Home > Home



# Strategy & management.

Corporate responsibility is an integral part of our core business and our daily activities.

Find out more



# Telekom worldwide.

We are actively involved in promoting sustainable development at all of our locations.

National companies

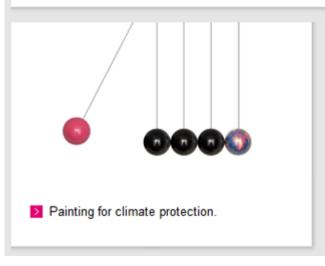


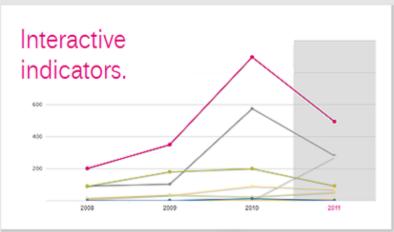


Foreword by the Chairman of the Board of Management

# Making corporate responsibility measurable.

CR KPI





We take responsibility.



Home > About this report

# About this report.

Telekom has provided extensive information to the general public about its objectives, its activities and the progress made in the relevant economic, ecological and social areas as part of corporate responsibility (CR) reporting since 1996.

The title "We take responsibility" is used for the fourth consecutive time since it is an expression of Telekom's long-term commitment to CR. By the year 2015, we plan to achieve our goal of becoming a global CR leader in the ICT industry. In this undertaking, the report is a central communication tool that informs our internal as well as external stakeholders of the progress we have made on this path between March 2011 and February 2012, and of the goals we are setting for the future.

#### Additional sources for CR-relevant content.

In addition to the present online CR Report for 2011, we also provide information about corporate responsibility in our <u>Annual Report</u>, in the <u>HR Report</u> and in the <u>Data Privacy Report</u>. We continually report on current activities relating to CR within the Group on our <u>responsibility portal</u>. The international subsidiaries provide information about their CR commitment on their Internet portals and in their own publications.

In order to reduce the complexity of our report, we have often provided links to other internal and external websites. For example, the information provided by the international subsidiaries is available through the subsidiaries' <u>profile</u> <u>pages</u> in the CR Report 2011.

#### Reporting period, scope of application and target groups.

This CR Report is a Group report that includes many international subsidiaries in which Telekom holds a majority stake. Any deviations are marked accordingly. This report ties in with the CR Report 2010/2011. The reporting period for the various topics spans from March 1, 2011 to February 29, 2012. All quantitative data and KPIs refer to the 2011 calendar year. Any deviations are marked accordingly. This CR report is primarily aimed at analysts and investors, CR ranking and rating agencies as well as non-governmental organizations. At the same time, we wish to address representatives from the worlds of science, research, education and politics.

#### Looking back on Deutsche Telekom's CR reporting.

Since 2003 Deutsche Telekom has been reporting on its sustainability activities: from 2003 up to and including 2006 the Group published a combined HR and Sustainability Report every year, which enabled us to satisfy our stakeholders' increased need for information on economic, ecological and social issues. An interim report issued in 2007 formed the transition to our current CR reporting. Since 2008 the Telekom Group has been publishing a comprehensive CR Report each year.

#### Online reporting since 2010.

Just like last year, we are publishing the current CR Report exclusively online to better meet the requirements and user preferences of our stakeholders. The online CR Report 2011 has been available since May 29, 2012 in German and English. Service functions such as the download section, search and dialog functions as well as

KPI views facilitate individual use. A recent addition has been the element "Find out more". Here, a drop-down menu can be used to call up background information on many topics that go beyond the presentation of the current developments.

Together with this online report we are also publishing an e-paper with a summary of the key developments in the reporting period. The subsidiaries can add a summary of their respective CR activities and then use the Report for their own CR communication. Not issuing a printed version means that we are saving resources.

The next CR report will be published in Q2 of 2013.

#### Selection of the main topics for the CR Report 2011.

To select the main report topics, we conducted a multiple-phase <u>materiality process</u> in Q4 of 2011. This is an integral part of our annual CR reporting. The process is a tool to help identify the topics with maximum relevance for our internal and external stakeholders.

# Structure of the current online report.

The online CR Report 2011 has been designed as a progress report that focuses on the key developments of the reporting period. Using the vertical navigation bar the reader can access the six main sections of the report:

- Networks
- Customers
- Society
- Employees
- Suppliers
- Climate and environment

In contrast to the previous year, the CR report 2011 includes a separate section on networks, which covers the topics of network and infrastructure expansion, mobile communications and health as well as environmentally friendly network infrastructure. In the previous year these topics were dealt with in different sections. By bundling these topics in a separate section of the Report we are doing justice to the increased importance of the topics identified in the materiality analysis.

Each introductory page shows three materiality matrices referring to our three CR categories. The topics that are relevant for the respective section are highlighted in color. The graphic depiction (font size and position within the matrix) reflects the relevance of the respective topic as assessed by our stakeholders.

The six sections mentioned above are supplemented by three others:

- The <u>Strategy & management</u> section describes the management of CR processes and the Group-wide integration of Telekom's CR strategy.
- The majority of the subsidiaries whose CR activities are described in this Report are presented on profile pages. These pages can be found under the <u>National companies</u> menu item.
- In the <u>Facts & figures</u> section, consolidated and commented indicators provide information about our progress in the past few years.

Selected KPIs in the CR Report 2011 from Germany as well as from Magyar Telekom Hungary, OTE, T-Mobile USA and T-Mobile Netherlands were audited by the auditing firm PricewaterhouseCoopers (PwC) as part of an assurance engagement.

The following sections were also audited:

- Strategy & management
- Suppliers
- Facts & figures

The independent assurance report can be found under the <u>assurance report</u> menu item.

All reviewed contents of this report are marked with <sup>♥</sup>and will remain effective until the next CR report is published.

# Implementation of high international reporting standards.

Telekom's CR Report 2011 fully complies with the guidelines (G3) of the Global Reporting Initiative (GRI). This also applies to the GRI Telecommunications Sector Supplement" in the 2003 pilot version that is applicable to companies in the telecommunication industry. Compliance with both catalogs of requirements was reviewed by the GRI, which awarded the highest application level, "A+".

This CR Report also serves as a COP (communication on progress) from Telekom as part of the United Nations Global Compact . The Global Compact Communication on Progress provides an overview of the specific measures required to implement the Global Compact principle.



# New CR App "We care".

In addition to the online CR report by Telekom we developed the <u>CR app "We care"</u> for the smartphone operating systems Google Android <sup>11</sup> and Apple iOS <sup>12</sup> and for tablets during the reporting period . With an interactive presentation of our CR commitment the App <sup>13</sup> provides an introduction to this complex topic – in a simple and entertaining, yet also self-critical way. The app includes handy links to the CR Report. With this innovative addition we intend to raise awareness among a broad target audience for the topic of corporate responsibility.

# Employees paint for climate protection.

At the end of January 2012, Telekom challenged its employees to get artistic to show what they themselves or Telekom are doing to protect the climate and the environment. The aim of the campaign was to actively involve employees in reporting and raise awareness of climate and environmental issues. In total, 55 works of art were submitted by 40 employees. All contributions are exhibited in a <u>digital picture gallery</u> as part of the CR Report 2011.

<u>Home</u> > <u>About this report</u> > Foreword by the Chairman of the Board of Management

# Foreword by the Chairman of the Board of Management.



René Obermann, Chairman of the Board of Management, Bonn, Germany.

### Dear Readers,

Many decisions in the worlds of politics and business have to be made quickly, and they are aimed at the near future. But we should never lose sight of long-range challenges—such as the transition to renewable sources of energy, as approved by the German government. We still have a long way to go before we meet this goal. Not all of the requirements for a successful turnaround are in place—far from it, in fact, although many German companies are ready with good solutions.

Deutsche Telekom offers an intelligent control system for advanced electrical grids. It connects consumers and producers so that electricity producers can deliver power exactly when and where it is needed. Smart electricity meters help link together large numbers of decentralized energy producers to create a central, virtual power plant. This means it is economically viable for electricity producers to shift to decentralized production and renewable energy sources.

We also need to tackle challenges in society. Let's take demographic change as an example. Major firms like Deutsche Telekom need to have the right mix of employees: proven colleagues with experience and younger workers who move freely and comfortably in the digital world. But to us as a business, demographic change also means developing new products and solutions for the healthcare segment and getting them ready for the market. We are ramping up our commitment to helping patients live independently as long as possible—thanks in part to innovative new Telekom products.

The way we live and work is undergoing huge changes due to increasing networking. For companies, mobile working can increase cost-effectiveness, even as employees enjoy enhanced quality of life. In view of this increasing networking, however, we want to make sure that as many people as possible benefit from it. For that reason, we will continue to promote media skills, the use of filters to protect children and young people surfing on

the Internet, and Internet seminars for seniors and immigrants.

Ever since the Global Compact was founded in 2000, we have championed the principles laid out in this United Nations initiative, in areas including human rights, climate protection, and combating corruption. Since January 2011, we have been the only German company active in the LEAD Steering Committee of the UN Global Compact.

Our CR Report provides information on the progress of our corporate commitment and involvement. Our new application "We care" also provides a good overview of our corporate responsibility activities. In a very playful, intuitive way, the application showcases the full breadth of our commitment and involvement.

We hope you enjoy reading it!

Bonn, May 2012

Sincerely,

René Obermann

Chairman of the Board of Management of Deutsche Telekom AG



Home > About this report > Group profile

# Group profile.

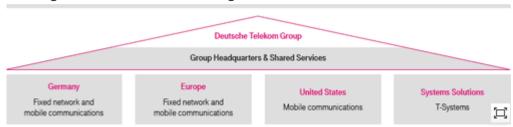
Deutsche Telekom is one of the world's leading integrated telecommunications companies, with approximately 129 million mobile customers, 34 million fixed-network lines and almost 17 million broadband lines in around 50 countries. We offer consumers as well as corporate and business customers a comprehensive portfolio of products and services in the areas of fixed-line/broadband, mobile communications, Internet and Internet TV as well as other innovative solutions for connected life and work. We were able to generate revenues of EUR 58.7 billion with a staff of some 235,000 employees worldwide in fiscal year 2011.

The Group is expressly committed to its corporate responsibility and bases its actions on economic as well as social and ecological criteria. In line with our goal of becoming a global leader in connected life and work, we continue to pursue our vision of leading the way in corporate responsibility (CR).

# Group structure and operating segments.

Telekom's organizational and management structure comprises the operating segments Germany, Europe, United States, Systems Solutions as well as Group Headquarters & Shared Services .

#### The organizational structure at a glance



- **Germany:** The Germany operating segment entails all the activities of the fixed-line and mobile business in Germany as well as wholesale telecommunications services for the Group's other operating segments. Continued demand for broadband products in the fixed network and mobile communications has driven revenues in these fields. However, this positive trend was not enough to compensate for the negative revenue effects, especially due to the decrease in voice telephony. Compared to the previous year revenue in this segment fell by 4.4 percent to EUR 24.0 billion.
- Europe: The Europe operational segment covers the fixed-network and mobile operations of the subsidiaries in Greece, Romania, Hungary, Poland, the Czech Republic, Croatia, the Netherlands, Slovakia, Austria, Bulgaria, Albania, the FYRO Macedonia, and Montenegro as well as the joint venture in Great Britain. The International Carrier Sales & Solutions unit, which mainly provides wholesale telecommunications services for the Group's other operating segments, is also part of the Europe segment. Intense competition, continuously falling retail prices and strong government and regulatory impact had a negative effect on business in the countries of the Europe segment and put pressure on total revenue. There was a slight increase in revenue from the fixed-network business, and especially the broadband/TV area. In addition, strong mobile data revenue growth had a positive impact.
- USA: The United States operating segment combines all mobile activities in the U.S. market. Despite a challenging market situation, including impacts from the formerly proposed deal with AT&T and increased competitive intensity, total revenues declined by only 3.3 percent. The decrease in revenue caused by the

declining number of net customers was partially offset by strong growth in data revenue from customers using smartphones with mobile broadband data plans.

• Systems Solutions: T-Systems offers individual ICT solutions for corporate customers, operating networks and data centers all over the world. Despite an overall declining price trend in ICT business, total revenue of T-Systems increased by 2.1 percent year on year.

# Group Headquarters & Shared Services .

Group Headquarters & Shared Services comprises all Group units that cannot be allocated directly to one of the operating segments. This area performs strategic and cross-divisional management functions and is responsible for operating activities that are not directly related to our core business. Shared Services include, for example, property management, DeTeFleetServices GmbH vehicle fleet management and the internal personnel services provider Vivento. The Shared Services in Germany.

# Corporate transactions during the reporting period.

- OTE: Following the transfer of an additional 10 percent of shares in the Greek OTE to Telekom on July 11, 2011, the Hellenic Republic holds—directly and indirectly—around 10 percent of the shares, while Deutsche Telekom now holds around 40 percent. The purchase price for the approx. 49 million OTE shares was EUR 0.4 billion.
- Procurement joint venture with France Télécom-Orange. Our procurement cooperation BUYIN with France Télécom-Orange was launched on October 7, 2011. We pooled our procurement activities in the areas of terminal devices, mobile communications networks, fixed-network equipment, and service platforms in a 50/50 joint venture. In addition, the two companies intend to launch pilot projects to explore other areas for inclusion in the joint venture, including IT infrastructure and other IT areas.
- PTC rolls out T-Mobile brand. The Polish subsidiary successfully launched the T-Mobile brand on the Polish market in June 2011. Since then, PTC has been operating under the name T-Mobile and using the "T" as its corporate logo in line with the Group's overall brand strategy.
- Commitment in Bratislava stepped up. Deutsche Telekom Shared Services s.r.o. in Bratislava, Slovakia, will gradually take over the financial and accounting services for all our European subsidiaries. The relevant processes will be pooled in Bratislava over the next few years. This step is intended to create more than 500 additional jobs in Bratislava by the end of 2015.
- OTE S.A. sells share in Telekom Srbija a.d. OTE S.A. signed a purchase agreement with Telekom Srbija to sell its entire stake of 20 percent in Telekom Srbija to the Serbian company. The value of the transaction amounts to EUR 380 million.

#### Business development in 2011.

Deutsche Telekom's total revenue was EUR 58.7 billion, which amounts to EUR 3.8 billion less than the previous year. However, this was significantly influenced by negative exchange rate effects and the deconsolidation of T-Mobile UK, which already took place in the prior year. The Systems Solutions operating segment recorded a revenue increase, whereas all others recorded decreases.

We also fully delivered on the shareholder remuneration policy we announced for the 2010 to 2012 fiscal years with a dividend payment of EUR 0.70 per share in 2011. With investments of EUR 8.3 billion, we pushed ahead above all with the broadband roll-out and invested in expanding the capacities of existing networks and in faster mobile networks.

# Adjusted EBITDA.

The adjusted EBITDA of EUR 18.7 billion achieved in fiscal year 2011 means a decrease of 4 percent compared to the prior year. EBITDA was impacted by negative exchange rate effects as well as the non-recurrence of the contribution of T-Mobile UK, which had been deconsolidated in the prior year. Our performance corresponded to our Guidance published at the beginning of the year.

#### Net profit.

The adjusted net profit of Deutsche Telekom declined in 2011 from EUR 3.4 billion to EUR 2.9 billion. Unadjusted for special factors, the decrease amounted to EUR 1.1 billion to EUR 0.6 billion.

#### Free cash flow and net debt.

At EUR 6.4 billion the Group's free cash flow was EUR 0.1 billion less than in the prior year. This means that we achieved the expected value which we announced at the beginning of the year.

Net debt decreased by EUR 2.2 billion year-on-year, to EUR 40.1 billion.

For detailed information about the Group's performance and Telekom's financial data, please refer to the <u>Annual Report 2011</u>.

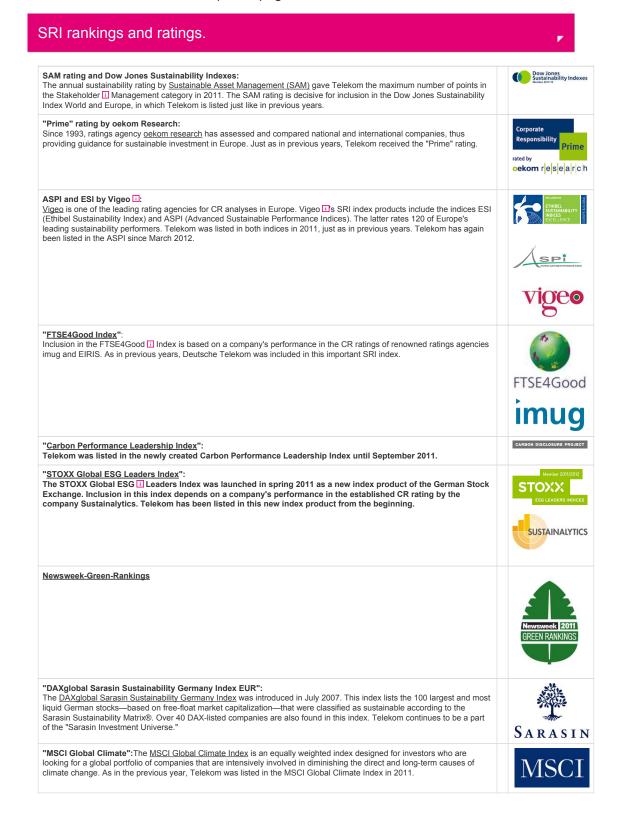


<u>Home</u> > <u>About this report</u> > Rankings, ratings & awards

# Rankings, ratings & awards.

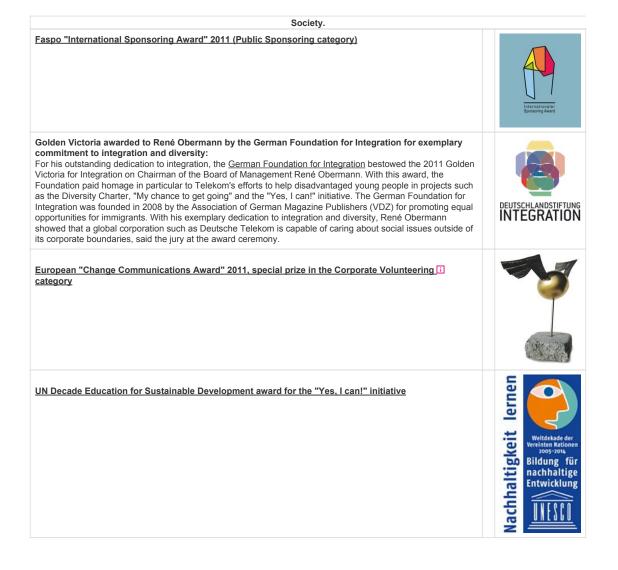
Content verified by PwC

We are very pleased about being listed in renowned sustainability rankings and ratings and about the numerous awards and certifications we have received during the reporting period. Our subsidiaries were also recognized for their CR commitment in various areas. You can find an overview of this on the profile pages of the <u>international subsidiaries</u>.



Networks.			
First place for TelekomCloud by Computer Bild	Computer Bild Test-Sieger Testorgebnis .gut" - Platz 1 Ausgabe 2/2012		
First place in mobile communications test by CHIP Online	Bestes Netz chip.de/netztest2011		
First place in network test by trade journal connect	CONNECT BESTES NETZ Heft 12/2011		
Commendation by readers of trade journal connect:  "Mobile Network Operator of the Year"	Mobilfunk- Netzbetreiber des Jahres 2011		
First place in the Internet and telephony categories by trade journal connect	Connect Internet- & Telefonie- Anbieter Platz des Jahres 2011		
First place in the IPTV category by trade journal connect	Platz Platz		
First place in the Virtual PBX category by trade journal connect	Virtuelle Telefon- anlagen des Jahres 2011		
Stiftung Warentest attested to Telekom's excellent network availability and highest data rates and awarded the rating "good."	Stiftung Warentest Telskom ist Testsieger In Ind. Dender Mahibitation 1970 (1970) (197		
"Gold SAP Quality Award" 2011 for T-Systems:  T-Systems was one of three German companies to receive the Gold Quality Award from software company SAP in 2011. With this distinction, SAP recognized the company's excellent quality in project management and in the execution of implementation projects for SAP software.	SAP		
"CRM Best Practice Award" in Bronze in the Launch category: The trade journal acquisa as well as the organizer of the customer relationship trade fair CRM-expo distinguished T-Systems with the Best Practice Award in Bronze in the Launch category in 2011. The award recognizes the efficient launch of a transnational technical solution to support the sales, marketing and complaints management process.	CRM Best Practice  AWARD  Bests Rundermanagement 2811  **********************************		

Costumers.	
"GWA EFFIE Award" in Bronze for the "Big changes start small" sustainability campaign in 2011	effie
"German PR Award" for eEtiquette as the most creative and innovative PR campaign	PR > 11  DER INTERNATIONALE  DEUTSCHE PR-PREIS
"Gottfried Wilhelm Leibniz Award" of German research organization Deutsche Forschungsgemeinschaft and research award Berliner Wissenschaftspreis 2011 for Professor Anja Feldmann (T-Labs)	
"Johann-Philipp Reis Award" (Communications Engineering category) for Professor Alexander Raake (T-Labs [1])	
<u>Trusted Cloud award (Sicheres Cloud Computing für Mittelstand und öffentlichen Sektor – Trusted Cloud)</u>	Trusted Cloud
"Certified Online Service" TÜV seal for TelekomCloud	Geprüfter Online Dienst  Manage harasse



Climate & environment.	
Environmental protection award presented to environmental officer Freia Siem (Technical Infrastructure Branch Office, Northern District) by Studien- und Fördergesellschaft der Schleswig-Holsteinischen Wirtschaft e.V.	
Award from "Aachener Initiative für saubere Luft" (Aachen clean air initiative)	
"Climate Leader" award presented by Greenpeace	
	GREENPEACE
"Bluefleet" seal by TÜV Rheinland for CO <sub>2</sub> emissions reduction	TOWNsmind BLUEFLEET* -CO2

Employees.			
"Initiative in Training and Development Award" 2011	Initiativpreis Aus- und Weiterbildung		
"Best of Corporate Publishing" Award in Gold	BEST CP CORPORATE PUBLISHING		
17th place among IT graduates in Trendence study	trendence Graduate Barometer 2011 DEUTSCHLANDS 100 Top-Arbeitgeber IT		
12th place in Universum study	UNIVERSUM TOP 100 ARBEITGEBER ant SYUDENT SHIVEY		
Third place in Top Automotive Employer 2011 award	ARBEITGEBER AUTOMOTIVE		
Second place in Career's Best Recruiter study	career's best recruiter		
First place in the HR Social Media Activities of DAX 30 Companies in 2011			
Fifth place in "Online Talent Communication"			


We take responsibility.



Home > About this report > GRI index

# GRI index.

Telekom's CR reporting is based on the requirements defined by the <u>Global Reporting Initiative</u> (GRI). Telekom's CR Report 2011 fully complies with the GRI guidelines (G3). This also applies to the GRI Telecommunications Sector Supplements (applicable to companies in the telecommunications industry) in the pilot version of 2003. Conformance with both requirements catalogs was checked by GRI, which issued the highest application level A+ for it.

The GRI index below indicates the scope to which we take the GRI indicators into account and the places in this year's CR Report where the corresponding information is available. The index also contains references to GRI-relevant text passages in other Telekom publications. The GRI index also states why Telekom does not report on individual GRI indicators.

Additional indicators that we have taken into account in the CR Report 2011, but whose fulfillment is not compulsory for level A+, are printed in grey.





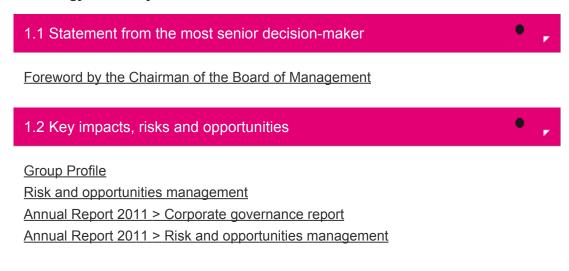
Home > About this report > GRI index > Profile

# Profile.

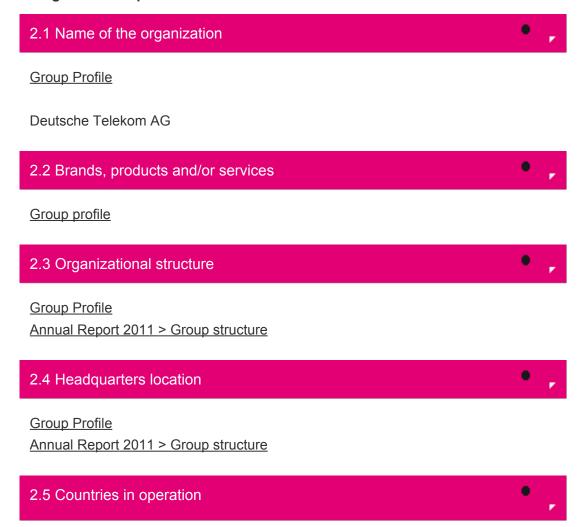
#### **Indicator Reference**

**Status** 

#### 1. Strategy and analysis



#### 2. Organizational profile



# Annual Report 2011 > Group structure 2.6 Nature of ownership Group Profile Annual Report 2011 > Group structure 2.7 Markets served **Group Profile** Annual Report 2011 > Group organization Annual Report 2011 > The economic environment 2.8 Scale of the organization **Group Profile** Annual Report 2011 > Overview of the 2010 financial year Annual Report 2011 > Development of business in the Group Annual Report 2011 > Employees 2.9 Significant changes regarding size, structure, or ownership **Group Profile** Annual Report 2011 > Development of business in the Group Annual Report 2011 > Development of Business at Deutsche Telekom AG Annual Report 2011 > Headcount development 2.10 Awards received Rankings, ratings & awards International subsidiaries 3. Report parameters 3.1 Reporting period About this report 3.2 Date of most recent previous report About this report 3.3 Reporting cycle

**Group Profile** 

#### About this report

# 3.4 Contact point for questions

Contact form and publishing information

Luis Neves

Head of Corporate Responsibility

Phone: +80 (0) 0738-122-0

E-mail: corporate.responsibility@telekom.de

# 3.5 Process for defining report content

About this report

Stakeholder expectations

# 3.6 Boundary of the report

**Group Profile** 

About this report

Telekom stakeholders

The topics of our stakeholders

# 3.7 Limitations on the scope or boundary of the report

٠,

About this report

# 3.8 Joint ventures, subsidiaries, and outsourced operations



Annual Report 2011 > Group organization

www.telekom.com > An overview of locations and affiliates

# 3.9 Data measurement techniques



About this report

CR key performance indicators

Independent assurance report

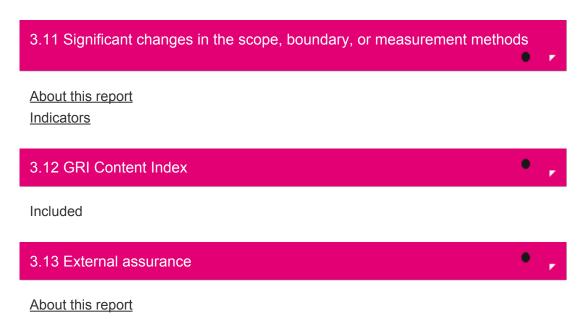
Indicators

**CR-Governance** 

Telekom has an internal reporting and indicator management system that allows us to incorporate the entire Group, i.e., all international subsidiaries and all strategic business areas, in almost every topic area. Since early 2010, we have been using a CR database to systematically collect and manage relevant data for our CR reporting activities.

# 3.10 Effects of re-statement of information provided in earlier reports

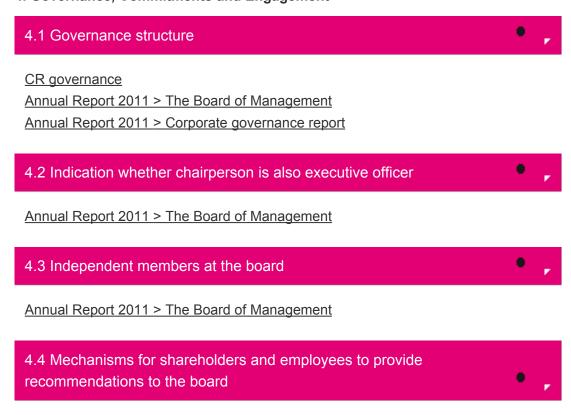
If information from previous reports is re-stated in the 2011 CR Report in a modified form, this will be indicated in the relevant places.



In addition to the "Strategy and management" section, Telekom commissioned an auditing firm to review the "Suppliers" section and selected indicators from Germany and the subsidiaries Magyar Telekom, OTE, T-Mobile USA and T-Mobile Netherlands.

# 4. Governance, Commitments and Engagement

Independent assurance report



CR governance

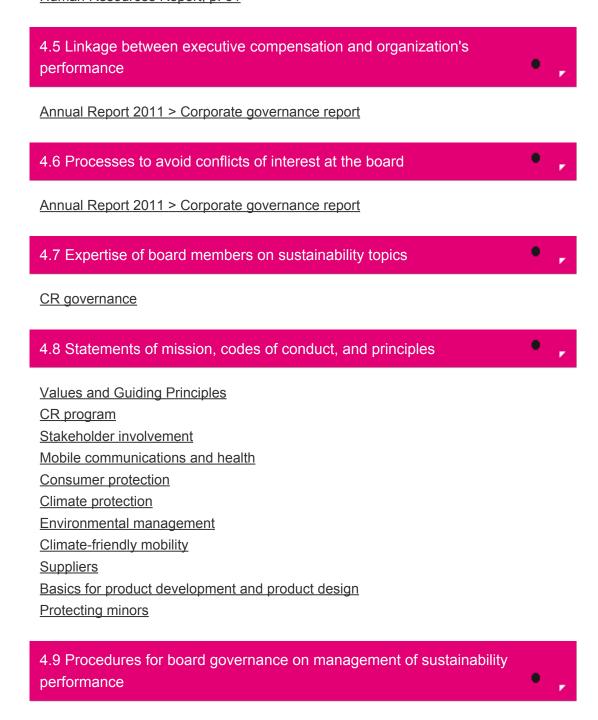
Socially responsible investment

Ongoing internationalization of the Total Workforce Management approach.

Annual Report 2011 > Supervisory Board's report

Annual Report 2011 > Corporate governance report

Human Resources Report, p. 61



# Strategie and management

As part of Corporate Communications and thanks to the Board Representative for Sustainability and Climate Protection, the CR unit is firmly integrated in the Chairman's department. Sustainability performance is managed by means of targets.

4.10 Process for evaluation of the board's sustainability performance

Annual Report 2011 > Corporate governance report

The Telekom Board of Management is responsible for the operational management of the Group and strives to

constantly improve the company's sustainability performance.

# 4.11 Precautionary approach

٠,

**Compliance** 

Risk and opportunities management

Annual Report 2011 > Corporate governance report

Risk management, compliance management and the CR KPIs provide approaches for proactive action at Telekom.

# 4.12 External charters, principles, or other initiatives

•

Stakeholder involvement

Network and infrastructure expansion

Protecting minors

Mobile communications and health

Consumer protection

International cooperation

Climate protection initiatives

Environmentally friendly network infrastructure

**Environmental management** 

# 4.13 Memberships in associations



Stakeholder dialog

Formats of involvement

Sustainable procurement strategy

International collaboration

**Protecting minors** 

#### 4.14 Stakeholder groups



About this report

Stakeholder involvement

#### 4.15 Stakeholder identification and selection



About this report

Stakeholder involvement

# 4.16 Approaches to stakeholder engagement



About this report

Stakeholder involvement

**Encouraging consumer dialog** 

Transparency
Corporate volunteering
International collaboration
Employee involvement

# 4.17 Topics and concerns raised by stakeholders

•

About this report

Stakeholder management

Socially responsible investment

Government relations and regulatory issues

Mobile communications and health

Customer satisfaction

Supply chain management

**Employee involvement** 



Home > About this report > GRI index > Economic performance indicators

# Economic performance indicators.

#### **Indicator Reference Status**

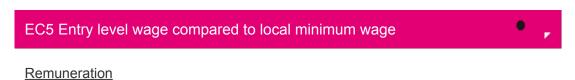


#### Annual Report 2011 > Financial data of the Group

The net value added of Telekom shows how the company performance is distributed among the various stakeholders, for example in the form of wages or salaries.



The Group received financial assistance amounting to approx. EUR 7.6 million for partial retirement in Germany — for Telekom and the T-Service companies — from the Federal Employment Agency in 2011.



Annual Report 2011 > Employees

Despite some necessary adjustments to market levels, e.g., as part of the collective wage negotiations for Telekom Service, the starting salaries of our employees are still attractive compared to the sector average,

especially in Germany.

# EC6 Locally-based suppliers

Sustainable procurement strategy

Supplier selection

With a volume of almost EUR 2 billion, around 11 percent of the goods and services that we procure via direct channels come from developing and emerging economies. This figure is far higher if we include our indirect procurement channels. Our European and North American suppliers and their suppliers also have part of their goods produced in developing and emerging countries. In doing so, we help support local economies at least indirectly in many different parts of the world.

# EC7 Local hiring

Regional added value

Competitive workforce

Annual Report 2011 > Employees

The availability of highly qualified personnel is the prerequisite for development of customer-centric products, solutions and services and thus for Deutsche Telekom's business success, today and in the future. For this reason, the selection of personnel at Telekom is not based on nationality or proximity to place of work but on the qualifications and skills of the candidates. To enable the cross-border transfer of expertise and skills and internationally harmonized global personnel development demanded of a global player, Human Resources (HR) develops the necessary structures, processes and measures within the HR strategy.

# EC8 Infrastructure investment and services for public benefit

· 🔭

Network and infrastructure expansion

engagement@telekom

Education

Sponsorship

Disaster relief

# EC9 Indirect economic impacts



Regional added value

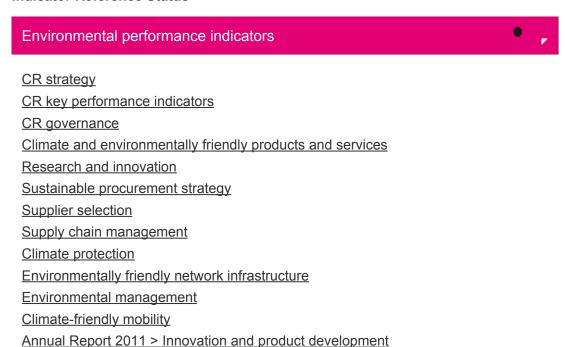
**Economic indicators** 



<u>Home</u> > <u>About this report</u> > <u>GRI index</u> > Environmental performance indicators

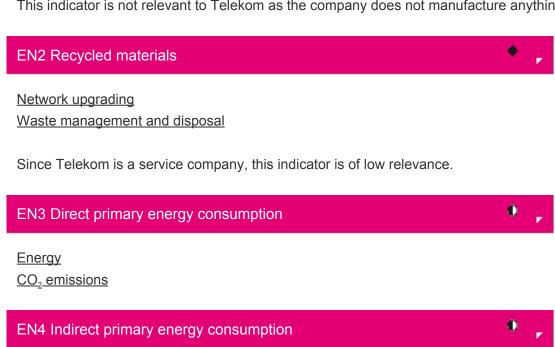
# Environmental performance indicators.

#### **Indicator Reference Status**





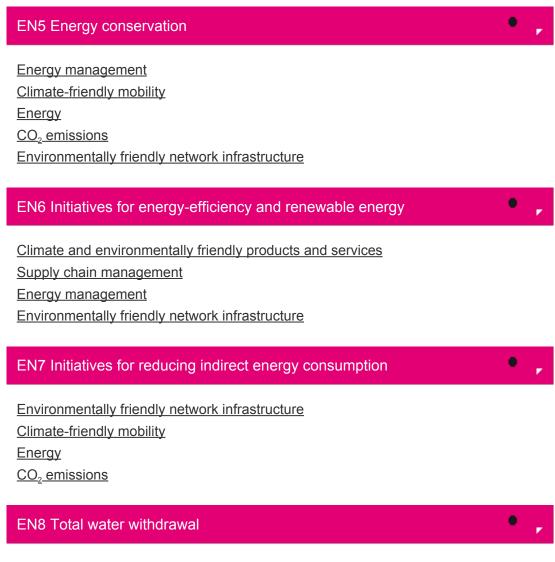
This indicator is not relevant to Telekom as the company does not manufacture anything itself.



**Energy** 

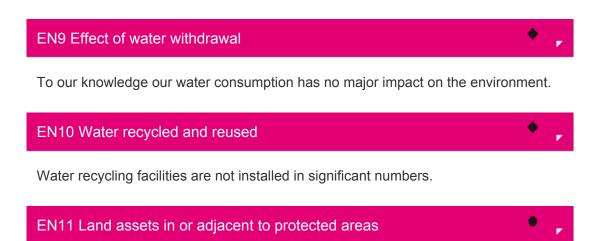
CO<sub>2</sub> emissions

A breakdown by renewable and non-renewable energy sources is not relevant for Telekom as the purchase of RECS (Renewable Energy Certificate System) certificates means electricity consumption in Germany is covered—directly or indirectly—entirely from renewable energy sources. In virtually all other countries, the proportion of renewable and non-renewable energy is in line with the electricity mix in the relevant country.



#### Water consumption

Water consumption is not linked to provision of services to customers. The main source of water, which is used for sanitary facilities and the watering of outdoor areas, is the public drinking water supply system. No other sources are used.



We financed compensation measures to restore natural habitats under nature conservation regulations In the

reporting period.

# EN12 Impacts on biodiversity



### **Biodiversity**

Internal guidelines regulate potential impacts on biodiversity, such as from the installation of cables or from electromagnetic fields. Aside from this, our business activities only have an indirect impact on biodiversity. We have a greater potential to help protect biodiversity through our climate protection activities.

# EN13 Habitats protected or restored



#### **Biodiversity**

We financed compensation measures to restore natural habitats under nature conservation regulations In the reporting period.

# **EN14 Strategies for biodiversity**



#### **Biodiversity**

**Environmental management** 

# **EN15** Endangered species



This indicator is not relevant to Telekom.

### EN16 Greenhouse gas emissions



# **Energy management**

CO<sub>2</sub> emissions

# EN17 Other greenhouse gas emissions



# **Energy management**

CO<sub>2</sub> emissions

 $CO_2$  emissions are calculated in accordance with the Greenhouse Gas (GHG) Protocol. No disclosures beyond  $CO_2$  emissions (e.g., on NOx, SOx or other air emissions) are possible.

#### EN18 Initiatives to reduce greenhouse gas emissions



Climate and environmentally friendly products and services

Supply chain management

Climate protection

**Energy management** 

Environmentally friendly network infrastructure

**Environmental management** 

Climate-friendly mobility

2nd and 3rd generation mobile communications

# EN19 Emissions of ozone-depleting substances



Telekom is not a manufacturing enterprise. Therefore, this indicator is not relevant to Telekom.

# EN20 NOx, SOx and other air emissions



Telekom is not a manufacturing enterprise. Therefore, this indicator is not relevant to Telekom.  $CO_2$  emissions are calculated according to the Greenhouse Gas (GHG) Protocol. No disclosures beyond  $CO_2$  emissions (e.g., on NOx, SOx or other air emissions) are possible.

# EN21 Water discharge



Water consumption

Since we participate in the public water supply, water withdrawal is nearly equal to water discharge.

# EN22 Waste by type and disposal method



**Environmental management** 

Network upgrading

# **EN23 Significant spills**



Since Telekom does not manufacture any products, this indicator is not relevant.

# EN24 Waste deemed hazardous under the terms of the Basel Convention



Since Telekom does not transport any waste, this indicator is not relevant.

#### EN25 Impacts of discharges and runoff on biodiversity



This indicator is not relevant for Telekom, as no direct discharges of water take place.

# EN26 Initiatives to mitigate environmental impacts



Basics for product development and product design

Climate and environmentally friendly products and services

Environmentally friendly network infrastructure

Phone and cell phone recycling

**Energy** 

# **EN27** Packaging materials



In Germany Telekom takes back 100 percent of its packaging in accordance with the Packaging Ordinance. In its international units, the company deals with packaging materials according to the legislation in the country concerned. Accordingly, a complete description is not possible at this juncture.

# EN28 Sanctions for non-compliance with environmental regulations



#### Annual Report 2011

We have an umbrella certificate according to ISO 14001 is since the end of June 2009, which ensures that there are no violations of environmental regulations Group-wide. In the reporting period we have not become aware of any relevant environmental violations.

# EN29 Environmental impacts of transport



Climate-friendly mobility

**Mobility** 

Climate and environmentally friendly products and services

**Energy** 

CO<sub>2</sub> emissions

Logistics and transport are carried out by service providers at Telekom. The environmental impacts of transportation are influenced by the contractual arrangements with the service providers.

#### EN30 Environmental protection expenditures



#### **Environmental management**

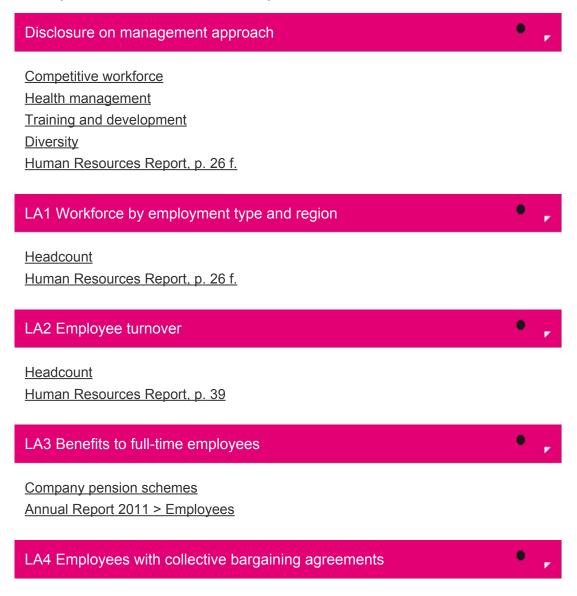
Total greenhouse gas emissions equivalent to 12,126 metric tons of CO<sub>2</sub> were offset in the reporting period. Currently, no other data on environmental protection expenses and investments is collected.

Home > About this report > GRI index > Social performance indicators

# Social performance indicators.

**Indicator Reference Status** 

Social performance indicators: Labor practices and decent work



Human Resources Report, p. 32 f.

In Germany Telekom has agreed most of the conditions of employment for its employees with its employee representatives on the basis of collective bargaining. There are exceptions for senior executives and a few small companies not covered by collective agreements. Internationally, Telekom aligns itself to the participatory culture of the relevant country. This means there is a diverse landscape of collective bargaining agreements in the various international Group companies. The responsibility for the negotiating and signing collective agreements lies with the management of the relevant national company.

Around 79,900 of 121,600 employees with permanent employment contracts were covered by collective agreements in 2011. This is a share of 66 percent.

# LA5 Minimum notice period(s) regarding operational changes

•

Human Resources Report, p. 61, p. 32 f.

In the case of significant operational changes, the relevant works councils are informed and involved according to the legally applicable provisions such as the German Works Constitution Act.

In addition, there is a regular exchange with the employee representatives, both on the national and international level. We established a Global Employee Relations Management (ERM) unit at Group level in 2010. It provides guidance and promotes an exchange of experiences for building the diverse employee relationships in various countries. It is also a central contact for all international employee and employer committees and the labor unions.

# LA6 Workforce represented in joint health and safety committees



Telekom has various committees on occupational safety and health involving both employee and employer representatives.

# LA7 Occupational diseases, lost days, and number of fatalities



**Employee health** 

Human Resources Report, p. 34 f.

# LA8 Training on serious diseases



Health management

Human Resources Report, p. 34.

By setting up universal standards and guidelines throughout the Group, we anchored this key topic firmly in our company and management structures as early as 2007. Employees can utilize advisory and training services, as well as preventive medical check-ups, as part of our health management.

# LA9 Trade union agreements on health and safety



Industrial safety issues are also addressed in negotiations with the employee representatives.

# LA10 Training per employee



In 2011, our employees received on average 36 hours of training.

A breakdown by employee category is not relevant for Telekom as the training and development offers are open to all employees equally.

# LA11 Programs for lifelong learning



Talent agenda

Personnel and organizational restructuring

# LA12 Regular performance and career development reviews

0 ,

HR development

Cultural change

Human Resources Report, p. 38.

From 2008 to 2011, all employee groups that take part in the target agreement process received a variable salary component based among other things on their service performance. For all senior executives, service targets are part of the medium to long-term, pay-related targets (variable pay). Since 2012 other employees in service functions have received the variable remuneration based on service performance.

Percentage of employees who receive regular performance assessments: performance and career development review indicators

All employees = 81.5 percent

Senior executives = 100 percent

Employees outside the collective bargaining system = 84.4 percent

Development planning:

All employees = 85.4 percent

Senior executives = not yet available

Employees outside the collective bargaining system = 78.4 percent; due to recent introduction for this target group

# LA13 Composition of governance bodies



**Diversity** 

<u>Annual Report 2011 > Members of the Supervisory Board including seats on the supervisory boards of other companies</u>

Human Resources Report, p. 52 f.

# LA14 Gender pay disparity



Remuneration

In harmony with our Group-wide Diversity Policy, remuneration at Telekom is not gender-related.

#### Social performance indicators: Human rights

# Disclosure on management approach



Values and Guiding Principles

Competitive workforce

Sustainable procurement strategy

Supply chain management



Supplier selection

Within the framework of our sustainable procurement strategy, we offer training courses for procurement managers and joint workshops with suppliers. The new e-learning tool in the CR area will also introduce CR and the associated human rights issues to a wide range of employees.

Intranet-based e-learning programs are also available to all employees in Compliance Management. These are supplemented by risk-specific on-site training.

Quantitative information on this indicator is not available at present as the majority of training programs are completed on a self-study basis on the intranet.

# HR4 Incidents of discrimination

There was no confirmed incident of discrimination in the reporting period.

The Code of Conduct and the Group-wide Diversity Policy ban discrimination on the basis of gender, age, disability, ethnic origin, religious beliefs and sexual orientation. The "Tell me!" portal was set up as an inbox to submit information regarding violations of the codex, in case discrimination occurs despite the standardized processes.

# HR5 Freedom of association and collective bargaining

We are not aware of any incidents of this nature.

Deutsche Telekom recognizes the fundamental right to freedom of association and the right to collective bargaining within the scope of national regulations and existing agreements. These basic rights form an integral part of the Social Charter , are binding for the entire Group, and must be confirmed in writing annually by the Group companies.

#### **Employee involvement**

#### HR6 Child labor

2011 audit results

Work and ethics

We work to counter risks relating to child labor by auditing selected strategic and particularly high-risk suppliers.

# HR7 Forced labor

• ,

2011 audit results

Work and ethics

We address risks regarding forced labor through audits of strategically selected and especially risk prone suppliers.

# HR8 Training for security personnel



As a global player, we insist that all our companies and all our suppliers around the world comply with internationally accepted social standards.

We have committed ourselves to this policy in our Social Charter , which is a constituent of the Telekom Code of Conduct. We check for compliance on an annual basis, holding audits in the form of declarations of compliance issued by the management of individual Group units.

# HR9 Violations of rights of indigenous people



This indicator is not relevant to Telekom.

#### **Social Performance Indicators: Society**

# Disclosure on management approach



CR strategy

Stakeholder involvement

Compliance

Data privacy

Government relations and regulatory issues

#### SO1 Impacts on communities



Stakeholder involvement

Risk and opportunities management

Mobile communications and health

Basics for product development and product design

Climate and environmentally friendly products and services

Research and Innovation

Annual Report 2011 > Risk and opportunities management

Telekom employs an integrated risk and opportunity management system to systematically leverage its opportunities without losing sight of the related risks. This system not only considers legal and financial aspects, but also social and environmental risks.

As part of its risk management, Telekom aims to allay concerns in the general public by means of an objective, scientifically sound and transparent information policy, both at the beginning and at the end of a business initiative.

Telekom is the only company in the world, for example, that has an international policy on electromagnetic fields (EMF) for its mobile communications segment, which sets out minimum standards for information campaigns, transparency, participation and the promotion of research.

# SO2 Corruption risks



The systematic prevention of white-collar crime is a top priority at Telekom. Compliance with legislation in this area is a requirement that applies to the entire Group, in all countries and to every member of staff. Any emerging fraud risks are systematically analyzed and any cases are documented.

We conducted compliance risk assessments with a special view to corruption risks for 97 of 238 fully consolidated companies during the reporting period. This corresponds to a rate of 40.76 percent. It should be noted that this rate is based on the number of all companies. However, many of the companies that were not assessed are not operational or are very small companies so that the rate based on revenue or the number of employees is much higher.

# SO3 Anti-corruption training



The Compliance department kicked off 2008 with an extensive anti-corruption campaign, which was also rolled out internationally in 2009.

The target groups include all members of the Group Board of Management and their direct reports, upper management levels in all Group companies, and departments and functional units selected on the basis of risk exposure.

The training covers laws and regulations applicable in the individual countries. In some countries, we have already trained trainers who can handle the transfer of knowledge within the Group companies.

Data collection has not yet been implemented Group-wide so that the percentage of employees trained in anti-corruption policies and processes cannot be stated for the time being.

# SO4 Actions taken in response to incidents of corruption



#### Strategy and management

In order to be able to intervene quickly when corruption is suspected, we have set up contacts in all organizational units and publicize these in a suitable manner.

Potential breaches of internal guidelines, laws or codes of conduct can be reported via the entry portal "Tell me!." All stakeholder groups — employees, business partners, customers, shareholders and other stakeholders — can approach us via this portal, anonymously if preferred.

Government relations and regulatory issues

Mobile communications and health

### SO6 Donations to political parties and politicians

.

It is of paramount concern to Telekom that its relationships with political decision-makers should be characterized by transparency and trust. This also extends to our refusal to support the work of any political party with donations.

### SO7 Legal actions for anticompetitive behavior

٠,

Annual Report 2011 > Risk and opportunities management

#### SO8 Sanctions for non-compliance with laws and regulations



Annual Report 2011 > Risk and opportunities management

#### Social performance indicators: Product responsibility

#### Disclosure on management approach



Basics for product development and product design

Values and Guiding Principles

Mobile communications and health

Consumer protection

Data privacy

#### PR1 Health and safety impacts along product life cycle



Mobile communications and health

Climate and environmentally friendly products and services

#### PR2 Non-compliance with health and safety standards



Annual Report 2011

Currently, Group Headquarters is not aware of any significant violation of health standards.

#### PR3 Product information



Mobile communications & health

**Protecting minors** 

www.t-mobile.de > SAR levels

#### PR4 Non-compliance with product information standards





#### Annual Report 2011

Currently, Group Headquarters is not aware of any significant violation of health standards.



Our commitment to protecting our consumers is based on our Code of Conduct, which was adopted in 2007. It also applies to all of Telekom's sales partners.

Standards for advertising are devised at the national level, in particular by means of self-regulation by the advertising industry, and therefore vary greatly from country to country. Telekom complies fully with all the legal and self-regulatory rules in the telecommunications industry in all company units. This concerns in particular the protection of children and young people and compliance with data protection. Telekom and its international subsidiaries have made major contributions to the development of two global, voluntary commitments by the industry: (a) the <u>GSMA Code of Conduct against Mobile Spam of 2006</u> and (b) the <u>GSMA Mobile Advertising Program</u>.





Home > About this report > GRI index > GRI Telecommunications Sector Supplement

# GRI Telecommunications Sector Supplement.

#### **Indicator Reference**

#### **Status**

Investments



This indicator is not relevant to Telekom.

#### Health and Safety

# IO3 Practices to ensure health and safety of personnel involved in infrastructure installation

A health, safety and environmental management system will be rolled out across the Group based on the OHSAS 18001 and DIN ISO EN 14001 standards.

The direct customers are those local business units that are integrating the end-to-end management system into their structures. Employees benefit from the system, as systematic occupational health and safety management alongside quality and environmental management makes workflows easier and minimizes health risks and factors that are harmful to the environment.

Communication on health, safety and the environment exists throughout all levels of the company.



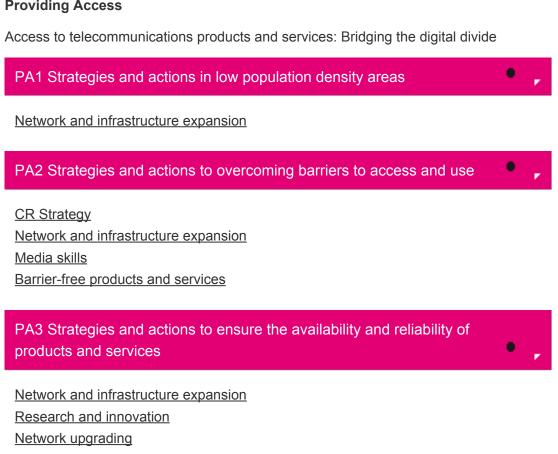
Mobile communications and health

Infrastructure



Telekom records the number of radio sites used individually or shared. In future the number of shared locations is to be further increased.

#### **Providing Access**



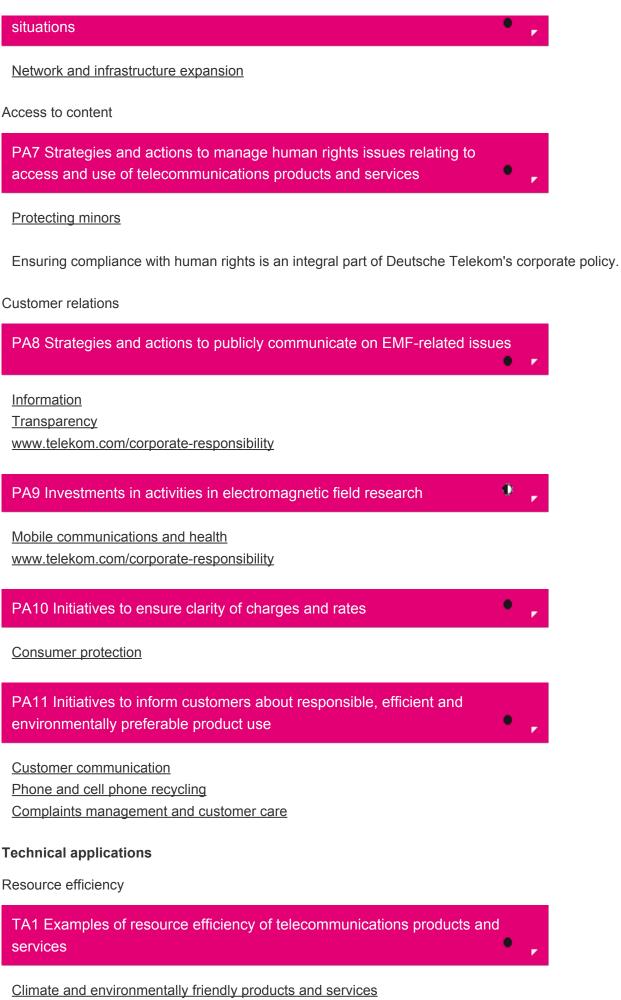
PA4 Level of availability and market shares for products and services

Network and infrastructure expansion Annual Report 2011

PA5 Number and types of products and services made available to low and no income sectors of the population

Barrier-free products and services

PA6 Programs and actions to provide and maintain services in emergency



Climate and environmentally friendly products and services
Research and innovation
Environmentally friendly network infrastructure

#### TA2 Examples of replacing physical objects through telecommunications

•

Resource efficiency in the workplace

Climate and environmentally friendly products and services

Barrier-free products and services

Research and innovation

# TA3 Changes in customer behavior caused by use of the above products and services

١,

Climate and environmentally friendly products and services E-health

# TA4 Impacts of use of the above products and services and lessons learned for future development



Climate and environmentally friendly products and services

Environmentally friendly network infrastructure

Basics for product development and product design

#### TA5 Practices relating to intellectual property rights



<u>Annual Report 2011 > Innovation and product development</u> <u>Annual Report 2011</u>

Home > About this report > GRI index > GRI Application Level check

### GRI Application Level check.

Statement: GRI Application Level check.

Statement as PDF-download



# Statement GRI Application Level Check

GRI hereby states that **Deutsche Telekom AG** has presented its report "2011 Corporate Responsibility Report" to GRI's Report Services which have concluded that the report fulfills the requirement of Application Level A+.

GRI Application Levels communicate the extent to which the content of the G3 Guidelines has been used in the submitted sustainability reporting. The Check confirms that the required set and number of disclosures for that Application Level have been addressed in the reporting and that the GRI Content Index demonstrates a valid representation of the required disclosures, as described in the GRI G3 Guidelines.

Application Levels do not provide an opinion on the sustainability performance of the reporter nor the quality of the information in the report.

Amsterdam, 16 May 2012





The "+" has been added to this Application Level because Deutsche Telekom AG has submitted (part of) this report for external assurance. GRI accepts the reporter's own criteria for choosing the relevant assurance provider.

The Global Reporting Initiative (GRI) is a network-based organization that has pioneered the development of the world's most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. The GRI Guidelines set out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance.

www.walonieroporting.org.

Disclaimer: Where the relevant sustainability reporting includes external links, including to audio visual material, this statement only concerns material submitted to GRI at the time of the Check on 26 April 2012. GRI explicitly excludes the statement being applied to any later changes to such material.

Home > About this report > Global Compact Communication on Progress

### Global Compact Communication on Progress.

This CR Report also serves as a communication on progress from Deutsche Telekom as part of the United Nations Global Compact . The table refers to the text passages where we provide information about our commitment to implementing the ten principles of the Global Compact in this CR Report and in other Group publications.

Deutsche Telekom is a co-initiator of <u>Global Compact LEAD</u> and is the only German company represented in the initiative's steering committee.



Principle 1: Support and respect the protection of internationally proclaimed human rights.

Values & Guiding Principles

Compliance

Data privacy

Government relations & regulatory issues

Mobile communications & health

Basics for product development & product design

Competitive workforce

Health management

Remuneration

Diversity

Sustainability procurement strategy

Supply chain management

Employee health

HR Report 2011/2012 (S. 24 ff., 30 – 35, 53 f.)

Annual Report 2011 > Group strategy

Annual Report 2011 > Group management

Annual Report 2011 > Employees

Annual Report 2010 > Members of the Supervisory Board

Data Privacy Report 2011 (p. 9ff.)

Values & Guiding Principles

Compliance

Government relations & regulatory issues

Mobile communications & health

Competitive workforce

Sustainability procurement strategy

Supplier selection

Supply chain management

# Principle 3: Uphold freedom of association and the right to collective bargaining.

Values & Guiding Principles

Compliance

Government relations & regulatory issues

Competitive workforce

Sustainability procurement strategy

Supplier selection

Supply chain management

HR Report 2011/2012 (S. 24 ff., 32 f., 62)

#### Principle 4: Elimination of all forms of forced and compulsory labor.

Values & Guiding Principles

Compliance

Government relations & regulatory issues

Competitive workforce

Sustainability procurement strategy

Supplier selection

Supply chain management

Annual Report 2011 > Group strategy and Group management

Annual Report 2011 > Group strategy and Group management

#### Principle 5: Abolition of child labor.

Values & Guiding Principles

Compliance

Data privacy

Government relations & regulatory issues

Competitive workforce

Talent agenda

Remuneration

Diversity

Sustainability procurement strategy

Supplier selection

Principle 6: Eliminate discrimination in respect of employment and occupation.

Values & Guiding Principles

Compliance

Competitive workforce

Remuneration

HR Report 2011/2012 (S. 24 ff., 30 – 35, 53 f.)

Annual Report 2011 > Members of the Supervisory Board

Annual Report 2011 > Group management

#### Principle 7: Support a precautionary approach to environmental challenges.

**CR** strategy

CR key performance indicators

CR governance

Government relations & regulatory issues

2nd & 3rd generation mobile communications

Environmentally friendly network infrastructure

Basics for product development & product design

Climate and environmentally friendly products & services

**Customer communication** 

Phone & cell phone recycling

Research & innovation

Sustainability procurement strategy

Supplier selection

Supply chain management

International collaboration

Climate protection

**Environmental management** 

Climate-friendly mobility

**Biodiversity** 

Energy

CO<sub>2</sub> emissions

Annual Report 2011 > Group strategy

Annual Report 2011 > Group management

Annual Report 2011 > Innovation and product development

Annual Report 2011 > Corporate Responsibility

Principle 8: Undertake initiatives to promote greater environmental responsibility.

Values & Guiding Principles

**CR** strategy

CR key performance indicators

CR governance

Government relations & regulatory issues

2nd & 3rd generation mobile communications

Environmentally friendly network infrastructure

Basics for product development & product design

Climate and environmentally friendly products & services

**Customer communication** 

Phone & cell phone recycling

Research & innovation

Sustainability procurement strategy

Group-wide rules for procuring raw materials

Supplier selection

Supply chain management

International collaboration

Climate protection

Environmentally friendly network infrastructure

**Environmental management** 

**Biodiversity** 

**Environmental indicators** 

T-Mobile > SAR-Werte

Annual Report 2011 > Innovation and product development

Principle 9: Encourage the development and diffusion of environmentally friendly technologies.

CR strategy

CR key performance indicators

CR governance

Basics for product development & product design

Climate and environmentally friendly products & services

**Customer communication** 

Phone & cell phone recycling

Research & innovation

Environmentally friendly network infrastructure

Climate protection

**Environmental management** 

Climate-friendly mobility

Sustainability procurement strategy

Group-wide rules for procuring raw materials

Supplier selection

Supply chain management

International collaboration

Annual Report 2011 > Innovation and product development

b	m	h	$\sim$	m	•
-			_	١١	•

**CR** strategy

Stakeholder involvement

Compliance

Risk & opportunities management

Data privacy

Government relations & regulatory issues

Sustainability procurement strategy

2011 audit results

Annual Report 2011 > Corporate governance report

Annual Report 2011 > Risk and opportunity management

Home > About this report > Independent assurance report

## Independent assurance report.

PricewaterhouseCoopers AG Wirtschaftsprüfungsgesellschaft has performed a limited assurance engagement on the German version of the chapters "Strategy & Management", "Suppliers" and selected information in the chapter "Facts & figures" and the "Interactive subsidiary benchmarking tool" of the Corporate Responsibility Report 2011 "We take responsibility" and issued an independent assurance report, authoritative in German language, which has been translated by Deutsche Telekom AG as follows:

We have been engaged to perform a moderate assurance engagement i in respect of observing the AA1000 AccountAbility Principles (Type 2 audit) and in respect of selected sustainability information in the Corporate Responsibility Report 2011 (the "CR Report") of Deutsche Telekom AG, Bonn, (the "Company"). Our assurance engagement related to selected individual disclosures and selected complete German pages from the Group's Corporate Responsibility Report 2011 website with information from reporting year 2011. In cases where our review covers the entire content of the pages, such pages are marked with the symbol . Individual disclosures reviewed by us, such as information under the heading "Indicators," are marked directly with the symbol . Any unmarked pages or disclosures that are referred to in or link from the web pages were not the subject of the audit engagement.

#### Management's responsibility

It is the responsibility of the Company's management

- to comply with the principles of inclusivity, materiality and responsiveness as defined in the AccountAbility Principles Standard (2008) (the "AA1000 AccountAbility Principles") in sustainability management, and
- to prepare the sustainability information in the CR Report in accordance with the criteria set out in the Sustainability Reporting Guidelines Vol. 3.1 (pp. 7 to 17) of the Global Reporting Initiative (GRI).

This responsibility includes the conception, implementation and maintenance of systems and processes for ensuring compliance with the AA1000 AccountAbility Principles and preparation of the CR Report using assumptions and estimations for individual CR disclosures that are appropriate under the given circumstances.

#### Practitioner's responsibility

Our responsibility is to express an opinion, based on our assurance procedures, as to whether any matters have come to our attention that cause us to believe that, in all material respects,

- the systems and processes set up by the Company are not suitable for compliance with the AA1000 
   AccountAbility Principles of inclusivity, materiality and responsiveness, or
- the disclosures and pages of the Corporate Responsibility Report 2011 marked with the symbol have not been prepared in compliance with the criteria of the Sustainability Reporting Guidelines Vol. 3.1 (pp. 7 to 17) of the GRI. These selected disclosures can be found under the headings "Strategy and Management," "Suppliers" and "Indicators" in the CR Report.

We have also been commissioned to make recommendations on the further development of sustainability management and CR reporting.

We conducted our work in accordance with the AA1000 Tassurance Standard (AA1000AS) 2008, as well as in accordance with the International Standard on Assurance Engagements (ISAE) 3000.

These standards require that we comply with ethical requirements and that we plan and perform the assurance engagement with due regard for the principle of materiality so as to allow us to express our conclusion with moderate assurancei, the level of assurance requested by Deutsche Telekom. We are independent within the meaning of section 3.2 of AA1000AS (2008). As a result of our specialist knowledge and experience of non-financial assurance engagements, sustainability management and social and environmental topics, we have the necessary expertise to carry out this assurance engagement.

In a moderate assurance engagement the evidence-gathering procedures are more limited than in a high assurance engagementii, and therefore less assurance is obtained than in a high assuranceii engagement.

The procedures selected depend on the practitioner's judgment. We conducted audits at Group Headquarters (Bonn, Germany) level and at the level of selected international subsidiaries, in particular T-Mobile USA Inc., Bellevue, Washington, USA, OTE A.E, Athens, Greece, Magyar Telekom Plc., Budapest, Hungary, and T-Mobile Netherlands BV, Den Haag, Netherlands. The evidence-gathering procedures we carried out in terms of adherence to the AA1000 AccountAbility Principles included:

- Inquiries of the relevant contacts in the Stakeholder I Involvement & Stakeholder I Dialog and CR Communications areas:
- Examination of the relevant documentation regarding stakeholder dialog, further communication with stakeholders and participative formats at Group Headquarters level and at the level of selected international subsidiaries;
- Examination of the relevant documentation regarding pinpointing and prioritization of sustainability topics, CR categories and identified stakeholder expectations at Group Headquarters level and at the level of selected international subsidiaries;
- Survey of selected departments and acquiring of evidence on randomly selected projects in relation to sustainability and stakeholder management that additionally show that the AA1000 AccountAbility Principles are accounted for in the organization.

In connection with the sustainability information in the CR report marked with <sup>♥</sup>, we have conducted, among others, the following audit procedures:

- Surveys of employees responsible for reporting sustainability information
- Determining the processes for recording, calculating and reporting sustainability information
- Testing of the main controls for ensuring data quality
- Acquiring of evidence on a sample basis of the accuracy of disclosures marked with the symbol , including by examining internal documents, minutes from internal meetings, reports by external service providers
- Analytical assessment of selected sustainability data

#### **Key findings and conclusions**

Findings with regard to the AA1000 AccountAbility Principle of **inclusivity**:

- At Group level, stakeholder management is managed by the central function Stakeholder ☐ Engagement & Stakeholder ☐ Dialog, which is part of the Corporate Responsibility department. The Stakeholder ☐ Involvement Strategy project was set up in this area with the aim of designing focused relationships with the Company's stakeholders and of systematically implementing a stakeholder management system and stakeholder involvement Group-wide.
- The principles of stakeholder involvement at Deutsche Telekom AG have been defined in accordance with the AA

1000 <sup>□</sup> AccountAbility Principles.

- It was found that Deutsche Telekom has established processes that facilitate the exchange with stakeholders and support the involvement of stakeholders in decision-making processes. At the level of selected departments, stakeholders are actively involved in projects.
- Internationally, the involvement of stakeholders is organized at international subsidiary level. This takes place in coordination with the central functions at Group level. It was found that stakeholders are regularly involved (e.g., through stakeholder dialog days) at the level of selected subsidiaries. As of the time of the audit, the international roll-out of the stakeholder involvement strategy had not been completed, but began while the audit was ongoing.

Findings with regard to the AA1000 AccountAbility Principle of materiality:

- As part of the materiality process, key CR topics are systematically identified with the input of internal and external stakeholders and shown in the materiality matrices within Deutsche Telekom AG's CR Report. Within the materiality process, issues relating to Deutsche Telekom AG's three CR categories were evaluated. The three CR categories are key pillars of the CR strategy with direct relevance to Deutsche Telekom's core business.
- As part of central stakeholder involvement, the expectations of individual stakeholder groups are determined in a targeted way, evaluated, and can then be taken into account in CR reporting, further CR communication, and the strategic alignment of the CR department.
- Internationalizing the materiality process was the first step in standardizing the identification of key CR issues in the different international subsidiaries.

Findings with regard to the AA1000 AccountAbility Principle of responsiveness:

- Our random sample inquiries and the evidence we have acquired show that the processes for responding to stakeholder queries are running correctly.
- It was found that, with the principles of the GRI (Global Reporting Initiative), suitable guidelines on CR reporting are used.
- Communication with stakeholder groups uses a number of communication channels and has a balance of topics.

Based on our moderate assurance engagement, nothing has come to our attention that causes us to believe that, in all material respects, the systems and processes established by the Company are unsuitable for fulfilling the AA 1000 AccountAbility Principles of inclusivity, materiality and responsiveness.

Furthermore, nothing has come to our attention that causes us to believe that, in all material respects, the disclosures and pages of the CR Report for calendar year 2010 marked with the symbol <sup>♥</sup> have not been prepared in accordance with the criteria of the Sustainability Reporting Guidelines Vol. 3.1 (pp. 7 to 17) of the GRI.

#### Additional information—Recommendations

Without qualifying the conclusions of our engagement set out above, we make the following recommendations for the further development of sustainability management and CR reporting:

- Further development of stakeholder management, in particular:
  - Continuation of the international roll-out of the stakeholder involvement strategy at international level, which began at the start of 2012
  - Formalization of the processes for responding to stakeholder queries and greater standardization of the processes for responding and documentation at international level
  - Continuation of the international standardization of processes for identifying key stakeholders and issues for international subsidiaries which have their own materiality process
- Expansion of the Group-wide management function for sustainability, e.g.:
  - There should be increased standardization and documentation of processes for recording and determining data

upstream of the CR database.

Düsseldorf, May 22, 2012

PricewaterhouseCoopers Aktiengesellschaft Wirtschaftsprüfungsgesellschaft

Andreas Bröcher Nicole Kummer

Wirtschaftsprüfer (German Public Auditors)



Home > About this report > User help

## User help.

We have included different service features to make it easier for you to read and use this CR Report. Below is a description of how to use these service features.

#### Introductory pages.

In addition to critical questions and a brief topical introduction, the introductory pages also contain videos and interactive graphics.

#### Videos.

You can watch the videos directly on your computer or on a mobile audio or video player.

#### Terms and conditions of use:

The videos provided by Telekom may be used for private purposes only and may not be used for commercial purposes of any kind. Copying, editing and further publication is not permitted. Content and information may not be modified. It is also prohibited to link or post Telekom videos on third-party websites or blogs.

#### Materiality matrix.

The graphics on the introductory pages to each section represent the materiality matrix. This matrix illustrates the topics of our CR categories assessed as part of the <u>materiality process</u> according to their relevance for the most important Telekom stakeholder groups. The larger the print and icon are, the higher the topic was rated by the stakeholders surveyed. Topics that are discussed in the respective section are highlighted with magenta font.

# Main text.

#### Drop-down headings.

The text contained in this CR Report has been structured with drop-down headings to make the content easier to navigate. If you would like to learn more about a certain topic, you can open the text by clicking on the appropriate heading. You can close the text by clicking on the heading again. This feature lets you open the text for several headings, one after the other.

Alternatively, you can select the "Expand all lists" function located in the service box on the right-hand side below the header "This section" to make all of the text visible and then hide it again.

If more information is available about a topic, "Find out more" will appear below the main text. If you click on this link, you can view more background information.

#### Indicator graphics.

Selected <u>indicators</u> of the Group as well as of Telekom Deutschland are illustrated in graphics. The upper right-hand corner of the graphics contains a field that you can use to access the <u>Interactive subsidiary</u> <u>benchmarking tool</u>. As a special feature for energy consumption indicators, there is a new drop-down function (and not only in the tool) that allows you to choose between display in MWh and Joules.

#### Contact.

Under the "Contact" heading we offer you various options for getting in touch with the right contact person for your questions and suggestions.

#### This section.

In order to enable barrier-free access to the report content as far as possible, we integrated the "Read page out loud" option under "This section" for the first time.

You will also find the following functions:

- "Expand all lists"—all of the text on the relevant page will become visible; clicking on this function again will hide the text
- "Place in Info cart"—this feature allows you to collect individual pages while reading and place them into the Info cart
- "Print this page"—prints the current view
- "Save this page"—saves the current view as PDF
- "Read page "—the text of the page will be read out loud
- "View Info cart"—this is where you will find the pages you selected You can download individual pages or several pages at one time as a PDF. You also have the option of saving all selected files on your computer as a compressed ZIP file. You need to have ZIP software installed on your computer to unzip the files. Cookies need to be activated on your browser in order to use this function.

#### Bookmarks.

You can mark up to five pages of the CR Report in the right-hand column under "My bookmarks" and access them with a single click. Cookies need to be activated on your browser in order to use this function.

#### Service.

This is where you will find the Download Center, where you can download the entire report as well as individual sections as a PDF file. In addition, links will take you to the most important CR publications of recent years. As a supplement to the report, we offer an e-paper with a summary of the most important progress during the reporting period (in PDF format or for online viewing).

Also in the right margin you will find a link to more detailed information about our interactive CR app "We care."

#### Interactive indicators.

Under "Interactive indicators" you have the option of directly selecting the <u>Interactive subsidiary benchmarking</u> tool.

#### Interactive subsidiary benchmarking tool.

The <u>interactive subsidiary benchmarking tool</u> allows you to compare the Group's indicators over the course of several years or between selected subsidiaries. The data can be viewed in the form of tables, line diagrams or bar charts. To compare individual Group subsidiaries, switch from "Compare key indicators " to "Compare subsidiaries" in the upper left-hand corner of the window. The buttons in the tables can be used to obtain additional background information about data trends. This option is available for 2010 and 2011 data and will make it easier to track important changes. In addition, the relevance for various reporting standards is specified under each indicator.

#### Social media.

Social network functions have been activated for the CR Report pages. You will find the links at the lower end of the menu column. Clicking on the icon of the respective network will allow you to directly access the Telekom offer available at that network.

#### Upper service bar.

#### Glossary.

The glossary contains definitions of the most important terms used in the CR Report. These are marked with the icon. You can view the definition of a term by hovering your mouse over the symbol. You can also access the glossary in the upper service bar and view all terms individually.

#### Overview.

The "Overview" feature provides an overview of the structure and all the content of the CR Report.

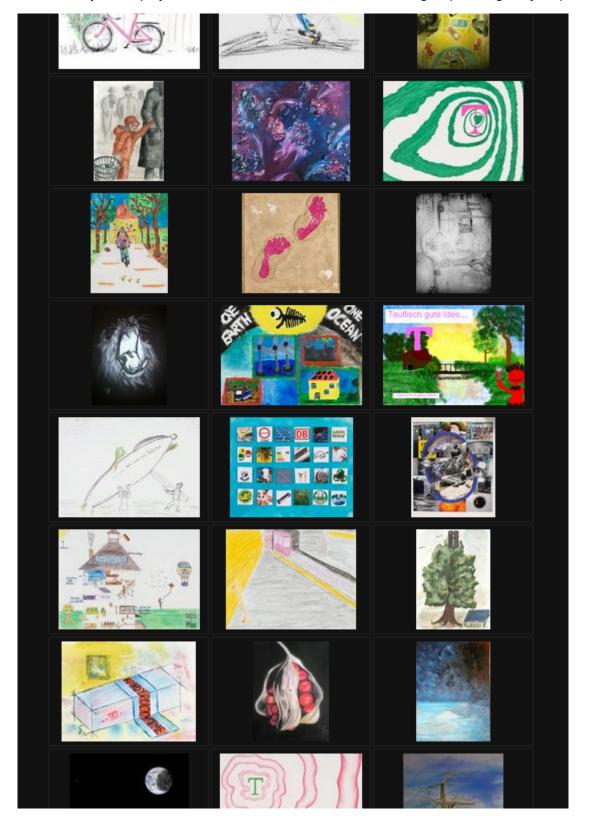
#### Search function.

You can search for specific information in the CR Report by clicking on the magnifying glass icon, entering the search term and clicking on the arrow.

<u>Home</u> > <u>About this report</u> > Painting for climate protection

# Painting for climate protection.

At the end of January 2012, Telekom challenged its employees to get artistic to show what they themselves or Telekom are doing to protect the climate and the environment. The aim of the campaign was to actively involve employees in reporting and raise awareness of climate and environmental issues. In total, 55 works of art were submitted by 40 employees. All contributions are exhibited in a digital picture gallery as part of the CR Report 2011.



Home > Strategy & management

### Strategy & management.



# How does Telekom make sure that CR is embedded in the entire company and all processes?

Find out more

### Strategy & management.

Deutsche Telekom's strategic goal is to become an international leader for connected life and work. For us, this means taking on a leading role when it comes to assuming social responsibility as well. We are planning to become the industry leader in terms of corporate responsibility by 2015 and, based on our <u>CR strategy</u>, to create the prerequisites for the company's long-term success even today. In order to illustrate and monitor our progress throughout the entire Group, we determined the consolidated <u>CR key performance indicators</u> including our international subsidiaries in 2011. We are also systematically involving our stakeholder groups in our CR activities and have developed a strategy for <u>stakeholder involvement</u> over the course of the reporting period.

#### Complex social questions call for clear, strategic answers.

How does Telekom manage to ensure profitability, assume responsibility for society and the environment and meet the different expectations of its stakeholders all at the same time?



CR category "Connected life and work"

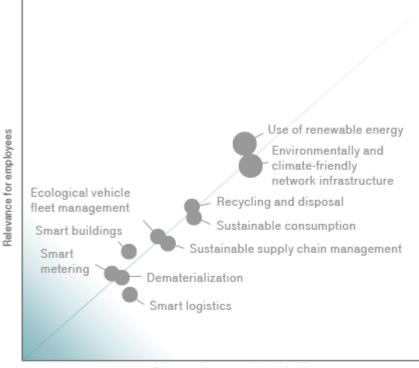
Relevance for external stakeholder

### CR category "Connect the unconnected"



Relevance for external stakeholder

CR category "Low carbon society"



Relevance for external stakeholder

The matrices map the results of our 2012 stakeholder survey. We use the survey to determine how relevant our internal and external stakeholders consider the various topics addressed by our <u>CR categories</u> to be. Further information regarding the stakeholder survey can be found in the <u>"Strategy & management"</u> section.



Home > Strategy & management > Vision

### Vision.



Our CR vision is based on the motto "We take responsibility." It expresses a philosophy that goes beyond short and medium-term goals and calls for the alignment of all our business activities with sustainability principles. The CR vision provides a long-term, Group-wide orientation framework and emphasizes our commitment to promoting sustainable development. Building on the CR strategy, our vision includes all <u>CR categories</u> that are the focus of this commitment.

#### **Our CR-Vision:**

Telekom is an international driving force for sustainable business practices, is setting standards for connected life and work, is exemplary when it comes to connect the unconnected by integrating them in the information and knowledge society, and is a leader on the path toward a climate-friendly society.



Home > Strategy & management > Values & Guiding Principles

## Values & Guiding Principles.

Content verified by PwC

Deutsche Telekom is continually working on establishing a value-oriented corporate culture throughout the Group that is characterized by responsible and sustainable behavior. Our Guiding Principles and the Code of Conduct based on them form the foundation of our corporate activities—both in our cooperation with external stakeholders as well as within the company itself.

#### Guiding Principles for the entire Group.

Our corporate culture is based on the Guiding Principles that were introduced Group-wide in January 2009. These principles represent our values and convictions and guide our actions.

#### **Tekekom's five Guiding Principles:**

- Customer delight drives our action.
- Respect and integrity guide our behavior.
- Team together Team apart.
- Best place to perform and grow.
- I am T count on me.

We implemented the Guiding Principles throughout the entire Group in 2010. They are available in 19 languages and apply in 34 countries and 50 international subsidiaries.

We regularly conduct brief, Group-wide <u>pulse surveys</u> on our employees' satisfaction and their understanding of the <u>Group Strategy</u>. November 2011 marked the third time that we asked employees about their experience when implementing the Guiding Principles in their daily work. Some 63 percent of employees answered that they not only know and understand the Guiding Principles but also implement them in their everyday work activities.

#### Guiding Principles Day to promote corporate values.

In order to fill the Guiding Principles with life in everyday work, a Group-wide Guiding Principles Day is held every year. All employees are encouraged to share their views on the Guiding Principles and how to implement them in their daily work.

On September 28, 2011, numerous activities took place to this end, including games, competitions, messages to employees, and team breakfasts. Subsequently, a slide show was posted on the intranet to present the activities that took place throughout the Group. Here are just a few examples of the wide range of activities:

• René Obermann and his team discussed the impact of the Guiding Principles on the

work at Group Headquarters.

- Executives in the Czech Republic organized a breakfast on Guiding Principles Day and used the opportunity for the team to share information and experience.
- Romanian employees who do not typically come into contact with customers in their everyday activities spent Guiding Principles Day at stores or call centers as a way to strengthen the service culture.
- Customer Service employees in Brühl (Germany) sold fortune cookies containing the Guiding Principles. Proceeds went to the "BILD hilft e.V. Ein Herz für Kinder" charity organization.
- Austrian employees had a caricaturist do a sketch of the Guiding Principles and could pick out "their" Guiding Principle.
- Employees from T-Mobile in Seattle (USA) were greeted with a rap version of the Guiding Principles and other activities in honor of "Values Day."
- Employees in Frankfurt developed a "Guiding Principles digit game" and held a workshop on how to fill the Guiding Principles with life.
- A Guiding Principle Hero was chosen at T-Systems Malaysia.
- Technical Service employees from the Health & Safety area created a photo story entitled "The health of our colleagues is important to us."
- The T-Systems Mobility Solutions Competence Center developed an app on the Code of Conduct and the Guiding Principles.
- Many employee teams used the day to <u>participate</u> in non-profit projects.

Our trainees also got involved in Guiding Principles Day:

- In Koblenz (Germany), trainees prepared an international multi-course meal featuring dishes from countries such as South Korea and Kosovo.
- A treasure hunt through the city center was hosted by the training center in Ulm (Germany).
- The trainees in Ulm also organized a charity race to support the Lebenshilfe Kempten organization. The organization's sports group participated in the race as well. Runners crossed the finish line with over EUR 2,600. The money was donated to the Lebenshilfe organization.

CR Report from the previous year

#### Group-wide implementation of the Code of Conduct.

Our Code of Conduct puts the five Guiding Principles into more specific terms and has served as a reference for clear rules of conduct for our daily work since 2006. The Code of Conduct applies to all Telekom employees worldwide. It connects compliance with laws and regulations with our requirements for ethical behavior and the Guiding Principles. Due to the increased aspiration of society for compliant and legally unimpeachable behavior and the launch of the Guiding Principles at the beginning of 2009, we revised our Code of Conduct in 2010.

#### Code of Conduct

In June 2011, we successfully completed the implementation of the revised Code of Conduct in Germany. For this purpose, a multimedia training package was given to

managers, whereas the online Interactive Code of Conduct tool was made available to support the Telekom employees in Germany. The tool was used 35,000 times in the first month after its introduction in Germany in May 2011. International implementation was successfully completed by the end of December 2011, and considered local legal and data protection requirements.



Home > Strategy & management > CR strategy

## CR strategy.



Deutsche Telekom aims to position itself as a global leader for connected life and work. At the same time, we are striving to become an international leader in our industry when it comes to assuming social and ecological responsibility. We are expecting to achieve this goal by 2015.

We have entrenched our commitment to sustainable corporate governance in our Group-wide CR strategy. The CR strategy has been derived from the Group strategy and also provides a framework for international subsidiaries when it comes to implementing CR in their areas of responsibility. In order to monitor and drive strategy implementation and our progress toward international leadership, we regularly measure our CR performance using CR key performance indicators.

#### "Leading the way" project defines criteria for success.

With our project "Leading the way" we are aiming to strengthen and expand our role as a CR pioneer. Our first step was to develop a criteria catalog in order to determine our position within the international ICT sector. We verified our position based on this catalog in 2011. Accordingly, some of the targets and measures had to be modified or supplemented. By the end of 2011, we had adapted the catalog of criteria to enable us to achieve our strategic goals.

The central <u>CR department</u> launched the "Leading the way" project to help us pursue our objective of becoming a CR leader more systematically and monitor our progress in this area.

We developed a catalog of criteria by conducting extensive competitor and trend analyses as well as an internal analysis in which the integration status of CR into key business processes was measured.

This catalog covers the entire range of corporate responsibility topics and focuses on industry-specific challenges. The criteria catalog is in line with existing corporate goals and the CR strategy. It significantly contributes to permanently entrenching CR in our core business and establishing the sustainability principles throughout the entire Group.

We derived concrete action packages on the basis of these progress criteria. We will monitor each recommended measure until 2015. We will also review the existing <u>CR KPIs</u> by 2015 based on the results of the "Leading the way" project.

We take responsibility.



Home > Strategy & management > CR strategy > CR categories

### CR categories.

Content verified by PwC

Technological progress as well as time and location-independent communication are fundamentally changing our lives. Deutsche Telekom is facilitating connected life and work, equal opportunities in the information and knowledge society, and a low carbon society with <u>sustainable products and solutions</u> and <u>initiatives</u> to promote, for instance, a low carbon society. And this benefits our customers and employees, suppliers, investors, society and the environment.

We take responsibility...

#### ... for connected life and work.

We are helping shape the change in the increasingly digitalized work and living environment. Deutsche Telekom supports cultural change with innovative products and solutions toward greater self-determination and quality of life both in our professional and personal lives. Our goal is to be a driving force for sustainable life and work.

#### ... for connecting the unconnected.

Irrespective of their social or economic opportunities, we try to get as many people as possible involved in the development of the society they live in. With this in mind, we promote numerous community initiatives and support projects for media skills development.

#### ... for a low carbon society.

Global warming and its consequences are one of the greatest challenges facing mankind. We have launched large-scale initiatives to reduce our own emissions for the long term. At the same time we are also empowering our customers and partners to make their contribution to a low carbon society with our <u>solutions</u>.

Download :: Brochure "Protecting the climate, cutting costs. Sustainable ICT solutions"

Home > Strategy & management > CR strategy > CR key performance indicators

## CR key performance indicators.

Content verified by PwC

In order to steer its CR performance, Telekom uses seven key performance indicators (CR key performance indicators or CR KPIs) that apply throughout the Group. These help us to systematically and transparently optimize our services on an ongoing basis.

The CR KPIs are divided into two categories:

- KPIs with targets standardized Group-wide, and
- KPIs with specific targets per international subsidiary.

#### CR KPIs mandatory as of 2012.

Since January 1, 2012 all international subsidiaries are obliged to determine their CR KPIs. The indicators that were still "voluntary" in the previous year are now of a mandatory nature.

For the first time, we also included selected CR KPIs in the <u>Annual Report 2011</u>. The <u>Energy Consumption</u> CR KPI and the <u>CO<sub>2</sub> Emissions</u> CR KPI were included in the report as KPIs for Telekom's ecological performance. This is the first step on the way to a closer <u>link between the Annual Report and the CR Report</u> which shows that sustainability is a fixed element of Deutsche Telekom's core business.

#### CR KPIs with Group-wide targets.

We collect consolidated data for the entire Group for the following three CR KPIs:

- The <u>Socially Responsible Investment (SRI) CR KPI</u> is used to measure our progress in the area of <u>sustainable investment</u>. This KPI indicates the share of Deutsche Telekom AG stock that is owned by investors who show concern for environmental, social and governance criteria in their investment strategies.
- The <u>Employee Satisfaction CR KPI</u> determines our employees' satisfaction. It is based on the <u>employee survey</u>, which we conduct every two years for each individual company.
- The <u>Sustainable Procurement CR KPI</u> measures the share of our overall procurement volume that we receive from suppliers who have been assessed for risk through audits and/or by using <u>E-TASC</u>.

We are planning to measure the sustainability of our product portfolio based on the <u>Sustainable Products CR KPI</u> in the future. The indicator should also become mandatory for all international subsidiaries. Four of the seven CR KPIs are based on individual, regional targets. The targets take into account the regional situation as well as specific developments at the respective international subsidiaries.

- Based on the <u>CO<sub>2</sub> Emissions CR KPI</u>, we determine the <u>CO<sub>2</sub> reduction</u> achieved compared to the reference year 2008. We aim to achieve a reduction of CO<sub>2</sub> emissions by up to 40 percent compared to 1995 values.
- The <u>Energy Consumption CR KPI</u>, with which we measure our electricity usage, is based on the Monetary Power Efficiency Indicator (MPEI). It shows the amount of electricity consumed compared to net revenue.
- We use the <u>Social Commitment CR KPI</u> to measure the perception of Telekom's CR activities in the public arena as an indicator of our social commitment.
- The Used <u>Cell Phone Collection CR KPI</u> compares the <u>collected used cell phones</u> measured in numbers of items or the equivalent value in kilograms to the number of a subsidiary's customers.

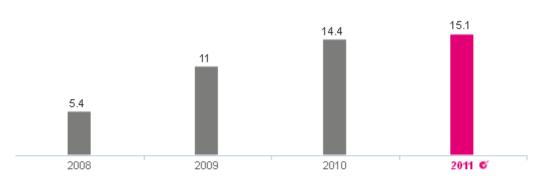
Home > Facts & figures > Economic indicators > Socially responsible investment

### Socially responsible investment.

#### CR KPI "Socially Responsible Investment".

In 2011, 13 percent of all Deutsche Telekom shares were held by investors who take SRI/ESG criteria into consideration at least partly in their investment strategy. 2 percent of T-shares were held by investors who give priority to SRI/ESG aspects when managing their funds.

CR KPI "Socially Responsible Investment" Deutsche Telekom AG.



Share of Deutsche Telekom AG stock that is owned by investors who incorporate environmental, social and governance criteria in their investment strategies (source of data since 2009: Ipreo; data in 2008: Sustainable Business Institute). Year-on-year comparisons may not be entirely accurate since the calculation base is updated annually.

The Investment CR KPI indicates the percentage of Deutsche Telekom AG T-shares held by investors who show concern for environmental, social and governance criteria in their investment strategy. Due to annual updating of the calculation criteria, comparisons with the previous year may not always provide conclusive information.

#### Reporting against standards.

The KPI is relevant for criteria 1 (Strategic analysis, strategy and goals) and 7 (Rules and processes) of the German Sustainability Code.



Listing of the T-Share in sustainability indices/ratings.

Rating agency	Indexes/ratings/	Succe	Successfully listed in index			
	ranking	2011	2010	2009	2008	
sam 🌘	DJSI World	✓	1	1	1	
	DJSI Europe	✓	1	1	1	
oekom	"Prime"	<b>/</b>	1	<b>/</b>	1	
vigeo	ASPI	<b>✓</b>	1	1	1	
	ESI	<b>✓</b>	1	1	1	
imug EIRiS	FTSE4Good II	<b>/</b>	1	<b>/</b>	1	
SARASIN	DAX Global Sarasin Sustainability	<b>✓</b>	1	1	1	
CARBON DISCLOSURE PROJECT	Carbon Disclosure Leadership	-	-	-	-	
	Carbon Performance Leadership (new since 2010)	-	✓	n.a.	n.a.	
MSCI*	MSCI Global Climate	✓	1	1	1	
	MSCI World ESG 🗓	-	-	-	-	
Newsweek 2011 GREEN RANKINGS	Rank Germany #6, Global #80, Technology #12	<b>/</b>	✓	n.a.	n.a.	
STOXX COLLEGES SECTO	STOXX Global ESG I Leaders (new since 2011)	<b>V</b>	n.a.	n.a.	n.a.	

<sup>✓</sup> Successfully listed.

### Reporting against standards.

The information is relevant for criterion 1 (Strategic analysis, strategy and goals) of the German Sustainability Code.

<sup>-</sup> Not listed.

<sup>\*</sup> Previously RiskMetrics/KLD.



Home > Employees > Competitive workforce > Internationalization

### Internationalization.

Under One Company, Deutsche Telekom is increasingly fusing into a global corporation. Just like other international groups, Deutsche Telekom is also required to define uniform standards for their global HR policy without ignoring local characteristics.

Global employee relations management—taking a multi-faceted approach to employee relations.

The Global Employee Relations Management unit offers guidance and encourages the exchange of experiences on structuring employee relations in different countries. At the "Employee relations in a connected world" conference in early May 2011, 70 leading executives from international businesses discussed the challenges presented by employee relations. This formed the basis for Deutsche Telekom's ongoing consultation with other employers to formulate forward-looking employee relations. Moreover, in a globally applicable Employee Relations Policy the Group commits itself to a high level of uniform minimum standards worldwide in dealing with its employees, taking account of different cultures, laws and needs. A monitoring system will be used to guarantee policy compliance as soon as the policy has been rolled out throughout the Group. Our policy is based on our Guiding Principles as well as on national regulations and internationally recognized rules such as the United Nations Global Compact [1], the OECD guidelines and the core labor standards issued by the International Labour Organization (ILO).

#### Social Charter: Complying with minimum standards.

We passed our <u>Social Charter</u> in 2003. The Charter is also based on the principles of the Global Compact , OECD and ILO. The Social Charter contains policies on human rights and working conditions, the ban on child labor, environmental protection, equal opportunity, occupational health and safety and the right to set up or join a trade union. These policies apply throughout the Group. Our suppliers are obligated to comply with these policies as well.

Cooperation with employee representatives on both a German and international level.

Again in 2011 we successfully continued to pursue intensive dialog with the bodies representing employees within the Group in Germany. The implementation of numerous measures and projects would not have been possible without the participation of elected employee representatives. This is where we are seeing the fruits of our commitment to cooperation based on trust, as outlined in the Group Policy on Employee Relations. A key role falls to the Group Works Council, our contact point for all co-determination issues within the Group in Germany. In the European Works Council (EWC), too, Deutsche Telekom nurtures an active relationship with the employee representatives of our European subsidiaries and affiliated companies.

Sub-targets	Status of implementation/measures
Strengthen international employee relations	Implementation underway • Finalize implementation of Employee Relations Policy • Monitor Employee Relations Policy

### 2010/2011 CR program

The current 2011/2012 CR program can be found in the	e "Strategy & management" section.



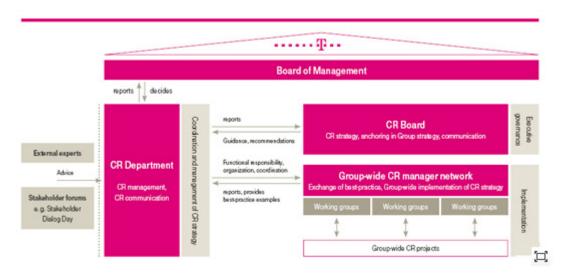
Home > Strategy & management > CR governance

# CR governance.

Content verified by PwC

Telekom has created an integrated governance structure for CR in order to closely link strategic management and operational implementation throughout the Group. By incorporating CR into the CEO's department, Telekom has made sure that sustainability issues become an integral part of all of Telekom's business activities.

#### **CR-Governance**



## CR Board: Group-wide management of the CR strategy.

The CR Board develops recommendations for the Board of Management regarding the implementation and future focus of the <u>CR strategy</u>. Targets and <u>key performance indicators (CR KPIs)</u> for the group-wide <u>CR program</u> are also discussed during the board's meetings.

The CR Board generally meets three times a year to discuss the latest developments at the Group, in society at large and in the markets in which Telekom is active. Additional meetings are called as needed. In 2011 the CR Board debated the following topics:

- In March, the board dealt with the <u>climate protection strategy</u>, <u>sustainable procurement</u> and our appearance on the website of the sustainability portal <u>Utopia</u>.
- In September, the perspectives of integrated ESG and financial reporting, the sustainability drive and our <u>health</u>, <u>safety and environmental management</u> were on the agenda.
- In December, the Board discussed the topics of <u>Stakeholder Dialog Day in China</u>, <u>socially responsible investments</u> and the program of the <u>Telekom Foundation</u> for 2012.

The CR Board is comprised of the heads of those corporate areas that play a key role in steering and implementing CR throughout the Group:

- Corporate Communications
- Human Resources
- Procurement
- Public and Regulatory Affairs
- Brand Management
- Chairman's Office
- Technology
- Deutsche Telekom Foundation
- Europe Board department
- Corporate Responsibility

The broad-based organizational positioning ensures that the CR strategy is in line with the Group and brand strategy as well as with the corporate values.

# The CR department as a central interface.

The central CR department is responsible for strategic CR management and CR communication. It coordinates and manages the implementation of the CR strategy in day-to-day business operations throughout all business areas and international subsidiaries. At Group level, the CR department acts as an interface in collaboration with all relevant departments. It plans and implements projects in the areas of <u>climate and environment</u>, <u>sustainable products and services</u>, <u>supply chain management</u>, <u>social commitment</u> as well as stakeholder involvement.

#### Development of Group-wide CR controlling.

In order to support the management of the CR department in relevant decision-making processes, we are developing Group-wide CR controlling. CR controlling can be used for early identification and management of opportunities and risks regarding the company's reputation, costs and revenue.

The Controlling unit will be established on the basis of the strategic <u>CR KPIs</u> defined by us and the associated parameters. We determined specific target values for several CR KPIs during the reporting period, thereby creating the basis for central CR controlling.

In order to collect CR data and to be able to calculate the CR KPIs based on this data, we introduced the CR database in 2009. As the database is the foundation for reporting and for Group-wide CR management, we are continually upgrading it. To this end, we hold regular feedback rounds and are making management aware of the necessity of collecting data, for example at the meeting of the <u>CR Manager Network</u> in Bratislava in October 2011.

Web-based software for data collection enables a transparent CR reporting process throughout the Group. The database ensures standardized, mandatory processes at the Group and subsidiary levels. All CR-relevant data and CR KPIs are validated in a multiple-phase process and consolidated centrally. This gives us a better understanding of the quantitative developments of strategic and operational CR topics and makes it easier to monitor deviations from set targets. The software also enables Group-internal

# International CR Manager Network.

Networking is a central strategic topic at Telekom and also a key issue within our CR organization. The <u>International CR Manager Network</u> plays an important role in this regard.

# Climate Change Group.

Telekom founded the Climate Change Group in order to contribute to an environmentally friendly society. The group is comprised of internal energy and climate experts and consults with external specialists as the occasion demands. Its task is to effectively reduce the Group's energy consumption and CO<sub>2</sub> emissions.

Over the course of the reporting period, the Climate Change Group focused on taking the climate protection strategy to an international level and developing the associated country-specific targets. It supported both the international subsidiaries as well as T-Systems' local business units in recording their greenhouse gas emissions and adopting measures for reducing these emissions.

# Update on the 2010/2011 CR program.

Sub-targets	Status of implementation/measures		
Implement a CR governance structure	Target achieved.  • Start of work and regular meetings of the CR Board  • Climate Change Group established  • Germany core team meets regularly		
Use of the rating analysis results for the entire "Leading the way" project	Implementation underway.  Recommendations for action, measures and measurement criteria established: target achieved  Controlling to review measures established: target achieved  First measures implemented  Annual review of the "Leading the way" project		

# 2010/2011 CR program

The current 2011/2012 CR program can be found in the "Strategy & management" section.



Home > Strategy & management > CR program

# CR program.

In its CR program, Telekom specifies mandatory targets to be implemented throughout the Group in the relevant processes of its core business. In this program we define specific measures and a timeline for implementation. We also provide information on the implementation status in the CR program.

Detailed information on the <u>CR key performance indicators</u>, which we use to quantify our performance in each area, is provided in the CR Report.

# Highlights in the reporting period:

- Internationalization of the climate protection objectives pushed forward
- 1 million used devices collected as part of cell phone return campaigns
- Expansion of the "Yes I can!" initiative and establishment of an association
- Integrated reporting including non-financial data in the 2011 Annual Report for the first time
- AA1000 certification

# Revising the CR program.

We revised our CR program during the reporting period in line with our goal of becoming the industry leader in terms of corporate responsibility by 2015.

In addition to the new 2011/2012 CR program, we continue to report on the progress made with the 2010/2011 CR program. That enables us to ensure continuity and transparency for the purpose of communication on progress. We report on the implementation of sub-targets from the old CR program in different sections of the report under the heading, "Update on the 2010/2011 CR program." The 2010/2011 CR program update was reviewed by an external auditing firm.

## The current 2011/2012 CR program.

Our new 2011/2012 CR program focuses on CR topics that will significantly impact the Group's future business development as well as the development of society in general. The new CR program is not subject to external review by an auditing firm.

CR-programm 2011/2012



Home > Strategy & management > Stakeholder involvement

# Stakeholder involvement.

Content verified by PwC

The targeted involvement of our stakeholders helps us build long-term, trust-based relationships and increase understanding for our concerns and activities. Last but not least, dialog with our stakeholders is also a source of inspiration for innovation processes and a basis for new cooperations or strategic partnerships. This is especially important in regard to our sustainability goals, which we will only be able to achieve together with partners from politics, society, science and industry.

## Development of stakeholder involvement strategy.

In order to systematically manage stakeholder involvement throughout the Group and live up to our aspiration to <u>lead the way in CR</u>, we developed a stakeholder involvement strategy in 2011. This strategy demonstrates that we take our stakeholders' concerns seriously and get them involved based on high-quality standards. The strategy is based on the three <u>AA1000 principles</u> of materiality, inclusivity and responsiveness developed by NGO AccountAbility.

We organized the development of our stakeholder involvement strategy as a participatory process. Interviews with 17 external stakeholders were conducted, during which we asked both about our stakeholders' experiences with Telekom and the expectations they have in regard to optimal cooperation. The goal was to consider both aspects in the early stages of strategy development. In order to obtain a comprehensive view of our stakeholders' interests, we also surveyed Telekom employees, conducting more than 20 interviews with employees who will be implementing the strategy in the Group.

#### Three-pillar model of the stakeholder involvement strategy.

The views and <u>expectations</u> voiced by our internal and external stakeholders had a considerable influence on the design of the strategy. As a result, the strategy adopted by Deutsche Telekom in December 2011 is based on the following three pillars:

- 1. Our strategic profile: The strategic profile designates relevant stakeholder groups and defines how the Group wants to fashion its relationship to these stakeholders. In addition to providing information and engaging in dialog, we are increasingly focused on participatory formats which customers, employees, NGOs and other stakeholders can use to get involved and make contributions. To this end, we are offering options to participate in discussing topics and finding solutions in the different <u>categories</u> of our CR strategy.
- **2. Internal skills development and service:** We are developing an infrastructure that will help our employees implement the strategy in practice. Internal networking meetings help to exchange experiences in dealing with stakeholders, to discuss practical examples and to plan and implement joint activities. In addition, we plan to develop a guideline in

2012 that will give employees guidance when implementing stakeholder formats.

**3. Development of a stakeholder management system**: We are creating transparency in all corporate processes relevant to stakeholder relationships. In this vein, we are documenting our stakeholder activities and monitoring the development of relevant stakeholder topics. In addition, in 2011 we employed our <u>materiality process</u> to test a system for handling our stakeholders' feedback and will gradually integrate it into the evaluation process.

# AA1000 as a guidance.

We looked to the AA1000 standard as a reference when developing our strategy. This is an internationally recognized body of rules and regulations for auditing sustainability management and CR reporting. At the end of 2011, accounting firm PricewaterhouseCoopers (PwC) issued a moderate assurance report which confirms that Deutsche Telekom heeds the AA1000 Account Ability principles in its CR processes and systems (Type 1 audit). The assurance engagement also took into account the stakeholder involvement strategy. The present report was also the subject of a moderate assurance engagement by PwC based on the AA1000 principles. This means that we achieved our target of a Type 2 audit in 2012.

# Update on the 2010/2011 CR Program.

Sub-targets	Status of implementation/measures		
Expansion and further development of stakeholder dialog	Target achieved.  • Board of Management signs the Change-maker Manifesto  • Board of Management signs "Leitbild für die deutsche Wirtschaft" (Guiding principles for German business)  • English intranet for international CR Manager Network and employees of the international subsidiaries  • Adoption of a stakeholder involvement strategy  • Establishing a stakeholder involvement process in line with the requirements of AA1000  • Enhancing the materiality process  • Expanding cooperation with CCCD and BBE in the area of social commitment  • Establishing a 50+ expert forum		
Intensifying customer dialog on sustainability	Implementation underway.  • Continuing the sustainability communication campaign  • Continuing customer dialog on the Internet platform nachhaltig-handeln.telekom.com  • Continuing dialog on Utopia.de  • Customer dialog on Deutscher Aktionstag Nachhaltigkeit, the German action day to promote sustainability, in Berlin in June 2012		

#### 2010/2011 CR program

The current 2011/2012 CR program can be found in the "<u>Strategy & management</u>" section.

<u>Home</u> > <u>Strategy & management</u> > <u>Stakeholder involvement</u> > Stakeholder expectations

# Stakeholder expectations.

Content verified by PwC

Precise knowledge of our stakeholders' interests and views is a basic prerequisite for an informed design of stakeholder relationships. This concerns the topics that our stakeholders consider important on the one hand, and their expectations of successful communication with us on the other hand.



# CR commitment recognized by experts and the general public.

To be able to focus our CR activities properly, it is important to determine how these are perceived and assessed by our stakeholders. To this end, we conduct regular measurements: We commissioned TNS Infratest to carry out a representative random sampling of the population and around 300 CR experts in August 2011. In November 2011, the survey of the general population was repeated.

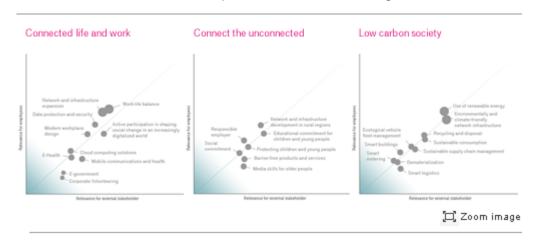
Telekom was able to slightly increase its rating in the perception of its CR commitment compared to 2010. It received the highest ratings from the general public among the ICT companies surveyed. Telekom also improved in the "corporate responsibility" and "social commitment" aspects. Telekom's commitment is clearly rated higher by CR experts than by the general population.

In an aided recall survey, the experts listed the <u>promotion of women</u>, the <u>Deutsche</u> <u>Telekom Foundation</u> or <u>Telekom@school</u>, for example. The subsequent second survey of the general population confirmed the increasing popularity of the "<u>Yes, I can!</u>" initiative, the cooperation with the <u>Nummer gegen Kummer</u> youth counseling line as well as the <u>cell</u> phone collection program.

The 2011 results provided us with an important starting point for establishing the content for our CR activities and for enhancing our CR communication. In addition, the data were used to update the "social commitment" and "corporate responsibility" leadership indicators, whose values increased considerably over the course of 2011. The first also forms the basis for our <u>Social Commitment CR KPI</u>. Details on the CR KPIs can be found in the "<u>Strategy and management</u>" section.

# The topics of our stakeholders.

In order to find out which topics are important to our stakeholders, we surveyed our internal and external stakeholders for the fifth time in February 2012. The survey revealed parallels as well as some differences between the two stakeholder groups. In the three CR categories, the relevance ratings of Telekom employees and external stakeholders did not differ greatly, same as in 2011. However, there are topics that are ranked as more important by external stakeholders than by internal stakeholders. These include "mobile communications and health," "active participation in shaping social change in a digitalized world," "corporate volunteering," "barrier-free products and services" and "smart logistics." Overall, internal and external assessments differ most for the topic of "active participation in shaping social change in a digitalized world." Telekom employees rate topics that affect them directly, such as "work-life balance" and "responsible employer" higher than external stakeholders. For further details, please refer to the following matrices.



Deutsche Telekom has committed itself to pay particular attention to those topics that received the most votes. The highest-ranking concerns were included in our CR roadmap. It is with the roadmap that we monitor—based on monthly reports—to what extent we have achieved our CR objectives. We will keep you updated on the success of these measures on the intranet as well as on the <u>Group website</u>.

# Social concerns of our stakeholders.

Along with the topics related to our CR categories, the participants of our <u>stakeholder</u> survey were asked to rate all the concerns that had been submitted to Telekom by

stakeholders in 2011. These ranged from setting up CO<sub>2</sub> accounts for employees to improving customer information to clearer explanation of our initiatives.

Employees and external stakeholders largely agreed on the following five most important topics:

- Setting up specific incentive systems to advance sustainable corporate governance for management
- Embedding sustainability more strongly in corporate processes, for example in product marketing and design
- More understandable presentation of our sustainability activities and avoidance of Anglicisms
- Avoidance of plane trips through increased use of phone, web and video conferences throughout the Group
- Increased promotion of employee commitment in the community

We also received numerous valuable suggestions and comments to our open questions on the survey, which we integrated into the analysis of stakeholder topics and which we will take into account in our further strategy development.

# Stakeholder expectations regarding dialog with us.

We need to know our stakeholders' expectations regarding mutual communication to be able to design our stakeholder relationships properly. Therefore, we systematically asked about the requirements for successful, mutually satisfying communication during the interviews that we conducted for our <u>strategy development</u>. Our main finding was that we need to modify our stakeholder involvement approach to achieve the "quality leadership" to which we aspire.

The interviews confirmed that many companies are now initiating stakeholder dialog. However, this seems to be sporadic in many cases, and the results appear to have little influence on corporate activities. The stakeholders involved are increasingly wondering whether this dialog really has an impact on corporate actions. In addition, it should be defined as clearly as possible from the beginning what the dialog is intended to achieve, and the "rules of the game" should be binding. Our stakeholders also expect to be informed about the implementation of the results.

The expectations voiced in this respect had a considerable <u>influence</u> on the design of our strategic profile. The evaluation also showed that our <u>involvement principles</u> largely fulfill our stakeholders' expectations. It has been confirmed that stakeholder involvement can only be successful when dialog is on an equal footing. That is why we replaced the term "stakeholder management," which was still used up to last year and which does not entirely define the true concept, with the term "stakeholder involvement."

#### Objectives and outlook for 2012.

In 2012 we will expand topic monitoring on the basis of our <u>stakeholder involvement</u> <u>strategy</u>. We have developed new surveying tools for this. For example, we intend to measure the impact of individual projects and measures with fast survey cycles.

In 2012 we plan to use our "CR barometer," which is based on these surveying tools, with customers and employees. We are also planning to introduce a new monitoring tool to collect and assess topics addressed by NGOs. Thanks to the new tool we will have another systematic process for identifying stakeholder positions, thereby fulfilling an important requirement of the <u>AA1000 standard</u>.

We take responsibility.



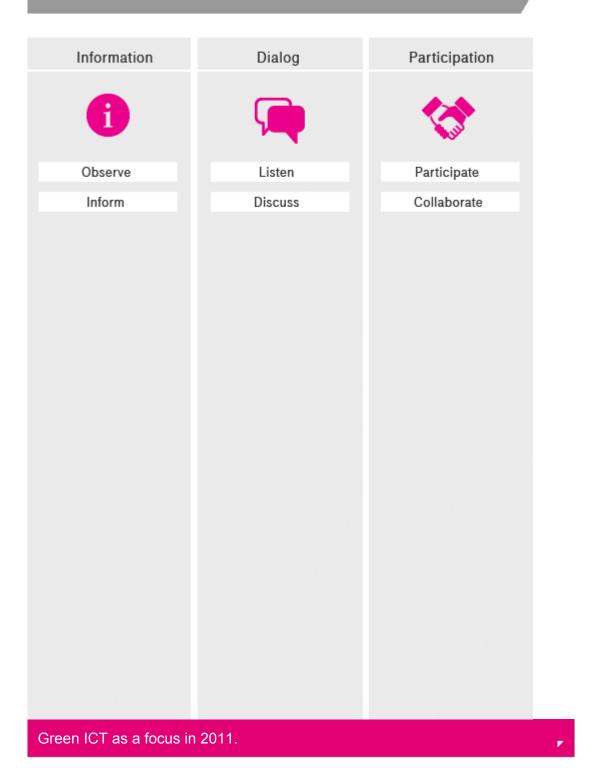
<u>Home</u> > <u>Strategy & management</u> > <u>Stakeholder involvement</u> > Formats of involvement

# Formats of involvement.

Content verified by PwC

The type and extent of our stakeholder involvement is based on the results of a case-related relevance analysis. The more relevant a stakeholder group is to the topic or project concerned, the more intense the stakeholder involvement will be. Depending on the intensity, we make a distinction between three types of involvement: information, dialog and participation.

# Degree of stakeholder involvement



We further developed our dialog approach as part of strategy development in 2011. This includes yearly changing focal points for our various dialog formats. In this reporting period, the focus was on the topic of green ICT. We debated this topic in a <u>dialog event</u> in October and in a <u>telegraph\_lunch</u> in December 2011.

# Broad-based involvement: memberships and collaborations.

Through our memberships with different organizations, we get involved in discussion processes and collaborate on international committees. Collaborations allow us to approach topics on which we as an individual company would only have a limited impact

together with other players. The graphic below shows selected memberships and collaborations:

ACHSE e.V.
American Chamber of Commerce Germany e.V.
Aktion Deutschland Hilft e.V.
B.A.U.M. e.V.
BILD hilft e.V. "Ein Herz für Kinder"
BITKOM Bundesverband Informationswirtschaft, Telekommunikation und neue Medien e.V.
Bürgerschaftliches Engagement (BBE)
Bundesnetzwerk Bundesverband der Deutschen Industrie (BDI) e.V.
Bundesverband Deutsche Tafel e.V.
Bundesverband Digitale Wirtschaft (BVDW) e.V.
Bundesvereinigung der Deutschen Arbeitgeberverbände (BDA)
Bundesvereinigung Lebenshilfe für Menschen mit geistiger Behinderung e.V.
Deutsche Telekom Stiftung
Deutscher Industrie- und Handelskammertag (DIHK) e.V.
Deutschlandstiftung Integration
DKMS Deutsche Knochenmarkspenderdatei gemeinnützige Gesellschaft mbH
EU Corporate Leaders Group on Climate Change
European Telecommunication Standards Institute (ETSI)
European Telecommunications Network Operators' Association (ETNO)
Forum Nachhaltige Entwicklung der Deutschen Wirtschaft e.V. (econsense)
Global e-Sustainability Initiative (GeSI)
GSMA
Initiative 2°
International Chamber of Commerce (ICC)
Nummer gegen Kummer e.V.
SOS-Kinderdorf e.V.
Sustainable Leadership Forum
Telefonseelsorge
World Economic Forum (WEF)

We take responsibility.



Home > Strategy & management > Compliance

# Compliance.

Content verified by PwC

Telekom's business is based on the principles of integrity and respect. Compliance, which is understood as the lawfulness of corporate activities, therefore plays a significant role at our company. Telekom is clearly committed to the ethical principles set out in the <u>Guiding Principles</u> and in the <u>Code of Conduct</u>.

All compliance management activities are in line with legal regulations and with Telekom's Privacy Code of Conduct, a policy on handling personal data at the Deutsche Telekom Group.

Download :: Privacy Code of Conduct

## Compliance management certified.

The key elements of the compliance management system are as follows:

- Establishment of a compliance organization in all major Group units
- Risk-based derivation of a compliance program and its consistent implementation through policies, training and consulting offers
- Appropriate response to breaches of compliance

The Group's compliance organization was certified by independent auditors on December 31, 2010 in terms of adequate implementation of minimum requirements and implementation specifications defined by Deutsche Telekom. Recertification is planned by 2013.

## Central responsibility for compliance organization.

Responsibility for the compliance management system has top priority at Telekom. In line with the high relevance of the topic, a separate Board of Management department for Data Privacy, Legal Affairs and Compliance was created in 2008.

Group-wide structures have been making efficient compliance management possible since 2005. The compliance organization consists of the Chief Compliance Officer, the Compliance Committee and the central and local Compliance units. The compliance organization develops Group-wide standards, tools and processes to guarantee compliant conduct at the company.

# **Compliance Committee provides internal consulting.**

The Compliance Committee consists of executives from the following areas:

- Compliance
- Legal

- Data Privacy
- Internal Audit
- Human Resources

The purpose of the committee is to establish and monitor structures for a functional compliance management system and to advise the Board of Management on all relevant questions about compliance. The Chief Compliance Officer is the chairman of the Compliance Committee.

#### Compliance Officer plays key role in compliance management.

The Chief Compliance Officer reports to the Group Board of Management member for Data Privacy, Legal Affairs and Compliance. He plays a key role in setting up the compliance management system and maintaining its functionalities in the long term. The Chief Compliance Officer informs the Board of Management and the Audit Committee of the Deutsche Telekom Supervisory Board about current compliance activities at the Group. According to the German Corporate Governance Code, the Audit Committee is responsible for compliance issues. The Chief Compliance Officer has the right to contact the Audit Committee directly and can also be directly commissioned by it.

# International collaboration improved.

The Group Board of Management and the respective bodies of the affiliated companies must ensure an appropriate compliance organization. The Group Compliance Management (GCM) unit supports these bodies in this task. The legal basis for this are contracts between the Telekom Group and its direct subsidiaries, the Intra Group Compliance Agreements, which define the rights and obligations of both parties.

Different legal practices and cultural values in the various countries where Deutsche Telekom is active represent a significant compliance challenge. In line with the Group's international structure, strategic issues are discussed with an International Compliance Advisory Team and a shared vision is defined. The International Compliance Advisory Team is a "trend-setter" of sorts, as it provides incentives for designing and implementing balanced compliance structures at the Deutsche Telekom Group.

We have been promoting Group-wide cooperation for years with the International Compliance Days, an annual meeting of the representatives of all compliance organizations of the international subsidiaries. 115 representatives from 24 countries followed the invitation by the central Compliance department to come to Bonn on September 8-9, 2011. This was the seventh meeting of this kind, and this time the future focus of compliance activities and possibilities to optimize international cooperation were on the agenda. The next International Compliance Days will take place in Bonn in April 2012.

## Compliance policies revised and implemented.

The Group Policy on Avoiding Corruption and Other Conflicts of Interest (or Anti-Corruption Policy) and the Group Policy on the Acceptance and Granting of Benefits (or Benefits Policy) were revised during the reporting period.

The Anti-Corruption Policy serves as an overarching policy and a link between the Code

of Conduct and the detailed rules of the more specific policies which regulate the acceptance and granting of undue benefits, sponsoring, donations, benefits extended in the political sphere, dealing with consultants, the ban on insider trading and anti-competitive agreements. In addition, it defines the organizational obligations and measures to prevent corruption and other conflicts of interest. The Benefits Policy governs how to handle gifts, entertainment and invitations to events in business relationships.

These policies are now becoming effective and mandatory throughout the Group. We first obtained the resolutions of the executive bodies in the national Group units and then made the policies known to employees at the national level. At the international level, the process will involve greater outlay because we must first check whether the policies comply with relevant national laws. The introduction is being accompanied by communication and training campaigns.

# Employee training for strengthening compliance.

The Group Compliance Management area conducted e-learning sessions as well as individual attendance courses for managers and employees on issues such as the Code of Conduct, general and risk-specific compliance topics and accepting and granting benefits.

Additional web-based training courses on the principles of ethical business conduct will be completed in 2012. For example, in May 2012 we will start an anti-corruption e-learning course where employees can learn about the Anti-Corruption Policy and refresh their knowledge from earlier training courses. This e-learning course will subsequently be adapted as necessary and introduced at the international subsidiaries.

# New e-learning module raises awareness of anti-trust risks.

Anti-trust compliance requirements are on the rise. In order to reduce the risks, we are making our employees aware of the possible consequences of non-compliance with anti-trust laws. The plan is to provide a new e-learning module on this topic for Telekom employees in Germany in Q2 2012. This will also be launched internationally in the course of 2012.

## E-learning module on compliance basics.

We will launch an e-learning module designed to raise awareness of compliance in April 2012. It will deal with the basics and requirements in the most important fields of compliance and will introduce users to our Guiding Principles, our <u>Code of Conduct</u>, applicable legal regulations as well as internal policies. The training offer will be available to all employees in Germany, and also internationally where necessary.

## Internet portals for prevention and advice.

#### Ask me!

In order to prevent compliance risks, we set up the "Ask me!" portal in 2008. Here employees can ask compliance-relevant questions, for example regarding the Code of Conduct or laws and internal policies. "Ask me!" offers reliable information that employees can use in their daily work.

#### Tell me!

We are dependent on the input of our employees, business partners, customers and other stakeholders when it comes to investigating violations of internal policies, laws or codes of conduct. "Tell me!" is a portal that is also accessible to external parties which can be used to report misconduct via e-mail, phone and fax. Despite the fact that we delisted from the New York Stock Exchange in 2010, we will continue to operate this portal—even though we are no longer obligated by law to provide a public reporting system.

#### Promoting compliance in customer contact.

Promotion of integrity and legally correct conduct in customer contact supports Deutsche Telekom's goal of being perceived as the most highly regarded service company in the industry. That is why we initiated the Customer Contact Compliance Program for the promotion of integrity in customer contact in 2010. The focus is need-based advice and effective implementation of measures tailored to different distribution channels and countries. We initially started the program at Telekom Deutschland and then at Magyar Telekom.

After successful implementation in these two countries, the initiative was rolled out at other international subsidiaries in 2011. Suitable action plans have been integrated into Deutsche Telekom's annual compliance program. Sustainable implementation is consistently monitored.

## Investigations of suspected corruption.

Telekom employs a zero tolerance policy when it comes to corruption. Violations are systematically investigated and prosecuted in order to create maximum transparency.

## Review of contracts in the F.Y.R.O. Macedonia and Montenegro.

The audit of the financial statements of Magyar Telekom for the 2005 financial year identified contracts for which it was not possible at the time to fully ascertain an appropriate business background. The Audit Committee of Magyar Telekom then commissioned an independent law firm to investigate the lawfulness of these contracts. Magyar Telekom and Deutsche Telekom reached an agreement with the U.S. Securities and Exchange Commission (SEC) and the U.S. Department of Justice (DOJ) in 2011 to resolve investigations into alleged breaches of the U.S. Foreign Corrupt Practices Act (FCPA). Additional information can be found in the 2011 Annual Report.

#### Review of irregularities in T-Systems International's sponsorship activities.

An internal investigation that was triggered by an anonymous tip gave rise to the suspicion that an arrangement violating compliance regulations had been made in the context of the business relationship between T-Systems International GmbH and a major car manufacturer to reward sponsorship involvement by awarding future contracts for IT services. Due to this, T-Systems International GmbH immediately terminated employment of its former CSO, the responsible sales manager and an external consultant and sent the internal report to the prosecutor's office responsible for further review. On the basis of the report, the public prosecutor initiated a preliminary criminal investigation, which resulted in charges being brought to the Regional Court in Stuttgart. The Regional Court is now

ruling on opening the trial.

# Major ongoing litigation.

Deutsche Telekom is party to several proceedings both in and out of court with government agencies, competitors, and other parties. The proceedings mentioned in the 2011 <u>Annual Report</u> are of particular importance from Deutsche Telekom's point of view.

# Respect for human rights as an ingrained practice.

Respecting human rights is a matter of course at Telekom and is a principle that is entrenched and practiced worldwide. Our <u>Code of Conduct</u>, which applies Group-wide, stipulates our requirements for ethical conduct. The Social Charter <sup>[1]</sup> adopted in 2003 defines Group-wide regulations regarding how to deal with employees and suppliers. The Charter is based on the principles of the United Nations Global Compact <sup>[1]</sup>, the conventions of the International Labour Organization (ILO) and the Organization for Economic Co-operation and Development (OECD). We check compliance with the Charter's regulations in an annual survey.

Beyond compliance with human rights, we also heed labor rights in all of the markets where we are active and in some cases even set higher standards. Minimum standards for dealing with our employees are also defined by the Telekom Diversity Policy, whose aim is to prevent discrimination based on gender, age, disabilities, ethnic origin, religious beliefs and sexual orientation.

#### Employee relationships.

As Deutsche Telekom is represented in over 50 countries of the world, it is not possible to name a generally applicable example of our high standards. Labor legislation is too different in the individual countries. Nevertheless, Deutsche Telekom offers its diverse international staff worldwide a general framework and a global cultural structure with its Employee Relations Policy. This means that the Group is committed to minimum standards applicable to employee relations worldwide and at the same time takes account of national legislation, different cultural backgrounds and needs. The Employee Relations Policy defines the core elements of Deutsche Telekom's human resources policy and describes what we stand for in our relationships to our employees around the globe. These relationships are characterized by our shared values and are derived from our five <u>Guiding Principles</u> as well as from additional Group policies. The Employee Relations Policy also includes statements regarding HR development, responsible change management, health and sustainability, fair pay, work and life balance, leadership, diversity, the ban on discrimination, communication and relations with employee representatives.

One example is T-Mobile USA. The international subsidiary complies with U.S. labor law without any exception, including the policies and legally specified processes regarding the right to set up and join a trade union. These policies reflect the right to freedom of association. T-Mobile USA does not prevent any of its employees from setting up or joining a union and does not discriminate against those who do. To date, however, a

large majority of staff at T-Mobile USA have chosen not to be represented by a union. Voting on union recognition has only taken place at two facilities in the north eastern United States, each of which has less than 20 employees. Employees in Connecticut decided in favor of union representation whereas employees at another facility in Long Island (NY) voted against it. Both voting processes were conducted in strict compliance with U.S. law and results were confirmed by the National Labor Relations Board.

In addition, individual subsidiaries have introduced activities that go above and beyond local standards and legislation. At T-Systems South Africa, for example, regular interchange takes place between management and employees although no labor union is represented at the company. This is known as "Employee consensus seeking approach" and helps take account of employee interests in the corporate decision-making process at an early stage.

In addition, our <u>health and safety management system</u> is deployed in 17 countries and we have coordinated its introduction at a total of 30 international subsidiaries. The next step will be to develop joint standards together with universities, institutes, employer's liability insurance organizations and partner companies that go beyond current labor rights and will be effective for the entire Telekom Group worldwide.



Home > Strategy & management > Risk & opportunities management

# Risk & opportunities management.

Content verified by PwC

Telekom's corporate environment is becoming increasingly complex and dynamic. Technological developments, state regulation and intensifying competition require a systematic, anticipatory management approach to risks and opportunities.

The <u>Group-wide risk and opportunities management system</u> is a central strategic tool of corporate management. It helps us identify and evaluate negative effects and the potential of current and future trends at an early stage and control their consequences.

The <u>Annual Report 2011</u> of Deutsche Telekom provides extensive information on current opportunities and risks that are also relevant in terms of corporate responsibility.



Home > Strategy & management > Data privacy

# Data privacy.

Content verified by PwC

Millions of customers entrust Telekom with their data. In order to live up to this responsibility, careful handling of personal data has top priority for us. We developed an extensive catalog of measures and created a separate Board of Management department for Data Privacy, Legal Affairs and Compliance to handle the topic at the highest management level of our company. We undergo regular audits conducted by an external data privacy advisory council as well as independent certification procedures.

We place great emphasis on transparency. Therefore, we are the first DAX 30 company to publish an annual data privacy report, which documents all of the Group's processes in this field. In 2011, we published a joint report on data privacy and data security for the first time.

Download the Data Privacy and Data Security Report 2011

In addition, at <a href="http://www.telekom.com/dataprotection/">http://www.telekom.com/dataprotection/</a> we report on all internal incidents pertaining to data theft and data misuse that were reported to the public prosecutor's office, present current measures for improving data privacy and provide information on how to handle personal data properly.



Home > Strategy & management > Government relations & regulatory issues

# Government relations & regulatory issues.

Content verified by PwC

As a globally active company with a strong presence in Europe, Deutsche Telekom acts as a discussion partner for governments, parliaments, authorities and NGOs on all issues related to ICT and innovation. Headquartered in Germany, we receive special attention from German domestic institutions. We also have a representative office in Brussels, where we engage in dialog with the institutions of the European Union as well as with other associations and organizations. We also engage in active dialog with similar institutions in countries in which Deutsche Telekom is active, particularly in the European markets and in the United States.

Politicians and government authorities influence the development and availability of the network infrastructure, technologies and services that are required for future ICT solutions such as cloud computing. Not only does this directly impact the competitiveness of telecommunications companies, it also impacts business in general, which relies on having a fast network infrastructure as well as state-of-the-art telecommunications services. In addition to economic factors, networks and services are considerably important for maintaining a sense of community in society. Decision-makers from parliaments, authorities and governments need the exchange of ideas with representatives of society and companies to help them tackle these challenges. Both the Bundestag, the lower house of the German Parliament, and the German federal government sought dialog on the revision of the German Telecommunications Act during the reporting period. That is why Deutsche Telekom engages in active, constant dialog with interested stakeholders from politics and the general public.

Our partners from parliaments, governments and other organizations need to uphold their independence and integrity. This principle is codified in Telekom's <u>employee guidelines</u>, which were revised in early 2011. For example, they prohibit donations to political institutions in Germany as well as non-transparent influential practices. By adhering to these guidelines, we are able to base our political communication on facts, expertise, credibility and integrity. Deutsche Telekom also ensures transparency by having <u>registered</u> in the public <u>lobbyist</u> <u>register</u> in Brussels with all the required information. This is the basis for recipients to experience our political communication as authentic and trustworthy, so that it can be taken into account in opinion-building processes in the political arena and society.

# More investment-friendly broadband network regulation needed.

Deutsche Telekom advocates future-minded regulation which encourages investment in broadband networks of the <u>next generation</u> more strongly. This can only be achieved by introducing more investment incentives and increasing planning security for the industry. The new EU legal framework for telecommunications already takes these requirements into account and is sending out a vital impetus. It is of key importance to Telekom that, after having been implemented in all EU member states, this framework provides the necessary incentives to invest in network expansion in the daily practice of national

regulatory authorities. These include:

- Increasing planning and legal security for investors before network expansion begins
- Giving market solutions priority above regulation
- Establishing regionally differentiated regulation that takes the competitive situation in the various regions into account
- Better opportunities to distribute risk fairly between investors and competitors who require access to their infrastructure
- Tapping into synergies by facilitating the shared use of existing infrastructure in all network sectors

#### Protecting the open Internet.

There was much discussion about the topic of network neutrality in the current reporting period. More specifically, there are concerns that today's Internet might be restricted in the future. Services which can now be accessed freely would then be available at extra cost only or not at all. However, Deutsche Telekom is committed to the open Internet. Content and services will remain accessible online according to the best effort principle in the future.

Deutsche Telekom will continuously expand its transmission capacities and infrastructure in order to be able to cope with our customers' growing data traffic and to enable innovations in the network. Only in this way will we be able to meet growing customer demands and enable providers of online content and applications to offer their services at the required quality levels. Network management is indispensable for operating telecommunications networks.

Based on the "best effort" Internet, Deutsche Telekom is developing business models that the Internet sector can use to offer innovative services that require a certain level of transmission quality.

Deutsche Telekom will be able to market different, non-discriminating quality standards in competition with other network providers in the future as well. This will support medium and long-term financing of broadband network expansion and enable providers to offer a wider range of services and guaranteed, high quality levels to consumers.

Deutsche Telekom supports mandatory transparency and provision of information on service quality. These obligations are specified in the European directives of 2009 and have been translated into national law. They have enabled national regulatory authorities to define minimum requirements on service quality. In combination with general competition law, these legal provisions are sufficient to guarantee the open Internet for the long term, without having to introduce any new laws or regulations.

## Encouraging consumer dialog.

Deutsche Telekom aims to become the most highly regarded service company in the industry, which is why we focused heavily on consumer topics in 2011. We also strengthened internal functions dealing with consumer relations in order to improve exchange between our product and service development and external stakeholders from

the political arena and the general public. We are involved in the following key topics regarding legislation and stakeholder dialog as well as efforts to create voluntary regulations for the industry:

- Safeguarding customer data
- At the European level, creating new <u>youth protection initiatives</u> together with competitors along the entire value chain
- Improving standards in <u>customer service</u>
- <u>Protecting consumers</u>, e.g., when moving or switching providers

In all these areas, Telekom adopts a constructive and solution-oriented approach that is geared to both the consumer's interests and the interests of our company.

We take responsibility.



Home > Strategy & management > Regional added value

# Regional added value.

Content verified by PwC

As a responsible corporate citizen, Telekom considers it its obligation to promote regional added value and social stability at our company sites. In fiscal year 2011, our <u>235,132</u> employees worldwide (as of Dec. 31, 2011) generated revenues of EUR 58.7 billion, with more than half of this coming from outside Germany. Deutsche Telekom awarded contracts totaling EUR 18.4 billion in 2011. These figures show that economic development at our company sites is closely connected to long-term business success.

## Telekom net added value.

Telekom publishes the net added value generated for the Group each year. These figures show how different stakeholders benefit from corporate performance. By paying wages and salaries and contributions to pension schemes, for example, we contributed substantially to regional purchasing power and a secure future at our locations. Net added value decreased to EUR 31.1 billion in 2011 from EUR 33.3 billion in the previous year.

## Participation in the information and knowledge society.

In the past couple of years, including during the reporting period, our focus was placed on investments to expand fast and stable <u>networks</u>. Our cash CAPEX [1], a KPI that summarizes our investment in equipment and systems, came to EUR 3,644 million for Germany in 2011. Of this, we invested EUR 1,028 million in intangible assets (without goodwill) and EUR 2,616 million in property, plant and equipment.

Both in Germany and at the international subsidiaries, we also support initiatives and are offering needs-based solutions to give disadvantaged people access to new communications technologies and media. These include:

- Special rates for <u>low-income and disabled people</u>
- Wide-ranging involvement in promoting media skills
- Facilitating the integration of disadvantage people

Telekom helps close the digital divide by supporting equal opportunities for all to participate in education, knowledge and communications. In doing so, the Group helps to strengthen the economic standing and quality of life as well as competitiveness at its locations and in its markets.

# Education—the foundation of a sustainable society.

With 9,600 <u>trainees and students</u> in cooperative study programs, we are one of the largest training providers in Germany in the training year 2011/2012. In addition, the

<u>Deutsche Telekom Foundation</u> is continually involved in promoting education in Germany.

# Research investments in Germany.

The development of innovative ICT solutions is a key growth driver not only for our industry but also for many other sectors.

The <u>Deutsche Telekom Laboratories (T-Labs)</u> are the central R&D unit of the Telekom Group. In addition to our German locations in Berlin and Darmstadt, we also run institutes in Israel and the U.S. A total of 360 Telekom experts at the T-Labs <sup>1</sup> researched <u>fast</u>, <u>secure and sustainable communication solutions</u> in 2011.

We are also committed to financing professorships and creating pioneering ideas in cooperation with universities. Telekom's research and development budget totaled EUR 121.4 million in 2011.

Home > Networks

# Networks.



# Doesn't expanding high-speed networks require more energy than the new technology will be able to save?

Find out more

# Networks.

We are driving a nationwide expansion of our broadband infrastructure in all of our markets. High-speed Internet and reliable mobile communications connections are key prerequisites when it comes to enabling equal participation in society. We are providing 4th generation mobile communications technologies (4G) that offer high data rates to more areas than ever before as a substitute for fixed-line services. In 2011 we were voted Mobile Network Operator of the Year for the twelfth time.

## ICT networks need to promote a sense of community.

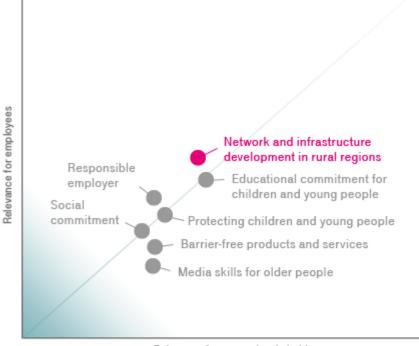
How are we going to manage the transition over to the new digital age? What is Telekom's contribution?



CR category "Connected life and work"

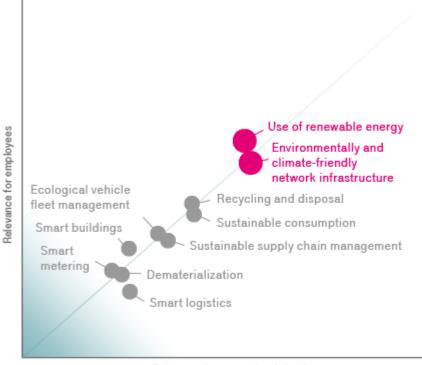
Relevance for external stakeholder

# CR category "Connect the unconnected"



Relevance for external stakeholder

CR category "Low carbon society"



Relevance for external stakeholder

The matrices map the results of our 2012 stakeholder survey. We use the survey to determine how relevant our internal and external stakeholders consider the various topics addressed by our <u>CR categories</u> to be. Further information regarding the stakeholder survey can be found in the <u>"Strategy & management"</u> section.

Home > Networks > Network & infrastructure expansion

# Network & infrastructure expansion.

Digital networking is one of the main trends in the modern information society. Full broadband coverage is becoming a key requirement for participating in society. However, many people have no or only limited access to this technology, especially in rural areas. There is a digital divide in our society. Our efforts in the <u>CR category</u> "Connect the <u>Unconnected</u>" are therefore focused on using new technologies to cover new regions.

Today, as a result of high-performance standards, top data transmission speeds are provided even in remote areas:

- ADSL and ADSL2+
- VDSL
- GPRS/UMTS and HSDPA/HSUPA
- LTE

The network infrastructure is at the heart of our business. Telekom builds and operates networks that meet the high requirements of the gigabit society. The Group's extensive <u>network expansion strategy</u>, which was approved in July 2010, discusses the steps Telekom is planning to take in the medium term on its way to creating the network of the future. The main objectives are growth, efficiency and quality.

# Network expansion in line with political goals.

Telekom supports the network expansion goals of the EU Commission and the German government. We plan to provide high-speed Internet access to as many households as possible mainly in rural areas of Germany that do not yet have coverage. We are primarily relying on the Long Term Evolution (LTE) standard to help us achieve this goal. Together with the fixed-line standards ADSL, ADSL2+ and VDSL. LTE will be a key component in future ICT solutions. We are pushing the development and expansion of fast networks in all the markets where we are active.

The European Commission passed a <u>Digital Agenda</u> in May 2010 as part of its <u>Europe 2020 strategy</u> in order to create the necessary conditions for economic growth in Europe. This agenda specifies that all Europeans will be able to surf online at speeds of at least 30 Mbit/s by the year 2020. Connections enabling at least 100 Mbit/s should be available to half of all European households by that year.

In line with the EU's digital agenda, the German government decided to pursue a similar goal with its broadband strategy, which it passed in 2009. It requires network access with speeds of at least 50 Mbit/s for all households by 2014, giving priority to infrastructure expansion in rural areas. Deutsche Telekom is one of the most important partners of this <u>broadband strategy</u> and contributes significantly to fulfilling the German federal government's broadband objectives.

## More than EUR 10 billion in investments in broadband expansion.

Telekom's total investments in broadband expansion in Germany from 2010 to 2012 will come to around EUR 10 billion, including those made for fiber optic networks, new mobile communications technology and IT processes.

That makes Telekom in Germany the largest investor when it comes to providing broadband access.

In 2010 we invested an additional EUR 1.3 billion in LTE frequencies and are now able to use the digital dividend to provide broadband services.

The Group will be able to tap significant growth opportunities with the network expansion strategy. In order to take advantage of these opportunities, Telekom needs to rethink its current business model, which consists of the following:

# 1. The network factory.

Our business is based on the network infrastructure and this will remain so. To update the infrastructure, we are planning to change entirely over to all-IP i technology in the next few years. Fixed and mobile networks will be fully integrated. The aim will not only be to provide high bandwidths but also top quality and the best possible service experience to our customers.

#### 2. Toolkit of standard services.

The second component consists of modern, highly efficient and standardized IT systems. Telekom currently operates thousands of IT systems. The plan is to reduce, simplify and update these systems. This will save money while improving the quality, flexibility and speed of our services.

#### 3. Content and services for customers.

The third element of our strategy is our enabling services which, with the help of ICT, enable providers from areas such as healthcare, energy or media distribution to expand their services or make them more customized. By doing so, we enable our customers to become more efficient as well as more growth and customer-oriented.

Our network and IT capabilities will be combined to create a toolkit of standard services. This will apply to our products as well as to the option of integrating our services into third-party services, such as those provided by companies and software developers, by using standardized interfaces. This toolkit will be a springboard for new business models and sales opportunities. With it, we will enable our partners to develop innovative solutions while participating in the process at the same time.

Telekom helps business customers bring their content and services to the customer. For example, Telekom provides its partners with state-of-the-art billing models, installs modern access management systems and guarantees high service quality.

# More Broadband for Germany project

Telekom also continued its cooperation with local communities in the More Broadband for Germany project in 2011 within the scope of bid processes. In those areas where broadband expansion may not be economically feasible, support from public funding is a viable option. For example, communities could provide existing conduits that are not in use, perform the civil engineering work required or participate in a network expansion project by making a financial contribution. More than 3,000 communities have been receiving broadband infrastructure through these means since 2008.

In 2011 we entered into more than 1,100 collaborations for broadband expansion following some 800 in 2010.

Each project generally involved a town or village. The most popular technology of choice was fixed-line DSL. We have been relying more heavily on a mix of fixed-line, mobile and radio relay system communications in our network expansion activities since 2010.

We will continue to make investments in broadband expansion in 2012 as well and expect to be involved in collaborations of around the same scope as those in 2011. We will now rely more heavily on a technology which

offers higher bandwidths, namely VDSL . Telekom has been using VDSL technology with bandwidths of up to 50 Mbit/s in rural areas as well since 2011. This expansion will continue throughout 2012.

#### CR Report from the previous year

The fundamental part of broadband-based high-speed Internet is a fiber optic network. Expanding the fiber-optic infrastructure to achieve blanket coverage goes hand in hand with tremendous financial expense. Experts estimate EUR 40 to 50 billion in Germany alone. The more remote the communities, the higher the costs. Reasons for this include the necessary civil engineering works, which can cost up to EUR 70,000 per kilometer.

#### Blanket coverage calls for cooperation.

Telekom will not be able to afford to finance blanket coverage under financially viable conditions by itself. Even in Germany, where we have a share of around fifty percent of the broadband market, we will only be able to manage this task in collaboration with our competitors. That is why we encourage German and European government offices to provide sufficient incentive to secure the necessary industry-wide participation of all ICT network operators.

#### Cooperating with communities.

Broadband expansion in many rural communities is not financially viable due to the low number of potential customers and high investment costs. In these cases, Telekom has been working in partnerships—since late 2007 in DSL network expansion and since 2011 by setting up a <u>VDSL network</u>. The company informs the communities about the costs and offers them various collaborative options:

- Use of the communities' existing cable duct systems or unused conduits to reduce civil engineering costs
- Local authorities taking on tasks such as conducting civil engineering works
- Providing advice in applying for possible subsidies

High-speed Internet access is an important factor in making a location attractive. The German Association of Towns and Municipalities (DStGB) published a guideline entitled "More Broadband for Germany" to inform decision-makers at local authorities of the possibilities and potential of broadband expansion. Deutsche Telekom contributed a series of expert articles to this publication. In doing so, the company is fulfilling its obligation to keep people informed and provide them with access to the information society.

Download :: Mehr Breitband für Deutschland (More Broadband for Germany – only available in German)

#### Fiber-optic expansion in Germany.

Deutsche Telekom intends to continue to expand its high-speed network over the next few years, laying the foundation for the gigabit society. This network of the future will give our customers in Germany high-speed access to the Internet, Entertain offerings and multimedia applications in unheard-of speed, variety and quality. We are specifically looking to cooperate with the housing industry in our expansion activities. Homeowners who agree to the expansion can expect the value of their property to increase considerably as a result of FTTH cable provision.

Deutsche Telekom embarked on a trend-setting collaboration in the area of ICT infrastructure with Deutsche Annington Immobilien AG (DAIG). The two partners gave the go-ahead for a fiber optic connection of around 171,000 homes managed by the DAIG nationwide in March 2011. In several steps, Deutsche Telekom will provide DAIG-managed buildings at approximately 600 locations with high-speed broadband connection at competitive prices. In a first step, 42,000 DAIG homes in North-Rhine Westphalia will be given access to the new network.

Deutsche Telekom employs the Fiber to the Home (FTTH) concept when expanding its fiber optic network. That means we will be laying fiber optic cables all the way to the customer's home. In this way, by using GPON (Gigabit Passive Optical Networks) technology, it is now possible to use the high-speed potential of fiber optic technology to its fullest: access of up to 2.5 Gbit/s of download speed and up to 1 Gbit/s of upload speed have now become feasible.

Fiber optics is the fastest data transmission medium. One of our goals therefore is to directly connect a large number of households to the fiber optic network in 2012.

# Using synergy effects for FTTH expansion.

Costs reduction potential and synergy effects can be realized and risks can be dispersed when installing new fiber optic networks based on network expansion collaborations. That is why we are open to collaboration and are reviewing all forms of cooperation in both the fixed-line and mobile communications areas.

The range of possibilities covers options such as marketing collaboration, renting complete, passive access networks, and joint ventures (joint regional companies founded with local utilities companies, special purpose associations or other partners). Telekom also launched the More Fiber Optics for Germany initiative. The goal is to further local fiber optic expansion in collaboration with communities and local utilities companies using a standardized expansion and business model.

Agreements with local competitors regarding mutual guarantee of network access (open access) play a role here as well, because such agreements can prevent double investment. We also offer special terms and conditions packages to enable pure service providers (resellers that do not have their own network) to participate in the expansion costs and risks involved in new networks.

## Migration to all-IP.

We are planning to change our entire network over to an all-IP infrastructure in the next few years. With this step, fixed network and mobile communications will be comprehensively integrated in a next generation network based on the Internet Protocol (IP i). Numerous IT systems will be simplified and updated for this purpose.

Many people already use IP-based solutions to organize their day-to-day lives conveniently and individually. We are constantly improving our offer of fast mobile communications and fixed-line connections to lay the foundation for this change. The voice and data service platforms, which are currently separate, will be integrated onto a standardized platform over the course of the all-IP i migration. This should help reduce energy consumption considerably.

A functional Internet infrastructure is based on a number of innovative technologies whose development is influenced by our planning processes. The all-IP in migration and the demand for increasingly faster bandwidths provide impetus for the provision of new, efficient technologies when it comes to data transport or individual network access. Together with changing customer demands and new ways of using technology, they are the force behind our efforts to restructure and update the network.

In 2012 we started with the preparations for the implementation of the new Broadband Network Gateway (BNG) technology approach. The BNG allows us to reduce network complexity through a more streamlined architecture.

It enables us to reduce the number of network elements, creating savings potential in network operation and

reducing investment costs as well as energy requirements.

#### Award for mobile communications network in Germany.

In 2011 we received significant awards for Telekom Deutschland's mobile communications network. The German consumer organization Stiftung Warentest recognized our excellent network availability, said that we had the highest data rates and rated our service as "good" (a score of 2.4 with 1 being the highest).

This was followed by a test involving extensive measurements conducted by the trade portal, CHIP online, in which we received first place. We also came in first in the test conducted by the trade magazine, connect. We were ranked far ahead of the competition in both tests.

The judges particularly praised the quality of the network expansion, which is based on innovative technologies. The 2nd carrier and dual cell function was activated at all sites by September 2011. That means that data rates of up to 42 Mbit/s are now possible thanks to blanket coverage provision of a second carrier frequency in the UMTS network.

## Mobile Network Operator of the Year for the twelfth time.

Readers of the "connect" trade journal voted Telekom "Mobile Network Operator of the Year" for the twelfth time in a row in May 2011. Furthermore, services in the areas of IPTV (Entertain), Internet and phone as well as virtual PABXs (Telekom DeutschlandLAN) were especially praised. We came in first in all of these areas.

The tests evaluated a total of 25 categories. The results for <u>Telekom Entertain</u> were particularly impressive: Telekom's IP-TV-offer with phone, Internet and digital TV was voted the best TV offer by 60 percent of test participants. connect readers also expressed their satisfaction with Telekom's combined phone and Internet offers such as Telekom's <u>Call & Surf</u> rate: 27.9 voted for Telekom as the best provider in the Internet & Phone category. <u>DeutschlandLAN</u>, an integrated solution for IT services, was voted best virtual PBX system in the business customers category.



Home > Networks > Network & infrastructure expansion > Fixed-line & broadband technologies

# Fixed-line & broadband technologies.

Data transport within the Internet infrastructure and individual use of the Internet both rely on a number of innovative technologies. Many people already use network-based solutions to organize their day-to-day lives conveniently and individually. That is why we are continuously striving to improve our offer of high-speed connections, both for fixed-line and mobile communications.

The DSL-based transmission protocols <u>ADSL</u>, <u>ADSL2+</u> and <u>VDSL</u> and the expansion of the fiber optic network all the way to the customer's home (Fiber i to the Home, FTTH) increase the speed of data transfer in the fixed-line area.

We are able to achieve similar increases in performance in the mobile communications area by switching from 2nd generation networks (2G :) with GSM and EDGE to third generation networks (3G :) with the <u>UMTS-based standards</u> HSDPA/HSUPA and HSPA+. With the switch to the <u>Long Term Evolution (LTE)</u> transmission standard of the future (also referred to as "4G"), data rates will increase many times over and reach broadband speeds.

Customers need more mobile bandwidth to be able to conveniently access complex online applications quickly when they are on the go. That is why Telekom is increasing its use of 3rd and 4th generation broadband mobile communications technologies.

# Overview: Access technologies.

#### Fixed-line technologies.

	Upstream 🗓	Downstream 🗓
ADSL (Asymmetric Digital Subscriber Line)	max. 640 kbit/s	max. 6 Mbit/s
ADSL2+ (latest version of Asymmetric digital subscriber line (ADSL))	max. 1 Mbit/s	max. 16 Mbit/s
VDSL [] (Very High Bit Rate Digital Subscriber Line)	max. 10 Mbit/s	max. 50 Mbit/s
FTTH with GPON (Fiber 11 to the Home)	max. 100 Mbit/s	max. 200 Mbit/s
WLAN (Wireless Local Area Network)	max. 34 Mbit/s	max. 34 Mbit/s

Mobile communications technologies.

2G II mobile communications	Upstream <u>□</u> *	Downstream
GSM plus EDGE (Global System for Mobile Communications EDGE)	max. 220 kbit/s	max. 260 kbit/s
3G <b>□</b> mobile communications	Upstream <u>□</u> *	Downstream
UMTS (Universal Mobile Telecommunications System)	max. 64 kbit/s	max. 384 kbit/s
HSDPA/HSUPA (High Speed Downlink/Uplink Packet Access/High Speed Uplink Packet Access)	max. 3.6 Mbit/s	max. 7.2 Mbit/s
HSPA+ (High Speed Downlink Packet Access+)	max. 5.8 Mbit/s	max. 42.2 Mbit/s
4G mobile communications	Upstream <b>□</b> *	Downstream
LTE (Long Term Evolution)	max. 50 Mbit/s	max. 100 Mbit/s

<sup>\*</sup> The maximum values listed here are based on theoretical assumptions. Upstream ••, downstream and data rates often fall below these values during actual use.

## ADSL2+ expansion.

ADSL2+ (Asymmetric Digital Subscriber Line 2+) is the DSL standard currently used by Deutsche Telekom for fixed-line connections. It allows for the fast transmission of large amounts of data at speeds of up to 16 Mbit/s.

Between 2006 and early 2012, 22.8 million lines in more than 1,000 cities were migrated over to ADSL2+ in Germany alone.

We began introducing MSAN (Multi service access node), a device class for access nodes, on August 15, 2011. MSAN integrates earlier technology into the all-IP intervork. It replaces the splitters that were previously used for network connection to separate voice and data and consequently enables the use of DSL lines with fully IP-based services as well as traditional phone services without the necessity to replace existing devices. We will continue the migration process in 2012.

## VDSL expansion.

With VDSL (Very high bit rate digital subscriber line), Telekom once again increased the speed of its DSL lines several times over: more than three times compared to ADSL and twice as fast as ADSL2+. The new technology allows for data rates of up to 50 Mbit/s. A hybrid network is needed to realize these speeds. In a hybrid network, the fiber optic cables extend all the way into the subscriber's neighborhood. Conventional copper lines are used to cover the last 300 to 500 meters to the customer.

Telekom expanded the high-speed VDSL in network in close proximity to each subscriber in 50 German cities in 2009. That means 11.6 million households have access to bandwidths of up to 50 Mbit/s. Bandwidths of up to 16 Mbit/s are available in 7,800 out of 7,900 exchange areas. Almost 20 million households in Germany can receive triple-play products (phone, Internet and TV) based on bandwidths of between 16 Mbit/s and 50 Mbit/s.

With the VDSL vectoring technology, which was developed in 2011, speeds of 90 Mbit/s can be achieved with VDSL . The new technology neutralizes interference that results from having several VDSL lines in one cable by pre-coding or equalizing the signals. This requires a standardized control mechanism for all VDSL lines in the cable, including those used by competitors. We will begin initial pilot operations with the new technology in 2012.

## FTTH expansion in Germany.

When it comes to fiber-optic expansion, Deutsche Telekom does not only rely on Fiber to the Cabinet (FTTC), which refers to expansion in the proximity of the subscriber, but also on the Fiber to the Home (FTTH) solution, in which fiber optic cables extend into the customer's home. FTTH expansion was launched in 2010.

Investments by Telekom in new fiber optic networks will be based on demand. Two requirements need to be met in the expansion areas before civil engineering works can start:

- At least 80 percent of residents need to give their permission to have their building connected or for cables to be laid in their building and
- at least ten percent of customers need to have preordered the service.

If these conditions are not met, the expansion will have to be postponed. At the same time, we will evaluate the feasibility of using other technologies, for example FTTC with VDSL .

A total of 168,000 homes ("homes passed") in ten German cities were enabled to receive connection to the Deutsche Telekom fiber optic network through the installation of new infrastructure in 2011.

The networks in these cities are scheduled to go into operation in August 2012. Customers will then be able to access download rates of up to 200 Mbit/s and upload rates of up to 100 Mbit/s - non blocking. That means that speeds will generally be higher than those provided by cable TV network operators.

Expansion is planned for up to ten additional cities in 2012. The number of cities that will actually be served depends on the achievement of a defined minimum profitability whilst taking into account future developments. Over the course of 2012 we will decide which cities will be included in the expansion process in 2013. Expansion in the years to come will depend on the investment resources available, on whether we have achieved our cost-effectiveness thresholds, as well as on regulatory decisions.

#### Broadband connectivity for business customers.

Companies throughout Germany have access to standardized <u>business customer solutions</u> with symmetrical bandwidths of up to 622 Mbit/s. Transmission rates as high as 100 Gbit/s have been achieved as part of a pilot project for coupling data centers, which is currently being conducted by T-Systems in the Saxon city of Freiberg.

## Expanding the fiber optic network in Croatia.

The Croatian subsidiary T-HT Hrvatski Telekom considerably extended its fiber-optic network in 2011. As many as 260,000 households can now be provided with FTTH connections. The company installed 94,500 FTTH

subscriber drops, and 7,100 households signed up to be connected to the fiber-optic network so that they could use MAXadsl and MAXtv.

CR Report from the previous year

## Continued FTTH expansion in Montenegro.

The Montenegrin subsidiary Crnogorski Telekom continued the expansion of its fiber optic network in 2011. Four districts in Podgorica and one in Tivat were provided with an FTTH infrastructure, connecting 7,700 households.

CR Report from the previous year

#### 43 000 new FTTH subscriber drops in FYRO Macedonia.

The Macedonian subsidiary provided 43,000 households with an FTTH infrastructure in 2011 and replaced the old copper cables. Makedonski Telekom invested a total of EUR 170 million in the expansion of its fixed-line and mobile communications networks in 2011.

CR Report from the previous year

## OTE is pushing broadband expansion in Greece.

21.8 percent of all Greek households had a broadband connection by the end of 2011. OTE remains the country's driving force when it comes to new information and communications technology. The company is the customers' first choice for broadband services. Broadband coverage is correspondingly high with OTE customers. Coverage was more than 32.5 percent in December 2011.

#### WLAN Services for broadband Internet on the go.

We currently offer our customers in Germany various options for broadband Internet use via WLAN, e.g., in different modes of transportation:

Users of our <u>HotSpot</u> service can use WLAN to conveniently access data and information at more than 11,000 locations in Germany (e.g. at all 1,400 McDonald's restaurants) and at more than 50,000 of our partner locations worldwide. By raising the number of official telestations with HotSpots from 3 100 to 5 100 we succeeded in significantly increasing wireless Internet coverage in 2011. The use of HotSpots is included in the rates for many fixed-line and mobile communications packages.

In collaboration with the German railway company Deutsche Bahn AG we offer <u>WLAN HotSpots in trains</u> on some routes with data transmission rates of between 1.5 and 16 Mbit/s, or an average of approximately 6 Mbit/s. As of early 2012, 69 ICE trains were equipped with the HotSpot service.

In <u>collaboration with Lufthansa</u>, we also give our customers the opportunity to use HotSpots to surf online via satellite during their flight. Around 25 planes were equipped with this technology as of early 2012. More are scheduled to follow.

## LTE makes HotSpots in trains faster.

We will be able to considerably improve the speed of our HotSpot products in trains by introducing LTE

technology. It will be possible to achieve maximum downlink speeds of 20 Mbit/s.

We have begun employing this technology as part of our collaboration with Deutsche Bahn AG. The Munich-Nuremberg, Wolfsburg-Berlin and Berlin-Hamburg routes will all be equipped with LTE by late 2012. A mixture of LTE and 3G will be used between Frankfurt and Nuremberg, while HSPA will be employed on the routes between Dortmund, Hanover and Wolfsburg.

We signed a supplemental cooperation agreement in December 2011 for equipping more trains. According to the agreement, some 185 ICE trains and the most important ICE routes will be equipped with LTE by late 2014. We will be starting on the Mannheim-Basel route in 2012. The agreement also includes free online access via Telekom HotSpots in train stations for all DB Lounge guests as of December 2011. The offer was previously only available for first class passengers in selected DB Lounges.

## T-Mobile Netherlands expands train WLAN network.

The Dutch train service company (Nederlandse Spoorwegen – NS) is planning to equip 200 trains, particularly double decker trains, with WLAN HotSpots by late 2012 with the help of T-Mobile Netherlands. The company had originally planned to equip 350 trains by late 2013, but at the moment it is unclear whether they will be able to achieve this goal.

We take responsibility.



Home > Networks > Network & infrastructure expansion > 2nd & 3rd generation mobile communications

# 2nd & 3rd generation mobile communications.

In addition to <u>setting up state-of-the-art mobile communications networks</u>, Telekom is also continuing to pursue the expansion of the current 2G infrastructure. We are also updating older systems in accordance with the latest <u>systems technology</u>. By doing this, we can save a considerable amount of energy and avoid CO<sub>2</sub> emissions.

### High-speed UMTS with HSPA+.

Customers in all of Germany's highly populated areas can also go online via UMTS (Universal mobile telecommunications system), the third generation (3G <sup>[1]</sup>) mobile communications technology. We reached our target of <u>covering 85 percent of Germany</u> with UMTS in late 2011. With the new UMTS-based protocol, High Speed Packet Access+ (HSPA+), data transmission speeds can be increased to DSL level, i.e., up to 42.2 Mbit/s. In line with our <u>role as a quality leader</u>, we will continue to expand the UMTS network in 2012 to provide quality services to our customers.

## T-Mobile USA: HSPA+ with 4G speeds nationwide.

The U.S.-based subsidiary continued to expand its HSPA+ services nationwide in 2011. By the end of the year, data rates of up to 21 Mbit/s were available to 200 million residents in 208 regional markets. Maximum data transmission speeds as high as 42 Mbit/s were available to 180 million residents in 163 market regions.

CR Report from the previous year

#### Croatian subsidiary upgrades 3G networks.

The Croatian subsidiary T-HT Hrvatski Telekom upgraded parts of its 3G network with the HSPA+ standard in 2011. The upgraded network enables downlink speeds of up to 21 Mbit/s and uplink speeds of up to 5.8 Mbit/s. T-HT Hrvatski Telekom plans to migrate more than half of its 3G network to HSPA+ over the course of 2012.

### Double data speed at Crnogorski Telekom.

Crnogorski Telekom's 3G network covers 15 cities or 67 percent of the population at data rates of up to 21 Mbit/s. By introducing the dual carrier technology, the Montenegrin subsidiary was able to set up HSPA+ with a data transfer speed of 42 Mbit/s in six cities.

Crnogorski Telekom's expansion strategy is twofold: increasing capacities in urban areas and expanding network coverage in rural regions. By pursuing this strategy, the subsidiary was able to provide 2G <sup>11</sup> coverage to 99 percent of the population or 86 percent of the regions in 2011.

#### T-HT Hrvatski Telekom tests UMTS in the 900 MHz band.

The Croatian subsidiary successfully conducted tests on its UMTS technology in a 900 MHz test network in 2011.

The results show that fast, cost-efficient, nation-wide coverage can be provided in the mobile broadband network thanks to the use of 3G in the 900 MHz band.

The company is planning to launch 900 MHz UMTS in early 2012. The technology will make it possible to achieve maximum data transmission rates of 7.2 Mbit/s.

#### Fastest 3G network in the country from Makedonski Telekom.

In 2011 the Macedonian subsidiary was operating the country's fastest third generation mobile communications network with speeds of up to 21 Mbit/s.

## Total network upgrade planned in Croatia.

T-HT Hrvatski Telekom plans to upgrade its entire mobile communications network. The company began upgrading its 3G network in 2011 and is going to include its current 2G network in the process in 2012. The technology used needs to enable operation of the future LTE network as well. The first step will be to replace the old base station control units.

## Cosmote Greece offers fastest transmission speed.

Cosmote Greece increased its 3G in network by 38 percent and average data transmission speed by 45 percent in 2011. More than 98 percent of the Greek population now has access to Cosmote's new 3G in network. A nation-wide study on the quality of different data networks commissioned by Cosmote Greece was conducted in cooperation with the National Technical University from March to July 2011. The study showed that Cosmote Greece had the highest data transmission speeds for mobile Internet.



Home > Networks > Network & infrastructure expansion > 4th generation mobile communications

# 4th generation mobile communications.

Telekom is very involved in establishing 4G (next generation mobile networks) based on LTE (Long Term Evolution) technology. The growing demand for high-speed, location-independent Internet can be met with LTE, even in areas with weak infrastructure.

Telekom is intensively pursuing LTE expansion to give smartphone and tablet computer users access to the entire range of services at as many locations as possible.

## Setting up the LTE network in Germany.

We began setting up the <u>LTE network in Germany</u> in the third quarter of 2010. By late 2011 we were able to hook up more than 1,500 rural, dead cell zones to the LTE 800 network. Another 1,000 will follow in 2012. We began LTE expansion in 100 large cities in the second half of 2011 including Cologne, where we were able to provide LTE infrastructure coverage to an area of around 150 square kilometers. Cologne became Germany's first LTE city in June 2011 after investments of approximately 5 million euros. It took some 80 Deutsche Telekom employees around 5,000 hours to install 100 LTE stations. We also installed approximately 120 kilometers of fiber optic cables in Cologne districts to connect the base stations with state-of-the-art transmission technology.

#### Test operation of LTE transmitters in Munich.

Telekom Deutschland has been running test operations of five LTE transmitters at the Munich trade fair grounds since December 6, 2011. General expansion in the city center and some surrounding areas began after the pilot phase. The pilot stations have been put into regular operation.

#### LTE ready for the market.

By late 2011 we and our competitors had met the requirements of the German Federal Network Agency to receive LTE licenses in ten German states. We purchased the licenses at auction in May 2010. The new technology can now be introduced in Baden-Württemberg, Bavaria, Hesse, Lower Saxony, North Rhine-Westphalia, Rhineland-Palatinate, Saarland, Saxony, Saxony-Anhalt and Thuringia.

We began advertising LTE rates in Germany in April 2011. The offering includes LTE routers and, as of July 2011, the LTE Speedstick. We set up LTE at no extra charge for all current rates such as our <u>Call & Surf Comfort via Funk</u> offer.

LTE is the successor of the UMTS mobile communications standard and rings in a new generation of mobile communications technology (4G) that is still being developed. Telekom is playing a key role in this development. LTE enables even greater acceleration of data transmission in mobile as well as fixed-line Internet to up to 100 Mbit/s. LTE offers transmission speeds that are 20 times faster than in previous mobile networks.

LTE can be used in a wide frequency range from 700 MHz to 2,600 MHz. The lower frequencies around 800 MHz are particularly effective for providing service to rural areas. They have a much greater range in open spaces than higher frequencies. They also help provide better service inside buildings.

Another advantage is network coverage even in areas where mobile communications and DSL coverage had not been possible before. The radio technology enables a reliable network for calls and Internet access. LTE creates

a stable network, both inside buildings and in cars or on the train.

## Expansion of LTE coverage in Austria.

T-Mobile Austria also invested heavily in the expansion and advancement of LTE network technology. In October 2010, Innsbruck became the first city in Austria to be connected to the network of the future. T-Mobile Austria put additional LTE mobile base stations into operation in Vienna in May 2011 and in Linz and Graz in June 2011. Some 600,000 Austrians have been able to use the new broadband technology in these four cities ever since.

T-Mobile Austria invested a total of EUR 116 million in expanding its mobile broadband network in 2011. In addition to LTE, the company further expanded the High Speed Packet Access HSPA standards HSPA +21 and HSPA +42. These transmission standards reach downlink speeds of up to 21 or 42 Mbit/s. Through these efforts, the company plans to be able to provide at least one fourth of the Austrian population with access to the new mobile communications standard by the end of 2013.

CR Report from the previous year

#### T-HT Hrvatski Telekom customers test LTE networks.

The Croatian subsidiary T-HT Hrvatski Telekom conducted a test of the previously installed LTE networks with 100 consumers and corporate customers in the second half of 2011. T-HT Hrvatski Telekom teamed up with system technology providers Huawei, Nokia Siemens Networks and Ericsson Nikola Tesla Croatia to conduct the test. All three partners provided their LTE network infrastructure for test operation. The networks provided coverage for the cities of Rijeka, Split and Zagreb. Test participants registered via Facebook and Twitter.

T-HT Hrvatski Telekom began providing commercial LTE services in the 1,800 MHz band in early 2012.

CR Report from the previous year

#### First LTE network provider on Hungarian market.

The Hungarian subsidiary began a comprehensive LTE network test with several hundred participants in October 2011. Magyar Telekom conducted the test in preparation for the market launch on January 1, 2012. The company is the first LTE network provider on the Hungarian market.

Home > Networks > Mobile communications & health

## Mobile communications & health.

At Telekom we are convinced that using mobile communications technology is safe if international limit values and standards are complied with. They are based on current findings of independent German and international experts that continue to evaluate all relevant studies and research results. Recognized expert organizations such as the World Health Organization (WHO) and the International Commission on Non-Ionizing Radiation Protection (ICNIRP) have repeatedly verified the current limit values for mobile communications over the past few years, thereby confirming the safe usage of this technology.

Nevertheless, mobile communications continues to be a source of concern among the general public when it comes to possible health risks. We hope to ease these fears by providing scientifically sound, transparent information. We will only be able to run a successful business and systematically drive <u>network expansion</u> if our technology is widely accepted by the people. That is why Telekom engages in open dialog with all stakeholders involved in network expansion including communities, skeptical organizations, interested residents and customers.

Our principles on how to handle mobile communications and health responsibly are specified in Deutsche Telekom's EMF Policy.

## EMF Policy.

EMF stands for "electromagnetic fields," which are the physical basis of mobile communications. With our EMF Policy we are committing ourselves to more transparency, information, participation and financial support of independent research on mobile communications, far beyond that which is stipulated by legal requirements.

By now, all management boards from all of Telekom's European mobile subsidiaries have signed the EMF Policy. Two more international subsidiaries signed the policy during the reporting period:

Slovak Telekom approved the EMF Policy in April 2011 and introduced different measures. The company provided information on its <u>website</u> and developed internal workflows for processing queries on mobile communications and health from the general public.

The Montenegrin subsidiary Crnogorski Telekom signed the policy in October 2011 and published it on <u>its own</u> website.

Telekom approved its EMF Policy addressing a responsible approach to mobile communications and health in March 2004. The policy contains mandatory recommendations for Telekom's European mobile communications subsidiaries. These are implemented in different markets in line with local circumstances and requirements.

Telekom's EMF Policy contains ten recommendations regarding the following four principles:

- Transparency
- Information
- Participation
- Supporting scientific research & partnerships

Download : Deutsche Telekom EMF Policy

## Evaluation of EMF Policy implementation.

Deutsche Telekom worked together with all of its mobile subsidiaries to define standardized minimum requirements for mobile communications and health in March 2011. We conducted an evaluation of all mobile subsidiaries in the summer of 2011 based on these requirements.

The analysis showed that Deutsche Telekom's subsidiaries are well positioned when it comes to <u>transparency</u>. The individual subsidiaries have adjusted their internal structures to be able to further implement the EMF Policy in a responsible way. One focal point is the systematic publication of the international limit values and safety standards as well as antenna locations. All subsidiaries also created a comprehensive information offer about mobile communications and health via internal sales channels and their collaboration with operator associations. Ways for the public to get involved have been continuously expanded over the past few years. Internal structures have been designed so that we can inform the public and local governments of our activities and involve them in the process at an early stage, e.g., during <u>network expansion</u>.

Our goal is for the EMF Policy to be effectively implemented at all the mobile subsidiaries, to contribute to a constructive discourse on mobile communications and health in society and to contribute to effective risk management in the respective market. To this end, our international mobile subsidiaries are continuously implementing the ten recommendations set forth in the EMF Policy. Telekom supports its mobile subsidiaries in this process by regularly evaluating their progress and jointly exploring possibilities for improvement.

### Sharing best practices as part of EMF topic management.

Group Headquarters and the mobile subsidiaries are sharing best practices in various working groups such as the EMF Core Team and the EMF Technical Working Group, which was founded in March 2011. New initiatives are developed and experiences, gained in pursuing various strategies, are discussed in this context.

Deutsche Telekom founded the EMF Core Team and the EMF Technical Working Group to act as cross-area coordination groups with members from all of Telekom's mobile communications subsidiaries. Both serve as platforms for the mobile subsidiaries to share their experience internationally and to encourage mutual learning in the sense of a systematic exchange of best practices.

The EMF Core Team accompanies and coordinates strategy processes and makes suggestions for improvement on how to address the topic of mobile communications and health responsibly. It also supports national implementation of the EMF Policy.

In the EMF Technical Working Group, experts from various international mobile subsidiaries work out technical assessments of the new technologies and develop internal health and safety policies on mobile communications and health.



Home > Networks > Mobile communications & health > Transparency

# Transparency.

Telekom has specified three focal points to promote transparency in the area of mobile communications and health. These are reflected in three recommendations made in the <u>EMF Policy</u>:

- Telekom requires its mobile subsidiaries to clarify and establish internal responsibilities and processes regarding technology, safety and health issues.
- They are encouraged to facilitate public access to information on existing electromagnetic fields. This includes conducting EMF measurement campaigns and supporting national EMF databases.
- Proof of compliance with the ICNIRP limits for each individual mobile communications antenna must be made available upon request.

Suitable measures were established and further expanded at all Telekom mobile subsidiaries during the reporting period.

### Management structures in Montenegro and FYRO Macedonia.

After approving the EMF Policy in October 2011, our Montenegrin subsidiary Crnogorski Telekom introduced various measures for addressing the topic of mobile communications and health. The company designated an EMF manager and founded an EMF working group. Crnogorski Telekom also developed processes for cross-area cooperation between Technology departments, Human Resources and Public Relations to help them process external inquiries without delay.

#### Prompt processing of inquiries at FYRO Macedonia.

The internal processes developed by T-Mobile Macedonia in 2010 for managing customer inquiries about EMF were put to the test in 2011. The assessment particularly focused on fast response being a key requirement for customer satisfaction. The results showed that all areas collaborated to process customer inquiries about EMF immediately after receipt and answered them within five workdays.

#### EMF measurement campaign in Croatia.

Authorized measurement institutes conducted EMF measurements at some 100 T-HT Hrvatski Telekom sites over the course of 2011 in cooperation with the Ministry of Health and Social Welfare in Croatia. The results confirmed once again that electromagnetic field levels are significantly lower than the national and international limit values. The measurements also enabled T-HT Hrvatski Telekom to comply with the new obligation of September 2011 to provide information on actual electromagnetic field levels at selected sites.

### Establishing EMF monitoring in Montenegro.

Crnogorski Telekom is giving financial support to the measurement campaigns scheduled for 2012 by the Montenegrin environmental protection authorities as well as the EMF monitoring program to inform the public about actual electromagnetic field levels. The Electrotechnical Department at the University of Montenegro has been commissioned to conduct the measurements. The results are scheduled to be released in 2012.

## Greece: Measurements every six minutes

Cosmote Greece installed a total of 28 new measurement stations featuring the Pedion24 measuring system. 7 ,141,000 measurements (one measurement every six minutes) were conducted throughout the year and the results were published on <a href="https://www.pedion24.gr">www.pedion24.gr</a> to provide interested citizens with transparent information about electromagnetic field levels existing at selected sites.

<u>Pedion24</u> is a constant (24-hour) EMF measuring system for frequency ranges of 100 kHz to 3 GHz. Cosmote Greece developed Pedion24 in close cooperation with research institutes such as the National Technical University of Athens, Aristotle University of Thessaloniki and the University of the Aegean.

Pedion24 is an autonomous monitoring system that measures the electromagnetic fields at selected sites around the clock and transmits measurement data to a central storage database. The information is then evaluated and immediately published online. Typical measurement sites include schools, hospitals, community centers and other public buildings. Cosmote Greece's experience shows that the public sees these 24-hour measurements as highly credible, which means these measurements are making a considerable contribution to helping the public EMF debate focus on the facts.

#### Albanian measurement campaign almost complete.

The Albanian subsidiary AMC supported an independent measurement campaign conducted by the Polytechnic University of Tirana in 2011 with the goal of creating more transparency regarding actual EMF emissions in the country. Electromagnetic fields were measured at "sensitive" sites such as schools, hospitals and residential areas. The results and the final report are scheduled for 2012 and will be published on the AMC and Polytechnic University of Tirana websites.

#### Compliance with international limit values.

The purpose of limit values is to protect people's health. They are based on the current state of scientific knowledge and indicate the permitted amount of exposure. There are limit values for drinking water and noise levels, for example. Limit values have also been specified for mobile communications. Compliance with these values guarantees safe use of mobile communications technology. On most markets on which Telekom is active, legally specified limit values apply that are based on recommendations made by the International Commission on Non-Ionizing Radiation Protection (ICNIRP) for mobile communications technology (for frequency ranges between 100 kHz and 300 GHz). All of the mobile subsidiaries' base stations have been built in accordance with the valid regulations of that country and comply with the guidelines of the International Commission on Non-Ionizing Radiation Protection (ICNIRP). For the sake of transparency, our international subsidiaries have issued statements of compliance with limit values for each individual base station.



Home > Networks > Mobile communications & health > Information

# Information.

Another principle specified in Telekom's <u>EMF Policy</u> involves active provision of information on technology and health research and requires the mobile subsidiaries to promote communication about technology, safety, research and health. This includes educational measures and consumer information as well as raising employee awareness.

#### Industry-wide communication initiatives.

Telekom's international mobile communications subsidiaries are involved in numerous national operator initiatives to improve public communication about mobile communications and health. The operator initiatives act as the central go-to place for residents, the media and public and private institutions when it comes to the topic of mobile communications. They work to promote transparency regarding all aspects of mobile communications, in particular health and consumer protection, network expansion, and how to deal with site conflicts.

#### Selected memberships in the area of mobile communications and health.

Founded	Name	Subsidiary
1996	Forum Mobile Communications (FMK) www.fmk.at	T-Mobile Austria
1999	Mobile Netwerk Operators Association (MoNet) www.monet-info.nl	T-Mobile Netherlands
2001	Informationszentrum Mobilfunk (IZMF) www.izmf.de	Telekom Deutschland
2003	Mobile Operators Association (MOA) www.mobilemastinfo.com	T-Mobile UK
2004	Mobile Communication Association of Croatia (UPKH) http://www.upkh.hr/index-en.html	T-HT Hrvatski Telekom
2005	T-Mobile USA's web portal on EMF and mast siting http://www.t-mobile-takeaction.com/aboutwireless.html	T-Mobile USA
2007	GSM Association's health & environment web portal www.gsmworld.com/health	Deutsche Telekom Group
2007	Hungarian Mobile Operator's EMF Portal www.emf-portal.hu	Magyar Telekom
2008	Polish Society of Applied Electromagnetics (PTZE) web portal 'Electromagnetic Fields' www.polaelektromagnetyczne.pl	PTC
2008	Mobile Operators Association (EEKT) <u>www.eekt.gr</u>	Cosmote Greece
2010	Macedonian Operator Working Group on EMF	T-Mobile Macedonia
2010	Czech Operator Association www.zdraviamobil.cz	T-Mobile Czech Republic

#### Discussions on consumer information.

During the reporting period, the industry initiative Informationszentrum Mobilfunk (IZMF) conducted numerous projects in Germany including the 8th Communication Forum in Berlin in September 2011. Some 40 experts from the worlds of politics, business, research and society, including Telekom representatives, met there to discuss labeling in the mobile communications sector.

SAR levels, the Eco Index and WEEE labels are only a few examples of the various information and labels relevant for products in the mobile communications sector. The main question at the event was whether or not

these labels really do help customers make the best choices and create more transparency.

<u>Informationszentrum (IZMF)</u> is a point of contact for residents, the media and public and private institutions when it comes to the topic of mobile communications. It is a registered, non-profit organization that was founded by the mobile communications network operators in Germany. Interested parties can get information on mobile communications from IZMF via the free hotline 0800/330 31 33 or by visiting <a href="http://www.izmf.de/en">http://www.izmf.de/en</a>.

## Target group-specific information in the Czech Republic.

During the reporting period, T-Mobile Czech Republic worked together with other Czech network operators in the national network operators association to develop new informative materials on the topic of mobile communications and health. Two target group-specific brochures were published in 2011: a flyer containing basic information as well as a comprehensive brochure containing details on technology, safety and current research for those wishing to address the topic in greater depth. In addition to these printed materials, the public now has access to the shared operator website <a href="www.zdraviamobil.cz">www.zdraviamobil.cz</a> focusing on mobile communications and health.

#### Support for German municipalities in LTE expansion.

Telekom Deutschland cooperates with its competitors in undertakings that are relevant to society even beyond the German network operators association. For example, we worked together with the national associations of local authorities and other network operators in Germany in 2011 to develop a general paper on the new mobile communications technology <u>LTE</u> and possible radio interference, e.g., in wireless microphone systems. The goal of this endeavor is to inform municipalities about the new technology LTE and to develop solutions. More information on LTE expansion is available in the section on <u>Networks</u>.

#### Proven EMF partnerships in the Netherlands.

T-Mobile Netherlands is working closely with its proven partners to handle resident inquiries on mobile communications and health. These partners include the network operator initiative, <u>MoNet</u>, the Dutch government's information platform, <u>Antennebureau</u>, and the public information platform on mobile communications and health, <u>EMF Knowledge Center</u>. All three institutions are supported by all Dutch network operators and have proven their value as an important source of information for the public.

#### LTE as campaign focus in Austria.

T-Mobile Austria completely revised and updated its online information on mobile communications and health in 2011. Under the heading "Safe on the Net," customers can access clear, easy to understand information on different aspects of mobile communications such as technology, safety and consumer issues as well as information on electromagnetic compatibility. Interested consumers can also download background information and brochures. T-Mobile Austria also gives customers the opportunity to contact internal experts directly via e-mail (environment@t-mobile.at). Mobile communications and health is also a key focus for T-Mobile Austria when it comes to the new LTE technology. The company will publish a special consumer brochure on this topic in 2012.

In 2011 Cosmote Greece launched a project to reduce the gap between current state of scientific knowledge and public knowledge in the field of mobile communications and health. The focus was placed on the current research, technical background and safety aspects as well as on actual electromagnetic field levels. During the project, Cosmote Greece provided brochures, held events at schools and in municipalities and engaged in dialog with local authorities. The <a href="Pedion24 measuring system">Pedion24 measuring system</a> was promoted intensively as well.

### EMF information campaigns in Romania and Albania.

The Romanian and Albanian mobile communications subsidiaries also developed new information initiatives and awareness campaigns during the reporting period.

The goal at Cosmote Romania is to introduce more facts into the current discussion of mobile communications and health and to enhance public understanding of the topic. Preparations for the information campaign, which is scheduled to start in July 2012, are already underway. The campaign will particularly address authorities at both the national and local level. Cosmote Romania also offers consulting services to help keep residents informed. Various brochures on the topic of mobile communications and health were published to support the campaign. A new brochure is currently being developed for 2012.

The Albanian mobile communications subsidiary AMC also published various informative brochures for interested residents on the topic of mobile communications and health during the reporting period. These are available on the AMC website and at AMC stores.

#### Online information on mobile communications and health.

Many international mobile subsidiaries provide informative material on mobile communications and health online in the local language.

Online information on mobile communications and health provided by mobile subsidiaries.	
Deutsche Telekom	http://www.telekom.com/verantwortung/
Telekom Deutschland sales portal	www.telekom.de/sar-werte
T-Mobile Austria	www.t-mobile.at
T-Mobile Netherlands	www.t-mobile.nl
T-HT Hrvatski Telekom	www.t.ht.hr
Cosmote Greece	www.cosmote.gr
Magyar Telekom	www.telekom.hu
Cosmote Romania	www.cosmote.ro
AMC	http://www.amc.al
T-Mobile Macedonia	www.t-mobile.com.mk

## Better information for mobile communications users.

Telekom Deutschland published new, revised brochures such as the flyer, "Information on using your cell phone ," to enhance our information offer available to consumers. Interested customers can pick up the flyer at T-Shops or download it online. Telekom uses the flyer to provide cell-phone users with information on the technology and safety-related aspects of their devices while at the same time fulfilling its commitment to the German federal government under the "Voluntary commitment of mobile network operators".

Consumers can also get information about the SAR levels of every mobile device sold by Telekom Deutschland. This service, which we are constantly updating, is available at stores, in different magazines such as "telekom trend" or at <a href="https://www.telekom.de/sar-werte">www.telekom.de/sar-werte</a>, the sales portal's homepage, which was redesigned in 2011. The portal provides interested consumers with background information on technology and safety.

Telekom also provides comprehensive information on mobile communications technology and safety on its <u>responsibility portal</u>. All of the company's online information on mobile communications and health was updated in 2011 and combined on one <u>online platform</u>. Customers can now access all information at one place and use the links posted there to visit related sites.

#### Consumer information on EMF provided by international subsidiaries.

Several international subsidiaries continued to improve their consumer information on mobile communications and health during the reporting period:

The Montenegro-based subsidiary Crnogorski Telekom implemented a series of information measures on the topic of mobile communications and health and, in particular, on SAR levels; more are scheduled for 2012. Information on the SAR levels of mobile devices has been a standard component in product information since 2011 and will soon be accessible at sales outlets and online as well.

Slovak Telekom also recently began including information on the SAR levels of its devices online.

In order to further expand its user-centered information offer, Cosmote Romania conducted four representative surveys—in February 2011, May 2011, September 2011 and January 2012—about public perception of mobile communications, EMF emissions and health. Cosmote Romania is currently developing a communication strategy based on the results. The strategy is scheduled to be implemented in the spring 2012.

#### Training and raising employee awareness.

Telekom employees are important "ambassadors" to the public. They help increase the knowledge of mobile communications and health among the population and by doing so, enhance the acceptance of mobile communications technology. Training programs were conducted at several international subsidiaries during the reporting period.

The Bulgarian subsidiary Globul conducted training for its employees on mobile communications and health and was able to bring a representative of the World Health Organization (WHO) on board as a speaker. The goal of the training was to intensify the employees' knowledge of physical and technical fundamentals, current state of scientific knowledge in the area of mobile communications and health as well as to communicate the results of measurement campaigns. Globul also offered EMF training in 2011 to contractors and subcontractors involved in site acquisition and antenna installation in order to guarantee that everyone participating in network set-up and expansion would be able to answer any questions asked by those interested.

The Croatian subsidiary T-HT Hrvatski Telekom trained around 260 employees on the topic of EMF in 2011, providing them with extensive information on technical background as well as safety and health-related aspects involved in mobile communications. T-HT Hrvatski Telekom also hosted online training for an additional 800 employees. These internal training programs were complemented by special workshops for employees who particularly need information about EMF in their areas of responsibility.

The Czech subsidiary T-Mobile Czech Republic introduced an expert training program in 2011 as a standard component of the company's orientation days for new employees. In addition to communicating knowledge, the

purpose of the training was to raise awareness of the public debate.		
© 2012 Deutsche Telekom AG		



<u>Home</u> > <u>Networks</u> > <u>Mobile communications & health</u> > Participation

# Participation.

The basis for successful <u>network expansion</u> is active participation of everyone involved right from the start. This is made possible by initiating dialog with stakeholders such as municipalities, residents and people who live near mobile base stations as well as skeptical organizations and NGOs. That is why we incorporated the idea of participation in the <u>EMF Policy</u>. We developed three essential recommendations that are based on this principle.

- We require our mobile subsidiaries to work closely with municipalities and to support them with their expertise when it comes to answering the questions of residents regarding network development and site selection for mobile base stations.
- Conflicts arising in connection with site selection should be resolved by finding solutions that are acceptable to all parties. Assigning local contacts as a liaison with those involved at the regional level makes it possible to resolve conflicts or answer questions quickly, easily and competently.
- We try to keep interference with the landscape and cityscape to a minimum. We also try to prevent mobile communications masts from becoming eyesores when selecting locations.

Our mobile subsidiaries have been conducting appropriate measures to encourage participation for several years. In Germany, for example, our approach is based in particular on the voluntary commitment by mobile network operators as well as on the agreement with the national associations of local authorities. Telekom Deutschland signed both in 2001.

## Voluntary commitment of mobile providers in Germany.

On the occasion of the tenth anniversary of the voluntary commitment of mobile communications providers in Germany in late 2011, Telekom Deutschland and the other German mobile providers informed the German federal government that they would continue to honor their voluntary commitment.

In December 2001, the four mobile providers in Germany voluntarily committed themselves to engage in trust-building activities when expanding their mobile networks. The main objectives of the agreement include improving transparency during network expansion, providing more information to consumers and sponsoring independent research. One specific example of how the agreement is being implemented is that we provide information to cities and municipalities and get them involved in mobile network expansion. The implementation of this voluntary commitment has laid the foundation for Deutsche Telekom's current network expansion plans including the roll-out of a state-of-the-art broadband network.

The network providers also announced that they would support the German Federal Ministry of the Environment's plans regarding risk communication in the next two years with a total of EUR 600,000. The goal is to provide people with even more comprehensive, targeted information about the possible impact of mobile communications technology on humans and the environment.

Implementation of the voluntary commitment contributed considerably to minimizing conflicts regarding sites for mobile base stations and to improving people's acceptance of mobile communications. This is confirmed by independent expert reports. An integral part of this voluntary commitment is having the measures regularly reviewed by a consortium of experts comprised of representatives of Deutsches Institut für Urbanistik (DIFU), the German institute for urban affairs, and the German consumer organization Verbraucherzentrale

Nordrhein-Westfalen. Every two years, the results of the review are summarized in an independent expert report that is submitted to the German federal government. Results of the 2011 expert report will be published in the second quarter 2012.

The continued positive feedback from the ministries involved and the Chancellor's office regarding successful implementation of the voluntary commitment encourages us to continue to promote a responsible approach to the topic of mobile communications and health.

The voluntary commitment of mobile network operators in Germany is an excellent example of how effective dialog and participation can be. In 2001 Telekom Deutschland teamed up with the other German network providers to submit a voluntary commitment to the German federal government. This commitment involves "measures to improve safety and consumer, environment and health protection and to provide information and conduct trust-building activities when expanding mobile communications networks."

The objective of the agreement is to improve consumer protection and health safety when expanding mobile networks in Germany. Network providers have been conducting a series of measures and activities to achieve this goal since 2001. Mobile providers in Germany once again reinforced their voluntary commitment in 2008 and announced additional measures. By reaffirming its voluntary commitment in 2008, Telekom Deutschland once again expressed its willingness to engage in dialog with municipalities and residents. That also includes continuing to comply with the mobile communications agreement concluded with national associations of local authorities.

This agreement ("Agreement on sharing information and municipality participation in mobile communications network expansion activities") was also signed in 2001 by all mobile network providers in Germany and the national associations of local authorities - the German Association of Cities, the German Association of District Councils, and the German Association of Towns and Municipalities. Its objective is to involve cities and municipalities in the network expansion process. Mobile communications companies and municipalities work together in cooperative, constructive dialog to come up with amicable solutions for new sites for mobile base stations. In this way, we have been able to permanently improve the flow of information between municipalities and network providers.

Other components of the voluntary commitment are to improve consumer information, particularly on the use of cell phones, and to sponsor independent <u>research on mobile communications</u> conducted by the German federal government.

## Dialog on network set-up and expansion.

When introducing new technology, it is important to inform residents about the technology being used at an early stage. Our experience with setting up networks shows that engaging in dialog directly with municipalities and the people contributes considerably to how well our technology is accepted and to easing the public's concerns.

During expansion of the <u>LTE network infrastructure</u> in Germany, Telekom Deutschland implemented a dialog with municipalities and residents in 2011 to address critical questions asked by local decision-makers, give them the opportunity to participate and work together with them to develop solutions.

Residents can address any questions they may have to local contacts that are familiar with local conditions and are involved in continuous dialog with residents and municipalities. People with questions on mobile communications and health can also call our expert hotline (0800-0852606) or send an e-mail to Telekom's e-mail address emvu@telekom.de.

As part of LTE expansion in Austria, T-Mobile Austria hosted informative events in all federal states for

representatives of state and local authorities from May to October 2011. The representatives had the opportunity to learn extensively about LTE technology and safety-related aspects. T-Mobile Austria was also able to bring renowned mobile communications and health experts from the University of Innsbruck on board.

Alongside the current network expansion in Montenegro, Crnogorski Telekom also initiated dialog with municipalities during the reporting period, helping make public discussion of the topic more factual.

## Participating in expert discussions on EMF.

Representatives of the Bulgarian mobile communications subsidiary Globul actively participated in the 6th international CEMA (Communication, Electromagnetics and Medical Applications) held in the country's capital of Sofia in October 2011. The CEMA is one of the most important conferences in the Balkans on the fields of engineering sciences and medicine. Under the headline EMF Exposure and Mobile Telephony, Globul discussed the problems involved in addressing the public debate about mobile communications and health and presented its strategy for handling the topic responsibly.

In Germany, the third meeting of the <u>Electromagnetic Fields Round Table</u> (RTEMF) was held in November 2011. Experts on health, the environment and consumer protection as well as scientists were invited to attend. An EMF expert from Telekom Deutschland also attended the meeting and discussed current safety, research and technology-related mobile communications issues.

The <u>Electromagnetic Fields Round Table</u> (RTEMF) is a key instrument for Telekom Deutschland when it comes to open dialog with all stakeholders involved in the public EMF discussion. The original round table was initiated as part of the <u>German Mobile Communications Research Program</u> (DMF). Since 2010 it has been held under the name "<u>Electromagnetic Fields Round Table</u>" (RTEMF).



Home > Networks > Mobile communications & health > Research & partnership

# Research & partnership.

The effects of electromagnetic fields on human beings have been researched thoroughly over the last few decades. All recognized expert committees confirm on the basis of sound research results that current limit values guarantee that mobile communications can be used safely.

However, in light of new technological developments, it is important that we continue to update the information available on possible effects of mobile communications. That is why supporting independent scientific research and partnerships is a key element in our <u>EMF Policy</u>. This is reflected by two recommendations for interacting with the research and scientific community.

- As a leading mobile network provider, Telekom supports scientific independent research such as independent national research programs on possible health effects of EMF.
- Limit values for mobile communications technology need to be defined on the basis of sound research results and to undergo constant review.

### Developing Expertise at the EMF Science Forum.

The kick-off event of the <u>EMF Science Forum</u> (WF-EMF) was held at the Berlin-Brandenburg Academy of Sciences and Humanities in April 2011. The forum's main objective is to develop new methods for approaching the conflicts that exist in the scientific community regarding the possible impact that electromagnetic fields have on health. The organization running the project is the Institute for Technology Assessment and Systems Analysis (ITAS) at the Karlsruhe Institute of Technology (KIT), a member of the Helmholtz Association of German Research Centers.

Almost 60 researchers from the fields of biology, epidemiology, decision research, communication research, human medicine, public health, sociology and statistics attended the Science Forum's kick-off event.

The EMF Science Forum held several meetings on selected research and risk assessment topics in the mobile communications and health area in 2011. All stakeholders including those from science, politics, business, NGOs and resident initiatives were welcome to attend. A network meeting on risk communication took place at the Fraunhofer Society's offices in Berlin in August 2011. A network meeting on "Neurodegenerative diseases and ELF & RF EMF exposure" followed in September 2011 in collaboration with the Charité Competence Center of Sleep Research in Berlin. Representatives from the scientific community, committees, governmental agencies and NGOs as well as from politics and industry met in December 2011 at the Helmholtz Association's Spreepalais in Berlin to discuss the International Agency for Research on Cancer's (IARC) decision to rank electromagnetic fields as a possible carcinogenic.

A summary of the results of the meetings is expected to be published in 2012 at <a href="http://www.wf-emf.org/en?set\_language=en">http://www.wf-emf.org/en?set\_language=en</a>.

Telekom financially supported the preparation and foundation of the <u>EMF Science Forum</u> in 2010. The EMF Science Forum was officially founded on January 1, 2011. The objective of the Science Forum is to research how scientific conflicts arise and which scientific rules and standards can be used to deal with controversial

situations. Another goal is to explore how scientific studies can be weighted and interpreted fairly in order to promote scientifically substantiated risk assessment.

The EMF Science Forum is run by the <u>Institute for Technology Assessment and Systems Analysis</u> (ITAS) of the Karlsruhe Institute of Technology (KIT), which is part of the Helmholtz Association of German Research Centers. The forum is advised by a board of internationally recognized researchers from the areas of biology, epidemiology, decision research, electrical engineering, communication, sociology and statistics. The aim is to develop research expertise in the area of mobile communications and health and to make extensive, clear and current information available to professional circles.

You will find more information on the EMF Science Forum at: <a href="http://www.wf-emf.org/en?set\_language=en">http://www.wf-emf.org/en?set\_language=en</a> and <a href="http://www.wf-emf.org/de/ressourcen/flyer">http://www.wf-emf.org/de/ressourcen/flyer</a> wf-emf-deutsch.

### Promoting independent research.

Together with the other German network providers, Telekom Deutschland supports projects on mobile communications and health conducted by the German federal government's environmental research plan. Collectively, the network providers contributed EUR 1 million. Several projects were conducted by renowned research groups under the program from 2008 to 2012. The research projects focused on possible long-term effects of using mobile communications technology and the possibly higher susceptibility of children to EMFs generated by mobile communications.

Supporting independent research financially is part of the voluntary commitment made to the German federal government by German network providers. This also includes Telekom's financial sponsorship of the <u>German Mobile Communications Research Program</u> (DMF) from 2001 to 2008. The German Federal Ministry for the Environment conducted the DMF program from 2002 to 2008. With a total budget of EUR 17 million, the ministry sponsored more than 50 studies on the effects of EMFs in mobile communications. Mobile network providers supported the project with EUR 8.5 million. The German Federal Office for Radiation Protection (BfS) was responsible for program administration and content. The results were published in June 2008. According to the BfS, earlier indications of possible health-related effects of high-frequency fields could not be confirmed. No new indications of possible health-related effects were found. In particular, no non-thermal effects were identified. The studies therefore did not find reason to adjust the current limit values.

## User data provided to researchers.

Researchers from Ludwig-Maximilians-Universität in Munich (LMU Munich) have been looking into the correlation between frequent use of cell phones and the occurrence of tumors in young people in their Mobikids study. In compliance with current data privacy regulations, Telekom Deutschland is providing the researchers with all necessary data on the frequency with which those participating in the study are using their cell phones. This lets researchers analyze possible diseases in relation to actual cell phone use, forms the basis for an improved research methodology and leads to more reliable results. Researchers from 13 countries are participating in the study by collecting medical data and data on cell-phone users in their countries. The study will be completed by 2014 and will provide valuable information on any effects that using cell phones may have on young people's health.

EMF study database available to the public.

The availability of scientifically substantiated information and studies on the topic of mobile communications and health is fundamental to constructive social dialog. During the reporting period, Deutsche Telekom financially sponsored the database of the German Research Center for Bioelectromagnetic Interaction (FEMU), which is run by RWTH Aachen University.

FEMU collects all scientific studies that have been published on the topic of mobile communications and health and makes them available to the public. Those interested can access the data at no charge by visiting <a href="http://www.emf-portal.de/index.php?l=e">http://www.emf-portal.de/index.php?l=e</a>. The database contains more than 15,000 scientific articles and reports and has established itself in the past few years in Germany and abroad as a reliable source for scientific studies on mobile communications and health. The World Health Organization (WHO) recommends the EMF portal and numerous German government agencies refer to it on their websites.

## Research on radio technologies and measurement techniques.

Telekom Deutschland and the other network providers in Germany are supporting the German Federal Office for Radiation Protection (BfS) in a study on determining the general population's exposure levels as a result of new mobile communications technology. This research project, which started in August 2011, is being conducted by the Institute for Mobile and Satellite Communication Technology (IMST) and the EM-Institut GmbH. The aim is to improve the amount of data available on the electromagnetic fields generated by new services such as <u>LTE</u>. Telekom is providing all of the necessary information on network configuration to IMST, which is in charge of the project. Study results are expected to be available by late 2012.

The new mobile communications technology LTE raises new questions. For example, we need to find out how LTE interacts with other technical systems. Telekom Deutschland commissioned IMST to research the interplay between LTE 800 and other technologies with the same frequency, such as wireless microphone equipment. The results will be used to support municipalities in addressing possible problems with LTE 800 and work with them to develop solutions.



Home > Networks > Environmentally friendly network infrastructure

# Environmentally friendly network infrastructure.

State-of-the-art information and communications technology (ICT) increasingly helps replace energy and resource-intensive products and services with more efficient ones. At the same time, however, the amount of data that needs to be saved and transmitted is growing due to ever more sophisticated applications. According to the SMART 2020 study published by the Climate Group of the Global e-Sustainability Initiative (GeSI), the ICT industry was responsible for around two percent of global emissions in 2007, the equivalent of around 830 metric megatons of CO<sub>2</sub>. Estimates foresee an increase to up to six percent each year until 2020.

That is why it is now even more important than ever to not only improve the performance of <u>networks</u> and <u>data</u> <u>centers</u> but to make them more energy efficient as well in the interest of <u>climate protection</u>.

Telekom Deutschland switches off, replaces and recycles any old systems that have been made redundant. We choose the most energy-efficient and environmentally friendly technology currently available when making <u>new purchases</u>. We also motivate our customers to save energy and reduce CO<sub>2</sub> emissions by providing them with <u>efficient solutions</u>. For this purpose we published the "Klima schützen, Kosten senken" (Protecting the climate, cutting costs) brochure based on the SMART 2020 study.

"Protecting the climate, cutting costs" brochure

## Code of Conduct on Energy Consumption of Broadband Equipment.

By signing the European <u>Code of Conduct on Energy Consumption of Broadband Equipment</u> (CoCBB), Deutsche Telekom has pledged to optimize the energy requirements of its broadband networks.

We incorporated the third version of the code into the environmental regulations of our procurement policies in 2011. Deutsche Telekom complies with the maximum energy consumption levels for new technology as specified in the code in collaboration with our suppliers.

In September 2010, 20 European telecommunications companies, all members of <u>GeSI</u>, signed the Code of Conduct on Energy Consumption of Broadband Equipment (CoCBB). Those who signed the code, including Telekom and our Greek subsidiary OTE, also pledged to optimize energy requirements in the broadband sector.

The CoCBB specifies standards for devices and network components and places a number of requirements on systems manufacturers:

- Permissible maximum consumption levels for network components (e.g., DSLAM), down to customer end-devices (e.g., routers)
- Placing all participants under the obligation to produce, select and use devices in compliance with energy-efficient criteria
- Providing information on improvements in energy efficiency regarding end devices and equipment used in the network infrastructure chain

In line with the <u>CoCBB</u> Telekom is identifying ways to optimize the energy consumption of its <u>ADSL2+ network</u>. Whereas previously, all connections were operated in a switched-on mode, i.e. in full-power mode" (L0 mode), by using the low-power mode" (L2 mode) it will be possible in the future to reduce the electric power usage when using data services with a lower bandwidth. Analysis revealed that the use of the L2 mode in the ADSL2+ network creates energy savings of up to 20 percent.

So far, the low-power mode has not been used in the network due to poor quality, stability and interoperability. Meanwhile, due to additional enhanced features of the L2 mode which have been achieved within the framework of standardization through the International Telecommunications Union (ITU), it is possible to increase both the quality of service in L2 mode and the stability. Telekom contributed significantly to the ITU standardization committee's development of the new standard during the reporting period.

In the future it will be possible to implement the improved modes with a modem generation based on MSAN technology, which is currently used in the ADSL2+ access nodes.

We take responsibility.



Home > Networks > Environmentally friendly network infrastructure > Network upgrading

# Network upgrading.

Energy efficiency is not only an important goal for Telekom in planning new networks, it is also important when optimizing existing ones. Better performance and less energy consumption go hand in hand.

## Replacing outdated 2G network technology.

The largest system technology swap in the history of Deutsche Telekom's mobile business began on September 4, 2011: the replacement of Alcatel-Lucent's outdated 2G/GSM technology with state-of-the-art Huawei technology. The plan is to replace the technology at a total of some 12,000 mobile communications sites and replace more than half of the outdated 2G/GSM systems. The number of controller sites for base stations will be reduced from 256 to 13 over the course of the swap.

By modernizing the technology we are laying the foundation for a future-proof technology platform which is not only suitable for LTE expansion, but will also ensure that the same hardware can be used for all mobile communication generations (2G  $^{\Box}$ , 3G  $^{\Box}$  and 4G/LTE) in the long term. The aim is to avoid future investments and reduce operating costs. In addition, the 2G  $^{\Box}$  network technology will be IP-enabled, thus meeting the future requirements of the fixed network (All-IP  $^{\Box}$ ).

#### Updating 3G base stations.

We were able to successfully complete the UltraSite Swap upgrade project in September 2011. We replaced the outdated 1st generation 3G in technology at around 3,100 base stations with the latest generation of efficient system technology. In addition to improving data transmission, which made it possible to activate HSPA+ with a bandwidth of 42 Mbit/s throughout Germany, we were able to save around 8,000 kWh of power each year per base station. The project resulted in overall savings of 24.8 GWh/year.

#### Best Power project.

The high-speed VDSL in network is based on fiber optic cables. Individual network components are bundled in cabinets, recognizable as the gray boxes found throughout the city. In order to further increase the energy efficiency of the technology contained in the cabinets and to minimize performance loss, we initiated the Best Power project in 2011.

The focal point of the pilot project is selecting the most effective network devices and increasing the energy efficiency of our system technology. We plan to reduce our  $CO_2$  emissions as well as our operating costs with the energy reduction the project is expected to generate. Official results will not be available until a field test has been conducted in late 2013, since a subproject of Best Power is being conducted in connection with the <u>DESI project</u>.

#### "Power Off" task force.

In 2011 we were able to shut down unnecessary technical systems with a wattage of overall 4,286 kW due to

measures implemented by the Power Off task force. The energy savings realized as a result are the equivalent of 16,564 metric tons of CO<sub>2</sub> per year.

The Power Off task force at Telekom Deutschland analyzes which residual modules can be removed from the network with a reasonable effort and organizes the systematic dismantling of outdated systems.

The prompt dismantling of technical systems that are no longer needed helps to cut energy consumption considerably. By dismantling these systems in 2011, Telekom can save around 37 GWh in electrical energy consumption as well as other costs amounting to EUR 8 million for electricity, cooling and uninterrupted power supply each year. In addition, the measures freed up one-time investment resources in areas such as cooling and uninterrupted power supply totaling at around EUR 8.4 million. These will be used to accelerate the installation of new, more energy-efficient networks.

### Upgrading the mobile communications infrastructure at Crnogorski Telekom.

The Montenegrin subsidiary Crnogorski Telekom began a program to upgrade its entire mobile communications infrastructure in mid-2011. A pilot project in the city of Bar, in which all services were migrated over to a single platform, yielded improvements to the network quality.

## Update on the 2010/2011 CR program.

Sub-targets	Status of implementation/measures	
Power Off task force	Implementation underway.  • Continuation within the framework of the Save4Service program in Germany; disconnecting equipment with 12,800 kW by the end of 2012	
Best Power task force project	<ul> <li>Implementation underway.</li> <li>Optimizing network equipment in cabinets to make it more energy efficient.</li> <li>The new network equipment is currently undergoing operations approval. Cabinet prototypes have been produced and are currently being tested; alternative energy supply systems are being prepared for a field test.</li> </ul>	

#### 2010/2011 CR program

The current 2011/2012 CR program can be found in the "Strategy & management" section.



Home > Networks > Environmentally friendly network infrastructure > Climate technology & energy use

# Climate technology & energy use.

Data centers produce a lot of heat and need to be cooled. Some 40 percent of the energy used by data centers is used for cooling. Energy-efficient climate technology offers significant reduction potential. Deutsche Telekom—particularly T-Systems—conducts intensive research and development in order to optimize data center infrastructures in consideration of financial and ecological aspects. The Group subsidiary Power and Air Condition Solution Management GmbH & Co. KG (PASM) is our partner in many of these projects.

In terms of climate protection, energy generation from renewable sources such as wind, sun and water is an important topic when it comes to data center operation. That is why we develop and use smart solutions for the employment of renewable energy.

## Heat Power Business project.

In collaboration with Telekom's Group Facility Management, PASM launched the Heat Power Business innovation project in December 2010. We operate ten mini-cogenerators with capacities ranging from 4.5 to 50 kW at network nodes that are used by different parties. The waste heat they produce is used to heat the buildings so that total usage of employed primary power is over 80 percent.

It was confirmed over the course of 2011 that the equipment can be operated in a way that is both efficient and environmentally friendly, as was shown in a previous feasibility study. After a start-up phase, the mini-cogenerators had generated around 1,300 MWh of electricity and around 2,000 MWh of heat by the end of the year. We were able to reduce CO<sub>2</sub> emissions by around 310 metric tons in 2011 thanks to the mini-cogenerators. After numerous adjustments of parameters had been made in the first quarter of 2011, the results of monitoring run-times, energy generation, efficiency and cycle frequency confirmed the findings in the feasibility reports that had been conducted previously.

We were able to save even more by reducing the stand-by times of installed large-scale heating systems. Thanks to the new mini-cogenerators we can now provide heat efficiently during periods of moderate heating requirements, thereby improving overall efficiency. Mini-cogeneration enabled us to save natural gas equivalent to 120 MWh at our heating station in Regensburg alone.

As part of the project, we are planning to analyze all of the network nodes used by several mobile communications providers to review the possible use of <u>cogenerator technology in 2012</u>.

The development and use of energy-efficient air conditioning systems for data centers is a central element of the PASM (Power and Air Condition Solution Management GmbH & Co. KG) product portfolio. PASM, a Telekom subsidiary, manufactures and markets complete energy-based solutions for technical systems for corporate customers, especially for companies from the information and telecommunications industry. PASM considers it its responsibility to constantly improve the energy efficiency of "availability products" comprised of uninterruptible power supply and cooling for network nodes.

Its energy-based products are used by Telekom Deutschland and T-Systems Deutschland in the fixed network and data centers. PASM also provides its products to around 20,000 base station control systems and mobile switching centers of Telekom Deutschland's mobile network.

## KPI review cooperation with STRABAG.

PASM defined various KPIs from August to November 2011 in consultation with our Group Facility Management. The KPIs will be used to measure the energy consumption of facilities used by several parties in relation to the amount of occupied office space. We reviewed these KPIs on test facilities in collaboration with experts from STRABAG Property and Facility Services in 2011. We plan to develop strategies in 2012 to introduce energy management systems once the tests have been evaluated.

Energy efficiency means <u>climate protection</u>. PASM uses efficiency indicators to monitor efficiency improvements at around 8,000 network nodes and data centers in Germany. PASM commissioned the Property and Facility Services (PFS) unit of the construction company STRABAG to conduct on-site analyses of its production systems as part of its TOP 100 program. Each year, the 100 most energy-inefficient buildings are identified and analyzed under the program. STRABAG PFS engineers analyze energy efficiency potential and develop solutions as to how to effectively exploit this potential. PASM has been able to significantly increase energy efficiency in the past few years by replacing inefficient fans, installing innovative control units or adjusting the systems to current demand. The energy efficiency indicator <u>PUE</u> for Telekom Deutschland's fixed network (not including data centers) was down to 1.53 in 2009 from over 1.75 in 2005. That is the equivalent of a reduction in greenhouse gas emissions of around 92,000 metric tons of CO<sub>2</sub> equivalents per year.

## DESI project—End-to-end energy-sensitive ICT.

PASM has been working together with Telekom Innovation Laboratories (T-Labs ) and Deutsche Telekom to test solutions for new smart energy sources since mid-December 2011. The purpose of the project is to develop a system for load adaptive control and to test concepts for generating and storing energy. This is one of the key foundations for smart grids.

We are testing ways to manage peak loads and optimize purchases within this context. We took the first steps during the reporting period by using outdated backup supply systems as interim storage for excess solar energy. In the past, these systems were kept constantly charged but almost never used to feed energy back into the network. In the smart grid project at T-City Friedrichshafen we were able to achieve load adaptive control at least to a certain extent. The batteries were not only used as backup for power outages, but also to operate the systems. The batteries were charged during electricity generation peaks and used during times when power supply in the public grid was scarce, which reduced costs and helped maintain network stability. Buffering energy and the resulting increase in network stability is an important contribution that Telekom is making toward establishing renewable energy sources, because storing energy is an essential factor in being able to utilize solar and wind energy, which are subject to heavy fluctuation. Additional equipment such as emergency power supply systems, cooling equipment and lithium-ion batteries will be incorporated into the system, analyzed and then tested in real-life situations in 2012 in order to realize additional advancements in saving costs and increased availability. We will be using a self-optimizing T-Lab software for this.

Solutions for implementing smart grids have been one of the big technology goals for the past few years. In the project "DESI —End- to-end energy-sensitive ICT," which is sponsored by the German Federal Ministry for Economics and Technology as part of the IT2Green research focus, PASM has been working on developing an overall approach in collaboration with <u>Telekom Innovation Laboratories (T-Labs) and Telekom Deutschland</u> that integrates the entire ICT supply chain. The project was initiated by T-Labs in and Telekom Deutschland and is scheduled to be carried out between 2011 and 2013.

The DESI approach focuses on three core areas:

- Creating ICT component connectability in smart grids
- Integrating ICT components into the entire energy supply chain
- Control of variable energy supply for ICT networks

Participants in the DESI project are also looking at how the ICT network power supply can meet the main requirements of a smart grid such as load shifts and supply stabilization by controlling energy storage. Finding a solution to this problem is basically the first stage in developing a smart grid control system.

Initial smart grid solutions are being employed at <u>T-City Friedrichshafen</u>.

## LOLA project for load-adaptive networks.

Load-adaptive, smart grid control holds reduction potential of around 30 percent when it comes to energy consumption and CO<sub>2</sub> emissions. This applies to the network infrastructure as well as customer use of ICT products, which we were able to prove in test beds during the reporting period.

Many of today's ICT devices and systems require a consistent power supply as long as they are switched on, regardless of what they are actually being used for. In the LOLA (Load adaptive networks & LANs) project, participants are identifying and studying usage case examples in which energy consumption can be adjusted to fit actual use both for access networks as well as customer home networks. For example, energy consumption in our business customers' corporate networks can be reduced by up to 30 percent with the right features. Telekom Deutschland's and T-Systems' Business Customer Sales departments teamed up to pilot these products and offered them at CeBIT 12012.

Other results in the area of access networks show that it is possible to reduce energy consumption by up to 30 percent there as well. That would mean reductions of 30 GWh per year. We will be continuing to advance and pilot the project in 2012.

We have been working in collaboration with international system manufacturers since 2010 to develop the technology and to standardize load-adaptive systems internationally in order to create energy-efficient global market products that anyone can purchase.

As a member of the International Telecommunication Union (ITU), Telekom was instrumental in developing the new Standardization of low power mode (L2 mode) in 2011.

Unlike traditional systems, which require a basically constant supply of energy throughout the day, load-adaptive ICT networks adjust their energy needs to actual use, which is subject to extreme fluctuations. Load adaptation means that parts of the production systems can be shut down gradually or all at once during low-usage times such as at night or in the early morning hours. That reduces energy consumption considerably. The LOLA project explores how smart control systems can reduce energy consumption in networks and end devices. The project is initially focusing on customer networks and the access network. The long-term goal is smart, end-to-end control along the entire network architecture. Initial model analyses and lab measurements indicate an estimated total energy and CO<sub>2</sub> reduction potential of around 30 percent. Another goal is to promote international standardization. The project is scheduled to run from October 2010 to December 2012. We already have initial results for corporate networks and broadband access networks.

The energy consumption in radio access networks is steadily increasing. This is due to the network expansion and also to the increasing capacity demands of mobile users. Telekom operates tens of thousands of base stations and Wi-Fi hotspots in Germany, which have a total annual energy consumption in the three-digit gigawatt hours range. Until now, these networks have been operated regardless of their usage; the same amount of energy has been used no matter whether the load is high or low.

The purpose of the ComGreen project is to ensure context-based network adjustment that provides users of telecommunications networks with exactly the right amount of transmission capacity needed rather than the maximum capacity that was previously supplied. In order to achieve this, an architecture for the self-organized and context-based adaptation (alignment) of the network parameters will be developed so that network resources can be switched on and off depending on the load.

Initial results from the project show that load-adaptive, intelligent network control holds a saving potential of around 30 percent when it comes to energy consumption and CO<sub>2</sub> emissions. In addition, the project will serve to develop concepts that will be submitted to international standardization committees. The medium-term aim is to integrate the concepts and mechanisms in the network nodes via the manufacturers.

#### PASM in Clean Power Net.

During the reporting period, PASM continued to be a committed member of the <u>Clean Power Net</u> competence network and was actively involved in drafting user requirements and technical specifications in 2012.

Getting a new technology ready for the market often requires the joint efforts of many players from business, politics and science. As a co-founder and partner of the German <u>Clean Power Net</u> competence network, the Group subsidiary <u>PASM</u> is driving the development of marketable fuel cells. The Clean Power Net initiative was founded in October 2010 by the Bavarian state government in cooperation with NOW (National Organization for fuel cells and hydrogen systems) as well as fuel cell users and manufacturers.

#### Program for hydrogen and fuel cell technology in Germany.

PASM had planned to set up a self-sufficient energy mobile base station at the Hanover trade fair grounds in 2011 under the German federal government's <u>National Innovation Program for Hydrogen and Fuel Cell Technology</u>. The project could not be put into practice because of extensive delays in getting permits and because one project partner withdrew completely.

In the meantime we have already begun operating five fuel cell systems. We will continue to test the efficiency of these fuel cells within the context of the German innovation project. We will be focusing in particular on using the fuel cells as a backup system and to manage peak loads and on identifying ways to incorporate the fuel cells into a virtual power plant.

## Energy-efficient systems for cold aisle containment.

We began using the particularly energy-efficient cold aisle containment system for Telekom's all-IP platform in July 2011. The system prevents the mixing of cool fresh air and warm waste air at data centers and network nodes. Cold air is used directly to cool the equipment. Planners from Telekom Deutschland, PASM and the STRABAG construction group contributed their experience to the project. The results of the <u>DataCenter 2020</u> project were also assessed in terms of controlling airflow volumes as well as air intake and outlet. We installed

temperature sensors in the cold aisle based on the results and successfully integrated the system into the current infrastructure at two Hamburg pilot sites between June 2011 and July 2011. We will be using this solution in future plans for our IP [1] platform.

## Update on the 2010/2011 CR program.

Sub-targets	Status of implementation/measures
DESI (End-to-end energy-sensitive ICT production) and LOLA (Load-adaptive networks and LANs) projects	Implementation underway.  • Reduced energy consumption of ICT production along the entire supply chain  • Lab tests on load-adaptive control were successful. The interplay between load-adaptive ICT networks and the power supply grid is being tested at T-City Friedrichshafen.

## 2010/2011 CR program

The current 2011/2012 CR program can be found in the "Strategy & management" section.



Home > Networks > Environmentally friendly network infrastructure > Green data centers

## Green data centers.

Energy efficiency is the most important instrument to effectively improve the CO<sub>2</sub> footprint of data centers. Telekom takes an integrated, comprehensive approach to increasing the efficiency of its data centers—from cooling and energy supply to optimized utilization of hardware capacities.

#### Video: DataCenter 2020

(Animation from our CR App "We care")



#### DataCenter 2020.

We have been operating the <u>DataCenter 2020</u> test data center together with Intel since September 2009.

DataCenter 2020 is based on the open source principle. The results of our joint efforts will be published and can then be used by all interested parties. We conducted some 200 events with around 10 participants each during the reporting period where we presented and discussed ways to optimize energy consumption at data centers.

In an initial project phase, which was conducted from 2008 to 2010, researchers reduced energy consumption using relatively simple solutions. They optimized the airflow by sealing leaks in the raised floor and insulating the cold air areas (cold aisle containment) to prevent the mixture of cold and warm air. As a result, the fan speed of the circulating air coolers could be reduced to 30 percent, and energy consumption of the fans was down to 10 percent. The researchers increased the temperature in the system and the difference between intake and outlet temperatures. They also raised the water intake temperature of the cooling unit. These measures make the cooling unit considerably more energy-efficient and reduce its operation times.

Reliable operation requires an uninterrupted power supply. The studies showed that this is needed less than previously expected thanks to the separation of cold and warm air. Measurements from 2011 show that the energy density, or electric power per module or rack, can be increased three times over from 5.5 kW to up to 17.5 kW. Computer availability and reliability remained as high as before despite the power increase. The researchers achieved a PUE (power usage effectiveness) value of 1.23 as a result of the optimization measures.

We initiated additional tests in 2012. Test results show that higher energy densities of over 20 kW per rack are manageable as well. We are also looking into the use of hot aisle containment. IT load control and the energy density this requires is another option to optimize data center operations as a whole which is currently explored by researchers.

T-Systems is operating the <u>DataCenter 2020</u> jointly with Intel at Euro-Industriepark in Munich. At DataCenter 2020, we are testing solutions that enable more energy and cost-efficient data center operation to benefit the

environment and the climate. The two partners work on developing pioneering business models and new, cost-efficient ICT solutions for users and customers.

One of the project partners' milestones is to achieve a PUE (power usage effectiveness) value of 1.3. The PUE value is the most important indicator of data center energy efficiency. It compares the entire amount of energy used for data center operation with the amount of energy consumed by the computers. The average PUE value at T-Systems International and PASM data centers is 1.75. That means that 1.75 kW of power needs to be supplied to the data center for every kilowatt of power the servers need. Telekom's goal is to decrease this value for new fixed network data centers to 1.4 and for existing data centers to 1.6 by 2020. We have already achieved a PUE value of 1.23 at DataCenter 2020.

Experts found a number of surprisingly simple solutions when looking for optimal energy efficiency in data center set-up and operation. For example, the PUE value can be significantly improved by strictly separating hot and cold air. Additionally, experts found that it was not necessary to cool the room temperature down to 22°C, as is common. Temperatures of up to 27°C do not have a negative effect on computing performance. However, the right location, the type of energy supply and the distance to the customers who order computing capacities are important factors. T-Systems plans to take these results into account when building or restructuring data centers.

### Data Center Optimization project.

We launched the Data Center Optimization project in collaboration with PASM in August 2011 to optimize the infrastructure of our data centers in Germany. The project is scheduled to be completed by the end of 2012. The first step will be to analyze planned reductions. In a second step we will check whether the project can be technically implemented at three pilot sites.

The Data Center Optimization project includes around 16 measures per data center to reduce energy costs and will be conducted at 15 data centers.

#### Consolidating data centers at T-HT Hrvatski Telekom.

In 2011 T-HT Hrvatski Telekom migrated all applications and data to new, standardized data centers within the scope of the Data Center Consolidation project. Processes used at the former T-Mobile data centers in Zagreb were introduced at T-HT Hrvatski Telekom's new data center, which went into operation in 2001, and two older sites were closed.

The Croatian subsidiary also built a new next generation data center based on the technology concepts of dynamic data centers and cloud computing. In addition, the company consolidated the server infrastructure, which is based on the UNIX and x86 operating systems, and the local area and storage area networks (LAN/SAN).

Thanks to the new, flexible infrastructure, T-HT Hrvatski Telekom can distribute resources dynamically and reduce energy consumption by allocating resources to designated subsystems, such as Oracle, for example. The company was also able to migrate applications and data and consolidate all of the systems onto shared platforms without limiting system operation.

Update on the 2010/2011 CR program.

Sub-targets	Status of implementation/measures
Improve climate management in buildings and data centers	Implementation underway.  • Group Facility Management: Climate Change Group to determine specific new reduction targets for the real estate sector  • PASM: 3,000 installations for air conditioning with new control software with potential savings of 27 GWh per year (2009 to 2014)
TEMPO task force project	Implementation underway.  • Analysis and optimization of operating temperatures for ICT systems  • Data recording over a 12-month period is almost complete. The data will then be evaluated.  • General implementation of the ETS 300 climate model is going according to plan.
Standardization of low power mode (L2 mode)	Implementation underway.  • As a member of the International Telecommunication Union (ITU), Telekom was instrumental in developing the new standard in 2011.

## 2010/2011 CR program

The current 2011/2012 CR program can be found in the "Strategy & management" section.

Home > Customers

## Customers.



What is Telekom doing to extend the lifespan of cell phones?

Find out more

## Customers.

We want to help create a beneficial digital society with innovative climate and environmentally friendly ICT solutions. With the goal of becoming the market leader in connected life and work, we focus our work around establishing long-term customer relationships. We offer our customers attractive products and services that meet their needs and help them make sustainable, green consumer choices. Our <u>Cloud computing offer for private customers</u> is a significant step in this direction. We were able to once again increase the number of used devices returned as a result of various <u>cell phone collection activities</u> in comparison to the year before.

#### People who use communications technology have a right to know that their information is safe.

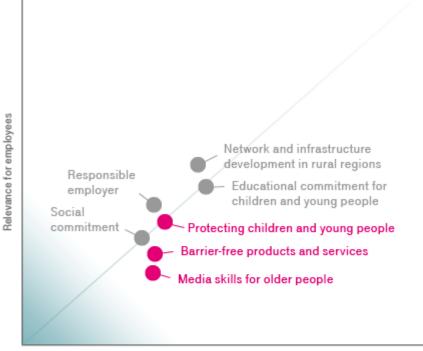
How does Telekom make sure that information is not abused? And how does it manage this information and make sure that it is handled responsibly?



CR category "Connected life and work"

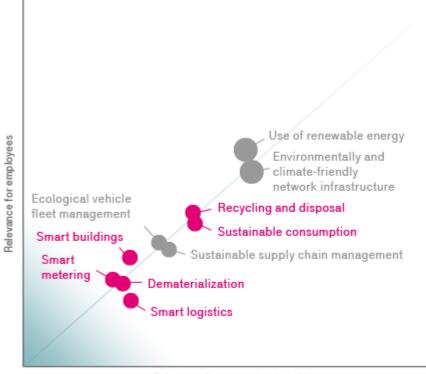
Relevance for external stakeholder

# CR category "Connect the unconnected"



Relevance for external stakeholder

CR category "Low carbon society"



Relevance for external stakeholder

The matrices map the results of our 2012 stakeholder survey. We use the survey to determine how relevant our internal and external stakeholders consider the various topics addressed by our <u>CR categories</u> to be. Further information regarding the stakeholder survey can be found in the <u>"Strategy & management"</u> section.

© 2012 Deutsche Telekom AG

<u>Home</u> > <u>Customers</u> > Basics for product development & product design

# Basics for product development & product design.

Changing consumer behavior is an important stepping stone in creating a sustainable society. According to the German Federal Environment Agency, private households are responsible for around 40 percent of greenhouse gas emissions in Germany. This means that responsible consumer decisions can make a big difference when it comes to protecting the climate and the environment.

Telekom considers it its responsibility to make it easier for its customers to practice sustainable consumption by providing them with as many environmentally-friendly products as possible. We are increasingly compensating for unavoidable CO<sub>2</sub> emissions by <u>neutralizing our carbon footprint</u>.

#### Sustainable Product Portfolio program.

The systematic creation and expansion of our climate-friendly product and service offerings is a decisive step toward achieving our goal of becoming a <u>CR leader</u> by 2015. In 2010, we initiated the Sustainable Product Portfolio program, which is scheduled to run until 2012. We work to help our customers lead a sustainable lifestyle with attractive products of high ethical and environmental quality. We also want to increase <u>customer satisfaction</u> and minimize the social and environmental impact of our products.

We conducted an extensive customer survey during the reporting period to find out what customers think about the sustainability of Telekom's offers. We also evaluated consumer tests. Results will be used in product development.

#### CR Report from the previous year

The <u>CR department</u> collaborates with other departments such as Product & Innovation, Sales and Procurement within the scope of the Sustainable Product Portfolio program. The program plays a key role in the achievement of our CR goal "<u>Leading the way</u>", because it integrates sustainability into our core corporate processes.

We plan to achieve the following results with the program by the end of 2012:

- Defining criteria that determine the sustainability of products
- Incorporating sustainability into product-relevant core processes and objectives
- Preparing employees for resulting changes
- Implementing an evaluation process
- Creating a CR key performance indicator (KPI) for sustainable products
- Improving customer communication on the topic of sustainability

That involves the strategic goal of increasing customer trust in the brand so that our customers perceive Deutsche Telekom as a sustainable company. This will help us set ourselves apart from our competitors and position ourselves as a premium brand.

#### Policies for sustainable product design.

the Group strategy since 2009. The primary principle, "Act responsibly - think globally," was derived from the CR strategy. The Öko-Institut reviewed Telekom's Sustainability Guideline for Product Design, which is based on the Design Principles, in 2011.

#### CR Report from the previous year

The Deutsche Telekom Design Principles form the content basis for Telekom's Experience Style Guide and Sustainability Guideline for Product Design. The design policies set forth in the Experience Style Guide are mandatory for all product development activities. Their purpose is to guarantee a consistent user experience of Telekom hardware and software offerings. The policies are in line with Deutsche Telekom's sustainability strategy.

#### At a glance: The Deutsche Telekom Design Principles.

- 1. Act responsibly think globally.
- 2. Analyze and picture the future to design toward it.
- 3. Create moments for sharing.
- 4. Support throughout the day.
- 5. Start with emotion.
- 6. Focus on core benefit.
- 7. Use learned recognition with a new interpretation.
- 8. Be coherent.
- 9. Design with passion and care for detail.
- 10. Create desire at first glance.

#### Device packaging policy revised.

In 2011 we revised our device packaging policy, which is valid throughout Germany, and incorporated sustainability criteria. In line with the policy, packaging material will be reduced to a minimum and only environmentally friendly materials will be used. All materials used must be fully recyclable including any plastic materials. Paper and cardboard must comply with the requirements of the Forest Stewardship Council ® and be bleached without the use of chlorine. Printing ink needs to be made from vegetable-based oils.

#### Sustainable product development in the corporate customers segment.

At the beginning of 2010, Telekom's corporate customer segment defined five new strategic *core beliefs* in order to meet its customers' increased demands for sustainable product development. These <u>core beliefs</u> were derived from business and society-related megatrends.

#### Sustainability and corporate responsibility - a permanent fixture.

One of the core beliefs is: Sustainability & Corporate Responsibility. With this core belief, T-Systems is contributing to implementation of the Telekom Group's <u>CR strategy</u>. The company supports its customers in reducing the use of natural resources while saving costs at the same time, e.g., by switching from <u>paper-based mail to e-mail</u>. T-Systems also applies this core belief to the <u>healthcare sector</u> to which it provides a number of innovative ICT solutions.

The <u>Deutsche Telekom expert circle 50+</u> has been critically evaluating products that we develop for persons above the age of 50 since November 2011. It also helps us improve our service for older individuals.

# Update on the 2010/2011 CR program.

Sub-targets	Status of implementation/measures
Develop customer-relevant sustainability criteria and KPIs for the expansion and controlling of the portfolio for sustainable products and services	Implementation underway.  Criteria and indicators developed with external and internal stakeholders  Regular stakeholder expert talks  Implementation of criteria and indicators in product and sales-relevant processes.  Introduction of product-related sustainability controlling  Developing a customer guidance approach  Internationalization  Survey instrument for measurement of sustainability criteria amongst our customers is developed and approved. Sustainability performance and customer perception together form a management system.
Develop and implement a strategy for Products & Innovation in order to embed CR in the product development cycle and innovation process	Target achieved. • The Design Principles have been published and now serve as the basis for product development activities. They have been reviewed to make sure they are in line with the sustainability criteria.
Carbon-neutral products and services	Target achieved.  • The process for neutralizing the carbon footprint of products and services was integrated into internal processes so that the certificates can now be ordered via internal Procurement.  • We have already ordered certificates for 2012 for the Load products.

#### 2010/2011 CR program

The current 2011/2012 CR program can be found in the "Strategy & management" section.

© 2012 Deutsche Telekom AG



Home > Customers > Climate and environmentally friendly products & services

# Climate and environmentally friendly products & services.

We are helping millions of consumers and business customers effectively lower their energy consumption and reduce CO<sub>2</sub> emissions with our growing offer of green products and innovative ICT solutions.

#### Trend: Sustainable mobile online services.

Whether you use them to do online banking, buy tickets online or check your electricity and heating costs on the go, there are many ways to use smartphones to consume intelligently and improve the sustainability of your lifestyle. People below the age of 30 are particularly attracted to these services, as shown in a <u>survey</u> conducted by the German market research company TNS Infratest and commissioned by Telekom in 2011: 48 percent of those surveyed welcomed the chance to buy tickets online and 44 percent said they would like to be able to use their smartphone to check their electricity and heating costs. 44 percent would also like to be able to access green product information using the product barcode. 2,000 households with Internet access were surveyed.

#### Platform for Climate Compatible Consumption in Germany.

Deutsche Telekom has been participating in the Product Carbon Footprint (PCF) project since 2008. The project's online platform was revamped as a dialog platform for climate-friendly consumption and carbon footprinting methods during the reporting period in order to promote climate-friendly consumption beyond the idea of limiting consumption altogether. The Platform for Climate Compatible Consumption in Germany (PKKD) is available to companies and stakeholders from all industries both in Germany and internationally. It provides extensive information and advice on reducing emissions along the supply chain based on the experiences of participating companies. It also gives other companies and stakeholders the chance to communicate their own progress in this area. Activities to further develop the PKKD are scheduled to continue until 2013. Workshops and dialog forums on key topics such as using renewable energy in the production process and how they affect the PCF are offered as well on a regular basis. The aim is to encourage discussion throughout the society and make a contribution to pursuing climate-friendly consumption together in a coordinated manner.

#### CR Report from the previous year

Products and services generate  $CO_2$  emissions throughout their entire life cycle, from production and use to disposal. These emissions can be illustrated using the  $CO_2$  footprint (Product Carbon Footprint - PCF). Information about this can help our customers make more sustainable purchase decisions.

#### PCF project: Creating CO<sub>2</sub> calculation standards.

Until now, there is no generally recognized method for calculating product-related CO<sub>2</sub> footprints. That is why Deutsche Telekom has been participating with eight other companies in the Product Carbon Footprint project since 2008. The project was founded by the <u>Thema 1</u> initiative and is being conducted in collaboration with <u>Öko-Institut e.V.</u>, the <u>World Wide Fund For Nature</u> (WWF) and the <u>Potsdam Institute for Climate Impact Research</u>. Telekom is also involved in other initiatives to develop industry-wide standards such as the <u>Greenhouse Gas (GHG) Protocol Initiative</u>.

#### Product Carbon Footprint policy.

In 2008 Deutsche Telekom began developing a method for PCF calculation based on international standards in cooperation with <u>Öko-Institut e.V.</u> The ISO 14040/44 life cycle standard, the <u>Greenhouse Gas Protocol</u> and the <u>International Telecommunication Union</u> (ITU) guidelines are being taken into account in this process. We initially calculated the CO<sub>2</sub> footprint of our products Call & Surf Comfort (in 2010) and Entertain (in 2011) to test the method's effectiveness.

The goal is to increase internal competence when it comes to comprehensively assessing the sustainability of our product portfolio. We are also developing internal standards for a method to expand our emissions reporting to include scope 3.

#### Improving router carbon footprints.

Telekom Deutschland and <u>Telekom Innovation Laboratories</u> (T-Labs ) are constantly working to reduce CO<sub>2</sub> emissions throughout the network infrastructure's entire life cycle. This also includes realizing reduction potential in the customer's infrastructure. We are, for example, working on the development of a load adaptive operation mode in order to make operation of routers more energy efficient and reduce CO<sub>2</sub> emissions. Feasibility tests are scheduled for completion in 2013 and will then be standardized.

The load adaptive mode makes sure that full power is only available to routers when they are actually being used, thereby making them more energy efficient. This mode can be used by the customer on-site as well as in the Telekom network infrastructure. By developing this innovation, we are taking steps to fulfill our voluntary commitment to gradually reducing network infrastructure energy consumption which we made when we signed the <u>European Code of Conduct on Energy Consumption of Broadband Equipment</u>.

#### Low-energy Speedphones.

The phones from our Speedphone series, which has been available at stores since 2012, help our customers reduce energy use. The phones communicate directly with a router without needing their own base station. In addition to improved voice quality, doing away with a base station, as is the case with the Speedphone 50, for example, reduces energy consumption by more than one third. This effect is somewhat reduced however due to the higher performance of models with a touchscreen or WLAN, such as the Speedphone 700.

#### New download portals in Germany and Croatia.

The <u>PagePlace</u> online kiosk has been providing a broad user group with a way to conveniently read digital books, magazines and newspapers on tablets, smartphones and computers since June 2011.

With its Planet9 service, which was launched in July 2011, the Hungarian subsidiary T-HT Hrvatski Telekom has made it possible for its customers to buy e-books. The books can be downloaded on computers, e-readers and smartphones.

#### Climate-friendly download portals.

Telekom neutralized the carbon footprint of another download portal, PagePlace, in March 2011, thereby

increasing the amount of CO<sub>2</sub> emissions compensated for by the end of the year to a total of 855 metric tons.

According to calculations, <u>Telekom's Load offers</u> – Gamesload, Musicload, Softwareload, Videoload and PagePlace – will generate an estimated 592 metric tons of CO<sub>2</sub> by the end of 2012. We offset these emissions by investing in the "Biomass energy in Brazil" project.

#### CR Report from the previous year

Telekom's <u>download portals</u> generate around 80 percent less CO<sub>2</sub> emissions than retail stores. However, new CO<sub>2</sub> emissions are also generated by providing these portals. By neutralizing the carbon footprint of our download portals step-by-step, we help our customers to opt for green consumption. We provide information on the topic at www.gruenerdownload.de.

#### Online billing—environmentally friendly and convenient.

More than <u>15 million customer bills</u> from the Telekom in Germany are sent every month. For this reason, the number of electronically sent bills came to more than 50 percent for the first time. Alternatively, customers can also access their data on the online customer portal. Because online billing comes as a standard service for new accounts and new customers can only switch to paper invoices on request, the number of people using online billing is constantly growing.

#### Online billing in Poland.

The Polish subsidiary PTC has been offering online billing to consumers since 2007. The company is advertising online billing with free minutes and attractive prize draws. The number of users rose to several hundred thousand within just a few months. The number of online bills sent out exceeded the 10-million mark in November 2011. Customers can either download their bills themselves or receive them via e-mail.

#### T-Mobile Netherlands and Slovak Telekom.

Around 85 percent of the customers at T-Mobile Netherlands were using online billing at the end of December 2011. Online billing has been a standard service feature for fixed-line and mobile customers at Slovak Telekom since August 2011 and most customers activate it when they sign up for service. By the end of December 2011, some 30 percent of customers were using online billing. The company advertised the feature during the reporting period with a number of activities such as placing posters in stores.

Slovak Telekom also keeps tabs on how many trees were saved by using online billing and then posts these figures online. As of December 2011, the calculated number of trees saved had already come to 5,956.

#### Ad campaigns in Croatia, Greece and Montenegro.

At the moment, few T-HT Hrvatski Telekom customers use online billing. The Croatian subsidiary is planning to offer their customers advantages such as discounts and service offers as of mid-2012 and expects the number of users to grow as a result.

The Bulgarian company Globul, a subsidiary of the Cosmote group, has already taken this approach. Every new customer who opts for paper-free billing receives a discount of 2 percent off their monthly fee for the first six months. The paper-free billing procedure was first introduced in 2009. An average 34.4 percent of post-paid customers took advantage of this service in 2011.

The Montenegrin subsidiary Crnogorski Telekom is also advertising online billing and plans to continue these activities in 2012. 13 percent of the company's customers were using online billing by the end of 2011.

#### CR Report from the previous year

Switching to online billing saves a lot of paper as well as water, energy and other resources needed to produce paper.

What's more, using online billing does away with the transportation involved in delivering paper bills, thereby considerably reducing CO<sub>2</sub>emissions. According to a study by Öko-Institut e.V., the Institute for Applied Ecology, paper bills are five times more harmful to the environment than online bills.

Life cycle assessment of online billing compared to paper billing

#### More than 4 million customers use the device rental service.

Telekom Deutschland offers its customers a <u>device rental service</u>. Once the rental period ends, the devices are serviced professionally or recycled. This service was expanded in 2011 to include our current router and media receiver models and, in early 2012, our <u>new Speedphones</u>. More than 4 million customers had decided to use the rental service by the end of 2011.

#### CR Report from the previous year

Telekom Deutschland's device rental service, which was offered for the first time in 2009, helps reduce electronic waste. Customers can lease devices such as DSL routers and media receivers for the time period of their choice with no minimum term of contract. Customers return the devices once the rental period is over. Necessary repairs are made and some of the devices can then be reused as replacement devices. Thanks to the device service package, customers no longer throw away their devices at home or just keep them laying around in the basement for years. Instead, those devices are reused immediately or properly disposed of. This makes valuable raw materials available to the raw materials market.

#### De-Mail helps to save up to 50,000 metric tons of CO<sub>2</sub> each year.

A study conducted in 2010 and 2012 shows that Deutsche Telekom's electronic <u>De-Mail service</u> can reduce CO<sub>2</sub> emissions by up to 50,000 metric tons each year compared to traditional postal mail services. We have been testing De-Mail since October 2009 at <u>T-City Friedrichshafen</u>. The Germany-wide launch began at CeBIT in March 2012. Since this date, operation of the technical platform for De-Mail has been carbon-neutral, which means it is not generating any additional CO<sub>2</sub> emissions.

Electronic communication between private individuals, companies and government agencies is increasingly rapidly. That means increased risk when it comes to data privacy. Telekom's De-Mail-system for encrypting electronic data provides the highest level of security and confidentiality for e-mail correspondence. With the corresponding law passed at the end of February 2011, De-Mail became legally valid and was given the same legal status as postal deliveries. That means that not only does Telekom's service help customers save considerably when it comes to time and costs, it also provides them with an environmentally friendly alternative to paper-based mail.

#### VideoMeet: Video conferencing without investment.

Video conferencing can replace business trips and therefore has the potential to reduce a considerable amount of CO<sub>2</sub> emissions. Telekom presented the first cross-platform video conferencing solution with its <u>VideoMeet product</u> in November 2011. The solution allows participants to dial in using various services and devices. The

online service bridges the gap between cost-intensive corporate applications and mass market services and can also be used with any video-compatible devices such as smartphones without the user having to download additional software. Users can also dial into conferences using their cell phone or fixed-line phone. The service, which was developed in collaboration with the California-based startup, Blue Jeans Network, complies with high security standards. It will initially be sold in Germany, Austria and the United Kingdom and then throughout Europe.

We have been compensating for the  $CO_2$  emissions generated by using Telekom's traditional video conferencing solutions since 2009. In this way, we compensated for 970 metric tons of  $CO_2$  from January 1 to December 31, 2010.

#### CR Report from the previous year

According to a study conducted by <u>IDC</u>, a leading provider of market data for the ICT industry, video conferences already replace one business trip out of ten. The <u>World Wide Fund For Nature (WWF)</u> estimates that the emission of an additional 28 million metric tons of CO<sub>2</sub> could be avoided if every fourth business meeting was done via video conferencing.

#### Green conferencing systems.

For several years, Telekom has enabled its customers to reduce  $CO_2$  emissions and costs by using telephone, web and video conferencing technology. All web conferences are easy to book and manage online via the <u>Conference portal</u>. Our customers can use an online <u>efficiency calculator</u> to calculate their  $CO_2$  reduction potential.

#### Progress in TelePresence rollout.

In 2011 we continued to roll out our TelePresence video conferencing system, which we launched in 2010. With 20 new systems, the service is now available at over 75 locations in Germany, at around a third of which the service can be booked in public spaces such as at hotels and conference centers. We introduced an online booking system for the service during the reporting period.

We were not able to achieve our goal of providing the video conferencing system at over 1,000 locations worldwide by the end of 2011. The delay was partly caused by technical problems that should be remedied by mid-2012. International collaboration agreements will have to be signed with other network providers.

#### CR Report from the previous year

We launched the sale of the new <u>TelePresence</u> service in Germany in September 2010. The service offers top video and audio quality and creates a personal meeting atmosphere despite the distance between the participants. By providing the service, Telekom gives customers one more reason to cut back on business trips and thereby reduce CO<sub>2</sub> emissions.

#### Cloud computing.

Cloud computing is based on the principle of outsourcing IT applications and infrastructure to a virtual cloud. Software and data are no longer processed on the office computer but in an external infrastructure such as the T-Systems data centers. Deutsche Telekom's corporate customers arm offers its customers software and computing services online and on demand, for example with <a href="DeutschlandLAN">DeutschlandLAN</a> won first place in the category of virtual PABXs in a vote by readers of the specialist magazine "connect" in 2011.

#### Cloud computing [1] for consumers as of 2011.

Telekom in Germany has been giving consumers access to cloud computing since September 2011 by bundling different services such as e-mail, music download, video on demand and storage under <u>Telekom Cloud</u>, which is managed centrally on the company's servers. The launch was accompanied by an information and promotional campaign. Central data processing uses much less energy than processing data on customers' home computers.

The TelekomCloud media center once again received the TÜV Certified Online Service seal in July 2011. Data privacy and security are at the heart of the certification process. The media center has received the certification, which must be renewed each year, for two years in a row. The Telekom Cloud was also named test champion among the various cloud systems in the 2/2012 issue of Computerbild (German computer magazine).

#### T-HT Hrvatski Telekom as a cloud computing pioneer.

In late June 2011 T-HT Hrvatski Telekom became the first provider in Croatia to offer a version of cloud computing that was unique in Europe at that time. Customers can use the tCloud Computer product to access all of their services and applications from any device, from anywhere and via any network. The service was developed primarily for business customers who now no longer need to buy their own hardware such as storage media or workstations, enabling them to save on costs and resources.

In 2010, T-HT Hrvatski Telekom acquired Combis, the leading provider of systems integration in Croatia, and converted the workplaces of more than 10,000 customers throughout the country to cloud computing. That makes T-HT Hrvatski Telekom the largest provider of these types of services in Croatia and the surrounding region. Cloud computing igives customers the advantage of higher computer capacity and data security at lower operating costs and over a longer device life cycle.

#### Data centers of the future: Efficient and environmentally friendly.

Bundling computer services at central data centers for cloud computing places high demands on T-Systems' infrastructure. The data center of the future needs to be energy-efficient, secure and fast as well as cost-efficient in every way.

T-Systems and Intel have been jointly researching the energy savings potential of data centers in the <u>DataCenter 2020</u> project since 2009. Innovative technologies are being used at a test center in Munich to reduce the energy consumption of servers, for example. DataCenter 2020 also provides important information on how to manage high-performing computers so that they produce less CO<sub>2</sub>.

#### Managed Document Services.

With Managed Document Services, T-Systems customers can reduce their consumption of paper and energy by transferring all or part of their processes into a digital workflow. All documents are not only fed into the customer's digital workflow but also saved to a tamper-proof archive.

In Germany, companies run more than 800,000 metric tons of paper through their printers each year, and the number is growing. But with sustainable business on the agenda, we should notice a downward trend with regard to paper consumption.

With its Managed Document Services, T-Systems handles the entire document process from digitalizing and archiving documents to sending them on as an e-mail, letter or webpage. All documents are also archived in compliance with regulatory requirements. For this, Managed Document Services use a certified electronic signature and meet statutory requirements, including the German Federal Ministry of Finance's <u>Grundsätze zum Datenzugriff und zur Prüfbarkeit digitaler Unterlagen (Principles of data access and auditing of digital documents.</u>

#### GDPdU).

The archiving solution encompasses SAP, various document management systems, billing archives and digital personnel files. At the end of the process, the outgoing mail can be distributed in any desired output format. For example, invoices are sent on to customers in printed form or as an e-mail attachment, or they are made available on an online portal by Managed Document Services. Here, customers can view their invoices and download them as required. In most cases, the documents are automatically printed and dispatched. For all outgoing letters, faxes and e-mails, Managed Document Services uses customized layout standards in accordance with the individual customers' requirements.

#### New, highly efficient products and services.

Telekom continued to expand its offer of energy-efficient DECT phones during the reporting period. Many of today's fixed-line devices come with an extra-efficient power supply unit that reduces the customer's energy consumption considerably.

We incorporated environmental criteria into the design of our new Entertain boxes and Integrated Access Devices (IAD) as well. We lowered the amount of harmful substances in the materials used to below the legally required thresholds by placing the respective requirements on our suppliers. We only use the most environmentally friendly plastics and coatings. Power consumption did not increase considerably despite a significant increase in performance levels and we plan to reduce it to far below the already low consumption levels stipulated by the European Eco-Design Directive.

#### Carbon-neutral shipment via GoGreen.

In Germany we started to use GoGreen, the carbon-neutral shipping offering of Deutsche Post, to ship all of our standard parcels in 2008. We were able to offset a total of 121 metric tons of CO<sub>2</sub> in 2011 for the shipment of T-Online Shop parcels alone.

CR Report from the previous year

#### Update on the 2010/2011 CR program.

# Sub-targets Status of implementation/measures Increase efficiency of switched-mode power units to over 90 percent Implementation underway. Implementation underway. Implementation underway. Increase the efficiency of small power units for ICT products The switch over to switch-mode power units for the majority of our telecommunications products has been completed. An efficiency of over 90 percent is achieved in some operating scenarios We expect to see the most significant increase in efficiency with the new Entertain box as of 2014. By using more efficient power units, consumption levels fell below the requirements of the voluntary agreement. The requirements were defined and approved in 2011. Precise measurements are not yet available.

#### 2010/2011 CR program

The current 2011/2012 CR program can be found in the "Strategy & management" section.



Home > Customers > Barrier-free products & services

# Barrier-free products & services.

State-of-the-art communications media has become crucial to our everyday lives. To make it easier for people with age-related or physical limitations to use new media, we are developing products and services that meet their needs and continuously work to improve user friendliness. In addition, the Telekom Group offers subsidized rates that enable low-income customers and disabled people to make phone calls and surf the Internet at reasonable prices. In accordance with our <u>CR Strategy</u>, the initiative enables as many people as possible to take part in the information society and to take advantage of the benefits that come with it.

#### Products and services for the elderly.

We are constantly expanding our range of products for the elderly. In August 2011, we launched the new Sinus A205 Comfort product on the German market, a cordless, user-friendly family phone with large, illuminated keys and an easy-to-read display. It is compatible with hearing aids and announces incoming calls both visually as well as by vibrating. The device and its power supply unit are both very energy-efficient.

T-Mobile Austria launched a new Emporia cell phone for seniors with a personalized emergency call function in May 2011 in collaboration with the Samaritans. When the user pushes a button, their call is directly transferred to the Samaritan's operations center where information about the special needs and personal circumstances of the person making the call are on file. This makes it possible to provide exactly the right kind of help needed, fast.

In cooperation with the Prague center for Health Care and Social Services and the company, Teltech Servis, T-Mobile Czech Republic developed a new system for providing care to the elderly and introduced it in February 2011. The system supports logistics processes for providers of home care services such as grocery shopping, doing laundry and similar. People in need of assistance can use the system to quickly and flexibly order these services. Requests are immediately transferred to the care provider so that they can schedule their service plan.

#### Recommendation for Sorglos-Paket Plus (no-worries package).

The German association of organizations for the elderly, Bundesarbeitsgemeinschaft der Senioren-Organisationen (BAGSO), which represents over 13 million people in Germany, recommended the Sorglos-Paket Plus package as part of the <u>Call & Surf Comfort</u> rate plan. In addition to reviewing the product and information material on the rate plan and services, the organization also tested the consulting service in Telekom Shops and the installation service as part of the Sorglos-Paket Plus package. The offer was ranked no less than "good" in all areas. In addition to the transparent pricing structure, the organization especially praised the expertise of the shop employees and the service technicians installing the product.

#### Enhancing e-health solutions.

In a survey of 1,000 German-speaking citizens over the age of 45, which was published by Telekom and the F.A.Z.-Institut in October 2011, 80 percent of those surveyed stated that they would like to continue living in their own home even if they had a physical disability. In view of increased life expectation and lifestyle diseases, a growing number of people are taking advantage of mobile e-health solutions that enable them to keep living at

home. Telekom consistently works to advance its solutions for this important growth market. A current hot topic is applications for <u>mobile health-monitoring devices</u> and plans for making the measurement devices compatible with additional operating systems.

#### Products and services for the hearing impaired.

Our hotline for deaf and hearing impaired customers in Germany, which we launched in 2003, is becoming increasingly popular. Questions for the qualified employees can be sent to the following e-mail address: <a href="mailto:deaf.hotline@telekom.de">deaf.hotline@telekom.de</a>. The colleagues will answer the questions directly or inform you of how they can be contacted via video call or webcam. Up to 50 people currently make contact every day to ask about special rates for the deaf or about special media receivers for programs with subtitles. The hotline in Bremen is run by two deaf Telekom employees. They are available at the Telekom Shop in the Bremen Weserpark center every two weeks as well.



#### Consulting services for the hearing impaired at Slovak Telekom Shops.

Slovak Telekom is the only company in Slovakia to offer employee training in sign language. The company trained another 60 employees in April 2011, which brings the total number of employees having attended the four-day training to more than 220. Employees also have access to an electronic manual at the stores on how to use sign language. 62 of Slovak Telekom's customer centers are currently able to serve people with hearing impairments.

With their song and video clip "Sound Vacuum," which were released in September 2011, the popular Slovakian band Desmond connected the hearing impaired with the rest of the world. Sound Vacuum makes it powerfully clear what it means to live in a world without sound. Slovak Telekom helped produce the song and the video, in which the singer uses sign language to trigger public discussion about hearing impairment.

#### Subsidized rates for various target groups.

We offer subsidized rates in Germany as well as at numerous international subsidiaries for two target groups: people with low income and people with disabilities. There is a long history of <u>subsidized rates</u> for eligible consumers with a fixed line connection at Telekom Deutschland.

Cosmote Greece introduced discounted rates for the unemployed and for pensioners in 2011 and the Montenegrin subsidiary Crnogorski Telekom did the same for people with disabilities. The Macedonian subsidiary Makedonski Telekom introduced a special rate for the hearing impaired in November 2011.

CR Report from the previous year

Update on the 2010/2011 CR program.

Sub-targets	Status of implementation/measures
Reduction of access barriers for people with disabilities	Implementation underway.  • Support for deaf and hearing-impaired people at Slovak Telekom (large public campaign, training of employees and interested people in sign language, support of hearing-impaired start-up candidates)  • Hearing-impaired chat at T-Mobile Austria  • Development of a product portfolio for people with disabilities  • Special rates for people with special needs at various subsidiaries

#### 2010/2011 CR program

The current 2011/2012 CR program can be found in the "Strategy & management" section.

© 2012 Deutsche Telekom AG



Home > Customers > Customer communication

## Customer communication.

The Internet has become one of the most important sources of information for consumers. More and more consumers are exchanging information on products in blogs, forums and other networks. One of the topics that is becoming increasingly important to consumers is the sustainability of a product. In order to meet the growing demand for information and to promote the idea of sustainability among the general public, we launched the "Big changes start small" sustainability initiative in the fall of 2009 in Germany. The initiative is scheduled to run over several years. A number of international subsidiaries also launched communication campaigns during the year to promote the idea of sustainability.

#### Award for the sustainability initiative in Germany.

On October 13, 2011, the German association for communication agencies "Gesamtverband Kommunikationsagenturen GWA" presented the "Big changes start small" sustainability initiative with the bronze EFFIE Award, praising it for being an especially effective and efficient campaign. Within the scope of the initiative, which was launched in September 2009, we want to promote the idea of sustainability together with our 43 million customers in Germany. We hope to raise awareness of what it means to consume responsibly and to inspire people to adopt a more sustainable lifestyle.



#### Focal points of the 2011 sustainability initiative.

Before launching the campaign, we selected 16 focal points and conducted market research to test how important they were to our customers. In the first half of 2011, the campaign focused on the topics "Green electricity," "Child protection" and "Promoting education". The aim of the "Sharing photos online to save paper" initiative is to raise awareness of the environmental benefits of <u>cloud computing</u>.

Between October and December 2011, we conducted an extensive <u>Cell phone recycling initiative</u>. We promoted the initiative by launching extensive ad campaigns in daily newspapers, on the radio and in online media and we posted the latest news on our campaign website <u>www.telekom.com/nachhaltig-handeln</u>.

As part of the sustainability initiative, we launched the "Internet—it's not a question of age" competition at the beginning of February 2012 on the topic of media skills for seniors at <a href="www.telekom.com/nachhaltig-handeln">www.telekom.com/nachhaltig-handeln</a>. The winners will be announced in May 2012. The competition is supported by our partners <a href="BAGSO">BAGSO</a> and <a href="klicksafe">klicksafe</a>.

CR Report from the previous year

The updated website on the sustainability initiative went online in May 2011. Users can use different interactive features and Facebook.

- People who visited the campaign website in May 2011 had the chance to leave comments on the featured topics and to post them together with a picture. These comments have become a permanent feature on the website.
- Between June and December 2011, the Facebook app "Baumfreunde" (Friends of the trees) was available at <a href="https://www.telekom.com/nachhaltig-handeln">www.telekom.com/nachhaltig-handeln</a>. Users could upload a photo showing themselves hugging a tree. For each uploaded photo, Telekom planted a young beech tree within the scope of the "Living beech forests" <a href="project">project</a> in the Bonn city park. The project was a collaboration between the city of Bonn and the German environmental organization Deutsche Umwelthilfe.
- Users could download an address label to participate in the <u>Cell phone recycling initiative</u> via a Facebook app or the initiative's website. The proceeds went to the BILD hilft e.V. initiative Ein Herz für Kinder. Participants could use the label to send their cell phones to Telekom free of charge. During the initiative, which lasted from October to December 2011, participants also had the chance to send a heart icon with a personal message to family and friends.

The central hub of the Telekom sustainability initiative launched in 2009 is the campaign website <a href="telekom.com/nachhaltig-handeln">telekom.com/nachhaltig-handeln</a>. The website features many options for customers to consume more responsibly by using Telekom's ICT products and services. For example, the website explains how to reduce the use of plastic by downloading music online instead of buying a CD. We are calling on people to get involved through various initiatives.

#### Customer messages on sustainability.

Within the scope of our sustainability campaign, we contacted our customers four times in 2011, either online or via mail.

- In May, we called upon 50,000 customers to become sustainability messengers for Telekom and to post a comment on our campaign website. Participants were eligible for our sweepstakes in which they could win a Dutch-style roadster bicycle.
- In June and July we sent out more than two million e-mails on "Energy efficiency and sustainable services at Telekom."
- In October, we informed 1 million customers about our involvement in the BILD hilft e.V. "Ein Herz für Kinder" initiative.
- At the end of October, we mailed flyers to 22.7 million households, asking them to participate in our cell phone recycling initiative. The flyers also served as an envelope that allowed people to send in their old cell phones to Telekom free of charge. In November, Telekom provided an additional 150,000 envelopes to its customers in their mail.

The response to the cell phone recycling initiative was particularly positive. In 2011, we were able to collect a total of 762,000 old cell phones.

#### Making the world a better place with Cosmote Greece.

Cosmote Greece launched a campaign in September 2011 under the motto, "What would you do to make the

world a better place?" The company asked users to submit their ideas and requests on Facebook and via a blog which was specifically set up for the campaign.

The company will evaluate all of the ideas and suggestions and some of them will be implemented with the active involvement of the initiator and other campaign participants with similar ideas. Implementation of three initiatives is scheduled for 2012. Even more ideas will be implemented in the future.

Because many users wanted to help children in need, Cosmote Greece decided to address this request first in 2011. Together with customers, the company organized games events for children at which for every point scored the amount donated towards the orphanage was increased. Following this, Cosmote Greece also donated a year of free healthcare and heating as well as a new playground to the orphanage.

#### Hungarian "hello holnap!" sustainability campaign.

The Hungarian subsidiary Magyar Telekom continued its "hello holnap!" sustainability campaign in 2011. In the spirit of the drive, the Magyar Telekom teamed up with leading media representatives to found the Sustainability Media Club as a way to raise awareness of sustainable practices and encourage people to take a more sustainable approach. NGOs who have their own sustainability projects can apply for grants for their projects at the Club every three months. Members of the Sustainability Media Club decide on the winners and Magyar Telekom will then finance the implementation of these projects.

The Sustainability Media Club also launched a prize worth HUF 1 million (EUR 3,436) for sustainable media reporting in 2011. The Club plans to award the prize annually. Magyar Telekom is providing the prize money. The award was presented for the first time on Magyar Telekom's fourth Sustainability Day on September 24, 2011.

Magyar Telekom has also been participating in <u>Earth Hour</u>, which takes place in late March, since 2008 by turning off the lighting and spotlights at its stores and branch offices for one hour. The company also held its own event to celebrate Earth Hour in 2011. It offered a 50 percent discount that day on environmentally friendly products and organized an event with concerts and other entertainment at Millenáris Park in Budapest.

#### CR Report from the previous year

On December 27, 2010, Magyar Telekom launched an extensive media campaign in Hungary as part of the "hello holnap!" drive. Practical examples were broadcast on the radio, TV and online to demonstrate how each individual can help protect the environment and create a sustainable future. The Hungarian subsidiary received support from celebrities who presented their resolutions for more environmental and sustainable behavior in the new year.

The campaign website <u>www.helloholnap.hu</u> explains how Magyar Telekom can help each individual. It also contains information of the company's sustainability performance.

#### Press conference about environmental efforts at PTC.

The Polish subsidiary PTC organized a press conference on September 15, 2011, focusing on its environmental efforts. 25 media representatives from TV and radio stations, newspapers and online portals attended the conference. Many of PTC's environmental activities were then published by various media sources.

PTC teamed up with the Polish government to conduct an anti-discrimination campaign in November and December 2011. The Polish subsidiary provided different communication channels such as SMS , MMS and video MMS as well as its own website that people affected by discrimination can use to submit a report to the government's anti-discrimination office.

The campaign focused on the government website <u>www.siecrownosci.gov.pl</u>, which contains a variety of information on the topic, and also provided specific tips on what to do if you witness an act of discrimination.

#### Globul presents first sustainability brochure.

Following the Group-wide sustainability campaign that was conducted in October 2010, the Bulgarian subsidiary Globul developed a sustainability brochure in July 2011 addressing the campaign's key topics. The brochure addresses cell phone recycling, the environmental benefits of downloading music and questions regarding online safety. The company printed 5,000 brochures on 100% recycled paper and placed them at its 169 stores and three administration buildings. The company also handed out 2,000 brochures at a children's festival along with a picture to color in.

In October 2010 the Bulgarian subsidiary Globul launched a campaign to promote the use of e-services, such as online contracts and online billing, and worked to raise awareness of online safety and environmental protection issues. Under the motto "Big changes begin with small steps" the company used the <u>sustainability campaign's website</u> to raise public awareness of topics such as cell phone recycling, battery recycling, music downloads and teleconferences.

#### feelGreen.de combines sustainability with fun.

People who would like to combine sustainability with fun should go to Telekom's online portal <u>feelGreen.de</u>, which was launched in September 2011. The portal provides information and ideas on the environment and social and health-related issues. The topics include health, fashion, energy, the environment and travel.

#### Life style initiative focuses on how to balance work and life.

Based on the motto "Take charge of your life," we launched a campaign on balancing work and life in June 2011 in Germany in order to make employees and the general public aware of this topic. We ran TV commercials and print ads to show how Telekom helps their employees pursue their goals with offers such as dual career planning, parental leave, flexible working hours and mobile work options.

#### Safe driving campaign at Cosmote.

In 2011 the Greek company Cosmote and its subsidiaries in Romania and Bulgaria continued their safe driving campaign launched in Bulgaria in 2007, which helps raise awareness of dangerous behavior such as using your cell phone while driving.

#### Customer communication via social media.

We want to provide Telekom customers and stakeholders with different ways of getting in touch with us. In

addition to the existing service offering, we are also using different Internet platforms such as Facebook and Twitter for this purpose. Our sites on these social networks attract more and more followers each day.

- The <u>Deutsche Telekom AG</u> page on Facebook boasts more than 20,630 followers (as of the end of February 2012).
- More than 28,670 people follow <u>Deutschetelekom</u> on Twitter (as of the end of February 2012).

#### **Customer support on Facebook and Twitter.**

- The <u>Telekom-hilft</u> page, which was launched in September 2010 and gives users the chance to ask questions about products and service and has over 29,170 followers (as of the end of February 2012), compared to some 3,000 followers two years ago.
- Users can also contact our customer support team on <u>Twitter</u>. Our customer support team has more than 17,810 followers on Twitter. More than 66,110 tweets had been posted by the end of February.

All Telekom social media platforms can also be accessed through our company website <a href="www.telekom.com">www.telekom.com</a> ,which was redesigned in 2011. There, users can access our <a href="Telekom Blog">Telekom Blog</a>, which was launched in 2010 and complements our traditional press activities and our sites on Facebook and Twitter.

Internet users can also access current reports about the Group's innovation topics on <a href="Telekom">Telekom's YouTube</a>

CR Report from the previous year

channel.

#### Telekom's Responsibility portal has been updated.

When we updated our company website <u>www.telekom.com</u>, we also revamped our <u>Responsibility portal</u>. This central platform provides up-to-date information on the Group's current sustainability initiatives to the public.

#### Update on the 2010/2011 CR program.

Sub-targets	Status of implementation/measures
Expansion of multilingual customer support at all Group units	Implementation underway.  • Multilingual hotlines and information material  • Assignment of English, Russian and Turkish-speaking employees in Germany and Spanish-speaking staff at T-Mobile USA

#### 2010/2011 CR program

The current 2011/2012 CR program can be found in the "Strategy & management" section.

© 2012 Deutsche Telekom AG



Home > Customers > Phone & cell phone recycling

# Phone & cell phone recycling.

Deutsche Telekom is involved in the reuse and recycling of old cell phones. Together with its customers, the company makes an important contribution to conserving natural resources and protecting the climate and the environment with these activities. Deutsche Telekom considers reusing used, functional cell phones to be a key component of sustainability, because the extended lifetime of the cell phones means their carbon footprint improves significantly.

#### Cell Phone Recycling CR KPI.

We have been monitoring the <u>Cell Phone Recycling CR KPI</u> since 2010 in order to emphasize the importance of cell phone recycling. This KPI compares the collected cell phones, measured in units and the equivalent in kilograms, with the number of customers at a Group company.

Information on the development of CR KPIs can be found under Strategy & management.

According to the WEEE (Waste Electrical and Electronic Equipment) Directive, it is mandatory for manufacturers of new electrical and electronic devices in Europe to take back old devices at no charge and dispose of them properly. Deutsche Telekom is involved in this process beyond the scope of legal requirements with targeted initiatives for collecting old devices. In order to meet our legal obligations to inform consumers of how to properly dispose of electronic products, we include an informative flyer with each new device.

Data privacy poses a particular challenge when collecting cell phones. Telekom's Data Privacy and Data Security department is involved in the collection system to guarantee data privacy and keep customer data from being abused.

#### Approximately 762,000 cell phones collected in Germany.

In 2011, we were able to collect a total of around 762,000 cell phones within the scope of a number of initiatives. The proceeds went to the following charitable organizations:

- BILD hilft e.V. "Ein Herz für Kinder"
- Deutsche Umwelthilfe e.V. and
- German Doctors e.V.

In April 2010, we set ourselves the goal, within the scope of the <u>Changemaker Manifest by Utopia</u>, to collect around 1 million old cell phones within one to two years in Germany for recycling. We achieved this goal at the end of 2011.

#### Cell phone collection initiatives for "Ein Herz für Kinder."

As part of an extensive cell phone collection initiative, which was conducted by BILD hilft e.V. "Ein Herz für Kinder" between October and December 2011, we were able to collect an additional 500,000 old cell phones compared with the previous year.

- We kicked off Germany's largest cell phone collection campaign ever in the German TV show "Wetten, dass...?" at the beginning of October 2011. In the show, we bet that we would be able to collect 500,000 or more old cell phones within only ten weeks. At the "Ein Herz für Kinder" gala show in December, host Thomas Gottschalk congratulated us for winning the bet. We managed to collect a total of 585,758 old devices within 10 weeks. Deutsche Telekom donated EUR 2 for each collected cell phone to the "Ein Herz für Kinder" charity. 140 sales and service employees took part in the charity event where they took phone calls from people who wanted to donate their old cell phones.
- Within the scope of an extensive campaign that took place between October 18 and 25, 2011, we mailed envelopes that could be used to send in old cell phones to Telekom free of charge to a total of 22.7 million households. Additionally, we provided address labels at <a href="https://www.telekom.com/nachhaltig-handeln">www.telekom.com/nachhaltig-handeln</a> for download so that users could send back their old cell phones free of charge.
- On November 15, 2011, the Telekom Truck collected old cell phones at the German national soccer team's game against the Netherlands.

In addition to the cell phone recycling initiative, we launched more campaigns during the year. The proceeds were also included in the sum donated. At the gala event, which was broadcast on ZDF, René Obermann was able to donate a total amount of EUR 1.5 million.

Deutsche Telekom also collects old fixed-line phones and recycles them.

#### CR Report from the previous year

Around two-thirds of all German residents have a total of 83 million old or unused cell phones in their homes, a 15 percent increase compared with 2010. This figure is based on a study that was carried out by the German industry association Bitkom in December 2011. These old cell phones could be used in other areas. They also contain valuable raw materials, including metals such as gold, silver and copper that could be recycled.

Metals and ores are often extracted under conditions that are problematic for people and the environment. Because of this, it is very important to collect, reuse and recycle old communications devices. Some of the cell phones returned by customers can be reused after making a few repairs and deleting all personal data. People in Asia or Africa, for example, are then able to purchase fully functioning cell phones at lower prices. Defective devices and cell phones that require extensive repairs or data deletion are recycled.

#### Supporting non-profit organizations.

Deutsche Telekom's cell phone recycling project not only protects the environment but also promotes non-profit organizations. The proceeds that Deutsche Telekom generates went to different organizations including BILD hilft e.V. "Ein Herz für Kinder," Deutsche Umwelthilfe (DUH) and German Doctors.

The charity organization, Bild hilft e.V. "Ein Herz für Kinder", has been raising money since 1978 and supporting children and institutions, both on a national and international level. The organization provides fast, non-bureaucratic support when children need help. In collaboration with renowned hospitals, the non-profit organization makes sure that children that cope with serious illness and cannot be treated adequately in their home countries receive access to vital surgical and therapeutic care in Germany. The charitable organization also provides emergency aid in war zones and after natural disasters. "Ein Herz für Kinder" focus their efforts mainly on Germany. The charity organization, which is run by the German daily BILD, promotes soup kitchens, children's hospitals and day care centers as well as sports and educational projects.

Deutsche Umwelthilfe (DUH) uses the donations to help important nature conservation projects such as maintaining natural river landscapes and forests as well as funding environmental education projects. 774 environmental and nature conservation projects were financed last year by donations from Telekom Deutschland. The majority of these projects were conducted in collaboration with groups collecting old cell phones at schools

and local environmental and nature conservation groups. Registered cell-phone collecting groups receive a donation for every cell phone they send in for their own projects, which include initiatives to redesign school buildings or campuses to make them more environmentally friendly or to conduct environmental education activities. In 2011, the new Internet portal <a href="www.handysfuerdieumwelt.de">www.handysfuerdieumwelt.de</a> was launched by DUH in collaboration with Telekom Deutschland.

The voluntary aid organization <u>German Doctors</u> works to improve the healthcare situation and living conditions of people in developing countries. With donations from cell phone collection activities, we are able to support mobile outpatient facilities in Mindanao (Philippines), which provide basic care to locals.

#### Cell phone recycling in Croatia: 11,300 old cell phones handed in.

Even though T-HT Hrvatski Telekom did not specifically advertise for people to recycle their cell phones, the number of people who gave their old cell phones to the company increased. A total of 11,300 devices were handed into the company in 2011. That means that a total of 111,300 devices have been collected since the recycling activities were initiated in 2005.

CR Report from the previous year

#### Campaign week for cell phone returns at T-Mobile Netherlands.

T-Mobile Netherlands collected a total of 1,800 old cell phones during a campaign week from March 25 through April 1, 2011, under its "GSM return plan" program, which the company launched in 2010. The campaign week was conducted in collaboration with a local radio station's donation campaign. As usual, donations went to the <u>War Child aid organization</u>, which was able to help 3,000 children with the donations collected during the campaign week. The GSM return plan program collected 87,870 cell phones by late 2011.

(available only in Dutch)

#### CR Report from the previous year

T-Mobile Netherlands initiated the nationwide cell phone recycling program, the "GSM return plan," together with TNT Post on January 5, 2010. By the end of 2010, the cooperation partners were hoping to collect 100,000 devices.. However, this goal was too ambitious. The partners were able to recycle some 40,000 devices in the first year. Profits generated from recycling the phones are donated to the <u>War Child</u> initiative and the <u>World Food Program</u>. Two other companies from the ICT industry have been participating in the "GSM return plan" since late 2010. Together, they intend to promote the important topic of cell phone recycling in the Netherlands.

# T-Mobile Czech Republic informs customers regularly about cell phone recycling.

T-Mobile Czech Republic has been including information on the importance of cell phone recycling as well as information on online billing in all bills sent to its customer since 2010. T-Mobile Czech Republic collected almost 8,000 used cell phones in 2011.

CR Report from the previous year

Recycling bins for old cell phones and accessories are available at all T-Mobile USA stores. All new cell phone packaging will be labeled with the words "Recycle your cell phone." in order to emphasize the importance of recycling The company is also conducting a communication campaign. During the reporting period, the company collected and recycled a total of 180,000 cell phones.

T-Mobile USA also promotes recycling through its involvement in industry initiatives such as CTIA—The Wireless Association. With the participation of T-Mobile USA representatives, the "green" CTIA working group developed an industry recommendation for recycling cell phones. All contracting parties should develop a collection program and initiate measures to raise public awareness of the issue. They should also increase their collection rates by 20 percent by 2015 and use more recycled materials in production.

CR Report from the previous year

#### Cell phone recycling campaigns at Cosmote.

Cosmote group companies again helped to protect the environment and conserve resources during the reporting period. Cosmote Romania conducted a cell phone recycling campaign from July through December 2011. The company distributed 27,000 flyers throughout the country and hung posters in the stores. A total of 123 kilograms of old devices and accessories were collected.

Cosmote Greece successfully continued <u>Join Us in Recycling</u>, its internal recycling initiative for cell phones, accessories, portable batteries and printer cartridges, at Cosmote and Germanos. A good 8 metric tons of used cell phones and accessories as well as almost 45 metric tons of old portable batteries were recycled. Almost 1,100 printer cartridges had been properly disposed of by the end of 2011. The recycling initiative was accompanied by an extensive communication campaign.

CR Report from the previous year

#### Update on the 2010/2011 CR program.

Sub-targets	Status of implementation/measures
Development of a Group-wide waste strategy	Target achieved.  • Coordination of international cell phone recycling activities (life cycle management)  • Testing of a certifiable cell phone return process including data deletion to increase reuse rate  • Return of 1 million cell phones by the end of 2011 in Germany and successful media presence

#### 2010/2011 CR program

The current 2011/2012 CR program can be found in the "Strategy & management" section.

© 2012 Deutsche Telekom AG



Home > Customers > Consumer protection

# Consumer protection.

Information and communications technology (ICT) gives consumers a variety of advantages but bears risks as well-from securing personal information to transparent pricing and protecting children from inappropriate content. Protecting its customers is a key element in Telekom's social responsibility involvement. We want to provide our customers with a secure, reliable user environment and comply with high standards to make this happen. In our efforts to do so we have been able to successfully market new—and sensitive—services such as mobile payment.

We especially want to contribute to the safe use of digital media by children and young people. To do this, we help them develop their own <u>media skills</u> and offer parents effective tools, such as special child protection software in Germany, to guarantee <u>age-appropriate use of the Internet</u> for their children.

#### Online safety initiative at OTE and Cosmote.

The Greek subsidiary OTE launched an information campaign in 2011 to raise awareness of online safety among consumers and employees all over the country. The campaign, with which OTE is hoping to become the country's leader in online safety, will be continued in 2012. The company is offering consultation on the topics of online safety as well as educational events for students, parents, teachers and the public OTE is cooperating in the campaign with the University of Athens' Adolescent Health Unit, Second Department of Pediatrics, at Pedon P. & A. Kiriakou Hospital. OTE hosted nationwide information events at locations such as the OTE Museum of Telecommunications in Athens in 2011. More than 750 students and 100 adults participated. For the second year running, the employees at OTE and their families were trained on the topics of online safety at information events in 2011.

OTE also participated in numerous initiatives: The company supported the EU program for Internet safety, <a href="https://www.saferinternet.gr">www.saferinternet.gr</a> and provided the infrastructure and technical support needed to operate a free helpline for minors addicted to the Internet at the Adolescent Health Unit Furthermore, OTE is a member of the non-profit organization Safenet. This promotes a regulation procedure for the safe use of the Internet and the protection of children against inappropriate content. Safenet supported a nationwide awareness campaign that was launched in July 2011 by the Ministry of Citizen Protection and Internet Crime.

With the Online Security software package that has been offered by the company since 2009, OTE has developed an effective tool for the integrated protection of e-mail programs and computers. The software combines firewalls with anti-virus, anti-spam and parental controls.

OTE also offers advice on safety topics on its customer service site.

OTE provides parents with practical tips on how to use the Internet safely in a brochure that comes with the product. Between 2006 and early 2012, more than 150,000 brochures were distributed.

#### Services and campaigns at the Cosmote group.

The Cosmote group and its subsidiaries Cosmote Greece, Cosmote Romania, Globul in Bulgaria and AMC in Albania focused their mobile communications safety activities on three areas:

 Participating in European initiatives on self-control and voluntary commitment. In this way, support is given to all mobile communication subsidiaries in the EU for example the European Framework for Safer Mobile use by Younger Teenagers and Childrenby the signing of the European memorandum on online safety

- Collaborating with the national Safer Internet Centers and the pan-European Insafe center (all subsidiaries except for AMC).
- Development of services which support the parental control of Internet usage (all subsidiaries)

Cosmote Romania conducted an information campaign on online safety at its stores and online in March 2011. Globul became an official partner of the first Bulgarian online safety hotline, which was initiated by the national Safer Internet Center and a parent initiative in April. The hotline was set up for children, parents and teachers. Globul gives callers a discount price of 7 cents per call, regardless of the duration of the call.

#### Child safety product package at Slovak Telekom.

In response to the results of a study published by the organization eSlovensko in 2009, Slovak Telekom launched a new range of child safety products in 2011. The study showed that 27 percent of parents in Slovakia did not care what their kids were doing online. 64 percent of the children said that their family did not have any rules for using the Internet.

Based on the study, Slovak Telekom became the first Slovakian telephone company in March 2011 to offer a prepaid SIM card, giving parents control over how their children use smartphones. Parents can use the card to block all inappropriate content and services on the Slovak Telekom portal and the websites of partner platforms. In August 2011, Slovak Telekom launched child safety software for online access via fixed-line connections and mobile broadband connections. In October the company integrated additional applications into prepaid cards, such as a text message notification to parents when their child's credit drops below 50 cents.

#### Mobile payment without subscription or cost traps.

To protect our customers and increase customer trust in mobile payment, the four German mobile network providers established the <u>Value-Added services Competence Center</u> in August 2011. The purpose of the center is to guarantee high standards when it comes to the security and transparency of digital mobile value-added services. A new quality standard for the online billing of paid subscription services such as ring tones, games and sweepstakes was introduced in January 2012.

As of mid-2012, customers will also be able to check speed dial numbers and get information on the relevant provider at <a href="http://www.mehrwertdienstekompetenz.de/20.html">http://www.mehrwertdienstekompetenz.de/20.html</a>. This will give them more transparency regarding the services they use. We are currently working on other measures for mobile use of the Internet.

Again and again customers unintentionally sign up for subscriptions online that are then invoiced in their cell phone bill. Providers do not always list prices and subsequent costs with enough clarity.

That is why the Value-Added Services Competence Center focuses primarily on developing and establishing standardized payment templates. It requires all providers of web-based services to provide important information such as prices, possible subscription durations and cancellation periods. Users must twice confirm that they have read this information. The participating companies have been praised by politicians and consumer protection authorities alike for their collaboration, which is being fully rolled out in the first half of 2011.

#### Phone and Internet use throughout the EU for a flat rate.

Mobile surfing abroad often leads to unexpectedly high costs for customers. That is why we introduced a

completely new data roaming model, Travel&Surf, on July 1, 2011, at almost all European subsidiaries. It provides standardized, reasonable rates throughout the EU for mobile phone and Internet services beyond country borders and can be conveniently booked via text message or online. As soon as they enter their country of destination, customers are sent a text message informing them of the offer and inviting them to book it. This information also pops up on the landing page when they open their browser. Customers can then keep track of the costs they accrue either online or via text message.

CR Report from the previous year

#### Customer-friendly data privacy standards.

In 2011 Deutsche Telekom also actively participated in the Mobile Privacy Initiative (MPI) to develop customer-friendly data privacy standards. The first <u>guidelines for developing mobile applications</u> were scheduled to be introduced in the spring after the Privacy Principles were published in January 2011. This deadline was postponed to February 2012, however, due to differing interests among the participating companies. The new guidelines cover all important data privacy topics and make sure that data privacy criteria are taken into account even during the app development process. The guidelines improve transparency, offer users more options and guarantee precise control over the personal information that is accessed by the app they are using. Just like the other European mobile communications providers, Telekom is implementing these guidelines in Europe step-by-step. Compliance with the regulations is checked during the product release procedure. Other topics are currently in the planning phase. Telekom will actively participate in these as well.

#### CR Report from the previous year

The Mobile Privacy Initiative (MPI), which was officially founded in January 2011, was initiated by the world's largest mobile communications association with a membership of over 800 mobile communications providers, the <u>GSM Association (GSMA)</u>. The purpose of MPI is to develop customer-friendly data privacy standards for Internet-enabled and multifunctional cell phones, otherwise known as smartphones. The value chain in the mobile communication sector is comprised of different providers, often located across the globe, specializing in end-devices, operating systems, telecommunications services, software programs (apps) and online services. The aim is to establish customer-friendly standards to be incorporated into products by product developers right from the start.

Examples of voluntary commitments and codes of conduct on consumer protection.

At a glance: Examples of voluntary commitments and codes of conduct on consumer protection.		
Data privacy code for geodata services with Bitkom	Telekom Deutschland	
Specific price controls in the General Terms and Conditions, § 13 (3)	T-Mobile Austria	
General Recommendations for the Provisioning of Audiotex Services	T-Mobile Czech Republic	
General Rules of Provision of Premium Services (Premium SMS II, Premium MMS)	T-Mobile Czech Republic	
Code of conduct for premium SMS/mobile services and web-based services	Telekom Deutschland (mobile communications)	
The GSMA's Mobile Privacy Initiative	Deutsche Telekom	
Code of Conduct for Value Added Services Provided through Mobile Phones and for the Protection of Minor Users	Cosmote Greece	
Bill Limit Service	T-HT Hrvatski Telekom	
Code of Conduct—Mobile Premium Services	Magyar Telekom (mobile communications)	
Code of Ethics for Premium Rate Services	Magyar Telekom (mobile communications)	
AntiSpam Policy	T-Mobile Macedonia	
SMS II Service Provision Code of Conduct	T-Mobile Netherlands	
General Rules for Providing SMS II Services for Non-branded Projects	Slovak Telekom (mobile communications)	
Cellular Telecommunications & Internet Association's (CTIA) Wireless Consumer Checklist	T-Mobile USA	
Cellular Telecommunications & Internet Association's (CTIA) Consumer Code for Wireless Service	T-Mobile USA	

#### Award for eEtiquette.

In October 2011, the German public relations association "Deutsche Public Relations Gesellschaft (DPRG)" recognized eEtiquette and presented the German PR Award to Telekom for its associated campaign to acknowledge its creativity and innovation. The International German PR Award is the most important award in the industry in German-speaking countries.

The goal of the eEtiquett guidelines, which were developed by users for users, is to raise awareness of the security aspects to be kept in mind when using modern communications media. The document uses catchy, humorous guidelines and tips on how to do this. For example, e-Etiquette points out that users should allow their data on Facebook to be viewed by selected groups only. Users also have the chance to give their opinions on Facebook and Twitter, comment on existing guidelines and make suggestions. This offer is not limited to those countries in which Telekom is active but is also available in Russia or India, for example. In June 2011, the second edition of the eEtiquette book was published. The book includes what users considered the 101 most important guidelines.

<u>Home</u> > <u>Customers</u> > Protecting minors

# Protecting minors.

The Internet has become part of everyday life for children and young people. According to a study that was conducted by Medienpädagogischer Forschungsverband Südwest (media education association in southwest Germany, MPFS) in 2010, minors spend an average of 140 minutes online every day. Teenagers tend to be a little bit too carefree when they are online.

One of our highest priorities is to show children and teenagers how to use new media responsibly and to be safe online. Deutsche Telekom's approach is based on three pillars:

- Providing attractive and age-appropriate content: With our age-appropriate websites and content, such as the
  fragFINN.de search engine, and with our Kidsportal, which was launched in 2004, we are offering exciting and
  attractive content to children and teenagers.
- Promoting media skills: We are promoting competent and self-confident usage of the Internet and mobile communications devices. This is the only way for children and young people to learn how to recognize risks and stay within boundaries. Telekom is working with different groups and initiatives in this area as well.
- Offering customizable protection tools: One essential element is offering appropriate protection measures. With our child-protection software, which was officially approved by the German Commission for the Protection of Minors from Unsuitable Media Content (KJM) in February 2012, Telekom Deutschland has been offering a reliable solution since 2003. During the reporting period, we made significant technical changes to the software to make it even more reliable. The software is now able to read the age rating details supplied on websites.

#### Industry-wide protection of minors initiative.

Telekom developed the Principles for the Safer Use of Connected Devices and Online Services by Children and Young People in the EU in collaboration with 25 European Internet companies. The principles were developed by the ICT Coalition for a Safer Internet for Children and Young People, whose members include telcos, device manufacturers and online service providers. The members voluntarily commit themselves to adhere to the principles. This was the first time that such an extensive coalition of companies that are active at all levels of the Internet industry agreed to jointly make a long-term commitment to improving the protection of minors.

By the end of this year, Telekom will decide on a number of concrete measures in six different areas to support the companies' commitment. These should include:

- Providing safe content
- Providing services to support parental control
- Taking measures to promote safer Internet use
- Fighting the depiction of child abuse
- Protecting user privacy
- Providing training and education

Principles for the Safer Use of Connected Devices and Online Services by Children and Young People in the EU

#### Extensive initiatives to protect minors in Germany.

Close cooperation of all parties involved is crucial to pushing forward the protection of minors. That is why Telekom relies on collaborations with partners from the worlds of business, politics and society.

#### Dialog with federal and state governments in Germany.

Since 2009, we have been participating in the multi-stakeholder dialog between the federal and state administrations to enhance youth protection in Germany. The aim is to establish uniform standards and guidelines and to initiate measures to communicate the topic and raise awareness. Deutsche Telekom helped develop the FSM self-classification tool in 2011.

CR Report from the previous year

#### fragFINN protected Internet space.

Telekom continued to sponsor the <u>fragFINN.de</u> protected Internet space in 2011. The service allows children to explore the Net safely without encountering inappropriate content. The search engine has been available since 2007 as the business sector's contribution to the German federal government's <u>Ein Netz für Kinder</u> (One Network for Children) initiative. In November 2009, Deutsche Telekom founded the association fragFINN e.V. in collaboration with other ICT companies in order to enable the age-appropriate search engine to offer its services over the long term.

#### TV-Spot: Child-appropriate Internet

(only available in German)

CR Report form the previous year

#### Media protection for minors integrated into product development process.

Protecting children and young people from damaging influences presented by the media is an important aspect of product development at Deutsche Telekom. The <u>design principles</u>, which are mandatory throughout the Group, have been in effect since 2009. These are based on the "Be responsible" principle and specify that criteria for protecting minors have to be taken into consideration even as early as in the product development phase.

Standards and ratings established by self-regulation institutions such as the Freiwillige Selbstkontrolle der Filmwirtschaft (FSK, the voluntary self-monitoring association of the movie industry) or Unterhaltungssoftware Selbstkontrolle (USK, Entertainment Software Self-Regulation Body) are of particular importance. These give guidance to children, young people and adults. That is why Deutsche Telekom makes sure that all of its distribution channels and Internet-pages comply with the age recommendations published by the self-monitoring institutions.

We are currently looking at categorizing the content of our websites according to the new classification standard of the <u>Freiwilligen Selbstkontrolle Multimedia-Diensteanbieter (FSM)</u>, the German association for the voluntary self-monitoring of multimedia service providers.

#### Online safety with child protection software.

minors in Germany to be recognized by the Commission for the Protection of Minors from Unsuitable Media Content (KJM), almost nine years after the Interstate Treaty on the Protection of Human Dignity and the Protection of Minors in Broadcasting and in Telemedia went into effect. The recognized version of the software is expected to be available as a free download for all Telekom fixed-line customers by late March 2012.

#### Child and youth protection at OTE.

The Greek subsidiary OTE has been providing different child safety offers since 2009 as part of its extensive online safety campaign. These include a security packet with a firewall, anti-virus, anti-spam and parental control functions along with an advice column on the customer website.

It also offered information events for children as of the end of 2010, on how to use the Internet as well as events for minors focusing on safety topics. These events take place every two months in the OTE museum for telecommunications. The company put on a play on the topic together with the young people.

#### CR Report from the previous year

Telekom's <u>child protection software</u> helps parents regulate their children's use of the Internet by providing features such as age-based filters for page content and time limits. Depending on the age they have selected, parents can block websites that have been programmed with a special age identification feature. This gives parents a reliable tool that they can use to keep their children safe.

We have also been offering our own <u>service forum</u> on child protection software to promote online safety since 2008. The forum is hosted by the Telekom Team and offers a platform for discussion on current problems and suggestions for improvement.

#### Initiatives and collaborations to protect young users.

We work throughout the Group toward promoting safe media use by minors and support numerous projects and <u>youth protection initiatives</u> in our markets. Our basic approach takes national laws and specific local needs into account. The Group subsidiaries individually decide where they want to focus their efforts for improving the protection of young people online.

Effective protection of minors requires that we closely cooperate with stakeholders. We worked to improve the protection of young people in numerous initiatives and cooperation projects during the reporting period:

At a glance: Initiatives and collaborations to protect minors and provide online safety.	
Adolescent Health Unit (A.H.U.) of the Second Department of Pediatrics—University of Athens (P & A Kyriakou Children's Hospital)	OTE
Advisory council of the klicksafe.de project	Telekom Deutschland
Deutschland sicher im Netz e.V.	Telekom Deutschland
fragFINN e.V.	Telekom Deutschland
Freiwillige Selbstkontrolle Multimedia-Diensteanbieter e.V. (FSM)	Telekom Deutschland
Greek Awareness Centre Saferinternet.gr	OTE Cosmote Greece
Jugend und Handy	Telekom Deutschland
Informationszentrum Mobilfunk e.V.	Telekom Deutschland
Internet Service Providers Austria	T-Mobile Austria
Kinder sicher im Netz (Making children safe on the Net) (in collaboration with FSM e.V. and the police crime prevention units of German state and federal governments)	Telekom Deutschland
ICT Coalition for a Safer Internet for Children and Young People	Deutsche Telekom
CEO Coalition to Make Internet a Better Place for Kids	Deutsche Telekom
Local Safer Internet initiatives under the patronage of the European Union	Telekom Deutschland T-Mobile Czech Republic PTC Slovak Telekom
Mobile Alliance against Child Sexual Abuse Content	Deutsche Telekom
Safenet	OTE
Media Rakkers foundation	T-Mobile Netherlands
e-Slovensko NGO	Slovak Telekom
European Framework for Safer Mobile Use by Younger Teenagers and Children	Deutsche Telekom
Teachtoday.eu in the United Kingdom, Germany, the Czech Republic, Italy and Spain	Deutsche Telekom
Support for the German government's Wege ins Netz media skills competition	Deutsche Telekom

#### Effective action against child pornography.

As a responsible company, Deutsche Telekom considers it its obligation to take rigorous action against child pornography, i.e. child abuse and its documentation.

Deutsche Telekom has been working with criminal prosecution authorities and NGOs active in this area in Germany and in other countries for some time now to ban such content from the Internet.

Deutsche Telekom has been committing itself at an international level since 2007 to fighting the depiction of child abuse throughout Europe within the scope of the <u>European Framework for Safer Mobile Use by Younger Teenagers and Children</u>. Deutsche Telekom has also been participating in the global <u>Mobile Alliance</u> against this type of content since 2008.



Home > Customers > Customer satisfaction

### Customer satisfaction.

As one of the world's leading ICT service providers, we have the potential – and bear the responsibility – to enable our customers to become sustainable consumers. As a service-oriented, responsible company, we feel obliged to respond to their needs and expectations. We have incorporated this commitment in our <u>Guiding Principles</u>, <u>which apply throughout the Group</u>: Customer delight drives our action. We develop innovative, <u>sustainable products</u> that are extremely reliable and easy to use thanks to intuitive interfaces.

We have commissioned the independent, external service provider, TNS-Infratest, to use the TRI\*M method to gauge customer satisfaction with systematic polls at all of our locations. The findings are then integrated into our management processes. Systematic complaints management activities also show us areas where further improvement is needed.

#### TRI\*M results in 2011: Increase in customer loyalty.

Compared to the previous year, the 2011 findings of the TRI\*M customer loyalty study showed an increase in customer loyalty of almost 6 percent. We plan to improve these results in Germany by 3.6 percent annually until the end of 2015.

#### CR Report from the previous year

The satisfaction of our customers is an indicator for our business success and is monitored by systematic surveys and management processes at all our sites around the world. The standardized TRI\*M index is used to measure customer loyalty four times a year and provides us with data that is comparable throughout the Group. The index analyzes

- how our customers rate our performance,
- the intention to remain with us and recommend us and
- our cutting edge over the competition.

The results are expressed as an indicator (TRI\*M index).

#### TRI\*M 2010 customer loyalty program.

We established the Loyalty Forum at the beginning of 2010. As part of the TRI\*M 2010 Program, this cross-functional committee's goal is to develop and implement different types of customer loyalty measures and evaluate the results. For example, the Corporate IT department named the Service Orientation project one of its top 5 projects in 2011 to improve cooperation with our customers as well as service quality. We held service workshops on this topic with around 100 employees mid-year in collaboration with an external consulting firm.

#### Standardized customer surveys at T-Mobile Austria.

T-Mobile Austria has been sending an SMS 11 the following day to its customers who contact the company at its

stores or via its hotline to rate their satisfaction since 2011. T-Mobile Austria recorded a response of 25 percent
or 10,000 customer responses a month. Customers are asked four questions. The last question asks them to
praise, criticize or suggest improvements. 70 percent of participants took advantage of this opportunity.

© 2012 Deutsche Telekom AG



<u>Home</u> > <u>Customers</u> > <u>Customer satisfaction</u> > Complaints management & customer care

# Complaints management & customer care.

Dialog with our customers provides us with important feedback on our services. Critical feedback is particularly valuable in showing us where we need to improve. Systematically evaluating customer queries and complaints gives us the chance to identify and eliminate the causes and to achieve our aim of significantly reducing the number of complaints.

In order to encourage dialog, we want our customers to be able to contact us quickly and easily via different communication channels. Online inquiries are playing an increasingly important role: More than 40 percent of all service inquiries made to Telekom Deutschland can already be resolved online. We were able to increase the use of our online services considerably via social networks. Our customers can get advice quickly, at no charge and with no red tape on both Twitter and Facebook.

#### Complaint figures for 2011: Reduction of 18 percent.

Compared to late 2010, we recorded 18 percent less complaints and repeat calls in the areas of fixed-line and mobile communications at the end of 2011.

#### CR Report from the previous year

In 2009, the contact reduction project was launched in Germany. Its original goal was to reduce complaints and repeat calls in the area of fixed-line services for consumers by 20 percent. The initial target is being constantly expanded: In 2010, mobile services were included and in 2011 the project was expanded to include business customers as well. We are planning on decreasing the number of complaints and repeat calls by 20 percent in each area.

All organizational units that have a direct or indirect influence on complaints are being included, from Sales and Marketing to Product Management, Process Management, Finance and Technology.

#### Improving business customer satisfaction.

Telekom Deutschland places much importance on improving the satisfaction of its business customers. A focal point in 2011 was improving complaints management processes.

The reasons for this were insufficient satisfaction ratings in the fourth quarter of 2010. To improve these results, we launched the VSE Complaints Management initiative in early 2011. The goal of the initiative is to improve complaint services and prevent customers from having to contact the company unnecessarily, thereby permanently improving customer satisfaction. The satisfaction ratings from SME customers were a central focal point.

Customer satisfaction with the complaint service has constantly improved since the initiative was launched in January 2011 compared to the previous year. It was up to 15 ACCI (After Call Customer Interview) points higher at the start of 2012 than at the end of 2010. However, there is still much room for improvement when it comes to processing complaints. That is why we are planning to introduce additional measures in 2012 within the scope of the initiative. For example, we introduced a new market research tool in January 2012. The tool will constantly

monitor relevant business processes at all of Telekom Deutschland's business customer areas and evaluate these using standardized KPIs.

#### Communication training for our service staff.

Our sales and technical service both use the WINS information system. It gives all employees who have customer contact the opportunity to learn about the status of the service processes. By having the information available in the system for the customer, it reduces the number of inquires and complaints. Over 10,000 service staff were trained in WINS in 2011. Customer communication plays a central role in this.

WINS provides our employees with a variety of processed information that can be be provided to the different target groups. It creates a uniform level of knowledge and provides a general sales approach which is irrespective of the communication channel used. By using WINS, employees have access to all the information they need to complete their daily tasks. It is divided into categories such as selling, devices, tariffs, services, IV technology and other technical topics. The content is structured uniformly which gives it a recognition value and means that each task can be completed with just a few simple clicks.

#### Bundling customer service multimedia expertise.

The growing spectrum of communication and entertainment products means increasing demands on the customer service staff's ability to advise our customers. Telekom Deutschland established a cross-area multimedia service team of several hundred employees for this purpose in November 2011.

The new structure combines online and fixed-line service so that teams are able to rely on a broad range of expert knowledge when helping customers. Decisive advantages of the new structure include a reduction in the number of forwarded calls, better availability and more flexibility when it comes to responding to fluctuating workloads. We are now also able to more effectively position new products and monitor product launches.

#### Telekom-hilft on Twitter with currently 17,810 followers.

Since May 5, 2010, our customers in Germany have been able to contact Telekom's customer service via the information network Twitter.

We had posted more than 66,100 tweets by the end of February 2012, which were followed by more than 17,810 fans.

#### CR Report from the previous year

At <u>Telekom-hilft</u>, Telekom employees answer customer inquiries regarding service offers and products, each time using less than 140 characters. Our service staff not only respond to inquiries but also search out tweets that indicate customer questions or problems. An increasing number of users appreciate this form of uncomplicated support in a personal atmosphere. Sales employees provide their name and even a photo to make this form of support more personal and transparent. Users can also browse through older entries on the website to look for support.

We pay strict attention to <u>data privacy</u> when helping our customers: Should we require a customer to provide personal information, the inquiry is processed via e-mail.

Twitter gives us the chance to get in touch with our customers and prospects on a platform where they communicate on a daily basis. Telekom uses the experience gained from this pilot project for other projects to

further promote sales and service via social media.

#### Telekom-hilft on Facebook.

Since September 2010, Telekom has been operating an official fan page on Facebook called <u>Telekom-hilft</u> (Telekom helps). More than 29,170 Facebook users already like this page (as of February 2012).

CR Report from the previous year

A service team consisting of 12 Telekom employees is available for Facebook users during weekdays from eight in the morning to eight in the evening. Users can post their questions and comments on the site's wall or directly get in contact with staff members that have a personal profile with a photo.

We take responsibility.



Home > Customers > Research & innovation

## Research & innovation.

Innovation and the consistent enhancement of products and services are key elements for Telekom in becoming a global leader in connected life and work. We are not content with just being state-of-the-art; we want to anticipate new developments and help shape the future. That is why we invest in wide-ranging research and development activities, in particular in the work of Telekom Innovation Laboratories (T-Labs in formerly known as Deutsche Telekom Laboratories). We are also committed to financing professorships and creating pioneering ideas in cooperation with universities.

Telekom tapped new business areas by developing smart network solutions in the fields of <u>energy</u>, <u>automobiles</u> and <u>health</u> during the reporting period. Together, these three new business areas are expected to generate around one billion euros in revenue by the year 2015. We intend to become the number one partner of the health industry by providing innovative health services.

#### Video: Video networking is the future



#### Expenditure in research and development.

Research and development expenditure in the narrower sense relates to pre-production research and development, such as the search for alternative products, processes, systems, and services. By contrast, we do not class as research and development expenditure the costs of developing system and user software with the aim of increasing productivity.

In 2011, research and development expenditure of the Group amounted to EUR 121 million, which is less than in the previous year. As the parent company, Deutsche Telekom AG bears part of the Group's research and development expenditure. At EUR 48 million, its expenditure was again lower than in the previous year (down EUR 17 million). Deutsche Telekom's investments in internally generated intangible assets to be capitalized decreased by EUR 39.8 million compared with the previous year. These investments predominantly relate to internally developed software, mainly for our Germany operating segment. As in the previous year, over 2,200 employees were involved in projects and activities to create new products and market them more efficiently to customers. The majority of employees working for T-Labs [1], the unit responsible for results-oriented research and innovation, are researchers from a wide variety of disciplines.

#### Awards for T-Labs researchers.

During the reporting period, <u>Telekom Innovation Laboratories</u> (T-Labs ) were reorganized into five areas, the innovation areas:

Internet & Services

- Cross-domain Middleware
- IT & Cloud
- Convergent Networks & Infrastructure
- Emerging Ecosystems

Two of our researchers were presented an award for their exceptional work during the reporting period. In March 2011, Professor Anja Feldmann, head of the "Internet Network Architectures" T-Labs in endowed professorship received the Gottfried Wilhelm Leibniz Award. The award includes prize money of EUR 2.5 million, which is sponsored by the German research organization Deutsche Forschungsgemeinschaft, and is one of the most renowned research awards. In February 2012, she received the Berliner Wissenschaftspreis 2011, which includes prize money of EUR 40,000, for her excellent achievements in science and research. The awards honor her pioneering achievements in the area of Internet architecture.

In 2011, Professor Alexander Raake, head of the Assessment of IP-based Applications area at T-Labs , received the Johann Philipp Reis Award, which included prize money of EUR 10,000, for his outstanding achievements in communications engineering.

Telekom Innovation Laboratories (T-Labs ) is the central research and innovation unit of Deutsche Telekom.

T-Labs works closely with Deutsche Telekom's operating units to deliver new ideas and support when it comes to developing and rolling out innovative products, services and infrastructures in our growth areas. With sites in Berlin, Darmstadt, Bonn (Germany), Tel Aviv (Israel), and Silicon Valley (USA), T-Labs 'i' focus is on medium-term projects and on technologies that produce unique selling propositions and new business for Deutsche Telekom.

Around 360 experts, researchers in a variety of disciplines from more than 25 countries, and young entrepreneurs work at T-Labs is side by side. The results of the T-Labs research and innovation activities are the basis for a large number of Deutsche Telekom's existing and future products and services. They include solutions for payment with mobile devices (the mobile wallet), new features for our Internet TV service Entertain, and processes that more effectively utilize fiber-optic cables and radio bands. With the help of a start-up company network in Germany, Silicon Valley and Israel, T-Labs have successfully outsourced a number of venture companies.

Since its foundation in 2005, T-Labs have already filed 350 patents and put out more than 2,000 publications. As a private research institution affiliated with Technische Universität Berlin, it is recognized worldwide.

#### Key research areas of T-Labs.

The T-Labs is research and development work is focused on seven main fields based on Deutsche Telekom's strategic areas:

- Interactive High-end Media: developing personalized and global media services, including 3D TV and integrated value-added services in the areas of consumer electronics, applications, service platforms and network components.
- <u>Future Communication</u>: developing convergent, secure and easy-to-use communication services that provide seamless access to all communications and messaging services with any device.
- <u>Information Relevance</u>: improving personalized services and customer recommendations through intelligent data management.
- <u>Cross-domain Middleware</u>: developing open communication platforms for different areas, including home, health, energy and traffic, as a basis for new services from third-party providers.

- Global Cloud: designing and developing basic IT tools that open up new business opportunities for network operators. This includes a cloud-based service architecture that contains IT infrastructure virtualization and the provision of network-centric applications and services.
- <u>Large-scale Infrastructure Optimization</u>: Large-scale infrastructure improvements that include developing convergent networks for global, high-quality broadband communication.
- Broadband Access Evolution: providing cost-effective, high-capacity wireless mobile Internet access for integrated service solutions.

#### Seventh Telekom BarCamp.

Telekom hosted the seventh BarCamp on May 18, 2011. Bar camps are organized by employees for employees who are interested in discussing current issues and projects in groups and workshops. Discussions again revolved around the wide-ranging possibilities of Web 2.0, including open processes, Twitter and blogs. As a rule, five sessions focus on five different topics, which means that a total of 25 topics are presented and discussed.

#### CR Report from the previous year

For around two years, Telekom Deutschland has been giving its employees the chance to participate in bar camps where they can talk about and develop current topics and company projects. A bar camp is a kind of workshop with the structure and content being determined by participants in the course of the workshop.

Home > Customers > Research & innovation > Smart grids & smart metering

# Smart grids & smart metering.

The use and decentralized generation of wind and solar energy pose a huge challenge to utility companies. The fluctuation of wind and sun power has an impact on electricity generation, while voltage in the mains has to remain stable. What is more, an increasing number of private households produce their own electricity, for example by using small cogeneration plants or photovoltaic systems. The energy created has to be managed intelligently with the help of state-of-the-art ICT in order to see the overall picture of this decentralized distribution network both in technological and financial terms. This requires a smart grid.

Smart grids help electricity providers to balance supply and demand and to keep voltage at a stable level. In these smart grids, consumers represent virtual power plants of sorts that can be regulated up or down at short notice.

In order for a smart grid to work properly, a huge amount of data needs to be evaluated in real time for operators to see when and where how much electricity is being generated and how much needs to be supplied. Smart metering provides the transparency necessary for this. At T-City Friedrichshafen, we launched a smart metering service as a pilot project in collaboration with utilities provider Technische Werke Friedrichshafen in 2008. In this project, we have also been testing smart grid solutions for the ICT-based integration of renewable energies. We have also been working with other municipal utilities providers and major energy suppliers on different projects dealing with smart metering and smart grids. One example is our collaboration with the technology group ABB. The joint project deals with securing stability when feeding solar power into the grid.

#### Video: How smart grids work

(Animation from our CR App <sup>□</sup> "We care")



Video: Smart meter & home management



#### Smart grids and green ICT at T-Labs.

Telekom Innovation Laboratories (T-Labs [i]) is the central research and innovation unit of Deutsche Telekom. Several research and development projects explore the possibilities of how energy can be saved through the use of ICT. Along with improving the energy efficiency of ICT, smart interaction between the ICT network and the power grid are key in the development of smart grids.

#### Flexible energy control through ICT.

Storage elements in ICT networks make it possible to adjust energy supply flexibly depending on the load. Load-dependent control of network components offers additional flexibility. For this, the performance of different network areas needs to be adjusted to the required data transfer volume. This is only possible if individual components can be shut down as needed without reducing overall performance of the network.

Flexible control not only means less energy consumption but ICT-supported modeling of electricity demand may also help to keep power grids stable in the future.

The <u>LOLA</u> (Load-adaptive networks & LANs) and <u>DESI</u> (End-to-end energy-sensitive ICT production) projects are pursuing this goal with different focal points.

#### Smart metering systems for your home.

Pursuant to the third EU "goods package" from 2009, at least 80 percent of all utilities customers should be able to check their energy consumption on smart meters by 2020. The 2011 amendment to the German Energy Industry Act (Energiewirtschaftsgesetz) specifies that smart meters must be installed if consumption levels exceed 6,000 kWh a year.

The Act also sets forth strict data privacy and data security requirements in order to make smart metering more attractive for customers and to protect the critical energy supply infrastructure. The Deutsche Telekom smart metering platform already meets these standards. Enabling connection of more than 90 meter types manufactured by some 20 different manufacturers, Telekom ensures maximum efficiency when it comes to system integration, thereby reducing the overall cost of the smart meters.

At T-City Friedrichshafen we have joined forces with the utilities provider Technische Werke Friedrichshafen and have been offering a smart metering service in a pilot project since 2008, which we are continuously expanding. The smart metering platform enables home owners, meter operators, sales companies and distribution network operators to offer this service to their customers at a reasonable rate. It also allows end customers to check and control consumption levels more effectively. In cooperation with energy companies such as E.ON and EnBW, Deutsche Telekom also offers solutions for a smart, energy-efficient home. Deutsche Telekom provides a basic platform that enables energy providers to offer innovative services to their end customers.

#### Intelligent use of decentralized energy sources.

Smart metering systems are a crucial element for climate-friendly energy supply for other reasons as well. They provide utilities companies with important consumption data so that energy providers are able to adjust voltage to the actual demand and to use decentralized energy sources, including private solar or cogeneration systems. In order to compensate for CO<sub>2</sub> emissions generated by operating the smart metering platform, Deutsche Telekom has been investing in a biomass project in Brazil since November 2009.

#### Smart meters at T-Mobile Netherlands stores.

T-Mobile Netherlands began equipping its stores and its mobile communications network with smart meters in December 2011 to enable the company to regularly measure consumption and better control its energy use. The project is scheduled for completion in 2012.



Home > Customers > Research & innovation > Connected cars

# Connected cars.

New business models and economic requirements such as increasing efficiency, complying with regulations, an increasing number of electric vehicles and the desire for all-embracing mobility concepts are turning the "networking" of drivers and vehicles into an unstoppable process. Telekom has been driving this development with a number of innovations.

Increased transparency, which is due to new ICT applications, leads to improved management, which in turn contributes to cutting emissions. For example, vehicle capacity can be used more efficiently and their maintenance status can be constantly checked, routes can be planned more flexibly and emission-heavy driving habits can be pinpointed. Safety aspects are of paramount importance with all innovations.

#### Video: Car ICT



#### Group business area for Connected Cars.

Telekom connects board computers to the <u>cloud</u> so that customers can access the Internet and online applications even when on the move. Transmission channels include mobile communications technologies such as UMTS, HSDPA and GPRS.

The Deutsche Telekom Group's Connected Car business area concentrates on four markets:

- Automotive manufacturers: Brand differentiation and customer retention in the automotive industry increasingly depend on online services. Telekom is developing a device-independent platform for manufacturers and service providers.
- Logistics service providers: Optimizing capacity utilization and avoiding empty runs require real-time tracking of vehicles and goods. Telekom is integrating all the players in the logistics network on a modern telematics platform.
- Fleet operators: Higher efficiency, transparency and improved carbon footprint through vehicle and driver management for commercial fleets. T-Systems teamed up with MAN to develop a <u>telematics application</u> that automatically sends vehicle data to the operations center and repair shops.
- Consumers: Secure private communication, social networks and personal information from the cloud.

Deutsche Telekom is also a partner for industry in the field of traffic research. for example in the <u>simDT project</u> that explores options for secure, smart mobility in Germany.

#### AutoLinQ and Connected Drive for online access in the car.

Deutsche Telekom has been offering AutoLinQ, a connected cockpit computer that enables people to go online

in their cars, through the automotive supplier Continental since 2011. At the core of the service is an online media center via which all data and apps are managed. These can be accessed from anywhere: the board computer in your car, your smartphone or your computer. Various online services and customizable apps make it possible to work while on the road and provide entertainment and information as well. The system is operated simply by pushing a button for uncompromised driving safety, and is equipped with a variety of special features. AutoLinQ can read e-mails or short messages out loud and answer them via voice control. An online directory can be used to call individual subscribers directly or to select their data as a navigation destination. The system also provides various remote monitoring and remote control options. These can be used to check tire pressure and oil levels or close the convertible roof.

#### Connected Drive with BMW.

Deutsche Telekom has been offering a similar service since mid-2010 in cooperation with the car manufacturer BMW. Connected Drive is being constantly expanded and currently comes with a smart maintenance system, expanded traffic information, an automatic emergency call service and Google services.

#### Telematics application for shipping companies.

T-Systems collaborated with MAN during the reporting period to develop a telematics application for logistics service providers and fleet operators, which was presented at CeBIT 2012. The application records all vehicle data, evaluates it and then sends it to a portal. Operators can use the portal to analyze the driving behavior of their drivers, determine the next maintenance date and communicate with the drivers. Current driving and sensor data of refrigerated modes of transport are monitored using the Be Cool app. The app notifies drivers on their smartphone when the temperature of their freight is rising.

Another application makes it possible for shipping companies to keep an eye on their entire vehicle fleet using a single screen regardless of the telematics system they use. In addition to displaying location, the application also focuses on current order and freight information.

#### Green telematics applications reduce pollutant emissions.

Various independent studies show that fleet operators' fuel costs and CO<sub>2</sub> emissions can be reduced by around ten percent by using different telematics solutions. Telekom is involved in various research and innovation projects in this area:

#### Vehicle and driver management services.

Telekom has been offering different vehicle and driver management services based on individual solutions for years now. These services provide extensive data to analyze driving behavior and fuel consumption, making it possible to optimize these factors. Users can also control the number of kilometers driven with a real-time navigation system featuring a reporting function.

#### Real-time calculation of CO<sub>2</sub> emissions.

Deutsche Telekom has been working in cooperation with Gesellschaft für Technische Zusammenarbeit and the Tongji University in Shanghai since November 2010 to develop a way to calculate  $CO_2$  emissions in real time. Smartphone applications measure acceleration and braking patterns as well as the route profile of the road traveled and use this information and the manufacturer's consumption data to calculate  $CO_2$  emissions. The Tongji University compiles the measured data into an up-to-date chart that drivers can view on their navigation devices and use to plan their route accordingly. The results of a pilot project involving 50 vehicles were presented at Expo 2010 in Shanghai.

#### Bonus for low-emissions driving.

Telekom and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) have teamed up to research how driving behavior can be influenced by introducing a CO<sub>2</sub> emissions fee for downtown city areas based on these smartphone apps in the <u>Pay as you Pollute</u> project. In a pilot project that was conducted in China in October 2010, car drivers who accelerated less at traffic lights or in congestions, thereby emitting less CO<sub>2</sub>, were rewarded with parking vouchers. This project was also presented at Expo 2010 in Shanghai.

#### T-Mobile USA: Cell phone safety mode while driving.

In 2011, T-Mobile USA developed a special service called DriveSmart that prevents calls while driving. As soon as a cell phone is in a moving vehicle, the call and text message features as well as the use of apps are restricted.



Home > Customers > Research & innovation > E-health

# E-health.

The healthcare sector is a strategic growth area for Telekom. That is why we are involved in numerous pilot projects for setting up a state-of-the-art ICT infrastructure in the healthcare sector. The aim is to network doctors, hospitals, patients and health insurance companies using technology that complies with the strictest security standards. In doing so, we are contributing to improved medical care and providing valuable support to older and chronically ill people, in particular. In view of increasing expenses in the healthcare sector, innovative ICT solutions are also an important tool for reducing costs.

Our strategy in the healthcare sector focuses on the development of new offers that are based on mobile communications. These could particularly help patients with physical limitations manage their everyday lives and ensure seamless medical care.

The goal is to further reduce the time to market for new mobile communications offers following successful pilot projects. To help us achieve this goal, we promote a uniform standard for data exchange between IT systems: the <a href="Integrating the Healthcare Enterprise">Integrating the Healthcare Enterprise</a> (IHE) standard. We are also working on a <a href="full-coverage broadband network">full-coverage broadband network</a> as the basis for using these new solutions.

#### Video: Healthcare



#### New network technologies for the healthcare market.

Deutsche Telekom presented its new Ambient Assisted Living network technology to intelligently connect hospitals, doctors and patients in November 2011 in Düsseldorf at Medica, the most important expert trade fair for medical technology. The company demonstrated features such as connected emergency call and alarm systems, systems for providing telemedical care and tablet computers designed for seniors. The new technology lets people live independently at home longer or be released from the hospital sooner.

Deutsche Telekom also presented a pilot project on outpatient palliative care for terminal illnesses, which it is conducting in collaboration with the Lahn Dill Kliniken hospital and the Dutch IT company Portavita. The aim of the project is to develop an electronic patient file that all care providers can view and update wirelessly using a tablet computer. This accelerates processes and improves the quality of treatment. In many cases, it is thanks to this technology that patients can be cared for at home.

Telekom also demonstrated how the "clue" ECG device, which is the size of a cell phone, can evaluate heart function data in only two minutes and display the user's personal stress level. Using the technology can reduce the risk of heart disease or burn-out and help people recognize signs right away. At the trade fair, Telekom also presented its Medisana products that patients can use to measure and monitor their own blood pressure, blood sugar levels and heart rate via a smartphone.

#### Comprehensive telemedicine network launched in Brandenburg.

In September 2011 Deutsche Telekom and GETEMED connected medical and information technology at two hospitals in Brandenburg, Germany, thereby launching the first comprehensive telemedicine network in Germany. The Carl Thiem Hospital in Cottbus and the Municipal Hospital in Brandenburg will in future cater for up to 500 high-risk patients with chronic heart problems via telemedicine, along with office-based family physicians and cardiologists. Patients will receive smart, wireless, easy-to-use diagnostic devices that regularly measure data such as heart rate, oxygen saturation and blood pressure. The recorded values are then forwarded automatically to the electronic patient file at the telemedicine center, where they are monitored by doctors around the clock. The aim of the large-scale project is to prevent stressful repeat examinations and expensive hospital stays.

#### Video: Telemedicine pilot project



#### Hospital rounds with the iPad.

In cooperation with the Berlin-based hospital, Charité, Telekom is currently developing a digital workstation for doctors that wirelessly compiles all patient information onto a tablet computer or notebook. New findings will be sent to the devices within seconds. That will enable doctors to remotely monitor the health status of their patients at all times. The project is initially focusing on three topics:

- Digital second opinions and virtual consultations: Thanks to structured digital information, specialists that are new to the case will be able to quickly get an idea of the patient's current health status. This will make it easier to get a second opinion. We are also testing the use of joint evaluations via video or online conferences.
- Digital hospital rounds: Mobile access to patient files during hospital rounds.
- Remote medical care: Patients receive additional care remotely after hospital stays. They can monitor their health data at home themselves and then send it to their doctor.

#### Award for cloud computing in the healthcare sector.

In June 2011 T-Systems was recognized together with its project partners as one of twelve winners of the Sicheres Cloud Computing für Mittelstand und öffentlichen Sektor - Trusted Cloud (Secure Cloud Computing for SMEs and the Public Sector - Trusted Cloud) competition, which was initiated by the German Federal Ministry of Economics and Technology. The company received the award together with its partners from the TRESOR (Trusted Ecoystem for Standardized & Open cloud-based Resources) project for developing solutions for simplified, secure data exchange between doctors, hospitals and health insurers.

#### Telemedicine applications for patients.

Telekom has been offering mobile health-monitoring devices in Germany in collaboration with the company Medisana since August 2011:

- GlucoDock
- CardioDock
- ThermoDock

These devices can be used to measure vital signs such as blood pressure, blood sugar and temperature while on the go. Customers can use a free app to organize, process and send information to their doctor from their iPhone, iPad or iPod. This way, even parents of children with diabetes are now able to easily monitor their child's condition, irrespective of the distance between them. The measuring devices are certified as medical products.

Telekom Deutschland launched its fourth health product to the market in October 2011: <u>TargetScale</u>. The scale calculates weight, body mass index (BMI), the percentage of body fat and water as well as muscle and bone mass and sends the data to the customer's smartphone via Bluetooth where it can be stored, evaluated and annotated with personal comments.

#### App in for customers with diabetes at T-Mobile Netherlands.

T-Mobile Netherlands has been offering the iBGStar app since November 2011 in the context of its partnership with the health company Sanofi. Diabetics can use the app to manage their values on their iPhone or iPod touch. The app works on the basis of data measured by a device manufactured by Sanofi. Values that are above or below normal levels can be automatically sent to the doctor in an e-mail.

An introductory video is available on the T-Mobile Netherlands blog.



Home > Customers > Research & innovation > T-City

# T-City.

The goal of Telekom's T-City concept is to turn the world of tomorrow into reality. We have done so at two locations: in the city of Friedrichshafen at Lake Constance and in the city of Szolnok in central Hungary.

At these "future labs", we have been implementing our ideas for connected life and work in collaboration with administration, academia and business. As part of these projects, we have been working with local initiatives, associations and residents to develop sustainable and innovative applications for key areas of life.

#### Installation of smart meters at T-City Friedrichshafen.

Following a three-year test phase, Deutsche Telekom started to install smart meters for electricity, gas and water in all <u>T-City</u> households in March 2011 in collaboration with the local utility, Technische Werke Friedrichshafen (TWF). Telekom is going to install the infrastructure, transmit the consumption data and prepare it for TWF within a scheduled project period of five years. Deutsche Telekom presented key results from the research project at a roadshow in three major cities in 2011. In Frankfurt and Düsseldorf the company demonstrated how smart grids can be used in areas such as telemedicine and presented energy solutions in Leipzig.

Click <u>here</u> for an overview of the various projects being conducted at T-City Friedrichshafen.

Since the project launch in 2007, Telekom has realized around 40 projects in the following six areas in T-City Friedrichshafen:

- Learning and research
- Mobility and transport
- Tourism and culture
- Citizens, the City and the State
- Business and work
- Healthcare and support

You can read about these topics and the implemented projects in detail on the <u>T-City website</u>. Since its update in October 2010, T-City Friedrichshafen's website has been hosting new interactive social media applications. For example, users can access new developments and information about T-City in real-time using a <u>Twitter box</u>.

#### BIGkidscoach T-City project.

In 2010 Deutsche Telekom initiated the BIGkidscoach project at T-City Friedrichshafen in collaboration with the Institut für Prävention und Nachsorge (PIN, institute for prevention and aftercare) and the BIG health insurance company.

The <u>BIGkidscoach</u> online platform was further developed during the reporting period.

CR Report from the previous year

problems and motor deficits. Because of this, the new BIGkidscoach T-City project was launched in Friedrichshafen in October 2010. The goal of the project is to use different online tools available at <a href="https://www.bigkidscoach.de">www.bigkidscoach.de</a> to motivate children and teenagers between the ages of 6 and 18 to do more physical activities and to eat healthier food.

The online platform was developed in collaboration with the health insurance company <u>BIG direkt</u> and the <u>Institut für Prävention und Nachsorge GmbH</u> (IPN). Children and young people can use the platform to analyze their fitness and current physical activity level. The results are used to develop an individual training plan. The children are then encouraged to follow the plan with the help of a 3D animated trainer. Any progress made is documented in their fitness profile and illustrated in a graph. The children also receive tips on how to eat healthy. Teachers and coaches can also use the broad spectrum of tests and exercises offered in their work with young people.

#### T-City Szolnok.

Telekom and the city of Szolnok runs their long-term development project, T-City since 2009. Numerous new projects were initiated at T-City in 2011 including:

- Live broadcasting of sporting and cultural events. These were held in Szolnok's sports arena and broadcast live online and recorded using four IP-based cameras.
- RFID-based access systems for schools: the company began testing an RFID (radio frequency identification) system at an elementary school in Szolnok in early 2009. The system uses electronic IDs to automatically register when students arrive at school and also when they leave the premises. The system's security was further improved in 2010 and 2011 as we launched the school portal and information system; and the e-lunch ticket.
- The technological equipment for the eNOTO town security system for keeping surveillance of the streets was installed. The system can play a key role in the settlement's public security situation, and improve the subjective perception of security in the population. The equipment is available for 24 hours a day in auto mode, to identify vehicle registration number from any directions.
- Virtual tour guide: The iPhone and Android compatible basic service operating together with a GPS <sup>II</sup> is showing all the important information conveniently and attractively to the client.
- Optimal Energy Management: The Optimal Energy Management System provides a wide range of energy cost savings services - a total load management system or a part of building of the client and the implementation of the energy-saving ideas proposed by team of experts.
- Intelligent City card: The objective is the gradual development of community services that will give mutual benefits for all participants. Personalized cards, which are usable for e-ticketing, city card functions, Loyalty point collecting system, admission, digital signatures.
- Improving media skills for people of all ages: In order to minimize the digital divide that exists in society, Magyar Telekom offers Szolnok residents two programs free of charge. The main goal of these programs is to introduce children and older people to information technology and teach them how to use the Internet.

#### CR Report from the previous year

Home > Society

# Society.



Life is for sharing.

# Is Telekom's social commitment not just a fig leave to polish the Group's image?

Find out more

## Society.

Telekom not only provides the necessary ICT infrastructure but also helps give as many people as possible access to the information and knowledge society through its many different activities. Under the motto, "We take responsibility," we have launched numerous initiatives and have sponsored non-profit organizations to live up to our responsibility to society. The creation of the <a href="mailto:engagement@telekom platform">engagement@telekom platform</a> in 2011 for connecting social organizations and initiatives was a significant impetus.

# For Deutsche Telekom, taking responsibility for the civil society of which it is part is an ethical obligation. How can we maintain the welfare state against a backdrop of excessively debt-heavy public budgets? What are the responsibilities of politicians, companies and each individual?



An article by Birgit Klesper, Vice President Group Transformational Change & Corporate Responsibility at Deutsche Telekom.

# CR category "Connected life and work"

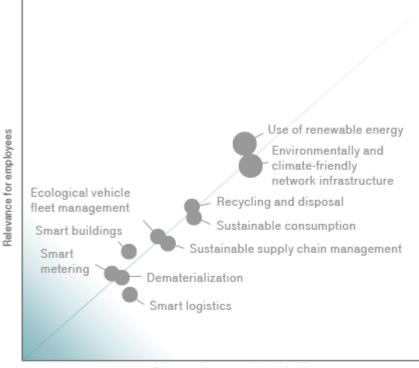
Relevance for external stakeholder

# CR category "Connect the unconnected"



Relevance for external stakeholder

CR category "Low carbon society"



Relevance for external stakeholder

The matrices map the results of our 2012 stakeholder survey. We use the survey to determine how relevant our internal and external stakeholders consider the various topics addressed by our <u>CR categories</u> to be. Further information regarding the stakeholder survey can be found in the <u>"Strategy & management"</u> section.



Home > Society > engagement@telekom

# engagement@telekom.

The engagement@telekom platform shows our broad commitment to supporting the society we live in—both as a company and through the volunteer efforts of our employees. The engagement@telekom initiative is providing support at three levels:

- Corporate volunteering and corporate giving
- Employee participation
- Disaster relief

The activities conducted as part of the engagement@telekom platform during the reporting period focused on <u>corporate giving and corporate volunteering</u>. The activities begun in spring 2012 in the area of <u>media skills</u> will be a focal point of corporate volunteering during the upcoming reporting period.

#### International expansion.

Telekom plans to incorporate its international activities into the engagement@telekom platform as well. The CR managers from the <u>international subsidiaries</u> discussed approaches and the next steps for this during the reporting period. The first of these initiatives to take place under the engagement@telekom umbrella were launched during 2011 International <u>Volunteer Day</u> on December 5th at international subsidiaries, e.g., in Austria and Poland. The first international collaboration with our partner organization <u>DKMS</u>, the German bone marrow donor center, began with PTC in Poland.

# Update on the 2010/2011 CR program.

Sub-targets	Status of implementation/measures		
engagement@telekom platform: Expand corporate volunteering program	Implementation underway.  • Launch of database for projects and topics: Target achieved.  • Expansion of corporate giving activities  • 1,000 employee volunteers planned for 2011, target achieved: More than 3,500 volunteers in 2011. Successive expansion of volunteer efforts to 5,000 employees in 2015.  • Corporate volunteering projects in 10 countries: Target achieved  • Cooperation with Telekom Foundation: Target achieved  • Award received: European Communications Award for engagement@telekom platform  • Presentation of engagement@telekom platform and "Yes I can!" at BBE		

#### 2010/2011 CR program

The current 2011/2012 CR program can be found in the "Strategy & management" section.



<u>Home</u> > <u>Society</u> > <u>engagement@telekom</u> > Corporate volunteering & corporate giving

# Corporate volunteering & corporate giving.

Telekom wants to create added value for society with its involvement in the community. To do this, we support various organizations and projects in the context of our <u>CR categories</u>. Many Telekom employees also make a very personal contribution to society, breathing life into our CR strategy. We help our employees combine their charitable activities with their job.

We use the positive effects of our employees' joint involvement, such as increasing social skills and strengthening team spirit, for personnel development purposes. We also make corporate donations worldwide to support non-profit organizations or to provide fast aid to the victims of disaster. We often give our employees the opportunity to help decide where donations should go.

#### Corporate volunteering program in Germany.

In fall 2010, Telekom in Germany introduced a comprehensive corporate volunteering concept as part of the <a href="mailto:engagement@telekom platform">engagement@telekom platform</a> which consists of three main components:

- An <u>intranet portal</u> gives employees tips on volunteering in their free time as well as contact information for participating in activities and opportunities to talk about their experiences with other active colleagues.
- Corporate volunteering is being integrated into employee training and development.
- Employees can apply at Telekom for aid funding for charitable projects. 1,000 applications submitted by employees are approved each year and the company makes donations totaling EUR 250,000. To receive funding, employees have to be involved in volunteering for the organization in their free time and the organization's activities need to relate to one of the three strategic CR categories.

#### Policy paper on volunteering.

Deutsche Telekom published the "Volunteering—A matter of honor for companies?" policy paper in February 2012. In this paper Birgit Klesper, head of Corporate Responsibility & Diversity, talked about the role of companies required to strike a balance between involvement in the community and economic responsibility. According to this, society is based to a considerable extent on stable, successful companies that are able to invest in social projects beyond their own business activities. Corporate volunteering plays an important role in this: It has an immediate impact, is perceived accordingly by the public, is very motivational and has a highly integrational effect. It can create a stable foundation for an open corporate culture based on integrity.

#### Award for "taking responsibility."

Telekom was recognized for its engagement@telekom platform in November 2011: We received a special award in the Corporate Volunteering category at the European Change Communications Award 2011 in Salzburg, Austria.

In the speech that was given at the award ceremony, we were praised for taking responsibility as a key component of our corporate strategy. Tangible examples and daily activities reflected how corporate values are

filled with life at Telekom.

#### Online portals for employee volunteering.

The <a href="mailto:engagement@telekom">engagement@telekom</a> portal, which was launched in 2011, received positive response from employees and non-profit organizations: 156 employees presented their volunteer activities on the intranet and non-profit organizations presented 58 projects. A mosaic was uploaded onto the intranet to provide a platform for our employees' volunteer activities and to demonstrate how highly we value their involvement. Employees were able to present volunteer activities here and talk about what motivated them to volunteer. The mosaic was redesigned to form the word "DANKE" (Thank you) on <a href="Volunteer Day">Volunteer Day</a> and then used in internal communication accordingly. Eight selected employee volunteer efforts were featured for two months in an intranet special.

#### Corporate volunteering platform at T-Systems Iberia.

In December 2011, T-Systems Iberia also started bringing together its corporate volunteering projects on one intranet platform. The platform is designed to be a place where employees can present their projects and ask for support from others at the company.

#### Participation in "Getting involved week."

Telekom presented its engagement@telekom platform and the "Yes I can!" initiative at the kick-off event in Berlin for the Germany-wide "Woche des bürgerschaftlichen Engagements" (Getting involved week) from September 16 to September 25, 2011. Telekom participated in the kick-off event together with many initiatives, associations, volunteers and German celebrities such as Ulrike Folkerts and Peter Maffay. Birgit Klesper, head of Corporate Responsibility & Diversity at Telekom, talked about the reasons behind the company's involvement in interviews held on stage at the event as well as on the German morning show, ZDF-Morgenmagazin.

We also introduced our engagement@telekom platform in detail in the event's magazine <u>Ehrenamt macht stark</u> and in a newsletter featuring <u>Corporate involvement day</u>.

#### International Volunteer Day.

Telekom used the occasion of International Volunteer Day on December 5, 2011, to motivate its employees to get involved and to recognize those who already volunteer.

#### Community involvement marketplace at Headquarters in Bonn.

Representatives from partner organizations presented their organizations' activities and their collaborations with Telekom in Germany in the foyer at Group Headquarters in Bonn. Participating organizations included the German bone marrow donor center <u>DKMS</u>, the Bonner Tafel food bank, Aktion <u>Deutschland Hilft</u>, an initiative by German aid organizations as well as the <u>Telekom Foundation</u>. On Volunteer Day, DKMS was present at four locations in Bonn and Magdeburg as well.

Numerous employee volunteer efforts were also presented in an exhibition. The head of Human Resources at Telekom Deutschland, Dietmar Welslau, recognized six "life savers" whose bone marrow donation gave leukemia patients the chance at a new life in 2011. On International Volunteer Day, one Telekom employee met the recipient of their donation, a nine-year old boy. A total of 152 employees registered in the DKMS database on Volunteer Day.

Telekom employees also donated high-quality, non-perishable foodstuffs to the Bonner Tafel food bank at the event. The Group had asked its employees to contribute a donation to needy people in the region that were to be

handed over on December 5th.

#### Video



#### T-Mobile Austria donates EUR 3,000 for three projects.

On International Volunteer Day, T-Mobile Austria donated EUR 1,000 each to three projects for which employees volunteer their time. Support was given to a school project in Ghana, an advertising campaign conducted by a soccer club to address children and young people, and the waste separation scheme in office buildings. All employees had the opportunity to submit their own project suggestions.

#### Slovak Telekom recognizes "best volunteers."

Slovak Telekom's employees had the chance to submit a picture of them doing volunteer work on Volunteer Day. Slovak Telekom raffled off a dinner as well as three t-shirts bearing the words "Best Volunteer" among the participants.

#### 3,524 employees participating in Social Days in Germany.

During our Social Days our employees volunteer for a non-profit organization for an entire day. 169 Social Days took place in 2011 with the participation of 3,524 employees. They volunteered at schools and day care centers, gave Internet and cell phone seminars to senior citizens, participated in <u>DKMS</u> typing drives and volunteered for the environment. Long-term involvements and regular joint activities often resulted from the Social Days activities. Employees also initiated and conducted many additional projects on their own.

#### Support for Lebenshilfe aid association.

Telekom in Germany and the <u>Lebenshilfe für Menschen mit geistiger Behinderung</u> aid association for people with mental disabilities cooperate closely. Telekom employees continued to support the association in numerous ways in 2011. Corporate Communications employees revamped the playground for the remedial day care center in Bonn on May 26th and 27th. Employees also held a workshop in Bonn in June on how to use cell phones for people with mental disabilities from the Lebenshilfe assisted living facilities. Trainees created a "garden of the senses" at another Lebenshilfe facility and helped out at the summer festival. Managers from Customer Service visited artists with mental disabilities at a Lebenshilfe atelier in Berlin.

Nine people with mental disabilities from the Lebenshilfe association visited the Service Counter employees at the Telekom branch office in Bonn on February 3, 2012. They learned the basics of using the Internet at an all-day workshop, for example skills such as searching for information on Google and bookmarking websites. Telekom field staff talked to them about possible risks involved in using the Internet. Afterward, the visitors took a tour of the building and were able to ask questions.

#### An afternoon for Berliner Tafel and Bonner Tafel food banks.

Around 60 Telekom employees helped the Berliner Tafel organization collect 120 metric tons of fruit and vegetables on the last day of the Fruit-Logistica trade fair and distribute them to people in need on February 10, 2012.

At <u>Guiding Principles Day</u> on September 28, 2011, employees sold homemade baked goods to their colleagues and donated the proceeds of EUR 700 to Bonner Tafel.

#### Social Days and volunteer programs in Hungary.

In 2011, the Hungarian subsidiary Magyar Telekom again worked to raise the social awareness of its staff by organizing volunteer programs. As in previous years, the Jövő/Menő program offered the opportunity for anyone interested to get involved. The program aims to promote sustainable development in poorly developed regions of the country. Furthermore, Magyar Telekom used corporate volunteering in 2011 for the first time ever to aid team development. A total of 389 employees participated in corporate volunteering activities in the course of the year, donating 480 days of volunteer work with an equivalent value of HUF 19.86 million (EUR 68,235).

#### Digital Bridge events in Hungary.

The aim of the Hungarian Digital Bridge program is to provide people in remote villages with the possibility of using modern information and communications technology, thus counteracting the digital divide in society. As part of the program, Magyar Telekom organized eight events with a total of around 1,000 participants in 2011. Around 300 volunteers from Magyar Telekom instructed visitors on how to use the Internet. In addition to this there was an Internet search competition and talent contests for both children and adults. Since the program began in 2004, Magyar Telekom has organized a total of 159 events.

#### Social Day in Albania.

In July 2011, 45 employees from the Albanian subsidiary AMC volunteered to help children at the SOS Children's Village in Tirana, a facility for hearing-impaired children as well as a facility for blind school students. With a budget provided by AMC, the volunteers redesigned the outside and internal areas and set up a mobile video library. The project is scheduled to be continued in 2012.

#### Huddle Up in the U.S. for better neighborhoods.

Employees at T-Mobile USA have worked hard to improve leisure activities offered to children and young people under the "Huddle Up!" scheme since 2006. After-school activities are offered to young people thanks to financial support and employee volunteer efforts. The program also brings people from the neighborhood together and motivates them to actively improve their community. 1,650 employees volunteered 13,200 hours in ten cities in 2011.

#### CR Report from the previous year

#### T-Mobile Czech Republic: 3,017 workdays for people in need.

More than 670 employees from T-Mobile Czech Republic, almost a quarter of the company's employees, participated in the "One day for people in need" campaign in 2011. They volunteered one whole day for the NGO of their choice at full pay. The employees have volunteered a total of 3,017 workdays since the corporate volunteering campaign was launched in 2005.

In 2010 T-Mobile Czech Republic also expanded its volunteer activities in collaboration with the VIA Foundation. Seven employees of the Czech subsidiary had worked together with external experts to train a total of 170 NGO employees at PR and human resources workshops by the end of 2011.

#### Donations for Christmas parties.

Telekom employees in Leipzig initiated several donation drives before Christmas 2011 and collected money as well as goods for children in need. The employees collected toys valued at around EUR 800 in just a few days. The donations were given to the Schutzengel e.V. organization, which helps families with small children living in

deprived areas, at the organization's Christmas party.

#### Getting trainees and students involved.

Telekom is one of the largest vocational training providers in Germany. In addition to providing our more than 10,000 trainees and students in cooperative study programs with specialized technical skills we also want to communicate values and increase their social skills. That is why volunteering activities are a permanent fixture in Telekom's training programs.

#### Involvement in the community as part of the training course.

The CR department presented the <a href="mailto:engagement@telekom">engagement@telekom</a> platform at the annual meeting of Telekom's training officers in Bad Honnef, Germany in November 2011. The training officers agreed on a more intensive collaboration between the Training units and the engagement@telekom platform in order to embody the idea of community involvement in training courses. Practical examples of such collaborations with training centers are projects in Essen (17/70 project), Bremen (SOS Children's Village), Bonn (Lebenshilfe aid association) and Berlin (Berliner Tafel).

#### Volunteer Day in Essen.

The training center in Essen held its first Volunteer Day in July 2011 under the slogan "Let's all volunteer together!"

113 trainees from all training groups and classes experienced what it is like to volunteer first-hand at different locations in Essen. They participated in various activities that a trainee project team had organized. Trainee photo journalists documented the Volunteer Day.

#### "Responsibility wins" award.

The internal competition, "Responsibility wins," in which we recognize the volunteer efforts of our trainees, entered its third round in February 2012. Some 1,000 trainees and students in cooperative study programs submitted over 100 projects in which they volunteer to help people in difficult situations.

Telekom recognized the three best projects in Bonn on February 1, 2012: A garden of the senses for people with disabilities created by the Bonn training center, SOS Children's village sponsorship by the Bremen training center and a concept for an internship for deaf teenagers developed by the Munich training center. Our young employees continued their involvement in the projects even after the award had been presented. The Bremen training center donated its prize money to the SOS Children's Village.

CR Report from the previous year

#### Employees volunteer for the climate and environment.

Our employees throughout the Group work for a clean environment and for climate protection and nature conservation.

#### Volunteering for forestry projects.

Some 180 employees helped do forestry work on the Venusberg in Bonn in July 2011. They installed gates and made birdhouses, tables and benches for a "green classroom" under the <u>Haus der Natur</u> (House of nature) scheme. The activities took place in the context of the <u>International Year of Forests 2011</u>.

One month before, participants of the forest redesign project, Living Beech Forest, which is being conducted by the city of Bonn, Deutsche Telekom and the Deutsche Umwelthilfe environmental organization, began initial preparatory work in the Bad Godesberg city forest. As a result of the redesign efforts, part of the Bonn city forest

will be transformed back into a mixed forest, similar to its natural state.

In December 2011 Telekom employees once again supported the Bonn city forestry and planted 200 shrubs and 25 trees to encourage biodiversity.

#### T-HT Hrvatski Telekom: Donations and employee reforestation efforts.

The Croatian subsidiary T-HT Hrvatski Telekom has been supporting various environmental projects since 2008. The international subsidiary continued to support the reforestation of areas destroyed by forest fires in cooperation with the public institution, Croatian Forests, in 2011. 100 T-HT Hrvatski Telekom employees supported the company's involvement in December 2011 by volunteering to participate in the reforestation efforts. Thanks to the subsidiary's support, project participants were able to reforest an area of 27 hectares.

#### Globul, AMC, T-Systems Slovakia: Working for a cleaner environment.

Employees from several international subsidiaries volunteered to preserve forests and collect trash in forests and parks during the reporting period.

- In 2011, our subsidiary Globul supported the Bulgarian WWF "Nature parks national day" for the third year in a row as part of protecting the countries largest nature reserve. Globul donated financially as well as being part of a national awareness campaign. A total of 100 employees helped to clean up some 15 tons of garbage in the eleven national parks.
- Every fifth employee at the Albanian subsidiary AMC participated in waste clean-up initiatives in mountains and on beaches in June and July 2011.
- Eleven employees from T-Systems Slovakia participated in voluntary environmental protection initiatives in the Košice region in June 2011. They were able to choose between various activities such as waste clean-up initiatives, community activities or conducting public awareness events.

#### New donation policy adopted.

Changing conditions as a result of new internal and external regulations as well as our new <u>CR strategy</u> led us to revise our donation policy in 2011. The policy now governs all of the company's donation activities, thereby forming the basis for extending our corporate volunteering and corporate giving activities.

#### Combining volunteer work and corporate donations.

#### T-Systems UK supports and gives donations.

Incorporating personal expertise is a central element of T-Systems UK's CR approach. Since 2010 employees at T-Systems UK have been choosing which non-profit organization they want to support from a list of organizations put together by themselves and their fellow employees. In 2011 they selected the NGO, The Respite Association. The organization provides respite care so that caregivers can take some time off. The employees of T-Systems UK supported the organization by designing a new visual identity, writing and producing a fund-raising brochure and redesigning the charity's website, which went live in June. Employees raised GBP 3,500 (EUR 4,130) through activities and donations to The Respite Association in 2011. This amount was matched by T-Systems UK to give a grand total of GBP 7,000 which was a significant contribution to the charity's best year ever for income. In 2012, employees are once again able to choose the organization to which they wish to donate their time, now on an individual basis with company support.

#### T-Mobile Czech Republic supports the environment and community.

T-Mobile Czech Republic sponsored different non-profit organizations for the seventh year in a row with the T-Mobile Fund for Employees in 2011. Donations were made under the slogan "Healthy planet" for the second

time. All employees had the chance to submit projects in which they were active participants. The company selected 27 projects out of 132 submissions. The selected projects contribute to either improving life in the community or the natural environment of the region. T-Mobile Czech Republic donated a total of CZK 2 million (around EUR 80,102). The company has supported more than 200 projects with around CZK 14 million (around EUR 560,711) since the start of the project.

## Croatia: "Together we're stronger."

H-HT Hrvatski Telekom has been asking its employees since 2006 to nominate local humanitarian initiatives or institutions for the company's donation program with the slogan "Together we're stronger." Employees selected 24 projects and institutions from among 294 suggestions in 2011. From helping people with disabilities to supporting educational projects and environmental and health projects, the company was again able to sponsor a wide variety of non-profit activities. T-HT Hrvatski Telekom donated at total of HRK 775,000, or approximately EUR 102,061, to the projects suggested by its employees in 2011.

CR Report from the previous year

#### 50x1,000 employee initiative.

We launched the corporate giving initiative, 50x1,000, in the Bonn area in summer 2011. We asked employees to suggest non-profit projects to receive donations. For the project to qualify for a donation our employees had to demonstrate voluntary involvement in it. Suggestions included volunteering to renovate a Bonn day care center and sponsoring a school orchestra for which an employee volunteered regularly.

Because of the positive response to this initiative, we launched the "Everyone needs education—education needs everyone" project in December 2011 in cooperation with the Telekom Foundation. The project supports employee volunteer work at day care centers and schools that focus on the STEM <sup>[]</sup> subjects.

#### Community support in Slovakia.

The Helping the Community sponsorship program was launched for the eighth time in October 2011. Employees of the Slovak Telekom have the opportunity to suggest projects to be sponsored, thereby contributing to the development of their local communities. 152 projects were submitted in 2011, 66 of which were chosen and sponsored with up to EUR 1,000. The total amount donated came to EUR 60,000.

#### Employees donate money and goods to those in need.

#### Donating money to Herzenswünsche e.V.

The Sales and Service Quality Management unit has been donating money to Herzenswünsche e.V. for over two years. Employees donated EUR 1,000 to help critically ill children in 2011.

#### T-Systems Malaysia.

T-Systems Malaysia has been giving its employees the opportunity to get involved by conducting donation drives since 2009. In October 2011 the company used the Hindu Festival of Lights as a reason to donate. Employees donated MYR 2,719 (around EUR 671) for clothing and food and helped purchase the items as well.

#### Cosmote Greece donates goods.

As part of the program "Cosmote family helps Greek families" Cosmote Greece employees have been regularly donating clothing, games, books and food to families in need since 2005. In December 2011, around 115

employees donated a total of 98 boxes filled with clothes, toys and food which were then donated to two institutions for children in January 2012. Earlier in the year, employees had already collected a total of eight boxes of food which were donated to families in need.

#### PTC employees donate part of their pay.

Employees of the Polish subsidiary PTC can have their donations for projects and institutions of their choice directly taken out of their paycheck as part of the Together for Others campaign since 2003. PTC matches the donations and then sends them to its collaboration partner, the <u>United Way Foundation</u>. Through this program, PTC and its employees have helped finance over 100 different projects, including projects for education and health. Employee donations totaling PLN 49,070 (around EUR 11,804) were collected in 2011. The foundation received around EUR 23,608 after the company had matched that amount.



Home > Society > engagement@telekom > Partnerships with NGOs

# Partnerships with NGOs.

Telekom emphasizes long-term cooperation when it comes to its involvement in the community. We are involved in long-lasting partnerships with various organizations such as the Nummer gegen Kummer youth counseling line and DKMS, the German bone marrow donor center. Our employees also play an important role in our involvement. They regularly volunteer and donate to good causes.

#### EUR 1.5 million donated to Ein Herz für Kinder.

Deutsche Telekom donated EUR 1.5 million to the German charity organization Ein Herz für Kinder in December 2011. Chairman of the Board of Management René Obermann presented the check to host Thomas Gottschalk during the Ein Herz für Kinder gala event, which was broadcast live by the German television station ZDF. 158 of our Telekom employees volunteered at the call center in Brühl to answer the calls of people wanting to donate and help the process run smoothly.

#### Employee involvement in cell phone collection campaign.

Telekom employees also participated in various initiatives to support Telekom's major cell phone collection <u>campaign</u> to benefit the Ein Herz für Kinder charity. Employees in Düsseldorf held a children's activity day where kids could get their face painted and receive a teddy bear by handing in an old cell phone at the Telekom Shop.

#### Women's Soccer World Cup 2011 campaign in Germany.

We were also involved in other activities over the course of the year and donated the proceeds to various organizations. For example, the German Football Association and the German women's national team sponsored Telekom's Herzrasen <u>campaign</u> during the FIFA Women's Soccer World Cup 2011.

#### Collaboration with DKMS.

Since we started collaborating with DKMS, the German bone marrow donor center, in 1994 we have conducted 97 company typing drives and one Christmas donation campaign.

19 typing drives were held at eleven Telekom offices in Germany in 2011. A total of 855 employees signed up to be registered in the database for the first time. Six German employees donated stem cells in 2011, giving sick people the chance at a new life. The "life savers" were recognized for their involvement on December 5 at <u>Volunteer Day</u>. 6,000 Telekom employees participated in the typing drive that was held in Münster in January 2012.

#### Trainees donate EUR 1,000.

Telekom trainees presented a check for EUR 1,000 to DKMS on May 19, 2011. They sold homemade baked goods to raise money for DKMS. The bake sale was held as part of Telekom's Germany-wide "Responsibility wins" initiative that has been ongoing since February 2010. At several events in Berlin, trainees also called upon their colleagues to register in the donor database and launched a DKMS blog as well.

#### Employees donate bonus.

Employees of the Systems Integration unit at T-Systems donated their employee bonuses totaling EUR 10,000

to DKMS in September 2011 to help fight leukemia.

#### CR Report from the previous year

Telekom sponsors <u>DKMS</u>, the German bone marrow donor center, in its fight against leukemia. We have been conducting company typing drives and assuming the costs for employee typing for 16 years. Every potential donor who wants to be registered in the DKMS bone marrow database submits a tissue sample to be typed. More than 6,000 Telekom Deutschland employees have been registered in the database as potential stem-cell donors since 1994 as a result of 97 registration drives within the company. Since then, more than 60 employees have given leukemia patients the chance at a new life by donating stem cells or bone marrow.

#### EUR 10,462 from pixel campaign.

On January 24 and 25, 2012, visitors to the <u>nachhaltig-handeln.telekom.com</u> website had the chance to resolve blurry images pixel by pixel. The image became clearer with each square they clicked on until it was entirely visible. We donated one euro to a charity for each pixel that was clicked on. The choices were:

- Children's charity Ein Herz für Kinder
- Environmental aid organization Deutsche Umwelthilfe
- German bone marrow donor center DKMS
- · Aid organization for people with mental disabilities, Lebenshilfe
- Youth counseling line Nummer gegen Kummer
- Food bank association Die Tafeln

Participants decided which of the six charity organizations they wanted their donation to go to when they clicked on the pixel. We donated a total of EUR 10,462 and are planning to continue this campaign.

#### Successful blood drives.

Numerous international Telekom subsidiaries conduct regular blood drives.

- Crnogorski Telekom responded to a request by the Montenegrin Red Cross and the Blood Transfusion Center and conducted a blood drive in 2011. Around 50 employees and managers gave blood. Crnogorski Telekom also donated three mobile transfusion beds to the Blood Transfusion Center.
- In collaboration with partners from the non-profit Slovakian Donor's Forum, Slovak Telekom organized a blood drive during the Volunteer Days on September 23 and 24, 2011. Almost 200 employees and managers from eight large companies donated a total of more than 90 liters of blood.
- Employees from the Greek subsidiary OTE donated a total of 3,189 units of blood in 2011. 1,135 of these were made available to OTE employees throughout Greece and the remaining 2,054 were made available to the public.
- T-Systems Slovakia also conducted blood drives as part of two "health weeks" in May and October 2011. A
  total of 69 employees donated more than 31 liters of blood at the drives.

CR Report from the previous years

#### First aid refresher course.

Telekom in Germany offered its employees a free first aid refresher course in 2011. Some 2,000 employees at

50 locations attended 133 courses. They are now able to assist in emergencies alongside the company's mandatory first aid staff.

#### Cooperation with City Year at T-Mobile USA.

T-Mobile USA has been cooperating closely with the U.S. organization City Year, which organizes activities such as the T-Mobile Huddle Up Service Days, since 2006. T-Mobile USA donated a total of USD 1.5 million or approximately EUR 1.1 million to the organization during the reporting period, thereby supporting after-school care for children and young people. T-Mobile USA also provided City Year with WLAN and technical services. Together, both donations have a value of over USD 2 million (around EUR 1.5 million).

#### Collaboration with Lebenshilfe.

Our employees breathed life into our partnership with the German association for people with mental disabilities, Lebenshilfe für Menschen mit geistiger Behinderung e.V., during the reporting period through various <u>corporate</u> volunteering activities.

#### Christmas campaign.

Artists from the Lebenshilfe association for people with mental disabilities designed the motifs for the Group's Christmas card once again in 2011 for the second time in a row. We donated EUR 20,000 to Lebenshilfe for the motifs. Telekom employees were able to select four out of ten motifs on the intranet. 250,000 cards were printed and sent to business partners and colleagues along with numerous e-cards.

#### Slovak Telekom helps the hearing impaired.

Through its Endowment Fund, Slovak Telekom continued its social involvement in 2011. The fund concentrates on projects that promote the ability to read, the integration of people with disadvantaged backgrounds in the information society and focuses on art and culture. The Endowment Fund donated over EUR 170,000 to 49 projects in 2011.

The fund is managed by the Slovakian Intenda Foundation, which also oversees the projects being supported by the fund.

#### Continuing education offers in sign language.

Slovak Telekom's program for people who are deaf or hearing impaired and want to start up their own business entered its fourth year in 2011. More than 40 people with hearing impairments have attended courses as part of the Looking for Another Sense program since 2008. The courses are held in sign language. Ten people participated in the program during the reporting period.

In addition, 20 business people with hearing impairments who had already participated in a business start-up course attended a workshop in October 2011 where they learned about marketing and communication.

The Slovak Telekom Endowment Fund, which was initiated in 2007, particularly supports projects for disabled or disadvantaged people, gives them access to state-of-the-art ICT and makes it possible for them to actively participate in the knowledge society.

Collaboration with Nummer gegen Kummer.

The youth counseling line <u>Nummer gegen Kummer</u> has been providing advice to children and young people in difficult life situations for 30 years now. Numerous Telekom employees in Germany support the initiative and have been volunteering at the hotline for years. Deutsche Telekom has been a partner of the Nummer gegen Kummer youth counseling line for the past 20 years and supports the organization both financially and with technical expertise.

#### Conference on the use of state-of-the-art ICT technology.

We provided rooms at our Berlin Representative Office for the meeting of the European New Communication Technologies workgroup in late November 2011.

The event agenda included using new technologies for European help hotlines and how to best structure collaborations with companies in the ICT industry. The collaboration between Deutsche Telekom and the Nummer gegen Kummer youth counseling helpline was discussed as a positive example.

CR Report from the previous year

#### Partnership with ACHSE e.V.

The Eva Luise and Horst Köhler Foundation presented the 50,000 EUR Eva Luise Köhler award for research on rare diseases in cooperation with <u>Allianz Chronischer Seltener Erkrankungen (ACHSE) e.V.</u> for the fifth time at Telekom's Berlin Representative Office on February 28, 2012. Telekom has been supporting ACHSE, the German alliance for chronic rare diseases, since 2007. Telekom and Achse worked together to launch the <a href="https://www.achse.info">www.achse.info</a> information and communication portal, which compiles available knowledge about rare chronic illnesses for doctors and affected persons.

#### EUR 86,000 donated to Bonner Chancen competition.

The Bonner Chancen competition, designed to offer "opportunities for Bonn" and sponsored by Telekom, was held in 2011 under the slogan "Different together. You. Me. Us." Projects that improve communication between generations and cultures and help create a feeling of community, such as plays and an international song project, were the focal point of the 2011 competition. Telekom selected projects from eight schools and four youth facilities as the winners of the competition from among the 30 projects that were submitted in 2011. We donated up to EUR 10,000 to each project, a total of around EUR 86,000 to help realize the most creative and valuable projects.

Bonn residents who work with children and young people at schools and recreational facilities as well as at senior resident centers and cultural institutions were invited to participate in the competition. We received a total of 30 project suggestions in 2011.

More than 400 children, young people and adults celebrated the winners of the Bonner Chancen 2011 sponsorship competition at an event held at Telekom Headquarters on November 26.

CR Report from the previous year

Video "opportunities for Bonn"



With the <u>Bonner Chancen</u> competition, Telekom sponsored educational and recreational offers for children and young people in the city of Bonn, where its headquarters are located, from 2005 to 2011. The purpose of the competition is to provide young people with better recreational and educational facilities in an attractive environment for life in the city. Every year, Telekom donates around EUR 100,000 for participants to realize creative project ideas.

#### Helping young refugees in Austria.

Nine young refugees between the ages of 18 and 22 successfully passed T-Systems Austria's IT Essentials course in July 2011. In 55 course units, course participants learned the basic computer skills needed for an apprenticeship or to continue secondary education.

As part of the "Learning pathways" program, T-Systems Austria helps the lobby.16 organization find internships and trainee positions for young refugees. The subsidiary itself provided two internship positions in the Field Services area in the summer of 2011.

T-Mobile Austria has teamed up with lobby.16 to enhance the "Learning pathways" program. The six-month education program for young refugees includes German, English and mathematics courses and is supplemented by sector-specific training. In the case of T-Mobile Austria, these involve product training, communications and sales training as well as practice days in the stores and in customer service.

T-Systems Austria and T-Mobile Austria have joined forces with the non-profit organization <u>lobby.16</u> since 2010 to give a brighter outlook to young people by investing in their education. lobby.16 provides job perspectives to young refugees from Afghanistan and Sudan who are living in Austria without their parents, for example by helping them to find internships and training programs. The aim is to help young people develop their skills, become confident in their abilities and gain self-confidence.

#### Christmas campaigns to benefit non-profit organizations.

Many international subsidiaries use the Christmas season as an opportunity to help others.

#### Penalty payments benefit environmental projects.

As part of this year's Christmas campaign, Telekom employees in Germany donated <u>penalty payments for high  $CO_2$  emissions company cars</u>, which totaled EUR 300,000 in 2011. 4,000 employees voted to select a charity they wanted the donation to go to. 49 percent of the votes, i.e., EUR 45,000, went to the One Earth – One Ocean e. V. organization, which develops technical solutions for cleaning up plastic trash from the ocean. Naturparadies Grünhaus, a project to restore the natural landscape of a former brown coal mine, came in second with EUR 42,500. The Bonn-Beuel comprehensive school received EUR 40,000 for its plans to make the school  $CO_2$ -free.

Many international subsidiaries use the Christmas season as an opportunity to help others.

#### Traditional Christmas auction at PTC.

The Polish subsidiary PTC has been holding annual Christmas auctions since 2002. Works of art that employees created together with children in the Share your Passion project are auctioned off at the event. 950 employees participated in the auction on behalf of their departments in December 2011. A total of PLN 66,041 (around EUR 15,886) in proceeds from the auction was donated to the non-profit Polish Santa Claus Foundation. PTC gave the same amount, and so the foundation received around PLN 132,082 (EUR 31,772).

#### Montenegrin employees hand out Christmas presents.

Employees of Crnogorski Telekom in Montenegro handed out 170 Christmas presents to preschool children from the Konik refugee camp near Podgorica. 30 disabled children, all members of the Association for Children and Youth with Disabilities, received presents as well. The Montenegrin employees collected, wrapped and handed out the presents to the children.

#### Employees spread Christmas cheer in FYRO Macedonia.

The T-Mobile for Macedonia Foundation has been promoting social involvement in the FYRO Macedonia and donating to charities since 2002. In December 2011 the foundation initiated the New Year Caravan for the sixth time in a row. 30 employees from T-Mobile Macedonia and Makedonski Telekom handed out Christmas presents to 900 children at 15 institutions such as children's homes and hospitals.



Home > Society > engagement@telekom > Disaster relief

# Disaster relief.

Natural disasters such as floods or earthquakes often have devastating effects on the people affected by them. They lose everything they have from one day to the next and are dependent on help from others.

Telekom has been working with renowned partners for years in order to help the people affected and provide direct, fast help. We provide equipment and money right after disaster strikes. Our employees are always ready to help people who have been affected by floods or earthquakes.

#### Donations for tsunami victims.

After the devastating earthquake in Japan on March 11, 2011, Telekom helped its customers get in touch with relatives and friends in Japan. We also helped local aid organizations through donations.

CR Report from the previous year

#### Donations for drought victims in East Africa.

Deutsche Telekom has been supporting the <u>Aktion Deutschland Hilft</u> organization in their work during humanitarian disasters worldwide, most recently during the famine in Africa. In addition to the company's efforts, individual employees often get involved as well.

Telekom has donated a total of EUR 3.7 million to the organization since 2003, including relief donations and calls for employee donations.



Home > Society > engagement@telekom > Media skills

# Media skills.

Telekom is dedicated to promoting media skills in society. The focus here is especially on showing children, young people and the elderly how to use the new information and communications media safely, because the new media can help them to make their lives easier and participate in society.

Examples of our involvement include the Telekom@School project and initiation of the "Internet—it's not a question of age" competition, which focuses on cross-generational activities relating to media skills. One key element in this is communicating media skills to small and medium-sized enterprises.

#### Free Internet access for 34,000 educational institutions.

As part of our Telekom@School infrastructure project, we offered to permanently increase the DSL bandwidth at some 34,000 general education and vocational schools in Germany from a maximum of 6,000 kbit/s to up to 16,000 kbit/s in April and May 2011. There was no charge for the switch-over or for subsequent use of the Internet. Telekom also gave each school licenses for its new child protection software.

We also offered to upgrade the connections of all schools in <u>VDSL expansion areas</u> to VDSL in at reduced rates. VDSL in enables data transmission speeds of up to 50,000 kbit/s.

#### High-speed Internet for Greek islands.

The Greek subsidiary Cosmote has been promoting unlimited online access in rural regions since 2010 with the Surfing the World project, the only one of its kind in Greece. Its goal was to connect all schools in remote parts of the Greek islands to the broadband network and equip them with the necessary hardware by the end of 2011. Since the start of the program; the company has been able to provide online access to 4,000 students at 81 schools.

In Germany, Telekom has been providing free Internet access to around 34,000 general education and vocational schools as part of its Telekom@School infrastructure project since 2000. Some 30,000 of these schools already have a broadband connection thanks to DSLInfo. The aim is to give school children and their teachers the chance to incorporate new forms of communication and media into the educational process.

#### Data privacy becomes a focal point in the classroom.

In the run-up to the European Privacy Day, Dr. Claus-Dieter Ulmer, Data Privacy Officer at Deutsche Telekom, participated in an information event which addressed data privacy at schools and was held at the Friedrich-Ebert-Gymnasium in Bonn on January 24, 2012. The event focused on topics such as how to handle personal information, cyber mobbing and cost traps. Our offer to hold information events at schools is available throughout Germany. Interested schools can find out more on <u>Telekom's Responsibility portal</u>.

#### Video



A <u>five-minute ad</u>, also addressed the dangers of the Internet, data privacy and necessary safety measures. The ad was filmed by the <u>Telekom Foundation</u> in collaboration with the 9 b class of the Europaschule in Bornheim, Germany, during the reporting period. The students talked about their knowledge of the topic during the eight-hour filming session. The Europaschule is the first school at which this type of ad was filmed. Ads will be filmed at three more schools. The Europaschule's ad has been available on the <u>www.teachtoday.eu</u> website since February 14, 2012. The platform is targeted at teachers as well as parents who want to learn more about current media.

Teachtoday Deutschland is an initiative that was founded by Telekom, Google, Microsoft, O2 and Vodafone. The initiative's aim is to actively support teachers when it comes to using ICT technologies safely and to promote young people's media skills.

The initiative is being conducted in cooperation with the European Schoolnet as well as the klicksafe EU initiative and Freiwillige Selbstkontrolle der Multimedia-Diensteanbieter FSM e.V., the German association for the voluntary self-monitoring of multimedia service providers.

#### "Internet—it's not a question of age" competition launched.

Enabling people of all generations to use the Internet is a core responsibility of our company. That is why Telekom, Bundesarbeitsgemeinschaft der Senioren-Organisationen (BAGSO, the German association of organizations for the elderly), and klicksafe, the EU initiative for a safer Internet, launched the "Internet—it's not a question of age" competition in February 2012. With the competition, we intend to sponsor projects and activities that help teach older people how to use the Internet. The competition was launched on February 7, 2012, Safer Internet Day, under the patronage of Kristina Schröder, German Federal Minister of Family Affairs, Seniors, Women and Youth.

Winners will be selected by an independent jury in April 2012 and will receive their prizes on the tenth German Senior's Day from May 3 to May 5. Winners will receive EUR 5,000 to further finance their projects.

#### Getting seniors involved in concept design.

During the planning phase, we discussed the competition concept with BAGSO and interested senior citizens at an expert panel held on November 9, 2011. The suggestions made were taken into account in the design phase.

We have included communication about the competition into our sustainability campaign, posting all information on our <a href="https://www.telekom.com/nachhaltig-handeln">www.telekom.com/nachhaltig-handeln</a> website and thereby encouraging our customers to participate.

#### Seminars on the protection of minors in Slovakia.

Other international subsidiaries are also involved in teaching people how to responsibly handle personal information online. During the reporting period, Slovak Telekom and the NGO, e-Slovensko, conducted 543 seminars on the protection of minors for teachers and students. 1,277 teachers and 13,800 students participated in the seminars. In addition, 93,000 handbooks addressing online safety were handed out to teachers and parents. Slovak Telekom also published nine new cartoons for children addressing the risks involved in using the

Internet, cell phones and new media in an entertaining format.

### Experience the Internet—surfing together

We also continued our support of the "Experience the Internet—surfing together" initiative in 2011. Telekom sponsored the Social Networks special award for the "Wege ins Netz" media skills competition.

Telekom awards the prize to an outstanding Internet project that promotes active participation in society and encourages people to help create the future. This may be a social network or blog or a website revolving around offline activities. In 2011 the prize went to the "Be an angel today" project conducted by the Gute-Tat.de foundation in Munich, an innovative initiative that promotes short-term community involvement.

Since August 2010, Telekom has been supporting "Experience the Internet—surfing together," a pilot project initiated by the German Federal Ministry of Economics and Technology (BMWi). The initiative is directed at people that do not know how to use the Internet in a targeted way so that they can take advantage of the professional and social opportunities provided by digital media.

#### More media skills for children in Berlin-Marzahn.

The branding agency, mc-quadrat, and Deutsche Telekom teamed up with the Straßenkinder e.V. organization in late 2011 to launch a project to increase media skills among children and young people. The aim of the project is to give young people from Berlin-Marzahn the chance to learn how to use media responsibly in a way that is fun and entertaining.

Participants told their own stories using modern media and published them on their own website. They were mentored by a media education expert. The Jugendhaus Bolle youth center was equipped with digital cameras, laptops and software for implementing the project.

The young people's <u>website</u> containing initial content including photos, animation, short films and stop-motion sequences has been online since February 16, 2012.

Telekom trainees in Berlin supported the project as well. They helped the "Bolle kids" use the media responsibly and gave them valuable advice.

#### Internet mentorships started.

Our Group-wide request to employees in October 2010 to become Internet mentors received a large response. Around 400 employees are willing to help people learn to use the Internet and help them take the first steps into the online world. The program, which was initially set up to address seniors, was extended to immigrants in 2011 at the suggestion of a Telekom employee. In 2011, Telekom employees conducted over 100 Internet seminars for seniors and immigrants in Hanover alone. These activities led us to renew our cooperation with the Wikimedia organization, which runs the online encyclopedia Wikipedia, in late 2011. Wikimedia offered to let the seniors trained by Telekom work as authors for Wikipedia under a special program. The project will begin in July 2012.

Telekom and the local Volkshochschule community college conducted the "AG 50 plus" project in the city of Datteln. In January 2012, trainees taught seniors how to use cell phones at a seminar for beginners. The advanced seminar took place in February. A total of 18 seniors attended to learn about their cell phones' more advanced features.

# Update on the 2010/2011 CR program.

Sub-targets	Status of implementation/measures
Strengthen the protection of minors, improve cooperation between the programs and intensify international exchange of information about specific projects within the Group	Target achieved.  • Establishment of structures for regular exchange of information  • Youth protection guideline  • Collaborations including those with Teach Today, Frag Finn, etc.  • Child protection software, Data Privacy at Schools project  • Data Privacy at Schools project launched throughout Germany  • ICT principles  • CR manager meetings and calls were used as an exchange platform.

### 2010/2011 CR program

The current 2011/2012 CR program can be found in the "Strategy & management" section.

Home > Society > Education

# Education.

Education is one of the most important prerequisites for innovation and progress. As a technology and innovation company, Telekom also relies on qualified junior staff. That is why we consider extensive education sponsorship and encouraging young talent to be keys to long-term success.

We are very involved in making sure that future generations develop the skills they need, even beyond our company borders.

- With the <u>"Yes, I can!" initiative</u> Telekom improves the skills that enable children and young people to take on the challenges of their everyday lives and shape their life successfully.
- For many years now, the key element of our educational commitment in Germany has been the <u>Deutsche Telekom Foundation</u>, which is one of the largest corporate foundations in Germany.
- When it comes to <u>vocational training and continuing education</u> we rely on collaborations with universities, scholarships and grants.
- Our efforts to <u>promote talent</u> are designed to actively encourage STEM <sup>[]</sup> initiatives and support disadvantaged young people.

We take responsibility.



Home > Society > Education > "Yes, I can!" initiative

# "Yes, I can!" initiative.

Employees, managers and members of the Board of Management at Deutsche Telekom founded the "Ich kann was! - Initiative für Kinder und Jugendliche e.V." association in 2011. The structure and sponsorship activities of our initiative, which bears the same name, have been fully transferred to this non-profit organization in order to establish the initiative as a legal entity. Our aim is to increase sponsorship capacity through additional donation channels and collaborations with partners. This will enable us to help even more institutions in their work to support young people. The association began its work officially at the start of 2012.

#### Promotion of more than 50,000 children and young people.

Telekom once again sponsored numerous projects for children and young people from deprived areas in 2011 with its "Yes I can!" initiative. A jury selected 87 projects from among more than 850 applications. We sponsored each of the winning projects with a maximum of EUR 15,000. We have sponsored 200 projects and have helped more than 50,000 children and young people since the initiative was launched in 2009. Total sponsorship volume came to around EUR 2 million by the end of 2011. The association will again provide over EUR 500,000 for 2012.

#### Focal point: "Fair society."

A focal point of the competition in 2011 was the "fair society." We asked applicants to submit projects that promote mutual respect and tolerance, whether it be film projects dealing with social marginalization, intercultural plays or workshops on non-violent communication. Empathy and the ability to deal with conflict are key skills when it comes to making a future for oneself.

Children and young people from different walks of life and cultures, both with and without disabilities, spent one week together in 2011 at the Tolerance Camp organized by the Freidenker Barnim association in Bernau near Berlin. The camp experience revolved around values such as assuming responsibility, tolerance, trust and respect.

#### CR Report from the previous year

With the <u>"Yes, I can!" initiative</u> Telekom improves the skills that enable children and young people to take on the challenges of their everyday lives and shape their life successfully. Based on the criteria published by the Organization for Economic Co-operation and Development (OECD) these key skills include

- The ability to act independently and confidently,
- The ability to successfully interact with different social groups and
- The ability to skillfully use communication and knowledge tools.

The initiative targets children and young people between the ages of 9 and 14. By experiencing success in activities such as music workshops, cooking classes and working together to build a ship, young people are encouraged to further develop their skills. The initiative places great emphasis on supporting institutions that are in or close to deprived areas. The projects supported range from the attainment of everyday skills, to projects with a media-based or cultural focus, to programs offering new experiences.

# The "Yes I can!" project network.

During the reporting period, we continued to successively network the sponsored institutions and projects. As part of these efforts, we held the second "Yes I can!" Cup in Berlin in 2011. More than 180 children and young people from sponsored projects all over Germany came to the capital and competed in 24 teams in the soccer competition.

#### UN Decade award.

The "Yes I can!" initiative received the UN Decade Education for Sustainable Development award on February 28, 2012, for the second time. The chairman of the national committee, Prof. Dr. Gerhard de Haan, and the general secretary of the German UNESCO commission, Roland Bernecker, presented the award at an international workshop in Bonn. At the workshop, experts from all over the world discussed a variety of topics revolving around education for sustainable development.



© 2012 Deutsche Telekom AG

<u>Home</u> > <u>Society</u> > <u>Education</u> > Deutsche Telekom Foundation

# Deutsche Telekom Foundation.

The non-profit <u>Deutsche Telekom Foundation</u> has been working to improve education in the STEM subjects (science, technology, engineering and mathematics) since 2003. With a trust capital of EUR 150 million, it is one of the largest corporate foundations in Germany. The foundation is active in the following areas:

- Early education,
- Teaching and more,
- Teacher training,
- Promoting talent, and
- Incentives.

Some EUR 10.9 million went into project work in 2011. The foundation participates in the Group's <a href="mailto:engagement@telekom">engagement@telekom</a> corporate volunteering program. Under the slogan "Everyone needs education—education needs everyone" the program primarily sponsors employee volunteer activities at day care centers and schools.

# The Science—Nature—Knowledge project.

The Deutsche Telekom Foundation began training multipliers in 2010 as part of the Science—Nature—Knowledge project. These multipliers go on to train staff at day care centers throughout Germany. We trained 250 multipliers in 2011, and will have trained a total of 650 multipliers by the fall of 2012. The foundation also donates course materials to the centers. These materials were developed over the past few years by the Science—Nature—Knowledge project.

#### Training educators.

The Telekom Foundation, the "Haus der kleinen Forscher" foundation and the "Schulen ans Netz" association (BIBER network) held a conference on teacher training on September 14, 2011. Based on the results of the conference, the Telekom Foundation plans to increase its activity in this area based on the training curriculum for educators, which will be developed by the Science – Nature—Knowledge project by fall 2012.

#### Planned cooperative project.

Once the Science—Nature—Knowledge project has been completed, the Foundation is planning to conduct a cooperative project to promote the training of educators at vocational schools and universities in Germany. A skills model focusing on two central aspects—educators' skills and their personal development—is being developed as the basis for the project. The model is not based on a particular subject so it can be used with different content and applied to various areas. The STEM [1] skills are being used as an example.

#### Forschergeist 2012 day care competition.

The Science—Nature—Knowledge project and the "Haus der kleinen Forscher" foundation launched the Forschergeist 2012 competition on December 1, 2011. Day care centers throughout Germany are encouraged to submit their STEM concepts. The competition is under the patronage of the German Federal Minister of Education, Prof. Dr. Annette Schavan. Prizes will be awarded in June 2012.

#### CR Report from the previous year

Science—Nature—Knowledge is the largest individual project focusing on early education. The Deutsche Telekom Foundation has been helping teachers communicate STEM <sup>11</sup> skills to young children since 2006 as part of these activities.

#### Supporting the "Interactive schools" initiative.

The Deutsche Telekom Foundation will financially sponsor the "Interactive schools" project until the end of the 2011/2012 school year as its contribution to helping transition the project over to the patronage of the German federal states. This will make it possible to integrate new media into teaching and learning activities at more than 40 schools.

#### Germany-wide network get-together.

The foundation held a get-together with some 100 participants on November 24 and 25, 2011, at the Wissenschaftszentrum Bonn as part of the project. Participants discussed topics such as the Internet, data privacy and social networks. One focal point was the responsible use of social media.

The Deutsche Telekom Foundation initiated the "Interactive schools" project in 2005 as part of its "Teaching and more" focus. The project investigated the integration of new media into teaching and learning activities. Teachers developed their own concepts for incorporating new media into the classroom at an initial 4 and then later at 42 secondary schools in the German states of North-Rhine Westphalia, Hesse and Saxony.

#### Math whiz competition for teachers.

#### Competition for math whizzes.

The Telekom Foundation launched a competition for math whizzes in 2011. The foundation called on all teachers from lower secondary schools throughout Germany to submit innovative or tried-and-tested concepts to assist young people with weak math skills.

A jury of experts selected the best concepts from among the 20 submissions and presented the winners with EUR 3,000 each on November 22, 2011 at the first "Be a math whiz" multiplier conference.

#### 2012 multiplier conference.

A second multiplier conference will be held in 2012 to develop and test modules for working with decimals, fractions and percentages. Sub-projects on teacher training and school development were launched in late 2011.

The Deutsche Telekom Foundation has made improving education in mathematics one of its focal points. Under the foundation's focus on teacher training, it launched the "Be a math whiz" project in 2011 with EUR 4.1 million in funding.

The funding is used to develop and research into lesson structures, concepts and materials for struggling school students and their teachers for grades 5 through 10. The aim is to structure math classes in a way that is more individual and more effective. The project is being conducted in collaboration with Technische Universität Dortmund, Freie Universität Berlin, Freiburg University of Education and Westfälische Wilhelms-Universität (WWU) Münster. The project is scheduled to run for three years.

The foundation put out a call to bid for a mathematics teacher training competence center in 2011 at the recommendation of an expert committee set up by the Telekom Foundation. The response was tremendous: The entire German mathematics education community considered participation. In the end, four consortia comprised of a total of 17 partners participated.

### Work to begin in the 2011/2012 winter semester.

The winner was the consortium headed by Humboldt Universität in Berlin. Other participants include Freie Universität Berlin, Berlin University for Professional Studies, the Universities in Bochum, Duisburg-Essen and Paderborn and Technische Universität Dortmund. The competence center started its activities in the 2011/2012 winter semester. The center's communication platform is scheduled to go online in spring 2012. The first professional development program will start in the 2012/2013 winter semester.

The Deutsches Zentrum für Lehrerbildung Mathematik center will be designed for educational staff at day care centers and math teachers as well as other multipliers who want to develop their skills. The Foundation is planning to invest around EUR 5 million in setting up and operating the center over the next five years. Because a solid education in math is important for developing skills in the other STEM is subjects, work at the competence center will initially be focused on mathematics. The plan is to offer scientific and didactic training courses in the other STEM is subjects in the future.

## Multiplier training.

The Telekom Foundation sponsored three multiplier trainings for the Class Kits project during the reporting period. Teachers can use the experiment sets and course material to teach topics such as "air and air pressure," "sound" and "swimming and sinking" more effectively at elementary schools. The plan is to distribute the course material financed by the Telekom Foundation to some 1,600 elementary schools throughout Germany. The first 150 class kits had been distributed to participants of the Lernen vor Ort cooperative project by the end of 2011. The foundation also conducted two trainings in 2011 as part of the Science—Nature—Knowledge project for teachers of day-care educational staff from the communities involved in the Lernen vor Ort project.

The Lernen vor Ort project, which was initiated by the German Federal Ministry of Education and Research (BMBF) in 2009 in collaboration with an association of foundations comprising over 140 foundations, creates incentives for cities and districts to set up consistent, cohesive educational management structures. The Deutsche Telekom Foundation also supports the EUR 60 million project.

As the sponsor of the business, technology, environment and science category, the Deutsche Telekom Foundation contributes concepts and materials from its projects Science—Nature—Knowledge, Class Kits, Junior Engineer Academy and Doing Math Differently. The Foundation is currently planning to support the initiative for three years (2010-2013).

#### Magenta Sofa talks to reflect sponsorship activities within the company.

Deutsche Telekom Foundation has been promoting involvement in education at regional events with the Magenta Sofa talk series since spring 2011. Employees at the Telekom sites in Dortmund and Munich were invited to discuss education issues with Telekom Board members and well-known guests. Promoting talent was the focus of an event that was held in Dortmund with Chairman of the Board of Management René Obermann. Chief Financial Officer Timotheus Höttges, who is also chairman of the foundation's board of trustees, discussed

the topic of lifelong learning with employees in Munich. The talk series is being accompanied by the Corporate Responsibility department, which presents activities like the <u>"Yes I can!" initiative</u> and the engagement@telekom <u>corporate volunteering program</u>.

The talk series will be continued with events in Berlin and Hamburg in 2012.

#### Everyone needs education—education needs everyone.

Under the "Everyone needs education—education needs everyone" project, which was launched in December 2011, the Deutsche Telekom Foundation and the Corporate Responsibility department sponsored employee volunteering at day care centers and schools. In particular, employees are invited to volunteer at science, technology, engineering and mathematics projects that go beyond every day activities at day care centers and schools and to apply for financial support from the Foundation for their project. For example, employees supported excursions, project days and working groups such as a robot work group and a nature workshop.



#### Update on the 2010/2011 CR program.

Sub-targets	Status of implementation/measures
Set-up of Junior Engineer Academies with a proportion of female students of at least 50 percent	Target achieved. • Increase the number of schools with Junior Engineer Academies in Germany to a total of 32 (end of 2011)

#### 2010/2011 CR program

The current 2011/2012 CR program can be found in the "Strategy & management" section.

Home > Society > Education > Commitment to training & development

# Commitment to training & development.

As an international ICT group, Deutsche Telekom is dependent on qualified junior staff. As one of the <u>major</u> <u>vocational training providers in Germany</u>, we invest heavily in training programs for the young generation. We also set up external projects to facilitate access to the information and knowledge society for all young people.

#### T-Systems Slovakia sponsors IT training.

T-Systems Slovakia has been sponsoring IT training in the region of Košice by offering a summer and evening university program since 2006. The company offers ICT administration courses in cooperation with local universities. More than 350 students had attended the seminars at no charge by the end of 2011. The company founded the T-Systems Education Academy in 2008 in collaboration with the Technical University of Košice. T-Systems Slovakia is designing lectures on ICT for the university as part of this project. The lectures are recognized by the Slovak Ministry of Education.

In 2011, T-Systems Slovakia launched an additional educational project in cooperation with three elementary schools in Košice: Ten volunteers taught Windows and Linux to school students to make them aware of how important ICT is in education. The company plans to expand the program to reach all educational levels in the future.

#### Greek subsidiaries invest in education.

Cosmote Greece has a tradition of supporting needy students with grants and special awards. OTE joined the program in its tenth year, making it possible to award 15 instead of 10 grants. Each grant recipient received EUR 15,280. Cosmote Greece also gave 27 students an award of EUR 1,528 for exceptional academic and extra-curricular performance. That put the total amount of money granted in 2011 at EUR 270,456. The Greek subsidiaries particularly focused on students who need aid because of a disability or low-income family situation. Even in the face of the economic crisis in Greece, Cosmote Greece and OTE have not stopped sponsoring education and continue to offer paid internships. Their aim is to help make it easier for young people to start their careers and give them the skills they need to do so.

CR Report from the previous year

#### Collaboration with schools to provide wireless Internet access.

In collaboration with Marienschule in Limburg, we launched the joint WLAN-AG project in 2010. Teachers, school students, Telekom trainees and the head of the Telekom training center work together to provide the school with a WLAN access and to come up with new ideas on how to extend the school's IT infrastructure.

#### Further projects in implementation phase.

Telekom helped school students to set up an Internet access in the school cafeteria and media library in April 2011. An extension is planned for the fall break 2012 to include the teachers' lounge and the schoolyard. We are also working on a new design for the wireless network. Other projects are currently being implemented, including the installation of a school network and a learning platform.

#### Books and educational materials for children in need.

#### T-Systems Singapore collects books for disadvantaged children.

With its BookMATTERS project, which was launched in 2011, T-Systems Singapore hopes to encourage reading in small children and young readers in Asia, thereby helping put a stop to illiteracy. To help them achieve this goal, the company conducted a book drive in collaboration with the non-profit organization Blessings in a Bag. The aim is to collect 1,000 books in six months. T-Systems Singapore's 150 employees donated a total of 410 books.

#### OTE employees donate school equipment.

The Greek subsidiary also conducted a nation-wide drive for school materials among its employees during the reporting period. The company collected some 70 boxes of materials and donated them to needy children via the non-profit organization, The Smile of a Child, so that those children have equal opportunities in the educational system.

We take responsibility.



Home > Society > Education > Promoting talent

# Promoting talent.

Deutsche Telekom supports young people with talent and innovative business ideas both within the Group and outside.

#### Supporting young business talent in Austria.

For the third year in a row, tele.ring, a mobile communications brand of T-Mobile Austria, and Sony Ericsson called upon Austrian students to participate in the Bessermacher competition in 2011. The aim of the competition is to develop a mobile communications concept for the future. The best ten out of 200 teams competed against each other with their ideas before the Bessermacher jury in the grand finale on June 17. First prize was a trip to Australia. Second and third-place winners received paid internships at tele.ring and Sony Ericsson as well as cell phones. A five-member team from FH Johanneum, University of Applied Sciences, won the competition, winning the jury over with an innovative rate plan and an excellent advertising concept. The winning concept was included in the tele.ring plan portfolio.

CR Report from the previous year

#### T-Mobile Czech Republic supports start-ups.

As part of the Takeoffs project, which was launched in September 2011, 15 employees shared their expertise with future entrepreneurs. They had the opportunity to submit their business concepts to win a grant. 343 applicants—144 of which were women—submitted a wide range of ideas, from starting up a soap factory to selling hybrid cars. 42 local and two national projects received prizes valued at CZK 7 million, or EUR 280,355. The national prizes went to a tandem bike rental company and a skateboard manufacturer. Not only are the winners given financial support, they are also equipped with telecommunications packages, smartphones and laptops and given tips on how to develop their sales strategy.

#### Supporting future electrical engineers in Croatia.

T-HT Hrvatski Telekom sponsors the country's best up-and-coming electrical engineers each year during their last year of study. Six students from the Faculty of Electrical Engineering and Computer Science (FER) in Zagreb received grants for the 2011/2012 study year. Experts from the Croatian subsidiary are also available to mentor the students. They also give guest lectures at partner universities.

#### Step into Life Campaign grants.

T-HT Hrvatski Telekom joined the Zagreb Kaptol Rotary Club's Step into Life Campaign in 2011 and committed to support five scholarship holders during their regular program of study with a monthly grant of HRK 1,600 (EUR 211). The Rotary Club organized the campaign for four years in a row. The campaign supports people who left children's homes or foster homes early and therefore did not receive any higher education.

### CR Report from the previous year

# T-Sytems Slovakia's grant program.

Six students received support in 2011 under T-Systems Slovakia's grant program, which was established in 2010. The grant is organized in collaboration with the Carpathian Foundation and is addressed at students on technical degree courses who come from disadvantaged backgrounds and exhibit above-average performance. Grant recipients must also be involved in volunteer activities. The aim of the grant is to make it possible for young people from Eastern Slovakia to get an education while also increasing the number of qualified engineers in the country. Each recipient is given EUR 1,400 a year as well as advice on their chosen path.



Home > Society > Sponsorship

# Sponsorship.

Culture and sports are two areas where society gets its innovative strength. They create a feeling of community, encourage communication across borders and inspire people.

We have been involved in the world of sports and promoting the cultural landscape in Germany for almost twenty years. In the meantime, we are among the largest sponsors in these areas in Germany. The international subsidiaries are also active in promoting culture and sports. This approach is an expression of how we see ourselves as an international company that accepts its corporate responsibility.

Our cultural sponsorship activities are also focused on promoting music and fine arts. We support established as well as up-and-coming artists.

Regardless whether it is competitive sport, mass sport, school sport or sport for the disabled—what matters to us is team spirit, tolerance and our responsibility toward society. These values are at the core of our sports sponsoring activities.



<u>Home</u> > <u>Society</u> > <u>Sponsorship</u> > Cultural sponsorship

# Cultural sponsorship.

Deutsche Telekom encourages variety in cultural expression from Beethoven and electronic beats to contemporary fine art and cross-over cultural events. Together with various partners from the national and international music and art scene, we want to give people access to an extensive cultural event offer and contribute our experience in effective and broad-based communications and marketing. We also provide state-of-the-art technology and products as needed.

# 28 participants from 13 countries participate in the Telekom Beethoven Comp

The international competition ended on December 10, 2011, with the finale at the Beethovenhalle in Bonn. 95 pianists from 33 countries applied for the fourth annual International Telekom Beethoven Competition Bonn, which was initiated by Telekom. The selection panel admitted 28 participants from 13 countries to perform at the piano competition in Bonn.

In addition to prize money for the best solo performance as well as other special awards, pianists can also win coveted concert engagements. On December 1, the candidates were presented to the audience at the Welcome Concert. They demonstrated their skills before an international jury from December 2 to December 10 in Bonn.

#### EUR 60,000 in prize money.

Jingge Yan from China won the competition in 2011. The pianist was ecstatic about his victory, for which he received EUR 30,000 in prize money and a studio production contract to record his own CD. The International Telekom Beethoven Competition Bonn awards cash prizes worth more than EUR 60,000.

We support young musicians on their way to the top, for example through the <u>International Telekom Beethoven Competition Bonn</u> which we launched in 2005. Our partners are the piano manufacturer Steinway & Sons, the city of Bonn, the Beethoven Orchestra in Bonn and the Beethoven-Haus Bonn. Every two years, young pianists from all over the world play before a top-class international jury.

#### Telekom Street Gigs for the fifth year in a row.

More than 35,000 fans have come to see live concerts at unusual locations, including ferries, botanical gardens and parking structures, since 2007.

The concert series is especially popular among the young crowd. More than 40,000 fans applied for tickets for concerts featuring artists such as Robyn, Thomas D., Milow, White Lies, The Subways, Jennifer Rostock, Clueso and Casper during the reporting period. The online live stream registered 70,000 viewers, which is a significant increase compared to the previous year.

### 95,000 active community members.

In addition to the concert visitors, three million people watched the concerts on TV during the reporting period. The Street Gigs online community experienced an increase of active members from 25,000 people to 95,000.

With the <u>Telekom Street Gigs</u>, we have been making a contribution to the German music scene since 2007. The concert series creates a unique music experience featuring national and international mainstream artists based on the slogan "The best bands at unusual locations."

### Electronic Beats throughout Europe.

In 2011, we hosted 18 music events in Germany, Austria, the Czech Republic, Hungary, Croatia, Poland, Slovakia and the Netherlands as part of the Telekom Electronic Beats music and lifestyle event. Established and young, up-and-coming artists performed in front of tens of thousands of fans.

From December 19, 2011, to January 8, 2012, we displayed a photo exhibition on Bryan Ferry's career at Admiralspalast in Berlin. The U.S. musician opened the show himself.

We were able to raise EUR 5,350 for the Kölner Jugendzentren GmbH youth center organization at the Electronic Beats Christmas Bazaar in December 2011.

<u>Electronic Beats</u> is Telekom's international music and lifestyle program, which has been enjoying much success for ten years now. In addition to hosting live events throughout Europe, Electronic Beats also publishes a quarterly music and club magazine, the Slices DVD series with new tracks from the world of electronic music and the <u>electronicbeats.net</u> website.

#### Extreme Playgrounds breaks record.

Under the slogan "Life is for sharing," we have been hosting Telekom Extreme Playgrounds since 2007. Up to 18,000 predominantly young people have been attending our events every year in Duisburg, Hamburg and Berlin where they experience a combination of an extreme sports and festival feeling.

In 2011, 4,400 visitors attended two sold-out events in Duisburg in April. 8,500 people came to Hamburg in August and 5,500 came to Berlin, which was a new record.

We managed to increase the reach and recognition of the event series in Germany during the reporting period. With almost 50,000 Facebook fans, Telekom Extreme Playgrounds is the most popular extreme sports event in Europe and one of the five most reputable music festivals in Germany. The media-related value also increased significantly in the event series' fifth year.

We have been supporting <u>Telekom Extreme Playgrounds</u> as chief sponsor since 2007. The event, which combines extreme sports and music, is especially popular with young people. Top athletes from all over the world compete against each other in BMX, mountain bike, wakeboarding and skateboarding competitions. Popular bands keep the party atmosphere going between the competition rounds.

#### New Horizons International Film Festival in Wroclaw.

Sponsoring the New Horizons International Film Festival, one of the largest of its kind in Poland, is one of Polish subsidiary PTC's key sponsorship commitments. More than 111,000 people came to see films at the festival in 2011. A total of 483 films from 44 countries were shown. PTC became the chief sponsor of the Nowe Horyzonty Edukacji Filmowej film project in 2011, a project conducted by Polish students.

# T-HT Hrvatski Telekom sponsors contemporary art in Croatia.

T-HT Hrvatski Telekom has been a partner of the Museum of Contemporary Art in Zagreb since 2007. The Croatian subsidiary supports the museum both financially and by providing the telecommunications infrastructure and associated services. The T-HTnagrada@msu.hr competition was held for the fourth time in 2011 as part of the cooperation. The competition is the most renowned annual award for contemporary art in Croatia. The winning pieces are exhibited at the Museum of Contemporary Art as part of the T-HT Hrvatski Telekom collection.

We take responsibility.



<u>Home</u> > <u>Society</u> > <u>Sponsorship</u> > Sports sponsorship

# Sports sponsorship.

Our sports sponsorship philosophy is centered around the values of fairness, tolerance and team spirit. We promote these values, which also apply to our company, as part of long-term commitments and collaborations. Acting on our social responsibility, we are now more active than ever in supporting mass sport, school sport, sport for the disabled and talented young athletes. But our support of top athletes and our collaboration with the Deutsche Sporthilfe foundation and Deutscher Behindertensportverband also play an important role in our sponsorship activities in 2012, the year of the Olympic Games and the Paralympics in London.

#### Association of sponsors and Telekom draw up guidelines.

The sponsors association "S20 – The Sponsor's Voice," chaired by Stephan Althoff, head of Group Sponsoring at Deutsche Telekom, developed guidelines on hospitality and criminal law in July 2011 in collaboration with the Initiative Sportstandort Deutschland. The initiative was launched together with the Deutscher Olympischer Sportverbund sports association and the German Ministry of the Interior.

The initiative's goal is to discuss urgent challenges in the world of sports and to develop appropriate solutions. The guidelines will also be integrated into the Group's sponsorship policy.

### Integrative "New sports experience" school project.

The "New sports experience" school project, which was launched in 2009, focuses on promoting respect, tolerance and fairness among people with and without disabilities. Following North-Rhine Westphalia, Baden-Württemberg, Lower Saxony, Bremen and Hamburg, the project was also launched in Bavaria, Berlin and Brandenburg in 2011. Around 45,000 students from more than 400 schools have participated in the project since October 2009.

#### Experience blind soccer and single skis.

Students were trained in different disabled sports in order to raise awareness and promote tolerance. Students from a school in Munich, for example, played blind soccer with Oliver Bierhoff, manager of the German men's national soccer team, and Steffi Jones, president of the organizing committee of the 2011 FIFA Women's World Cup. In Berlin and Brandenburg, students at 50 schools tried out wheelchair basketball and soccer for a day in mid-October. In February 2011, Martin Braxenthaler, the most successful single skier of all times, showed young people the ropes of his discipline.

A total of 18,750 students from 125 schools participated in the project in Bavaria, Berlin and Brandenburg during the reporting period.

#### DFB and the DFB's Sepp Herberger Foundation are new partners.

Alongside the kick-off to the school sports project in Berlin and Brandenburg, the German soccer association DFB and DFB's Sepp Herberger Foundation announced their partnership with the project. This will enable us to integrate blind soccer into the project even more effectively for the long term.

#### Public Sponsoring award received.

We received the FASPO Award from the German Fachverband für Sponsoring e.V. association in the Public

Sponsoring category in March 2011 for our involvement in the "New sports experience" school project. The jury stated that the project was a success and a valuable experience for young people.

#### CR Report from the previous year

In collaboration with the German disabled sports associations <u>Deutscher Behindertensportverband</u> and <u>Deutscher Rollstuhl-Sportverband</u>, we launched an unprecedented school project in Germany called "New sports experience" in October 2009. Students attending grades 7 to 10 are given the chance to experience first-hand what disabled sports are like. The kids get the chance to play sports that they would not normally find at their schools, including wheelchair basketball, goalball and blind soccer. Getting this unusual perspective makes it easier for them to understand and respect people with disabilities.

### Promoting disabled sports.

In line with its disabled sports sponsorship, Telekom supported the IPC Swimming European Championships that were held in Berlin from July 3 to July 10, 2011. The Group provided the communications infrastructure for the European Championships, which was the largest swimming competition in the history of disabled sports with 450 athletes from 40 countries. As a leading telecommunications company and official provider, we also supplied communications technology as well as products and services.

#### Voting for the disabled athlete of the year.

In November 2011, Telekom supported the disabled athlete of the year election process. The event took place at the Deutsches Sport- und Olympiamuseum in Cologne. Skiing professionals Anna Katharina Schaffelhuber and Gerd Schönfelder and the German women's national basketball team received awards at the gala event.

CR Report from the previous year

#### Employees get involved in athlete sponsorship.

Around ten months before the kick-off to the Olympic Games in London, we launched the Telekom for Germany campaign in September 2011 in Bonn with a special sports sponsorship campaign day. Around 123,000 Telekom employees in Germany have the chance to get involved as "official sponsors" of German Olympic athletes. The registration deadline is shortly before the start of the event in late June 2012. So far, 1,500 Telekom employees have signed up. Participants can win a trip to the 2012 Olympic Games in London.

#### Advertising at a German Bundesliga basketball match.

Telekom provided advertisement space for the "Dein Name für Deutschland" campaign run by Deutsche Sporthilfe at the kick-off game to the Beko Basketball Bundesliga season in October 2011. At the top match between Telekom Baskets Bonn and FC Bayern München, ads on the players' jerseys and at the court were replaced with the campaign's logo and slogan.

### Additional top-athlete support planned for 2012.

With the campaign day and additional initiatives at Telekom locations in Darmstadt, Cologne, Düsseldorf, Stuttgart and Munich, the Group and Deutsche Sporthilfe will continue to advertise for promoting top athletes as part of Deutsche Sporthilfe's "Dein Name für Deutschland" campaign in 2012.

A tour truck, or information bus, has been advertising for the Deutsche Sporthilfe Foundation at major sporting events throughout Germany since summer 2010. Deutsche Telekom is one of four German sponsors to support this campaign. With the slogan "Your name for Germany," the truck will stop at 70 sporting events throughout

Germany each year until the 2012 Summer Olympic Games in London. Sports fans can visit the truck to become an official sponsor of the German Olympic athletes for EUR 3 a month and contribute to the German athletes' success.

### Donation drive for the "Ein Herz für Kinder" charity campaign.

Telekom's Herzrasen campaign was designed to promote the 2011 FIFA Women's World Cup in Germany, which took place in July 2011. As part of this campaign, we launched a number of initiatives centering around the World Cup to support the German charity association "BILD hilft e.V. <u>Ein Herz für Kinder</u>". We donated EUR 10,000 for each goal that the women's national team scored or a minimum amount of EUR 100,000. After the campaign, the final amount was donated to the charity organization.

#### Charity text message for people who want to donate money.

In 2011, we were also able to raise money for the Ein Herz für Kinder association through customer and employee campaigns and public initiatives at the FIFA Women's World Cup. One of these campaigns was called "Spielfreude-Tour." For this campaign, we set up a text message number via which people could donate money.

#### Communications infrastructure.

As part of the involvement in the 2011 FIFA Women's World Cup, Telekom also provided its telecommunications expertise and set up a communications infrastructure.

#### 7,000 students experience the World Cup.

Telekom as a national sponsor of the 2011 FIFA Women's World Cup, together with the Ministry for Children, Youth, Family, Culture and Sport of the German state of North-Rhine Westphalia and the Mittelrhein Soccer Association, invited students to visit the FIFA Women's World Cup under the slogan "20eleven from its best side." A total of 7,000 local kids went to a 2011 World Cup group-stage match in Leverkusen.

#### Bonn marathon.

At the 11th Bonn Marathon, which took place in April 2011, we partnered with the Berlin-based university hospital Charité-Universitätsmedizin to test an ECG live stream. One of the test subjects was Lena Schöneborn, Olympic gold medalist in modern pentathlon. She had already participated in the Telekom relay race. During the test, <u>data</u> was sent directly to the cardiovascular telemedicine office at Charité hospital in Berlin, via a wireless high-speed connection, where doctors were able to evaluate the data in real time.

#### 450 Telekom employees at the start line.

Telekom has been sponsoring the Bonn Marathon since 2005. 11,000 people, including 450 Telekom employees, participated in the race in April 2011. In November 2010 we had set up the "Staying in shape in the winter" training program to prepare our employees for the marathon. The training program included organized runs, training schedules, trainers and different presentations. A total of 1,300 employees took part in the training program.

#### 2,100 sign up for the training program.

In 2012, we are again supporting the Bonn Marathon and are preparing our employees for the race with our "Staying in shape in the winter" training program By the end of February 2012, a total of 2,100 employees had signed up, more than ever before. In addition to Bonn, we are now also offering the training program at the Telekom locations in Münster, Hanover, Darmstadt and Munich.

The Greek subsidiaries OTE and Cosmote also sponsored sports in Athens. In 2011, Cosmote sponsored the Athens Classic Marathon for the sixth time. A total of 110 employees were there at the starting line Cosmote made a donation to the I MITERA Baby Center for every kilometer its employees ran.

OTE was involved in the Athens Classic Marathon for the first time in 2011. 91 employees turned out to participate in the event. OTE donated EUR 5 to the Hellas Muscular Dystrophy Association (MDA Hellas) for every kilometer run. The organization supports people with neuromuscular diseases.

### OTE and Cosmote support Special Olympics.

Cosmote and OTE also sponsored the 2011 Special Olympics Summer Games in Athens. They provided the entire telecommunications infrastructure and services for the Special Olympics. Both companies also launched a volunteer program to support the Games. 169 employees from all over Greece participated in the program.

Home > Employees

# Employees.



Telekom is committed to promoting women. Doesn't it make more sense to offer options for balancing career and family to all of our employees, regardless of gender?

Find out more

# **Employees.**

What makes a company successful in the long term? Telekom has a simple answer: A company needs a lively corporate culture and structures that facilitate and promote new ideas. We have taken key measures on our way to establishing this kind of corporate culture and becoming the most highly regarded service company in our industry.

### Sustainable employers support their employees throughout every life phase.

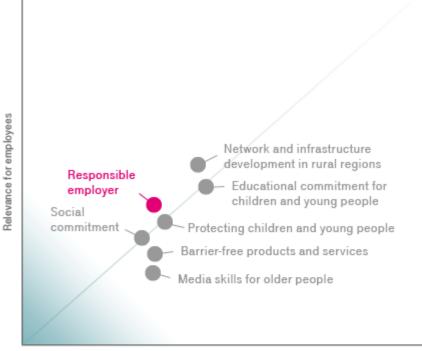
How is Telekom responding to the demographic shift? What is it doing today to prepare for the work environment of tomorrow?



CR category "Connected life and work"

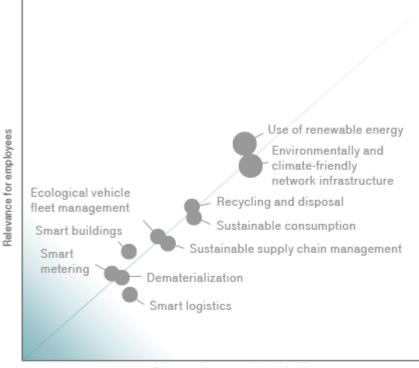
Relevance for external stakeholder

# CR category "Connect the unconnected"



Relevance for external stakeholder

CR category "Low carbon society"



Relevance for external stakeholder

The matrices map the results of our 2012 stakeholder survey. We use the survey to determine how relevant our internal and external stakeholders consider the various topics addressed by our <u>CR categories</u> to be. Further information regarding the stakeholder survey can be found in the <u>"Strategy & management"</u> section.

We take responsibility.



<u>Home</u> > <u>Employees</u> > Competitive workforce

# Competitive workforce.

#### Sustainable HR work for customer-focused services and products.

We want and need to strengthen Telekom's global competitiveness, customer focus and flexibility. In order to achieve this, we not only need an innovative service and product portfolio but also efficient corporate and HR structures. This approach will enable us to create secure jobs with long-term perspectives. We structured our human resources activities around three core topics in 2011:

- Human resources planning: We introduced our qualitative HR planning approach throughout the Group. At the heart of this approach is the concept of <u>Total Workforce Management</u>.
- Personnel restructuring: We continued our organizational and personnel <u>restructuring</u> activities in Germany and Europe.
- Occupational health and safety: We further expanded our exemplary occupational health and safety scheme.



Home > Employees > Competitive workforce > HR planning

# HR planning.

In order to remain competitive, we need to incorporate future developments into our HR planning activities. We need to be able to identify upcoming challenges as early and reliably as possible, whether these be changes on the market, technological advancements or the effects of demographic change.

Total Workforce Management: At the heart of Group-wide, qualitative HR planning.

We need to be able to judge whether we have the right personnel for our business activities—the right number of employees at the right time with the skills and abilities needed for the job. Personnel costs need to be acceptable as well. To this end, we have set up qualitative and quantitative HR planning. Its core element, Total Workforce Management (TWM), gives us one of the world's best methods for HR planning and management. The first step was to standardize the SAP-based data basis. We are now able to determine how many employees with which skills we need by simulating and analyzing various estimates relating to factors such as demographic developments and future business demands. This will help us make sure that we have the experts we need at the right time. It also means that we can find alternative work options for our specialists as needed. And Total Workforce Management helps us meet our responsibility of providing long-term employment and creating interesting development opportunities for our employees. We can make decisions regarding HR development, the vocational training structure and the number of trainees and direct hires we will need in upcoming years as well as whether and how we can best realize new business models. Moreover, we also incorporate services procured from freelancers or external service providers, through offshoring for instance. Of course, we involve employee representatives when making all of these decisions.

# Ongoing internationalization of the Total Workforce Management approach.

We began working with the Total Workforce Management approach in 2008/2009 in pilot areas at Telekom, for example for HR planning activities in Germany. One of our main aims was to look at the current skills profiles of the workforce and to compare it with future business demands. We expanded the method in 2010 and 2011 by adding planning tools for the demographic and skill-specific workforce structure, for example, in order to optimize our continuing education budget and training policy. We also introduced Group-wide Labor Cost Management . At the same time, we embraced the TWM approach in the entire Group worldwide. Most international subsidiaries—for example in Brazil, Malaysia, Mexico, Poland, Slovakia, South Africa, the Czech Republic and Hungary—now rely on defined TWM procedures for strategic, integrated HR planning. We have introduced TWM at more units since the beginning of 2012, e.g., in the OTE Group (Greece), T-HT Hrvatski Telekom (Croatia) and at our central innovation unit Products & Innovation.



<u>Home</u> > <u>Employees</u> > <u>Competitive workforce</u> > Personnel & organizational restructuring

# Personnel & organizational restructuring.

We are getting our corporate and personnel structures ready for the future. We have been streamlining our global corporate organization and making sure that personnel restructuring is moderate and as socially acceptable as possible wherever necessary. In 2010 we merged the mobile and fixed-network arms into One Company in Germany and under the Group umbrella. The same change has already been completed in Croatia, Slovakia and Hungary.

#### Streamlining business customer sales.

The company and employee representatives have agreed to streamline the previously segmented structure of our information technology in Germany. Business Customer Sales will be represented by 16 sales and service centers and 28 sales offices and IT will focus on eight innovation centers. This transformation is to be completed by mid-2014.

#### New company for fiber-optic network expansion.

On January 1, 2012, we set up our own German company for the expansion of the fiber-optic network This will enable us to expand the broadband network more quickly as well as make it more flexible and economical.

#### Bundling accounting functions.

We are combining our accounting operations for Europe and South Africa in Bratislava. This is a successful example of constructive <u>employee relations</u> on a European level. The European Works Council (EWC) received early notification and made comprehensive use of its consultation rights.

#### Restructuring at OTE Group.

The crisis in Greece means that the OTE transformation is taking place in a very difficult economic and political atmosphere. In spite of this situation and despite the restrictions of labor law and collective agreements dating from the time when OTE was a nationalized company, we have been able to make some important progress. Through a range of measures—including overtime reductions, shorter working weeks with lower salaries, as well as the training and transfer of employees from non-profitable workplaces to new roles—we have been able to make substantial reductions to the high personnel costs.

#### T-Systems Act4Service project.

T-Systems has been working within the framework of a new business structure in Germany since July 1, 2011, and doing so at all business units worldwide since January 1, 2012. The new structure creates the conditions for easier operations across sectors and national boundaries and was introduced as part of the Act4Service project. It is subdivided into the Sales, Service, Production and Systems Integration areas.

#### Streamlined Service Headquarters.

2011 saw the launch of plans for a streamlined Service Headquarters. We will implement these plans in the second half of 2012 following consultation with employee representatives. From then on our Group Headquarters will be staffed by fewer than 1,000 employees, managed with more strategic, performance and results-based focus.

### T-Mobile USA adopts Total Workforce Management approach.

On March 20, 2011, Deutsche Telekom AG and AT&T signed a contract for the sale of T-Mobile USA. Following the U.S. authorities' decisive stance against the transaction, the sales agreement was canceled on December 19, 2011. In 2012 we will embark on qualitative HR planning for T-Mobile USA on the basis of <u>Total Workforce Management</u> and initiate the necessary demand-based restructuring.

#### Staff restructuring tools.

In order to make the necessary business-driven personnel restructuring as fair and socially considerate as possible, we use tried-and-tested tools that encourage employees to leave the company voluntarily. In Germany some of the most notable examples include early retirement for civil servants and the new provisions, issued in the fall of 2011, on phased retirement for older employees, employees outside collective agreements and senior executives. The benefits granted by these provisions substantially surpass statutory norms. We also assist employees who are interested in professional reorientation.

In recent years the measures promoting voluntary exits and the business-centered reorganization of Deutsche Telekom have helped us improve productivity, effectiveness and age structures in numerous areas, particularly at T-Systems and Telekom Deutschland. At the same time we have reorganized sections within our Shared Services —for example in Human Resources, Accounting and Vivento—and further improved quality and efficiency as a result. We will be continuing this process in other administrative areas in the years to come.

#### Vivento—successful work in 2011.

One of <u>Vivento's</u> most urgent tasks as a service provider for socially acceptable workforce downsizing is to offer employees alternative employment prospects in good time—in the public as well as the private sector. In 2011 we provided around 6,900 employees in Germany with alternative employment—externally and internally. More than 3,100 of them are working temporarily in the public sector and over 200 employees have found a new permanent position in the public sector. We secured new public-sector partners for Interamt, the employment portal we launched for the public sector, and made the portal even more attractive for employers and applicants.



Home > Employees > Competitive workforce > Health management

# Health management.

Requirements on our employees and executives are increasing in many areas of the company. As a caring employer we want to be proactive in countering any possible physical and mental overload. We have already attained a recognized high standard in health and safety at work and environmental protection and we are constantly working to improve further. This is shown by awards such as the Corporate Health Award 2010 and certificates granted in 2011 to business areas responsible for the international Group-wide Health, Safety & Environmental Management System.

International health, safety and environmental management with high standards.

We support the Group-wide concept of occupational safety and health with a standardized international health, safety and environmental management system (HSE MS). By the end of 2011 we had introduced it in 13 German and international Group companies. Its introduction in other national companies has already begun or is being planned. With this step, we have laid the foundation for defining consistent global standards for occupational health and safety. The system is based on the international OHSAS 18001 [1], ISO 14001 [1] and ISO 9001 [1] standards for occupational safety and health, environmental protection and quality. Plans include minimum standards for hygiene, first aid and medical activities in a crisis. We have also defined standard indicators, such as the number of days absent from work. By defining minimum standards and the corresponding indicators, we intend to create not only greater transparency and better comparability at an international level, but also use these as the basis for our long-term "pandemic care plan." With this plan we specifically intend to protect our employees to the greatest extent possible. This will also allow us to maintain the global telecommunications infrastructure in a crisis.

# Components of health management.

The most important components of Telekom's health, safety and environmental management system include:

- Early warning cockpits for critical health areas
- Comprehensive employee survey on health and work pressures
- Occupational and fire safety: We have an occupational safety program for all employees in Germany in accordance with legal provisions. Occupational safety is practiced internationally in accordance with local provisions. This is monitored with spot check audits. The international subsidiaries create their own occupational safety programs within the framework of the HSE MS.
- Prevention and good health initiatives
- Employee and executive advisory service (50 experts available for psychosocial counseling)
- Free telephone counseling for professional and personal problems (9,100 calls in 2011)

#### Employee survey on health.

As part of our "Healthy Working" program, we have drawn conclusions from the employee survey (which takes

place every two years) that was carried out in October/November 2010 with 124,000 participants. The survey is one of the best and most detailed investigations into mental stress in the workplace. The results serve as an early warning signal of overall patterns of mental illnesses and general health risks and as an impetus for measures at corporate, area, team and individual level.

# Promoting health competence and health awareness.

Our health measures range from specific offers for junior staff and seminars on stress management to flu shots and health checks. Outside the realm of the employee survey, we use our health management system and preventive offers to promote health literacy and health awareness among the entire workforce—for example, through the frequently used personal and telephone-based counseling service for executives and employees. One fact is absolutely clear even without these programs and offers: the key prerequisite for a healthy corporate culture is that management staff reflect on their leadership behavior, reduce high-intensity change and improve the quality of their planning.

#### Health communication.

In 2011 we developed web-based training programs as one way of providing executives with better information on their role in workplace health and safety, and to make them aware of their responsibilities. This goal is shared by the health communication campaign for all employees. The campaign will continue throughout 2012 focusing on sport/fitness, diet and mental health. In addition, since March 2011 the intranet has hosted an international information forum on health and safety at work.

# Update on the 2010/2011 CR program.

Sub-targets	Status of implementation/measures
Improving health rate and preventing accidents (in Germany)	Target achieved.  • Implementation of an improved electronic accident reporting system (UNDIS) in Germany  • Organizational integration of health management, occupational safety and fire prevention into the Human Resources area  • Restructuring the local health and safety organization
Group-wide health management	Implementation underway.  • Development and implementation of an early warning cockpit (in Germany) for mental stress suffered by employees: early warning cockpit developed in 2011  • Deriving recommendations for action and monitoring of the measures: recommendations for action derived from employee survey results  • Implementation of a uniform management system with minimum standards and health and safety guidelines starting in 2010: 50% of international subsidiaries integrated by the end of 2012

#### 2010/2011 CR program

The current 2011/2012 CR program can be found in the "Strategy & management" section.



Home > Employees > Competitive workforce > Remuneration

# Remuneration.

Fair and market-oriented pay and benefits are a key tool to steer Telekom in times of change and high competitive pressure.

#### Deutsche Telekom is committed to fair pay.

Group Diversity Management conducted a salary survey to compare the salaries of female and male employees in March 2009. The Analysis revealed that there are no gender-specific pay differences for employees outside the collective bargaining system in Germany. Among employees covered by the collective bargaining system, we can exclude the possibility of gender-specific disadvantages, since pay is determined solely by an employee's assignment to a function group. These results prove that Deutsche Telekom practices fair pay for women and men, and is opposed to all forms of salary discrimination. The analysis was based on random sampling and will be expanded in future.

### Group-wide standardized remuneration system for executives.

Remuneration for executives has been standardized throughout the Group under the Global Compensation Guideline. The guideline ensures that remuneration packages for executives in the Group are harmonized and market-oriented. They can also be evaluated comprehensively in the respective market environment and analyzed and assessed systematically throughout the Group.

# Company pension plan.

Capital account plan: Telekom offers its employees an attractive, employer-financed company pension scheme on the basis of voluntary commitments. The capital account plan is a modern, defined contribution system. In addition to the capital account plan, Telekom also offers its employees an optional company pension scheme, which is exclusively financed by the employee. This enables employees to close any retirement income gaps and, if desired, to protect themselves against occupational disability and/or secure financial support for relatives in case of death.



Home > Employees > Competitive workforce > Internationalization

# Internationalization.

Under One Company, Deutsche Telekom is increasingly fusing into a global corporation. Just like other international groups, Deutsche Telekom is also required to define uniform standards for their global HR policy without ignoring local characteristics.

Global employee relations management—taking a multi-faceted approach to employee relations.

The Global Employee Relations Management unit offers guidance and encourages the exchange of experiences on structuring employee relations in different countries. At the "Employee relations in a connected world" conference in early May 2011, 70 leading executives from international businesses discussed the challenges presented by employee relations. This formed the basis for Deutsche Telekom's ongoing consultation with other employers to formulate forward-looking employee relations. Moreover, in a globally applicable Employee Relations Policy the Group commits itself to a high level of uniform minimum standards worldwide in dealing with its employees, taking account of different cultures, laws and needs. A monitoring system will be used to guarantee policy compliance as soon as the policy has been rolled out throughout the Group. Our policy is based on our Guiding Principles as well as on national regulations and internationally recognized rules such as the United Nations Global Compact [1], the OECD guidelines and the core labor standards issued by the International Labour Organization (ILO).

### Social Charter: Complying with minimum standards.

We passed our <u>Social Charter</u> in 2003. The Charter is also based on the principles of the Global Compact , OECD and ILO. The Social Charter contains policies on human rights and working conditions, the ban on child labor, environmental protection, equal opportunity, occupational health and safety and the right to set up or join a trade union. These policies apply throughout the Group. Our suppliers are obligated to comply with these policies as well.

Cooperation with employee representatives on both a German and international level.

Again in 2011 we successfully continued to pursue intensive dialog with the bodies representing employees within the Group in Germany. The implementation of numerous measures and projects would not have been possible without the participation of elected employee representatives. This is where we are seeing the fruits of our commitment to cooperation based on trust, as outlined in the Group Policy on Employee Relations. A key role falls to the Group Works Council, our contact point for all co-determination issues within the Group in Germany. In the European Works Council (EWC), too, Deutsche Telekom nurtures an active relationship with the employee representatives of our European subsidiaries and affiliated companies.

Sub-targets	Status of implementation/measures
Strengthen international employee relations	Implementation underway  • Finalize implementation of Employee Relations Policy  • Monitor Employee Relations Policy

# 2010/2011 CR program

The current 2011/2012 CR program can be found in the	"Strategy & management" section.



Home > Employees > Service culture

# Service culture.

#### The way to outstanding employee services for HR customers.

Telekom needs a common, global corporate structure to come out on top as a service company and innovation engine on its markets. We have already established the fundamental values on which such a corporate structure is based with our <u>Guiding Principles</u>. We particularly focus our efforts on making sure our executives exhibit effective leadership and exemplary service conduct and that our employees participate and assume shared entrepreneurial responsibility in order to make sure that our new corporate culture becomes ingrained at the company and can grow.



Home > Employees > Service culture > Guiding principles

# Guiding principles.

#### Guiding Principles and Code of Conduct rolled out worldwide.

In 2010 we updated our <u>Code of Conduct</u> (CoC), which is mandatory throughout the Group. This is where our Guiding Principles are substantiated and defined. The Code of Conduct helps to illustrate what the Guiding Principles mean for employees and executives in their everyday working lives. We call on our executive staff to set an example of the conduct we expect from our employees. We are expecting all employees of the Deutsche Telekom Group to strictly comply with the Guiding Principles and report any violations of legal or ethical principles.

In 2011 we began rolling out the CoC at 40 out of 42 international subsidiaries and completed the majority of these projects. We also finalized the roll-out at T-Mobile Netherlands in early 2012. The roll-out at OTE in Greece and at its affiliates will follow gradually.

#### The Guiding Principles and Code of Conduct are central pillars of the One Company strategy.

Rolling out the Guiding Principles and Code of Conduct in our Europe segment is a cornerstone of our One Company strategy. It enables us to link the fixed and mobile network businesses in our European companies and offer our customers products and services from a single source. This structural change has already been completed in Germany, as well as in Croatia, Slovakia and Hungary. Makedonski Telekom (FYRO Macedonia) began to prepare for restructuring in 2011.

# Guiding Principles Day anchoring corporate culture in daily working life.

The Guiding Principles, the corporate vision we all share, are very much alive. This is made clear not only by the second annual <u>Guiding Principles Day</u>, which took place on September 28, 2011, with a large number of participants. The results of our regular <u>employee surveys</u> confirm it too: our employees and executives are not only familiar with the Guiding Principles but are also making them more a matter of course in their daily working lives.



Home > Employees > Service culture > Initiatives

# Initiatives.

The shift over to the One Company structure in Germany and Europe calls for changes in the way we think and act as well as how we perceive service. We are promoting these changes in many ways such as offering skills development schemes such as the Service Academy and the opportunity provided by service careers.

Service initiatives provide training for 1,800 executives at the Service Academy alone.

Our executives are service role models, ambassadors and purveyors of our corporate culture. To take our service culture forward we have been enrolling executives across Germany in the Service Academy since 2008. Some 1,800 executives took part in phase 3 of the Service Academy in 2011. Each year the program consists of a two-day workshop complemented by a one-day service experience and a half-day learning module of the participant's choice.

Some of our subsidiaries have extended or introduced their own service initiatives. Here are just three examples:

- The Management Workshop@TSG at Telekom Shop Vertriebsgesellschaft targets a common understanding of the best in-store sales and service experience. The workshops took place in 2011 and achieved high participation levels and positive approval ratings.
- In 2011 we also introduced "magenta T" in our Polish subsidiary PTC. To consolidate the loyalty and high commitment levels of 6,800 employees, our Polish colleagues have worked with 80 change experts to run 200 half-day or full-day workshops.
- T-Mobile Netherlands won awards for good service, the Best Customer Performance Award (2010) and, for the Online Shop, the Best Web Performance Score (2009, 2010, 2011).

#### More than 2,000 new service jobs.

As part of our service campaign we are creating new jobs: 2011 and 2012 sees us taking on over 1,000 new employees in sales and service for Telekom Deutschland alone.

#### Service careers for over 3,600 employees since 2009.

Since 2009 we have furthered the development of over 3,600 employees under the service career model. In this way we are securing and improving the quality of our customer service along a wide front.

The service career is a career path that has been tailored to the service companies in Germany. It offers high-performing employees a high-caliber opportunity to develop professionally. The training phase takes no more than ten months and qualifies employees for a range of activities in Sales and Service in Germany, for instance as a customer service representative or team leader. With this initiative, we want to improve both our employees' personal development opportunities and their solution and service competency for our customers. The service career also offers financial rewards.

### Service Stars recognized for excellent service.

One way in which our employees are recognized for excellence in internal and external service is through personal awards. In 2011 we selected 20 Service Stars and honored them with a place on the Walk of Service at Group Headquarters. We hope this will encourage all our employees to follow their example.

**Walk of Service:** Similar to the concept of the Walk of Fame on which film stars receive a star in Los Angeles, Telekom employees are recognized on the Walk of Service by getting their own floor tile placed in the foyer at Group Headquarters.

### Update on the 2010/2011 CR program.

Sub-targets	Status of implementation/measures
All senior executives of the Group in Germany attend the Service Academy regularly	Implementation initiated in December 2007.  • Participation of almost 100% of senior executives in phases 1 and 2. Almost half completed phase 3  • Phase 4 has been underway since January 2012

#### 2010/2011 CR program

The current 2011/2012 CR program can be found in the "Strategy & management" section.



Home > Employees > Service culture > Cultural change

# Cultural change.

#### Change management to support change.

Telekom wants and needs to provide its customers with excellent service at competitive prices, both on our domestic market as well as at our European subsidiaries and affiliates. This is why we continue to reorganize our Group so that the structure of our company is as efficient as possible and at the same time as flexible as possible for our customers. The ongoing evolution of our business demands that our employees be ready to embrace change. To support and accompany it, we introduced Group-wide change management in 2009. This is the only way to get employees involved in radical change processes on our way to becoming the "new Telekom," and to integrate the corporate culture and new structures in the everyday work routine.

#### On-site change managers, global tools and expertise.

Support for uniform change awareness throughout the Group comes in the shape of the globally available Change Navigator—a kit of tools and methods—as well as certified training courses for change managers. Change managers are the HR Business Partners and executives at the local business units.

#### Change Community creates networks.

In addition to providing continuing education offers as well as access to tools and best practices, we also encourage regular communication among our change experts. We use a shared social media platform, international teleconferences and the International Change Community Conference as forums where people can share knowledge and collaborate in the Change Community in a project-oriented way and at an international level.



Home > Employees > Service culture > Employee involvement

# Employee involvement.

Our employees need to be enabled to play an active role so that they can devote their energies to the success of the company and identify with it, for instance by inviting each and every employee to contribute ideas and suggestions. More streamlined hierarchical structures, new forms of work and communication channels and regular surveys also promote open dialog and the productive exchange of ideas. Our focal point in 2011 was translating the extensive feedback we received from our employees in the 2010 employee survey into numerous improvements. For the first time, the employee survey also included detailed questions about mental and physical health.

Employee survey and pulse check: feedback tools widely accepted and used.

The employee survey held every two years and the six-monthly pulse check are our most important Group-wide feedback tools. Acceptance levels are high and still rising. The next employee survey will be carried out globally once again in fall 2012. It gives all employees the chance to give detailed feedback and provides managers with valuable information about potential for improvement and necessary changes within their teams. Telekom was the first DAX-listed company to include detailed questions on mental and physical well-being in the 2010 employee survey. The 22 questions in our concise six-monthly pulse check help us ascertain which improvements resulting from the employee survey have actually been seen to have been made.

#### Follow-up measures focused on health.

2011 was characterized by the follow-up measures derived from the 2010 employee survey. Topics such as "Trust in senior management," "Workload" and "Understanding the strategy" have been directly addressed by the improvements introduced by our executives. The follow-up process focused on the topic of health, as demonstrated by the spread of measures. At least 50 percent of all measures put into practice across the Group concerned employee workload pressures and resources. Some key projects have already been implemented and are particularly noteworthy: the Early Warning Cockpit for Mental Health and the good practice exchange project Your Voice—Your Chance. Your Voice—Your Chance demonstrated which changes to employee working conditions were needed to achieve greater employee satisfaction and, in turn, to increase customer satisfaction.

The Early Warning Cockpit for Mental Health gives quarterly information on significant health-related data. We analyze this data to catch critical trends within the teams in the early stages and act preventively.

Pulse check 2011: Up to two thirds of employees confirm the success of the measures.

The question in our pulse check asking whether teams had seen successful improvements implemented after the 2010 employee survey was answered "Yes" by two thirds of employees in the Germany segment. This was confirmed by a majority of employees in all other segments too. We expanded some questions in the November 2011 pulse check, relating for example to the working environment as well as to workload and resources.

Results here too pointed to the success of our employee survey follow-up measures. As regards the topics of work volume/quality, work-life balance and recognition, there was an impressive double-digit increase in the approval rate.

#### Enterprise 2.0: toward an open culture of innovation.

Deutsche Telekom is pursuing technological change and the transformation of customer markets in parallel with the internal transformation in cooperation and working culture—on the way to Enterprise 2.0. The possibilities that Web 2.0 opens up in terms of new forms of collaboration and interactive customer contact are emblematic of such changes. We are primarily targeting the application of collaborative tools to make social media a natural part of a new and creative culture of innovation.

#### Ideas management: Employees helping Telekom grow.

Telekom's ideas management already plays an important role in involving employees in the company's development. This applies for all issues, aspects, and areas of our Company, from customer service and internal processes through to product innovations. With its interactive tools, ideas management also paves the way toward even greater openness for Telekom, both internally and externally. In 2011 the genial@telekom IT tool, introduced back in 2009, was supplemented by a new way of generating ideas, the Ideas Garden. This IT tool enables employees to work with other interested parties and experts in a virtual environment to turn initial suggestions into fully developed ideas. Although the Ideas Garden is still in the pilot phase, more than 10,600 registrations and 2,180 active employees prove that this way of getting involved has been warmly welcomed.

# External Web 2.0 activities: 425,000 fans on Facebook, 40,000 followers on Twitter.

In terms of external customer contact and recruitment, Deutsche Telekom in Germany is one of the leading DAX -30 companies. For example, more than 40,000 people follow our activities on Twitter and Deutsche Telekom has more than 425,000 "fans" on Facebook, with numbers rising. Our European subsidiaries are also increasing their use of Web 2.0 to contact their clients and other external stakeholders.

# Internal Web 2.0 activities: 55,000 employees use our social media platforms.

Around 55,000 employees use our internal social media platforms for in-house cooperation: they hold discussions on the Telekom blog platform and work on more than 2,300 projects and topics on Telekom MyWiki. We have been merging all of the numerous internal social media platforms that have sprung up over the last few years into a Group-wide Telekom Social Network since 2011. This will be the technological basis for very simple, cross-area and cross-level collaboration in 2012. Online Telekom Jams—virtual get-togethers—with several thousand employees across various units and seniority levels tackling specific issues over a limited time period, are to be rolled out Group-wide in 2012.

Our collaboration platform is available to all employees as the open TelekomWiki, and to closed project and user groups as Telekom MyWiki.

Our move to Enterprise 2.0 affects our whole working culture: how are we going to work and with what tools? What will be our understanding of leadership, achievement, personal responsibility, service, research and creativity? What areas of our company will be affected by this and to what extent? Starting in Germany, we have initiated an open dialog on the "Working differently" blog and at open discussion events. These give our employees the opportunity to take part in this discussion, so that we can answer these questions with one common vision for the future.

## Update on the 2010/2011 CR program.

Sub-targets	Status of implementation/measures		
Refocusing ideas management	Implementation underway.  Central organization and Group-wide provisions implemented in Germany: target achieved  Establishment of the Group-wide, web-based IT platform genial@telekom in 2009: target achieved  Expansion to include a communication platform based on web 2.0 ("Ideas Garden"), launched in 2010 target achieved  Implementation of campaigns within the Group, e.g., a sustainability drive in ideas management with 346 ideas launched in 2010: target achieved  Tapping synergies in the Group by interlinking ideas development (E2.0 strategy) with the planned "Jam" online discussion forum in 2012		

#### 2010/2011 CR program

The current 2011/2012 CR program can be found in the "Strategy & management" section.

We take responsibility.



Home > Employees > Talent agenda

# Talent agenda.

## Creating the "new Telekom" through diversity of talent.

We need competent and creative employees at all levels and in all areas of our company, whether apprentices, students on cooperative programs, young people at the start of their careers, or experts and executives with professional experience. These are the people who create innovations, turn them into products and services and in so doing drive Deutsche Telekom forward. In order to recruit, retain and develop these employees, the Group is pioneering a future-minded human resources and talent policy. Our aim is to draw on the best talent in all its diversity by offering attractive development opportunities and work environments as an employer. And we combine the different potentials and needs of women and men.

We take responsibility.



Home > Employees > Talent agenda > Employer brand

# Employer brand.

#### The Great Experience: a global employer promise.

With this straightforward, global promise, which we call The Great Experience, we intend to sharpen our profile on the job markets. On top of our promise, the international subsidiaries are honing their message of exactly what it is that makes them attractive as an employer, showing future employees why they can gain unique, valuable experiences at Telekom. From 2012, we will use The Great Experience to forge ahead in our search for talent.

#### find out more

#### The Great Experience—experience diversity and set out on new paths.

Our goal as one the world's leading ICT companies is to provide access to very special experiences and enable people to share these at any time. Diversity lies at the heart of how we think and act, and enables us to deliver outstanding performance. In an environment with room for personal development and the perfect conditions for an optimum work-life balance. We are an international network that resolves challenging tasks through cooperation and team spirit. And in which all employees are helped to live out our corporate responsibility. We firmly believe that changes bring new opportunities for development and innovation—and that people who pursue maximum performance can exceed their potential and create something new.

### Continuing to improve employer image.

Our goal is to regularly be included among the best in the rankings of top employers by 2015. In 2011, we significantly improved in graduate studies, such as the Trendence and Universum studies. In the ranking by IT graduates for Trendence we took 17th place and in the Universum study, 12th place; in that study we ranked higher than employers from the automotive industry for the first time. Furthermore, in Germany, our corporate customer arm T-Systems took third place overall in the Top Automotive Employer 2011 award.

#### Numerous awards in Europe.

In Europe, our national companies scored highly. In Austria, T-Systems received the award for best employer for career starters and was placed among the highest rankings in the Great Place to Work competition. T-Systems achieved other number 1 spots as the Top ICT Employer in the Netherlands, and as IT Company and Company of the Year 2011 in Slovakia; it also made the podium in the Czech Republic in the Employer of the Region competition. At the same time, T-Mobile Austria was named Most Attractive Employer and T-Mobile Netherlands and PTC were named Top Employers 2011.

#### Successful recruiting: all 2,600 vacant positions filled.

In particular, the figure of some 49,000 external applicants and filling around 2,600 vacant positions show that the popularity of the Group as an employer is growing steadily. This was also confirmed by the Career's Best Recruiter study, which evaluated the HR products, processes, activities and the perception of communication with applicants for the 500 largest German companies from the perspective of applicants in 2011. Telekom was ranked second in the study.

© 2012 Deutsche Telekom AG		



Home > Employees > Talent agenda > Talent management

# Talent management.

Any company looking for new talent should go where the talent can be found. The digital native generation, for example, can be found online, in particular in social media.

#### Looking for talent in the digital world: More awards.

On the Internet, especially in social networks, digital natives use the possibilities of interactive networking and real-time communication with unconventional forms of communication and flat hierarchies. Nowadays, applicants expect direct insight into the company. They want to know what their potential employer looks like, they want to meet their future colleagues and get an idea of topics and areas. This is one of the great advantages of social media. For years, Telekom's Web 2.0 commitment has been seen as leading among the German DAX 30 companies. Our European subsidiaries also have a presence on the talent markets through social media. In 2011, we took first place for the second year in a row in the HR Social Media Activities of DAX 30 Companies. The Online Talent Communication study ranked us in 5th place. The study evaluates social media, career sites, job forums and mobile recruiting channels. Some 30,000 students and graduates around the world were surveyed.

We also increase interactivity and personal relevance through campaigns such as the crowdsourcing competition "Your idea!," which is the only one of its kind so far in German HR marketing. Here, for the first time, students and graduates can design their own app for the Facebook fanpage TelekomKarriere or to incorporate in our careers page on the Internet.

#### New job exchange planned for first half of 2012: three-minute application process.

The aim of the new job exchange is to accelerate the application and recruitment process. Professionals, for example, will be able to apply for our jobs in just three minutes. Our job postings will reach a larger audience. We will be using external job portals and social media channels more heavily than ever before thanks to automatic interfaces to sites such as Monster, StepStone, Facebook and Twitter.

#### Attracting talent among students and graduates.

#### More than 300 international university graduates used the opportunity to start their careers in 2011.

We successfully continued our entry-level offers for graduates, the entry program Start up! and the direct entry program Jump in!. Start up! is our international, project-based program for university graduates. The fifteen-month program is held under the particular attention of the Board of Management and is offered, for example, in the areas of human resources, finance, IT, technology, sales, and service. The 56 university graduates who began through Start up! last year came from 14 different countries. More than 30 percent of participants in the program are international, 49.3 percent are young women. Jump in! offers university graduates in all subjects direct hire positions at Telekom in their preferred field. Supporting measures provide new employees with precisely targeted encouragement in their first 24 months. In 2011, more than 250 graduates joined Telekom through Jump in!.

#### 360 grants under the Deutschlandstipendium scholarship program by 2014.

Deutsche Telekom AG has been supporting the German federal government's scholarship program since the

2011 summer semester. The Group will sponsor a total of 360 students under this scheme by 2014. A third of the scholarships are reserved for Masters degree programs, two thirds are provided by the company for Bachelor degree programs. Students who are eligible for support particularly include those studying STEM subjects (STEM = science, technology, engineering, mathematics) at one of seven German universities: TU Dresden, WWU Münster, LMU Munich, HS Munich, TU Darmstadt, TU Dortmund and FH Dortmund.

Getting in touch with graduates and young people with talent with numerous events and programs.

A whole range of events and programs supports the goal of building up and maintaining contact with graduates and promising young people:

- "Flexikum—the internship where the Company adapts to interns' timing." The Bologna university reform substantially restricts the timing options for doing internships. However, in order to build a bridge between theory and practice for budding academics, Telekom has developed the Flexikum: participants can tailor their internship plan to their personal needs, the company adapts to their plans.
- LoungeXING. T-Systems combines Web 2.0 activities with events for making personal contact, for instance LoungeXING. The expert forum was held for the fourth time in collaboration with different groups from the XING social network such as IT-Connection and StuttgartBC.
- Telekom ambassadors. In 2011 Telekom's unique ambassador network comprised 530 experts and executives (compared to 300 in 2008). As Telekom ambassadors, they hold guest lectures or give presentations on practical issues at universities and contribute significantly to improving the company's image as an employer through personal contact.

### New approaches to school student marketing: Gold Award for "reif."

With channels such as the award-winning youth magazine "reif" and our new platform "Knowledge changes everything", we are increasing the number of applications, especially for technical cooperative study programs, and the number of applications from women. More than 85,000 participants have been exploring Telekom virtually on the wissen-veraendert-alles.de microsite since November 2010. In "reif," Telekom pools all its information on career paths. The magazine is both a training brochure and a youth magazine. The Best of Corporate Publishing competition—the biggest of its kind in Europe—awarded "reif" the gold medal. 4,000 readers' letters and 200,000 clicks on reif-magazin.de confirm the very strong reader loyalty.

#### Telekom's commitment to education.

■ STEM (science, technology, engineering, and mathematics):

**HfTL** mentoring program for young women: Through a wide range of STEM initiatives, we hope to inspire girls and young women to go for technical and science-based careers, professional and management positions. For example, the second mentoring program for young women will start at the <u>Hochschule für Telekommunikation Leipzig (HfTL) University of Applied Science</u> in the fall semester of 2012. We are particularly interested in getting girls and young women from immigrant families involved in the program.

More women in STEM degree programs: In 2011, the percentage of women on all STEM study programs (on-campus, cooperative, part-time) increased from 13.4 percent in 2010 to 20.7 percent. For cooperative STEM study programs alone, the figure more than doubled to 26 percent.

**STEM** Inhandbook: Telekom also shares its experience with interested companies and institutions in a <a href="handbook">handbook</a> on the "JUMP in MINT" youth mentoring program, which is available at no charge. The handbook talks about the mentoring program concept and gives recommendations for how other companies and institutions can adopt the program.

#### Programs for disadvantaged young people:

#### Helping young adults get a start with their careers: Golden Victoria for Integration award.

We take our corporate and social responsibilities very seriously at all levels of education. In 2011, we offered 100 young people the opportunity to get a foot on the career ladder. We plan to give more young people solid prospects for beginning a career with the pilot project "My chance to get going," which we are carrying out in collaboration with the German Federal Employment Agency, until 2012. The program particularly addresses young people who come from a background of long-term unemployment. In 2012, we plan to provide 150 places. So far, the results of the project have been positive. Of the 66 young people who did an internship under this scheme in 2010, 48 (i.e., 75 percent) have started vocational training with us. 32 young people were even accepted directly into the second year of training. In 2011, Telekom received the Golden Victoria for Integration award for this commitment. For our vocational training, we endeavor at each training center to recruit the same percentage of apprentices from a migrant background as are represented in the regional population.

#### Part-time training for single parents: New pilot project launched with 17 mothers.

In September 2011, Telekom together with the German Federal Employment Agency launched a project to provide training and study for single parents. In the pilot project, 17 single mothers began training part time at five of our training centers. In addition, in October 2011, three young mothers started a technical cooperative degree program on a part-time basis.



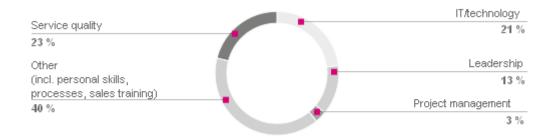
<u>Home</u> > <u>Facts & figures</u> > <u>Social & HR indicators</u> > Training & development

# Training & development.

#### Further education at Deutsche Telekom.

We conducted 40,965 seminars with 284,044 participants in Germany in 2011 within the scope of Deutsche Telekom's training measures. Based on the number of days completed, the average comes to six days of training per employee.

Further Education at the Deutsche Telekom Group in Germany.



Seminars: 40,965

Participants: 284,044 {Ø of 2 seminars attended per employee}

Participant days: 734,237

Ø number of training days per participant: 2.6; per employee: 6.0

Number of web-based trainings carried out (content usages on internal e-learning platform): 813,235

#### Reporting against standards.

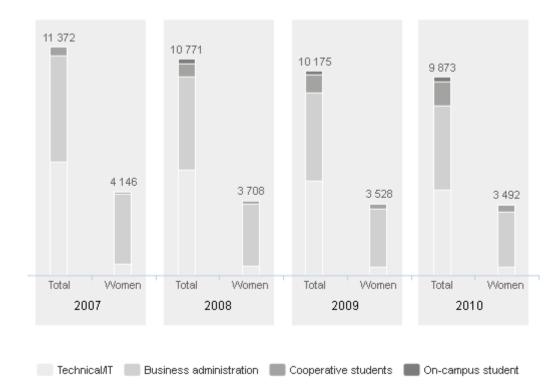
By reporting this data, we partially cover the LA 10 (Average hours of training per year per employee by employee category) and LA 11 (Life-long learning) GRI performance indicators and the S02-02 (Average expenses on training per FTE p.a) EFFAS indicator. This data also covers criterion 16 (Steps taken to promote the general employability of all employees) of the German Sustainability Code.

#### Trainees and training programs.

The number of trainees (including students) decreased slightly from 10,175 in 2010 to 9,873 in 2011. The number of female trainees decreased from 3,528 to 3,492.

#### Apprentices and training programs in Germany.

Total and percentage of women in the Deutsche Telekom Group in Germany.



Commercial training programs: office communications administrators, retail sales or dialog marketing assistants, industrial business administrators

Cooperative study programs: Bachelor in Business Administration, Communications and Information Technology, Business Information Systems

#### Reporting against standards.

The data also partially covers the LA 10 (Average hours of training per year per employee by employee category) GRI performance indicator. This data is also relevant for criterion 15 (Diversity and health) of the German Sustainability Code.



Home > Employees > Talent agenda > HR development

# Human Resources development.

We want to fill the majority of our expert and management positions with top performers from within the company. First and foremost, we offer our future experts and managers attractive working conditions in order to keep them in the Group. We assign demanding, exciting and challenging tasks. At the same time, we want to open up long-term prospects for their personal professional development.

Talent management: Internal HR development and talent promotion.

#### Talent Spaces to raise the profile of talented people internationally and across segments.

The Talent Spaces initiative is a milestone for our international and cross-functional talent management. True to our Guiding Principle "Best place to perform and grow," the aim of the initiative is to network and raise the profile of participants within the company. We initially started in October 2010 in five functional areas: technology, IT, procurement, finance and HR. In the second round of Talent Spaces from October 2012, we will integrate additional functions. The success of our Talent Spaces initiative can be seen from the figures. After 12 of the total 18 months, half of the almost 200 talents—of whom 44 percent are women and 42 percent international participants—have already progressed, either within or beyond their own functional area, business unit or country.

Core of personalized HR development: Performance & Potential Review and Compass.

The linchpin of our HR development is the valuation of our employees' and executives' performance, competence and potential. A high degree of transparency and comparability aims to ensure that we identify successors and open up challenging, including cross-functional and international career prospects for them. For this purpose, we have the HR development tools Performance & Potential Review and Compass. In 2011, we rolled out the PPR internationally for all employees not covered by collective agreements and for executives. Planning for connecting all international experts to the PPR is already underway.

In Germany, this huge step toward Group-wide transparency was followed by a first step toward greater comparability at employee level, also in 2011: Compass, the new annual development meeting for employees covered by collective agreements and civil servants. Compass enables our employees to assess and put into context where they stand professionally. Thus we reward and encourage good performance and breathe life into our Guiding Principle "Best place to perform and grow."

#### Career paths at Telekom.

#### Wide variety of development opportunities.

While we use the PPR at an international level to assess the potential of our executives and employees in expert, project and leadership roles not covered by collective agreements, with Compass, we focus on advancing employees covered by collective agreements. This development is part of our career paths, which we try to make as mutually permeable as possible:

- STEP up! for executive development and
- Go Ahead!, the expert and project career.

We completed preparations for the uniform Group-wide roll-out of Go Ahead! in the reporting year. This is scheduled to take place in mid-2012. We launched Go Ahead! at T-Systems in 2011. Regardless of whether a project, expert or management career, the same always applies: we want to take high performers from within the company, develop them as specifically as possible, network them, and prepare them for tasks with greater responsibility.

STEP up!: Internationalizing our development programs with hundreds of participants.

Our executive development program Step up! includes the global Leadership Development Program (LDP) and the German-language equivalent, the FEP executive development program, which is temporarily still available. In this way, we support employees who are preparing for their first management position with greater, permanent personnel responsibility, but also executives on their way to a more advanced management role. 612 employees and executives took part in LDP and FEP in 2011; 32 percent of them were women.

#### International mobility, exchange and knowledge transfer.

In order to drive the development of know-how as well as a shared concept of One Company at a business-specific level and across national borders, we set great store by international development measures:

- Telekom X-change as an international HR development initiative. The program offers high performers the opportunity to experience everyday work in an international environment for three to six months. This includes assignments to and from Germany, as well as directly between international subsidiaries.
- Professional programs (PP) guarantee state-of-the-art expertise: Together with renowned business schools, we are expanding and developing specialist knowledge and strategically relevant skills of our employees. Many employees take the opportunity to get a Masters degree to crown their high dedication.
- Master Classes: This European-wide development offer addresses selected top performers from Go Ahead!

Telekom School of Transformation: providing impetus for the Telekom of tomorrow.

In fiscal year 2011, we initiated the establishment of the Telekom School of Transformation. In the future, it will act as a provider of impetus for the Telekom of tomorrow. The Telekom School reflects changes in society, culture and technology, encourages sustainable solutions for future work and living environments and therefore promotes the continual transformation of Telekom.

The Telekom School of Transformation supports national and international networking within the company in the same way as the dialog with its external stakeholders. It identifies potential for innovation and change and encourages responsible entrepreneurial conduct in employees. It strengthens Telekom on its way to becoming the most highly regarded service company in the sector. Learning and experience spaces—virtual and real—allow the development of new competencies, and leeway for thinking opens windows into the future. In this way, our employer promise, The Great Experience, will be immediately tangible at the Telekom School. In mid -2012, the measures and offers of the Telekom School of Transformation will gradually go "live," thus becoming accessible to our employees.

# Update on the 2010/2011 CR program.

Sub-targets	Status of implementation/measures		
Introduction of expert careers with emphasis on specific areas	Implementation underway.  • The target group of 35,000 to be addressed by 2011 was achieved  • 2011-2013: Further roll-out to additional corporate areas and subsidiaries		

#### 2010/2011 CR program

The current 2011/2012 CR program can be found in the "Strategy & management" section.



Home > Employees > Talent agenda > Diversity

# Diversity.

For Deutsche Telekom, diversity means productive variety. Our aim is to promote and benefit from the diversity that is present within and outside of our company as a source of business success, creativity and innovation. In this way, we are bearing up against the changing demographics, challenges in business and demands from society. With our transformation into an open company, we offer talented individuals in various phases of life a wide variety of opportunities to grow both personally and professionally: in Germany and internationally, for women and men, young and old. We create attractive work environments, flexible working conditions and working time options. In 2011, our activities included further expanding our program for improving the reconciliation of work and private life, "work-life@telekom."

#### Gender: More women at the top.

#### More women in management positions.

In 2010, Telekom was the first DAX 30 company to introduce a women's quota for new appointments and participation in management programs. With this move, we have established diversity in Germany as a top social issue. We set the bar for the DAX 30 companies. In October 2011, all member companies followed Telekom's lead and voluntarily introduced targets for increasing the number of women in management. By the end of 2015, 30 percent of upper and middle management positions at Deutsche Telekom are to be held by women. This rule applies to all of Telekom's international subsidiaries. In order to achieve this target, we are implementing our program for the women's quota right along the entire talent pipeline—in our training courses, cooperative and part-time study programs, in our development programs for junior staff, and in our programs for executives, right through to filling top positions. By controlling and monitoring our appointment and selection processes, we create transparency and aim to make sure that at least 30 percent of women are included in applicant shortlists.

#### Women's quota: Target for 2011 surpassed.

We have made considerable progress in the last two years.

- Since the women's quota took effect at the start of 2010, the percentage of female executives worldwide has increased from 19 percent to 24.7 percent.
- There are now seven women in the 66-strong management team below the Group Board of Management, the Business Leader Team.
- Since May 3, 2012, two of Telekom's seven Board of Management positions have been held by women.
- 31 women (previous year: 13) now hold mandates on Supervisory Boards of Telekom subsidiaries and sub-subsidiaries in Germany (20.5 percent). At international subsidiaries, 17 women hold a position on supervisory boards (13.2 percent).
- We are systematically increasing the percentage of talented young women throughout the entire talent pipeline. For Bologna@Telekom, women accounted for 30 percent in 2011.

#### Driving forward change in the corporate culture.

We supported cultural change in the Group through a range of measures in 2011. Three examples:

- Dialog forums: The events focused on the reconciliation of work and private life.
- Firmly embedding diversity internationally: At T-Systems alone, some 60 diversity projects were launched in the local business units. In Europe best practices are being exchanged, mainly on flexible worktime and projects on gender and generation management.
- Strengthening female networks: Our women's networks are enjoying large memberships and are supported by the Group. Almost 1,000 women currently take part in the networks.

#### Gender collaboration trainings: Leadership in mixed teams.

The fact that mixed teams are more creative and innovative has been shown by countless studies. In order to exploit this potential and turn diversity into a success factor, Telekom has launched Group-wide gender collaboration training. Here we prepare our managers for leading increasingly diverse teams. The main aim of the mandatory training is to firmly embed diversity in the company. We launched the training at European Telekom companies in December 2010 and rolled it out across Europe. We are currently carrying it out at all major locations in Germany.

#### work-life@telekom: Reconciling work and private life.

We systematically expanded work-life@telekom—our program for improving the work-life balance, launched in 2009—in Germany in the reporting year. With these efforts we aim to drive forward the development of female talent in management positions and offer men flexible working time models in light of changed career expectations. In order to encourage personal responsibility and give employees control over their own time, we have injected some vitality into our voluntary commitments on the issue of work-life balance:

#### Work-related use of mobile devices: Group-wide discussion kicked off.

In 2011, we made it clear in Germany that there is no obligation to answer cell phones or e-mail messages for work purposes outside of working hours. Since announced and introduced, this voluntary commitment has increasingly been discussed internationally as well. Take, for example, the adapted voluntary commitment at T-Systems in China, where work-related e-mail communication is avoided from Friday 6 p.m. to Monday 8 a.m. Through new ways of working, we want to create a mix that combines excellent performance with attractive employment opportunities and establishes a win-win scenario for company and workforce alike. One example of this is "mobile working" a working model we first introduced at T-Mobile Austria.

#### ■ More than 14,500 employees take advantage of part-time work in Germany alone.

The voluntary commitment on part-time for executives is beginning to take effect. The number of male and female German executives working part time has increased to 27. Overall, in Germany alone, more than 14,500 employees work part time.

#### New models for taking time out under preparation.

In 2012, Telekom is also creating new, tailored offers and financing models for taking a defined period of time away from work. We offer time-out or part-time models, financed in advance by the company, taken for personal reasons—including part-time models for family (family care leave with a special salary model offered since January 2012), continuing education, or social commitment. In addition, a savings model offers the opportunity of taking flexible time-out or tailoring the structure of part-time work.

#### Standardized parental leave process.

We further pursued our "Stay in contacT" parental leave scheme for all employee groups in 2011. The goal is for employees to stay in touch with the company, colleagues and their department via systematic contact management. We help them by offering planning consultation at the start of and during parental leave as well as re-entry consultation, among other offers.

#### "Mobile working".

Employees can use this work option if their position allows, if they personally qualify for the option and if the option is approved by their superior. Qualified employees can spend a maximum of 20 percent of their work time working on a trust basis at locations of their choice

#### Other work-life balance and support offers.

- Diversity consultants: Advice on issues such as the parental leave process and flexibility in workplace and working hours. Contact person for career development matters.
- Fathers' network
- Day care places: total of 379 across Germany. In 2012, approximately 180 more child care places will be added. Expansion to national companies as well
- Child-friendly offices: set up in Germany and Hungary
- Vacation program: fixed component of the company's offering.
- Youth exchange program: In the reporting year, there was also a pilot for an international youth exchange program.
- Free emergency childcare
- Free support in the search for local childcare facilities
- Advisory and placement service for employees with elderly family members in need of care
- Leave of absence for family emergencies
- Family vacations: over 42,000 employees and their family members took advantage of these offers
- Family-support services: advice and arranging of childcare through the AWO welfare organization's parental service
- The Post Postbank Telekom welfare service provided some EUR 110,000 in studying grants and some EUR 385,000 in support payments in the reporting year, for the most part in Germany.

#### Generation@Telekom—ready for the demographic shift.

The trend toward an aging society is also reflected in Telekom. We have to secure the experience of older employees and at the same time ensure a balanced age mix in the company through the targeted recruitment of younger staff. With Generation@Telekom, we plan to make Telekom fit to meet these challenges and promote mutual understanding between the generations. The measures of our HR policy across all phases of life include, for example, "reverse mentoring." An exchange of experience between the generations turned around—younger employees explain the world of the Web 2.0 to older executives. Other measures also include the following:

- 50plus customer advisory council: The experts advise the Group on developing and introducing products and services designed especially for the 50-plus generations.
- Encouragement of health awareness and provision of offers
- Mentoring of students studying STEM subjects
- Bologna 40plus: special part-time study offers for academic education. We reach employees over 40 through a variety of academic offers. They can opt for individual part-time study modules or complete part-time degree programs. In 2011, eight percent of the 433 part-time students being supported were over 40.

#### Internationality: Improving exchanges.

Encouraging international cooperation between countries and cultures is a central challenge for us. We support the exchange of experiences through our international diversity network with participants from our national

companies. Besides our international development programs, other measures to improve intercultural exchange include our involvement in the <u>Diversity Charter</u> and our participation in the "<u>Afrika kommt!</u>" project designed to promote young professionals from African countries.

#### Sexual identity.

Telekom is a strong advocate for an open-minded working environment, where all employees can reach their full potential, regardless of their sexuality. With this in mind, we expanded our "queerbeet" network for homosexual, bisexual and transsexual employees in 2011. We also maintain close partnerships with <u>Völklinger Kreis</u> and <u>Wirtschaftsweiber</u>, two associations for gay and lesbian managers. In addition, we are represented each year at the <u>MILK</u> career days.

#### People with disabilities: Statutory quota surpassed.

Supporting and integrating people with disabilities is important to us. With 6.7 percent disabled employees in Germany, we are well over the statutory quota of five percent. During the reporting year, we took around 1,300 measures to create disabled access to workplaces and stepped up our efforts to find positions for people with severe disabilities in the Fairplay project.

### Update on the 2010/2011 CR program.

Sub-targets	Status of implementation/measures	
Continue and expand life@telekom program	Implementation underway.  • Permanent integration into the corporate and leadership culture through innovative policies, e.g., voluntary commitments on use of mobile devices and promotion of part-time work  • Implement the new "Stay in Contact" parental leave process  • Consulting and childcare and elderly care services from the German Workers' Welfare Organization (AWO).  • Expand company day care facilities by 240 places by 2012  • Implement an international youth exchange program	
First DAX 30-listed company to introduce a quota for women in middle and upper management	Implementation underway.  • Target quotas along the talent pipeline  • Creation of the required framework conditions by work-life@telekom, e.g. through part-time employment policies or expansion of work-and-care offers such as day care centers	

#### 2010/2011 CR program

The current 2011/2012 CR program can be found in the "Strategy & management" section.



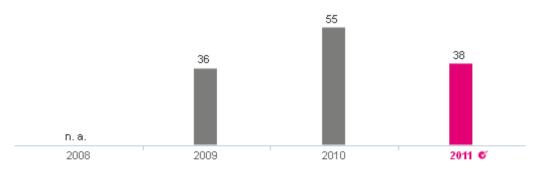
Home > Facts & figures > Economic indicators > Suppliers

# Suppliers.

### CR KPI "Sustainable Procurement".

The Sustainable Procurement CR KPI decreased from 55 to 38 percent compared to the previous year. This can be attributed to a significant reduction in procurement volumes from suppliers who were audited or who are registered in E-TASC.

CR KPI "Sustainable Procurement" Deutsche Telekom Group.



Proportion of total procurement volume audited and/or covered by self-assessment via E-TASC. Internal and external social audits conducted with 1st tier suppliers have been taken into account.

Data checked by PwC. Based on procurement volumes at Central Procurement. Values cannot be directly compared to the previous year.

Altogether, the number of audited suppliers remained the same compared to the previous year. The order volume with suppliers who were relevant in the previous year as well decreased in part, however, and some suppliers with lower order volumes were also documented in E-TASC compared with the previous year. However, a reduction in Deutsche Telekom's overall procurement volume by 12 percent minimized the effect in the decrease of the Sustainable Procurement CR KPI.

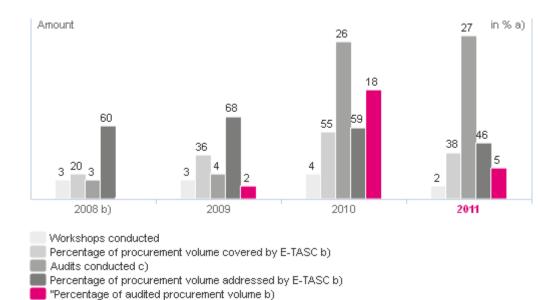
#### Reporting against standards.

The Sustainable Procurement CR KPI together with information about our strategic approach fully covers the HR 1 (Human rights), HR 2 (Suppliers and human rights) and HR 10 (Impact assessments) GRI performance indicators. By providing this information, we cover the V28-04 EFFAS indicators (Supply chain). It is also relevant for criteria 1 (Opportunities and risks), 3 (Sustainability goals), 4 (Value added chain), 6 (Rules and processes), 7 (Performance indicators) and 17 (Human rights) of the German Sustainability Code. It is also used for reporting in accordance with the Global Compact principles 1 (Supporting and respecting human rights), 2 (No complicity in human rights abuses) and 5 (Effective abolition of child labor).

### Supplier relationships.

The percentage of procurement volume generated with companies registered in the industry information tool E-TASC decreased significantly from 55 percent in the previous year to 38 percent in 2011. The percentage of procurement volume generated with audited companies also decreased from 18 percent to 5 percent.

Risk management for supplier relationships at the Deutsche Telekom Group.



- a) Procurement volume from Procurement's global database (GDB).
- b) Data verified by PwC. Social audits conducted internally as well as externally were taken into consideration only for 1st tier suppliers. Based on procurement volumes at Central Procurement. Values cannot be directly compared to the previous year.
- c) Social audits conducted internally as well as externally were taken into consideration (both Deutsche Telekom as well as those conducted by JAC Joint Audit Cooperation). Audits also include follow-up audits.

The reduction can be attributed to a significant reduction in procurement volumes from suppliers who were audited or who are registered in E-TASC. In contrast, the number of registered or audited suppliers remained stable. However, procurement volume by suppliers who were also relevant in the previous year decreased. Other suppliers with lower order volumes were recorded in E-TASC compared with the previous year. Therefore the values for this and the previous year cannot be compared directly. As in previous years, workshops were carried out with top suppliers.

#### Reporting against standards.

The Sustainable Procurement CR KPI together with information about our strategic approach fully covers the HR 1 (Human rights), HR 2 (Suppliers and human rights) and HR 10 (Impact assessments) GRI performance indicators. By providing this information, we cover the V28-04 EFFAS indicators (Supply chain). It is also relevant for criteria 1 (Opportunities and risks), 3 (Sustainability goals), 4 (Value added chain), 6 (Rules and processes), 7 (Performance indicators) and 17 (Human rights) of the German Sustainability Code. It is also used for reporting in accordance with the Global Compact [1] principles 1 (Supporting and respecting human rights), 2 (No complicity in human rights abuses) and 5 (Effective abolition of child labor).

Home > Suppliers > Sustainability strategy for procurement

# Sustainability strategy for procurement.

Content verified by PwC

Under its <u>CR strategy</u> Telekom is also working toward becoming the industry leader in terms of sustainability in procurement and supply chain management. The fact that we were once again at the top this year in renowned <u>sustainability rankings</u> is proof that we are well on track in this respect.

Compared to our competitors, we hold a leading position when it comes to the sustainable management of our supply chain. We intend to solidify this position and expand it further. The basis for this is the strategic integration of sustainability into our procurement activities.

Sustainability in procurement activities at Deutsche Telekom. Methods, tools and stakeholders.

Tools and methods for promoting sustainability in procurement activities

#### Supply chain management

- Prequalification questionnaire
- Supplier selection process
- Supplier assessment
- Supplier workshops

#### Risk management

- E-TASC
- Social Audits
- Improving supplier competence
- Escalation process

#### **Communication & training**

- Procurement portal
- Online training tool
- Reports on sustainability in our procurement activities
- Stakeholder Dialog Day

#### **Rules & regulations**

- Procurement Practices
- General Purchasing Terms and Conditions
- Social Charter
- Statement on Extractives

Strategy to promote sustainability in procurement activities

Sustainable

Procurement

workgroup

Internal: Developing standards, KPIs; internal communication, central point of contact and

first escalation level

**External:** External communication, dialog sessions with suppliers, NGOs, investors,

scientific community

Stakeholder II

Internal: Employees, purchasers, other workgroups (Climate Change Group, "sustainable

products," etc.)

External: Suppliers, sustainability-oriented investors

### Procurement volumes and regions.

We work with suppliers in over 50 countries. We procured a total of EUR 2 billion in goods and services from emerging and developing countries in 2011. That is the equivalent of some 11 percent of Telekom's total procurement volume. In contrast, 1.9 percent of Telekom's procurement volume came from emerging and developing countries in the previous year—goods in the amount of EUR 398 million. This increase can primarily be attributed to an increase in order volumes in eastern European countries.

<u>Close collaboration with stakeholders in these countries</u> plays a significant role in making sure the production conditions meet Telekom's environmental and social standards. We consider it our duty to ensure basic social and environmental standards, particularly in emerging and developing countries.

CR Report from the previous year

#### Sustainable Procurement CR KPI.

We use the <u>Sustainable Procurement CR KPI</u>, to identify how much of our procurement volume throughout the Group comes from suppliers who are audited or who provide voluntary information on <u>E-TASC</u>. The Sustainable Procurement CR KPI has applied throughout the Group since early 2011. The KPI will be calculated and managed centrally at company level. The audited volume identified via this channel came to <u>38 percent</u> <u>Group-wide</u> during the reporting period.

A detailed description of the CR KPI can be found under Strategy & management.

#### Procurement joint venture with France Télécom-Orange.

The partners Deutsche Telekom and France Télécom have pooled their procurement activities in the areas of devices, mobile communications networks, large parts of their fixed-network equipment, and service platforms in a 50:50 joint venture.

In addition, the two companies intend to launch pilot projects to explore other areas for inclusion in the joint venture at a later stage, including IT infrastructure and further IT areas. The inclusion of additional fixed-network components remains to be reviewed by the German Federal Cartel Office. The joint venture, which has been named BUYIN is expected to generate an annual run rate of EUR 1.3 billion through procurement savings after three years of implementation.

Deutsche Telekom and France Télécom have agreed on joint sustainability criteria to be met by suppliers. The companies plan to draft a joint supplier code of conduct for BUYIN in 2012 based on these criteria.

### Positioning within the organization.

The Corporate Procurement Strategy department has been responsible for developing concepts and methods for achieving sustainability in our procurement practices since 2010. The Sustainable Procurement Working Group continues to provide assistance when it comes to realizing sustainability in our procurement activities throughout the Group. Experts from the CR area work together with representatives from Telekom's major procurement areas on this international committee.

We are driving Group-wide implementation of the sustainable procurement strategy with increased assistance from the <u>CR Manager Network</u> as part of our international implementation of the <u>CR strategy</u>.

### Sustainable procurement strategy.

Telekom places importance on more than just financial aspects when it comes to procurement. Ecological and social criteria need to be taken into consideration as well. This has been laid down in our Group-wide Sustainable Procurement Strategy designed to implement sustainability in our procurement activities, which was approved in 2007 and revised in 2010. All guidelines and processes dealing with improving sustainability in the supply chain are based on this strategy. For example, the entire life cycle of products and services is analyzed for potential environmental impact before any sourcing decisions are made. Telekom also acknowledges its social responsibility with this strategy, i.e., regarding fair payment and the observance of basic human rights.

#### Guidelines for a sustainable supply chain.

The Group Global Procurement Policy plays a significant role among the various sustainable procurement regulations. It was approved for Deutsche Telekom in November 2010 and rolled out at numerous international subsidiaries from March 2011 to early 2012. Out of 71 German and international subsidiaries that are planning to implement the policy, 59 had done so with an official decision being passed by their managing boards by late January 2012. We will be continuing to roll out the Global Procurement Policy at the remaining twelve international subsidiaries throughout the remainder of this year.

Our Procurement Practices are a detailed guideline for our purchasers in Germany and

serve to further specify the general policies contained in the Global Procurement Policy. A fully revised version of these was published in August 2011. Besides numerous additions and further details, such as provisions for selecting new suppliers, the Procurement Practices have also been restructured to harmonize more effectively with the Global Procurement Policy. We will continue to update the guideline in accordance with changing conditions at Procurement.

T-Systems Slovakia approved its own procurement policy in November 2011 to help support local suppliers. These measures will supplement existing Group-wide Telekom guidelines and policies and form the basis for a procurement policy that is in line with local conditions.

CR Report from the previous year

#### Binding rules of conduct.

Deutsche Telekom requires all of its suppliers to comply with the <u>Code of Conduct</u> and the policies contained in the Social Charter .

Our Fraud Policy is designed to fight corruption and also applies to all supplier relationships. We demand that our suppliers, for their part, apply these standards to their own sub-suppliers. We conduct regular social audits to make sure that our suppliers comply with the mandatory minimum standards specified in the Code of Conduct, the Fraud Policy and the Social Charter.

Download :: Code of Conduct

Download :: Fraud Policy

Download :: Social Charter

In 2011, T-Mobile Netherlands completely integrated compliance with the Social Charter and environmental criteria into OneSource, its contract management system, thereby making this a mandatory requirement for cooperation.

Deutsche Telekom adopted its Social Charter in 2003. As an integral element of Deutsche Telekom's <u>Code of Conduct</u>, the Social Charter is based on the values of the UN Global Compact and the policies passed by the International Labour Organization (ILO) and the OECD Guidelines for Multinational Enterprises.

It contains Group-wide guidelines on

- Human rights and working conditions
- Environmental protection
- Equal opportunities
- Health and safety at work
- The right to set up and join a trade union

The principles described in the charter apply to all Telekom business units worldwide. In the charter, which is an integral part of our General Purchasing Terms and Conditions, we require all suppliers to comply with these basic principles as far as possible.

#### Group-wide rules for procuring raw materials.

Sustainable procurement of raw materials in the ICT industry comes with considerable challenges. Many valuable metals are used in making phones, cell phones, computers and other ICT products. These valuable raw materials are often extracted in emerging and developing countries under problematic conditions.

One example of this is the metal tantalum, which is extracted from coltan and is present in many products that are sold or used by Telekom. We do not directly purchase raw materials or the metals extracted from them. Nevertheless, we consider it our duty to minimize the harm caused to people and the environment in connection with extracting these substances and to completely put a stop to these consequences in the long term. We work on this in close collaboration with our suppliers.

We approved the Statement on Extractives in 2009 as an addition to our Coltan statement, which we published in 2005. The Statement on Extractives requires that all supply chain participants comply with the minimum standards specified in the Social Charter. The purpose of this decision is to make sure that both our direct suppliers as well as their sub-suppliers minimize the social risks that come with extracting raw materials. We require our suppliers to officially state that they will comply with the Deutsche Telekom Statement on Extractives.

In addition, we actively support the efforts of the industry association <u>Global</u> <u>e-Sustainability Initiative (GeSI)</u>. One of the initiative's goals is to increase transparency in the raw materials extraction process and minimize the negative social and environmental impact of <u>raw material extraction</u>.

Download :: Coltan Statement

Download : Statement on Extractives

#### Participation in the German Global Compact Network.

Telekom also contributes to improving social conditions along the supply chain through its participation in the <u>German Global Compact Network (DGCN)</u>. In 2011, Telekom participated in selected DGCN meetings and discussed the issue of balancing business and human rights with other companies.

In order to be able to effectively assess whether a company has implemented the Guiding Principles on Business and Human Rights, which were drafted by UN Special Representative John Ruggie, DGCN developed the Human Rights Due Diligence—Organizational Capacity Assessment. This tool was the focal point of the DGCN meeting that we hosted in May 2011. We will be using the tool throughout the course of 2012 to analyze to what extent the <u>Guiding Principles on Business and Human Rights</u> have been implemented at Telekom. The results are expected to reflect a general assessment of the situation at a corporate level and help us determine our further course

#### CR Report from the previous year

DGCN has offered three training courses for companies on human rights since 2008. An informal workgroup on business and human rights was founded based on these courses. In the workgroup, eleven multinational companies get together to discuss the progress being made and the challenges involved in human rights protection in the supply chain. The workgroup meets at least twice a year. Telekom also makes a significant contribution in supporting DGCN's activities with its expertise and recognized CR performance.

# Update on the 2010/2011 CR program.

Sub-targets	Status of implementation/measures		
Increase share of procurement volume (first supply level) reviewed using E-TASC and other risk assessment tools	Implementation underway.  • Increase in procurement volume reviewed using E-TASC and supplier audits from 36 percent (2009) to 55 percent in 2010. Target for YE 2011: 70 percent; target for 2011 not met because overall order volume declined. Number of suppliers registered in the system has not changed; the order volume covered by E-TASC has declined  • Clear increase in risk-covered procurement volume via E-TASC planned for 2012.  • The plan is to address all suppliers with order volumes of more than EUR 100,000 via E-TASC		
Internationalization of sustainable supply chain management processes	Target achieved.  • Expansion of Sustainable Procurement Working Group (SWPG) to more heavily involve international subsidiaries in 2011. T-Mobile Netherlands has been a member of SPWG since 2010 and T-Systems China (Shenzhen procurement office) has been a member since late 2011.  • International subsidiaries including T-Mobile USA to be informed and included in the sustainable procurement efforts by the strategic procurement (CPR) area. SPWG provides support where necessary		

#### 2010/2011 CR program

The current 2011/2012 CR program can be found in the "Strategy & management" section.



Home > Suppliers > Supplier selection

# Supplier selection.

Content verified by PwC

Telekom lays the foundation for a sustainable supply chain even when selecting its suppliers. Suppliers and sub-suppliers that are interested in doing business with Telekom first need to undergo a prequalification process.

With the help of an online questionnaire on our supplier portal, we are also able to collect information on compliance as well as conformity with sustainability criteria and then take these factors into consideration during the further selection process.

#### Stricter requirements on selected supplier groups.

Not only do our strategic suppliers and suppliers from high-risk industries have to pass prequalification, they are also asked to provide additional information on the topic of sustainability using the <u>Electronics Tool for Accountable Supply Chains</u>. The term "strategic suppliers" refers to suppliers that are significant for procurement activities at Telekom due to the extent of the supply relationship, their position on the market or their potential for innovation.

#### Central supplier portal online.

In 2011, we focused on continuing to improve transparency and efficiency in our supplier selection process through measures such as the <u>Supplier Management Portal (SMP)</u> with its seamless prequalification process including transparent voluntary information provided by suppliers via targeted questionnaires. The SMP acts as the central gateway for suppliers to Deutsche Telekom's Procurement department.

Launched on January 17, 2011, the SMP was initially run parallel to the Corporate Procurement Portal, which was being used at the time. We have been registering new and regular suppliers exclusively via the SMP since July 4, 2011, resulting in one standardized communication channel between Deutsche Telekom and its business partners.

We can use the new portal to make communication between suppliers and our Procurement department more transparent and to structure our business processes to be more sustainable. For example, the portal makes it possible to share information and documents for order processing and billing transactions for materials and services digitally, thereby doing away with the need for paper documents. We have also been able to improve data quality by simplifying our procedures.

We continue to develop ways to make the SMP more user-friendly and to add new, innovative features in order to support our suppliers and simplify their daily business processes when doing business with Deutsche Telekom. For example, we are planning to introduce new tools for supplier evaluation starting in the third quarter of 2012. Subsequently, we intend to implement the supplier file as a new way to transparently share and manage documents.

#### Optimizing the prequalification process.

We comprehensively optimized the prequalification process in 2011 based on our <u>revised guidelines</u>. The prequalification process helps the Procurement department develop and shape the supplier portfolio. In this process, suppliers fill out a questionnaire and their responses are then used to evaluate that supplier.

Main focal points in improving the prequalification process particularly included limiting potential supplier-related risks and systematically expanding our sustainability requirements to the supply chain. The optimized prequalification process enables more effective supplier evaluation and helps the Procurement department select the best business partners. The key optimization measures include:

- Convenient, user-friendly invitation to participate in the prequalification process for potential suppliers
- Risk minimization through automated checking of black lists during the invitation process
- Inclusion of sustainability criteria in the supplier questionnaire
- Use of supplier information in any follow-up processes (invitations to bid and auctions, vendor master data, purchase-to-pay process, reporting)
- Support for buyers with software-supported evaluation processes

Additional improvements are planned for 2012:

- Making the process international (multilingual, country-specific questions for the supplier questionnaire)
- Process adjustment in line with merchandise groups
- Possible re-qualification of regular suppliers
- Rating of responses and analysis of sales data from suppliers in the Global Procurement Business Intelligence System (GPBI)
- Visual illustration via "supplier cockpit": Key supplier information at a glance

#### Prequalification process in Hungary, Spain and Slovakia.

The Hungarian subsidiary Magyar Telekom expanded the supplier prequalification program that it introduced in December 2010 and evaluated additional suppliers during the reporting period. The subsidiary evaluated the sustainability risks of its top 38 suppliers based on the <u>GeSI questionnaire</u> and conducted an even more thorough sustainability assessment of its top 10 suppliers using the supplier scorecard (SSC) in 2011. The company informs suppliers of the results to encourage them to improve their performance. Magyar Telekom also plans to introduce a comprehensive process to guarantee a sustainable supply chain in the context of its <u>new sustainability strategy</u>.

T-Systems Iberia integrated its supplier selection process into T-Systems International's global processes, which also require suppliers to undergo sustainability prequalification, during the reporting period. Slovak Telekom also began reviewing its top 100 suppliers for compliance with CR policies. The subsidiary reviewed 40 companies in December 2011 and January 2012 and plans to continue the process over the course of the year in order

to help establish CR and sustainability criteria at its suppliers' companies.

## Sustainability criteria during the bidding process.

After developing various criteria for assessing the sustainability of proposals in 2009 and 2010, we have been actively encouraging compliance with these criteria during bid processes since 2011. Our goal is to systematically establish sustainability criteria as a permanent component of our bid processes by 2013.

During the reporting process we took an initial step in this direction by standardizing the questionnaires and evaluation systems for bid processes, thereby making them considerably easier to use for buyers and suppliers. We will develop additional product-specific criteria in 2012 and 2013, which we intend to make a permanent component of the bidding process as well.

Sustainability criteria have been systematically included in the award notice for major orders since 2010.

CR Report from the previous year

#### Online CR training tool for buyers.

We revised the content and method of our internal corporate responsibility online training tool in cooperation with Humboldt Universität in Berlin in 2010 and will introduce it in the second quarter of 2012. We made the application more efficient and easier to use by shortening training time and reducing the amount of content. These changes should make the tool easier to use.

We established an internal online training tool on the topic of corporate responsibility for our buyers in 2008. The purpose of the tool is to help harmonize sustainable procurement processes throughout the Group. By using the tool, employees are trained to recognize risks in the supply chain. They become familiar with tools and techniques for sustainable procurement and learn about the advantages of being able to steer the supply chain. They also get tips on how to best include their suppliers in the process of developing sustainable solutions.

#### Update on the 2010/2011 CR program.

Sub-targets	Status of implementation/measures		
Online training on relevant sustainability topics for all buyers	Implementation underway.  • We commissioned an external service provider to thoroughly modify and revise the online training tool for buyers in 2010.  • Content was approved and fine-tuned and a pilot test was conducted in 2011.  • Rollout of the new online training tool for all buyers is scheduled for the second quarter of 2012.		
Consideration of weighted sustainability criteria when awarding contracts	Implementation completed.  Consideration of sustainability criteria tested in 8 bids in 2010.  The pilots led to a revised standard questionnaire for suppliers and a uniform scoring which is based on the scoring logic for E-TASC.  The questionnaire can be used for both the prequalification process and the supplier selection process, for example if no prequalification is required.  Establishment as part of the standard process via the SMP was completed in 2011, but the scoring option has not yet been implemented in the system. This step is planned for 2012.  There are currently around 500 completed sustainability questionnaires in the SMP.		

# 2010/2011 CR program

section.		

The current 2011/2012 CR program can be found in the "Strategy & management"



Home > Suppliers > Supply chain management

# Supply chain management.

Content verified by PwC

Processes and tools for evaluating suppliers are key aspects of supply chain management at Telekom. These are, for example, valuable in identifying financial improvement potential and in controlling supplier progress in social and environmental areas.

By practicing systematic <u>supply chain management</u>, Telekom is able to quickly identify potential risks in the supply chain and respond to them.

We also rely on dialog with regard to sustainability in cooperation with our suppliers. For us at Telekom, it is important to know that our business partners are supporting new ways of achieving sustainable business practices. This is the only way to effectively improve the supply chain. In addition to our suppliers, who are our most important external procurement stakeholders, our collaboration partners, institutions and NGOs are important stakeholders when it comes to making the supply chain more sustainable. We also work to improve ethical social and environmental standards as a member of industry initiatives such as the Global e-Sustainability Initiative (GeSI) and the Joint Audit Cooperation.

#### Advancing E-TASC.

E-TASC, or the Electronics Tool for Accountable Supply Chains, is an online information system used throughout the industry for assessing the sustainability-related risks involved in supplier activities. As a member of the <u>Global e-Sustainability Initiative (GeSI)</u>, Telekom played a key role in the development of this system and is also involved in its further development.

We collaborated actively on the development of version 2.0 of the information system in 2011. Updates included revising the E-TASC questionnaire and the supplier risk assessment. The design was improved and the system restructured for increased user friendliness as well. Plans for 2012 include adding a supplier and facility comparison feature to the system. This feature will make it possible to compare registered suppliers. New questions on topics such as fighting corruption and the extraction of raw materials from regions that are experiencing conflict will be incorporated as well. There are also plans to expand the system to include a management feature for corrective measures and audit results.

The online information system <u>E-TASC</u>, or Electronics-Tool for Accountable Supply Chains, which is used throughout the industry, helps us quickly identify current or potential CR risks in the supply chain and respond to them appropriately.

Suppliers use the system to provide detailed information on their social and environmental production conditions and their management systems. They also benefit from using the cross-industry system because this helps them to demonstrate their CR status to other business partners and skeptical members of the public.

If a supplier is not able to provide the requested information, an internal, multiple phase process is initiated to encourage the supplier to use E-TASC. In many cases, a few conversations are often enough. Multiple escalation phases are initiated if discrepancy persists.

#### Using E-TASC at Telekom.

We use particularly strict criteria to evaluate strategically important suppliers for possible sustainability risks. That is why we require them to use E-TASC even during the <u>selection</u> process.

We asked 33 additional suppliers to provide information in E-TASC between January and December 2011. 18 of these had responded to this request by the end of the year. Even so, the share of our procurement volume from suppliers that have provided information on E-TASC fell from 55 percent to 38 percent. This reduction of 17 percent is reflected in a reduction of the order volume which is around 12 percent. The number of registered suppliers in the system is stable and the reduction of the order volume through E-TASC is as much due to cost-cutting measures as it is to an altered list of suppliers in the E-TASC system.

#### Supplier scorecard for strategic suppliers.

In addition to the E-TASC tool, which is used throughout the industry, our supplier scorecard (SSC) is another element for evaluating selected suppliers. The SSC is generated every six months. In addition to evaluating key financial performance indicators, it also provides a Group-wide overview of the sustainability performance of our strategic suppliers.

CR Report from the previous year

#### Supplier workshops for a more sustainable supply chain.

Telekom Deutschland organizes <u>workshops with important suppliers</u> in order to more firmly integrate sustainable elements into the supply chain.

During the reporting period, we conducted two sustainability workshops on  $CO_2$  management in the supply chain. We worked with participants to develop a method that can be used to included the  $CO_2$  emissions generated by our suppliers and their sub-suppliers into our  $CO_2$  calculation as precisely as possible. Establishing the required trust within the process posed a particular challenge. That challenge was particularly a factor when it came to our suppliers' trust in their sub-suppliers. Once we have approved the procedure for calculating our  $CO_2$  emissions from the supply chain in collaboration with our strategic suppliers, we plan to draft mandatory target agreements to reduce greenhouse gas emissions.

The project was originally scheduled for completion in 2010, a deadline that we were unable to meet due to delays in the international standardization process. With the new GHG Protocol for calculating scope 3 emissions, however, which was passed in October 2011, the foundation has now been laid for extensive recording of scope 3 emissions. That means we will be able to effectively continue our sub-project and complete it in 2012. We are also developing a procedure to calculate the CO<sub>2</sub> that our customers generate

when using our products and services.

We are actively participating in the creation of an industry supplement to the GHG Protocol for the ICT sector. With these efforts, we are pursuing the industry-specific specification of policies for recording and publishing greenhouse gas emissions in the ICT industry.

CR Report from the previous year

#### Sustainable Procurement Stakeholder Dialog Day.

The fourth Sustainable Procurement Stakeholder Dialog Day was held on November 10 and 11, 2011, in the Chinese city of Shenzhen. It was the first time we hosted the event in China. This was Telekom's first dialog event outside of Europe and the first time ever this type of event was held in China.

By deciding to host a dialog event in China, we acknowledged the important role that the Chinese market plays in our global supply chain and were also able to gain valuable knowledge of local conditions and expectations.

A total of 97 participants, including Telekom employees, suppliers from China and representatives of governments, NGOs and research institutes, used the event to share information on different aspects of sustainable procurement in the ICT sector. The question of how to improve the various stakeholders' collaboration in order to comply with established environmental and social standards was the focal point of the event. This gave us the ideal opportunity to demonstrate the significance of CR for the success of our company and the resulting requirements for our suppliers, and to offer assistance in better meeting these requirements.

By working together, companies and their suppliers can resolve problems identified in the global supply chain such as working hours, occupational health and safety, and fair pay, as well challenges such as the conservation of natural resources and climate change. Compliance with ecological and social standards in the global supply chain is a fundamental aspect of our CR risk management. That involves creating transparency throughout the entire supply chain, something that still needs improvement. We will demand greater cooperation from our suppliers in this respect in future.

CR Report from the previous year

#### Sustainable Sourcing Excellence research project.

We saw initial results within the scope of the Sustainable Sourcing Excellence research project during the reporting period. Telekom is a participant in three of the project's five work packets:

- Developing a procedure for measuring environmental impact caused by purchasing and procurement logistics. This included analyzing requirements on standardized measuring methods and reviewing earlier approaches taken by industry partners.
- Developing an international, mandatory guideline for purchasing and procurement logistics. We finalized an initial working version of the Sourcing Governance Code in the

third quarter of 2011.

Establishing a procurement platform to help calculate the costs resulting from CO<sub>2</sub> emissions generated by purchasing and procurement logistics processes in order to make these a quantitative factor in procurement decisions. We will then begin developing strategies to prevent CO<sub>2</sub> emissions. Within the scope of this work packet, we analyzed current procurement platforms and compiled industry partner requirements into a specifications sheet.

In addition to this research project, Telekom teamed up with the EBS university (EBS Universität für Wirtschaft und Recht) to initiate another research project entitled "Sustainability & TCO." The aim of the project is to make it possible to quantify and evaluate the costs and savings associated with sustainable activities. With the results we hope to be able to provide our buyers with an effective tool for price-based evaluation of sustainability effects.

We began the first pilot projects to calculate costs generated by sustainability activities in October 2011. Within the scope of the projects, we plan to test the applicability of scientific methods and user acceptance of those methods. We will then decide whether to make further adjustments for systematic implementation based on the results.

Since December 1, 2010, Telekom's Corporate Procurement – Procurement Excellence & Vendor Management department has been participating in the Sustainable Sourcing Excellence project within the scope of the <a href="EffizienzCluster Logistik-Ruhr">EffizienzCluster Logistik-Ruhr</a> program, which is being conducted by the EBS university and the Supply Chain Management Institute in Wiesbaden, Germany.

The project is focused on the following:

- Developing a procedure for the integrated measurement of environmental impact caused by purchasing and procurement logistics
- Creating a sourcing governance code
- Creating guidelines for sustainable purchasing and procurement logistics
- Establishing a CO<sub>2</sub> efficient sourcing platform
- Developing an IT-based sustainability risk management system for purchasing and procurement logistics

Telekom decided to participate in this project, which is sponsored by the German Federal Ministry of Education and Research (BMBF), for a period of two years to begin with.

#### Magyar Telekom recognizes dedicated trading partners.

In June 2011 the Hungarian subsidiary presented the <u>DELFIN Award</u> for the fourth time to suppliers for particularly successful efforts in the area of sustainability. The purpose of the prize, which was first awarded in 2008, is to promote the idea of sustainable development and honor progress made in this direction. Award recipients must exhibit exceptional performance in the following four categories:

- Supporting equal opportunity and anti-discrimination within and outside of the company
- Sustainable innovation

- Sustainability education and awareness
- Investment and development in the area of climate protection

#### CR Report from the previous year

# Update on the 2010/2011 CR program.

#### **Sub-targets** Status of implementation/measures Further develop suppliers through harmonization Target achieved. and raising awareness of Telekom's sustainability • Sustainable Procurement Stakeholder II Dialog Day requirements, in annual dialog rounds or in 2010. workshops dedicated to the topic • International CR Stakeholder II Dialog Day held in China on November 10 and 11, 2011. • Four workshops were conducted with suppliers on sustainability topics in 2009 and in 2010 as well. • Two workshops with selected suppliers on the carbon management supply chain were conducted in 2011.

## 2010/2011 CR program

The current 2011/2012 CR program can be found in the "<u>Strategy & management</u>" section.

We take responsibility.



Home > Suppliers > Social Audits

# Social Audits.

Content verified by PwC

We continued and further expanded our social audit activities in 2011. In general, the auditors looked at areas in which Telekom generates the highest procurement volume and which involve the highest risk potential. Based on what we learned over the course of the reporting period, we decided not only to audit our direct suppliers but their <u>suppliers</u> as well. We were also able to further improve the efficiency of the social audit processes in the Joint Audit Cooperation (JAC).

#### 27 social audits in 2011.

During 2011, 15 of our suppliers and sub-suppliers were audited as part of the <u>Joint Audit Cooperation (JAC)</u>. Telekom also commissioned external auditors to conduct twelve additional social audits. With this efficient, comprehensive audit system, we are able to create more transparency in our supply chain and minimize risks.

With this <u>number</u>, we were able to maintain our good supply chain results in important <u>sustainability ratings</u> and even mildly improve our SAM rating with 94 out of 100 points compared to the previous year (90 points). As a result, Telekom received the best rating in the supply chain management category of all the companies in the mobile communications sector in 2011.

Some of our international subsidiaries conducted audits as well. T-HT Hrvatski Telekom in Croatia audited five suppliers that carry out work on the network infrastructure in 2011.

A total of 23 audits have been conducted on behalf of T-HT Hrvatski Telekom since 2003.

#### CR Report from the previous year

A social audit at Telekom comprises the following essential elements:

- A general risk assessment of suppliers conducted by Telekom,
- An evaluation of the supplier self-assessment conducted by Telekom
- Personal communication with the suppliers and
- The on-site audit.

Finally, the auditors write up an audit report including an audit rating. Instead of ending our business relationship with suppliers who violate our policies, Telekom works together with these suppliers to permanently improve conditions. We address any problems in an action plan and work together with the supplier to remedy these within a pre-defined period of time. We will continue to focus our social audit activities on Asia. We are also reviewing suppliers from other high-risk regions, such as Latin America and Eastern Europe.

## Audit program for 2012.

We conducted 53 audits at Group level between early 2010 and late 2011. They were carried out by experts from Deutsche Telekom and qualified external auditing companies. In 2011 we reviewed our target of conducting a total of 200 social audits of strategically important direct suppliers in the period from 2010 to late 2012.

We decided to expand the scope of our audit candidates to cover downstream levels of the supply chain in order to create more transparency in our supply chain and to increase our knowledge of potential CR risks. That way we are focusing on areas that we feel need the most improvement. By late April 2012 we will decide which companies to audit and begin conducting audits of second and third-level suppliers via our direct suppliers. We expect to reach our target of auditing a total of 200 suppliers by late 2012 with these measures.

In addition to the social audits, our China office in Shenzhen conducts supplier performance visits at direct and indirect suppliers. Five supplier performance visits were conducted in 2011. In addition to general topics regarding improving business relationships, sustainability issues were also discussed.

In 2012 we want to make the supplier performance visits more effective and also analyze different corporate areas more systematically with the help of a specific checklist. One of the main focal points of the visits is sustainability. If potential problems are identified during the visits, they are reported to us immediately. The suppliers involved then become potential candidates for a social audit. We plan to intensify supplier performance visits and make sustainability audits a permanent element in our quality management audits of current and potential network infrastructure suppliers.

#### Audit collaboration in the telecommunications industry.

Our activities in 2011 as part of the Joint Audit Cooperation (JAC) were focused on expanding the collaboration network. Experience gained in previous audits was also used to fine-tune audit parameters and revise the audit question catalog. Due to these measures only 15 audits were conducted in 2011 within the scope of the JAC instead of the 16 originally planned. The majority of these were follow-up audits to verify the corrective action taken for suppliers that had already been audited.

#### More members and new collaborations.

In 2011, four additional telecommunications companies joined the JAC - Belgacom, KPN, Swisscom and Vodafone. This will considerably increase the efficiency of the social audit processes.

A collaboration that extends beyond the social audits is being planned. The collaboration should make it possible to exploit synergy effects with other organizations such as the <u>Global e-Sustainability Initiative (GeSI)</u>.

#### Meeting to take stock and make plans.

The Joint Audit Cooperation (JAC) holds a meeting of its steering committee twice a year, which is attended by high-ranking representatives from JAC member companies. The first meeting in 2012 took place on January 11 in the Chinese city of Shenzhen. The

agenda included taking stock and discussing the 2011 audit activities as well as selecting additional activities for 2012. Another central topic was the integration of new members as a decisive factor in being able to realize sustainability criteria throughout the supply chain. Participants also discussed making JAC membership available to non-European telecommunications companies. The next steering committee meeting is scheduled for late June 2012 in the Netherlands.

The JAC also held its International Corporate Social Responsibility Forum on January 12, 2012, in Shenzhen with the slogan, "Cooperation Beyond Competition." More than 150 representatives of suppliers, NGOs, the press and ICT companies as well as sustainability experts participated. The participants all agreed on the necessity for increasing supply chain transparency through intensified collaboration. This is essential, in particular to submit the downstream delivery levels to a comprehensive risk analysis and thus achieve adequate and prompt improvements. The JAC members assured the suppliers and sub-suppliers that they would help them implement improvements.

As part of an industry-wide cooperation, Telekom and its competitors, Orange/France Telecom and Telecom Italia, announced a joint decision to improve the sustainability of their supply chain in Asia in December 2009. In October 2010, this decision resulted in the founding of an initiative, the Joint Audit Cooperation (JAC).

JAC comprises a strategy that enables the three companies to audit their shared suppliers globally on the basis of standardized criteria. The collaboration partners are also striving to establish social, ethical and environmental standards amongst their suppliers. The processes used for accomplishing this goal are based on the international social and environmental standards SA 8000 and ISO 14001 . Audits are conducted by internationally recognized auditing firms.

JAC improves the efficiency of social auditing processes since only one audit needs to be conducted of shared suppliers. The three companies then provide the results to each other.

# Update on the 2010/2011 CR program.

Increase the number of supplier audits conducted (risk verifications)

Implementation underway.

• 4 audits in 2009 (target achieved)

• 26 audits in 2010 (target achieved)

• 27 audits in 2011 out of 80 planned (target not achieved)

• Planned expansion of the Audit Roadmap to include indirect suppliers in 2012 to create more transparency of CR risks in the supply chain. Identification of suitable audit candidates by end of March 2102. Target of conducting 200 audits from 2010 to late 2012 is still valid.

#### 2010/2011 CR program

The current 2011/2012 CR program can be found in the "<u>Strategy & management</u>" section.



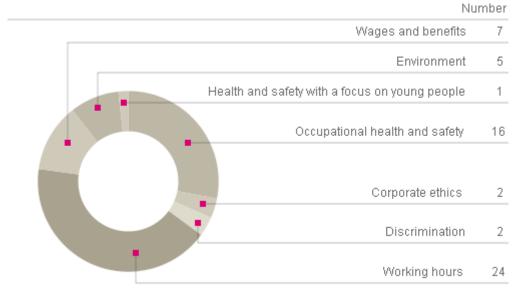
Home > Suppliers > Social Audits > 2011 audit results

# 2011 audit results.

Content verified by PwC

Through audit programs set up and steered at Group level, we conducted 27 <u>social audits</u> of Deutsche Telekom's direct and indirect suppliers in 2011. We particularly focused our social audit activities on suppliers located in Asia. However, we also conducted social audits in Latin America and Eastern Europe. T-HT Hvratski Telekom conducted an additional five social audits of its suppliers in 2011. Their results have not been included in the list below.

At a glance: 2011 audit results.



#### Results and measures for improvement.

In 2011, a total of 27 audits were conducted by external and internal auditors. Fifteen of these audits were conducted as part of the <u>Joint Audit Cooperation (JAC)</u>. The suppliers audited included producers from the areas of network infrastructure, fixed-line and mobile devices, office supplies and service uniforms.

We did not find any cases of corruption. However, we identified material weak points and considerable need for improvement particularly in the following areas:

- Working hours
- Occupational health and safety
- Fair pay

Some of the findings came from third parties, for example from the Joint Audit Cooperation (JAC). We found violations against Telekom supplier requirements in a total of 57 cases, 16 of which must be considered critical. Based on these findings, measures were immediately introduced to improve conditions on site.

CR Report from the previous year

	Measures and improvements made
t	A system for automatically recording working hours and providing information to the executive management in compliance with SA 8000
1	requirements was introduced.  • A mandatory day off after seven working days was introduced.

Working hours	<ul> <li>The audits revealed that a lot of overtime had been carried out.</li> <li>Employees at one production site were scheduled to work 20 days in a row.</li> </ul>	<ul> <li>A system for automatically recording working hours and providing information to the executive management in compliance with SA 8000 requirements was introduced.</li> <li>A mandatory day off after seven working days was introduced.</li> </ul>
Wages and benefits	Immigrant workers were paid different wages than domestic workers.     Overtime was not paid in accordance with legal regulations.	<ul> <li>Equal pay was specified for native and immigrant workers.</li> <li>Payment of the legal minimum wage was introduced for regular work and overtime.</li> </ul>
Child labor	Adolescents were working the night shift.	<ul> <li>From now on adolescents will only be employed to handle light-stress jobs and are not allowed to work night shifts or overtime.</li> <li>Regular checks will be carried out to ensure that supervisors comply with the protective measures and adolescents will be asked about the situation on a regular basis.</li> </ul>
Discrimination	Female employees had to undergo a pregnancy test before being hired.	Pregnancy tests are no longer being conducted before a female employee is hired.

Key findings

# Environment, health and safety.

Topic	Key findings	Measures and improvements made
Environment	<ul> <li>There was no certified environmental management system in production.</li> <li>Suppliers of products involving an increased environmental risk were not being requested to provide environmental certificates.</li> </ul>	<ul> <li>ISO14001 certification has now been achieved.</li> <li>Mandatory environmental certification was introduced for suppliers of products involving an increased environmental risk.</li> </ul>
Occupational health and safety	Risks at the workplace that could lead to accidents, injury or work-related illnesses were not being reviewed. There were no safety specifications for chemicals. There were no informational or training measures on occupational health and safety.	Work processes and stations are now being regularly inspected and documented in consideration of risk factors.     All safety specifications for chemicals and hazardous goods are being reviewed and updated.     Employees receive regularly training in occupational health and safety measures.

# Corporate ethics.

Topic	Key findings	Measures and improvements made
Corporate ethics	<ul> <li>Suppliers were not required to comply with ecological, social and ethical standards.</li> </ul>	<ul> <li>Mandatory environmental and social standards for suppliers were introduced, including regular assessments.</li> </ul>

Home > Suppliers > International collaboration

# International collaboration.



Telekom has been working on an international level toward establishing sustainable supplier relationships for several years now; this can be seen, for example, in the Global e-Sustainability Initiative (GeSI).

We are also directly active in the countries of our suppliers. One focus of our current activities is China. In addition to our official branch office in Beijing, our procurement, technology and product management units have an office in Shenzhen in the south of China. As a partner of the SWITCH Asia project, we work toward embedding sustainability in the Chinese electronics industry.

#### GeSI: Initiative in the telecommunications industry.

As a founding member of <u>GeSI</u>, Telekom has been involved in creating more transparency in the supply chain since 2011. The main goal of <u>GeSI</u> is to improve social and environmental conditions when it comes to the extraction of raw materials.

Telekom has been holding the chairmanship at GeSI since 2006 and assumed the co-chairmanship of the Supply Chain Working Group as well in April 2011. This working group is primarily involved in securing and further advancing minimum social and environmental standards in the ICT supply chain. We also actively participated in other GeSI working groups during the reporting period promoting the consideration of CR aspects, including:

- Climate Change Working Group,
- Energy Efficiency Working Group,
- E-Waste Working Group and
- Extractives Working Group.

CR Report from the previous year

Raising awareness of sustainability in China's small and medium-sized enterprise sector.

The goal of SWITCH Asia is to conduct 35 training workshops between 2010 and 2012 in the five project regions and reach out to around 500 companies.

During the reporting period, Telekom participated in several activities in China:

#### Workshops for small and medium-sized enterprises.

A total of five training workshops for small and medium-sized enterprises were conducted in the Chinese regions of Bohai Basin, Jiangsu, Zhejiang, Shenzhen Industrial Zone and Pearl River Delta between April and June 2011 within the scope of the SWITCH Asia

project.

#### National kick-off event.

A one-day national kick-off event was held on September 2, 2011, in Beijing for the SWITCH Asia project. Speakers presented the initiative's goals, activities and initial success in order to get stakeholders interested in the endeavor and generate additional support. At the event Telekom presented an overview of sustainable procurement strategies and talked about its support of the SWITCH Asia project. Around 150 representatives from high-ranking Chinese authorities and organizations as well as from Chinese and European companies participated in the event.

#### CR Report from the previous year

As a strategic partner, we support the <u>SWITCH Asia</u> project, which was initiated in 2009 and is funded by the EU. Telekom is the sole representative of the ICT industry in the project. The objective of the project is to provide information and training to more than 500 small and medium-sized enterprises from the electronics industry in areas such as ecological efficiency, occupational health and safety and CR.

Home > Climate & environment

# Climate & Environment.



# Why does the Telekom fleet have so few cars with alternative drives?

Find out more

#### Climate & environment.

The ICT industry plays a key role when it comes to curbing climate change. Deutsche Telekom discussed this fact at the United Nations' COP 17 climate protection conference, which was held in December 2011 in Durban, emphasizing the necessity of setting specific, mandatory targets.

Germany—and therefore Telekom—needs to take on a pioneering role in doing so. We are developing our products and services in line with these criteria, making it possible for our customers to engage in green consumption with our innovative ICT services and solutions. We are also investing heavily in the expansion of a climate and environmentally friendly network infrastructure.

What's more, we take a host of measures to continuously reduce the impacts that our own business activities have on the climate and environment. Reducing the Group's CO<sub>2</sub> emissions in Germany is a focal point of our <u>climate</u> <u>protection strategy</u>. During the reporting period we concentrated on implementing our <u>climate protection strategy</u> throughout Europe.

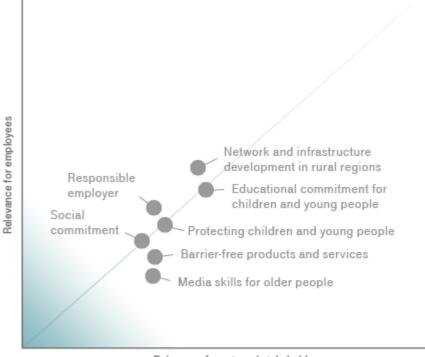
Climate protection calls for fundamental rethinking of approaches in the worlds of business and society. We think that we already know how to fight climate change. Are we right or do we need a much broader vision? What is Telekom's vision? What measurable contribution is Telekom making to the fight against climate change?



CR category "Connected life and work"

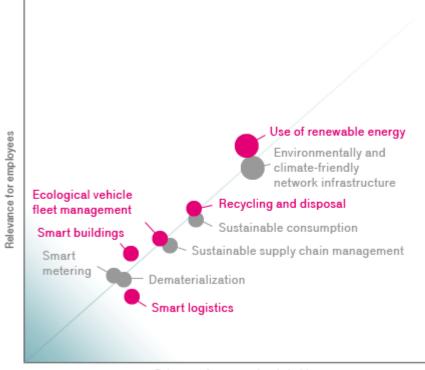
Relevance for external stakeholder

# CR category "Connect the unconnected"



Relevance for external stakeholder

CR category "Low carbon society"



Relevance for external stakeholder

The matrices map the results of our 2012 stakeholder survey. We use the survey to determine how relevant our internal and external stakeholders consider the various topics addressed by our <u>CR categories</u> to be. Further information regarding the stakeholder survey can be found in the <u>"Strategy & management"</u> section.



Home > Climate & environment > Climate protection

# Climate protection.

Digital technology and innovative ICT solutions can contribute significantly to reducing greenhouse gas emissions worldwide. Companies from the ICT sector are not the only ones that can make a contribution to the reduction of CO<sub>2</sub> emissions. Intelligent use of information technology can reduce emissions considerably in other industries as well. This primarily applies to all aspects of smart buildings, smart logistics, smart grids, smart motors and dematerialization. These were the findings of two studies that were supported by Telekom over the last few years:

- the SMART 2020 global study, which was conducted by the Global e-Sustainability Initiative in 2008 and
- SMART 2020 Germany Addendum, which was published in 2009.

Based on these findings, we have integrated the promotion of a climate friendly society into our <u>CR strategy</u>. We are involved in different <u>initiatives</u> outside our company walls as well to promote climate protection at a national, European and global level. Additionally, our innovative <u>products and services</u> are already making an important contribution to creating a climate-conscious society. One example of these are our phone and web conference offers, which reduce  $CO_2$  emissions considerably compared to real-life meetings. The Telekom Group is also constantly working to reduce its own  $\underline{CO_2}$  emissions.

# Video: Climate Change

(Animation from our CR App "We care")



# Climate protection goal: 40 percent less CO<sub>2</sub> by 2020.

Telekom in Germany plans to make a contribution to creating a <u>low carbon society</u> by 2020. Our goal is to reduce  $CO_2$  emissions by 30 percent by 2020 compared to 2008 levels. That will be the equivalent of more than 40 percent compared to emissions recorded in 1995.

 $CO_2$  reductions at the Telekom Group will primarily result from the transition to the more energy-efficient Internet protocol (All-IP) over the next couple of years. The new Green Car Policy and reductions in the area of facility management will also make a major contribution to achieving this goal. Emissions reductions are measured using the  $CO_2$  Emissions key performance indicator (KPI) Telekom generated emissions totaling 2,138,039 metric tons of  $CO_2$  throughout the Group in 2011.

#### Internationalization of the climate protection strategy.

40 percent fewer CO<sub>2</sub> emissions than in 1995: Telekom in Germany has set itself this ambitious climate protection goal to help create a <u>low carbon society</u>.

We started to expand our climate protection strategy to include 13 European subsidiaries and 11 T-Systems LBUs in 2011. The goal is for these units to approve their own climate protection strategies by May 2012. These strategies will include specific targets and measures to be realized by 2020. We determined the base values from 2008 for all units and identified specific measures during the reporting period. The plan is to specify and approve reduction targets for the individual units in 2012.

These will be expanded to cover our non-European subsidiaries once the climate protection strategy has been implemented at the European units.

## Team of experts supports further reduction of CO<sub>2</sub>.

An internal group of experts, the <u>Climate Change Group</u>, is developing and initiating specific measures that we can use to curb our CO<sub>2</sub> emissions in the time period between 2011 and 2015. These include:

- Climate friendly network infrastructure solutions
- The LOLA (Load Adaptive Networks) project
- Planned introduction of <u>Green DSL</u>
- The Green Car Policy
- Teleconferencing and web conferencing

Additional measures are being developed at our Energy Camps. Employees from our subsidiary, <u>Power and Air Condition Solution Management GmbH (PASM)</u>, <u>DFMG Deutsche Funkturm GmbH</u>, experts from different Telekom areas and representatives of the <u>Climate Change Group</u> attend these camps, which are held annually. The following activities were decided upon for 2012 and 2013 at the Energy Camps in September 2011:

- Continuing to dismantle old network technology
- Optimizing the temperature in equipment rooms
- Increasing the energy efficiency of office buildings

#### 12,126 metric tons of CO2 compensated for by certificates.

Telekom compensated for the CO<sub>2</sub> footprint left behind by events, products and services totaling at 12,126 metric tons of CO<sub>2</sub> during the reporting period.

We reworked our event policy in September 2011 in consideration of climate protection. Climate certificates must now be purchased for all events that generate more than 10 metric tons of CO<sub>2</sub> in order to eliminate their CO<sub>2</sub> footprint. CO<sub>2</sub> compensation for events with emissions below this limit is voluntary. Project managers responsible for events need to take climate protection-related issues into account even during the planning phase. They can use an emissions calculator to calculate values such as the emissions that will be generated by participant travel to and from the event.

We also compensate for CO<sub>2</sub> generated by <u>products and services</u> such as teleconferencing technology or software for downloading videos and music.

## CR Report from the previous year

We are also increasingly making up for unavoidable CO<sub>2</sub> emissions by investing in certified climate protection projects such as a biomass energy project in Brazil and a small water power plant project in Costa Rica. 30 percent of the climate certificates comply with the Gold Standard, the strictest requirements for emission

reduction projects worldwide, and 70 percent comply with the Voluntary Carbon Standard, which is recognized internationally as well.

## Greenpeace: Telekom is Climate Leader.

At the annual meeting of the European business association, Business Europe, which was held in Brussels in May 2011, the environmental protection organization asked companies to support EU-wide legislation calling for a 30 percent reduction of greenhouse gas emissions by 2020. At the event <u>Greenpeace</u> selected Telekom to be one of ten European Climate Leaders, thereby recognizing them as a role model when it comes to supporting the ambitious EU climate policy.

#### Measuring emissions along the value chain.

We have introduced the measurement of our Scope 1 and 2 emissions at international level over the past few years. To do this, we use the data provided by our international units in the Group-wide CR database, in which each company records the number of kilometers driven, consumption of fossil fuels and electricity consumption. Based on this data we calculate the Scope 1 and 2 CO<sub>2</sub> emissions using a coefficient.

We are aware that this only reflects part of our impact on the climate. Additional emissions are generated in particular during the production and transport of the goods that we purchase from our suppliers as well as when customers use our services. In the past we have only recorded part of these emissions, which are referred to as <a href="Scope 3 emissions">Scope 3 emissions</a>. We intend to record them in their entirety in the future.

We will continue to work on a new <u>ICT Greenhouse Gas Standard</u> for Scope 3 emissions along with suitable measurement methods in collaboration with other companies in 2012. We conducted <u>workshops</u> with two selected strategic suppliers during the reporting period in order to learn more about the emissions generated by our suppliers. Initial measures for estimating emissions generated by customers are scheduled for 2012.

#### Employees paint for climate protection.

At the end of January 2012, Telekom challenged its employees to get artistic to show what they themselves or Telekom are doing to protect the climate and the environment. The aim of the campaign was to actively involve employees in reporting and raise awareness of climate and environmental issues. In total, 55 works of art were submitted by 40 employees. All contributions are exhibited in a <u>digital picture gallery</u> as part of the CR Report 2011.

### Update on the 2010/2011 CR program.

Sub-targets	Status of implementation/measures
Develop a Group-wide climate change strategy and revise the specific target for reducing CO <sub>2</sub> emissions	Implementation underway.  • Board of Management has adopted a new CO₂ target for Germany  • Internationalization and development of a Group-wide target by 2012

### 2010/2011 CR program

The current 2011/2012 CR program can be found in the "Strategy & management" section.

© 2012 Deutsche Telekom AG		

We take responsibility.



Home > Climate & environment > Climate protection > Climate protection initiatives

# Climate protection initiatives.

Fighting global warming will be one of the main issues in our future. Close collaboration between the worlds of business, politics and society is very important in developing effective approaches to climate protection. That is why Telekom is involved in numerous initiatives to protect the climate and the environment.

We made efforts to drive the topic during our participation in the United Nations' COP 11 17 climate protection conference, which was held in December 2011 in Durban. At the conference, we emphasized the central role of the ICT industry in realizing CO<sub>2</sub> reduction targets as well as the necessity of developing specific, mandatory objectives.

# Telekom signs 2°C Challenge Communiqué.

As a founding member of the EU Corporate Leaders Group on Climate Change , Telekom signed the initiative's 2°C Challenge Communiqué in November 2011. The Communiqué calls upon governments to put an end to the current standstill in international climate protection negotiations and to take the necessary steps for making the switch over to a sustainable economic approach at the national level without delay.

The <u>EU Corporate Leaders Group on Climate Change</u> (EU CLG) initiative, which was founded by the Prince of Wales, is an association of 16 leading European companies from different industries. As a founding member of the EU CLG, Telekom is dedicated to an ambitious, fair agreement on the global reduction of CO<sub>2</sub> emissions.

#### 2°—German CEOs for Climate Protection initiative.

Deutsche Telekom supports the German federal government at a national and international level in creating an effective policy to protect the global climate as a member of the 2°—German CEOs for Climate Protection initiative . Prior to the United Nations' COP . 17 climate conference, which was held in the South African city of Durban in December 2011, the initiative members wrote a letter to German Federal Minister for the Environment, Norbert Röttgen. The letter makes it clear that the companies that signed the letter are dedicated to climate protection and expect the German federal government to make every effort to reach an agreement on ambitious climate protection targets.

#### CR Report from the previous year

The objective of the <u>2°—German CEOs for Climate Protection</u> initiative is to limit average global warming to a maximum of 2°C compared to pre-industrial levels in the long term. The initiative considers its most important contribution to German climate protection policy to be the development of technologies, procedures and services that can be used worldwide to reduce greenhouse gas emissions.

# Involvement in the Global e-Sustainability Initiative.

Telekom is a founding member of the <u>Global e-Sustainability Initiative</u> (GeSI). Telekom has chaired the board for the initiative since 2006 and became co-chair of the Supply Chain Working Group to develop criteria for

sustainable procurement in April 2011. Company representatives were involved in all five current working groups during the reporting period:

- Climate change: The plan for 2012 is to identify the potential for reducing water consumption in processes used to manufacture network infrastructure and end devices.
- **Supply chain:** During the reporting period, the working group further advanced the standards for a transparent raw materials supply chain, for example under the <u>Conflict-free Smelter Program</u>.
- Energy efficiency: An energy efficiency benchmark for fixed-network operators was initiated in November 2010. Deutsche Telekom also decided to participate in a relevant pilot project in June 2011.
- e-Waste: The group is planning to conduct an e-Waste Academy for representatives from the political and administrative sector as well as for small and medium-sized disposal companies in Ghana in June 2012. The purpose of the Academy will be to raise awareness of how to handle electronic scrap effectively.
- **Public policy**: GeSI used the United Nations' COP <sup>1</sup> 17 climate conference, which was held in Durban in December 2011, as an opportunity to engage in numerous activities, in which Telekom also participated as a member of GeSI. For example, GeSI hosted an ICT Day in collaboration with the International Telecommunication Association and launched the <u>Transformative Step of the Day</u> initiative with the objective of initiating measures for reducing CO₂ at a local level. GeSI presented an award to three governmental initiatives within this context: a Danish-Korean-Mexican public-private partnership as well as two Chinese environmental initiatives. The activities reflected GeSI and Telekom's dedication to climate protection and demonstrated solution options for the ICT industry.

## Positioning at the COP 11 17 climate protection conference.

In addition to actively participating in the GeSI events, Telekom representatives also took part in numerous other panel discussions at COP 11. We teamed up with partners to effectively <u>position</u> ICT as a key technology to support CO<sub>2</sub> reduction in industry and business.

#### Standardization process for universal chargers.

GeSI worked to develop a standard for universal chargers in the reporting period under the leadership of Luis Neves, head of Corporate Responsibility at Deutsche Telekom. The standard defines a comprehensive norm for chargers for cell phones, tablet computers, cameras, navigation devices, wireless headphones as well as MP3 and MP4 players. The chargers are comprised of a power pack with a removable cable, which means that users can use a single cable to transmit data and charge their device. Their universal application makes them compliant with policies for electronic scrap prevention. Transport costs for new devices are also reduced as specific chargers are no longer necessary. The International Telecommunication Union, a special organization of the United Nations, approved the standard in May 2011. The most important cell-phone manufacturers and mobile network providers, including Deutsche Telekom, have already agreed to introduce the standard.

#### Majority of EU Commission broadband code of conduct requirements met.

The European <u>Code of Conduct on Energy Consumption of Broadband Equipment</u> specifies limits for the energy consumption of broadband equipment. In 2011, Telekom informed the European Commission that its DSL modems had already fulfilled the requirements specified in version 3 of the code of conduct, which had been signed the previous year, in 2010. As to xDSL equipment, Telekom complied with the relevant limits in 2011. In 2012 we will be reviewing the more ambitious version 4 of the code of conduct for signing.

#### CR Report from the previous year

Telekom has been involved in the <u>Global e-Sustainability Initiative (GeSI)</u> since 2001 as a founding member. This industry initiative is dedicated to fully exploiting the global CO<sub>2</sub> reduction potential that state-of-the-art information technology offers society. GeSI also works to make the extraction of raw materials more transparent

and to improve social and environmental conditions in raw material extraction.

As a member of GeSI, Telekom participated in drafting the <u>Guadalajara ICT Declaration</u> at the COP 1 16 climate conference, which was held in Cancún in December 2010. The goal of the declaration is to more heavily use the potential that ICT offers for reducing CO<sub>2</sub> in close collaboration between the private and public sectors.

An additional ten companies signed the European <u>Code of Conduct on Energy Consumption of Broadband</u> <u>Equipment</u> in 2011. That means that already 72 percent of broadband connections throughout the EU are subject to the code of conduct.

#### Platform for climate-friendly consumption.

As a member of the <u>Product Carbon Footprint</u> (PCF) project, Telekom has been helping set up a <u>cross-industry</u> <u>platform to promote low-emissions consumption</u> since 2008 This platform was developed into a dialog forum known as Platform for Climate Compatible Consumption in Germany during the reporting period.

### Supporting the GHG Protocol Initiative.

As a member of the <u>Global e-Sustainability Initiative</u>, Deutsche Telekom actively participated in 2011 in drafting the ICT Sector Supplement to the <u>Greenhouse Gas (GHG) Protocol</u>, which is scheduled for publication in 2012. The supplement explains how to calculate CO<sub>2</sub> emissions in the ICT industry and how to define relevant KPIs. With the supplement, we are making a considerable contribution to the international standardization of these calculations. Other participants included organizations such as Carbon Trust, the <u>World Resource Institute</u> (WRI) and the <u>World Business Council for Sustainable Development</u> (WBCSD).

In 2010 we participated in reviewing the standards developed by the GHG Protocol Initiative to calculate greenhouse gas emissions generated by products and companies. Based on this, the WRI and the WBCSD published standards for calculating product carbon footprints and recording Scope 3 emissions in October 2011. Companies can use these two standards to improve their CO<sub>2</sub> efficiency along the entire value chain, to reduce risks and to thereby create competitive advantages.

CR Report from the previous year

#### Statement drafted for Rio+20 conference.

As a member of the <u>International Chamber of Commerce</u> (ICC) Telekom helped draft a statement for the 2012 Rio+20 conference during the reporting period. The statement identifies ways in which the ICT industry can help reduce CO<sub>2</sub> emissions. The document is scheduled to be published in April 2012.

## "Green with ICT" panel discussions.

We hosted the "Green with ICT" panel discussions during the reporting period. Representatives from environmental, business and consumer associations as well as research institutes met with Telekom representatives at our Headquarters in Bonn on October 10, 2011 to discuss "Green with ICT—contradiction or reality?"

Update on the 2010/2011 CR program.

Sub-targets	Status of implementation/measures
Execute a carbon footprint project (CFP) for a uniform Group methodology	Implementation underway. Basic project carried out in 2009.  • Collaboration in a GHG road testing project  • Collaboration with the Product Carbon Footprint pilot project "Platform for climate compatible consumption" in Germany  • Participation in the 2010/2011 platform symposium including presentation of the sustainability impact of Telekom's video conferencing platform  • Restructuring the platform for climate compatible consumption  • Additional support planned for 2012

# 2010/2011 CR program

The current 2011/2012 CR program can be found in th	e "Strategy & management"	section.



Home > Climate & environment > Climate protection > Energy management

# **Energy management.**

In order to achieve our ambitious <u>climate protection goals</u>, we use resource-conserving information and communications technology in the <u>products and services</u> we offer to our customers. What is more, we are also systematically optimizing our operational processes and our <u>network infrastructure</u> in terms of climate protection. We work to reduce the <u>relative energy consumption</u> generated by our business activities in relation to revenues. We have been using the <u>Energy Consumption</u> CR key performance indicator (CR KPI) and the <u>CO<sub>2</sub> Emissions</u> CR KPI to measure progress in this area since 2010. A detailed description of the CR KPIs can be found in the "<u>Strategy and management</u>" section.

#### Certificates for 3,000 GWh of renewable energy acquired.

Telekom in Germany has been using renewable energy sources to cover 100 percent of its <u>electricity needs</u> via RECS-certified (Renewable Energy Certificates System) Scandinavian water and wind power plants. We purchased certificates for roughly <u>3,000 GWh</u> in 2011. These certificates are reviewed and reissued annually by the technical services provider TÜV-SÜD.

We test other technological options for generating renewable energy in various pilot projects. For example, we installed another photovoltaic system in Bonn to test the use of solar energy for mobile base stations during the reporting period. The results should be available in 2012. We also conducted a study to research conditions such as feed-in rates for electricity supplied to the grid and local grant requirements for using power from renewable energy sources at 14 international subsidiaries. This data will be used in the international subsidiaries' sustainability programs.

#### PASM develops Telekom 2020 energy concept.

Experts from Power and Air Condition Solution Management GmbH (PASM) reviewed energy use and procurement at Telekom for efficiency, environmental friendliness and supply reliability in the reporting period. The company looked at different factors and potential components of energy management from the all-IP in network's energy consumption patterns and the green power privilege under the German Renewable Energy Sources Act (EEG) to introducing a Group-wide smart grid. The review also took external factors such as legal requirements and technological developments into consideration. The initial results were presented in the Telekom 2020 Energy Concept in August 2011. We will be discussing the different energy concepts and their possible impacts on Telekom's CR strategy with the responsible corporate units in 2012.

Based on the results of the review, PASM and Deutsche Telekom teamed up with Deutsche Funkturm, Deutsche Telekom Technik GmbH and Group Facility Management to develop comprehensive measures to significantly reduce energy consumption from 2012 to 2014. These include:

- Using energy-efficient technologies in the network infrastructure
- Using highly efficient fresh air cooling systems for smaller network nodes
- Using waste heat generated by telecommunications technology to heat buildings
- Generating electricity, heat and cooling locally

Using low-energy lighting in offices

The energy concept indicates that it may take several years to successfully implement these measures. Generating electricity, cooling and heat, using waste heat generated by technical systems to heat buildings and increasing the energy efficiency of our equipment will positively impact costs and the environment. We will be installing additional systems to locally generate electricity and heat as early as 2012. However, the review also indicated that the direct procurement of energy from renewable sources as defined in the German Renewable Energy Sources Act is not possible on a cost-efficient scale under current legal conditions. That is why we may initially be targeting higher-grade certifications instead of the current RECS certificates.

<u>PASM (Power and Air Condition Solution Management GmbH)</u> is a subsidiary of Deutsche Telekom AG. PASM is responsible for procuring, provisioning and delivering power, including the associated support services, within the Deutsche Telekom Group.

#### PASM energy management certified.

PASM's managing board designated an energy manager in 2011 and approved targets, measures and implementation plans for the company's energy strategy. They also introduced an energy management system for the production area. PASM was certified in accordance with the DIN EN 16001 energy standard in November 2011. As in the previous year, PASM was also recognized as an energy-efficient company pursuant to § 41 of the German Renewable Energy Sources Act by the German Federal Office of Economics and Export Control.

#### Energy-efficient facility management.

Effective facility management is a key component in Telekom's efforts to achieve its ambitious climate protection goals. That is why we conduct an energy-related inspection of heating and ventilation systems as part of all facility renovation work and are constantly working to make our facility management practices even more energy- efficient. We increased the energy efficiency of our facilities during the reporting period by conducting various measures, including:

**Energy analysis:** We recorded the energy consumption of our largest buildings and conducted additional microanalyses for three properties on the basis of different consumption measurements for areas such as heat, water and electricity. We then came up with specific recommendations for further action. The purpose of these activities is to evaluate the facilities in terms of energy efficiency in accordance with the new energy performance certificate in Germany. We are planning to assess six additional buildings in 2012. We have also begun including investments for energy savings measures at buildings in our budget.

**Efficiency KPI:** Power and Air Condition Solution Management (PASM) developed an efficiency KPI for assessing energy consumption at office buildings. We commissioned the on-site analysis of ten properties based on the results. The analyses included heating and cooling equipment, lighting, ventilation systems and tools. The analyses also looked at how meters could be retrofitted to improve invoicing accuracy and positively influence user behavior. The microanalyses indicated savings potential for energy consumption of up to 15 percent. We have begun implementing the measures recommended by the analyses.

Introduction of LED lighting: We began switching over to LED lighting for general areas such as stairwells, corridors and basements at several office buildings in December 2011. We are planning to conduct these measures at other sites as well. In 2011 we also initiated the LED@Office project with the goal of equipping all Telekom offices in Germany with LED lighting. We already made the switch in some offices and assessed our experiences in cooperation with Group Facility Management, Procurement, Telekom Deutschland and

T-Systems. We then commissioned the technical services provider TÜV Rheinland to analyze the results and switched over to LED lighting at other test sites. We plan to evaluate operations at those sites in late 2012.

In addition to six further microanalyses in 2012, we are also planning to conduct more waste heat projects. For example, we plan to generate heat from central cooling equipment and using large heat pump systems located in ventilation ducts. This will enable us to tap the energy used to operate the Telekom networks to heat our offices. A similar project in Frankfurt/Main is currently in the bid phase.

### Croatia: Energy management at the company level.

T-HT Hrvatski Telekom is aiming for clear synergies and cost effects with the launch of an energy efficiency project at the company level that merges existing individual initiatives. The project was launched in June 2011. In total, more than 30 projects with excellent savings potentials have been identified. This includes more efficient use of cooling and heating systems as well as a migration to renewable energy resources. Today, 219 of the 1,684 vehicles in T-HT Hrvatski Telekom's fleet are operated with liquefied petroleum gas (LPG). To motivate its employees to engage in more efficient driving behavior in this vehicle class, the company held an internal ecological driving contest in 2011.

#### Savings in the Greek fixed and mobile communications segment.

The Greek subsidiary OTE completed the evaluation of its second largest and most energy-intensive administration building in 2011 as part of its program launched in 2008 to calculate the carbon footprint of buildings. An annual savings potential of around 2,500 MWh was calculated for the entire building—requiring an investment of EUR 700,000.

In addition, the company is planning to increase the highest permissible temperature in office buildings by 2°C to 26°C. This measure would enable some 750 MWh of power for air conditioning to be saved every year.

OTE also intends to improve its carbon footprint by switching to alternative energy production. An application was submitted in October 2011 to mount a 350 kW photovoltaic system on the roofs of commercial buildings in Attica. In April 2011, a program for evaluating the potential of wind energy, including a feasibility study for three wind turbines, was started in Crete.

#### Efficiency programs in mobile communications segment a success.

Cosmote, OTE's mobile communications arm, also achieved high savings potentials through energy efficiency measures during the reporting period. These include the installation of systems for outdoor cooling or wind turbines or the use of energy-efficient communications technology. Overall, the measures in 2011 meant that some 3,700 metric tons of CO<sub>2</sub> (i.e., 2.8 percent of the previous total emission figures) were avoided. Furthermore, the energy consumption at the base stations was decreased by 3.7 percent.

In 2011, Cosmote covered 1.1 percent of its energy consumption with renewable energy sources.

#### Hungary: 51 GWh of energy from renewable sources.

Hungary's Magyar Telekom is increasingly using power from renewable resources for operating its facilities. In the 5-year strategy, the goal is to purchase 46 GWh of green energy by 2015. Already in 2011, 51GWh were achieved. This accounts for almost 23% of the total volume used by Magyar Telekom Plc.

In order to achieve its climate protection goals, Magyar Telekom also launched a research and development project during the reporting period at a base station in Iszkahegy. The plan is to power the station with wind and

solar energy. The technical equipment should be installed by late March 2012. The generation of renewable energy should be continuously monitored and analyzed for potential of a possible extension.

CR Report from the previous year

### Free cooling in 40 branch offices at Slovak Telekom.

Slovak Telekom continued its installation (begun in 2008) of systems for the use of low external temperatures (free cooling), and outfitted 40 branch offices accordingly in 2011. Today, a total of 110 branch offices in Slovakia are using this state-of-the-art technology, thereby decreasing the energy consumption of their heating and cooling systems by 20 percent. Depending on the size of the branch office, this amounts to between 6 and 15 MWh per year. In addition, Slovak Telekom has been gradually replacing the environmentally harmful coolant chlordifluormethane in its air conditioning systems since 2009. 63 systems were retrofitted in 2011. The switch-over is scheduled for completion in 2014.

# Higher energy efficiency saves 2 GWh in Poland.

The Polish subsidiary PTC took various measures to decrease its relative energy consumption by 2 GWh at its branch offices during the reporting period. One example is the use of energy-efficient air conditioning systems and dynamic voltage regulators that adapt the power supply voltage to current demand. Innovative meter reading technologies for electricity meters in turn reduce the number of trips made to the base station.

#### British subsidiaries support climate goals.

40 percent fewer CO<sub>2</sub> emissions compared to the time period between 1995 and 2020—this ambitious reduction goal specified by Telekom in Germany has also been adopted by T-Systems UK. In order to achieve this, the subsidiary will set specific reduction goals for its local units for 2012. These measures will be accompanied by comprehensive employee information.

The company conducted several measures for reducing CO<sub>2</sub> emissions during the reporting period. Two projects were launched in June to provide fresh-air cooling at the data centers in combination with integrated use of waste heat to drastically reduce energy consumption. The permissible temperature at the data centers was increased to save on air conditioning use. Both measures are still being fine-tuned, and the actual reduction results are not yet available. More energy savings were achieved by switching the lighting system at 30 locations over to LED lighting equipped with motion sensors.

Initial measurements indicate that the consumption was reduced by 75 percent, from 465.47 to 116.61 kWh. Due to the high costs involved, LED lighting will only be installed in new buildings or when renovations are being carried out.



Home > Climate & environment > Environmental management

# Environmental management.

We want to make sustainability a component of all our business processes and of our employees' everyday lives. Our health, safety and environment (HSE) management system helps us make this possible. The system is based on the international standards OHSAS 18001 for occupational health and safety, ISO 14001 for environmental management and ISO 9001 for quality management. Key components of the environmental management system include a consistent environmental policy, a Group-wide manual, central document management and standardized Group-wide processes.

### 25 companies with central environmental management.

Telekom has been using an environmental management system that complies with the international ISO 14001 standard since 1998. Telekom Deutschland GmbH's environmental management system was certified in October 2011. That means that some 70 percent of the Group's locations now have a certified environmental management system.

# ISO 14001 umbrella certificate covers 25 companies.

25 international subsidiaries are now certified under the ISO umbrella certificate that the Group received in 2009. The following subsidiaries were added to the list of certified companies within the Group during the reporting period:

- T-Systems do Brazil
- T-Systems Malaysia
- T-Systems Netherlands
- T-Systems South Africa

#### Award for active environmental protection.

Environmental officer Freia Siem from the Technical Infrastructure Branch Office, Northern District, of Deutsche Telekom Technik GmbH, who is also responsible for ISO 14001 audits, received the environmental protection award presented by Studien- und Fördergesellschaft der Schleswig-Holsteinischen Wirtschaft e.V. The organization has been presenting this award since 1987 to people who demonstrate exemplary and successful dedication to protecting the environment in the scope of their professional activities.

CR Report from the previous year

# Expansion of OHSAS 18001 certification.

Our Headquarters in Bonn and 13 other Group subsidiaries were OHSAS 18001-certified in 2011:

- IT Services Hungary
- Power and Air Condition Solution Management
- T-Systems Austria
- T-Systems Czech Republic
- T-Systems do Brasil

- T-Systems International
- T-Systems Malaysia
- T-Systems Mexico
- T-Systems Multimedia Solutions
- T-Systems Netherlands
- T-Systems Slovakia
- T-Systems South Africa
- T-Systems UK

CR Report from the previous year

#### Development of occupational safety indicators.

We developed two performance indicators to analyze the quality of occupational safety and have been collecting data for this in a pilot project since January 2012:

- The indicator for the number of work-related accidents resulting in absence from work will be used to compare the values within the Group.
- The indicator for the duration of absence from work after work-related accidents is used to calculate length of absence and will be used in combination with the number of accidents to help analyze the quality of on-site occupational safety.

In the pilot phase in January 2012, the relevant data was collected at T-Mobile Czech Republic, T-Mobile Austria, T-Systems do Brasil T-Systems Netherlands, T-Systems Switzerland and T-Systems South Africa.

We also initiated a two-year project in September 2011 to develop Group-wide health and safety standards with integrated need analyses. In addition to the indicators, the purpose of these standards is to expand on the content of the Group's international occupational health and safety management system.

### Polish subsidiary wins Green Brand competition.

In April 2011, PTC became the first mobile provider to receive the Green Brand certificate from the Green Brand Award Committee. This award is given to companies for extraordinary achievements in environmental protection and sustainable business practices. This prize recognized PTC's continuous efforts in environmental protection within and beyond the company's ISO 14001 certified environmental management system.

#### Training on environmental topics for 1,095 employees in Croatia.

The Croatian subsidiary T-HT Hrvatski Telekom continued its comprehensive training measures in 2011 in order to increase its employees' awareness of the importance of environmental topics and familiarize them with the environmental management system. The company has been offering a voluntary e-learning course since April 2010. Some 800 employees successfully completed the course in 2011. A total of 295 employees participated in training courses for employees with specific environmentally sensitive duties during the reporting period. T-HT Hrvatski Telekom's infrastructure unit also received an award from the Croatian Society for Quality in November 2011 for their important contribution to implementing and promoting quality standards in the Croatian business sector.

Sub-targets	Status of implementation/measures
Implement a Group-wide environmental management system compliant with ISO 14001	Implementation underway.  • Umbrella ISO 14001  certificate for 18 companies: Target met  • Further integration of all environmentally relevant Group companies
Implement a health, safety and environmental (HSE) management system according to ISO 14001 ii and OHSAS 18001 ii	Implementation underway.  • Occupational health, safety and environmental management system introduced at 17 companies (as of December 31, 2011)

# 2010/2011 CR program

The current 2011/2012 CR program can be found in the "Strategy & management" section.

Home > Climate & environment > Resource efficiency at the workplace

# Resource efficiency at the workplace.

Telekom wants to keep the negative impact of its business practices on the environment to an absolute minimum. We are committed to the responsible handling of natural resources throughout the Group. For example, we use our <u>cell phone recycling program</u> to motivate our customers and employees to make a personal contribution to the conservation of natural resources. We also make our workstations environmentally friendly through measures such as using low-energy devices. Sustainability criteria also play a key role in the procurement of office supplies.

#### 77 percent of paper consumption from recycled paper.

We introduced a modified purchasing process for paper during the reporting period. The process requires employees to get approval before purchasing fresh-fiber paper. With this policy, 77 percent of our paper consumption now involves recycled paper.

This measure is in line with the five-point statement that we support as members of the <u>Pro Recyclingpapier</u> initiative that promotes the use of recycled paper. The modified purchasing process was introduced in connection with the <u>Jetzt umstellen</u> (Time for a change) campaign, which was launched during the reporting period.

CR Report from the previous year

#### Conserving resources with state-of-the-art printers.

We are planning to install a total of 4,800 environmentally friendly multi-functional printers at Group sites in Germany by April 2012. Each printer can serve several workstations. Almost 77,000 workstations had access to a total of 4,100 multi-functional printers by late February 2012. These printers bear the <u>Blue Angel</u> and <u>Energy Star</u> seals for being particularly low-energy, climate friendly products. We installed 1,696 new multi-functional printers during the reporting period.

By introducing multi-functional printers, we will be able to save an annual 1,019,572 kWh of electricity, i.e., 439 metric tons of CO<sub>2</sub>. It will also help us save costs of around EUR 155,000.

# CR Report from the previous year

#### Printing on only one page becomes the exception to the rule.

New multi-functional printers have been configured to print on both sides as a default setting since September 2011. Thanks to a software update, multi-functional printers that had already been installed before November 2011 were also configured for double-sided printing as default setting. This printer function conserves resources and reduces costs by using less paper.

#### Green office supplies.

We continue to promote the use of green office supplies by featuring them prominently in our central ordering system, eBest. An online training tool addressing the "green office" has been available since late 2011 as well. In 2012, we also plan to use internal media such as the employee newsletter and the intranet to raise our

employees' awareness about ways to be green at the office.

## CR Report from the previous year

Our central ordering system eBest offers a selection of more than 900 environmentally friendly items such as recycled paper and recycled files as well as writing utensils made from recycled materials. Employees can easily find these materials and then order them by entering the key words "environmentally friendly" into the search function. In order to encourage the use of environmentally friendly office materials, Telekom Deutschland offers online training for its secretarial offices and for those responsible for ordering supplies at the service companies.

#### Increased use of online services.

By introducing Software Managed Services, i.e., standardized and software-based processes used in areas such as orders, staff data records and travel management, Telekom in Germany avoids unnecessary paper printouts and a paper-based filing system. We further advanced this system in 2011 and increased user friendliness by bundling the individual components.

17,000 employees have been receiving their payslip digitally since 2011. That saves paper and postage.

#### Annual saving of 234 metric tons of paper at T-Mobile USA.

T-Mobile USA was able to significantly reduce paper use at its branch offices in 2011 thanks to a printer optimization program. By reconfiguring all printers—except for those at stores—to do two-sided printing in black ink and installing new software at the start of the year, the company has been able to reduce paper use by 234 metric tons and save USD 1 million (EUR 744,491) annually. Thanks to innovative cloud printing technology another 6.6 metric tons of paper were saved in 2011. The technology makes it possible to delete print jobs. Furthermore, the cost of the print jobs are displayed on the device.

## Lighting systems retrofitted at Spanish branch offices.

In the context of its environmental management system, T-Systems Iberia switched the lighting at its branch offices in Barcelona and Madrid over to low-energy light bulbs and updated the systems, making it possible to shut off parts of the lighting as needed. However, because the branch offices are not equipped with dedicated meters, the company will only be able to estimate the amount of energy savings based on the energy bill. T-Systems Iberia expects savings of around 2 percent of total consumption.



Home > Climate & environment > Waste management & disposal

# Waste management & disposal.

Deutsche Telekom reduced its <u>waste</u> throughout the entire Group by around 10 percent during the reporting period. In order to make our waste management even more resource-efficient we developed a new <u>strategy</u> in December 2011. Our waste is primarily made up to <u>office waste</u> and <u>dismantled equipment</u> from our nationwide network infrastructure.

### Recycling 11,000 metric tons of cable.

In 2011 Telekom removed more than 11,000 metric tons of cable, e.g., plastic, lead and corrugated-steel sheathed cable, from ducts in Germany alone. The cable was processed in accordance with environmental standards at certified waste disposal facilities and up to 90 percent was recycled.

Telekom in Germany developed a new waste management strategy in December 2011. The main objective of the new strategy is to increase resource efficiency by:

- Preventing and reducing waste
- Recycling devices and technical equipment
- Recycling valuable materials such as metal and rare earth metals
- Other measures such as using waste to generate heat
- Environmentally-friendly disposal of remaining waste
- Reducing disposal costs and optimizing revenue

The new strategy also includes developing KPIs for improved waste management and implementation monitoring.

International coordination and approval of the waste management strategy and the start of implementation into operational processes and systems are scheduled for 2012.

Most metals and plastics are introduced back into the production cycle in high quality. There are only minimal production losses involved in dismantling cables and recycling copper. Depending on the composition of the waste, we are able to achieve reuse rates of approximately 70 to 90 percent. Telekom initiates annual audits of cable disposal facilities. We use the results of these audits to optimize dismantling processes together with the firms commissioned and to maximize the amount of copper recovered. We guarantee a high degree of safety and seamless traceability with our control procedure, which is compliant with the statutory waste disposal regulations, and additional internal transportation documentation.

### Experts manage systematic network upgrade.

The removal of outdated technology that is no longer necessary is an important measure against the backdrop of ongoing <u>all-IP network expansion</u> to help us conserve energy and save costs in the years to come. At Telekom in Germany, the <u>Power Off task force</u> identifies which unnecessary components can be removed from the network with reasonable effort. These are then removed systematically.

We shut down systems with a total power consumption of 4,286 kW in 2011, thereby reducing CO<sub>2</sub> emissions by 16,564 metric tons.

We are making considerable progress with dismantling <2 MB transmission systems. During the reporting period, circuit boards with capacities of 3,009 MW were shut down, dismantled and then sent on to be recycled. The circuit boards contain valuable resources such as gold and silver.

In addition to the Save4Service efficiency project that was launched in 2010, the Retire project identified a further 6.5 MW of line capacity during the reporting period that the Power Off task force plans to deactivate in 2012. The valuable components will then be recycled.

#### e-Waste Academy planned for Ghana.

The e-Waste working group of the <u>Global e-Sustainability Initiative</u>, of which Telekom is a member, is planning to conduct e-Waste Academies on this topic. The Academies are five-day workshops involving international experts as well as experts from governments, administrations and SME disposal companies of developing countries. The purpose of these workshops is to share best practices, increase awareness about electronic scrap and encourage networking. The workshops are also intended to contribute to the creation of a legal framework that will improve the environmental situation without limiting people's employment and income opportunities. The first e-Waste Academy is scheduled to be held in Ghana in late June, 2012.

Slovak Telekom acquires 1,056 metric tons of copper through recycling efforts.

Slovak Telekom was able to acquire 1,056 metric tons of copper from cables through recycling efforts in 2011. This means an increase of 30 tons of recycled cables compared to 2010.

#### 100 percent recycling rate in Great Britain by 2020.

T-Systems UK plans to achieve a recycling rate of 100 percent for the entire waste accumulation of its branch offices by the year 2020. T-Systems UK managed to reduce landfill waste to under 2 percent in 2011 by changing their contractual partner and implementing an accompanying employee awareness campaign. Additional information events will be launched in the future. A current contract amendment with the company's waste disposal partner aims to decrease the landfill waste to less than 1 percent in 2012. In the long run, T-Systems UK intends to significantly reduce the amount of its waste.

#### Recycling programs at Greek subsidiaries.

Managing raw materials and recycling waste are key elements of environmental management practices at the Greek subsidiary OTE. The company sent a total of 1,481 metric tons of discarded equipment and 40 metric tons of electronic scrap to certified recycling companies in 2011. In addition, ink and toner cartridges used by OTE nationwide will be recycled by a certified recycling company. The relevant contracts were concluded in October 2011.

The phase-out of the old HellasPack data network, which began in July 2011, and the switch-over of customers to state-of-the-art data connections will be completed in 2012. This will reduce electricity consumption by 370 GWh per year, which is equivalent to a saving of 267,288 metric tons of CO<sub>2</sub>.

Cosmote Greece's subsidiaries, Globul in Bulgaria, Cosmote Romania and the Albanian company AMC, have also implemented a variety of recycling schemes.

- An internal program was started for recycling paper and plastic waste in 2007. Customers and employees have been able to hand in their used cell phones, batteries and accessories for mobile phones at Globul stores to be recycled since October 2008. The program was expanded in 2010 by including also portable batteries and other electronic waste. Special containers have been placed in the stores and administration buildings for this purpose. Other companies and organizations such as Coca Cola, Sony Ericsson, the British embassy and Shell Bulgaria support the program. In 2011, 163 kg (3,974 pieces) of handsets, mobile phone batteries & accessories and 457 kg (19,498 pieces) of portable batteries were collected as part of the program.
- Customers and employees of Cosmote Romania have been handing in their used cell phones to be recycled at Cosmote Romania stores and administration buildings since 2010. The internal recycling program for paper, plastic and electronic devices was expanded to include lighting equipment in 2011.
- AMC launched a national program to recycle office paper in 2010 as part of its environmental management policy. Recycling bins have been placed in all company rooms and next to all copy machines. The bins are emptied daily. The program is being accompanied by an awareness campaign. Paper usage was cut by 4.2 percent in 2011. Moreover, the usage of recycled paper increased by 10.3 percent. This meant that 55.8 percent of paper used was recycled paper.

## Collecting used devices in Spain and the Netherlands.

T-Systems Iberia collected a total of 419 discarded company cell phones and 142 company laptops from its 4,157 employees for recycling purposes in 2011.

T-Mobile Netherlands launched a campaign to sensitize its employees to sustainable behavior in the workplace with a <u>film</u> and a cell-phone collection campaign in October 2011. Almost 900 discarded cell phones were collected within two weeks, during which employees also received practical tips on environmentally friendly behavior.

#### T-Mobile USA reduces waste by 40 percent.

T-Mobile USA conducted various measures during the reporting period under its resource efficiency strategy. As a result, the company was able to reduce waste at headquarters by 40 percent by introducing waste separation. Labeled containers were placed in all of the break rooms to collect organic waste to be composted. An online awareness campaign accompanied the project.

#### New waste separation system at T-Systems Austria.

In order to reduce the waste volume and to ensure correct waste separation, T-Systems Austria set up separate waste containers in their kitchen areas for residual waste, metal, plastics and glass at the end of February 2012.

In addition to this, each workplace has its own bin and a compartment for scrap paper.



Home > Climate & environment > Climate-friendly mobility

# Climate-friendly mobility.

With around 30,000 cars and service vehicles in Germany alone, our company fleet is one of the largest in Europe. Our fleet's carbon footprint reflects approx. 10 percent of our direct and indirect emissions (Scope 1 and 2 according to the Greenhouse Gas Protocol) in Germany. By working toward a more sustainable mobility approach and lower emissions, we are taking important steps toward achieving our climate protection targets.

Telekom pursues a three-pillar approach in developing a climate-friendly vehicle fleet:

- Rightsize: By choosing state-of-the-art, efficient vehicles, we are working toward making our fleet more environmentally friendly. Telekom's mobility services provider, DeTeFleetServices, has always explicitly selected low-emission models for our service vehicles. Greater emphasis is now also being placed on this aspect for company cars. Our new Green Car Policy is paving the way.
- Economize: Our employees who use company cars learn how to drive as efficiently as possible in special driving courses.
- Substitute: By testing different mobility concepts, we are promoting the use of low-emission, alternative drive systems.

#### CO2 emissions down to 131 g/km in new cars.

We were able to make further progress toward establishing a sustainable fleet [link to KPIs > Environmental indicators> Mobility] during the reporting period due to our strict Green Car Policy  $\Box$ . The average  $CO_2$  emissions of our new company cars decreased from 136 g/km in 2010 to 131 g/km (based on manufacturers' standard mileage information). If we include service vehicles in this calculation, the average  $CO_2$  emissions of all new vehicles were down to 125 g/km.

For 2012, our target with new cars is an average emission level of 121 g/km.

#### CR Report from the previous year

On April 1, 2010, Telekom Deutschland introduced its new Green Car Policy for company cars and revised its previous car procurement strategy to include environmental aspects. The policy sets forth a CO<sub>2</sub> based selection procedure when purchasing new company cars. These include vehicles provided by Telekom to employees on account of their position or function that can also be used privately.

The intention is to reduce standard emission levels of all new fleet vehicles to an average of 110 g/km by 2015, an objective that is also supported by purchasing energy-efficient service vehicles. This corresponds to an average consumption of 4.2 liters of diesel per 100 kilometers. This fuel consumption rate will put us well within the EU climate protection target limit of 120 g/km for new cars applicable from 2015. Even today, DeTeFleetServices only provides cars with a maximum CO<sub>2</sub> emission level of 190 g/km.

## Bonus/penalty program for company cars adjusted.

employees to choose low-emission cars. Employees share the costs of both increased mobility and greater strain on the environment in the form of a penalty if they choose a car with a high CO<sub>2</sub> emission level. Users who choose a low-emission car receive a bonus in relation to the savings in fuel costs. In the reporting period we increased our bonus/penalty amounts for company cars by 10 (bonus) and 20 (penalty) cents per gram of CO<sub>2</sub> because of rising fuel costs.

#### Proceeds go to environmental organizations.

In 2011, our employees who chose high-emission cars made penalty payments in the amount of EUR 300,000. This amount was donated to nine environmental organizations. Deutsche Telekom employees were invited to decide how much money would be given to which organization. More than 4,000 employees participated in an internal vote and decided to give EUR 45,000 to <u>One Earth – One Ocean e. V.</u>, which was the highest donation amount given to an individual organization. One Earth – One Ocean develops technological solutions for cleaning up plastic waste in oceans. The organization Naturparadies Grünhaus came in second place (EUR 42,500) and CO<sub>2</sub> freie Schule third (EUR 40,000).

# Telekom fleet TÜV-approved.

The Telekom fleet in Germany received the Bluefleet certification from the technical inspection agency TÜV Rheinland for their low-emission fleet at the end of 2010. This certification is based on TÜV Rheinland's GRPD BLUEFLEET® standard and the company's CO<sub>2</sub> reductions of 1.9 kilotons in 2010. Due to the fleet's decreasing CO<sub>2</sub> reductions, Telekom expects to receive TÜV Rheinland's certification for 2011 as well.



Fig: TÜV Rheinland's Blue Fleet logo

CR Report from the previous year

#### Critical assessment by Deutsche Umwelthilfe.

The German environmental organization <u>Deutsche Umwelthilfe</u> (DUH) checked the CO<sub>2</sub> emissions of different vehicle fleets in Germany and presented them with a red, yellow or green card in 2011. Together with nine other companies, Deutsche Telekom was presented with a yellow card despite its exceptional car fleet. According to DUH, this assessment was due to Telekom's recognizable but still insufficient efforts to protect the environment. The high emissions produced by the company cars used by Telekom Board members, which in some cases clearly exceed 230 g/km, are inconsistent with a low-emission fleet. Company cars for Board members have gradually been replaced with more efficient cars that boast an average of 183 g/km, which is below the company emissions cap.

## 7,600 employees receive driver training.

The eco-drive program, a training course designed to teach participants to adopt a more efficient and safe driving style, was extended significantly in coordination with the Group units in Germany. A total of 7,600 users of company and service cars from Deutsche Telekom Technik, the Technical Service and T-Systems International participated in the program. We were able to exceed our original goal of 6,000 participants by more than 25 percent.

We will continue to offer the eco-drive program. The training program is an important and effective tool to reduce our fleet's fuel consumption and a significant contribution by DeTeFleetServices to achieving Telekom's climate protection objectives.

### Using alternative drive systems.

The number of DeTeFleetServices' vehicles powered by natural gas has been significantly reduced over the last few years because manufacturers have not been offering suitable cars. Telekom still uses 150 natural gas-powered cars, which emit less CO<sub>2</sub> and other pollutants than other vehicles.

We have also been testing the use of alternative drives for years. We advanced various projects and explored new opportunities during the reporting period.

- Since spring 2011, we have been conducting a test run with two electric cars from Renault. We will be collecting and evaluating the results at least until mid-2012. Based on our current knowledge, electric cars can only be used to a limited extent as service vehicles. User feedback has been positive if the driving distance per day did not exceed 100 kilometers and if they were able to charge them during the night.
- Deutsche Telekom has been supporting the e-Mobility-Berlin project, which is one of the most extensive field tests with electric cars worldwide, since 2010. In this project, DeTeFleetServices and other Group units have been testing the use of four electric Smart cars.
- Since September 2010, our employees at Group headquarters in Bonn have been able to rent two electric
   Smart cars for short periods of time. In 2011, we added an electric car by Volkswagen in Berlin as a test car.

#### Green business trips.

We are trying to make employee business trips within Germany as green as possible in cooperation with Deutsche Bahn. In February 2010, we signed an agreement with Deutsche Bahn AG to eliminate the carbon footprint caused by employees traveling by train.

In January 2011, we introduced a flight ban for trips between Frankfurt and Munich. Exceptions to this ban are only made under special circumstances. With this and other restrictive measures, we were able to reduce the number of flights on this route by 93.5 percent. The  $CO_2$  emissions associated with such trips in 2011 decreased from 735 (extrapolated) to 48 metric tons.

#### 23,700 employees choose a climate-friendly way to commute.

Some 23,700 employees in Germany used a discount <u>season ticket</u> to get to work in 2011. The number of users increased by 500 compared to the previous year.

A regional season ticket offer is available at all Telekom offices located in large conurbations in Germany. We signed new contracts with regional public transportation providers in 2011. These new contracts make it possible for employees in three additional cities—Aachen, Magdeburg and Chemnitz—to get discount season tickets. Some 155 employees took advantage of the new offers in 2011.

We are planning to introduce discount season tickets in the German cities of Hamm, Erfurt, Trier and Kassel as well. As of 2012, we are also planning to compensate for CO<sub>2</sub> emissions generated by our employees' use of public transportation with emissions certificates.

#### CR Report from the previous year

### Award for discount season tickets.

Deutsche Telekom received an award from the "Aachener Initiative für saubere Luft" (Aachen clean air initiative) for its commitment to low-emissions mobility in 2011. The jury was particularly impressed by the introduction of the discount season ticket for employees from the Telekom and T-Systems branch offices in Aachen. The mayor of Aachen, Marcel Philipp, presented the certificate on November 22.

The city presents the award each year in collaboration with the Chamber of Industry and Commerce, the Aachen chamber of trade (Handwerkskammer Aachen) and the trade association Einzelhandels- und Dienstleistungsverband Aachen-Düren e.V.

### GPS guidance system saves over 90,000 liters of fuel.

After a three-month installation phase, 300 Slovak Telekom company cars have been connected to a GPS immonitoring system since April 2011. The intelligent route planning and control enabled by this system should decrease fuel consumption by 10 percent, thereby saving some 50,000 liters of fuel per year. Slovak Telekom also participated in the European Mobility Week in September 2011. The company introduced an internal tool for using carpools and called on all employees to carpool or use public transport. A total of 400 employees participated in the initiative.

The subsidiaries in FYRO Macedonia, Makedonski Telekom and T-Mobile Macedonia, also installed GPS systems in 380 cars in company fleets during the reporting period. That enabled the companies to save 41,500 liters of fuel compared to the previous year. The companies also provided their employees with information on fuel-saving driving practices, which are also included in the user guidelines.

### Efficient fleet management at Greek subsidiary OTE.

The Greek subsidiary OTE developed and piloted a real-time guidance system for driving routes in 2010. The system should be fully operational by 2012 and is part of a program to significantly reduce transport-related emissions. The Fleet Management department has been ISO 14001 certified since 2007.

### Electric cars at several international subsidiaries.

PTC was the first telecommunications company in Poland to include three electric cars into its vehicle fleet in August 2011. They are used by employees for service calls in Warsaw. A charging station was installed at the entrance to the corporate headquarters.

The Hungarian subsidiary Magyar Telekom also integrated two electric cars into its fleet in 2011. The cars have been in operation since January 2012, one in the technical customer service area and the other as a "key car" for employees. Besides a five percent reduction of fuel consumption, the Sustainability Strategy for the 2011 -2015 period defines two basic objectives: by the end of 2015, the average CO<sub>2</sub> emission of the vehicles must not exceed 157.7 g/km, and the ratio of hybrid and electronic cars among all vehicles of personal use should be increased to 20 percent. In order to promote the achievement of the above objectives, in July 2011 Magyar Telekom issued a new group directive on benefit cars and subsidizes the procurement of hybrid benefit cars by a special allocated budget and has elaborated a system of incentives (bonus-malus) aimed at encouraging people to opt for low-CO<sub>2</sub> cars.

The subsidiary Globul in Bulgaria launched a pilot project to promote sustainable mobility by purchasing an electric car in April 2011. As one of the first electric cars in the country it has already been presented at several green transport forums. In a profitability calculation Globul also describes the conditions under which switching

the majority of the company fleet over to electric cars would pay off financially.

### Successful bicycle campaign in the Czech Republic and Croatia.

T-Mobile Czech Republic conducted a campaign in 2011 to motivate its employees to ride their bikes to work. During the one-month campaign period, the 36 participants logged over 9,440 kilometers on their bikes, saving 1,038 kg of CO<sub>2</sub> on their commutes.

T-HT Hrvatski Telekom conducted an internal communication campaign from March through September 2011. The theme was environmentally-friendly mobility, e.g., riding a bike to work. The company also offered discounts on bikes and accessories at different sporting goods stores. Many employees took advantage of these offers.



Home > Climate & environment > Biodiversity

# Biodiversity.

Plant and animal diversity is crucial to human existence and can facilitate adjusting to changing environmental conditions, such as those resulting from global climate change. In light of these facts, the United Nations has named the years 2011 to 2020 the <u>UN Decade of Biodiversity</u>.

We are involved in helping conserve a diverse plant and animal population as well. Telekom Deutschland has been cooperating with the <u>Deutsche Umwelthilfe</u> (DUH) environmental organization for more than ten years and sponsored a total of 774 environmental protection and nature conservation projects as well as environmental education activities as of the end of February 2012. Our <u>employees</u> also volunteer in nature conservation projects.

### Living Forests nature conservation fund extended.

The United Nations named 2011 the <u>International Year of Forests</u>. We were happy to take up the call to help preserve forests as important habitats for animals and plants and decided to extend our Living Forests nature conservation fund until December 31, 2012. The fund has sponsored six projects since it was founded. Two of those were successfully completed in 2011:

- Habitats for the hazel dormouse: In 2010 the <u>Deutsche Verband für Landschaftspflege in Saxony</u> (DVL) created better living conditions for the native hazel dormouse by conducting forestry work in the Niederlausitz region. The association conducted several educational events and workshops in the first half of 2011 in order to raise awareness of forest owners and forestry managers regarding the needs of the heavily protected rodents. The project was concluded successfully in September 2011. Results show that it is particularly important to restore coppiced woodlands to promote biodiversity and to protect endangered species. To raise customer awareness about the topic, Telekom reported on this project in its customer magazine, "telekom\_life" in 2011 and conducted a hazel dormouse drawing competition for children in collaboration with the German environmental organization Deutsche Umwelthilfe. Around 80 children participated in the competition. The ten pictures that best showed the hazel dormouse in its natural habitat were awarded prizes.
- Living Weser—planting a riparian forest. School classes from the Weser basin in North Rhine-Westphalia were taught how to care for a riparian forest in 2010 by the organization <u>Büro am Fluss Lebendige Weser</u> (Office on the river—Living Weser). Around 100 cuttings were planted in the prepared riverbed areas between Bodenwerder and Holzminden. 40 students participated in the activity.

### CR Report from the previous year

In collaboration with the German environmental organization, Deutsche Umwelthilfe (DUH), Telekom founded the <u>Living Forests</u> nature conservation fund in 2009. The fund sponsors exemplary nature conservation projects in Germany that are committed to conserving forests as well as the plants and animals that live in them. The sponsored projects are selected by Deutsche Umwelthilfe and recommended for implementation by a committee of recognized nature conservation experts.

We launched the Living Beech Forest project in collaboration with Deutsche Umwelthilfe and the city of Bonn on Environment Day on June 5, 2011. Together with the forestry office of the city of Bonn, the project will redesign part of the Bonn city forest, which is currently a spruce monoculture, as a beech forest full of biodiversity. 3,000 young beech trees were planted during the reporting period.

Facebook users were also able to participate in the project through the Tree Friend (Baumfreunde) campaign. They could upload a picture of themselves and a tree on Facebook between June 2011 and March 2012. One tree was planted in the Bonn city forest for each picture that was uploaded—a total of 121 trees (as of February 28, 2012).

Around twelve employees helped with preparations for planting the trees and cleared the forest to make room for new trees. Telekom Deutschland donated a total of EUR 10,000 to the project. Another 1,000 young beech trees are scheduled to be planted in March 2012 with the help of employees. Plans also include installing easy-access information plaques on site about forest biodiversity and the forest restoration project.

The Living Forest nature conservation fund is sponsoring two additional projects in 2012. The fund supported a restoration initiative conducted by BUND in North Rhine-Westphalia in February 2012 with school classes to conserve the habitats of lizards in the Dellbrücker Heide nature conservation area in Cologne. As part of a forest conservation project to expand the Eschenkahr wetland area in the Bad Orb city forest, project participants are planning to build additional forest ponds as a habitat for a number of rare and endangered animal species.

### Using tablet PCs to research biodiversity.

Telekom Deutschland has been sponsoring the INQUIBIDT project run by the PH Ludwigsburg University of Education since July 2011. INQUIBIDT stands for Inquiry-based Biodiversity Teaching, an innovative biodiversity teaching approach that focuses on learning through research and discovery. The aim of the three-year, EU-wide project is to research flora and fauna using state-of-the-art mobile communications technology.

Telekom provided ten tablet computers to the project during the reporting period. The computers are being used in teacher training, in study courses and in classes. For example, they are used to identify the location of specific plants and then map that location on Google Maps. A wiki, which is an interactive online info page, is created for the geographic data. Through this approach, participants hope to record all of the biodiversity present in a marked area and raise awareness of the importance of biodiversity. The plan is to make data collected by project participants and their experiences available to other teachers and their students, e.g., in training courses for teachers and student competitions.

### Environment and sustainability fund at T-Mobile Austria.

T-Mobile Austria's environment and sustainability fund sponsors nature conservation projects with endowment funds totaling EUR 250,000. A pilot project was launched in September 2010 in collaboration with the World Wide Fund for Nature (WWF) to preserve the Morava-Dyje floodplains, a diverse floodplain landscape to the east of Vienna. The WWF Austria and its supporters were able to permanently save 100 hectares of floodplain forest from destruction in 2011. In January 2012, the fund donated at total of EUR 50,000 to three environmental projects that were selected via online voting. Almost 40,000 Austrians participated in the vote, which was held from December 2011 to January 2012.



Home > Facts & figures

# Facts & figures.



Environmental Indicators	2010		2011
CR KPI "Energy Consumption" (MWh / Mil. €)	107	7	116
CR KPI "CO <sub>2</sub> Emissions" (Thousand t.)	268	Ŋ	260
CR KPI "Used Cell Phone Collection" (Cell phones coll. thousands / Customers mil.)	7	7	21.5
Social and HR Indicators			
CR KPI "Employee Satisfaction CR" (%)	55	-	55
CR KPI "Social Committment" (%)	-8	7	- 13
Economic Indicators			
CR KPI "Sustainable Procurement" (%)	55	7	38
CR KPI "Socially Responsible Investment" (%)	14.4	7	15.1

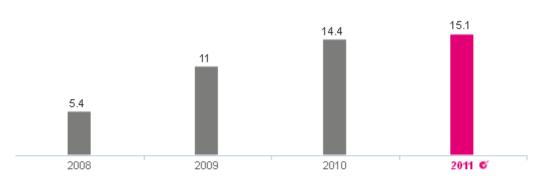
Home > Facts & figures > Economic indicators > Socially responsible investment

# Socially responsible investment.

### CR KPI "Socially Responsible Investment".

In 2011, 13 percent of all Deutsche Telekom shares were held by investors who take SRI/ESG criteria into consideration at least partly in their investment strategy. 2 percent of T-shares were held by investors who give priority to SRI/ESG aspects when managing their funds.

CR KPI "Socially Responsible Investment" Deutsche Telekom AG.



Share of Deutsche Telekom AG stock that is owned by investors who incorporate environmental, social and governance criteria in their investment strategies (source of data since 2009: Ipreo; data in 2008: Sustainable Business Institute). Year-on-year comparisons may not be entirely accurate since the calculation base is updated annually.

The Investment CR KPI indicates the percentage of Deutsche Telekom AG T-shares held by investors who show concern for environmental, social and governance criteria in their investment strategy. Due to annual updating of the calculation criteria, comparisons with the previous year may not always provide conclusive information.

### Reporting against standards.

The KPI is relevant for criteria 1 (Strategic analysis, strategy and goals) and 7 (Rules and processes) of the German Sustainability Code.



Listing of the T-Share in sustainability indices/ratings.

Rating agency	Indexes/ratings/ ranking	Succe	Successfully listed in index			
		2011	2010	2009	2008	
sam 40	DJSI World	✓	1	1	1	
sam 🌘	DJSI Europe	<b>✓</b>	1	1	1	
oekom	"Prime"	<b>/</b>	1	<b>/</b>	1	
vioeo	ASPI	✓	1	1	✓	
ngc •	ESI	✓	1	1	1	
imug EIRiS	FTSE4Good 🗓	<b>/</b>	<b>/</b>	<b>/</b>	1	
SARASIN	DAX Global Sarasin Sustainability	<b>✓</b>	1	1	1	
CARBON	Carbon Disclosure Leadership	-	-	-	-	
DISCLOSURE PROJECT	Carbon Performance Leadership (new since 2010)	-	✓	n.a.	n.a.	
MCCI	MSCI Global Climate	<b>✓</b>	1	1	1	
MSCI -	MSCI World ESG 🗓	-	-	-	-	
Newsweek 2011 GREEN RANKINGS	Rank Germany #6, Global #80, Technology #12	1	✓	n.a.	n.a.	
STOXX COLLEGES SECTO	STOXX Global ESG I Leaders (new since 2011)	<b>V</b>	n.a.	n.a.	n.a.	

<sup>✓</sup> Successfully listed.

### Reporting against standards.

The information is relevant for criterion 1 (Strategic analysis, strategy and goals) of the German Sustainability Code.

<sup>-</sup> Not listed.

<sup>\*</sup> Previously RiskMetrics/KLD.



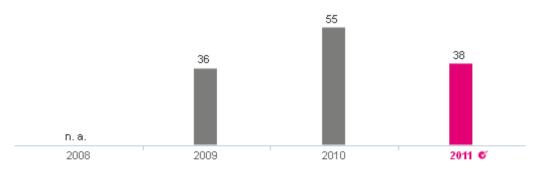
Home > Facts & figures > Economic indicators > Suppliers

# Suppliers.

### CR KPI "Sustainable Procurement".

The Sustainable Procurement CR KPI decreased from 55 to 38 percent compared to the previous year. This can be attributed to a significant reduction in procurement volumes from suppliers who were audited or who are registered in E-TASC.

CR KPI "Sustainable Procurement" Deutsche Telekom Group.



Proportion of total procurement volume audited and/or covered by self-assessment via E-TASC. Internal and external social audits conducted with 1st tier suppliers have been taken into account.

Data checked by PwC. Based on procurement volumes at Central Procurement. Values cannot be directly compared to the previous year.

Altogether, the number of audited suppliers remained the same compared to the previous year. The order volume with suppliers who were relevant in the previous year as well decreased in part, however, and some suppliers with lower order volumes were also documented in E-TASC compared with the previous year. However, a reduction in Deutsche Telekom's overall procurement volume by 12 percent minimized the effect in the decrease of the Sustainable Procurement CR KPI.

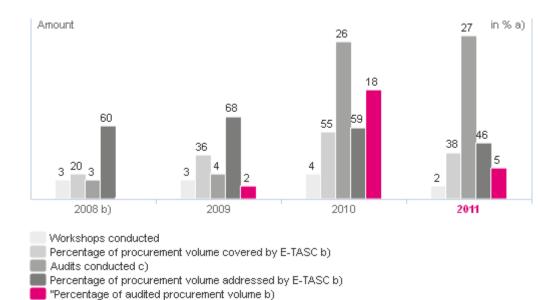
### Reporting against standards.

The Sustainable Procurement CR KPI together with information about our strategic approach fully covers the HR 1 (Human rights), HR 2 (Suppliers and human rights) and HR 10 (Impact assessments) GRI performance indicators. By providing this information, we cover the V28-04 EFFAS indicators (Supply chain). It is also relevant for criteria 1 (Opportunities and risks), 3 (Sustainability goals), 4 (Value added chain), 6 (Rules and processes), 7 (Performance indicators) and 17 (Human rights) of the German Sustainability Code. It is also used for reporting in accordance with the Global Compact principles 1 (Supporting and respecting human rights), 2 (No complicity in human rights abuses) and 5 (Effective abolition of child labor).

### Supplier relationships.

The percentage of procurement volume generated with companies registered in the industry information tool E-TASC decreased significantly from 55 percent in the previous year to 38 percent in 2011. The percentage of procurement volume generated with audited companies also decreased from 18 percent to 5 percent.

Risk management for supplier relationships at the Deutsche Telekom Group.



- a) Procurement volume from Procurement's global database (GDB).
- b) Data verified by PwC. Social audits conducted internally as well as externally were taken into consideration only for 1st tier suppliers. Based on procurement volumes at Central Procurement. Values cannot be directly compared to the previous year.
- c) Social audits conducted internally as well as externally were taken into consideration (both Deutsche Telekom as well as those conducted by JAC Joint Audit Cooperation). Audits also include follow-up audits.

The reduction can be attributed to a significant reduction in procurement volumes from suppliers who were audited or who are registered in E-TASC. In contrast, the number of registered or audited suppliers remained stable. However, procurement volume by suppliers who were also relevant in the previous year decreased. Other suppliers with lower order volumes were recorded in E-TASC compared with the previous year. Therefore the values for this and the previous year cannot be compared directly. As in previous years, workshops were carried out with top suppliers.

### Reporting against standards.

The Sustainable Procurement CR KPI together with information about our strategic approach fully covers the HR 1 (Human rights), HR 2 (Suppliers and human rights) and HR 10 (Impact assessments) GRI performance indicators. By providing this information, we cover the V28-04 EFFAS indicators (Supply chain). It is also relevant for criteria 1 (Opportunities and risks), 3 (Sustainability goals), 4 (Value added chain), 6 (Rules and processes), 7 (Performance indicators) and 17 (Human rights) of the German Sustainability Code. It is also used for reporting in accordance with the Global Compact [1] principles 1 (Supporting and respecting human rights), 2 (No complicity in human rights abuses) and 5 (Effective abolition of child labor).



Home > Facts & figures > Economic indicators > Financial indicators

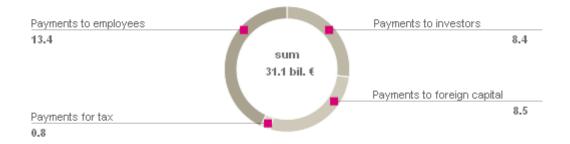
### Financial indicators.

### Net value added.

The figures on net value added indicate the extent to which individual stakeholders of the Group participate in the company's performance in the form of wages or taxes, for example. Deutsche Telekom's net value added is the result of adding sales revenue to cash inflow from the sale of assets less operating costs and other expenditure. Net added value decreased to EUR 31.1 billion in 2011 from EUR 33.3 billion in the previous year.

#### Net value added.

in bil. €



### Reporting against standards.

With this KPI, we fully cover the EC 1 GRI performance indicator (Direct economic value generated and distributed).

### Net revenue, EBITDA and net profit.

A detailed clarification of our financial KPIs is available at <a href="https://www.telekom.com/investorrelations">www.telekom.com/investorrelations</a>.

Net revenue, EBITDA/EBITDA margin (adjusted for special factors), and net profit of the Deutsche Telekom Group.

2008	2009	2010	2011
in bil. €	in bil. €	in bil. €	in bil. €
61,7	64,6	62,4	58,7
19,5	20,7	19,5	18,7
31,6	32,0	31,2	31,8
1,5	0,4	1,7	0,6
	in bil. €  61,7  19,5  31,6	in bil. € in bil. € 61,7 64,6 19,5 20,7 31,6 32,0	in bil. € in bil. € in bil. €  61,7 64,6 62,4  19,5 20,7 19,5  31,6 32,0 31,2

During the reporting period, the personnel cost ratio could be maintained throughout the Group at 23.2 percent.

### Personnel costs and personnel cost ration for the Deutsche Telekom Group worldwide.

	2008 in bil. €			2011 in bil. €
Personnel costs in the Group	14,1	14,3	15,1	14,7
of which: Germany	9,8	9,0	9,2	9,2
Special factors*	1,1	0,5	1,0	1,2
Personnel costs in the Group adjusted for special factors	13,0	13,8	14,1	13,6
Net revenue*	61,7	64,6	62,4	58,7
of which: Germany	29,7	28,4	28,1	27,2
Adjusted personnel cost ratio, Group (in %)	21,2	521,4	22,5	23,2
Adjusted personnel cost ratio, Germany (in %)	29,9	30,1	30,4	30,6

<sup>\*</sup>Special factors in billion €, calculated and rounded on the basis of millions for the purpose of precision. Expenses for staff-related measures (early retirement arrangements, severance and voluntary redundancy payments, compensation payments, etc.) primarily in the Germany (-0.6), Europe (-0.1) and T-Mobile USA (-0.1) operating segments, as well as at Group Headquarters & Shared Services ☐ (-0.2).

2009: Expenses for staff-related measures (early retirement arrangements, severance and voluntary redundancy payments, compensation payments, etc.) primarily in the Germany (- 0.3) and Systems Solutions (- 0.1) operating segments, as well as at Group Headquarters & Shared Services (- 0.1).

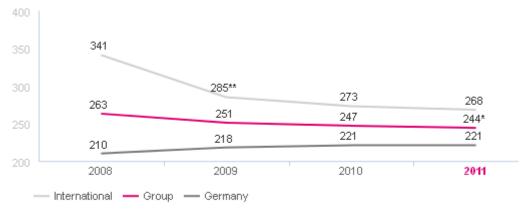
2008: Expenses for staff-related measures (early retirement arrangements, severance and voluntary redundancy payments, compensation payments, etc.) primarily in the Germany (- 0.8) and Systems Solutions (- 0.3) operating segments.

### Revenue per employee.

In view of increased performance pressure at the international level, Group-wide revenue per employee decreased slightly during the reporting period. In comparison, we were able to keep the generated revenue per full-time equivalent (FTE) constant at Deutsche Telekom in Germany at a level of €221,000.

Revenue per employee.

<sup>2010:</sup> Expenses for staff-related measures (early retirement arrangements, severance and voluntary redundancy payments, compensation payments, etc.) primarily in the Germany (0.4), Europe (0.2) and Systems Solutions (- 0.1) operating segments, as well as at Group Headquarters & Shared Services (- 0.1).



<sup>\*</sup> The reason for the revenue trend is that international pressure on revenues is affecting the Group as a whole. The trend in Germany is almost constant.

<sup>\*\* 2009:</sup> OTE acquisition resulted in a disproportionately high increase in international employees in relation to revenue growth



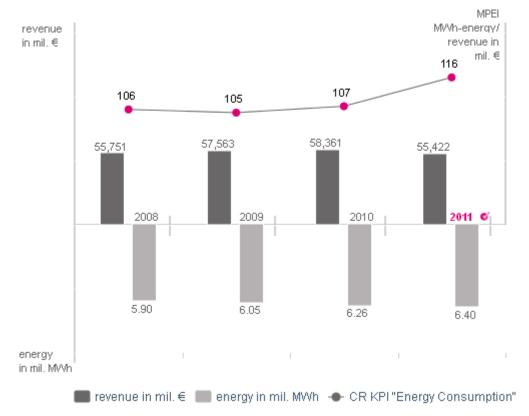
Home > Facts & figures > Environmental indicators > Energy

# Energy.

### CR KPI "Energy Consumption".

Deutsche Telekom measures the Energy Consumption CR KPI as the Monetary Power Efficiency Index (MPEI) in which developments in energy consumption (in MWh) is indicated in relation to revenues (in millions of euros). This value increased by 8 percent in 2011 compared to the previous year. Electricity consumption at the Group only increased by 2 percent. However, consolidated net revenue of the reporting international subsidiaries (94 percent of Group revenue) decreased by 5 percent in the same period.

CR KPI "Energy Consumption" Deutsche Telekom Group.



Data verified by PwC. For detailed audit comments see "DT Group in Germany" and "T-Mobile USA".

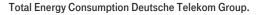
Reasons for the increase include constantly growing data volumes as well as the expansion of the data base at some international subsidiaries such as T-Systems UK and T-Systems Iberia. Nevertheless, our considerable efforts to save energy and to increase energy efficiency prevented the increase in energy consumption from being much higher. The Group-wide CR KPI is calculated based on total electricity consumption at the reporting units in relation to the consolidated net revenue of those reporting units.

### Reporting against standards.

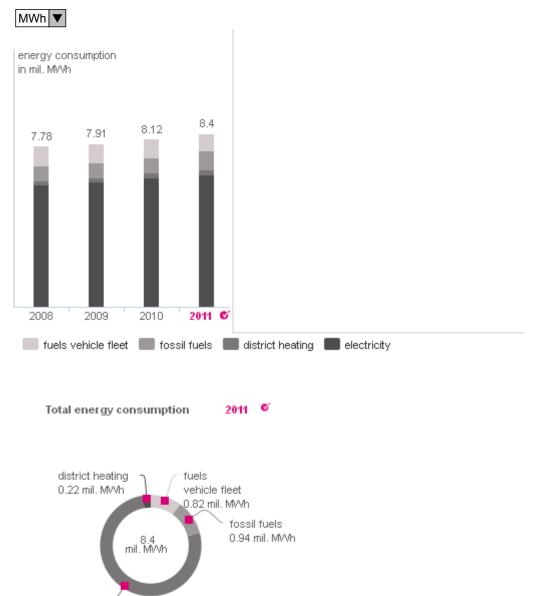
By reporting our electricity consumption as a source of indirect energy consumption in relation to our revenues for the reporting period, we partially cover the EN 4 GRI performance indicator (Indirect energy consumption) and the E 01-01 (Energy consumption, total) EFFAS indicator and we fully cover the E01-02 (Energy consumption, specific) EFFAS indicator. This data is relevant for criteria 7 (Rules and processes), 11 and 12 (Usage of natural resources) of the German Sustainability Code. It is also used for reporting on the Global Compact [1] principles 7 (Precautionary

### Total energy consumption.

Overall energy consumption increased slightly by 3 percent compared to the previous year. This can be attributed primarily to heavier use of electricity and fossil fuels as well as to a change in calculation criteria at some international subsidiaries. Reasons for increased energy consumption include the constantly growing data volumes in our networks. The increase in heating energy consumption (fossil fuels) is particularly the result of the long, hard winter experienced by many international subsidiaries in 2011, e.g., T-Mobile USA, which led to an increased use of heating. See individual subsidiaries in the <u>interactive subsidiary benchmarking tool</u> for details.



electricity 6.4 mil. MVVh



Total verified by PwC. For detailed audit comments see "DT Group in Germany" and "T-Mobile USA". However, thanks to considerable <u>efforts to conserve energy</u>, we were able to prevent a significant increase in energy consumption. T-Systems Slovakia even achieved a significant reduction in consumption of around 16

percent with its SaveEnergy program. <u>Improved driving behavior</u> and a reduction in the demand for company cars led to a decrease in fleet fuel consumption throughout the Group of some 9 percent.

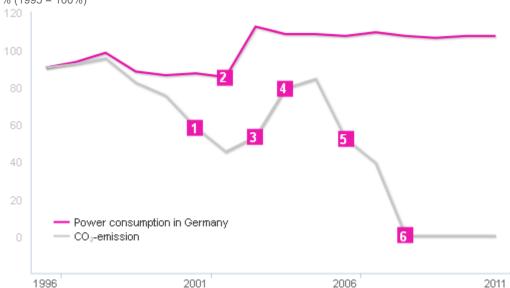
### Reporting against standards.

By reporting our energy consumption by primary sources, we fully cover the EN 3 (Direct energy consumption) and EN 4 (Indirect energy consumption) GRI performance indicators as well as the E01-01 (Energy consumption, total) EFFAS indicator. By reporting fleet energy consumption, we partially cover the EN 29 (Environmental impact of transportation) GRI performance indicator. This data is also relevant for criterion 11 of the German Sustainability Code (Usage of natural resources). It is also used for reporting on the Global Compact [1] principles 7 (Precautionary approach) and 8 (Environmental responsibility).

### Decoupling power consumption and CO<sub>2</sub> emissions.

We were able to reduce emissions resulting from our electricity consumption in Germany to zero as was the case in the two previous years, we covered all of our electricity requirements in Germany from renewable energy sources, either directly or indirectly, in 2011 as well. As in the previous years, we purchased RECS (Renewable Energy Certificate System) certificates in an amount of around 3,000 GWh as proof of the amount of energy used from indirect renewable energy sources.

Decoupling Power Consumption and  ${\rm CO_2}$  Emissions of the Deutsche Telekom Group in Germany. in % (1995 = 100%)



- 1 Increased procurement of power from cogeneration (CHP) plants
- 2 Rise in energy consumption for technical reasons
- 3 Power utilities no longer provide data on share of energy otained from cogeneration
- 4 Power utilities no longer provide data for their power mix > calculation based on power mix for Germany
- **5** Purchase of power from renewable energy sources
- 6 All electricity requirements covered directly or indirectly by renewable resourcesn

### Reporting against standards.

By providing this information we partially cover the EN 6 (Initiatives for energy-efficiency and renewable Energy) and EN 18 (Initiatives to reduce greenhouse gas emissions) GRI performance indicator and fully cover the E16 -05 (Total alternative energy consumption) EFFAS indicator. Further, the information is relevant for criteria 3 (Strategic Analysis, Strategy and Goals), 11 and 12 (Usage of natural resources) of the German Sustainability Code. It is also used for reporting in accordance with the Global Compact Principles 7 (Precautionary approach) and 8 (Environmental responsibility).



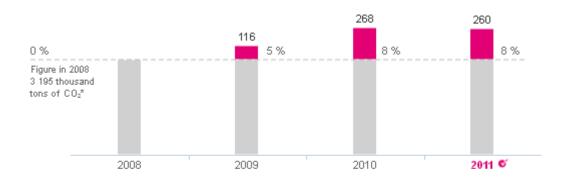
Home > Facts & figures > Environmental indicators > CO2 emissions

# CO<sub>2</sub> emissions.

### CR KPI "CO<sub>2</sub> Emissions".

By reducing total CO<sub>2</sub> emissions by 8,000 metric tons, we were able to keep the CO<sub>2</sub> Emissions CR KPI steady compared to the previous year at 8 percent above the 2008 base value (3,195,000 metric tons of CO<sub>2</sub>). Contributing factors, besides the programs to reduce energy consumption and increase energy efficiency, included a clear reduction in fuel consumption by the vehicle fleet in Germany as well as a slightly lower emission factor for electricity in Germany.

CR KPI "CO<sub>2</sub> Emissions" Deutsche Telekom Group.



- Changes in CO<sub>2</sub> emissions compared against 2008. Emissions are measured in CO<sub>2</sub> equivalent/values based on energy and fule consumption in accordance with the Greenhouse Gas'Protocol and employing the International Energy Agency's eission factors.
- CO<sub>2</sub> emissions (Scope 1 & 2) in 2008.

  Calculated on the basis of appropriate estimates and extrapolations.

  \* Deviating from the appual report, corrected display of the base.
- \* Deviating from the annual report, corrected display of the base value 2008 to the amount of approx. 3,195 thousand metric tons of CO<sub>2</sub>.

Progress was measured as part of Deutsche Telekom AG's comprehensive climate protection strategy. Emissions are converted to CO<sub>2</sub> values based on different energy and fuel consumption values. Calculation complies with the Greenhouse Gas (GHG) Protocol and is based on emission factors set forth by the International Energy Agency (IEA) and/or the GHG Protocol calculation tools. Deutsche Telekom in Germany, for example, set an ambitious climate target in this climate protection strategy: By 2020 the company plans to reduce its CO<sub>2</sub> emissions by up to 30 percent compared to values from 2008. That will be the equivalent of more than 40 percent compared to emissions recorded in 1995. Please note: Group values for 2008 also include individual values from then subsidiary T-Mobile UK, which, however, is no longer included in this report due to the change in ownership. No consideration of RECS (Renewable Energy Certificate System) certificates for CO<sub>2</sub> emissions from power consumption in Germany in the figures.

### Reporting against standards.

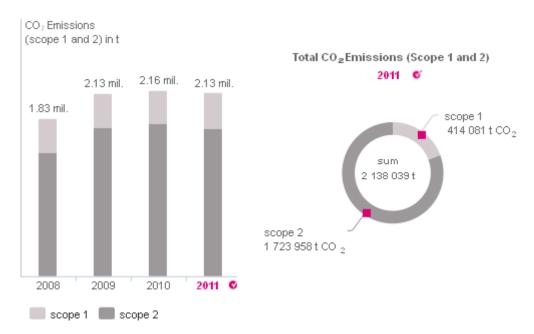
By measuring progress based on our CO<sub>2</sub> Emissions CR KPI, we report our CO<sub>2</sub> emissions in accordance with the Greenhouse Gas Protocol together with our self-defined CO<sub>2</sub> reduction goal, thereby complying with criterion 13 of the German Sustainability Code (Greenhouse gas emissions). By reporting this data, we fully cover the EN 16 (Total direct and indirect greenhouse gas emissions by weight) GRI performance indicator and partially cover the E

02-01 (Scope 1-3 greenhouse gas emissions) EFFAS indicator. This data is also relevant for criteria 7 (Rules and processes), 11 and 12 (Usage of natural resources) and 13 (Greenhouse gas emissions) of the German Sustainability Code. It is also used for reporting on the Global Compact principles 7 (Precautionary approach) and 8 (Environmental responsibility).

### Total CO<sub>2</sub> Emissions (Scope 1 & 2) Deutsche Telekom Group.

During the reporting period, we were able to realize a slight decrease in greenhouse gas emissions based on GHG Scopes 1 and 2 throughout the Group. The decrease in Scope 2 emissions was particularly apparent at around 2 percent. This corresponds with the reduction in emissions that result from the generation of electricity purchased by us for the entire Group. Under our <u>climate protection strategy</u>, Deutsche Telekom in Germany is aiming to reduce CO<sub>2</sub> emissions by up to 30 percent by 2020 compared to the 2008 values. That will be the equivalent of more than 40 percent compared to emissions recorded in 1995. See individual subsidiaries in the <u>interactive subsidiary benchmarking tool</u> for details.





Data verified by PwC. For detailed audit comments see "DT Group in Germany" and "T-Mobile USA". This reduction is counterbalanced by an increase of around 6 percent in direct emissions, which result from the increased consumption of fossil fuels. This trend is due in part to the long, cold winters that affected some of our international subsidiaries, such as T-Mobile USA. We were able to reduce vehicle-related direct emissions by around 9 percent by decreasing mileage and improving driving behavior.

Emissions are calculated in CO<sub>2</sub> based on the different energy and fuel consumption values. Calculation complies with the Greenhouse Gas (GHG) Protocol and is based on emission factors set forth by the International Energy Agency (IEA) and/or the GHG Protocol calculation tools. The total value reflects direct (Scope 1) and indirect (Scope 2) emissions. Changes result from the associated change in consumption values and from changes in emission factors. You can find detailed comments in the appropriate breakdowns of direct and indirect emissions and/or in the energy and fuel consumption values on which these are based.

We were able to reduce emissions resulting from our electricity consumption in Germany and the Netherlands to zero as in the previous year. We again covered all of our electricity requirements in Germany from renewable energy sources, either directly or indirectly, in 2011. We purchased RECS (Renewable Energy Certificate System) certificates in the amount of around 3,000 GWh as proof of the amount of renewable energy taken from

indirect sources. We also implemented numerous measures to reduce energy consumption and increase efficiency. These practices were successful in other countries as well. More than half of the reporting international subsidiaries were able to reduce their Scope 1 and 2 emissions in 2011.

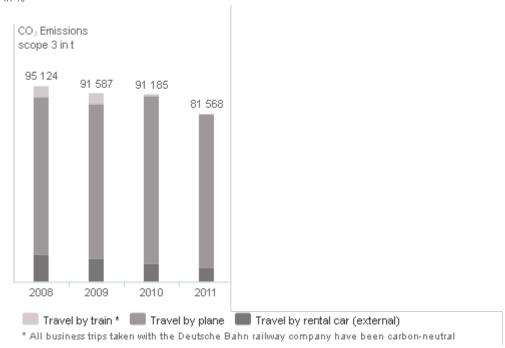
### Reporting against standards.

By reporting our direct and indirect CO<sub>2</sub> emissions (Scope 1 & 2) in accordance with the Greenhouse Gas Protocol, we fully cover the EN 16 (Total direct and indirect greenhouse gas emissions by weight) GRI performance indicator and we partially cover the E02-01 (Scope 1-3 greenhouse gas emissions) EFFAS indicator. This data is also relevant for criteria 11 and 12 (Usage of natural resources) and 13 (GHG emissions) of the German Sustainability Code. It is also used for reporting on the Global Compact <sup>[1]</sup> principles 7 (Precautionary approach) and 8 (Environmental responsibility).

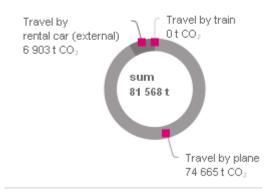
### CO<sub>2</sub> emissions from business travel (Scope 3 emissions).

Deutsche Telekom was able to significantly reduce scope 3 emissions during the reporting period. On February 15, 2010, we signed an agreement with Deutsche Bahn AG to eliminate the carbon footprint caused by employees traveling by train. We were also able to reduce emissions generated by plane travel and the use of external rental cars. Reducing scope 3 emissions is part of Deutsche Telekom's <u>climate protection strategy</u>, the goal of which is to systematically minimize all CO<sub>2</sub> emissions (scope 1-3).

 ${
m CO}_2$  Emissions from Business Travel Deutsche Telekom Group in Germany (Scope 3 Emissions). in %



# CO<sub>2</sub>Emissions from business travel (Scope 3 emissions) 2011



### Reporting against standards.

By providing this information we partially cover the EN 16 (Total direct and indirect greenhouse gas emissions by Weight) GRI performance indicator as well as the E02-01 (Greenhouse gas emissions, total) EFFAS indicator. Further, the information is relevant for the criteria 11and 12 (Usage of natural resources) as well as 13 (Greenhouse gas emissions) of the German Sustainability Code. It is also used for reporting in accordance with the Global Compact [1] Principles 7 (Precautionary approach) and 8 (Environmental responsibility).

Home > Facts & figures > Environmental indicators > Mobility

# Mobility.

### Number of vehicles.

The total number of vehicles was reduced by 2 percent compared with 2010. Telekom made a significant contribution to this by downsizing its fleet. International subsidiaries, including T-Mobile Macedonia, T-HT Hrvatski Telekom and T-Mobile Poland, also optimized their fleets. See individual subsidiaries in the <u>interactive subsidiary benchmarking tool</u> for details.

Number of Vehicles Deutsche Telekom Group.

	2008	2009	2010	2011
Number of vehicles (total)	51 322	44 130	46 837	45 735
Number of vehicles with diesel fuel	0	36 114	38 108	37 478
Number of vehicles with gasoline fuel	0	7 374	8 294	7 958
Number of vehicles with alternative drives	0	642	435	299
Number of company cars	15 753	13 290	15 152	15 765
Number of service vehicles	35 569	30 840	31 685	29 970
	1			

We were able to slightly reduce the overall percentage of gas-powered vehicles in our fleet. For example, Deutsche Telekom replaced gas-powered vehicles with more efficient diesel-powered vehicles in Germany. Telekom pointed the way to the future by increasing its stock of electric cars to 137. However, the number of vehicles powered by natural gas was reduced compared to previous years, because we forewent purchasing new natural-gas vehicles due to a lack in supply. We are nonetheless consistently working toward reducing the environmental impact of our need for mobility and promoting low-emissions mobility.

### Reporting against standards.

Logistics and transport are carried out by service providers at Telekom. The environmental impacts of transportation are influenced by the contractual arrangements with the service providers. By reporting additional vehicle fleet data we fully cover the EN 29 (Environmental impact of transportation) GRI performance indicator. This data is also relevant for criterion 11 (Usage of natural resources) of the German Sustainability Code.

### Mileage.

The optimized fleet at different individual subsidiaries, including at T-Mobile Macedonia, T-HT Hrvatski and T-Mobile Poland, and the lower number of fleet vehicles at Telekom in Germany also had an effect on the Group-wide number of miles traveled. In 2011, we recorded a decrease of 7 percent compared with 2010. This decrease mainly results from the reduced number of miles traveled at Telekom in Germany and T-Mobile Poland. Adjusted usage requirements and <u>better driving and usage behavior</u> also contributed to this trend. See individual subsidiaries in the <u>interactive subsidiary benchmarking tool</u> for details.

### Mileage Deutsche Telekom Group.

	2008 in thousand km		2010 in thousand km	2011 in thousand km
Mileage (total)	1 042 668	1 156 326	1 111 909	1 032 053
Mileage by company cars	387 924	522 005	488 131	458 709
Mileage by service vehicles	441 394	634 321	623 778	573 344
Mileage by vehicles with diesel fuel	1	995 105	946 706	872 539
Mileage by vehicles with gasoline fuel	9 303	147 258	155 731	153 811
Mileage by vehicles with alternative drives	0	13 963	9 473	5 703
		,		

### Reporting against standards.

Logistics and transport are carried out by service providers at Telekom. The environmental impacts of transportation are influenced by the contractual arrangements with the service providers. By reporting additional vehicle fleet data we fully cover the EN 29 (Environmental impact of transportation) GRI performance indicator. This data is also relevant for criterion 11 (Usage of natural resources) of the German Sustainability Code.

### Fuel consumption.

Group-wide fuel consumption fell by 9 percent in 2011 due to the fleet optimization process at different individual subsidiaries, including T-Mobile Poland, T-Mobile Macedonia and T-HT Hrvatski, and the decreased number of fleet vehicles and the reduced mileage at Telekom in Germany. This decrease can mainly be attributed to reduced fuel consumption at Telekom in Germany and T-Mobile Poland. Adjusted usage requirements and better driving and usage behavior also contributed to this trend. See individual subsidiaries in the interactive subsidiary benchmarking tool for details.

Fuel Consumption Deutsche Telekom Group.

2008	2009	2010	2011
114			
liters	liters	liters	liters
90 720 363	90 454 373	89 232 509	81 538 107
29 761 238	39 066 125	36 256 203	33 561 000
37 898 830	51 388 249	52 976 307	47 977 107
14 358 127	72 174 860	69 927 828	62 515 049
15 038 288	17 164 184	18 473 571	18 497 985
6 035	1 115 329	831 110	525 073
	29 761 238 37 898 830 14 358 127 15 038 288	29 761 238 39 066 125 37 898 830 51 388 249 14 358 127 72 174 860 15 038 288 17 164 184	90 720 363       90 454 373       89 232 509         29 761 238       39 066 125       36 256 203         37 898 830       51 388 249       52 976 307         14 358 127       72 174 860       69 927 828         15 038 288       17 164 184       18 473 571         6 035       1 115 329       831 110

<sup>©</sup>Data verified by PwC. For detailed audit comments see "DT Group in Germany" and "T-Mobile USA". **Reporting against standards.** 

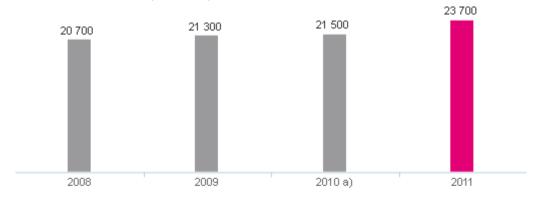
Logistics and transport are carried out by service providers at Telekom. The environmental impacts of transportation are influenced by the contractual arrangements with the service providers. By reporting additional vehicle fleet data we fully cover the EN 29 (Environmental impact of transportation) GRI performance indicator. This data is also relevant for criterion 11 (Usage of natural resources) of the German Sustainability Code.

Jobticket.

In 2011 some 23,700 employees of the Deutsche Telekom Group in Germany used the Jobticket to travel to and from work. The Jobticket is a reduced-rate public transportation ticket. The number of users increased by 1,200 compared to 2010.

### Jobticket Deutsche Telekom Group in Germany.

Subsidized season tickets for public transport, in numbers



80% of the data was taken from the online registration tool for Jobticket administration. 20% of the data was provided by transportation companies.

a) Data has been recorded as an average annual value since 2010. The end-of-year value was listed in previous years.

We offer the discounted season ticket (Jobticket) to our employees at all German Telekom locations in urban areas. The offer was extended to three additional cities in 2011 – Aachen, Magdeburg and Chemnitz. We are planning to offer discounted season tickets to our employees in Hamm, Erfurt, Trier and Kassel as well. We are also planning to begin compensating for greenhouse gas emissions generated by travel with public transportation in 2012 by purchasing emissions certificates.

### Reporting against standards.

By providing this information about the use of the discounted season ticket (Jobticket) we partially cover the EN 18 (Initiatives to reduce greenhouse gas emissions) GRI performance indicator as well as the V04-13 (Percentage of services for offsetting carbon emissions) EFFAS indicator. Further, the information is relevant for the criteria 2 (Implementation of the sustainability strategy) and 10 (Innovation and product management) of the German Sustainability Code. It is also used for reporting in accordance with the Global Compact [1] Principles 7 (Precautionary approach) and 8 (Environmental responsibility).

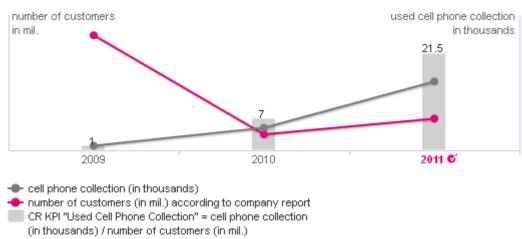
Home > Facts & figures > Environmental indicators > Used cell phone collection & waste generation

# Used cell phone collection & waste generation.

### CR KPI "Used Cell Phone Collection".

We achieved outstanding results for the Used Cell Phone Collection CR KPI during the reporting period. Despite the fact that the number of customers remained relatively constant, we were able to almost triple the number of collected cell phones. This figure indicates the ratio between the number of collected cell phones in thousands to the number of customers in millions.

CR KPI "Used Cell Phone Collection" Deutsche Telekom Group in Germany.



Data verified by PwC. Calculation of collected cell phones is partly based on projections.

During the reporting period, Telekom collected a total of around 762,000 cell phones in Germany. Thus we contributed to the recovery of valuable raw materials, ensuring that a proportion of the phones that still work are reused and the others are recycled and recovered. Telekom made a donation to a non-profit organization for each cell phone returned. We increased the number of used cell phones collected by more than 500,000 compared with 2010, with proceeds benefiting the children's charity "BILD hilft e.V. Ein Herz für Kinder."

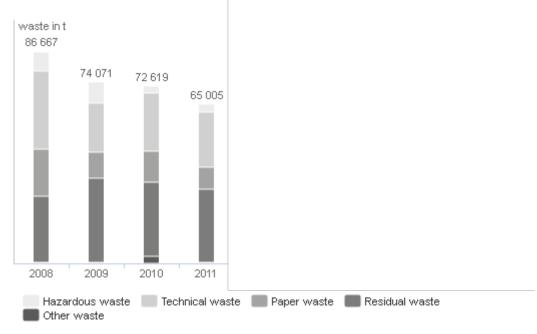
### Reporting against standards.

By reporting the Used Cell Phone Collection CR KPI as an indicator of progress achieved in the resource-efficient and environmentally friendly use of products, we fully cover the EN 26 (Initiatives to mitigate environmental impacts), PA 11 (Initiatives to inform customers about product features and applications that will promote responsible, efficient, cost effective, and environmentally preferable use) and TA 1 (Examples of the resource efficiency of telecommunication products and services delivered) GRI performance indicators. By reporting this data, we also partially cover the EN 27 (Percentage of products sold and their packaging materials that are reclaimed by category) GRI performance indicator and the E14-01 (Recycling ratio) EFFAS indicator. This data is also relevant for criteria 7 (Rules and processes), 10 (Innovation and product management), 11 and 12 (Usage of natural resources) of the German Sustainability Code. It is also used for reporting on the Global Compact in principles 7 (Precautionary approach) and 8 (Environmental responsibility).

Waste generation.

Telekom in Germany and T-Mobile USA contributed considerably to this reduction by significantly cutting back on paper waste as well as technical and other waste. T-Mobile USA was even able to reduce its paper waste by 90 percent. See individual subsidiaries in the <u>interactive subsidiary benchmarking tool</u> for details.





#### Waste Generation 2011



The amount of waste reduced throughout the Group indicates that a Group-wide strategy to minimize waste amounts is being effectively implemented. Despite increases here and there in the amount of waste produced - the amount of hazardous waste produced throughout the Group increased by 8 percent, for example - overall waste production decreased at almost all of the international subsidiaries. The remaining waste was <u>disposed of in compliance with environmental regulations</u>.

### Reporting against standards.

By reporting the amount of waste we generate, we fully cover the EN 22 (Total weight of waste by type and disposal method) GRI performance indicator and the E04-01 (Total waste in tonnes) EFFAS indicator. This data is also relevant for criterion 11 (Usage of natural resources) of the German Sustainability Code. It is also used for reporting on the Global Compact <sup>[1]</sup> principles 7 (Precautionary approach) and 8 (Environmental responsibility).

© 2012 Deutsche Telekom AG		

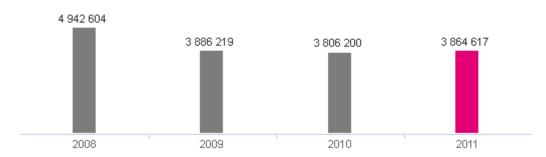
Home > Facts & figures > Environmental indicators > Other environmental indicators

### Other environmental indicators.

### Water consumption.

Group-wide water consumption increased slightly by 2 percent during the reporting period. This trend can be primarily attributed to increased consumption volumes by the T-Mobile USA subsidiary (approx. + 30%) due to increased irrigation in the dry summer of 2011. The trend at T-Mobile USA is mitigated by a significant decrease in water consumption at Deutsche Telekom in Germany, OTE in Greece and T-Mobile Netherlands. The generally low consumption values of T-Systems Mexico, T-Systems Iberia and T-Systems UK increased due to extended data recording and partly due to rising staff numbers. See individual subsidiaries in the <u>interactive subsidiary benchmarking tool</u> for details.

Water Consumption Deutsche Telekom Group. in m<sup>3</sup>



International subsidiaries OTE and T-Systems Slovakia reported success in their water management practices: OTE was able to reduce its water consumption during the reporting period by 29,000 liters by fixing leaks. T-Systems Slovakia reduced the amount of water consumed by 14 percent compared with 2010 due to its SaveWater program.

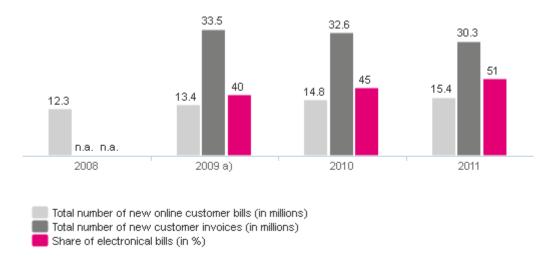
### Reporting against standards.

By reporting water consumption we fully cover the EN 8 GRI performance indicator (Total water withdrawal by source) and the E28-01 (Total water withdrawal) EFFAS indicator. This data is also relevant for criterion 11 (Usage of natural resources) of the German Sustainability Code. It is also used for reporting on the Global Compact [1] principles 7 (Precautionary approach) and 8 (Environmental responsibility).

### Online customer bills.

In 2011 more than 50 percent of customer bills and credit notes for fixed-line and mobile communications customers were done online, totaling at 15.4 million online customer bills. This indicates that the percentage of online bills has grown continuously over the past four years.

Online Customer Bills Deutsche Telekom Group in Germany.



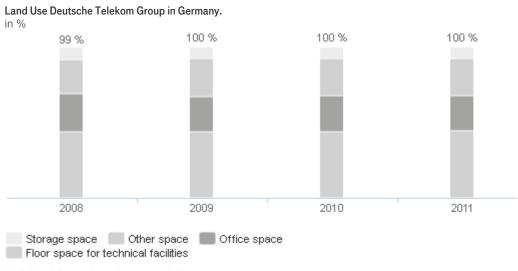
a) T-Home adjusted its counting method in 2009

### Reporting against standards.

By reporting data on the number of online customer bills, we fully cover the EN 26 (Initiatives to mitigate environmental impact) and TA 1 (Examples of the resource efficiency of telecommunication products and services delivered) GRI performance indicators and partially cover the EN 7 (Initiatives to reduce indirect energy consumption) GRI performance indicator and the V04-13 (Percentage of services or products for increasing eco-efficiency of own products) EFFAS indicator. This data is also relevant for criteria 2 (Implementation of the sustainability strategy) and 10 (Innovation and product management) of the German Sustainability Code. It is also used for reporting on the Global Compact [1] principles 7 (Precautionary approach) and 8 (Environmental responsibility).

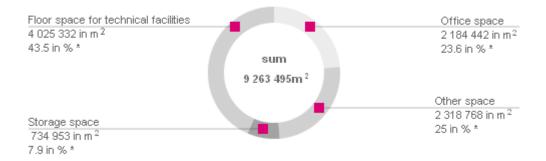
# Land use.

The property used by Deutsche Telekom in Germany covers most of our demands for technology, office and storage space and well as providing space for other needs. The total space used decreased slightly compared to 2010 with 9,153,607 m<sup>2</sup> of utilized space.



Individual figures have been rounded.

Land Use Deutsche Telekom Group in Germany.



<sup>\*</sup> Individual figures have been rounded.

### Reporting against standards.

This data is relevant for criterion 11 (Usage of natural resources). It is also used for reporting on the Global Compact principles 7 (Precautionary approach) and 8 (Environmental responsibility).

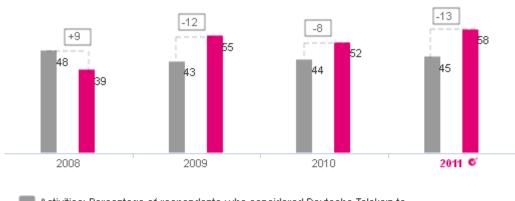
Home > Facts & figures > Social & HR indicators > Social commitment

### Social commitment.

### CR KPI "Social Commitment".

The Social Commitment CR KPI indicates the discrepancy between perceived importance of social commitment and perception of Deutsche Telekom's actual involvement in this area. This difference had decreased to 8 percent in 2010. It increased to 13 percent in 2011 as a result of increased importance attributed to CR activities by the public.

 $\label{lem:condition} \textbf{CR KPI "Social Commitment" Deutsche Telekom Group in Germany.}$ 



- Activities: Percentage of respondents who considered Deutsche Telekom to be committed to social issues.
- Importance: Percentage of respondents who considered corporate social commitment to be "important" or "very important".
- CR KPI "Social Commitment": Difference between the assessment of the importance of social commitment an Deutsche Telekoms's social commitment activities (expressed in percentage points).

Source: TNS Infratest, exclusive telephone survey of 1,000 persons resident in Germany, October 2011.

▼ Data verified by PwC. Data is partly provided by external service providers.

We are able to specify the Social Commitment CR KPI for all years back to 2008. We are pleased that perception of Telekom's community-related activities increased by one percent in 2011 and even more according to a survey of "CR experts." At the same time the importance attributed to social commitment by the public increased considerably from 52 to 58 percent year on year, which widened the discrepancy between importance and performance by 5 percent. Source: TNS Infratest. Exclusive telephone survey of 1,000 German residents. Question on importance: "How important is it to you that companies are active in the community?" Answer: "extremely important" or "very important." Question on performance: "I am going to read a list of other companies (...) to you (...) and would like you to tell me if you think (...) that these companies are committed to community engagement." Answer: "yes" for "Deutsche Telekom."

### Reporting against standards.

By reporting our Social Commitment CR KPI as an indicator of progress regarding the effectiveness of our community involvement we partially cover the SO 1 (Impacts of operations on communities) GRI performance indicator. This data is also relevant for criteria 18 (Corporate citizenship) and 7 (Rules and processes) of the

German Sustainability	ode.

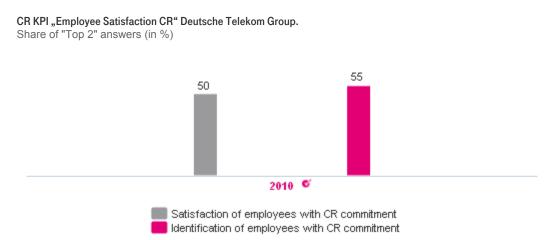


Home > Facts & figures > Social & HR indicators > Employee satisfaction

# Employee satisfaction.

### CR KPI "Employee Satisfaction CR".

We use the Employee Satisfaction CR KPI to determine how our employees are identifying with the company and to assess their satisfaction with our CR activities. The calculation is based on an employee survey that is conducted at the international subsidiaries every two years. This KPI serves as the basis when defining future targets. The first calculation took place in 2010, which means there are no new values for 2011.



### Reporting against standards.

This data is relevant for criteria 7 (Rules and processes) and 14 (Employee rights and diversity) of the German Sustainability Code. It is also used for reporting on the Global Compact in principles 3 (Freedom of association) and 6 (Elimination of discrimination).

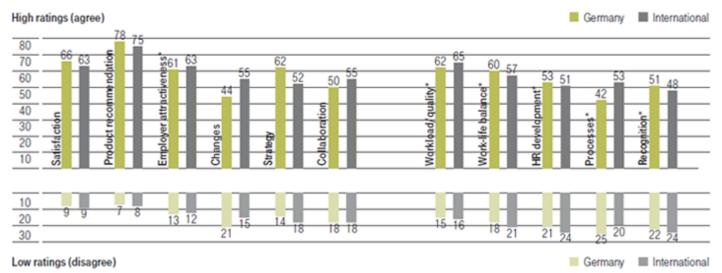
# Pulse survey.

The results of the 2011 pulse check on employee satisfaction were very good in 2011 as well. 121,000 employees from 29 countries participated in the survey. More than 50 percent answered the questions in almost all of the categories positively. Satisfaction with our products was very high in 2011 as well. Around 75 percent of the employees surveyed recommended our products and services to family, friends and acquaintances, for the Telekom in Germany the percentage was even higher at a level of around 78 percent.

### Pulse check with excellent results.

Results of the Group-wide pulse check, November 2011, in %.

Around 121,000 employees from 29 countries participated in the pulse check. More than 180,000 were invited to take part, response rate: 67 % (2010 employee survey: 71 %).



<sup>\*</sup> New element of the pulse check.

High ratings = Very good, good/agree fully, agree.

Low ratings = Poor, very poor/do not agree, do not agree at all.

"Neither agree nor disagree" ratings are not included.

#### Explanations of questions asked:

Satisfaction = How do you feel in the company?

Product recommendation = I recommend the products/services of our company to potential customers outside of my work environment.

Employer attractiveness = I would recommend our company as a great place to work.

Changes = I can understand the changes in our company.

Strategy = I can clearly explain to others the strategy of Deutsche Telekom.

Collaboration = In my experience, we all work together as partners at Deutsche Telekom in the interests of the Group's success.

Workload/quality = In my team, the workload and quality requirements are consistent with one another.

Work-life balance = The current working hours allow a good balance between private (family/leisure act.) and job-related interests.

HR development - Our company offers sufficient training opportunities to support my professional development.

Processes = Processes, IT tools and procedures allow me to effectively meet my customers' needs.

Recognition = Considering all my efforts and achievements, I feel that I have received the appropriate amount of recognition at work

### Reporting against standards.

This data is relevant for criteria 14 (Employee rights) and 15 (Diversity and health) of the German Sustainability Code. It is also used for reporting on the Global Compact principles 3 (Freedom of association and the right to collective bargaining) and 6 (Elimination of discrimination).

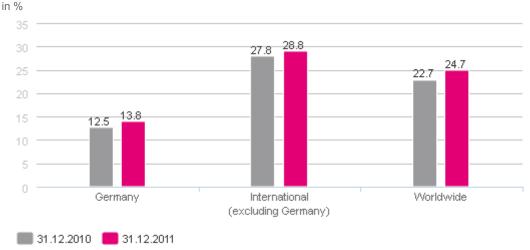
Home > Facts & figures > Social & HR indicators > Diversity & company pension scheme

# Diversity & company pension scheme.

### Women in the group.

Within the scope of introducing a quota for women's positions, we were able to increase the number of women holding positions at the top and middle management levels in Germany as well as throughout the Group in 2011. The target is to have thirty percent of top and middle management positions occupied by women by the end of 2015. This rule applies to all of Telekom's international subsidiaries.

### Women in the Deutsche Telekom Group in Germany.



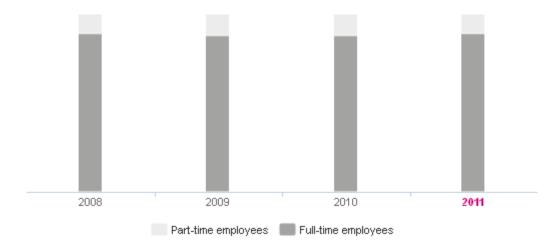
### Reporting against standards.

By reporting data on the percentage of women holding positions in middle and top management, we partially cover the LA 13 (Composition of governance bodies and breakdown of employees per employee category) GRI performance indicator and the S10-01 (Percentage of female employees in relation to total employees) EFFAS indicator and fully cover the S10-02 (Percentage of female FTEs in senior positions) EFFAS indicator. This data is also relevant for criterion 15 (Diversity and health) of the German Sustainability Code. It is also used for reporting on the Global Compact [1] principle 6 (Elimination of discrimination).

### Part-time employees.

As in the previous year, the percentage of part-time employees came to around 11 percent in 2011, thus remaining at a stable level when viewed over the past four years.

Percentage of part-time employees in the Deutsche Telekom Group in Germany. in  $\,\%$ 



### Reporting against standards.

This data is relevant for criteria 14 (Employee rights) and 15 (Diversity and health) of the German Sustainability Code. It is also used for reporting on the Global Compact principles 3 (Freedom of association and the right to collective bargaining) and 6 (Elimination of discrimination).

### People with disabilities.

Supporting and integrating people with disabilities is important to us. At 6.7 percent, the percentage of disabled employees was considerably higher in 2011 than the statutory quota of five percent (Source: 2011 Human Resources Report, p. 56).

People with disabilities Deutsche Telekom Group in Germany.

Business units of the Deutsche Telekom Group in Germany, in %

	2009 in %	2010 in %	2011 in %
Germany OS	6,3	6,6	6,7
T-Systems	3,6	3,7	3,8
Group Headquarters and Shared Services	7,7	7,9	8,1
Group (total) in Germany	6,0	6,2	6,3

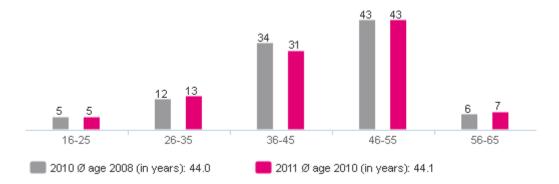
### Reporting against standards.

This data partially covers the LA 13 (Composition of governance bodies) GRI performance indicator. This data is also relevant for criterion 15 (Diversity and health) of the German Sustainability Code. It is also used for reporting on the Global Compact principle 6 (Elimination of discrimination).

### Age structure.

The age structure at Telekom in Germany remained unchanged for the most part in 2011 compared to the previous year. The majority of our employees are between the ages of 46 and 55. We experienced a slight decrease in the age group between the ages of 36 and 45. The percentage of employees in this age

Age structure at Deutsche Telekom Group in Germany. in  $\,\%$ 



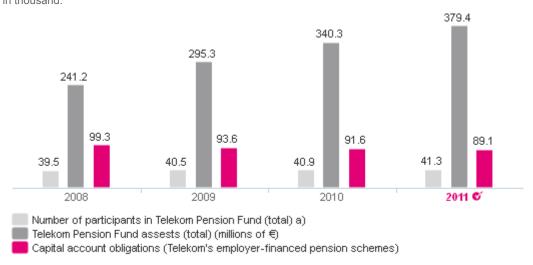
### Reporting against standards.

This data partially covers the LA 13 (Composition of governance bodies and breakdown of employees per employee category) GRI performance indicator and fully covers the SO3-01 (Age structure/distribution) EFFAS indicator. This data is also relevant for criterion 15 (Diversity and health) of the German Sustainability Code. It is also used for reporting on the Global Compact [ii] principle 6 (Elimination of discrimination).

### Company pension.

The increase in fund assets can be attributed to the payments of the increasing number of plan participants (as was the case in previous years). Because the majority of participants in the 2001 pension plan are still active, i.e., still paying into their retirement plans, this increase will remain steady over the next few years.

Company Pension Deutsche Telekom Group in Germany. in thousand.



a) The volume comprises the assets of the Telekom-Pensionsfonds in the 2001 pension plan.

Verified by PwC: only number of participants in Telekom Pension Fund and Telekom Pension Fund assets. **Reporting against standards.** 

This data fully covers the EC 3 (Coverage of the organization's defined benefit plan obligations) GRI performance indicator.



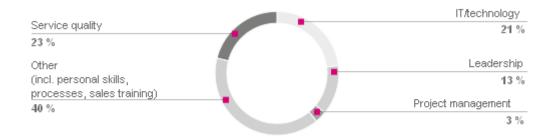
<u>Home</u> > <u>Facts & figures</u> > <u>Social & HR indicators</u> > Training & development

# Training & development.

### Further education at Deutsche Telekom.

We conducted 40,965 seminars with 284,044 participants in Germany in 2011 within the scope of Deutsche Telekom's training measures. Based on the number of days completed, the average comes to six days of training per employee.

Further Education at the Deutsche Telekom Group in Germany.



Seminars: 40,965

Participants: 284,044 {Ø of 2 seminars attended per employee}

Participant days: 734,237

Ø number of training days per participant: 2.6; per employee: 6.0

Number of web-based trainings carried out (content usages on internal e-learning platform): 813,235

### Reporting against standards.

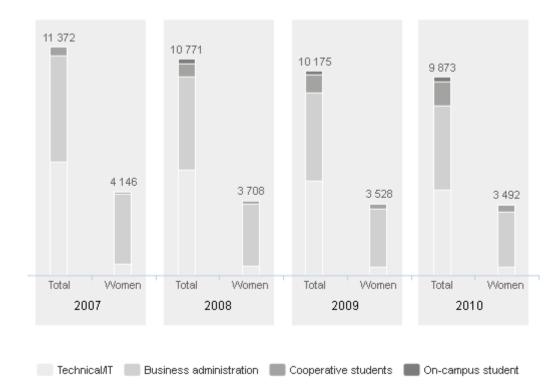
By reporting this data, we partially cover the LA 10 (Average hours of training per year per employee by employee category) and LA 11 (Life-long learning) GRI performance indicators and the S02-02 (Average expenses on training per FTE p.a) EFFAS indicator. This data also covers criterion 16 (Steps taken to promote the general employability of all employees) of the German Sustainability Code.

### Trainees and training programs.

The number of trainees (including students) decreased slightly from 10,175 in 2010 to 9,873 in 2011. The number of female trainees decreased from 3,528 to 3,492.

#### Apprentices and training programs in Germany.

Total and percentage of women in the Deutsche Telekom Group in Germany.



Commercial training programs: office communications administrators, retail sales or dialog marketing assistants, industrial business administrators

Cooperative study programs: Bachelor in Business Administration, Communications and Information Technology, Business Information Systems

### Reporting against standards.

The data also partially covers the LA 10 (Average hours of training per year per employee by employee category) GRI performance indicator. This data is also relevant for criterion 15 (Diversity and health) of the German Sustainability Code.



Home > Facts & figures > Social & HR indicators > Employee health

# Employee health.

### Health rate.

The health rate at Telekom in Germany remained constant at a high level over the course of the year at approximately 94 percent.

Health rate stable at Deutsche Telekom in Germany. Group segments in Germany, in %

	2009	2010	Dec. 31, 2011
Germany OS	93,3	93,4	93,5
Europe OS	97,4	97,8	97,7
T-Systems	96,4	96,5	96,2
Group Headquarters and Shared Services	94,0	94,3	93,8
Group (total)	94,0	94,2	94,1

Deutsche Telekom achieved a high level in the area of health, safety and environmental protection. This is shown by awards such as the Corporate Health Award 2010 and certificates granted in 2011 to business areas responsible for the international Group-wide Health, Safety & Environmental Management System. In 2011 we developed web-based training programs as one way of providing executives with better information on their role in workplace health and safety, and to make them aware of their responsibilities. The communication campaign, "Health for all employees," serves the same purpose. The campaign will focus on sports/fitness, diet and mental health throughout 2012.

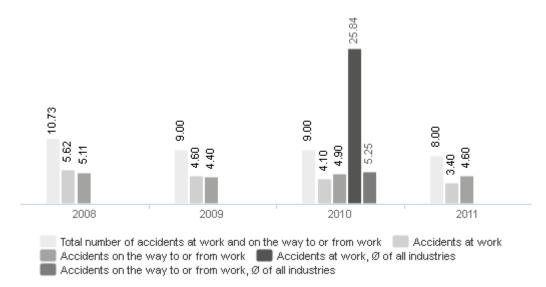
### Reporting against standards.

In combination with data on work-related accidents, the health rate data fully covers the LA 7 (Rates of injury, occupational diseases, lost days, and absenteeism) GRI performance indicator. This data is also relevant for criterion 15 (Diversity and health) of the German Sustainability Code.

### Occupational accidents.

The quota of all work and travel-related accidents was reduced from nine to eight accidents per every thousand employees. Fortunately, there were no fatal accidents during the reporting period.

Occupational accidents Deutsche Telekom Group in Germany. Per thousand employees



Accidents from 2011 have not yet been included in the statistics published to date.

### Reporting against standards.

In combination with the health rate, the data on work-related accidents fully covers the LA 7 (Rates of injury, occupational diseases, lost days, and absenteeism) GRI performance indicator. This data is also relevant for criterion 15 (Diversity and health) of the German Sustainability Code.

<u>Home</u> > <u>Facts & figures</u> > <u>Social & HR indicators</u> > Workforce

### Workforce.

### Workforce development worldwide.

The number of employees decreased in 2011 compared to the previous year. The reason for personnel reductions was high competitive pressure as well as the negative effects of the financial crisis on international subsidiaries, for example in Greece. As a responsible employer, we placed emphasis on conducting staff restructuring measures in a <u>socially acceptable way</u>. You will find more information in our <u>Human Resources Report</u>.

#### Workforce development worldwide.

By business areas and regions, all as of Dec. 31.

* Operating Segments ** from 2011 Europe incl. SEE				
Group (total)	227 747	259 920	246 777	235 132
Group Headquarters and Shared Services	19 077	20 703	21 494	21 033
USA	38 031	40 697	37 760	32 868
T-Systems	45 862	46 021	47 707	48 163
SEE	20 885	53 532	51 230	**
Europe OS	18 255	17 631	12 108	58 010 **
Germany OS*	85 637	81 336	76 478	75 058
	2008	2009	2010	2011

### Reporting against standards.

In combination with additional data on the number of employees, the data on the trend in employee numbers worldwide fully covers the LA 1 (Total workforce) and LA 2 (Total number and rate of employee turnover) GRI performance indicators. It also partially covers the S01-01 (Percentage of FTE leaving p.a.) EFFAS indicator.

### Deutsche Telekom workforce 1998 to 2011.

The number of employees throughout the Group was lower in 2011 than in the two previous years.

Deutsche Telekom workforce 1998 to 2011.

In thousands of FTE, as of Dec. 31 of each year.



<sup>\* 2009</sup> figures include 32,990 FTE at OTE.

### Reporting against standards.

In combination with additional data on the number of employees, the data on employees in the German Group and at international level fully covers the LA 1 (Total workforce) and LA 2 (Total number and rate of employee turnover) GRI performance indicators. It also partially covers the S01-01 (Percentage of FTE leaving p.a.) EFFAS indicator.

### Proportion of Civil Servants Deutsche Telekom Group in Germany.

The number of civil servants employed in Germany decreased from 43,977 in 2010 to 40,828 in 2011 as a result of the general employee trend.

### Percentage of civil servants Deutsche Telekom Group in Germany.

2008 to 2011 in FTE.

	2008	2009	2010	Dec. 31, 2011
Active civil servants	32 113	29 188	25 570	23 516
Civil servants on temporary leave from civil-servant status*	3 033	6 597	1 678	1 537
Civil servants at affiliated companies	17 610	13 267	16 729	15 774
Total civil servants	52 756	49 052	43 977	40 828**
Number of non-civil servants in Germany	78 957	78 435	79 197	80 736
Total number of employees in Germany	131 713	127 487	123 174	121 564
Percentage of civil servants in Germany in %	40.1	38.5	35.7	33.6

<sup>\*</sup> Civil servants whose status as such is currently suspended. They have temporarily switched to an employee relationship not covered by collective agreements.

### Reporting against standards.

In combination with additional information on the number of employees, the data on the proportion of civil servants fully covers the LA 1 (Total workforce) and LA 2 (Total number and rate of employee turnover) GRI performance indicators.

<sup>\*\*</sup> All figures calculated on the basis of precise detailed data. Since figures are rounded, totals may differ.

The number of employees at Vivento barely changed at 6,853 compared to 6,850 in 2010. A total of 770 employees found new jobs. Our target for 2012 is to help an additional 560 employees to find new employment (Source: 2011 Human Resources Report, p. 33).

#### Vivento workforce.

Incl. business models and projects, as of December 31, 2011.



Permanent employees and support staff incl. Vivento Customer Services: 742 umber of employees who found new employment through Vivento in 2011: 770 number of employees who are to be placed through Vivento in 2012: 560 additions to employees in Vivento since it was established: 48,510 left Vivento since it was established: 39,988

\* All figures calculated on the basis of more precise detailed data. Since figures arerounded, totals may differ.

### Reporting against standards.

In combination with additional information on the number of employees, the data on employees at Vivento fully covers the LA 1 (Total workforce) and LA 2 (Total number and rate of employee turnover) GRI performance indicators.

### Tools for socially acceptable staff restructuring.

We continued our efforts to engage in socially acceptable staff restructuring at Telekom companies in 2011. We use internationally proven tools giving employees the option to voluntarily leave the company as part of this process. In Germany some of the most notable examples include early retirement for civil servants and the new provisions, issued in the fall of 2011, on phased retirement for older employees, employees outside collective agreements and senior executives whose responsibilities clearly extend beyond legal standards (Source: 2011 Human Resources Report, p. 32).

Tools for socially responsible staff restructuring at the Telekom Group in Germany.

### Staff departures in FTEs.

	2008	2009	2010	Dec. 31, 2011
Early retirement (civil servants)	2,779	2,788	3,947	2,564
Early retirement (non-civil servants)	218	468	121	0
Severance payments	3,252	2,192	2,227	709
Phased retirement (start of passive phase)	1 672	643	846	959
Other socially responsible tools	117	132	782	163

Reporting against standards.	
This data is relevant for criteria 6 (Rules and processes) and 14 (Employee rights) of the German Sustainabili	ty

© 2012 Deutsche Telekom AG

Code.



<u>Home</u> > <u>Facts & figures</u> > <u>Social & HR indicators</u> > Ideas management

# Ideas management.

### genial@telekom. Ideas management.

In 2011, employees submitted 10,831 suggestions for improvement using the genial@telekom ideas platform, which was introduced several years ago. The savings generated by these improvements came to EUR 116 million. We registered 244 patents in the reporting period as well.

genial@telekom. Ideas management.

Modern ideas management on the advance.

### In 2011, the number of patent applications stood at 244.

	2008	2009	2010	2011
Suggestions for improvement	7 295	5 592	10 498	10 831
Savings in million €	141	122	136	116

### Reporting against standards.

Employee involvement is encouraged via the genial@telekom ideas management platform. This data is relevant for criterion 14 (Employee rights) of the German Sustainability Code.

### Portfolio of intellectual property rights.

The portfolio of intellectual property rights has increased continuously over the past four years and came to more than 7,500 in 2011.

### Portfolio of intellectual property rights Deutsche Telekom Group in Germany.

	2008	2009	2010	2011
Patent applications	6 328	6 881	7 434	>7 500

Industrial property rights include inventions, patent applications, patents, utility models and registered designs. The latter give their owners the sole right to use an aesthetic format (design, color, form). The IPR portfolio is reviewed on a regular basis and those rights that are no longer relevant are eliminated. We manage these property rights based on cost-utilization criteria. (Data source: 2011 Group management report, p. 121)

### Reporting against standards.

This data partially covers the TA 5 (Practices relating to intellectual property rights) GRI performance indicator as well as the V04-05 (Number of patents registered within the last 12 months) and V04-06 (Percentage of patents

registered within last 12 months	s in relation to total number of patents) EFFAS indicators.	