

# connect to learn

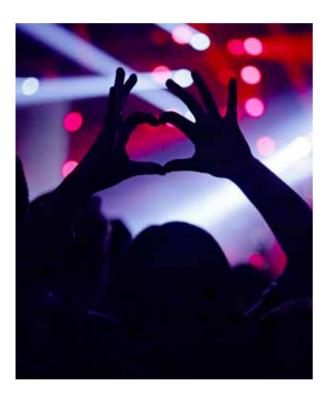
# TECHNOLOGY FOR GOOD

**Ericsson Sustainability and Corporate Responsibility Report 2015** 

### ABOUT ERICSSON

Ericsson is the driving force behind the Networked Society a world leader in communications technology and services. Our long-term relationships with every major telecom operator in the world allow people, business and society to fulfill their potential and create a more sustainable future.

Our services, software and infrastructure - especially in mobility, broadband and the cloud - are enabling the telecom industry and other sectors to do better business, increase efficiency, improve the user experience and capture new opportunities. With approximately 115,000 professionals and customers in 180 countries, we combine global scale with technology and services leadership. We support networks that connect more than 2.5 billion subscribers. Forty percent of the world's mobile traffic is carried over Ericsson networks. And our investments in research and development ensure that our solutions - and our customers - stay in front.



### **Ericsson Compliance Line**

A student in India benefitting from

initiative co-founded by Ericsson.

For reporting of suspected violations of laws or the Ericsson Code of Business Ethics, please visit http://www.ericsson.com/reporting-compliance-concerns for information on how to make a report via the Ericsson Compliance Line, our whistle-blower tool.

#### Cover photo:



ABOUT THIS REPORT

This report, together with additional information available online, summarizes our 2015 sustainability and corporate responsibility (CR) performance. It is Ericsson's 23rd such report.

Sustainability and CR are central to Ericsson's core business and our commitment to the triple bottom line of responsible financial and environmental performance and socio-economic development. Our aim is to create positive impacts for our stakeholders and our business while managing environmental, social and ethical risks. Conducting business responsibly is a top priority, and we take a full value-chain perspective.

We believe this approach delivers new business opportunities, greater efficiency, less risk, greater brand value, market leadership, employer attractiveness, and boosts long-term competitiveness.

#### **UN Global Compact Advanced**

Ericsson has reported according to the UN Global Compact (UNGC) Advanced Level criteria since 2012.

#### UN Guiding Principles on Business and Human Rights Reporting Framework

This is the second year that Ericsson has reported according to the UN Guiding Principles (UNGP) on Business and Human Rigths Reporting Framework, and this year we have added a UNGP Reporting Framework Index, p. 58.

#### **Report Boundaries**

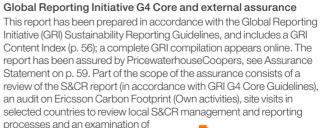
Unless otherwise stated, all information and data pertains to activities undertaken from January 1, 2015, to December 31, 2015. The report covers the Ericsson Group, i.e. Telefonaktiebolaget LM Ericsson and its subsidiaries. The Ericsson Annual Report 2015 provides information on Ericsson's structure, nature of ownership and legal form, subsidiaries, as well as changes regarding size, structure and financial performance.

### Technology for Good™

By 2020, 90% of the world's population will be covered by mobile broadband networks. This scale brings unprecedented opportunity to address global sustainable development challenges. In the Networked Society, Ericsson is a leading advocate of Technology for Good. It is a concept we work with every day, and is the overarching theme of this report.

#### Forward looking statements

Certain matters discussed in this report include forward-looking statements subject to risks and uncertainties. Readers of this document are cautioned that our forward-looking statements are not guarantees of our future actions or developments, which may differ materially from those described or implied. We expressly disclaim a duty to provide updates to these forward-looking statements after the date of this report to reflect events or changes in circumstances or changes in expectations or the occurrence of anticipated events. The information included on any websites that appear in this report is not incorporated by reference in this report.



the process for the OHS Incident Review Board.



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of active employees acknowledge the Code of Business Ethics

ICT could help reduce global GHG emissions by up to



20 MILLION

people are positively impacted by Technology for Good initiatives



### LETTER FROM THE CHAIRMAN

I am confident that a proactive stance on sustainability and CR creates value in the short-, medium- and long-term."

As an industry leader, Ericsson is actively driving its business to ensure we create a positive impact in society. We call this Technology for Good. In all three spheres of performance which comprise the triple bottom line – financial, environmental and socioeconomic – we are delivering results and focus on our core business.

### Governance and strategy integration

The Board is keenly aware of sustainability and CR's growing importance to the company and to our stakeholders. In management of sustainability and CR, the Board of Directors' remit is both governance and strategy. We are regularly updated in order to stay informed about the issues, oversee governance of sustainability and CR, and ensure that these topics are integrated into the strategy.

### Creating value

I am confident that a proactive stance on sustainability and CR creates value in the short-, medium- and long term. Reducing product energy consumption provides a benefit already in the short term. With fully leveraged connectivity, we connect the unconnected, improve health, education and livelihoods, and help cities become more sustainable, creating value in the medium to long term.

One of the most fundamental changes that I have seen over time is the shift to a solution agenda. Today business leaders have understood that being responsible in sustainability can be good for business, and we do our best when we can link sustainable development to our core business. There is enormous potential when businesses find the rationale and decide to provide solutions to sustainable development challenges.

### **Balancing risks**

In addition to the benefits, we have to balance the risks. Potential misuse of technology can pose a risk to the right to privacy and other human rights. Other risks include corruption, responsible sourcing, and occupational health and safety. The Board is aware of the risks and the actions that must be taken to address them. The Ericsson management is deeply committed to, and has a

long history and culture, of embracing sustainability. Conducting business responsibly is a fundamental business prerequisite – and will be even more important going forward. The opportunities for mobile technology to positively impact society will continue to grow. As a technology optimist and a technology activist, I believe we can use technology to contribute to the positive development of societies, and I believe we're only at the beginning of this journey.

Leif Johansson Chairman of the Board



### LETTER FROM THE CEO

We intend to build on the momentum we achieved in 2015, so that everyone can benefit from the opportunities afforded by the Networked Society."

The Networked Society is enabling transformative change across industries and society. We strive to be a responsible and relevant driver of positive change in society and include society a key stakeholder alongside shareholders, customers, and employees. As a cornerstone of our leadership approach and a strategic priority, sustainability and CR is integrated across our business.

In 2015 the UN Sustainable Development Goals (SDGs) laid out a clear and united path to a more sustainable world, and ICT is a powerful lever to make that happen. We continue to support the ten principles of the UN Global Compact and the UN Guiding Principles for Business and Human Rights (UNGP).

### Making progress

In 2015, we made progress in several areas. We advanced energy performance, delivering one of the most energy efficient platforms on the market, Ericsson Radio Systems. We are decoupling energy from traffic growth, and providing ICT-enabled solutions on the path to a low-carbon economy. In 2015, we delivered on a target to reduce twice as much societal carbon emissions via our product and service offerings as we emitted from our own operations, in selected areas such as utilities, smart meters and transportation.

Our Technology for Good efforts are delivering innovative approaches to connect the unconnected, even in the most remote and challenging areas. We are delivering new solutions and business models to address this segment, like Managed Rural Coverage, PSI Coverage and Mobile Broadband Expander, all designed to improve affordability and accessibility of mobile communications to close the digital divide.

### Transformation with responsibility

Not only are we helping transform society, but we are also a company undergoing enormous transformation to make this happen. This covers all aspects of the company. One example is the employee perspective where 17,000 left the company during 2015, and 15,000 new employees joined the company. Given the changes, vigilance is required to ensure that our responsible business standards are met across our global operations. No company can ever ensure 100% compliance with standards, but our position is clear, and we focus on prevention and accountability. By the end of last year 99% of active employees acknowledged that they have read and understood our Code of Business Ethics. We work actively with human rights such as privacy and freedom of expression, as well as with anti-corruption, responsible sourcing, and Occupation, Health and Safety (OHS).

### Platform for change

We take an industry-leading role in pushing for positive change and I'm proud to serve on several organizations working to advance sustainable development. In 2015, I joined the board of the UN Foundation to support its work to improve health, increase prosperity, empower women and girls, and address climate change. As a commissioner on the Broadband Commission for Sustainable Development and member of the Leadership Council of the Sustainable Development Solutions Network, I am part of a strong multi-stakeholder platform for shaping policy recommendations and actions that move us closer to our shared goals.

### At a crossroads

We are at a crossroads in sustainable development. Business-

as-usual will not be sufficient to achieve the SDGs. Partnership will be a necessity, not an option. We intend to build on the momentum we achieved in 2015 so that everyone can benefit from the opportunities afforded by the Networked Society.

Hans Vestberg President and CEO



### LETTER FROM THE VICE PRESIDENT OF SUSTAINABILITY AND CR

The world faces pressing challenges: ensuring respect for human rights, climate change, and global humanitarian crises, all areas where technology can play a key role. We have adopted the SDGs as the framework for measuring our impact on society. By embedding sustainability and CR into our business, we have a strong platform for continued progress and positive impact.

This report covers progress in three main areas of performance: conducting business responsibly; energy, environment and climate change, and communication for all.

### **Responsible business**

We take steps each year to continuously improve management of CR issues. We use the UN Guiding Principles Reporting Framework to report on our work within human rights. We believe anyone working on behalf of Ericsson deserves a safe working environment, and we therefore take an inclusive approach to Occupational Health and Safety (OHS) including our supply chain. By being transparent, we aim to encourage others in our sector to follow suit. We discuss the challenges in increasing electronic waste (e-waste) volumes. In all of these examples, we aim to earn the trust of our stakeholders.

### Taking climate change action

2015 was a pivotal year for climate action with a new global climate treaty agreed in Paris in December, and we were active at COP21 promoting ICT's role in shaping low-carbon economies. Our partnership with UN-Habitat demonstrates how sustainable urbanization can contribute to prosperity and climate resilience, addressing issues such as access to a safe and sustainable water supply.

We also offer our customers products and solutions with optimized energy performance, and we are working with the industry organization the GSMA to help operators benchmark and improve their energy performance.

### **Technology for Good**

Our approach is to use our core business – our technology and expertise, often in public private partnership, to effect positive change. We work to ensure that everyone, everywhere can benefit from mobile communications. A prominent example is mobile money, where we are part of driving the enablement of financial and social inclusion.

As the Ericsson Ambassador for SDG 4 on education, I am proud to report that our Connect To Learn initiative, utilizing our core assets of mobility, broadband and cloud solutions to ensure access to a quality secondary education for girls in developing countries, is now reaching over 76,000 students in 22 countries.

ICT is also a powerful tool to address poverty, health, humanitarian response, refugee reconnection, peace-building and gender equality. On the humanitarian front, we marked the 15th anniversary of Ericsson Response, our employee volunteer program which has supported 40 relief efforts after disasters in 30 countries and is a pioneering example of public-private partnership in action.

### Looking forward

As the SDGs move into implementation, it is even more important to work on advocacy around the benefits ICT can deliver. It is not always easy to determine which aspects to measure, and in what way, to give the most complete picture. We are actively focused on the risk mitigation and reduction and positive change, enabled by ICT, that is already evident on the ground. We will continue to work in public-private partnership and advocate Technology for Good to drive that change.

Elaine Weidman-Grunewald Vice President, Sustainability and Corporate Responsibility

 We have adopted the SDGs as the framework for measuring our impact on society. By embedding sustainability and CR into our business, we have a strong platform for continued progress and positive impact."



### **TOP LEADERSHIP** COMMITMENT

Examples of our SDG Ambassadors include:



































SDG 1. Per Borgklint

Senior Vice President and Head of Segment and Business Unit Support Solutions

SDG 2. Rima Qureshi Senior Vice President, Chief Strategy Officer, Head of Group Function Strategy and Head of M&A

SDG 3. Angel Ruiz Head of Region North America

SDG 4. Elaine Weidman-Grunewald Vice President Sustainability and Corporate Responsibility

SDG 5. Valter D'Avino Head of Ericsson Region Western and Central Europe

SDG 6. Anders Thulin Senior Vice President, Chief Information Officer and Head of Group Function Business Excellence and Common Functions

SDG 7. Arun Bansal Head of Business Unit Radio

SDG 12. Anders Lindblad

SDG 8. Jan Frykhammar Executive Vice President, Chief Financial Officer and Head of Group Function Finance

SDG 9. Ulf Ewaldsson Senior Vice President, Chief Technology Officer and Head of Group Function Technology

SDG 10. Bina Chaurasia Senior Vice President, Chief Human Resources Officer and Head of Group Function Human Resources

SDG 11. Magnus Mandersson Executive Vice President and Head of Segment and Business Unit Global Services

Head of Business Unit Cloud & IP SDG 13. Helena Norrman Senior Vice President, Chief Marketing and Communications Officer and Head of Group Function Marketing and

Communications SDG 14. Jan Wäreby

Senior Vice President and Head of Group Function Sales

SDG 15. Mats H. Olsson Senior Vice President and Head of Ericsson Asia-Pacific

SDG 16. Nina Macpherson Senior Vice President, Chief Legal Officer, Head of Group Function Legal Affairs

SDG 17. Hans Vestberg CEO and President







# ICT AND THE UNITED NATIONS SUS



The UN Sustainable Development Goals (SDG), adopted in 2015, invite global action by 2030 in

three overarching areas; end poverty, combat climate change and fight injustice and inequality. We see ICT as a powerful enabler for each of the 17 goals, and highlight the products, services and solutions that can help achieve them.



M-commerce solutions, such as Ericsson Mobile Financial Services, enhance social and financial inclusion boosting productivity and competitiveness among small businesses and entrepreneurs.



With our M-Commerce Interconnect solution, water credits are loaded on smart cards via operators. Smart water management through ICT also helps improve water availability, affordability and quality.



We promote dematerialization by promoting a shift from a product- to a service-based economy. We aim to close the loop with proper end-of-life management of our own products through our global take-back program.

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# 7 AFFORDABLE AND CLEAN ENERGY

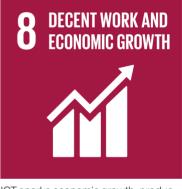
Many solutions in our portfolio focus on improved energy performance such as PSI Coverage, Power Saving features and renewable power solutions like Managed Rural Coverage (MRC).



Our research shows huge potential for ICT: enabled solutions to reduce 15% of global CO<sub>2</sub>e emissions in other sectors, such as utilities and transport.



In villages across Africa and elsewhere, ICT helps rural farmers gain efficiency and access new markets. A Food Hackathon created ICT solutions to reduce waste at distribution and consumption.



ICT sparks economic growth, productivity and jobs. Our research shows that doubling broadband speeds for an economy can add 0.3% to GDP growth.



Monitoring and early-warning systems can protect marine resources. Our Connected Water solution in Atlanta, USA, is remotely monitoring municipal water quality.

# TAINABLE DEVELOPMENT GOALS



Our technology brings telemedicine and remote diagnostics to thousands of community health workers in rural areas. In some countries like Croatia, we have delivered a nationwide e-health system.

## **9** INDUSTRY, INNOVATION AND INFRASTRUCTURE



ICT is a key infrastructure for progress and development and we work to ensure positive impacts on society with partners such as the UN Broadband Commission for Sustainable Development.



Our connected mangroves project and connected vineyard project are two examples of how mobile sensors can be a powerful enabler to monitor the state of the planet, and enable early-warning systems.



Our Connect To Learn program uses mobile broadband and cloud services to expand access to quality education, particularly for girls' secondary education in developing countries.

# 10 REDUCED INEQUALITIES

Our technology and advocacy help reduce inequalities, from extending broadband to rural areas, to Connect To Learn to our Mobile Financial Services, and our diversity and inclusion work.



In the Whitaker Peace & Development Initiative, ICT training for conflictaffected youth gives them the tools for change. With REFUNITE, we developed a mobile platform so refugees can reconnect with family.



We support initiatives to attract more women into the ICT field. We are committed to increasing gender diversity in our workforce. Connect To Learn enables greater access to girls' education.



In cities and communities, we deliver ICT solutions in transport, energy, public safety, and emergency response. In collaboration with UN-Habitat, we carry out research on sustainable urbanization.



ICT can play a transformational role in accelerating the achievement of all the SDGs. We are engaged in public-private partnerships to scale up solutions to meet sustainable development challenges.

### STRATEGY TO DELIVER POSITIVE CHANGE WITH REDUCED RISK

Ericsson's wanted position in the Networked Society

**Customer** Leading ICT transformation partner

**Employees** Attract, develop and retain best talent



Shareholder Shareholder value creator

### Society

Responsible and relevant driver of positive change

Grow faster than the market with best-in-class margins

Through our strategy, we seek to create value for our key stakeholder groups: customers, employees, shareholders and society.

Our Sustainability and Corporate Responsibility (CR) strategy is to create measureable contributions to a sustainable Networked Society, by reducing risk and increasing positive impacts, and making the world a better place with our technology and skills. This is reflected in Ericsson's wanted position, in which we seek to be a responsible and relevant driver of positive change in society.

### Networked Society vision and strategy

In the Networked Society, Information and Communication Technology (ICT) has taken us to a critical stage – an inflection point – enabling transformative and disruptive change across industries and society. The Networked Society aims to deliver growth and prosperity based on greater social cohesion and environmental sustainability.

By engaging with diverse stakeholders and leading in mobility and connectivity, we continue to uncover and share insights about our rapidly transforming, connected world and ensure that we drive technology as a force for good.

### Embracing the SDGs

In 2015, our Sustainability & CR strategy embraced the UN SDGs that were ratified

by the UN General Assembly in September (p. 6–7). These call for bold breakthroughs by 2030. To be achieved, the SDGs must leverage existing and widely deployed technologies – technologies such as ICT that can bring transformative and disruptive change.

Sustainability and CR are integrated in our business strategy execution, target setting and risk management process which involves Regions, Business Units and Group Functions. Sustainability and CR policies as well as our Code of Business Ethics and Code of Conduct are part of our governance system and applied globally across the business. The Ericsson Sustainability and CR Steering Group is comprised of senior executives who approve the strategy and targets that support our commitments. For more information on governance, see p. 15.

### Focused Sustainability & CR strategy In our strategy we aim to:

- > Be the trusted partner by conducting business responsibly.
- > Be the undisputed leader in product energy and environmental performance.
- > Improve sustainability performance of our own operations.
- Drive ICT as a major solution to minimize effects of urbanization and climate change.
- Drive customer, employee and societal engagement through Technology for Good.

How we deliver on the strategy is covered in the three report sections: Conducting Business Responsibly; Energy, Environment and Climate Change, and Communication for All.

### Setting our compass

To track our performance against the strategy, we report on a range of objectives and achievements associated with our most material issues. Taking a value-chain perspective, we aim for continuous improvements over time.

To deliver on our ambition to be a responsible and relevant driver of positive change in society, we set objectives in two dimensions (see p. 54–55): our positive impacts and risk reduction.

The positive impact in society is twofold, related to people impacted and CO<sub>2</sub>e emissions reduced. By the end of 2016, we aim to impact over 28 million people through Technology for Good<sup>TM</sup> initiatives and to reduce societal CO<sub>2</sub>e emissions from selected Ericsson's Industry & Society offerings with 2 times Ericsson's own CO<sub>2</sub>e emissions.

### An ambitious road ahead

Our strategy recognizes ICT as an industry with a powerful means of interlinking all sectors involved in meeting sustainable development objectives. We will continue to be a leading voice for sustainable development and the role of our technology in accelerating the achievement of the SDGs. We're committed to leading that transformation.

# ON THE HORIZON

As we look towards the horizon over the next several years, we believe that the role of ICT is poised to deliver deep societal transformation and provide an accelerated path to achieve the SDGs. Yet significant challenges must be tackled if we are to achieve the full potential of the Networked Society.

Currently, there are as many mobile subscriptions as people in the world. Every second, 20 new mobile broadband subscriptions are activated. The number of mobile subscriptions is growing across all regions, with greater device affordability encouraging new subscribers in developing regions. According to the Ericsson Mobility Report, the growth is expected to be particularly strong in the Middle East and Africa due to a young and growing population and rising GDP. This opens up an abundance of opportunities for ICT-enabled solutions that can advance sustainable development. It is a journey that we can't fully predict.

### Recognizing the challenges

As part of our Group strategy process (see Ericsson Annual Report, p. 22), we examine

key opportunities and risks, global trends and developments that can affect our business and ability to deliver on our Society 2020 goal (p. 8). In 2015 we identified opportunities in three main areas:

- to enable freedom and empowerment of people
- > to be a relevant driver in transforming industries and society
- > to provide solutions to global sustainable development challenges.

Among the risks were potential misuse of technology, privacy and security concerns related to the right to privacy and freedom of expression, and non-compliance with the Code of Business Ethics, Code of Conduct, and the Occupational Health and Safety policy.

Our emphasis on conducting business responsibly takes into account both the ability of ICT to enable the enjoyment of human rights and the need to identify and manage the risks that can be related to the rapid development of the Networked Society.

### Transformational role

To achieve ICT's transformative potential, we are focused on expanding from excellence in our core business areas to emerging and future areas for ICT-enabled solutions that can enhance sustainable develop-



Source: Ericsson Mobility Report, November, 2015

ment. We are working to establish leadership in targeted growth areas, such as ICT-enabled solutions within utilities, transportation and public safety, to advance a low-carbon economy.

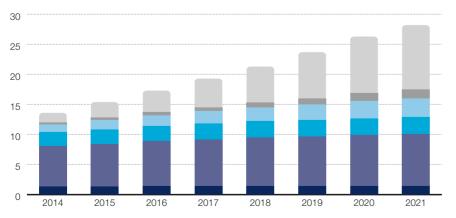
Next-generation mobile broadband (5G); the Internet of Things (IoT); artificial intelligence, 3D printing and more will provide tools for unprecedented advances in healthcare, education, energy services, production, agriculture, and environmental monitoring and protection. With the forecast of 28 billion connected devices by 2021, we expect that Internet of Things will be a rich platform for innovation (p. 45). 5G will widen the range of use cases for Internet of Things but it will also require us to work more broadly with issues such as privacy and security, to protect the integrity of individual data.

2015

2021

### Connected devices (billions)

In our forecast a connected device is a physical object that has an IP stack, enabling two-way communication over a network interface  $^{1\!\mathrm{)}}$ 



	15 billion	28 billion
M2M: non-cellular	2.6	10.7
M2M and consumer electronics: cellular	0.4	1.5
Consumer electronics: non-cellular	1.6	3.1
PC/laptop/tablet	2.4	2.8
Mobile phones	7.1	8.7
Fixed phones	1.3	1.4

Source: Ericsson Mobility Report, November, 2015

<sup>1)</sup> Traditional landline phones are included for legacy reasons.

Examples of M2M: connected car, machines and utility meters, remote metering.

Note: A connected car is herein counted as one "thing" though it may have hundreds of sensors. Examples of consumer electronics devices include: smart TVs, digital media boxes, Blu-Ray players, gaming consoles,

audio/video (AV), receivers etc.

### ESTABLISHING COMMON GROUND

### Our approach to stakeholder engagement

In our approach to stakeholder engagement, we carefully consider issues of importance to our stakeholders, based on their input, during each step of the process, to create positive impact and reduce risks.



### Our stakeholder engagement is an inclusive and continuous process aimed at building relationships and creating mutual understanding.

We engage with our stakeholders in many fora and on a wide range of topics to enhance our ability to tackle shared challenges, and find common solutions.

Our stakeholders fall into four categories: customers, shareholders, employees and society. Society includes suppliers, governments, civil society, non-governmental organizations (NGOs), industry partners, media, academia, and the general public. We see increasing interest from our stakeholders in our performance related to sustainability and CR.

In 2015, a stakeholder survey was conducted to incorporate feedback from select investors, customers and employees to further strengthen our materiality process. The survey confirms the importance of conducting business responsibly, and the general balance and relation of our significant issues from a medium-term perspective.

The engagement approach, outlined in the illustration above, helps us identify the stakeholders, issues and ways to engage in order to incorporate feedback into our current and future efforts.

Interactions with stakeholders are part of the day-to-day operations of our business, and can take place at the global,

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regional or local level. Engagement also occurs through employee engagement activities, joint projects and initiatives; customer meetings; investor meetings and roadshows; surveys, participation in industry groups and representation on decision-making bodies as well as through academic research. We also gain stakeholder insight through in-person meetings, consultation with affected stakeholders, and formal public reports. Among the issues on which we engage with our stakeholders are supply chain management, energy efficiency, human rights impact assessments and our Technology for Good™ programs, and we leverage our social media to extend the conversation. A robust stakeholder engagement approach leads to better management of CR risks and ensures a balanced approach to issues such as human rights, responsible sourcing, corruption, health and safety, conflict minerals, and handling of e-waste.



Elaine Weidman-Grunewald, Hans Vestberg, Ericsson and Stephen O'Brien, UN-OCHA discussing the private sector's role in humanitarian response at the World Economic Forum in Davos.

Ericsson Sustainability and Corporate Responsibility Report 2015

### SPARKING CHANGE THROUGH ADVOCACY

In 2015, much of our advocacy work was focused on embedding ICT as a key enabler of transformative change in the process of establishing the SDGs.

Ericsson's support of the SDGs is reflected in the many arenas where we took this message around the globe, in dialog with UN and international organizations, government leaders and ministries, as well as corporate leaders including:

### **Broadband Commission for** Sustainable Development

ITU and UNESCO set up the Broadband Commission for Digital Development in response to UN Secretary-General Ban Ki-Moon's call to step up UN efforts to meet the Millennium Development Goals.

### BROADBAND COMMISSION

Following adoption of the UN's Sustainable Development Goals in September 2015, it was

relaunched as the Broadband Commission for Sustainable Development. Ericsson has been a member of the Commission since its inception, advocating the importance of broadband on the international policy agenda and making recommendations for governments to implement national broadband plans as well as showcase the power of ICT and broadband based technoloaies. Ericsson led the Commission's Climate Change working group, and more recently the Post-2015 working group, and has contributed to the State of Broadband Reports annually.

### Global e-Sustainability Initiative (GeSI)

Ericsson is a founding member of the Global e-Sustainability Initiative (GeSI), represented on the Board of Directors

and co-chair of the Public Policy Work and Climate Change



Committe. GeSI aims to create an open and global forum for the improvement and promotion of products, services and access to ICT to benefit society and the



Ericsson CEO Hans Vestberg launches the ICT and SDG report at the Broadband Commission for Sustainable Development meeting, September 2015.

environment. Sustainable sourcing and climate change are key issues on the agenda where Ericsson is taking a leading role.

### **UN Global Compact**

Ericsson was one of the first signatories of the UN Global Compact in 2000, and we

work actively with its ten principles on human rights, labour, environment and anti-corruption. As an active member of the Global Compact, we have

reported our Communication on Progress since the start and since 2012, at the Advanced level. We are part of the Compact's Caring for the Climate initiative and in 2015, we joined the CEO Water Mandate, committed to take meaningful action to address water and climate challenges.

### Sustainable Development Solutions Network

As part of the Leadership Council, CEO, Hans Vestberg has been part of this network formed in 2012 to mobilize scientific and technical expertise from academia, civil society, and the private sector to support sustainable development

problem solving at local, national, and global scales.



### Swedish Leadership for Sustainable Development

Ericsson is a member of the Swedish Leadership for Sustainable Development. and help to launch this network of 20 leading companies within Swedish industry, coordinated by the Swedish International Development Cooperation Agency (Sida). Members work in four priority areas: creation of jobs with decent working conditions; reduction of corruption and unethical behavior; reduction of negative environmental impacts and maximization of resource efficiency, and integration of sustainable development into core business models and activities.

### World Economic Forum

is the focus of our efforts,

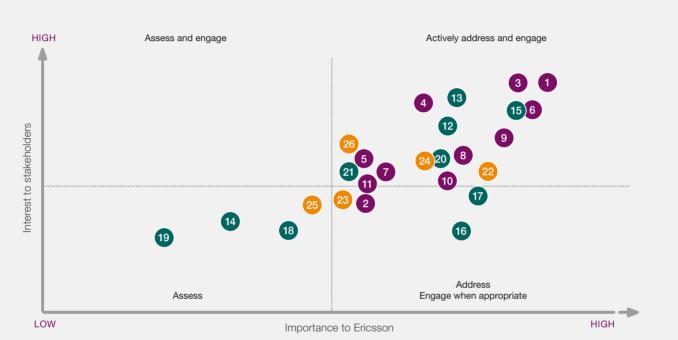
As a strategic partner to the World Economic Forum, we join other leading global companies to support a commitment to improving the state of the world. Sustainable de-WØRLD ECÓNOMIC velopment supported FORUM by digital transformation

and we actively contribute to Future of the Internet global challenge workstreams.

Ericsson is a signatory of The World Economic Forum Partnering Against Corruption Initiative (PACI), a global, multiindustry, multi-stakeholder anti-corruption initiative set up to raise business standards and to contribute to a competitive, transparent, accountable and ethical business.

### ASSESSING OUR MOST MATERIAL ISSUES

A materiality assessment is essential to our sustainability and CR strategy, target setting and risk management and reporting process. We consider the economic, environmental and social impacts most significant to our business, and those that substantively influence the assessments and decisions of stakeholders.



### Conducting business responsibly\*

- 1 Anti-corruption
- 2 Radio waves and public health
- 3 Right to privacy
- 4 Freedom of expression
- 5 Labor standard issues
- 6 Responsible sourcing
- 7 Tracing of conflict minerals
- 8 Diversity and inclusion
- 9 Occupational health and safety
- 10 Employee engagement
- 11 Responsible tax

### Energy, environment and climate change\*

- 12 Energy consumption (Ericsson own activities)
- 13 Ericsson carbon footprint and climate change
- 14 Emissions (effluents, air emissions other than GHG)
- 15 Product energy performance
- 16 Efficient use of materials
- 17 Electrical and electronic waste management
- 18 Waste management (office and production)
- 19 Water consumption
- 20 ICT contribution to low-carbon economy
- 21 Smart sustainable cities

### Communication for all\*

- 22 ICT socio-economic impact
- 23 Access to education
- 24 Access to communication
- 25 Peace building and conflict resolution
- 26 Disaster response

\* Numbering for reference in the graph, not in order of importance.

Our materiality assessment remains focused on the issues most relevant to our sustainability impacts and is used to inform our strategy.

### Sharpening our focus

The number of significant issues in our materiality matrix was reduced to make it more focused.

We have described each issue, including their "boundaries" i.e, where in the value chain impacts occur for each identified material issue. This facilitates a better dialogue with our stakeholders. We have a long tradition of considering economic, environmental and social impacts within and outside of the organization, and identifying stakeholders and their significance to the business. Stakeholder perspectives are incoporated in our work.

### **Prioritizing issues**

Previous materiality assessments are the starting point to prioritize issues that are relevant to our business and that substantively influence the assessments and decisions of our stakeholders. We then include



updates based on developments during the year. Issues under consideration span our entire value chain. Life-cycle assessment helps to identify and measure opportunities to decrease negative environmental impacts. We use the lens of saliency in order to identify our leading human rights challenges. Human Rights Impact Assess-

### STAKEHOLDER INTEREST IN TAX ISSUES

Corporate tax policies and practices are important to stakeholders, and we support transparency and dialog on this issue.

We see payment of taxes as a responsibility but one that brings positive socio-economic impacts through our global presence, employment creation and use of local suppliers. It is our policy to pay the right amount of local corporate income taxes wherever we do business, based on a fair and sound assessment of the profit levels generated locally supported by external benchmark studies.

Ericsson complies with tax rules and payment obligations through our global business operations. This is ensured through a robust and tightly controlled governance system handling tax strategy and compliance which is carried out by Company Control Hubs.

The Hubs each have a Tax Management Unit responsible for the legal entities and branch offices in its region. The hubs are governed by Group Function Finance. This means that Ericsson is paying taxes based on where we have our business operations.

We are closely monitoring the OECD actions in the BEPS (Base Erosion and Profit Shifting) project. The outcome of the actions in relation to Country by Country Reporting will result in local legislation in Sweden and in other countries. Ericsson will work to implement relevant reporting processes in order to fully comply with such future legislation.

ments and the Sales Compliance Process help identify salient human rights issues (see p. 19).

In 2015, we validated our materiality assessment by conducting a survey with selected representatives from our key stakeholder groups: employees, customers and investors. This helps provide insights on issues that these stakeholders consider material for the future.

In our matrix, p. 12, the quadrants are defined as follows:

Actively address and engage: We actively address issues deemed most material to Ericsson and our stakeholders. We manage efforts to tackle the issue, and investigate, steer and/or implement new governance procedures to ensure business sustainability and accountability. We also actively engage on this set of issues with stakeholders, through dialogue and advocacy, to demonstrate the positive socio-economic and environmental effects of mobility, broadband and the cloud, as well as discuss potential risks.

Assess and engage: As part of our ongoing evolution, we have identified issues where stakeholders express interest. We monitor the evolution of the issue, and report on our performance in these areas.

Assess and address/engage when appropriate: Other issues are addressed in which we engage with selected stakeholders when appropriate. We have procedures in place that aim to ensure that we are working according to our stakeholders' expectations on issues deemed relevant.

# CONDUCTING BUSINESS RESPONSIBLY

## EVERY ACTION COUNTS

Conducting business responsibly, with integrity and transparency, is at the heart of our commitment to sustainability and corporate responsibility.

Responsible business practices are embedded into Ericsson operations to guide the way of working and to ensure management of risks. Group policies, directives and processes encompass responsible sourcing, occupational health and safety, environmental management, anti-corruption, human rights and other areas. The Ericsson Group Management System includes the Code of Business Ethics, the Code of Conduct, OHS Policy and Sustainability Policy. Under our Global Assessment Program, an external assurance provider audits the implementation of these policies and directives, management of risks and achievement of objectives.

### Setting the tone

Our Code of Business Ethics sets out our overarching commitment to the area of responsible business. This includes our commitment to uphold the UN Global Compact Principles and to implement the UN Guiding Principles on Business and Human Rights (UNGPs) throughout our business operations and supply chain. Employees acknowledge the Code of Business Ethics at the time of employment and periodically throughout the term of employment. In 2015 all employees were requested to acknowledge the Code; 99% of active employees completed the acknowedgement.

We have zero tolerance for corruption and bribery, and have set high standards within the areas of responsible sourcing, the environment, occupational health and safety, human rights and labor practices across our operations.

The Code of Conduct, which applies to both employees and suppliers, is based on the UN Global Compact principles. It covers human rights, labor conditions, environmental management and anticorruption.

### Strengthened approach

In 2015, both the Code of Business Ethics and the Code of Conduct were strengthened to reflect the transition to a third-party managed whistleblower system, the Ericsson Compliance Line (p. 20), which supports our commitment to comply with laws and regulations, as well as the Code of Business Ethics and other policies, directives and instructions.

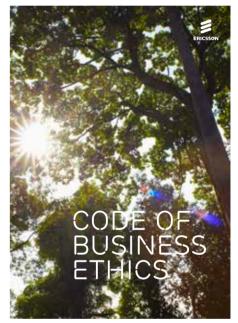
### **Raising awareness**

All employees are offered online training on sustainability, anti-corruption, human rights and other CR issues. In 2015, two new employee e-learning trainings were launched: one on Code of Business Ethics and Code of Conduct awareness, and another on human rights and business; the latter launched on Human Rights Day, dec 10, 2015. More than 94,700 of active employees have taken the anti-corruption training by 2015 and close to 51,500 have taken sustainability and CR training. In addition, specific human rights training was conducted for personnel within, for example, the security, finance, mergers and acquistions and sourcing organizations.

### Starting at the top

The commitment to responsible business is anchored at the highest levels of Ericsson. The CEO and senior management actively support and are regularly informed of progress. Sustainability and CR objectives are part of the Ericsson Group 2015 balanced scorecard. The cross-functional Sustainability and CR Steering Group provides guidance on strategic and operational issues.

The Board of Directors of the Parent Company strives to uphold the company's responsibility to respect human rights and to conduct business responsibly. The Board is briefed twice yearly on sustainability and CR matters; more often if needed. In 2015, briefings covered governance updates, strategy execution including risks, performance, and results, specific topics like OHS and human rights, as well as advocacy activities and stakeholder feedback and perception.



The Ericsson Code of Business Ethics is our tool to be a trusted partner, to conduct business responsibly and to remind us that every action counts. For more information, please visit our website ericsson.com

# IN RESPECT OF HUMAN RIGHTS

### We work actively to address human rights across our value chain. While ICT facilitates many fundamental human rights, we also recognize specific challenges around business and human rights.

Many fundamental human rights such as the right to health, the right to education, and freedom of expression are enabled by ICT. This technology can also be used by governments to assist in emergencies and to fight crime, including cyber attacks and terrorism, in order to enhance citizens' safety and security. At the same time, we recognize human rights challenges linked to the Networked Society. A critical issue for Ericsson is the extent to which States strike the right balance between the state obligation to protect individuals and groups against human rights abuses while also refraining from interfering with or curtailing the enjoyment of human rights. The unintended use of ICT to restrict or violate human rights presents a clear challenge for the entire ICT ecosystem and policymakers.

Ericsson has customers in more than 180 countries, with different cultures, legal systems and other factors impacting society and the business environment. Group policies and directives covering respect for human rights apply to our global operations and management system, which are relevant to employees, subcontractors and suppliers, for example.

Privacy and security are important elements in products and services delivered by Ericsson, and we work to align our product and business processes to safeguard that human rights such as privacy and freedom of expression are respected throughout the operations of our products and services.

### Embedding the human rights lens

Ericsson respects all internationally proclaimed human rights as stated in our Code of Business Ethics and Code of Conduct.

Since 2011, we have been working to integrate the United Nations Guiding Principles on Business and Human Rights (UNGP) into our governance framework. These Principles set out the corporate responsibility to respect human rights. This means

### USING OUR LEVERAGE

Our aim is to build leverage, both internally and externally, to prevent and mitigate potential human rights risks. Leverage is considered to exist where the enterprise has the ability to effect change in the wrongful practices of an entity that causes harm (principle 19, UNGP). During 2015, with Shift, we held several workshops and internal interviews to help us to identify ways to build leverage to address our key salient human rights. Discussions on how processes can be further strengthened took place Other identified actions were human rights mitigation measures in contracts, training sales staff, improving risk and audit assessments and collaborative public-private sector efforts. that business enterprises should avoid infringing on the human rights of others and should address adverse human rights impacts with which they are involved. Companies should also have in place a human rights due diligence process to identify, prevent, mitigate and account for how they address their impacts on human rights.

We have been working with the Business Learning Program of the non-profit organization for business and human rights, Shift, since 2012 to systematically embed a human rights framework across the company. We focus on different areas or processes each year, most recently strengthening integration of human rights considerations in mergers and acquisitions and reviewing options and innovations for using leverage (see box) to reduce risks to human rights within our value chain.

One way in which we are further embedding our approach is to work to ensure that our employees understand our commitment to human rights. A human rights and business e-learning was introduced in 2015 for all employees. It provides an understanding of human rights issues, opportunities and challenges for Ericsson. The aim is that employees become familiar with the definition of human rights and international requirements regarding human rights and business; understand key concepts used in the business and human rights framework; can evaluate human rights trends and risks relevant for Ericsson, and understand how Ericsson is working in this area.

### Identifying our salient issues

The UNGP Reporting Framework states that a company's salient human rights issues are those rights that are at risk of the most severe negative impact through the company's activities or business relationships.

In 2016, for the second consecutive year, we are applying the UNGP Reporting Framework, the first comprehensive guidance for companies to report on how they respect human rights. In 2015, we were the first company in the ICT sector, and among a handful globally, to report according to the Framework.

We have defined our salient human rights issues to be the right of freedom of expression, the right to privacy, and labor rights. These are highlighted in the Code of Business Ethics and Code of Conduct.

We identify and manage our salient human rights issues in a number of ways. This includes Human Rights Impact Assessments (HRIA) in high-risk countries, stakeholder consultations in conjunction with HRIAs, and internal processes such as the Sales Compliance Process. Broader stakeholder consultations and industry initiatives provide input to the definition of our salient human rights issues.

HRIA results are shared and discussed in consultations with stakeholders such as employees, investors, governments, customers and civil society. Feedback from the consultations as well as the recommendations from HRIAs are implemented into our management system and operations and we continually address and monitor human rights challenges.

### Assessing our impact

Our human rights due diligence covers processes within sales, sourcing, legal affairs, and operations. During 2015, different processes have been further strengthened in order to implement the UNGP. These processes are, for example, the Sales Compliance Process (p. 19) and the merger and acquisitions due diligence process where we are implementing a more systematic, risk-based approach to strengthen consideration for human rights, identify potential human rights risks and impacts and capture findings.

We also use Human Rights Impact Assessments (HRIA) in accordance with the UNGP as part of our human rights due diligence and to help identify and manage salient human rights issues in high-risk countries. The HRIA covers adverse human rights impacts that Ericsson may cause or contribute to, through our own activities, or which may be directly linked to our operations, products or services by our business relationships. The aim is to ensure that we respect human rights within the scope of our business operations and analyze the social, operational and human rights context for doing business in the country. HRIAs have been initiated in the following three countries:

### Myanmar:

In Myanmar, a country undergoing democratic and social reform, Ericsson re-established a presence in 2012 following the suspension of sanctions. Respect for human rights remains a concern to the international community. In 2015, we acted upon and continue to address the findings identified in the HRIA completed in 2014. Findings concerned, for example, labor conditions and worker safety, particularly in the supply chain. These issues continue to be a focus of supply chain audits and assessments in Myanmar. All sales in Myanmar are assessed through the Sales Compliance Process (p. 19). We monitor developments in the country to ensure we uphold the UNGPs.

Several trainings for employees in Myanmar were conducted in 2015 and included conducting business responsibly and human rights issues.

### Iran:

In Iran, where Ericsson has had customers for over 100 years, an HRIA was initiated in 2014 and implemented in 2015. We continue to evaluate the human rights situation and monitor international developments. Occupational health and safety (OHS), sourcing and supply chain management, security, sales compliance, and discrimination are all prioritized action areas. In each area, mitigation activities have been identified and acted upon, for example:

- > Enhancing driver training and greater emphasis on safety checks and security guidelines.
- > Strengthening suppliers' awareness of our Code of Conduct; translating the Code into Farsi, and increased focus on safety issues for suppliers and subcontractors.
- > Undertaking actions to increase the security level and awareness among Ericsson staff and others.
- > Working to ensure adherence to the Sales Compliance Process.

A stakeholder consultation with civil society and human rights organisations among others was held. Right to privacy, discrimination of religious minorities and women were issues that were highlighted during these consultations and further discussed, and mitigation measures were further strengthened to address these concerns. Potential risks for stakeholders are considered when deciding where and how to conduct stakeholder consultations, and the consultation process is adapted accordingly.

### Ethiopia:

In 2015, we initiated a HRIA in Ethiopia due to increased business in the country and as part of our human rights due diligence to identify salient human rights issues.

### **Providing remedy**

An alleged violation of the Code of Business Ethics may be reported through the updated whistle-blower tool: Ericsson Compliance Line (p. 20).

### Stakeholder engagement

Stakeholders have rising expectations for greater transparency on business and human rights. We engage with a wide range of stakeholders including human rights organizations, governments, customers and other stakeholders to better understand the responsibilities and challenges around human rights and business. Some of our engagements in 2015 included:

- > Stakeholder consultations as part of our HRIA work for Iran.
- > The Global e-Sustainability Initiative (GeSI) working group on human rights, which includes stakeholder engagement. It initiated in 2015 several projects focusing on specific ICT sector challenges regarding the supply chain and the right to privacy.
- > The stakeholder consultation on the impact assessment of the ICT sector in Myanmar published by the Myanmar Centre for Responsible Business, a joint initiative of the Institute for Human Rights and Business and the Danish Institute for Human Rights. Actions were recommended on how companies, civil society and governments can protect human rights.
- Sharing our experience on reporting according to the new UNGP Reporting Framework at both the UN Forum on Business and Human Rights and a conference with Nordic investors.

### PROTECTING THE RIGHTS OF CHILDREN

In addition to our salient human rights issues, respecting and promoting children's rights are also important to Ericsson. As a more vulnerable population, children require specific attention to guarantee respect for their human rights. We include children's rights in our overall human rights approach. We are part of the UNICEF Corporate Network for Children's Rights in Sweden and participate in the Global Child Forum, a platform for informed, global dialogue and building partnerships between different sectors of society we can inspire to cross-sector action on children's rights. Using the internet provides children worldwide with opportunities, but also risks. We take action against Child Sexual Abuse (CSA) by implementing a tool which identifies images verified by law enforcement authorities as CSA images that are stored on and/or accessed by PCs used by Ericsson employees or consultants. We have also been part of the updates of the Child Online Protection Guidelines, a multi-stakeholder initiative to promote awareness and develop practical tools for governments, industry and educators regarding child safety in the online world.

# FOCUS ON THE RIGHT TO PRIVACY

Privacy is recognized as a fundamental human right by the United Nations in Article 12 of the Universal Declaration of Human Rights as well as in other UN conventions. We are fully committed to work for the right to privacy of people as we lead ICT transformation across industries and enable the Networked Society.

The nature of our business gives us an additional responsibility to work effectively with privacy as part of our responsibility to respect human rights. Respecting this right is essential for building trust in the Networked Society. This is why we place particular emphasis on this salient human rights issue.

ICT has the potential to transform how we innovate, collaborate and socialize - but only if networks and services keep information secure and protect the privacy rights of all. The exceptional rise in the volumes of personal data that are handled today by many different entities puts privacy in the spotlight. Breaches in data security and data sovereignty (the concept that digital data is subject to the laws or legal jurisdiction of the country in which it is stored) are a growing concern. Both public and private sectors are making use of big data analytics and data protection. Privacy risks posed by big data must be balanced against the benefits to society, including the possibility to use big data for social good, such as improving response to diseaseoutbreaks.

Respect for the right to privacy is included in our Code of Business Ethics. We have also developed and further strengthened in 2015 a series of clear Ericsson Privacy Prin-



ciples that form the basis of a comprehensive global privacy program. Privacy is designed into Ericsson's processes, tools, products and services in order to maintain security and protect privacy.

### Privacy framework

Our Privacy framework aims to ensure that privacy is considered from the beginning of any product release and is an integral part of product development. Privacy Impact Assessments assess and manage privacy-related risks in Ericsson products, while Risk Assessments performed according to Ericsson's Security Reliability Model consider product security risks. Results from these impact assessments are used within the Sales Compliance Process (p. 19).

The privacy program supports our commitment to ensure the integrity of personal information for which we are responsible, and helps our customers to develop trusted relationships with consumers. We align our business with applicable legal requirements for privacy.

### Driven across the company

Day-to-day responsibility for issues related to right to privacy within Ericsson is ensured through a number of roles and

### CONSUMER VIEWS ON PRIVACY

People see the benefits of the sharing economy, while also wanting safeguards to protect privacy. Almost 50% of smartphone users would like a verification service to check the authenticity of an online posting or news clip. One in two people said protecting personal information should be a priority on the political agenda.

Source: "Sharing Information," Ericsson ConsumerLab (2015)

processes including a Chief Privacy Officer. In addition, security and privacy advisors within Ericsson including our Chief Technology Office are responsible for checking that privacy concerns are reflected throughout the entire product-related process. Also Sales Compliance (p. 19), Product Security and Legal functions have processes or responsibility for right to privacy issue. Within Managed Services, when we manage networks on behalf of our customers, we also take on the responsibility for protection of privacy.

Securing privacy in a connected world requires a sustained cross-industry effort. Newtechnologiesbring new privacy implications, and continuous dialogue between industry, governments, regulators and civil society is essential. Ericsson is committed to driving and participating in these multistakeholder discussions.

### Towards improved standards

In 2015, Ericsson contributed to the developmentofseveralupcomingstandardsfrom the International Organization for Standardization (ISO), following the privacy principles stated in ISO 29100. These new standards will provide an improved methodology for performing a Privacy Impact Assessment, assess an organization's privacy capability, and bring greater clarity and consistency to industry's way of working with privacy. Ericsson is a member of the International Association of Privacy Professionals (IAPP), the world's largest information privacy organization. In 2015, within the context of IAPP, Ericsson helped drive the conversation on a range of topics critical to managing privacy issues.

### MANAGING HUMAN RIGHTS IN THE SALES PROCESS

We take a comprehensive approach to human rights considerations in the sales process.

Integrating a human rights perspective into the sales process is essential for adhering to our commitment to respect human rights throughout our operations. It is particularly important for the assessment, prevention and mitigation of potential impacts related to two of our most salient human rights issues, freedom of expression and privacy. We have a fully operational sales compliance process to ensure consideration of human rights.

The Sales Compliance Process regularly reviews human rights impacts in the sales process and looks at specific sales requests.

A Sales Compliance Board, which has ultimate responsibility for the process, may approve sales with conditions or reject cases. In some cases, it may recommend that human rights impacts assessments be conducted for specific countries.

The Sales Compliance Core Team and Sales Compliance Board act as a two-step escalation path for the sales organization.

When necessary, the Sales Compliance Process determines whether mitigation actions should be undertaken; for example, that staff implementing lawful interception at the operator must have the right product or service training before a contract is concluded.

Different departments and functions are represented in the Sales Compliance Board and Core Team to help ensure that any decision considers multiple angles, to reduce the risk that Ericsson's technology directly or indirectly impacts negatively on human rights.

A Sales Compliance Unit works with the Sales Compliance process on a daily basis in order to secure sufficient resources to handle the increasing number of sales opportunities under review.

### Strengthened scope

The Sales Compliance Policy and Directive were updated in 2015 to reinforce our commitment to uphold the responsibility of the company to respect human rights. The process was also strengthened in 2015 to evaluate each business engagement's risk (see Methodology illustration above) in order to avoid potentially negative human rights impacts.

In 2015, we strengthened our requirements for end-user statements from Sales compliance risk methodology



customers in order to obtain licenses for exports of so-called dual-use items. In this process, we collect end-user statements with a condition for civil and peaceful use of the equipment. Non-compliance will deny the customer future access to similar equipment, including software and hardware upgrades or updates of the already supplied equipment.

### Criteria for evaluation

Sales that trigger one or more of the following criteria are evaluated in the sales compliance process:

- Portfolio: Whether the sale includes sensitive products, services and know-how.
- > Purpose: This concerns understanding the purpose and context in which the product, service or know-how will likely be used.
- > Customer: To whom we sell/deliver.
- > Country: This provides insight about the country to which we deliver, based on the risk indices of a global risk analytics firm in areas such as human rights risks; corruption; democratic governance; freedom of opinion and expression. Countries requiring extra attention are those under sanctions as well as other countries ranked as a high risk based on the external risk indices. We recognize this is an ongoing process and continuously monitor international developments.

### Outcome of cases in 2015

In 2015, more than 430 cases were reviewed within the Sales Compliance Process (see graph). The total number of cases increased by 37% in 2015. This is mainly due to increased business and more countries in scope according to our country risk ranking. A decision to proceed with a sale can include conditions to mitigate identified risks. We have procedures to follow up decisions and corresponding mitigation actions.

### **Continuous improvements**

The growing complexity of technology is among the challenges we face to ensure our process remains robust and effective. Several improvement areas have been identified for 2016. We will continue to focus on human rights training for sales staff and are automating our IT systems to integrate the process within the sales tool.

We will also adapt our country criteria index to include a recently developed and specific Right to Privacy index. This will allow us to better reflect the current country situation with respect to our salient human rights issues.



### STANDING STRONG ON ANTI-CORRUPTION



Our zero tolerance approach against bribery and corruption aimstoensure that we operate our business globally with transparency and integrity.

Corruption is costly for economic, political and social development. Corruption adds up to 10% to the total cost of doing business globally (The World Economic Forum). Along with rising stakeholder pressure on companies to conduct business responsibly, governments are increasing legislation around this issue. A proactive approach to anti-corruption is important to retaining trust among our stakeholders and can lead to a competitive advantage.

### Prevention and accountability

We have customers in 180 countries – many with a high risk of corruption according to Transparency International's anticorruption country index. A strong anti-corruption stand is therefore central to our responsible business approach. Our approach is based on prevention and accountability, and we continually improve our anti-corruption program through robust risk assessment, internal audit and regularly updated employee and supplier training.

### Assessing risks

Corruption risks are evaluated as an integral part of Group Risk Assessment, in line with strategy and target-setting process. Headed by the Group's Chief Compliance Officer, the anti-corruption compliance program targets both prevention and and personal accountability. The program's effectiveness is reviewed and evaluated annually by the Audit Committee of the Board of Directors.

In 2015, a particular focus was assessing risks for corruption and bribery in the supply chain, as we recognize the importance of securing appropriate anti-corruption due diligence of business partners.

### Focus on training and awareness

All Ericsson employees periodically acknowledge the Code of Business Ethics. By the end of 2015, more than 94,700 active employees had completed an anticorruption e-learning course designed to raise awareness of risks, dilemmas and appropriate courses of action.

Key personnel in sales and other relevant functions, including regional leadership teams, receive additional specialized training. In 2015, we placed special focus on anti-corruption e-learning training for suppliers (p. 21).

### New screening tool for suppliers

To help ensure that suppliers meet our business integrity standards, in 2015 we selected an automated anti-corruption screening tool for suppliers and other third parties. The tool will be piloted in our operations in East Central Asia in early 2016. Based on the pilot outcome, a global process is then planned to be rolled out.

### **Ericsson Compliance Line**

In November 2015, we strengthened the reporting of violations by updating the

whistle-blower tool with a third party managed whistleblower system. Re-named the the Ericsson Compliance Line, employees and external parties can report suspected violations of law or the Code of Business Ethics via phone or a secure website. Ericsson Compliance Line is available 24/7, 365 days per year and enables persons to report in 188 countries and in more than 77 different languages. We believe that moving to a third-party managed compliance line enhances transparency and integrity and reflects industry best practice in anti-corruption.

### Handling of reported cases

In 2015, there were 116 cases of alleged violations of law or the Group's Code of Business Ethics reported to the whistleblower systems (both the previous internal channel as well as through the new Ericsson Compliance Line) and through certain other channels. Concerns reported through the Ericsson Compliance Line are received by the Corporate Investigation Team within Corporate Audit which reports to the Audit Committee of parent company Telefonaktiebolaget LM Ericsson.

The Corporate Investigation Team makes a preliminary assessment of the case; the Group Compliance Forum then decides how the matter should be handled, i.e. if it should it be investigated and by whom. There are a number of steps that the company will take depending on the nature and severity of the breach and to ensure appropriate remedy, where relevant. Examples are warnings or termination of employment. Regional Compliance Forum in each region support this process. All reports are ultimately reported to the Audit Committee.

### INDUSTRY COMMITMENT

Since 2012, we have been a signatory to the World Economic Forum Partnership Against Corruption Initiative and its Principles for Countering Corruption, aimed at raising business standards and contributing to greater transparency and accountability. The PACI Principles commit signatory companies to two basic actions:

- > A zero tolerance policy towards bribery.
- > An effective program to counter bribery and ensure its implementation.

### **RESPONSIBLE SOURCING** A TOP PRIORITY

### Our approach to responsible sourcing goes beyond monitoring to engage our suppliers in continuous improvement.

Suppliers must comply with the requirements of the Ericsson Code of Conduct (CoC) (p. 15). The Code forms a core part of our supplier contracts and its requirements are available in 16 languages on our website. Specific Supplier Environmental and Occupational Health and Safety requirements are included in the Code.

We aim for:

- Zero deviations from the Code of > Conduct
- > Zero Occupational Health and Safety (OHS) incidents.

This means our suppliers must comply with Ericsson requirements, operate in a safe environment, and strive to minimize their environmental impact.

In 2015, we focused on three strategic priorities to help achieve this.

- Integrate responsible sourcing in relevant processes to ensure that responsible sourcing is consistently part of supplier selection, evaluation and award of business.
- Drive supplier Code of Conduct com-> pliance by optimizing the supplier audit program, including new supplier cate-

gories, and by piloting the anti-corruption screening framework.

> Boost responsible sourcing commitment by increasing internal and external awareness of responsible sourcing.

As a complement to the supplier audit program, in 2015 we initiated the "beyond monitoring" program. Its focus is increased preventive and joint development initiative for service suppliers. The program will support end-to-end process integration, competence development and enhance a business-driven mindset.

### Focus on anti-corruption

In 2015, anti-corruption in the supply chain was in focus (p. 20). By the end of 2015, over 10,800 supplier employees, representing some 3.600 companies from 148 countries, had completed web-based anti-corruption training. The training is available in 16 languages.

### Driving compliance

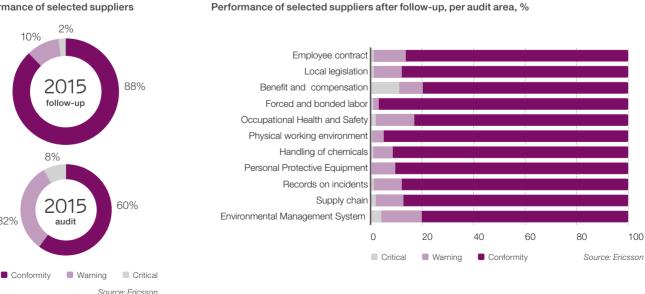
Before we select our suppliers, we require mandatory Supplier Self-Assessments via a questionnaire covering Code of Conduct, OHS and Environment, Ericsson uses a risk-based approach to identify relevant suppliers for Code of Conduct audits. Prioritized risk areas include working at heights, road and vehicle safety, anti-corruption, labor rights (including

working hours), environmental management, and communication of requirements further down the supply chain.

We have been consolidating our supplier base over recent years. This reduces our aggregate exposure to supplier-related risk.

In 2015, over 345 supplier Code of Conduct audits and assessments were performed on identified high-risk suppliers by Ericsson's Supplier Code of Conduct auditors. We had 205 trained and active auditors by end 2015. We view each audit as an improvement opportunity and expect suppliers to address identified non-compliances. Audit results varv. but commonly identified areas of improvement include fire prevention, training and awareness, use of personal protective equipment, and environmental management. For example in China, working hours remain a challenge for some suppliers.

Auditors follow up on actions to ensure continual improvement in the supply chain. Year on year, analyses of our audit results demonstrate significant advances in all audit areas. In 2015, we exceeded the target in the closing of 60% of critical and warning audit areas, after follow-up. By closing, we mean evidence has been provided that the supplier has appropriately addressed the non-conformance (see graph). Any suppliers who repeatedly fail to comply with our Code of Conduct risk being disgualified from further business.





32%



Following our Zero Tolerance Safety rules and proper training are crucial both for employees and suppliers working in high risk environment.

### **Boosting commitment**

We collaborate closely with suppliers on compliance activities, CoC seminars and training sessions and web-based learning to encourage suppliers to drive responsible sourcing in their organizations and supply chain. For example, we held two seminars in China in 2015 with 20 electromechanical suppliers represented. We presented our Code of Conduct requirements. Health and safety, labor conditions and environmental issues were discussed. Participants shared challenges, for example, regarding over-time and workplace safety. We will continue to provide support to help suppliers address such issues.

### Meeting customers' expectations

Our own performance as a supplier is also monitored by external stakeholders. We participate in the yearly Joint Audit Cooperation (JAC) Forum comprising ten of our largest telecom operator customers. JAC members conduct supplier Corporate Responsibility audits of Ericsson factories and suppliers and share results. Several Ericsson and supplier sites have been assessed by JAC auditors in the past few years, with excellent results. Selected Ericsson suppliers have also been audited by JAC. When findings were observed, corrective action plans were swiftly implemented by our suppliers, and approved by JAC member companies.

### Challenges ahead

Ensuring supplier compliance with Occupational Health and Safety and other Code of Conduct requirements is an evolving challenge that calls for long-term planning. As our supply chain grows more complex, we continue to focus on managing our risks and further strengthening our Responsible Sourcing program.

### FOCUS ON TRACING CONFLICT MINERALS

We are committed to raising transparency regarding conflict minerals in our supply chain and to work with our suppliers with the aim to continue to trade with the Democratic Republic of the Congo (the DRC) without contributing to conflict. We have actively chosen not to ban minerals from the DRC as an embargo could result in negative consequences for the region.

Tin, tantalum, tungsten and gold are defined as conflict minerals since they are partly mined in eastern DRC where some of the trade is known to contribute to the financing of armed conflict. The minerals are exported to smelters globally, and once refined incorporated into different products. As there are several tiers of suppliers between Ericsson and the mines, collaboration with our suppliers and industry peers is vital to trace the origin of conflict minerals in Ericsson's products. We are members of the Conflict-Free Sourcing Initiative (CFSI) that has developed a certification scheme enabling smelters to become certified as conflict-free. This means customers can source metals from smelters and refiners certified as conflict free.

In 2015, we concluded, based on our supplier surveys and due diligence activities, that all of the tantalum smelters identified as being part of our supply chain were certified as conflict-free by CFSI.

Ericsson is directly affected by the U.S. Dodd-Frank Act on conflict minerals. We file an annual report on conflict minerals to the U.S. Securities and Exchange Commission. In the report we also raised transparency and published the names of the smelters identified in our supply chain.

### HEALTH AND SAFETY COMES FIRST

Ensuring a safe and healthy workplace is a fundamental part of corporate responsibility. Our inclusive approach to Occupational Health and Safety (OHS) includes all persons who are employed by – or working on behalf of – Ericsson. Our vision is zero major incidents and we work actively to prevent injuries and work-related ill health.

To avoid incidents and prevent workrelated hazards we apply a risk-based approach that is based on transparency and inclusiveness. OHS is integrated with the Ericson Group Management System (EGMS) which is certified to the OHSAS 18001 standard. To monitor and improve our OHS processes and work methods, all operations undergo internal and external assessments. In 2015, we made progress towards our target: to increase frequency and quality of incident reporting and handling, and to increase knowledge and awareness within incident handling for selected key job roles.

### A new global tool

Competence and awareness are key to reducing major incidents. We set out requirements and provide guidance and training as part of a comprehensive



approach towards achieving a high standard of OHS performance.

To fulfill our vision, we are rolling out a global program aimed at zero major incidents. It is designed to increase OHS training and awareness of project managers, field-service personnel and sub-contractors, reinforce governance and inspections, and improve global management tools. It includes launch of a global incident tool, with 400 people across our business regions trained to handle incidents.



The program was piloted in the Netherlands, India and Egypt in 2015 with the global rollout continuing during 2016.

### Promoting safety rules

In 2015, the Zero Tolerance Safety rules were established to improve understanding of – and adherence to – workplace safety. These rules apply to all employees, contractors and suppliers, and include the obligation to intervene and report if unsafe acts or conditions are observed. Following these seven basic rules helps prevent major incidents (see illustration to left).

The rules have been translated into over 10 languages and are supported by company-wide communication activities, with a video translated into 14 languages.

The OHS policy has also been revised to reflect the zero major incidents vision, our risk-based approach, and the Zero Tolerance Safety Rules.

The importance of safety is underscored in all new supplier contracts. If persistent violations occur, the supplier contract may be ended.

### Reporting on incidents

In 2015 there were no Ericsson employee fatalities. As part of our inclusive approach to workplace safety, we also address and report on suppliers and contractors

engaged in high-risk activities. In total, 27 workplace fatalities were reported involving 17 contractors and 10 members of the public (all traffic accident-related). Traffic was the biggest cause of major incidents followed by working at heights and working with electricity.

### Increased focus

Any workplace fatality is unacceptable. We have therefore increased our focus on managing traffic-related risk by instituting additional safety requirements for vehicles used by those working for Ericsson. Other measures include proper driver safety equipment and enhanced training for drivers of both motorcycles and cars. Particular emphasis is placed on those countries where the largest number of trafficrelated incidents occurred. We will follow up to ensure that effective measures are being implemented.

We have also reinforced oversight to ensure that those working at heights use the proper safety equipment and observe the Zero Tolerance Safety rules.

### RADIO WAVES AND HEALTH

Ericsson employs rigid product testing and installation procedures with the goal of ensuring that radio wave exposure levels from products and network solutions are below established safety limits. The Company also provides public information on radio waves and health, and supports independent research to further increase knowledge in this area. Since 1996, Ericsson has co-sponsored over 100 studies related to electromagnetic fields and health, primarily through the Mobile Manufacturers Forum.

To assure scientific independence, firewalls were in place between the industrial sponsors and the researchers conducting these studies. Independent expert groups and public health authorities, including the World Health Organization, have reviewed the total amount of research and have consistently concluded that the balance of evidence does not demonstrate any health effects associated with radio wave exposure from either mobile phones or radio base stations. In 2015, a new internal Ericsson course on radio waves and health was launched which provides training for employees who work in environments where general public exposure limits may be exceeded and occupational exposure limits and compliance procedures need to be applied, e.g. near transmitting radio base station antennas or in certain laboratories. The training course is available for all employees and mandatory for employees with certain job roles.

### SUSTAINABLE WORK-LIFE

Maintaining a sustainable work-life is important for wellbeing. Companies have a role to play by providing a working environment that is sustainable. With this in mind, in 2015 we rolled out a global toolkit on the Ericsson intranet, incorporating practical tools for the assessment and/or management of social workenvironment risks and stress.

The program has three components:

- > Health-promoting facts, for example suggestions for daily activities to provide a boost and mindfulness activities to aid both sleep and concentration.
- > Workshops to encourage team dialogue and activities on the topic of sustainable work-life including work-life balance.
- > Self-assessment tools, such as stress test and a leadership self-assessment.

During 2015, the team tools were tested by leaders globally. Our annual employee survey showed 79% of employees agree that Ericsson supports efforts to balance work and personal responsibilities. We will continue to measure the program's success via the annual survey results.



# PEOPLE VITAL TO SUCCESS

Our people are vital to Ericsson's future success: By attracting the best, developing the best and establishing an engaged, high-performing, and diverse workforce, Ericsson can ensure continued technology and services leadership.

### Encouraging innovation

Our core values define who we are, how we do business, and how we behave towards each other, within teams and with customers. Key elements of our people strategy are: a high-impact learning culture; a collaborative and constructive environment that encourages innovation, and a diverse and inclusive workplace.

### **Engaged employees**

Being leaders in our industry, and our strong sustainability and corporate responsibility commitment, comes down to our people. The results of our annual employee survey (see below) show that our people are highly engaged and proud to work for Ericsson.

### Everyday learning

We aim to be a best-in-class learning organization so that employees can excel in their careers and contribute to the business. Our "Everyday Learning" model consists of on-the-job learning, collaboration forums, and formal training. This approach supports various learning styles, which makes development easier for employees.

### Competence in focus

Both technical and non-technical critical employee skill gaps are identified through a rigorous annual process. Our structured formal and on-the-job training programs build competence in emerging technology areas as in sales, services and product development. Every employee has clearly defined development goals that are reviewed through out the year. In 2015 we closed over 99% of the identified targeted employee critical competence gaps through training.

### Taking learning virtual

People learn on the go; we offer blended learning, including crowd sourcing, discussion forums, and video sharing. Collaboration and knowledge management is



driven across the company, for example, through video learning on the Ericsson Play channel, accessible via mobile devices. The Ericsson Academy Virtual Campus offers learning on a wide variety of topics. Learning virtually not only saves time and costs, but has an environmental benefit.

### A learning organization – 2015 facts and figures

### ERICSSON'S CORE VALUES

Our values are the foundation of our culture. They guide us in our daily work, in how we relate to each other and the world around us and in the way we do business. They also support an enabling culture that empowers people to reach their full potential.



96% Share of employees that took formal training

Total learning hours



No. of different courses attended 15,800

·

**Engagement index** 

76%

### 94%

participation rate on our annual employee survey indicates employees are highly engaged in Ericsson's success

88% of employees state they are "proud to work for Ericsson"

### SHAPING A DIVERSE, INCLUSIVE WORKFORCE

Diversity and inclusion are strategic to our business. A workforce with a broad range of backgrounds, perspectives, and experiences drives innovation and makes the business more resilient. It is a key success factor in an increasingly global, multi-faceted and competitive market.

For us, diversity extends beyond gender, race, nationality, religion, ethnicity, disability, sexual orientation, and age to include the other aspects – like experience or family situation – that individuals bring to the workplace. Inclusion is about all of us, treasuring diversity and building communities of engaged employees.

### Integrated across the company

Diversity and inclusion are integral to our vision, strategy and company values. A Global Diversity and Inclusion Council comprised of senior business leaders across the company reviews, approves and monitors diversity and inclusion activities. It reports twice a year progress to the CEO and the Global Leadership Team. Our global diversity and inclusion agenda is supported by regional and local councils.

### Deepening our approach

Reducing inequality is a key focus of the UN Sustainable Development Goals. To build on our diversity and inclusion efforts, in addition to a strong foundation, robust governance structure, and ambitious targets, we continually raise awareness to ensure our strategy is implemented across the organization.

Our Global Diversity and Inclusion Council has set diversity and inclusion objectives, which are strongly supported by the Executive Leadership Team. This is cascaded to line managers as part of their accountability to lead change. We have reviewed our processes from a diversity and inclusion perspective – such as checking our careers website and job descriptions for gender-neutral language. Diversity and inclusion are a key component of leadership programs. In addition to our strong focus on gender balance, we are increasing our efforts to optimize other areas of diversity as well.

### Getting the balance right

A particular focus for Ericsson is increasing gender diversity. Our 2020 gender diversity target is for 30% of all employees to be female, including leaders and executives. In 2015, 22% of Ericsson employees were female (p. 27).

We have made progress towards this target since 2013 but there is more to do. From a recruitment perspective, a greater number of females are being hired, and there is a comparable attrition rate for female and male. Partnerships with universities and organizations like Girls in ICT will build our future talent pipeline. We are therefore confident that we are moving into the right direction. Our program Connect To Learn (p. 46) is directed at increasing access to girls' education, especially in developing countries.

### Exploring unconscious bias

One way to further constructive dialogue on inclusion is by raising awareness of unconscious bias. All people harbor unconscious biases as a result of life experiences, culture, background, and exposure. Biases influence decision making and can affect perceptions and behavior towards others.

Our program to address unconscious bias kicked off in 2015, with face-to-face training for business leaders. The aim of the training is to raise awareness about



Bina Chaurasia, Head of Group Function Human Resources, is the ambassador for SDG 10 to help raise awareness on ICT's role in reducing inequality.

diversity and inclusion; initiating a culture of constructive dialogue around diversity and inclusion, learn about unconscious bias and its impact on decision-making, and help leaders create concrete action plans for their teams.

Our initiative to address unconscious bias kicked off in 2015, with workshops for business leaders. The aim of the workshops are to raise awareness about diversity and inclusion; Close to 30% of all Ericsson leaders went through the workshops in 2015.

For 2016, our goal is to train an additional 35%.

### SHARING OUR STORIES

To attract top talent on social media, we promoted our commitment to diversity and inclusion by sharing experiences from our diverse network of employees. In 2015, we ran a number of successful campaigns, including the month-long celebration of Global Diversity Awareness Month that garnered over 7.6 million impressions. Other successful campaigns in 2015 included: International Women's Day, highlighting how female employees are empowered at Ericsson; World Day for Cultural Diversity, sharing what makes employees proud of their cultures; #ILookLikeAnEngineer, challenging gender stereotypes about female engineers; #EricssonDearMe, sharing advice employees would give to their younger selves; and supporting the UN gender equality campaign, #HeForShe.



Ericsson in Mexico invited female university engineering and technology students from several organizations to discuss diversity and inclusion and the crucial need to attract top talent in the company's journey towards the Networked Society.

#### Bringing people together

In 2015, we participated in several events and activities highlighting diversity and inclusion, including International Women's Day and World Day for Cultural Diversity. In Global Diversity Awareness Month in October we held workshops, social media activities, network group events, and educational webinars around diversity aspects such as gender, generational, cultural, sexual orientation and disability.

Also, employee submitted profiles to an interactive Ericsson world map. They shared Ericsson experiences and favorite recipes in a Cultural Journeys e-book.

We engage in several external initiatives, like TechWomen which empowers and connects next-generation women leaders from Africa and the Middle East in science, technology engineering and mathematics. In 2015, we co-sponsored

Employees by age and gender 2015

the Grace Hopper Celebration of Women in Computing, the world's largest talent fair of women computer scientists. With hundreds of participating companies, it is crucial to recruiting young and high-achieving women in technology and computing.

#### Enhancing supplier diversity

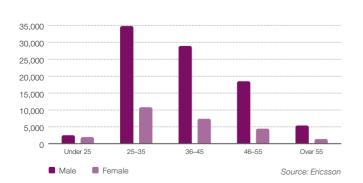
Ericsson is committed to using minority, women and disabled veteran-led busines-

ses as Ericsson suppliers to build a "best in class" diversity program. Ericsson North America in 2015 continued to build the program, i.e., with a matchmaking event and mentorship program. The program has won the AT&T Supplier Diversity Crystal Award for three consecutive years and was a 2015 winner of America's Top Corporation for Women's Business Enterprises.

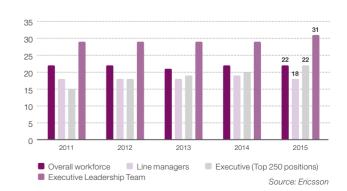
88%

of employees agree that 'Ericsson has created an environment where people with diverse backgrounds can succeed', and 'employees at Ericsson are treated as individuals, regardless of their job, age, race, gender or physical capabilities'.

Annual employee survey, 2015.



#### Female representation, %



Ericsson Sustainability and Corporate Responsibility Report 2015

# MAKING A DIFFERENCE

Our Technology for Good employee volunteer program provides a way for our people to be change makers in society, within their local communities and globally.

In a world of complex global sustainable development challenges, ICT can make a tremendous difference, and our employees want to be part of making that happen. The Technology for Good employee volunteer program provides employees an opportunity to volunteer their time and skills to make a positive contribution to society. It complements local volunteer activities that have taken place over many years.

Some employees are mentoring students in ICT skills in their local communities; others contribute to Ericsson's Technology for Good projects, such as Connect To Learn (p. 46) or refugee reconnection (p. 50) in partnership with UN agencies or NGOs.

The employee volunteer program is a way to demonstrate and leverage our commitment to Technology for Good. It is also a way to meet employees' growing interest in being part of the solutions that ICT, and Ericsson, offers within humanitarian response and sustainable development.

The program offers different types of engagement:

- > Basic engagement: This is open to all employees. Every employee is encouraged to volunteer according to local practices.
- > Project-based volunteering: In these activities, specific skills are required for the project.

Another volunteering opportunity is the long-standing employee humanitarian response and disaster relief program Ericsson Response (p. 48).

All employees who participate in the Technology for Good volunteer program must take the Sustainability and CR e-learning training. To date, the program has been very well received by employees.

### Wide range of activities

The volunteer program was launched in selected countries in Europe, Latin America and the Middle-East in 2015. It will be rolled out globally to other regions during 2016.

In Sweden, employees have been mentoring disadvantaged youth from schools around Stockholm who are experiencing integration issues. The aim of the program is to both give employees the chance to contribute positively to the society and for employees to serve as role models for the students. In India, volunteering activities include employee involvement and technical solution development in Connect To Learn projects.

In Latin America, volunteering activities focus on education by providing ICT training for students. Employees serve as virtual volunteers for our Technology for Good projects. In the Middle East, employees assist our refugee reconnection projects in Jordan and Iraq with NGO REFUNITE (p. 50).

### CC VIEWPOINT

"I have found it very rewarding to mentor young girls as they make decisions about their future. I also learn a lot

by seeing different perspectives. I think this is a excellent initiative which makes me feel very proud to work for Ericsson."

Ida La Spisa, Head of Portfolio Management and Architecture, Business Unit Support Solutions





"I coach girls in Grade 9 using my experience from my own education and work background to advise them on their future career path. It enables them to discover the world outside of their own school environment and community. It makes me feel good

because I can use all the experience from my personal and working life to give something back to society."

Esra Kocatürk-Norell, Head of TV & Media Practice, Region Northern Europe & Central Asia

"Volunteering for me is an opportunity to cross paths and bond with people in our community. I volunteered with Plan India, working with our Connect To Learn program on girls' education, and advising on their future careers."



Richa A Sharma, Lifecycle Manager, Region India

### Global citizen campaign

Employees can also engage with the Global Citizen platform, managed by the Global Poverty Project, established in connection with the UN Sustainable Development Goals (p. 6). The digital platform invites people to learn more and take action on a range of issues that are important to them as individuals. Ericsson's employee volunteer portal extends the invitation to become a global citizen.

# FACTS AND FIGURES

### Employees

No.	2015	2014	2013	2012	2011
Year end	116,281	118,055		110,255	104,525
Average	119,718	117,156	116,630	112,758	103,130
Temporary employees	1,413	776	493	766	901
Employees who have left Ericsson	16,610	15,536	13,025	12,280	10,571
Employees who have joined Ericsson	14,836	19,251	17,110	18,010	24,835
Turn-over (%) 1)	7.8	-	-	-	-

1) Excluding non-voluntary leave (Attrition Rate).

### Satisfaction

%	2015	2014	2013	2012	2011
Engagement index	76	78	77	77	77
Response rate	94	93	93	94	90

### Diversity - Background

%	2015	2014	2013	2012	2011
Executives with a back- ground other than Swedish (Top 250 positions)	54	54	48	55	50
Executives with a back- ground other than Swedish (Executive Leadership Team)	23	29	29	29	29

### Diversity - Female representation

2015	2014	2013	2012	2011
22	22	21	22	22
18	19	18	18	18
22	20	19	18	15
31	29	29	29	29
36	30	25	27	20
	22 18 22 31	2013 2014   22 22   18 19   22 20   31 29	2018 2014 2018   22 22 21   18 19 18   22 20 19   31 29 29	2018 2018 2012   22 22 21 22   18 19 18 18   22 20 19 18   31 29 29 29

### Diversity – Age and gender 2015

No.	Under 25	25–35	36–45	46–55	Over 55
Female	1,973	10,736	7,329	4,331	1,397
Male	3,151	35,514	28,813	17,901	5,136

### Responsible sourcing

Audits and assessments					
No.	2015	2014	2013	2012	2011
Auditors	205	197	195	179	170
Audits	338	444	479	494	392
Assessments	8	151	144	152	270

### Occupational health and safety

### Fatalities (Ericsson employees)

	2015	2014	2013	2012	2011
Total	0	1	0	1	1
North America	0	0	0	0	0
Latin America	0	0	0	0	1
Northern Europe & Central Asia	0	0	0	0	0
Western & Central Europe	0	0	0	0	0
Mediterranean	0	0	0	0	0
Middle East	0	0	0	0	0
Sub-Saharan Africa	0	0	0	0	0
India	0	1	0	1	0
China & North East Asia	0	0	0	0	0
South East Asia & Oceania	0	0	0	0	0

### Major incidents (Ericsson employees)

	2015	2014	2013	2012	2011
Total	76	25	29	20	20
North America	0	0	0	0	0
Latin America	11	12	16	19	19
Northern Europe & Central Asia	7	2	4	0	0
Western & Central Europe	37	8	2	0	0
Mediterranean	8	0	0	0	0
Middle East	2	2	0	0	0
Sub-Saharan Africa	1	1	0	0	0
India	4	0	5	1	0
China & North East Asia	2	0	0	0	1
South East Asia & Oceania	4	0	2	0	0

#### Fatalities (Supply chain and others)

	2015	2014	2013	2012	2011
Total	27	21	15	6	11
North America	0	2	2	0	0
Latin America	3	5	0	1	8
Northern Europe & Central Asia	1	0	1	0	0
Western & Central Europe	0	0	2	1	0
Mediterranean	0	1	1	1	0
Middle East	13	5	7	2	2
Sub-Saharan Africa	6	1	0	1	0
India	4	6	0	0	1
China & North East Asia	0	0	1	0	0
South East Asia & Oceania	0	1	1	0	0

### Major incidents (Suppliers working on Network Roll-out and Managed Services)

	2015	2014	2013	2012	2011	
Total	92	44	35	78	11	
North America	2	4	2	1	0	
Latin America	9	13	11	40	7	
Northern Europe & Central Asia	3	1	2	10	1	
Western & Central Europe	17	0	2	5	1	
Mediterranean	2	1	1	2	0	
Middle East	34	7	9	5	1	
Sub-Saharan Africa	12	1	1	7	0	
India	12	16	2	2	0	
China & North East Asia	0	0	4	4	1	
South East Asia & Oceania	1	1	1	2	0	

Source: Ericsson

# ENERGY, NVIRONMENT ND CLIMATE ANGE THE R ana a 슻슻슻슻슻슻슻슻슻슻슻슻슻슻슻슻

### LIFE CYCLE APPROACH **REDUCES CARBON EMISSIONS**

Our objective is to improve our environmental performance throughout the value chain, with a particular focus on reducing energy use and Greenhouse Gas (GHG) emissions. We apply a life-cycle model to environmental management as part of a circular economy approach.

Our strategy focuses on three areas:

- > Leading in energy and environmental performance of our products and solutions.
- > Improving the sustainability performance of our own activities.
- > Driving ICT as a major solution to minimize the effects of urbanization and climate change.

### Analyzing the ICT sector footprint

The end-to-end energy consumption of ICT - from devices to access, core, transport networks and data centers - can be expressed as GHG emissions measured in carbon dioxide equivalents (CO<sub>2</sub>e).

We have done extensive research on the energy and carbon footprint of ICT from a life-cycle perspective. Life cycle assessment (LCA) studies show that products in operation typically represent about two thirds of the carbon footprint of ICT. The remaining third comes from the manufacturing and transport of equipment and devices.

According to the Ericsson Mobility Report (November 2015), energy consumption from fixed networks and user equipment represented more than 85% of the total ICT energy consumption in 2015. The share of mobile networks is smaller because user devices are powered by small batteries with limited capacity, designed to use energy more efficiently.

In fixed ICT, the switch from desktop PCs to laptop PCs, improvements in data centers and energy efficiency gains in various components have led to lower energy requirements. Recent studies show that in Organisation for Economic Cooperation and Development (OECD) countries with high ICT use, the total energy footprint has started to decrease: as mobile device usage grows, the use of larger, less energy-efficient fixed devices is declining, reducing the energy and carbon footprint of ICT overall.

As ICT becomes more prominent in many developing countries, its overall energy and carbon footprint is growing worldwide. Today the ICT sector's share of global GHG emissions is around 1.6%, and it is estimated to account for about 2% by 2020. This share is expected to have increased only marginally by 2030. Of this, about three guarters is expected to be related to fixed ICT and one quarter to mobile ICT.

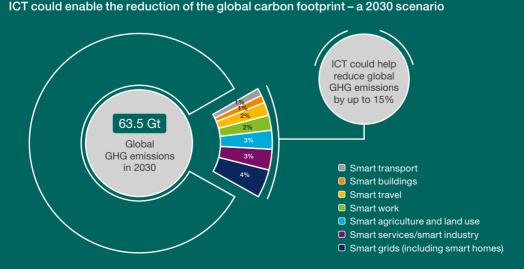
We therefore put strong emphasis on improving energy performance and finding opportunities to reduce energy consumption and GHG emissions across the mobile network.

### Transformative potential

ICT has unique potential to enable other industrial sectors to reduce their environmental impact and improve sustainable urbanization. According to the Ericsson Mobility Report, ICT solutions could help to reduce GHG emissions by up to 15% by 2030, amounting to around 10 gigatonnes of CO<sub>2</sub>e, more than the current carbon footprint of the EU and US combined. Technology particularly ICT – has a growing role to play in delivering solutions to address climate change. The agreement reached at COP 21 in Paris in 2015 underlined the importance of business engagement and solutions to meet global climate goals.

### Our targets to reduce societal emissions

ICT-enabled solutions can help society achieve energy and climate objectives. In 2015, we delivered on a target to reduce twice as much societal CO<sub>2</sub> emissions via our product and service offerings in areas such as utilities (smart meters) and transport as we emitted from our own operations, (see p. 36).





### SUPPORTING THE CIRCULAR ECONOMY

Our circular economy approach builds on nearly 20 years of LCA experience. The well-established life-cycle assessment (LCA) includes raw material extraction, design, manufacturing, transport, use of products, disassembly and closing the loop with proper end-of-life management.

In a truly circular economy, growth is decoupled from resource use, so the economy can thrive within global resource limits. The circular economy provides a platform for innovative product design and business development.

### Starting with design

Closing the loop starts with design and materials use. Since 1998 Ericsson has applied circular economy principles. Our key material streams are ferrous metals, plastics and precious metals.

As one of the first companies to systematically collect information on the materials contained in our products, we have 20 years of detailed information on product inputs. By requesting full material declarations on purchased products, Ericsson is in a position where we can identify the usage of scarce resources, and verify that the purchased products meet our own requirements. Our substance requirements go beyond compliance, applying the same proactive requirements on all products worldwide. We design our products and components for ease of disassembly and recyclability, including packaging.

We can systematically track phase-out of substances and the location of substances as well as the constantly changing requirements of chemical legislation such, as REACH, which raw materials are used in certain components helps to minimize risk and to prioritize, for example, among suppliers as we work to trace conflict minerals in our supply chain (p. 22).

### Transport of products

In addition to avoiding unnecessary use of materials and ensuring use of safe materials, our approach takes product transport into account, with a major shift over the last few years from air to surface transport to reduce  $CO_2$  emissions (p. 36).

### Products in use

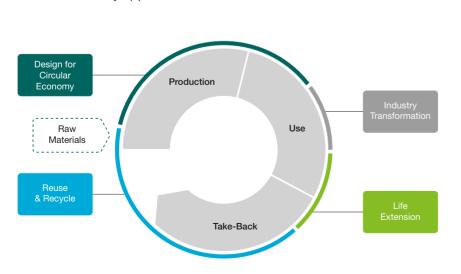
Our LCAs consistently show that the energy used when our products are in operation presents our most significant environmental impact. But our solutions and services can also help customers minimize the environmental impact of their networks. Software upgrades, remote management solutions and hardware capacity improvements can prolong the lifespan of a mobile network by delaying the need for hardware expansion and minimizing use of scarce resources such as energy and materials.

### End-of-life treatment

Managing e-waste and taking extended responsibility is an important element of the circular economy. We conduct product take-back with recycling partners who meet our requirements, and are certified according to internationally recognized environmental and recycling standards (p. 35).

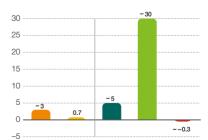
### Transformation of other sectors

Our technology can help other industries make progress towards a more circular economy. ICT is a key enabler for the sharing economy, providing the digital platform for people to share resources such as increased mobility via car-pooling and the ability to sell second-hand items online. These are just a few examples of how ICT is facilitating dematerialization and reducing use of resources.





Mtonnes CO<sub>2</sub>e





### Circular economy approach

### DECOUPLING ENERGY FROM TRAFFIC GROWTH

Mobile traffic is forecast to grow considerably in the future, and networks need to be more sustainable on the road to 5G. To achieve optimum energy performance while meeting increased coverage and capacity, operators need to consider the entire network.

By 2021 smartphone traffic over mobile networks will increase eleven-fold and almost 70% of mobile data traffic will be from video. Some 75% of the world population will be covered by 4G/LTE, according to Ericsson Mobility Report, November 2015. With these demands on networks, decoupling energy from traffic growth is essential.

Four key elements comprise our systematic approach:

- > Use capable hardware
- > Boost performance with software
- > Build with precision
- > Optimize on site

The radio access network (RAN) consumes the most energy, and is therefore a key focus for energy-efficiency improvements. Yet by tackling energy performance across the entire system we can deliver the best results.

### Use capable hardware

New hardware platforms like the Ericsson Radio System, launched during 2015, establishes a generational shift in mobile networks for the 5G future. The new radio unit provides a 50% improvement in energy efficiency compared to previous generations.

### Boost performance with software

Energy performance solutions must address current and future technologies in operators' networks. Software solutions can help solve capacity bottlenecks, and prolong the hardware capacity life cycle, resulting directly in increased energy performance. One example is *Ericsson Lean Carrier,* which applies the 5G ultra lean design concepts to today's 4G LTE to deliver higher performance in data speed

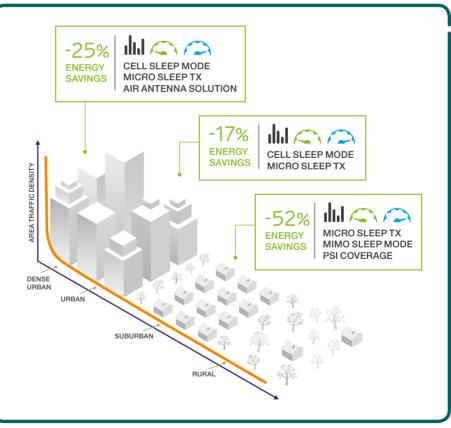
### RETHINK ENERGY PERFORMANCE

Nodes Sites Networks

and app coverage while boosting energy performance.

For a large installed base, there are RAN-specific energy-savings software functions for 2G, 3G and 4G. These functions adapt energy consumption to traffic, typically by reducing the output power of the carrier, or enabling discontinuous transmission when possible. Applying the software functions across thousands of radio sites in a mobile network will aggregate tens of millions of kilowatt hours (kWh) in annual savings.

A mobile operator in China using software features MIMO Sleep and Micro Sleep TX was able to reduce energy consumption by 20%, with annual savings of 74 million kWh. From the operator's point of



As illustrated in this example, there are significant potential savings for different type of sites in a LTE network when applicable energy-saving software features and hardware configurations are applied.

### MODERNIZING THE NETWORK

For mobile operator Aircel India, we provided a core network modernization during 2015. Highly efficient architecture that reduced space and power requirements enabled Aircel to significantly lower its energy consumption and carbon footprint. The modernization will result in over 75% savings in power consumption and 90% savings in space required.



view, the energy-saving solutions helped reduce their carbon footprint without heavy investments, while improving environmental performance and reducing the operating cost.

### **Build with precision**

Our research shows that half of a network's sites carry only 15% of the traffic, while 5% of the sites serve 20% of the traffic. Precise dimensioning with the right radio site hardware for each traffic segment can reduce energy consumption by up to 40% while maintaining network performance.

An example of this is our unique *Psi Coverage* solution which provides app coverage in low-density areas. It uses a single radio unit to provide the same coverage as an ordinary 3-sector base station equipped with three radio units. Using less hardware reduces energy consumption by more than 40% while maintaining the same performance. In 2015, Psi Coverage has evolved to support 4G networks and this enables operators to deliver superior app coverage in the 50% of their sites with relatively low traffic. The large Psi Coverage deployment in Robi Bangladesh has reduced energy consumption by 6,459 MWh from the first installations in November 2013 until the end of 2015.

### Optimize on site

Optimizing on site gives operators complete control over the energy consumption chain. Among the solutions we offer is *Remote Site Management* which contains a number of features to reduce energy costs. Another solution, *Remote Hybrid Control Management* ensures an optimized usage of diesel generators, batteries, solar power, wind turbine, fuel cells, etc. The new *Ericsson MINI-LINK* is equipped with an EC-bus (Enclosure Control), which is a communication bus (a main cable or link) to connect all Ericsson equipment on site. The climate control enables the MINI-LINK node to request more or less cooling from the site or cabinet cooling equipment. This can save up to 80% of the power consumption for the cabinet fans and also reduces the noise level.

### Helping operators manage energy

Currently, about 150 million subscribers are served by networks for which we provide *Energy Management Services.* This means that we operate infrastructure on behalf of operators with the aim of reducing energyrelated costs, promoting efficient use of energy and improving network availability. The service includes around-the-clock, realtime monitoring of infrastructure. Remote and onsite problem resolution is available for all operator sites, whether or not they are connected to utility grids.



### USING RENEWABLE ENERGY

In 2015, Ericsson and operator Vodafone in the Netherlands released the first radio site in the Netherlands powered with a hydrogen fuel cell. The majority of Vodafone's network in the Netherlands is powered by renewable energy sources. Radio sites not connected to the electricity grid are usually powered by diesel. Hydrogen fuel cells produce no CO<sub>2</sub> emissions and only warm water as a residual. CO<sub>2</sub> emissions from a single site will be reduced by 30 tonnes per year compared to a site with traditional diesel generators. While hydrogen needs to be transported to the site currently, the hope is to migrate to a self-supporting site using solar panels to generate hydrogen on site. This successful deployment of renewable technique has led to the next phase, combining GSM, WCDMA, LTE and LTE-Advanced on one radio site fully powered by hydrogen.

In the pan-EU project "FCpoweredRBS" supported by the Fuel Cells and Hydrogen Joint Undertaking (FCH JU), Ericsson and operators TIM and 3 Italia, have explored the viability of fuel cell technology and other alternative energy sources to lower the total cost of ownership for off-grid sites. In a wide-scale demonstration, the radio base station power supply was replaced with fuel cells, solar, batteries, electrolyzer and telecontrolling. Results show a three-year payback time for replacing diesel generators and suitability of fuel cells for off-grid sites and as back-up for larger sites.

# CLOSING THE LOOP

Closing the loop at end-of-life means looking for ways to turn unwanted or no longer needed products into a resource, not a waste.

Closing the loop is a precious opportunity to recapture valuable resources so materials can be recycled, reused or repurposed for future use – provided proper handling methods are used.

Our product take-back program is offered free of charge to our customers globally in 180 countries and over the past decade customers in more than 107 countries have taken advantage of the program.

#### Increased take-back

When we take-back products, we recycle more than 98% of the materials. We continue to expand our product take-back program, involving more countries and increasing take-back volumes for our customers. Product take-back and recycling remain on the same level as in 2014. In 2015, we retrieved 15,590 tonnes of electronic waste (e-waste), as well as 856 tonnes of batteries. We see increased volumes in North America and India.

### **Revised target**

Collection levels in 2015 were just below our global target commitment average of 9% of products put on market, with 8.14%. To simplify reporting Ericsson has decided to move from a relative target to an absolute target (weight of products collected from the market) but weight of collected products in relation to put on the market will continue to be tracked. We promote and offer our product take-back of all Ericson products free of charge. Since there is extensive demand for products and parts on the second hand market as well as for products for metals recovery, collections are not increasing as expected and thus we have revised our targets to a lower level to reflect the reality of the market situation.

#### Selected recycling partners

We conduct product take-back with a limited number of recycling partners meeting our requirements and are certified according to internationally recognized environmental and recycling standards.



An Ericsson and MTN branded freight container has been refurbished into a humble collection and sorting station with scales to monitor weight as well as different compartments for handling items.

Disassembly occurs as close as possible to the collection point to minimize transport. Recycling of certain metals requires more advanced processes provided by approved recycling partners in locations around the world.

Most recycled materials re-enter the commodities market as raw materials. Treatment varies based on type of material and technology used including a manual or automated disassembly process, shredding and refining. Recycled metals such as steel can be used for the same applications as virgin steel. Recycled plastic become products such as plastic bottles while precious metals like copper are used in piping and roofing, for example.

### Spreading the word

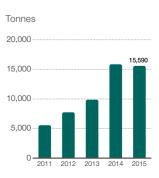
Ericsson is committed to raising customer awareness about the program, expanding it to new markets. Two take-back projects with the operator MTN in Benin and in Côte d'Ivoire included joint events and collection campaigns to promote e-waste collection and recycling. Overall, 32 tonnes of e-waste were collected by MTN Côte d'Ivoire and 26 tonnes by MTN Benin. In Ghana, with one of the world's largest ewaste dump sites, we partner with operator Airtel to help with e-waste disposal and recycling, including end-of-life telecom equipment.

We continue working closely with our customers to ensure end-of-life equipment is handled and treated in an environmentally sound manner.

Product Take-Back

### A GLOBAL ISSUE

According to UN StEP (Solving the global E-Waste Problem), by 2017 global e-waste will reach 65.4 million tonnes, one-third higher than in 2012 due to soaring international demand for electrical and electronic equipment. The bulk of this waste comprises discarded electrical or electronic devices, from cell phones and TVs to computers, laptops and tablets.



### TRACKING THE CARBON FOOT-PRINT OF OUR OWN ACTIVITIES

### We continuously work to reduce the carbon footprint of our own activities.

We have a four-pronged approach:

- reducing energy usage in facilities (offices, production sites, data centers and test labs)
- > shifting from air to surface product transport
- > reducing business travel impact
- > improving fleet vehicle management.

### On track with our target

In 2015, we exceeded our goal to reduce CO<sub>2</sub>e emissions per employee by 30%, two years ahead of schedule. This amounted to a 42% reduction compared to the 2011 baseline. In 2015 this represents 4.56 tonnes CO<sub>2</sub>e emissions per employee per year (see graph). This achievement implies a reduction of 0.28 Mtonnes CO<sub>2</sub>e in absolute emissions from our own activities compared to the baseline. We are therefore on track with our long-term objective to maintain absolute CO<sub>2</sub>e emissions from our own activities in 2017 at the same level as in 2011. Our own activities target includes business travel, product transportation and facilities energy use. In 2016 we will set a new longterm target to reduce the carbon footprint of our own activities.

### Facility energy usage

Better workplace functionality; a shift to more energy-efficient buildings and driving building requirements (e.g. Leadership in Energy and Environmental Design (LEED) level gold or equivalent) contribute to more efficient use of our buildings. Green electric power increased globally in 2015 to 44% compared to 39% at year-end 2014.

We are also reducing our footprint through flexible use of building space, i.e., "free seating," and teamwork workspaces. We regularly conduct energy audits which will assist us in meeting the EU Energy Efficiency Directive – effective from 2015.

### Saving energy with the cloud

Our ongoing strategy to establish three high-tech, Global ICT Centers continued in 2015. The centers use the latest cloud technology, allowing our 23,700 R&D engineers to collaborate beyond borders and ramp up innovation in testing of future communication technologies. The new centers - two in Sweden and one in Canada – are situated in areas with access to renewable energy and a reliable power grid. The two ICT Centers in Sweden began initial operations in late 2013 and late 2015 respectively. The centers feature leading-edge design, modular, scalable and efficient use of resources. We estimate that the combined architecture. design and location solution will reduce

Tonnes CO2e/Employee Mtonnes 8 0.8 0.54 0.6 6 4 0.42 0.2 Carbon footprint intensity Tonnes CO<sub>2</sub>e/Employee Carbon footprint absolute emission, Mtonnes 0 0 2012 2013 2014 2011 2015 Source: Ericsson

### Carbon footprint intensity target, Ericsson's own activities

energy consumption up to 40% compared to how our test labs were set up previously.

#### **Product transportation**

In 2015, we continued the ongoing shift from air to surface transport to reduce  $CO_2e$  emissions. Product volumes transported were comparable to 2014; however we have achieved a reduction of 31 ktonnes  $CO_2e$  in absolute terms and are below 1 tonne  $CO_2$  per tonne goods transported.

#### **Business travel**

Business travel emissions dropped by 15% per employee compared to 2014. We promote video conferencing and other ICT tools as a substitute to travel.

### **Fleet vehicles**

Our aim is to reduce CO<sub>2</sub>e/km in our vehicle fleet by using vehicles more efficiently, implementing telematics, and trialing alternative fuels.

### Water consumption

In 2015 we signed The CEO Water Mandate by UN Global Compact. Water supply for our facilities is ordinary municipal water, mainly used for toilets, restaurants, changing rooms and sport facilities. We do not abstract freshwater directly from ground or surface water sources but use municipal water. In 2015, water consumption within our own activities was below 20 cubic meters per person per year. According to the Ericsson Suppliers Environmental Requirements, suppliers are expected to control and measure their water usage. If water consumption is identified as a significant environmental aspect, the supplier is expected to develop a water management plan. We have begun informing our supply chain about the new requirements.

# FACTS AND FIGURES

### Consumption

	2015	2014	2013	2012	2011
Electricity	759	761	845	808	830
District heating	30	36	47	56	60
Other energy	81	89	96	121	130
Business travel (Mpkm	)				
	2015	2014	2013	2012	2011
Air travel	1,177	1,392	1,320	1,200	1,400
Road travel	91	113	77	74	129
Fleet vehicles	386	411	390	339	_
Commuting	448	438	430	415	375
Product transportation	(Mtonnekr	n)			
	2015	2014	2013	2012	2011
		274	294	452	481
Air transport	231	214	234	702	40
	231 232	274	264	372	
Road transport		······	••••••		360
Road transport Sea transport Rail transport	232 296 9	280 276 6	264	372	360 99
Air transport Road transport Sea transport Rail transport Production and office v	232 296 9 vaste (Tonr 2015	280 276 6 ne) 2014	264 309 5 2013	372 338 53 2012	360 99 53 2011
Road transport Sea transport Rail transport Production and office v Total	232 296 9 vaste (Tonr 2015 14,490	280 276 6 ne) 2014 18,100	264 309 5 2013 16,100	372 338 53 2012 29,512	360 99 53 2011 31,045
Road transport Sea transport Rail transport Production and office v Total Recycling	232 296 9 vaste (Tonr 2015 14,490 6,180	280 276 6 ne) 2014 18,100 8,180	264 309 5 2013 16,100 6,025	372 338 53 2012 29,512 13,500	360 99 53 2011 31,045 16,300
Road transport Sea transport Rail transport Production and office v Total Recycling Energy	232 296 9 vaste (Tonr 2015 14,490 6,180 3,610	280 276 6 <b>ne)</b> 2014 18,100 8,180 5,080	264 309 5 2013 16,100 6,025 5,215	372 338 53 2012 29,512 13,500 9,900	360 99 53 2011 31,045 16,300 8,400
Road transport Sea transport Rail transport Production and office v Total Recycling Energy Landfill	232 296 9 vaste (Tonr 2015 14,490 6,180 3,610 4,680	280 276 6 <b>ne)</b> 2014 18,100 8,180 5,080 4,580	264 309 5 2013 16,100 6,025 5,215 4,510	372 338 53 2012 29,512 13,500 9,900 5,400	360 99 53 2011 31,045 16,300 8,400 5,400
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Road transport Sea transport Rail transport Production and office v Total Recycling Energy Landfill	232 296 9 vaste (Tonr 2015 14,490 6,180 3,610 4,680 24	280 276 6 <b>ne)</b> 2014 18,100 8,180 5,080 4,580 49	264 309 5 2013 16,100 6,025 5,215 4,510 150	372 338 53 2012 29,512 13,500 9,900 5,400	360 99 53 2011 31,045 16,300 8,400 5,400
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Road transport Sea transport Rail transport Production and office w Total Recycling Energy Landfill Hazardous Product Take-Back (T-	232 296 9 vaste (Tonr 2015 14,490 6,180 3,610 4,680 24 B) and End 2015	280 276 6 ne) 2014 18,100 8,180 5,080 4,580 49 -of-Life tre 2014	264 309 5 2013 16,100 6,025 5,215 4,510 150 atment 2013	372 338 53 2012 29,512 13,500 9,900 5,400 712 2012	360 99 53 2011 31,045 16,300 8,400 5,400 945 2011
Road transport Sea transport Rail transport Production and office w Total Recycling Energy Landfill Hazardous Product Take-Back (T-	232 296 9 vaste (Tonr 2015 14,490 6,180 3,610 4,680 24 B) and End 2015 15,590	280 276 6 ne) 2014 18,100 8,180 5,080 4,580 49 -of-Life tre 2014 15,860	264 309 5 2013 16,100 6,025 5,215 4,510 150 atment 2013 9,870	372 338 53 2012 29,512 13,500 9,900 5,400 712 2012 7,750	360 99 53 2011 31,045 16,300 8,400 5,400 945 2011 5,570
Road transport Sea transport Rail transport Production and office w Total Recycling Energy Landfill Hazardous Product Take-Back (T- e-Waste treated (Tonne) Reuse (%)	232 296 9 vaste (Tonr 2015 14,490 6,180 3,610 4,680 24 B) and End 2015 15,590 0	280 276 6 ne) 2014 18,100 8,180 5,080 4,580 49 -of-Life tre 2014 15,860 0	264 309 5 2013 16,100 6,025 5,215 4,510 150 atment 2013 9,870 0	372 338 53 2012 29,512 13,500 9,900 5,400 712 2012 7,750 1	360 99 53 2011 31,045 16,300 8,400 5,400 945 2011 5,570 5

GWh: Gigawatt hours = one billion (1,000,000,000) watt hours Mpkm: Million personal kilometer = Million distance traveled Mtonnekm: Million \*tonne\* kilometer kTonne: Thousand tonne Mtonne: Million tonne GHG: Greenhouse Gas CO2e: Carbon dioxide equivalent

### Emissions (CO<sub>2</sub>e)

	2015	2014	2013	2012	2011
Total	675	766	829	909	881
Direct (kTonne)					
	2015	2014	2013	2012	2011
Total	266	298	357	355	260
Facilities energy use (S1)	18	20	20	30	32
Fleet vehicles (S1)	64	68	66	62	-
Facilities energy use (S2)	183	210	270	263	228
Indirect (kTonne)					
	2015	2014	2013	2012	2011
Total	410	470	472	554	621
Business travel (S3)	163	193	172	159	189
Product transportation (S3)	172	204	229	326	370
Commuting (S3)	75	73	71	69	62

Other indirect (Mtonne)						
	2015	2014	2013	2012	2011	
Total	30	35	28	26	24	
Products in operation (S3) – future (life time)	30	35	28	26	24	

S1, S2 and S3 stand for Scope 1, Scope 2 and Scope 3 according to GHG protocol.

Aspect	Emission factor	Source
Electricity	Country specific	International Energy Agency
Electricity, Sweden	0.0007 kgCO <sub>2</sub> /kWh	Sites in Sweden uses "Good envi- ronmental choice" from Telge Kraft
Green electricity	0.0010 kgCO <sub>2</sub> /kWh	
District heating, Other regions	0.22 kgCO <sub>2</sub> /kWh	Chalmers Industrial Technology Average. Site specific when available.
District heating, Sweden	0.10 kg CO₂/kWh	Chalmers Industrial Technology/ "Boverket" (Swedish Building Adm.)
Fuels	GHG protocol (for each typical fuel)	-
Air travel	0.12 kgCO <sub>2</sub> /pkm	GHG protocol (average for long/ medium air travel). DEFRA GHG indicators for long haul air travel.
Car travel	0.16 kgCO <sub>2</sub> /pkm	"Vägverket" (average car in the EU (Vägverket = Swedish Road Adm.)
Air transports	0.65 kgCO <sub>2</sub> /tonnekm	Based on an investigation of air transport by Ericsson.
Road transports	0.08 kgCO <sub>2</sub> /tonnekm	GHG protocol, average Swedish road transports according to Swedish Road and Transport Research Institute.
Sea transports	0.017 kgCO <sub>2</sub> /tonnekm	Average of Maersk Line and Ericsson typical TEU, TEU = Twenty foot container eq. unit.
Rail transports	0.03 kgCO <sub>2</sub> /tonnekm	2012 Guidelines to Defra/DECC's GHG Conversion Factors for Company Reporting.

Source: Ericsson

### BUILDING A LOW-CARBON FUTURE TODAY

### Across every sector of society, mobility, broadband and the cloud are transforming industries, paving the way towards a low-carbon economy.

We see potential for ICT solutions to help reduce GHG emissions by up to 15% by 2030 (Ericsson Mobility Report, November 2015). Along with energy savings, ICT can help reduce the negative impacts of urbanization such as traffic congestion. Our offerings focus on key industries, such as utilities and transport, where we can leverage our technology leadership in our core business.

### Utilities look for energy efficiency

Energy production and use account for two-thirds of the world's GHG emissions (OECD/IEA, 2015). The utilities industry faces huge demand to address energy efficiency and greater sustainability.

Advanced communications networks used to control energy infrastructure and monitor meters can help achieve this aim. We offer smart grid communications to help utilities increase efficiency and better manage, distribute and monitor energy use. Smart metering for homes, building energy management and smart grids help reduce energy consumption and enable use of more local renewable energy sources. Utility companies can also better plan and optimize the grid to reduce energy losses.

#### Smart transport

Transport is responsible for 23% of energy-related CO<sub>2</sub> emissions and 13% of all GHG emissions emitted worldwide (IEA, 2009).

### う VIEWPOINT

We have the technology to deliver precise traffic information to passengers – through screens at bus stops, online, and via a smartphone app. These technological solutions greatly



contribute to better traffic management for the operator, PTA, and a better experience for the end user. With Volvo's expertise in transport and Ericsson's global technological expertise, we together deliver a better service and a great benefit to the population."

Vinicius Gaensly, Head of Volvo Bus Telematics, Volvo Latin America

Intelligent transport solutions can enable better route and traffic optimization, improved vehicle and fleet management and aid the shift to low-emission alternatives like public transport. In early 2016, Ericsson and Geely Auto signed an agreement to jointly develop connected car services using Ericsson's Connected Vehicle Cloud platform which enables application developers, government organizations, businesses and automotive manufacturers

### URBAN MOBILITY IN LATIN AMERICA

Volvo Bus Latin America and Ericsson signed a partnership agreement in 2015 for localization and customization of Volvo's ITS4Mobility intelligent transport system to address the needs of the Latin American market. The real-time traffic management and passenger information system increases the efficiency of urban transportation systems, thereby contributing to enhanced mobility.

Ericsson will be responsible for development, implementation, support and maintenance of the traffic management and passenger information system – which will be offered commercially by both companies in Latin America.

Bus operators will be able to track their fleet in real time – gaining access to information about travel time, punctuality, and number of buses on each route. This information enables the bus operators to distribute their vehicles in an optimal manner to address changing passenger flows. Passengers will also have access to real-time information about bus transport and improved service quality in the city.



to reach drivers and passengers with services and information. Advanced safety and maintenance features, including fuel-usemonitoring, will be introduced first, followed by vehicle-to-vehicle and vehicle-to-infrastructure communications and, ultimately, autonomous driving.

In 2015 we joined forces with truck and bus manufacturer Scania and Sweden's Royal Institute of Technology in their Integrated Transport Research Lab (ITRL) to explore transport solutions of the future. The joint initiative will explore areas such as autono-mous buses and improved systems for traffic management.

In 2015 we partnered with Solar Team Eindhoven, a multidisciplinary student team at Eindhoven Technical University in the Solar Challenge, developing a solar-powered, four-seat family car, Stella Lux. The Ericsson Solar Navigator contributed by optimizing the route according to weather and traffic conditions. After a twoweek race, Stella Lux won the category of multi-seat solar vehicles. On a sunny summer day, Stella Lux has a range of 1,000 km on a fully charged battery pack, generating more energy than required for an average family's consumption pattern.

#### Smarter shipping

We use our ICT expertise to increase the efficiency of shipping. Our new offering Maritime ICT Cloud will connect vessels at sea with shore-based operations, maintenance service providers, customer support centers, fleet/transportation partners, port operations and authorities. The offering also enables services used to manage fleets, monitor engines and fuel consumption, oversee routes and navigation, and ensure the crew's wellbeing.

In 2015 Ericsson was selected by U-Ming Marine Transport Corporation headquartered in Taipei, Taiwan, to deliver end-toend connected vessel and voyage optimization solutions through the new offering.

### Smart energy solutions

In 2015 Ericsson entered a partnership to develop smart energy solutions for various industries, and introduce new services and products, through the innovation company Brunnshög Energi AB founded by energy company E.ON. Four areas are in focus: commercial real estate, transportation, solar energy production, and data centers. Brunnshög, in Lund, Sweden, aims to create a world-leading research and innovation environment, a European model for sustainable urban planning. Power and automation specialist ABB is also a partner.

### **Reinventing cities**

Cities are socio-economic powerhouses, generating over 80% of global GDP (World Bank). They also emit significant GHG emissions, rising from about 67% today to 74% by 2030 (International Energy Agency, 2008). This is a significant challenge – but also fertile ground for applying ICT to enhance sustainable urbanization, as outlined in a 2015 report by Ericsson and UN-Habitat,

### SAFER ROADS

For road authorities and public transit authorities and operators, connectivity provides real-time data that can greatly improve disaster and emergency response. As a member of the private sector coalition Together for Safer Roads we focus on contributing to safer roads, vehicles and systems and safer road users in recognition of the UN Sustainable Development Goals to improve road safety.

### FOCUSING RESEARCH ON WISE WATER USE

The sustainability of water resources is increasingly on the global agenda, not least because of the impact of climate change on water resources. Wise water management can enable climate-resilient societies. ICT can play a key role in managing this vital resource.

Our research project with UN-Habitat and Nairobi City Water and Sewerage Company focuses on providing safe and secure water to less prosperous areas of Nairobi in Kenya (p. 40).

We are also working with world-leading pump manufacturer Grundfos (online) on their LifeLinks sustainable water solution which uses ICT to better control and manage water points. Acknowledged for helping build climate resilence, it was a winner in the 2015 UNFCCC Momentum for Change awards.



"Information and Communication Technology for Urban Climate Action." Sweden's Stockholm Royal Seaport, a sustainable urban district with the goal to be carbon neutral by 2030, is a prime example. It won the Sustainable Communities award in the C40 Cities Awards at COP 21 (p. 41). In 2015, a smart energy housing project with 150 new apartments was launched at the Seaport. We are part of a consortium of companies involved in the project, including Fortum, ABB, Ericsson, Electrolux and the Swedish Energy Agency and NCC, Erik Wallin and HEBA. The homes will be equipped with state-of-the-art energy technologies and connected appliances, so residents can monitor and control energy usage in real time.

In the city of Zhuhai, China, together with a mobile operator, we launched a smart transportation project in which our solution can monitor real-time traffic on 951 streets and provide 90% accuracy. This helps municipal traffic authorities monitor city transportation and helps drivers avoid traffic jams in rush hours.

For road authorities and public transit authorities and operators, connectivity provides real-time data that can greatly improve disaster and emergency response.

### Collaboration with UN-Habitat

Our ongoing collaboration with UN-Habitat, the UN agency tasked with creating a better urban future, explores how ICTenabled solutions for cities can drive progress toward SDG 11, Sustainable Cities and Communities. In joint research and projects, we seek to provide insights to support international processes and assist decision makers to design clear policies and implement tools around ICT's role in sustainable urbanization, including water, urban planning and citizen participation.

As 4G/5G, IoT and big data technologies become widespread, the potential for ICT to contribute to addressing cities' challenges will rise ("Laying the foundations for a smart, sustainable city," Ericsson, 2016). But ICT projects alone do not necessarily make cities smart or sustainable. Poorly planned, short-sighted developments can hinder a city's long-term progress.

At a 2015 preparatory meeting for the third UN Conference on Housing and Sustainable Urban Development, Habitat III – set for Ecuador in 2016 – we launched a joint report with UN-Habitat, "The role of ICT in the proposed Urban Sustainable Development Goal and the New Urban Agenda." The report highlighted ICT's role in helping city mayors meet the SDGs.

#### Social impact assessments

ICT can also help achieve SDG 6. Clean Water and Sanitation. With UN-Habitat we have done two social impact assessment projects. The first is a new approach to address water quality, availability and affordability in Nairobi, Kenya. Sensors and connected infrastructure monitor water supply and quality. Local residents help maintain the physical infrastructure. They perform maintenance tasks to minimize costs for service delivery, earning income via mobile payment for their work. The approach can boost water availability and quality, water governance and gender equality, as water collection is often done by women.

In a project implemented by UN-Habitat, Nepalese youth used the computer game Minecraft for urban design and decision making to revitalize an urban park. Minecraft players use a three-dimensional environment to build creative structures like buildings, cities, or whole worlds. The youth contributed Minecraft designs that will be used as input to the architectural design and construction process.

### HOT CONSUMER TRENDS 2016

Ericsson ConsumerLab has identified some of the most important consumer trends for 2016 and beyond, many of which underscore the growing importance of sustainability to consumers.



**Sensing homes:** 55% of smartphone users believe that within only five years, their own homes will have embedded sensors that look for construction errors, mold buildup, water leaks and electricity issues.

Smart commuters: Commuters want real-time crowd information integrated to help them manage their commute, as well as unified payment options and services that span across travel modes. Some 86% say they would use personalized commuting services if they were available.

Artificial Intelligence: will enable interaction with objects without the need for a smartphone screen. Some 85% of smartphone users think wearable electronic assistants will be commonplace within five years. Additionally, one in two believes they will be able to talk to household appliances, as they do to people.

**Emergency chat:** Some 65% of smartphone owners are interested in an emergency app, which would alert them in a crisis or disaster, and provide verified, rumor-free information.



### BRIGHT LIGHTS, BIG CITY

In 2015, Los Angeles became the world's first city to deploy Philips' smart pole Street Lighting with LED lighting and our Zero Site solution, which integrates small cells with street lamps to provide optimal urban mobile broadband coverage with minimal visual impact. Some 100 LED light poles in Los Angeles will be fitted with the solution.

The solution, jointly developed by Ericsson and Philips Lighting, addresses two major issues: rapid urbanization and the challenge faced by operators and utilities in acquiring sites in dense areas. Today there are 100 times more lampposts in the world than there are telecom sites. Street light poles are everywhere in cities; public lighting may account for up to 50% of a city's electricity bill. LED technology can provide power savings of 50% to 80%. The Zero Site Solution was also implemented in 2015 in street light poles in Spain, France, and Algeria.

### A TURNING POINT FOR CLIMATE ACTION

With a new global agreement to combat climate change, business in general – and ICT as a key solutions industry – will have a critical role to play to advance climate goals.

ICT can be instrumental in making transformational rather than incremental progress in achieving climate change targets.

The 21st Conference of the Parties (COP21) on Climate Change in Paris in December 2015 met under the auspices of the United Nations Framework Convention on Climate Change. A historic agreement to combat climate change and unleash actions and investment towards a low carbon, resilient and sustainable future was agreed by 195 nations. The aim is to keep a global temperature rise this century to well below 2°C above pre-industrial levels; although there was a recognition among stakeholders that the aim needed to be 1.5 degrees.

### **Taking action**

We supported a number of commitments on climate in conjunction with COP21. This included signing the Paris Pledge for Action, an initiative endorsed by the French presidency of COP21 and open to all organizations, businesses, regions, cities, and investors.

Signatories "pledge support to ensuring that the level of ambition called for in the agreement will be achieved or exceeded." The Paris Pledge for Action is also supported by World Economic Forum (WEF),



Hans Vestberg, at the New York Times "Energy for Tomorrow" conference during COP21 in Paris.

the World Business Council for Sustainable Development (WBCSD), and the Global e-Sustainability Initiative (GeSI), among other organizations.

Ericsson also signed the Earth Statement to urge world leaders to act now on climate change. It calls for an equitable, ambitious and science-based global

### CITIES PLAY A CENTRAL ROLE

With the help of ICT, cities can play a key role in our efforts to combat climate change and build resilience. To fully realize the potential of ICT for a successful transformation to climate-smart sustainable urbanization, city leaders need to take five steps: 1. Define and agree a vision, strategy, and targets; 2. Promote sustainable urbanization through comprehensive urban planning, legislation and financing; 3. Create informed networked governance structures; 4. Engage with all relevant stakeholders and 5. Forge and foster long-term partnerships.

Source: "Information and Communication Technology for Urban Climate Action," UN-Habitat and Ericsson, 2015, with contributions from the International Telecommunication Union (ITU).

climate agreement and has received overwhelming endorsement from business leaders, religious leaders and political leaders (www.earthstatement.org).

We also support the Swedish government initiative Fossil-Free Sweden to support Sweden's aim to be one of the world's first fossil fuel-free nations, with an energy system based on renewable energy sources.

### Joining world climate leaders

Ericsson has signed the World Economic Forum (WEF) CEO Climate Leaders initiative, comprising over 50 CEOs and chairpersons from the world's largest companies who have signed a statement in support of concrete, business-led climate solutions aligned with the UN Sustainable Development Goals (SDGs).

# COMMUNICATION FOR ALL



Ericsson Sustainability and Corporate Responsibility Report 2015

# BRIDGING THE DIGITAL DIVIDE

Our outreach, partnerships and solutions seek to bring the benefits of mobile technology to everyone to create a more inclusive and sustainable world.

At Ericsson, we channel our technology leadership, innovation and advocacy to help create positive socio-economic and environmental impacts to address a range of global challenges. These include climate change, urbanization, poverty, education, health, human rights, and humanitarian issues such as refugees, peace building and disaster response. We believe ICT is fundamental to addressing these challenges, and we leverage public-private partnerships to scale our impact.

#### Reaching the unconnected

According to Ericsson Mobility Report. November, 2015, there are over 7 billion mobile subscriptions worldwide In less developed countries, broadband rollout means millions of people are experiencing connectivity for the first time, with all the benefits this brings to quality of life. Yet addressing the digital divide remains a challenge. Two-thirds of the world population lack access to the internet (Ericsson 2014), mostly in the developing world, but the rapid uptake of mobile phones in developing countries is changing that picture. In sub-Saharan Africa, for example, mobile penetration was just above 50% five years ago: by 2021 it is expected to reach 100% in the region (Ericsson Mobility Report, November 2015).

#### **Proven technology**

Many studies link broadband to macro-

# CREATING MOMENTUM FOR THE SDGs

Joint research in 2015 by Ericsson and the Earth Institute at Columbia University highlighted five major ways that ICT can dramatically speed the uptake of services supporting the UN Sustainable Development Goals (SDGs). These are:

- > The unprecedented speed of diffusion and uptake of ICT itself.
- > The reduced costs of deploying new services.
- > Raised public awareness of new services and technologies.
- Rapid upgrading of new applications via national and global information networks.
- > Provision of low-cost online platforms for training workers in the new technologies.

economic growth in GDP and other positive socioeconomic impacts, including job creation and productivity. A 10 percent increase in ICT capital services is associated with a 0.9 percent increase in GDP (Cross-country study results based on 59 countries, Niebel 2014). ICT can also advance equality, democracy, governance and freedom of expression.

By connecting small business owners with customers, mobile services boost livelihoods. Cloud-based solutions like Connect To Learn (p. 46) give students – especially girls – access to quality education. Community healthworkers equipped with smartphones and mobile health apps can better serve rural areas. Ericsson Mobile Financial Services (p. 44) is opening new avenues for the unbanked. Mobile technology helps make humanitarian response more effective, especially for more vulnerable populations such as refugees and also contributes to peace building (pages 50–51).

Greater focus on social innovation and public-private partnerships give reason for optimism. With enabling technology and commitment from all sectors of society, we are coming closer to the goal of a more inclusive, equitable and sustainable world.

### MAKING A POSITIVE IMPACT

In 2014, we positively impacted 4 million people through our Technology for Good<sup>™</sup> initiatives and set a target to impact an additional 5.5 million by the end of 2016. We also extended Ericsson's methodology for assessing positive impact to include customer technology deployments that have direct positive impact on society and the triple bottom line – for example, rural mobile broadband deployments in low, and medium HDI (Human Development Index) countries and mobile, commerce deployments in sub-Saharan Africa and Latin America where there is linkage between our technologies and fulfillment of the SDGs. By the end of 2015, we had positively impacted an additional 16 million people, achieving our target ahead of schedule. Based on this we estimate 20 million people are directly impacted by Technology for Good<sup>™</sup> initiatives so far. We are aiming to impact a minimum of eight million additional people by the end of 2016, bringing the total to 28 million people.



Our partnership with REFUNITE help refugees reconnect with their loved ones.

### MOBILE MONEY ENHANCES FINANCIAL INCLUSION

### Technology and particularly mobile financial services is proving to be a game changer for advancing financial and social inclusion.

Increasing access to financial services, primarily through mobile money, is considered instrumental in addressing financial and social inclusion, according to the World Bank and other experts and can contribute to SDG. Mobile technology is seen as playing a pivotal role in expanding access to banking services, with nearly 90% of the world's population having access to mobile phones by 2020 (Ericsson Mobility Report, 2014). In 2015, the World Bank recorded a massive 20% drop in the number of unbanked to 2 billion adults. Some 700 million adults worldwide became account holders between 2011 and 2014. This trend is partly due to ambitious government initiatives for financial inclusion. In India, for example, the Prime Minister's People's Wealth Scheme in India aims to provide 75 million people with bank accounts.

### Closing the digital financial gap

In emerging markets, the number of people with mobile phones who can benefit from services such as mobile money is on the rise. Adoption rates are highest in developing countries – reaching 60–70% in China and India (KPMG, 2015). Studies show that access to mobile financial services can reduce income inequality, boost job creation and directly help people better manage risks and absorb financial shocks. It can also address female empowerment.

### "Modelo Perú"

In Peru, ASBANC, Peru's National Bank Association, has launched a unique initiative, Modelo Perú, to boost financial inclusion. It is considered a model of a new financial eco-system that connects banks, mobile operators, money transfer organizations, and payment and loan providers. ASBANC wants to provide next-generation mobile financial services with the goal of including 2.1 million Peruvians, about 7% of the total population, within five years.

Ericsson was the selected supplier to implement the initiative in 2015. In addition to involving a large number of banks in

Peru, the initiative enables bank agents and mobile operators to also get connected. The Ericsson Mobile Financial Services platform features easy-to-use and secure next-generation mobile financial services, capable of hosting all services from different financial and commercial institutions to secure interoperability. People will be able to use wallet solutions for banking, payments and remittances between banks, shops, employers, government institutions and customers, all carried out on on a single, secure platform, To encourage inclusion the service is available in indigenous languages as well as Spanish.

The initiative won an award in the category of Disruptive Digital Payments in the Mobile Money and Digital Payments Global Awards in 2015.

### Growing demand

Ericsson Mobile Financial Services today covers some 20 markets. We see growing demand in Africa, Asia, and Latin America. We are doing a pan-African rollout in several countries with operator MTN, including Uganda, Rwanda, Nigeria, and Swaziland. We also work with operator Millicom's Tigo platform in Senegal. In 2015, Ericsson Mobile Financial Services was also launched in Ghana, Cameroon, Benin and the Ivory Coast.

In Asia, we have been selected for the design and deployment of the new mobile financial service platform for EasyPaisa, Pakistan's first and largest branchless banking service and a joint venture of Telenor Pakistan and Tameer Microfinance Bank.

### Building the right foundation

We contribute to multi-stakeholder discussions to address challenges in closing the digital and financial gap. This includes building the right infrastructure; reaching rural areas; enabling regulation and supportive government policy, consumer education and local system capacity. We also focus on offering secure and real-time transactions to build consumer trust and protect against fraud.

One such initiative is the UN Better Than Cash Alliance. Our commitment to address financial inclusion is aligned with the aims of this partnership of governments, companies, and international organizations. The goal is to accelerate the transition from cash to digital payments in order to reduce poverty and drive inclusive growth.



# THE INTERNET OF THINGS

Several potential socio-economic and environmental benefits are increasingly linked to innovation around the Internet of Things (IoT).

### Connected vineyards

In an approach that can be scaled to apply to agricultural productivity in general, we are taking part in a trial in the Connected Vineyards project in Germany to demonstrate how Ericsson's cloud-based IoT platform enables the collection and analysis of sensor data from a vineyard environment in order to better inform wine producers about soil, humidity, use of fertilizer, and temperature.

### **Connected mangroves**

In 2015 we began working with technology providers and NGOs to more efficiently reforest mangroves in Malaysia. About 50% of Malaysian mangroves have been destroyed due to unsustainable development, leaving coastal areas vulnerable to risks such as flooding and tsunamis. In the Connected Mangroves project, Malaysian mangrove conditions are monitored in real-time, enabling better management of new sapling growth by combining mobile, IoT and cloud technologies. Communities can then take prompt action to address changing environmental conditions.

### Connected water

ICT can also help overcome the challenge of clean water. Field trials with operator AT&T for connected water solutions in Atlanta, USA kicked off in 2015. The trials will enable the Chattahoochee Riverkeeper, an organization dedicated to protecting water in the Chattahoochee River Basin, to remotely monitor the quality of the city's water at key watershed locations and allow for early detection of water contamination. The connected water field trials will utilize a design prototype based on the winning idea from a recent Ericssonsponsored Technology for Good innovation challenge with university students. AT&T will provide all wireless connectivity for the IoT devices.

### Internet of Food

With Telco and ICT operator TIM and retail chain Coop we held a Food Hackathon in 2015. Youth were asked to devise ICTbased solutions to reduce food waste at point of distribution, retail and consumption. The jury included Ericsson, TIM and the World Food Programme.



The 23 coders, designers and experts used the Ericsson IoT platform to develop ideas such as a retail chain app with geo-localized offers on close-to-expiry items. We will work with TIM to continue developing innovative IoT-based services and devices for the automotive, utility and agriculture industries.

# CONNECTIVITY AS A SERVICE

Despite the rapid growth in mobile communications, commercially viable business models are still lacking in many rural areas. As a result, some 2.4 billion people still do not have access to the internet.

One way in which we are addressing this challenge is through our Managed Rural Coverage solution whereby we enable operators to provide mobile coverage for a set period according to service level agreements and defined key performance indicators. Access is provided via low-power consumption Ericsson radio base stations running on solar energy to avoid the high costs and emissions associated with diesel generators. Transmission is provided via satellite to avoid the high costs and civil works associated with building a microwave backhaul network in remote villages.

### Bringing connectivity to rural Benin

In 2015, we joined with mobile operator MTN to deploy Managed Rural Coverage to parts of central and northern Benin where there was none previously; in essence, providing connectivity as a service. The five-year contract covers 50 sites.

#### A new business model

Managed Rural Coverage represents a new business model that makes it possible provide mobile coverage to areas most in need of it, such as remote areas of Benin where people have to survive on less than two dollars a day.

With mobile connectivity, the people of Benin will be able to beneft from increased access to information and services that support health, education and small businesses.

### ACCESS TO EDUCATION THROUGH TECHNOLOGY



In a unique public-private collaboration, Connect To Learn is being deployed in Myanmar. Some 21,000 students will benefit in the first two years; more than half are girls. The aim is to improve access to the internet, deliver teacher training and enable the students to experience a 21st century education.

ICT can help overcome development challenges such as access to education. The global initiative Connect To Learn is tackling access to secondary education head-on, especially for girls.

According to UNESCO, some 62 million girls today are denied their basic right to an education. Girls without education have diminished economic opportunities and are more vulnerable to poor health, early and forced marriage and other forms of violence. Addressing this is the focus of SDG 4: Ensuring an inclusive and equitable quality education and promoting lifelong learning opportunities for all. Access to education is also a fundamental human right.

With quality education, girls have a much greater chance to earn a decent living, raise a healthy, productive family and improve their quality of life. A World Bank study found that every year of secondary school education correlates with an 18% increase in a girl's future earning power.

Connect To Learn is a global education initiative launched in 2010 by the Earth Institute of Columbia University, Millennium Promise and Ericsson. The aim is to scale up access to quality secondary education, in particular for girls, by providing scholarships and bringing ICT to schools in remote, resource-poor parts of the world, using mobile broadband and cloud.

To date, the initiative is launched in 22 countries and benefiting over 76,000 students (see map) and engaging 16 mobile operators. Connect To Learn is about:

- improving the quality of education and connecting school children globally through ICT
- increasing access to global educational resources
- delivery quality content efficiently in areas with low bandwidth or connectivity challenges

- > removing barriers to teaching by providing a cloud-based, remotely managed solution, designed to avoid IT complexity for teachers, who can instead focus on the quality of education
- leveraging public-private partnerships to advocate for policies that support universal secondary education
- in some instances, providing scholarships, especially for girls.

### Educating girls in Myanmar

In 2015 we began deploying Connect To Learn in Myanmar, in a unique public-private collaboration with a range of partners. The partners are Ericsson; the UK Department for International Development (DFID), under their Girls' Education Challenge; UNESCO; the Earth Institute at Columbia University; Finja Five; Qualcomm© Wireless Reach<sup>™</sup> and the external evaluator EduEval. The deployments are supported by mobile operator Myanmar Post and Telecommunications. Some 21,000 students will benefit in the first two years; more than half are girls.

The collaboration aims to improve access to the internet, deliver teacher training and enable students in Myanmar to experience a 21st century education. This unique constellation of partners aims to bring scale and impact to Connect To Learn and make a significant difference in a country where only 54% of secondary school-aged children are enrolled in secondary school, according to the World Bank.

### Expanding the reach of program

Connect To Learn was deployed in a number of new countries and locations during 2015:

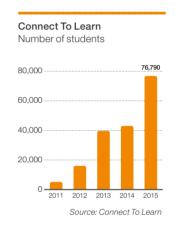
India: Recognizing the link between limited mobility of women and girls and accessing quality learning opportunities, we are leveraging Connect To Learn with Plan India to increase self-development opportunities for 15,000 girls aged between 15–25 years. Three 'Ericsson Digital Learning Centers' were inaugurated with Plan India in 2015 in Delhi as knowledge hubs for girls. Twelve more are planned to be set up in early 2016.

**Tunisia:** In 2015, under the Tunisian government's plan to deploy ICT to all primary schools across the country, we partnered with the Ministry of Education and the Ministry of IT to pilot Connect To Learn in primary schools. Sri Lanka: In a partnership between Ericsson, Mobitel, the Commonwealth of Learning and the Open University of Sri Lanka, Connect To Learn is part of an initiative to equip teenage girls in farming communities with the ICT skills required to empower them to pursue further university education and secure future employment. The program is planned to be extended to three new locations in 2016.

### Educating teachers in refugee camps

As part of our global partnership with the International Rescue Committee (IRC), we are deploying Connect To Learn in Domiz refugee camp in Iraq with operator Asia-Cell to provide educational support to IDPs (Internally Displaced People) and refugees and their host communities. Our solution helps IRC support refugees in Iraq by ensuring that students in camps have access to education - IRC purchases equipment and trains teachers and we provide the technical solutions and remote computer support. AsiaCell provides equipment and data packages and we deliver the connectivity and cloud-managed software at no cost so that the IRC can bring quality educational content to refugee camps.

The aim of Connect To Learn is to scale up access to quality secondary education, in particular for girls.



### CONNECT TO LEARN AROUND THE WORLD



### TRANSFORMING HUMANITARIAN RESPONSE

Technology has a key role to play in ensuring a rapid and effective humanitarian response.



Ericsson Response volunteers support end-to-end connectivity during missions on behalf of humanitarian partners.

The frequency of storms and disasters is increasing, in part due to the effects of climate change. In addition, the nearly 60 million forcibly displaced people in the world today is unprecedented. We are working to transform humanitarian response with technology and to help create a positive change by supporting our partners in the field. ICT and in particular mobile communication has been proven to improve the effectiveness of humanitarian response. A key consideration is knowing what technology to leverage and how to best make use of data and partners. Our humanitarian partners include OCHA (UN Office for Coordination of Humani tarian Affairs), the International Rescue Committee, and the World Food Programme, leading the UN Emergency Telecom Cluster, which serves hundreds of organizations. Other Ericsson partners include UNICEF; MSB, the Swedish Civil Contingencies Agency, and Save the Children.

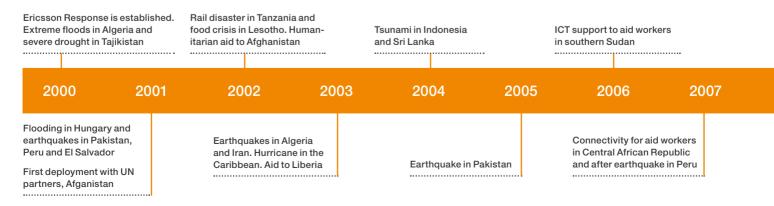
Our commitment to disaster and humanitarian response is long-standing – the Ericsson Response disaster relief program recently marked its 15-year anniversary. Our technology also assists refugee populations by helping them find loved ones in our partnership with REFUNITE (p. 50).

In our partnership with the Whitaker Peace & Development Initiative (WPDI), we also utilize ICT in providing education, tools and awareness to foster a culture of peace among youth in conflict-affected countries (p. 51).

### **Connectivity Charter**

In 2015, we became signatories to the Humanitarian Connectivity Charter launched by mobile operator industry organization the GSMA. The Charter sets out to enhance coordination within and among mobile network operators before, during and after a disaster, and to scale and standardize the industry's preparedness and response activities. The aim is to enable a more predictable response, and strengthen industry, government and the humanitarian sector partnerships.

### Ericsson Response timeline 15 years



### ERICSSON RESPONSE MARKS 15 YEARS

When Ericsson Response was launched 15 years ago, ICT's role in disaster relief was in its infancy. Today it is widely accepted that connectivity is as vital as food, shelter and water when disaster strikes.

Fifteen years ago, a group of Ericsson employees realized mobile communications could assist in major disasters. Now many organizations, governments and the private sector see the value of ICT in humanitarian and disaster relief.

Since the launch of Ericsson Response in 2000 and our first major mission to Afghanistan, hundreds of employees have supported over 40 humanitarian relief efforts in 30 countries. There were 147 active volunteers in 2015.

Our volunteers deploy and run emergency telecoms equipment and provide technical expertise. In 2015, Ericsson Response assisted the ETC in connecting over 90 humanitarian sites, including community care centers and Ebola treatment units as well as humanitarian operations in Sierra Leone, Guinea, Liberia and Ghana.

Ericsson Response volunteers were deployed to Nepal after the 2015 devastating earthquake. As an ETC member organization, Ericsson Response, supported some 1,430 users from over 250 humanitarian organizations in their efforts. Ericsson Response also assisted when Tropical Cyclone Pam struck Vanuatu in the Pacific region, causing widespread devastation in parts of the country. It also collaborated with the WFP in South Sudan and Iraq to provide communications and expertise to support humanitarian efforts in refugee and Internally Displaced Persons (IDP) camps.

In 2015, employee donation campaigns raised USD 75,000 for the WFP and the ETC in Nepal, and USD 450,000 for UNHCR refugees.



Ericsson Response volunteers supporting relief efforts in Kathmandu, Nepal.

# ്ര VIEWPOINT

Throughout the past years, Ericsson Response has been a constant, reliable and present partner to the World Food Programme. Their volunteers have made their time and skills available to address some of the biggest humanitarian challenges



of our time – from the Afghanistan operation in 2001 to Ebola in West Africa, to the Philippines and Nepal today. We are grateful for their support. Ericsson Response continues to truly understand the value of preparedness and their technical solutions are providing life-saving support to those most in need, through WFP and the Emergency Telecommunications Cluster. Thank you Ericsson Response."

Ertharin Cousin, Executive Director World Food Programme



### A MOBILE PLATFORM HELPS REFUGEES RECONNECT

### The refugee crisis grew in urgency in 2015, as wars and conflict forced more people from their homes than at any other time in history.

The world's single largest driver of displacement is the ongoing war in Syria. Instability and conflict in Afghanistan, Somalia and elsewhere add to the crisis. Many people have become long-term internally displaced people (IDPs) or refugees according to UNHCR.

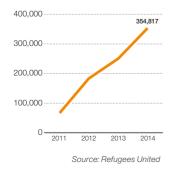
### One connection at a time

A mobile phone can be a lifeline for those looking for lost loved ones. Since 2010, Ericsson has been the lead technology partner to Refugees United (REFUNITE), a non-profit organization dedicated to help displaced people locate missing family and loved ones.

Ericsson has supported development of an online family reconnection platform, providing technical expertise, and engaging with mobile network operators, other social organizations and employees to achieve the joint mission to achieve the joint mission of getting 1 million refugees registered on the platform. The mobile phone platform combines a simple, low-tech user interface, like text message services such as SMS and USSD, with high-tech backend search algorithms and analytics. Costfree, it works over low bandwidth on the most basic devices for ease of use.

Refugees reconnection

Number of refugees registered



### Rising number of users

REFUNITE has assisted thousands of forcibly displaced families, resulting in hundreds of family reconnections. In 2015, the platform had approximately 414,000 registered users – an increase from approximately 350,000 in 2014, largely thanks to digital registrations.

The program is deployed in the following countries: Kenya, Somalia, Somaliland, South Sudan, Jordan, Turkey, Iraq, and the Democratic Republic of Congo (DRC).

### **Reaching out in Europe**

In 2015, the number of refugees taking dangerous sea journeys increased, including large numbers from Syria but also from Afghanistan, Iraq and Eritrea. Many sought refuge in Europe.

Ericsson is working with European operators to promote the service to the more than one million people who according to UNHCR arrived in Europe during 2015. The service enables refugees arriving in Germany to reconnect with separated family members.

### Extending service with voice mail

With REFUNITE we began in 2015 to develop an Interactive Voice Response and VoiceMail touch point as an extension of the REFUNITE call center in Kenya.

Using the functionalities of an existing Ericsson platform, Messaging in One, refugees could use the call center and toll-free line touch points enabled by REFUNITE in multiple markets. We believe this functionality will allow illiterate users or users with very low technology skills to use a mobile phone to find loved ones. The system was developed internally by Ericsson including three telecom and software engineering students participating in an international internship with Talentum Startups scholarship, in co-operation with the Telefónica Spain Talentum Startups scholarship.The project will deliver a first proof of concept by early 2016. If successful, the next steps will be to look at bringing the system to a live environment.



### LONG LOST SISTERS REUNITED

In 2003, sisters Belle and Marie from the Democratic Republic of the Congo were separated from their other sister Julienne during violence in their hometown. Belle and Marie fled to Kakuma Refugee Camp in Kenya, but heard that Julienne had drowned while escaping to Tanzania. As years passed with no news, they feared the worst. In 2013, Belle and Marie signed up to the REFUNITE platform. First, Belle located her husband. Then, a year later, Marie received a message on her REFUNITE account from someone named Julienne. After confirming each other's identities, Marie and Belle realized: Julienne was alive. Separated for over a decade, the sisters were reunited.

### PEACEBUILDING STARTS WITH YOUTH

Living free of violent conflict is a fundamental human right. Our contribution to the peacebuilding process starts with providing ICT education and tools to youth in conflict-affected countries.

The Whitaker Peace & Development Initiative (WPDI) helps youth affected by conflicts and violence to foster safer and more-productive communities in the United States, Latin America, and in Africa. ICT has proven to be a powerful tool in that mission.

Founded in 2012 by Forest Whitaker. UNESCO Special Envoy for Peace and Reconciliation and UN Advocate for Children Affected by War, WPDI provides holistic peacebuilding training that focuses on conflict transformation. As the technology partner to WPDI, we provide ICT equipment for the youth based on Connect To Learn (see p. 46). Working with partners like mobile operator Zain, we have enabled connectivity and internet access for the initiative via computer centers and have leveraged expertise from our learning academy to deliver comprehensive virtual and face-to-face education in ICT and professional skills. WPDI also provides youth training in basic business and life skills and supports the youth as they develop and implement communitybuilding projects.

### South Sudan: Youth Peacemakers

The Youth Peacemaker Network (YPN), WPDI's flagship program, fosters young leaders in conflict regions such as in South Sudan and post-conflict regions like Northern Uganda. In South Sudan, the YPN had to suspend activities in 2013 due to an outbreak of violence. The program now operates in Eastern Equatoria State, where 18 youth have received WPDI's peacebuilding curriculum and two computer centers have been established. We conducted several week-long ICT trainings at the centers in 2015. After graduating from their training in 2015, the participating youth have recruited over 150 other young women and men from across the state and, together, are establishing community action plans to bring peace and development to their villages. Nine computer centers are planned in Eastern Equatoria, providing internet access and training in ICT and adult literacy.

The long-term goal is to empower young women and men from Eastern Equatoria as peace leaders, community builders and global citizens through certi-fied education and training programs. This includes teaching peacebuilding and con-flict resolution, life- and empathy-skills, coaching and training in ICT and vocational skills.

### Harmonizer Program

Designed to address conflict transformation in urban settings where violence has affected youth, the Harmonizer Program is currently active in Mexico and Uganda. The Mexican program was first established in Tijuana (where 34 youth graduated in 2015). The program launched in Chiapas in 2015, training a new cohort of 28 youth.

In Uganda, the Harmonizer Program reaches out to former child soldiers and orphans of Uganda's civil war at the Hope North School. Several workshops have been held over the past two years at the school. In 2015 a Hope North computer center was launched.

### Reaching out in Myanmar

In 2016, the YPN will launch in Myanmar. The three-year program will focus initially on Mandalay, targeting young men and women between the ages of 18 and 24. The plan is to provide a core group of youth with WPDI's standard peacebuilding training and to establish a network of computer centers throughout the regions.

#### Building for the future

By empowering a cadre of youth between the ages of 15 and 24 with the knowledge and skills to resolve conflicts in peaceful ways, these initiatives are creating a network of community-based and regional grassroots organizations as well as governmental and international agencies that support the youth participants. Among the aims: to implement youth-driven incomegenerating and conflict-mitigating community projects, to build a global network of youth peacemakers, and to provide a digital platform for online dialogue, resources and information exchange with other peacemakers around the world.





# IN RECOGNITION

### Global 100 Most Sustainable Corporations in the World



Ericsson is on the 2015 Global100 list which was announced during the World Economic Forum in Davos in January 2015. The Global 100 is an annual project initiated by Corporate Knights, the company for clean capitalism.

### FTSE4Good

FTSE Group confirms that Ericsson has been independently assessed according to the FTSE4Good criteria, and has satisfied the requirements to become a constituent of the FTSE4Good Index Series, an

equity index series designed to facilitate investment in companies that meet globally recognized corporate responsibility standards.



#### Member of the Ethibel excellence

Ericsson has been reconfirmed as a constituent of the Ethibel Sustainability Index



(ESI) Excellence Europe since 21/09/2015. This selection by Forum ETHIBEL indicates that the company performs better than average in its sector in terms of Corporate

Social Responsibility (CSR).

### Africa Award for "Social Contribution"

Ericsson was recognized with a 2015 Africa Award for "Social Contribution" for its global education initiative, Connect To Learn. The Africa Awards, organized by Total Telecom, recognize outstanding performance and innovation from the leading organizations in telecoms and the Internet of Things markets.

### EcoVadis According to



EcoVadis, a collaborative platform enabling companies monitor and benchmark their suppliers sustainability and corporate responsibility performance used by 20 of our customers, Ericsson is in the top 1% of suppliers in all categories with a score of 82/100, the EcoVadis Gold level.

### CDP

In 2015, Ericsson is listed as part of the Disclosure leaders within the Nordic Climate Disclosure Leadership Index (CDLI).

Ericsson as a leading company in tackling climate change score 99 on the Disclosure



Leadership Index and achieved a performance score B for proactive climate actions.

### FAR Award

Best Sustainability Report, 2015. Ericsson was awarded for Best Sustainability Report in Sweden by the national organization FAR, which represents about 6,000 accounting professionals. The award was for the 2014 Sustainability and Corporate Responsibility Report – Ericsson's 22nd such report.

### 2016 Hunger Hero Award

The United Nations World Food Programme (WFP) honored Ericsson President and CEO Hans Vestberg in January 2016 with the Hunger Hero Award for Ericsson's pioneering work in providing telecommunications solutions in support of humanitarian response. The award was presented at the World Economic Forum annual meeting in Davos, Switzerland. Hans Vestberg is a strong advocate for the UN Sustainable Development Goals and for tackling global challenges such as poverty, hunger, and climate change.

For the past 15 years, Ericsson has provided humanitarian relief agencies such as the WFP with essential mobile communications support during disaster relief operations through our volunteer program Ericsson Response (p. 48). According to WFP Executive Director Ertharin Cousin: "Hans Vestberg is a true champion of the Sustainable Development Goals. And Ericsson and its employees are shining examples of the type of private sector collaborations that are vital to reaching zero hunger by 2030."



CEO Hans Vestberg at the 2016 Hunger Hero Award ceremony. Pictured with Secretary General of the United Nations, Ban-ki Moon, Mr. Feike Sijbesma, CEO, DSM and Ertharin Cousin, Executive Director, World Food Program.

### OBJECTIVES AND ACHIEVEMENTS

In line with our wanted position to be a relevant and responsible driver of positive change (see page 8), our objectives and achievements reflect our efforts to reduce risks and increase positive impacts.

### **Risk reduction objectives**

Status 2015	Long Term Objectives (2020) *	Objectives 2015	Achievements 2015	Objectives 2016
•	Identify and mitigate supplier risks related to Responsible Sourcing.	Close 60% of Suppliers Code of Conduct audit findings.	Closed over 70% of Suppliers Code of Conduct audit findings.	Close 65% of Suppliers Code of Conduct audit findings.
•	Increase completion rate of anti-corruption e-learning for employees to achieve 90% of active employees.	Continue to deploy anti-corruption training targeting all employees, and selected sup- pliers, in line with our zero tolerance policy. Secure independent third party to manage whistle blower process.	As per December 31, 2015, 94,700 of the active employee, representing 81% of all employees, had completed the anti-corruption training for employees. More than 3,600 unique suppliers with over 10,800 suppliers' employees have attended the anti-corruption training for suppliers. Strengthened the reporting of violations by updating the whistle-blower tool with a third party-managed whistleblower system.	Continue to deploy anti-corrup- tion training targeting all employ- ees and achieve 85%, in line with our zero tolerance policy.
	Reduce risk by increasing take- back of products at the end of life stage from our customers.	Achieve 9% of e-waste take-back vs. Equipment Put on Market while continuing to ensure less than 5% of e-waste is disposed of in landfill.	Achieved 8.1% of e-waste take-back vs. Equipment Put on Market and less than 5% of e-waste is disposed of in landfill, resulting in15,590 tonnes of e-waste treated at the end of life.	Achieve 12,080 tonnes take- back of products at the end of life.
•	Reduce major Occupational Health and Safety (OHS) inci- dents and track mitigation on risks for major incidents, work- ing toward our long-term vision for zero fatalities.	Increase reported volume of incidents with 50% in countries with low reporting and train personnel for key roles.	Achieved 96% reported volume of incidents in countries with low reporting. 48% of personnel for key roles were trained.	Increase maturity level of inci- dents by increasing reporting volume and reporting quality with 30% globally.
•	Secure Regional and Business Unit adherence to the Sales Compliance process. Manage Corporate Responsibil- ity risks including human rights risks.	Extend a third year of the Business Learning Program on business and human rights with Shift. Secure regional and Business Unit adher- ence to the Sales Compliance policy and directive and manage Corporate Responsi- bility risks. Reduce human rights risks by completing identified mitigation plans in human rights impact assessments for Iran and Myanmar, and initiate Human Rights Impact Assess- ment (HRIA) for one additional country.	Completed third year of the Business Learning Program on business and human rights with Shift. Regional and Business Unit adherence to the Sales Compliance policy and directive was achieved. Reduced human rights risks by closing mitigation activities in human rights impact assessments for Iran and Myanmar and initiated a HRIA for Ethiopia.	Measure adherence to Sales Compliance decisions for each project that has a decision and that closes during the year, with a minimum of 70% adherence. Reduce human rights risks by completing identified mitigation plans in Human Rights Impact Assessments for Ethiopia and initiate a new HRIA.
•	Maintain absolute CO <sub>2</sub> e emis- sions from Ericsson own activi- ties for business travel, product transportation and facilities energy use in 2017 at the same level as 2011. Reduce CO <sub>2</sub> e emissions per employee by 30% over five years.	Reduce CO <sub>2</sub> e emissions per employee by 6% for business travel, product transport- ation and facilities energy use.	Achieved a reduction of 16% CO <sub>2</sub> e emis- sions per employee activities for business travel, product transportation and facilities energy use. The five-year target to reduce CO <sub>2</sub> e emis- sions per employee by 30% has been achieved two years ahead of schedule, with a 42% reduction compared to the 2011 baseline.	Monitor and report the CO <sub>2</sub> e emissions per employee reduc- tion performance for final two years. During 2016 we will define new long terms targets for climate action.

### Positive impact objectives

Status 2015	Long Term Objectives (2020) *	Objectives 2015	Achievements 2015	Objectives 2016
•	Demonstrate energy perfor- mance improvements in line with the strategy to be the undisputed leader in energy performance.	By 2016 research and evaluate algorithms or technologies that would enable a decrease of total accumulated mobile network energy consumption with 30% in a 2020 scenario, in addition to the concepts provided by the EARTH project. Demonstrate energy performance improvements in customer networks.	Simulations into technologies that would enable a decrease of total accumulated mobile network energy consumption indi- cate a potential of over 40% energy savings in 2020 vs a 2014 state-of-the-art network, based on proposed 5G technologies. Demonstrated savings between 20 and 40% on energy performance in radio networks of customers in various regions. In core network modernization projects, we have demonstrated over 75% power consumption savings.	Research and evaluate tech- nologies that would enable a decrease of total accumulated mobile network energy con- sumption with 40% in a 2020 scenario, in addition to the con- cepts provided by the EARTH project.
•	Positively impact 28 million people through Technology for Good™ initiatives by 2016.	Positively impact 4.8 million people through Technology for Good™ initiatives.	Positively impacted 16 million people through Technology for Good™ initiatives.	Positively impact a minimum of 8 million additional people through Technology for Good™ initia- tives, in order to meet the Long term Objective.
•	Reduce societal CO <sub>2</sub> e emis- sions from Ericsson selected Industry & Society offerings with 2 times Ericsson's own CO <sub>2</sub> e emissions by 2016.	Reduce societal CO <sub>2</sub> e emissions from Ericsson selected Industry & Society offerings with 2 times Ericsson's own CO <sub>2</sub> e emissions.	Achieved over 2.1 times reduction in societal emissions from selected Industry & Society offerings compared to Ericsson's own emissions, equating to more than 1.5 million tonnes CO <sub>2</sub> e reduced.	Reduce societal emissions from Ericsson selected Industry & Society offerings with 2 times Ericsson's own emissions. This should result in at least an addi- tional 1.5 million tonnes CO <sub>2</sub> e reduced.
•	Increase to 30 percent the female representation of all executives, line managers and the employee workforce.		Achieved 31% Ericsson Leadership Team (ELT), 22% Executives (top 250), 18% Line Managers and 22% Overall Workforce female representation.	

\* Unless otherwise stated.

Target achieved

🔶 On track

Partly achieved

# GRI INDEX

The Standard Disclosure Items listed below have been externally assured by PwC, see Assurance Statement page 59. Disclosure of Management Approach (DMA) covering identified material issues can be found online. Omissions to Standard Disclosure Items are described, when applicable, in GRI Disclosure 2015 online.

Standard Disclosure Items in this list are an indicative short description. For a full Standard Disclosure Items description please visit GRI Sustainability Reporting Guidelines.

GRI	Standard Disclosure Items	Reference St	atus				
STRAT	STRATEGY AND ANALYSIS						
G4-01	Statement from the most senior decision maker of the organization	AR p.2–4 S&CR p.2–4					
ORGA	NIZATIONAL PROFILE						
G4-03	Name of the organization	GRI					
G4-04	Primary brands, products, and/or services	AR p.10–19					
G4-05	Location of organization's headquarters	AR p.177					
G4-06	Countries where the organization operates	AR p.14–15					
G4-07	Nature of ownership and legal form	AR p.134					
G4-08	Markets served	AR p.14–15					
G4-09	Scale of the organization	AR p.ii					
G4-10	Total workforce	AR p.100					
G4-11	Collective bargaining agreements coverage	GRI	0				
G4-12	Organization's supply chain description	AR p.50					
G4-13	Significant changes during the reporting period	AR p.6					
G4-14	Precautionary approach application by the organization	GRI					
G4-15	Commitment to external economic, environmental and social principles or initiatives	GRI					
G4-16	Memberships of associations and national or international advocacy	GRI					
IDENT	IFIED MATERIAL ASPECTS AND BOUNDARIES						
G4-17	Entities included in the organizations consolidated financial statements	AR p.112–113					
G4-18	Process for defining report content and aspects boundaries	S&CR p.12–13					
G4-19	Material aspects identified in the process for defining the report content	S&CR p.12–13					
G4-20	Aspect boundary within the organization for each material aspect	GRI					
G4-21	Aspect boundary outside the organization for each material aspect	GRI					
G4-22	Effect of any re-statements of information provided in earlier reports	GRI					
G4-23	Significant changes from previous reporting periods in the scope and aspect boundary	GRI					
STAKE	HOLDERS ENGAGEMENTS						
G4-24	Stakeholder groups engaged by the organization	S&CR p.10					
G4-25	Basis for identification and selection of stakeholders with whom to engage	S&CR p.10					
G4-26	Organization's approach to stakeholder engagement	S&CR p.10					
G4-27	Key topics and concerns raised through stakeholder engagement, and how organization responded	S&CR p.10					
REPOR	RT PROFILE						
G4-28	Reporting period for information provided	S&CR p.i					
G4-29	Date of most recent previous report	GRI					
G4-30	Reporting cycle	GRI					
G4-31	Provide the contact point for questions regarding the report	S&CR p.60					
G4-32	GRI Content Index and 'in accordance' option	S&CR p.1, 56–57					
G4-33	Organization's policy and practice with regard of external assurance for the report	S&CR p.59					

GRI	Standard Disclosure Items	Reference Sta	atus
GOVE	RNANCE		
G4-34	Governance structure of the organization	AR p.132–163	
ETHIC	S AND INTEGRITY		
G4-56	Organization's values, principles, standards and norms of behavior	GRI	
ECON	OMIC PERFORMANCE INDICATORS		
EC 02	Risks and opportunities due to climate change	AR p.50–51	
EC 04	Financial assistance received by the organization from governments.	GRI	
EC 07	Extent of development of significant infrastructure investments and services supported.	GRI	
EC 08	Significant indirect economic impacts, including the extent of impacts	S&CR p.42–51	0
EC 09	Percentage of the procurement budget used for significant locations of operation spent on suppliers local to that operation	AR p.50 GRI	
ENVIR	ONMENTAL PERFORMANCE INDICATORS		
EN 01	Materials used by weight or volume	GRI	0
EN 03	Energy consumption within the organization	S&CR p.37	
EN 04	Energy consumption outside of the organization	S&CR p.37	
		S&CR	_
EN 06	Reduction of energy consumption	p.36–37	
EN 07	Reductions in energy requirements of products and services	S&CR p.33–34	
EN 08	Total water withdrawal by source	GRI	
EN 15	Direct greenhouse gas (GHG) emissions (Scope 1)	S&CR p.37	
EN 16	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	S&CR p.37	
EN 17	Other indirect greenhouse gas (GHG) emissions (Scope 3)	S&CR p.37	
EN 18	Greenhouse gas (GHG) emissions intensity	S&CR p.36	-
LINIO	Greet in ouse gas (circa) emissions intensity	S&CR	
EN 19	Reduction of greenhouse gas (GHG) emissions	p.36–37	
EN 21	NOX, SOX, and other significant air emissions	GRI	
EN 27	Impact mitigation of environmental impacts of products and services	GRI	0
EN 31	Environmental protection expenditures and investments	GRI	0
EN 32	Percentage of new suppliers that were screened using environmental criteria	GRI	
EN 34	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms	GRI	

### **GRI INDEX**

GRI	Standard Disclosure Items	Reference St	atus
SOCIA	L PERFORMANCE INDICATORS		
Humar	) rights		
HR 01	Number of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	GRI	0
HR 02	Hours of employee training on human rights policies or procedures, including the percentage of employees trained	GRI	
HR 03	Number of incidents of discrimination and corrective actions taken	GRI	0
HR 06	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	GRI	
HR 07	Percentage of security personnel trained in the organization's human rights policies or procedures that are relevant to operations	GRI	
HR 09	Number and percentage of operations that have been subject to human rights reviews or impact assessments	S&CR p.16–19	
HR 10	Percentage of new suppliers that were screened using human rights criteria	GRI	
HR 12	Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms	GRI	0
Labor			
LA 01	Number and rates of new employee hires and employee turnover by age group, gender and region	AR p.100	0
LA 06	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	GRI	0
LA 09	Average hours of training per year per employee by gender, and by employee category	S&CR p.25	0
LA 10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	S&CR p.25–28	0
LA 11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	S&CR p.25	0
LA 12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	AR p. 100, 144–147, 152–155	
LA 14	Percentage of new suppliers that were screened using labor practices criteria	GRI	
LA 15	Significant actual and potential negative impacts for labor practices in the supply chain and actions taken	GRI	
LA 16	Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms	GRI	0

GRI	Standard Disclosure Items	Reference St	atus
Produc	ct responsibility		
PR 01	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	GRI	
PR 02	Number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes	GRI	
PR 08	Number of substantiated complaints regarding breaches of customer privacy and losses of customer data	GRI	
Society	y		
SO 01	Percentage of operations with implemented local community engagement, impact assessments, and development programs	GRI	0
SO 02	Operations with significant actual and potential negative impacts on local communities	GRI	
SO 03	Number and percentage of operations assessed for risks related to corruption and the significant risks identified	AR p.49, 149–151	
SO 04	Communication and training on anti-corruption policies and procedures	S&CR p.20–21	
SO 05	Confirmed incidents of corruption and actions taken	GRI	
SO 07	Number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	AR p.52	
SO 09	Percentage of new suppliers that were screened using criteria for impacts on society	GRI	
SO 10	Significant actual and potential negative impacts on society in the supply chain and actions taken	S&CR p.21	
SO 11	Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms	GRI	0

### Reference

S&CR	Sustainability and Corporate Responsibility Report 2015
AR	Annual Report 2015
GRI	GRI disclosure 2015 (online)
GIN	
Degree	e of reporting
Degree	•

# UNGP REPORTING FRAMEWORK

This template is designed to help reporters and readers quickly identify the location of answers to the United Nations Guiding Principles on Business and Human Rights (UNGP) Reporting Framework.

Section of the Framework		Location where addressed (page S&CR)
Policy commitment	A1	3, 15, 16
	A1.1	
	A1.2	
	A1.3	15
Embedding Respect	A2	2, 3, 15, 17
	A2.1	
	A2.2	2, 15
	A2.3	15, 16
	A2.4	
	A2.5	
Statement of salient issues	B1	16
Explanation of salient issues	B2	16
Geographical focus (if any)	B3	
Additional severe impacts (if any)	B4	

Section of the Framework		Location where addressed for each salient issue (page S&CR)		
		Right to privacy	Freedom of expression	Labor rights
Specific Policies	C1	16, 18, 19	16, 19	15, 16, 21
	C1.1	17, 19	17, 19	17, 21, 23
Stakeholder Engagement	C2	17, 18		17
	C2.1			
	C2.2	17, 18	17	17
	C2.3	17		
Assessing impacts	C3	17, 18, 19	17, 19	17,21
	C3.1	18, 19	19	21, 23, 24
	C3.2			•
Integrating Findings and Taking Action	C4	16, 17, 18, 19	16, 17, 19	16, 17, 22, 23
	C4.1	18, 19	19	
	C4.2	19	19	21
	C4.3	17, 18, 19	17, 19	17, 21, 23, 24
Tracking Performance	C5	15, 19	15, 19	15, 21, 22,23
	C5.1	19	19	21, 23
Remediation	C6			20
	C6.1	15,17	15,17	15,17,20
	C6.2			
	C6.3	20	20	20
	C6.4	-	-	
	C6.5			



Auditor's Combined Assurance Report on Ericsson's Sustainability & Corporate Responsibility Report

#### To Telefonaktiebolaget LM Ericsson (publ)

#### Introduction

We have been engaged by the Executive Leadership Team of Telefonaktiebolaget LM Ericsson (publ) ("Ericsson") to perform an examination of the Ericsson Sustainability & Corporate Responsibility (CR) Report for the year 2015.

#### Responsibilities of the Board and Management

The Board of Directors and Executive Leadership Team are responsible for the preparation of the Sustainability & CR Report in accordance with the applicable criteria, as explained on the inside front cover (page i) of the Sustainability & CR Report, and are the parts of the *Sustainability Reporting Guidelines* (published by The Global Reporting Initiative, GRI) which are applicable to the Sustainability & CR Report, as well as the accounting and calculation principles that the Company has developed. This responsibility includes the internal control relevant to the preparation of a Sustainability & CR Report that is free from material misstatements, whether due to fraud or error.

#### Responsibilities of the Auditor

Our responsibility is to express a conclusion on the Sustainability & CR Report based on the procedures we have performed.

We conducted our engagement in accordance with RevR 6 Assurance of Sustainability Reports issued by FAR, as well as AA1000AS (2008) issued by AccountAbility (type 2 engagement). The engagement includes a limited assurance engagement on the complete Sustainability & CR Report and audit of Greenhouse Gas emissions data regarding Ericsson's own activities on page 37.

A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of the Sustainability & CR Report, and applying analytical and other limited assurance procedures. Hence, the conclusion based on our limited assurance procedures does not comprise the same level of assurance as the conclusion of our reasonable assurance procedures. The objective of an audit is to obtain reasonable assurance that the information is free of material misstatements. A reasonable assurance engagement includes examining, on a test basis, evidence supporting the quantitative and qualitative information in the Sustainability & CR Report. Since this assurance engagement is combined, our conclusions regarding the reasonable assurance and the limited assurance procedures will be presented in separate sections.

The firm applies ISQC 1 (International Standard on Quality Control) and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our procedures are based on the criteria defined by the Board of Directors and the Executive Leadership Team as described above. We consider these criteria suitable for the preparation of the Sustainability & CR Report.

In accordance with AA1000AS (2008), we confirm that we are independent of Ericsson. Our review has been performed by a multidisciplinary team specialized in reviewing economic, environmental and social issues in Sustainability & CR reports, and with experience from the Information and Communication Technology sector. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusions below.

#### Conclusions

Based on the limited assurance procedures we have performed, nothing has come to our attention that causes us to believe that the Sustainability & CR Report is not prepared, in all material respects, in accordance with the criteria defined by the Board of Directors and Executive Leadership Team, including adherence to the AA1000APS (2008) principles inclusivity, materiality and responsiveness.

In our opinion the information in the Sustainability & CR Report which has been subject to our reasonable assurance procedures have, in all material respects, been prepared in accordance with the criteria defined by the Board of Directors and Executive Leadership Team.

#### Other information

The following is other information that has not affected our conclusion above. According to AA1000AS (2008), we have included observations and recommendations for improvements in relation to adherence to the AA1000APS (2008) principles:

#### Regarding inclusivity

We perceive that Ericsson has a well-established and structured approach to managing key Sustainability & CR risks, including a group level instruction on stakeholder engagement with specific guidance addressing human rights issues in their own operations and supply chain. Ericsson has successfully conducted several stakeholder engagement exercises in assessing the human rights impacts of working in high risk markets. We have no specific recommendations regarding inclusivity.

#### Regarding materiality

We note that Ericsson in 2015 has updated their materiality assessment to make it more focused, substantially decreasing the number of topics that are deemed material for both business and key stakeholders. The prioritized topics have been confirmed through a stakeholder survey with select informed customers, investors, and employees. Going forward, we recommend Ericsson to extend the scope of this survey and ensure that the survey process and results are documented. Also, a more detailed description on how the assessment is carried out could be included in the Sustainability & CR Report.

#### Regarding responsiveness

We acknowledge that Ericsson has a systematic process for capturing and responding to significant stakeholder concerns. Ericsson is continuing to align the organization with the UN Guiding Principles (UNGP) on Business and Human Rights, including incorporating elements of the UNGP Reporting Framework in the Sustainability & CR Report. In 2015, Ericsson has also initiated work on how to consider the impact of the UN Sustainable Development Goals on the business. We have no specific recommendations regarding responsiveness.

Stockholm, March 30 2016

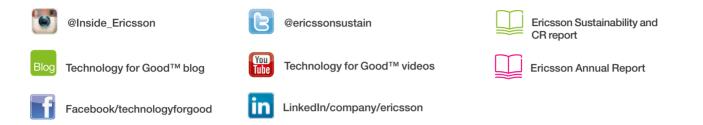
PricewaterhouseCoopers AB



Peter Nyllinge Authorised Public Accountant Fredrik Ljungdahl Expert Member of FAR

# ENGAGE WITH US

This report and additional content can be found at www.ericsson.com/sustainability, including more comprehensive information on Global Reporting Initiative indicators. If you are interested in learning more or continuing the conversation, we also welcome you to engage with us via our Technology for Good<sup>™</sup> social media channels and websites below.



### EMPLOYEE DONATION DRIVES

During 2015, employees around the world participated in donation drives supporting two of our long-standing UN partners.

After the earthquake in Nepal, and in addition to the work done by the employee-volunteer program, Ericsson Response, a donation drive for the Emergency Telecom Cluster led by World Food Programme was launched. Employees donations and company matching raised USD 75,000.

In response to the refugee crisis in Europe, employees donated generously and with company-matched funds raised USD 450,000 for UNHCR in support of their critical support for refugees in the form of essential items, shelter, food, water, and medical care.



Below is a selection of videos highlighting Technology for Good™. Additional partner and customer cases can be found online.



Technology for Good

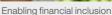


I ICT and the SDGs



Volvo Bus Latin America

9





To help us improve reporting and ensure transparency, we welcome your feedback and questions on our report and performance, please email: corporate.responsibility@ericsson.com



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Telefonaktiebolaget LM Ericsson SE-164 83 Stockholm, Sweden www.ericsson.com