

TECHNOLOGY FOR GOOD

CHANG IN VETWOR

Ericsson Sustainability and Corporate Responsibility Report 2016

ERICSSON IN BRIEF

Ericsson's vision is a Networked Society where every person and every industry is empowered to reach their full potential. The potential of the Networked Society lies in transformation through mobility. Transformation in the way people organize their individual lives and carry out vital tasks. Transformation in the way we work, the way we share information, and the way we do business. Transformation in the way we consume and the way we create. To realize the vision of a Networked Society, Ericsson provides industry-leading high performing solutions for Networks, IT & Cloud and Media. The aim is to develop, produce and offer products and services with excellent and sustainable performance, at the right cost. In the fast developing ICT (Information and Communications Technology) landscape, the ambition is to be a preferred transformation partner for existing and new customers.

Ericsson has its headquarters in Stockholm, and the Ericsson share trades on Nasdaq Stockholm and on NASDAQ, New York.

This report has been prepared in accordance with the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines, and includes a GRI Content Index (p. 64); a complete GRI compilation appears online. The report has been assured by PricewaterhouseCoopers, see Assurance Statement on p. 68. Part of the scope of the assurance consists of a review of the Sustainability & Corporate Responsibility report (in accordance with GRI G4 Core Guidelines), an audit on Ericsson Carbon Footprint (Own activities), site - visits in selected countries to review local S&CR management and reporting processes, as well as an agreed upon procedures review of Conflict Minerals information and an examination of the process for the OHS Incident Review Board.



Ericsson Compliance Line

For reporting of suspected violations of laws or the Ericsson Code of Business Ethics, please visit 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:

A Technology for Good volunteer working in the Connected Mangroves project, which used mobility, IoT and cloud technologies to empower local communities and support climate action.



ABOUT THIS REPORT

This report, together with additional information available online, summarizes our 2016 sustainability and corporate responsibility (CR) performance. It is Ericsson's 24th 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 Communication on Progress

Ericsson has been a signatory since 2000. We report our Communication on Progress annually and according to the Advanced Level criteria since 2012.

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

This is the third year that Ericsson has reported according to the UN Guiding Principles (UNGP) on Business and Human Rights Reporting Framework, and we have a UNGP Reporting Framework Index, p. 66.

Report Boundaries

Unless otherwise stated, all information and data pertains to activities undertaken from January 1, 2016, to December 31, 2016. The report covers the Ericsson Group, i.e. Telefonaktiebolaget LM Ericsson and its subsidiaries. The Ericsson Annual Report 2016 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. We use our technology, solutions, advocacy and expertise to create positive impacts for our stakeholders and our business, while managing environmental, social and ethical risks. In the Networked Society, Ericsson is a leading advocate of Technology for Good. It is a concept we work with every day to address areas such as climate change, poverty, education, human rights and humanitarian issues, and it 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.

CONTENTS











About Ericsson and this report	i
Ericsson's commitment to Sustainability and Corporate Responsibility	2
Ericsson solutions to help achieve the Gobal Goals	4
Creating positive impact and mitigating risks	6
Managing the digital transformation	8
With engagement, greater insight	10
Advocacy puts ICT on the agenda	11
Staying focused on material issues	. 12

CONDUCTING BUSINESS RESPONSIBLY

Building on a strong foundation	15
Through a human rights lens	16
Human rights in sales compliance	
Strengthening global anti-corruption initiatives	
Maintaining high standards for suppliers	
Managing raw materials in the supply chain	
A safe and healthy workplace	
It starts with our people	
Leading for the future	
Focus on diversity and inclusion	30
Helping spark positive change	
Facts and figures	33

ENERGY, ENVIRONMENT AND CLIMATE ACTION

Coming full circle	35
ICT footprint on downward energy trend	36
Energy in focus as networks expand	37
From waste to resource.	40
Tracking the carbon footprint of our own activities	41
Facts and figures	42
A catalyst for the low-carbon economy	43
Sustainable urbanization challenges	45
Advancing the climate agenda	47

INTERNET FOR ALL

Leaving no one behind	50
Bringing internet to all	51
Driving financial inclusion	52
Digitalizing education for greater impact	53
With ICT, enhanced humanitarian response	55
Ericsson response on the ground in Haiti	56
Helping refugees reconnect	. 57
For youth, tools to foster peace	. 58
A second chance	. 59

Engage with us6	51
Objectives and achievements6	62
GRI Index6	34
JNGP Reporting Framework Index 6	6
ndependent Auditor's Combined Assurance Report 6	38
ndependent Auditor's Report on Conflict Minerals	39

ERICSSON'S COMMITMENT TO SUST AND CORPORATE RESPONSIBILITY

President and CEO



At Ericsson we believe that sustainability and CR are cornerstones of building a company for the future and long-term value creation. We work on two dimensions, reducing risks and creating positive impacts.

Our ambition is to develop and deliver solutions to support climate action. We will do this by taking into account three levels: our own operations, our portfolio and installed base, and our ability to offset carbon emissions in society. This will not only help society reach climate goals but also improve our own efficiencies, and deliver value to our customers.

For example, our successful deployment of the world's first "pure solar" 500 Watt solar-powered site in Myanmar made solar more economical than diesel for the first time. As well as cutting costs, this innovative solution cracked a widespread problem in many emerging markets: how to get power to off-grid radio base station site connections. This is a great way to bring shared value to customers and society.

We are also directing R&D muscle to break the energy curve on 5G—the latest generation of mobile technology—with encouraging results and we aim to be at the forefront of that change.

A responsible business

Conducting business responsibly is essential to building trust with our stakeholders and one of my top priorities as incoming CEO is to ensure that responsible business practices are upheld. This starts with creating an even greater sense of leadership and "tone from the top." Our corporate responsibility (CR) standards are among the highest in the industry. We have strong programs in areas such as human rights, anti-corruption, occupational health and safety and responsible sourcing and we continue to support the ten principles of the UN Global Compact and the UN Guiding Principles for Business and Human Rights. A robust approach that combines prevention and accountability helps mitigate risks and reinforce the right thing to do.

Ericsson is currently voluntarily cooperating with inquiries from the United States Securities and Exchange Commission and the United States Department of Justice regarding its compliance with the U.S. Foreign Corrupt Practices Act. As of today. these inquiries concern a period from January 1, 2007 and onwards, and we will make additional disclosures regarding these inquiries to the extent required. It is important to underline that Ericsson has a zero-tolerance approach to corruption and we continuously strengthen our compliance processes and how they are implemented. Over the last year we intensified our efforts, adding both internal resources as well as engaging outside counsel to support the overall process and give an outside view of the robustness of our programs.

A strong business

Providing internet access to the world's population is a great business opportunity and a powerful way to deliver on the Sustainable Development Goals. Our goal is to enable cost-efficient upgrade paths from 2G to 3G to 4G and find viable ways to bring Internet for All.

By connecting our portfolio, our customers and sustainability, we want to build a strong and profitable company now and for the future.

Börje Ekholm President and CEO

Senior Vice President and Chief Sustainability Officer



Our work within sustainability and CR is as much about embracing opportunities as tackling global sustainability challenges, and we use the UN Sustainable Development Goals to measure our impact on society.

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

Starting with a solid foundation

Continual improvement of CR issues is a top priority for us. We emphasize accountability and responsibility for all Ericsson employees in adhering to the company Code of Business Ethics and continually strengthen our programs. We use the UN Guiding Principles Reporting Framework to report on our human rights work, and we are the only ICT company to do so.

Towards a low-carbon future

The passage of the global climate agreement was an important milestone, and we continue to advocate for ICT based solutions as viable means for cities and countries to reduce their own carbon footprints. Our leading research shows that despite significant growth in data traffic, the energy and carbon footprint of ICT has started to decrease. We have set ambitious new targets on our portfolio and especially for 5G.

Bringing internet to all

When it comes to bringing an additional 4 billion people online, we know that mobile broadband will be instrumental. The fastest and most effective way to do this is on enabling cost efficient upgrades from 2G

AINABILITY

to 3G and to 4G, and we are focused on delivering solutions to our customers that address the affordability and accessibility barriers.

As an industry leader, we advocate strongly on how ICT can help shape more sustainable societies and we engage in public-private partnerships to advance shared aims and vision. Our work in the Broadband Commission for Sustainable Development continues to drive the fundamental role of mobile broadband as the key enabler to realizing Internet for All.

We are also delivering innovative programs such as Connect to Learn, using mobile broadband and cloud solutions to enable internet access in schools, currently benefiting 80,000 students in 23 countries. And employees are also making a difference – our Technology for Good volunteer programs are making a difference in local communities in 72 countries around the world.

Advocating for change

It is clear that business has a key role to play in supporting achievement of the SDGs, and we are championing this effort in fora like the Business Commission for Sustainable Development, to encourage more companies to engage.

Through the World Economic Forum Global Council on Humanitarian Response, we are working with public and private partners to drive action and build alliances for humanitarian response, and we are making a difference with partners like World Food Programme in emergency situations such as Hurricane Matthew in Haiti, with Ericsson Response.

Yet the potential of mobility, broadband and the cloud to address a range of sustainability and CR issues remains highly underleveraged. It is vital that we scale the power of ICT so that everyone can reap its benefits.

Cone bet m

Elaine Weidman-Grunewald Senior Vice President and Chief Sustainability Officer

Chairman of the Board



Our vision is to be a responsible and relevant driver of positive change in society, and we strive to have a positive impact in every market where we operate. This approach is what we call Technology for Good.

Our aim is to deliver results along the triple bottom line of financial, environmental and socio-economic performance, focusing on our core business. The Ericsson Board of Directors is keenly aware of the importance of sustainability and corporate responsibility (CR) to the company and to our stakeholders. We recognize that proactive management of these issues creates value in the short-, medium- and long term.

Opportunities for mobile technology to positively impact society are growing rapidly, from improving our products' energy performance to building out mobile broadband to connect the unconnected. Growing the market for ICT-enabled solutions that advance sustainability is a cornerstone of our business strategy.

Good governance is also at the core of our business and a key role of our Board is to ensure that strong foundations are in place to support responsible business practice across our global operations. Among our current priorities are responsible sourcing, occupational health and safety and fighting corruption.

Ericsson's commitment to conduct business responsibly is set out in our Code of Business Ethics. This is the guiding framework that everyone performing work for Ericsson—employees as well as suppliers working on the company's behalf—must follow. Ensuring that these values are upheld is of particular importance to the Board and must remain an ongoing focus as Ericsson continues to deliver the benefits of the Networked Society to people around the world.

We also know that technologies have risks that need to be managed. In our industry these risks include threats to the right to privacy and other human rights. The Board is aware of these risks and receives regular updates to ensure that necessary action is taken to address them.

Since Ericsson's founding 140 years ago, we have always been guided by the importance of access to communication as a basic human need. That commitment is as strong as ever. Sustainability and corporate responsibility, and the power of technology to create positive change, will continue to be a compass that guides Ericsson on our journey.

Leif Johansson Chairman of the Board

ERICSSON SOLUTIONS TO HELP ACH



Implementation of the UN Sustainable Development Goals (SDGs) aathered steam in 2016,

a year after their adoption. The SDGs urge global action to tackle three overarching areas by 2030: end poverty, combat climate change and fight injustice and inequality. We see ICT as a powerful enabler for all 17 goals. While there are considerable challenges to be tackled in achieving this ambitious agenda, these examples of our products, services and solutions around the globe demonstrate the considerable opportunity for ICT to accelerate achievement of the SDGs while supporting the business.





Mobile financial services support financial inclusion. ASBANC and Ericsson's next-generation mobile financial services aims to reach 2.1 million unbanked Peruvians by 2019.



AsiaCell we are deploying Connect to Learn in Domiz refugee camps in Iraq. Connect to Learn is also deployed in 22 other countries



When Hurricane Matthew hit Haiti, employee volunteers with our disaster relief program Ericsson Response set up emergency communications to assist the World Food

Programme.



6

In a public-private partnership, we are deploying Connect To Learn in Myanmar, improving literacy and life skills for over 21,000 students; more than 50% benefiting are girls.



With operator Telenor, we deployed the world's first 500 Watt solar-powered radio base station site in Myanmar, making solar more economical than diesel for the first time.



ICT boosts health systems. In Croatia, we delivered a nationwide e-health system, connecting primary healthcare teams and digitizing medical records, prescriptions and referrals.

A research project we are **CLEAN WATER** conducting with UN-Habi-AND SANITATION tat aims to address water quality, availability and affordability in Nairobi, Kenya using sensors and connected infrastructure.

DECENT WORK AND B DECENT WORK AND A CONOMIC GROWTH

Mobile money spurs access to banking services. In Uganda, we work with operator MTN Uganda to deliver mobile financial services that can help drive economic development.

IEVE THE GLOBAL GOALS





ity. In Ghana, female secondary students are having the opportunity to pursue their education through our global education initiative Connect to Learn.

CLIMATE Action 13

nerable to climate change, our Connected Mangroves initiative in Malaysia aims to rehabilitate and connect up to 10,000 mangrove seedlings by 2020.

In our Tuscany 5G research project, connected agri robots interact with the biological environment, detecting, for e.g., parasites, using processing and analytics in



In Goiania, Brazil, our solu-

tion for connecting city

public transport while

reducing carbon

emissions.

buses to a mobile broad-

band network is improving

14 LIFE BELOW WATER

With AT&T, Ericsson is monitoring water quality using wireless sensors at key watershed locations in the city of Atlanta, to help protect water in the Chattahoochee River Basin.

At the World Economic Forum in Davos, Switzerland, the Business Commission for Sustainable Development launched a report on the role of business in achieving the SDGs.

we work to bring ICT and

life skills training for peace

and community building to

youth in conflict regions

like South Sudan.

17 PARTNERSHIPS FOR THE GOALS

STRONG INSTITUTIONS

5

CREATING POSITIVE IMPACT AND MITIGATING RISKS

Through our technology, competence and leadership, we create business value by delivering positive impacts for society while reducing risk.

Our sustainability and CR strategy is a core part of our business strategy and embedded across the company. The UN Sustainable Development Goals (SDGs) are the framework we increasingly use to define and measure our impact. Our five-fold strategy is to:

- > Leverage trust as a business advantage
- Establish leadership in energy performance
- > Establish a circular economy for materials, waste and water
- > Develop and deliver solutions to support climate action
- Scale the impact of Technology for Good.

Embedding and aligning the strategy

ICT can help deliver change on the scale needed to implement the SDGs and meet the commitments set out in the Paris Agreement on climate change.

As a responsible and relevant driver of positive change in society (see illustration),

we use the SDGs to set our own vision for how we can contribute with our technology and competence.

Conducting business responsibly

Being a trusted partner lies at the heart of this strategy. Our policies and directives apply globally and we work actively to uphold them. Our ability to deliver solutions, spearhead initiatives and build partnerships—including our efforts in support of the SDGs—depend on us operating with integrity and transparency wherever we do business.

Energy, environment and climate

ICT can play a transformative role in helping other sectors of the economy decouple growth from resource use and contribute to reduction of societal carbon emissions as well as the protection of air, water and other environmental resources.

Circular economy approach

To maximize this positive impact we take a circular economy approach with a focus on three key areas: 1) leadership in product energy and environmental performance, 2) environmentally responsible use of materials, waste, and water, and 3)

reducing the carbon footprint of our own operations.

Scale the impact: Internet for All

A key part of our strategy is to bring the benefits of mobile communications and Internet to everyone. In addition to connecting the world, we apply our technology, leadership, and innovation in areas such as education, improved livelihoods, and humanitarian issues such as refugees, peace building and disaster response, with the aim of scaling the impact of our Technology for Good initiatives.

Setting targets

Meeting the stretch goals set out in the SDGs calls for a transformation of societies far deeper and faster than in the past. We use a framework and methodology to assess and describe the positive impact we bring to society, set further targets and monitor progress. We are continually refining our methodology with peers within academia to describe the positive impact we bring to society.

Assessing impact and risks

In support of our sustainability and CR strategy, we measure annual and long-term targets according to positive impacts

Ericsson's wanted position in the Networked Society

Customer Leading ICT transformation partner

Employees Attract, develop and retain best talent



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

Shareholder Shareholder value creator

Society

Responsible and relevant driver of positive change

and risk mitigation. Our positive impact is currently measured in two main ways:

- > Positively impacted number of people
- Reduced societal greenhouse gas emissions.

CR risk mitigation is measured in the following areas:

- > responsible sourcing
- > anti-corruption
- > sales compliance adherence
- > Occupational Health and Safety.

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

Business integration

Sustainability and CR are integrated in our business strategy execution, target setting and risk management process which involves Regions, Business Units, Group Functions and Customer Groups. We are at a critical inflection point, enabling transformative and disruptive change across industries and society."

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 comprises senior executives who approve the strategy and targets that support our commitments. For more information on governance, see p. 15.

Tracking performance

We report annually from a value chain perspective on our progress on a range of objectives and achievements associated with our most material issues (p. 62), with the aim of delivering continual improvements. To inform our strategy, we engage regularly with stakeholders and draw insights from trends and use an evidencebased approach, channeling our knowledge gained through, for example:

- Life-cycle assessments (LCAs) for measuring environmental and carbon impacts
- > Monitoring and evaluation studies
- Insights from Ericsson ConsumerLab studies
- > Human Rights Impact Assessments.

Leveraging our strategy, we will continue to be a leading voice for sustainable development and the role of our technology to accelerate action towards our shared global agenda.



The UN Sustainable Development goals (SDGs) were a key focus of the agenda at the Ericsson Leadership Summit in 2016.

MANAGING THE DIGITAL TRANSFORMATION

ICT is driving rapid transformation of the economy and nearly every aspect of our lives. Breakthroughs such as 5G, big data and the Internet of Things (IoT) are opening up opportunities to enhance sustainable development and address global challenges. This enormous potential must also be balanced with mitigating risks and addressing societal concerns. ICT – notably mobile broadband – has demonstrated the fastest, most global technology uptake in human history. In the future, rapid innovation around technological advances such as IoT, big data, automation, advanced robotics, artificial intelligence, virtual and augmented reality, 3-D printing, and small low-battery sensors promise further substantial gains across the global economy.

The promise of 5G and IoT

Research from Ericsson ConsumerLab on the "10 hot consumer trends for 2017" shows that consumers are increasingly relying on IoT devices for applications using virtual reality, artificial intelligence, and other technologies, shaping new business models and value chains. The deep and far-reaching disruption driven by the Networked Society also offers unprecedented opportunities to address global sustainable development challenges and accelerate action on the SDGs.

ICT-enabling solutions are already seen in the growing use of smart meters in the utilities industry to facilitate more efficient management of energy, water or gas consumption (p. 43), connected vehicles (p. 44); mobile financial services (p. 52) and use of IoT and sensors for monitoring water use and quality. In the health sector, advances in robotics are expected to enable remote surgery. In manufacturing



A Connected Tuscany, shows how the opportunities of digital transformation can bring efficiency and sustainability gains to an entire region across every sector of society.

and mining, IoT applications can lead to benefits within factory automation, realtime monitoring of facility and process conditions and remote control of heavy machinery to lower risks in hazardous environments.

Purpose-driven ICT

It will be key to have purpose-driven ICT implementation to achieve the potential gains while minimizing negative impacts. For example, it is not enough to have smart cities, but cities need to be sustainable as well. A smart, sustainable city is an innovative city that uses ICT to deliver basic services to citizens such as education, healthcare, and food to improve quality of life, efficiency of urban operations and services, and competiveness while embracing its native culture. In essence, it is a city that respects the economic, social and environmental needs of its present and future inhabitants (p. 45).

5G set to boost pace of change

The latest generation of mobile broadband, 5G, will accelerate the digital transformation and support the ongoing trend towards IoT. The first commercial 5G networks are expected to be available by 2020, with 550 million 5G subscriptions forecast by 2022 (Ericsson Mobility Report). For more on 5G, see p. 39.

Innovation in action

Here's a snapshot of some of the ways that Ericsson is helping to advance the digital transformation to improve quality of life and support sustainable development:

Data for humanitarian assistance: Big data is increasingly used to contribute to

social good; for instance, to better understand disease epidemics (p. 55).

Transport: With sustainable transport leader Scania we're exploring how 5G networks will enable remote operations, driver-assist features and autonomous vehicles to improve traffic flows and boost fleet utilization and vehicle safety (p. 44).

Agriculture and food security: ICT applications with, for example, sensors, IoT, big data and robotics can help to foster sustainable production and consumption, optimize value chains and reduce resource usage and waste by controlling and detecting plant disease and insect attack or measuring humidity. For example, with RISE Research Institutes of Sweden, we're using new technologies such as sensors, communications and data analysis to investigate how digitization can create a "smarter food chain." The project is focused on the the digitization of the agricultural and food chain, using new technologies such as sensors, communications, and data analysis. The feasibility study will pave the way for demonstration and test farms where new techniques can be tested by customers and technology developers.

Environmental monitoring: We've developed customized deployments using IoT, sensor and data analysis for Connected Water (p. 48) and Connected Mangroves (p. 47) and envision a range of similar ICT-enabled applications. For example, through microweather, we're turning citywide microwave link networks into a local weather radar system that can capture and process rain intensity data in real-time and offer visual information about rainfall to support climate resilience and early warning systems (see illustration below).





Source: Ericsson Mobility Report, November, 2016

INTERNET OF THINGS

The Internet of Things (IoT) is the network of physical objects that contain embedded technology to communicate and sense or interact with their internal states or the external environment. Examples include wearable devices that track individual health data, smart meters, connected vehicles, and sensors that monitor water quality or weather patterns.



It is important to address risks and societal concerns associated with emerging technology. Privacy and security issues around protecting the integrity of individual data and the use of big data analytics and risks must be managed and balanced against the benefits to society. We view privacy as fundamental for establishing trust in the Networked Society and strongly support the right to privacy, and have a strong privacy and security program in place (p. 18).

In growing economies, another consideration is "rebound effects" from ICT. For example, productivity gains from incorporating ICT into production and logistics could fuel further consumption and thereby increase consumption-related emissions. To counteract this "rebound effect," strategies and incentives must be put into place to encourage citizens to change their consumption habits and reduce their total impact on the environment.



Interpolated Microwave Links



These examples illustrate our microweather concept, where microwave links are able to collect more granularity in the storm intensity than radar. This detailed information can be useful for new applications such as "real-time sewage optimization" to reduce the impacts of heavy floods.

WITH ENGAGEMENT, GREATER INSIGHT

Our stakeholder engagement aims to create meaningful dialogue and build relationships that can help achieve shared goals.

By reaching out to our stakeholders and creating dialogue on issues and concerns of common interest, we build trust, gain insights critical to our business, spark innovation and build relationships that advance our vision of a Networked Society. A robust stakeholder engagement approach also takes the pulse of stakeholder concerns so that we gain insight into risks as well as opportunities.

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 engage with stakeholders on a regular, ongoing basis, in many different fora and on a diverse range of topics. This includes employee engagement activities, joint projects and initiatives; customer meetings; investor meetings; surveys; participation in industry groups and representation on decision-making bodies and academic research. We also gain stakeholder insight in other ways, such as in-person meetings, consultation with affected stakeholders, and research collaboration with academia, institutions, industry peers and others.

We leverage our social media to extend the conversation. We have a steady and growing engagement with our Technology for Good focused social media channels, with a particularly strong base on the Facebook page @TechnologyForGood.

We engage with our stakeholders on a wide range of issues, including supply chain management, energy efficiency, human rights impact assessments and our Technology for Good programs to support humanitarian assistance, access to education and other sustainable development goals. The engagement approach helps us identify the stakeholders, issues and ways to engage in order to incorporate feedback into our current and future efforts.

An open dialogue

We engage with a diverse range of stakeholders, such as with NGOs and governments in our human rights consultations. We are better able to address the challenges and complex issues surrounding human rights when a variety of views and insights contribute to the dialogue. Similarly, we engaged in dialogue around responsible business with investors during 2016 to provide clear and transparent information about our responsible business practices.

Topics of interest for investors during our meetings in 2016 included anti-corruption, privacy and cybersecurity; Board engagement with sustainability; sustainability and CR target measurement; ensuring compliance with targets across the company; responsible sourcing including conflict minerals and OHS, and responsible handling of staff reductions. Some investors also inquired about how we work with the SDGs.

A two-way conversation

We are also a member of a Stakeholder Panel on Responsible Business convened in 2016 by our customer Telefónica, a Spanish multinational broadband and telecommunications provider. The panel invites experts in environmental, social and ethical matters including companies and civil society organizations to meet quarterly to discuss sustainability trends, stakeholder concerns and provide insight on global sustainability developments as well as identify best sustainability practices. We appreciate the opportunity to share our insights and experience as well as listen to and learn from others.

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.



ADVOCACY PUTS ICT ON THE AGENDA



Elaine Weidman-Grunewald, Senior Vice President and Chief Sustainability Officer, Ericsson (standing) at the Inaugural Dialogue with the Private Sector on The Unique Role That Business Has to Play in Ending Violence Against Children at the World Economic Forum annual meeting.

Through our advocacy, we aim to provide leadership in accelerating action on the Sustainable Development Goals.

With Partnership for the Goals (SDG 17) at the heart of the SDGs, we take a proactive leadership role in a number of high-level fora and collaborate with a wide range of stakeholders to scale the impact of our advocacy efforts.

The private sector role in the SDGs

The role of the private sector to advance sustainable development is increasingly evident. As a member of the Business & Sustainable Development Commission we work to highlight the role of the private sector in achieving the SDGs.

New research from the Commission shows pursuing 60 sustainable and inclusive market "hotspots" in just four key areas (energy; cities; food and agriculture; health and wellbeing) could create at least USD \$12 trillion in business value by 2030 – equivalent to 10% of forecast GDP – and generate up to 380 million jobs, mostly in developing countries.

Through our engagement with the UN Global Compact we work actively with its 10 principles on human rights, labour, environment and anti-corruption. We are part of the Compact's Caring for Climate initiative and CEO Water Mandate, committed to taking meaningful action to address climate and water challenges.

ICT underpins achievement of the goals

In our sector, we have led the way in developing solutions and connecting the role of ICT to achievement of the global goals. Through our work in the Broadband Commission for Sustainable Development and its annual report on The State of Broadband as well as our research with the Earth Institute at Columbia University, we demonstrate the solutions needed to achieve and in some cases accelerate achievement of the goals.

Internet for All

Through our work in the Global Connect Initiative, the Alliance for Affordable Internet and the Internet for All Steering Group of the World Economic Forum, we aim to ensure that the benefits of the internet, which underpin achievement of the SDGs, are affordable and accessible to all. In these fora we are assessing existing efforts and progress towards connecting the 3.9 billion people not on the internet and developing innovative approaches and solutions on how these efforts can be scaled and replicated.

Humanitarian Response

In 2016 we were the first company to commit to the UN Office for the Coordination of Humanitarian Affairs Connecting Business Initiative, a multi-stakeholder initiative that provides a mechanism for the private sector to engage with the UN system, national governments and civil society in a coordinated manner on crisis risk reduction, emergency preparedness, response and recovery.

STAYING FOCUSED ON MATERIAL ISSUES

To provide a strong foundation for our strategy and decision-making, we regularly review our most significant sustainability and CR issues.

Materiality assessment is a central component of our sustainability and CR strategy, target setting and risk management and reporting process. As part of this, we consider a wide range of economic, environmental and social impacts significant to our business, or which substantively influence the views and decisions of our key stakeholders.

We use a materiality matrix to review significant issues on an annual basis, taking into account emerging trends, stakeholder feedback and other input. We also make adjustments as needed to incorporate critical issues as they arise, for example, the protection of children's rights took greater precedence as an emerging issue in 2016 (p. 19).

Setting the right priorities

Since publishing our first materiality assessment in our 2012 Sustainability and CR Report, we have refined our approach, sharpening our focus on our most significant issues. Some issues will have longterm significance for the business, such as the right to privacy and security issues, while others may have relevance in the short- to mid-term.

As a first step we begin each year with a baseline, reviewing previous materiality assessments, along with updates and developments during the year. We draw on life-cycle assessment to identify and measure environmental impacts and to identify opportunities to increase our positive impacts along the entire value chain. Human Rights Impact Assessments and the Sales Compliance Process are also helpful in identifying salient human rights issues (p. 16 and p. 19). Each material issue and applicable 'boundary' – i.e., where in the value chain the impact occurs – is described in the report.

Defining our approach

Our materiality matrix (p. 13) is composed of the following quadrants:

Actively address and engage: Issues that are identified as most significant to Ericsson and our stakeholders are actively addressed. Where necessary, we investigate and adjust and/or implement new governance procedures to ensure business sustainability and accountability. We actively engage stakeholders on these issues through dialogue and advocacy, to discuss and mitigate potential risks and enhance positive socio-economic and environmental effects of mobility, broadband and the cloud.

Assess and engage: These are issues in which stakeholders express some interest. We monitor the issue, report on our performance in these areas and continue dialogue as needed.

Assess and address/engage when appropriate: These are areas on which we engage with selected stakeholders when appropriate, but do not necessarily report on. We have procedures in place that aim to ensure that we are working according to our stakeholders' expectations on issues deemed relevant.

Employee survey

In 2016, we conducted a focused survey on sustainability and corporate responsi-

bility (CR) with a representative sample of active employees. The results showed that 85% of employees surveyed perceive Ericsson's work with responsible business to be a competitive differentiator; 83% believe Ericsson is living up to the position of relevant and responsible driver of positive change in society; and 73% agree that Ericsson's sustainability and CR strategy is integrated across the company. The results help inform our materiality assessment.

Customers and investors are also important stakeholder groups for our company. We seek information from them through surveys and dialogue; for example, we are a member of the Telefónica Stakeholder Panel on Responsible Business (p. 10).

Key issues in 2016 were anti-corruption, right to privacy, product energy performance and how the company is working with the Sustainable Development Goals (SDGs).

We value stakeholder input and welcome feedback and ongoing dialogue on emerging issues relating to our business activities.





Materiality Matrix

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 (including materials sourcing)
- 7 Diversity and inclusion
- 8 Occupational health and safety
- 9 Employee engagement
- 10 Responsible tax

Energy, environment and climate change*

- 11 Ericsson carbon footprint (GHG emissions) and climate change
- 12 Product energy performance
- 13 Materials usage
- 14 Life-cycle impacts of products and services (including electrical and electronic waste management)
- 15 Water and wastewater management
- 16 Contribution to low-carbon economy
- 17 Sustainable cities

Communication for all*

- 18 Strategic partnerships for socio-economic development
- 19 Access to education (including peace building and conflict resolution)
- 20 Access to communication
- 21 Humanitarian response (Including disaster response)

^{*} Numbering for reference in the graph, not in order of importance.

CONDUCTING BUSINESS RESPONSIBLY

BUILDING ON A STRONG FOUNDATION

Conducting business responsibly is the foundation of our approach to sustainability and corporate responsibility. We work continuously to improve and strengthen our responsible business practices.

We have a long-standing commitment to conducting business responsibly built on trust, transparency and integrity. Over the years, we have strengthened our responsible business practices, further integrating them into our operations. With a responsible business approach, we aim to be a trusted partner, better manage risks, and respond proactively to issues as they arise.Our approach is about demonstrating respect – for our employees, for the communities in which we do business, for the planet and for society. We see this as a continual journey.

Our way of working

Responsible sourcing, occupational health and safety, environmental management, anti-corruption, human rights, e-waste and other areas are covered by Group policies, directives and processes. The Ericsson Group Management System includes the Code of Business Ethics, the Code of Conduct, the Occupational Health & Safety Policy and the Sustainability Policy. Our external assurance providers, through the Global Assessment Program, audit implementation of policies and directives, management of risks and achievement of objectives.

Code of Business Ethics, Code of Conduct

Our Code of Business Ethics sets the overall tone for how we conduct business. It 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. It also contains our zero tolerance for corruption and bribery. Employees sign the Code of Business Ethics at the time of employment and periodically throughout the term of employment; the next such signing is planned for 2017.

The Code of Conduct applies to both employees and suppliers and encompasses our company commitments. It is based on the UN Global Compact principles which cover human rights, labor conditions, environmental management and anti-corruption. We respect all internationally proclaimed human rights and we are committed to implement the United Nations Guiding Principles on Business and Human Rights throughout our business operations.

To ensure compliance with legal and regulatory requirements and the high standards that we set for ourselves, Ericsson has adopted internal rules that include a Code of Business Ethics, and other policies, directives and instructions. We have a third-party managed whistleblower system, the Ericsson Compliance Line.

During 2016, a review of both the Code of Conduct and the Code of Business Ethics was initiated to assess the needs for updates and improvements for example in light of the increased focus on modern slavery and human trafficking. A statement on our approach to modern slavery and human trafficking can be found at the Company's website.

Training for employees

All employees are offered online training on sustainability, anti-corruption, human rights and other CR issues. Some 95,900 active employees have taken the anti-corruption training by 2016 and 53,200 have taken sustainability and CR training. As of end of 2015, an e-learning training on human rights and business is available for all Ericsson employees. In addition, specific human rights training was conducted for personnel within, for example, mergers and acquisitions.

Senior level commitment

Responsible business is anchored at the highest levels of our company, starting with the Board of Directors of the Parent Company, the CEO and Executive Leadership Team, who are regularly informed of progress. A cross-functional Sustainability and CR Steering Group provides guidance on strategic and operational issues. An Ethics and Compliance Board, comprised of several executive members, was established in 2016 for overall governance of compliance and ethics within the Group. 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 2016, briefings covered governance updates, strategy execution including risks, performance, and results, specific topics like OHS, human rights, including modern slavery, as well as advocacy activities and stakeholder feedback and perception.

THROUGH A HUMAN RIGHTS LENS

Access to communications is a basic human need and this is embodied in our approach to human rights. We are committed to address and integrate human rights across our value chain. By continually improving our approach to human rights, we are better prepared to confront new issues rising on the agenda and to better manage risks.

ICT brings many benefits, including empowering people to more fully realize their human rights, from freedom of expression and freedom of assembly to economic, social and cultural rights that enable, for example, improved access to health and education. Governments use technology to assist in emergencies, to fight crime and to protect citizens' safety and security.

Other societal benefits of ICT include the opportunity to use big data for social good, such as improving response to disease outbreaks and managing traffic flows in cities. Yet unintended use of ICT to restrict or violate human rights can occur, for instance, when there are illegitimate uses of ICT by governments. There are also societal concerns around cybersecurity and the right to privacy with the use of ICT (p. 18). The benefits of ICT must be balanced against the need to ensure that the right to privacy is protected. As an industry leader, we engage with stakeholders including other members of the ICT industry to address these dilemmas (see "Engaged in dialogue" section).

Over the past several years, we have worked to develop and strengthen our human rights framework to fulfil our responsibility to respect human rights according to the UN Guiding Principles on Business and Human Rights (UNGP) (see illustration). During 2016 we continued to strengthen a number of processes which we describe below.

Respecting human rights

We respect all internationally proclaimed human rights as reflected in our Code of Business Ethics and Code of Conduct. Since 2011, we have been working to integrate the UNGP into our governance framework. These Principles set out the corporate responsibility to respect human rights. This means that business enterprises should avoid infringing on the human rights of others and should address adverse human rights impacts with which they are involved.

Reporting on human rights

In 2016, for the third year, we are applying the UNGP Reporting Framework, the first comprehensive guidance for companies to report on how they respect human rights (p.66–67). We are the first ICT company and one of the early adopters to report according to the Framework.

Defining 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.

We have defined our salient human rights issues to be the right to 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 (p. 20). Broader stakeholder consultations and industry initiatives also provide input to the definition of our salient human rights issues. Additionally, 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.

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.

Conducting due diligence

The UNGP requires companies to have 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 Shift, a leading non-profit center of expertise on the UN Guiding Principles, since 2012 to systematically embed a human rights framework across the company and to



strengthen our due diligence processes. Our human rights due diligence covers processes within sales, sourcing, legal affairs, mergers and acquisitions (M&A) and operations.

We focus on strengthening different areas or processes each year. A key focus was integrating human rights considerations in the M&A process which continued in 2016. Also in 2016, we furthered strengthened the sales compliance process on how to use leverage (p. 20). In addition, we developed a simplified process for human rights impact assessments that can be applied to more countries, beyond the highest risk contexts where a full impact assessment is carried out.

We also worked further with the concept of leverage (p. 18) as well as some initial discussions on remedy (p. 18).

Training and awareness raising

Raising employee awareness about human rights is important for embedding our approach. A human rights and business e-learning available for employees was launched in 2015 and from 2016 it is mandatory for certain functions such as Legal and Security. The training describes human rights issues, opportunities and challenges for Ericsson, human rights and international requirements, and key concepts used in the business and human rights framework. The aim is to help employees understand human rights trends and relevant risks and understand how we work within this area.

Human Rights Impact Assessments

We have developed strong insights into conducting HRIAs over the past eight years, with our first such assessment conducted for Sudan in 2009. After the adoption of the UNGP in 2011, we started to use HRIAs 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

THE PRIVACY DIVIDE

Although privacy has been debated for some time, the heat of the debate is only set to increase. Two in five want to use encrypted services only; another 46% say they need the encrypted protection these services offer. But consumers are divided over this. One in three advanced internet users believes that governments should be able to access any personal data including their own, in order to fight crime and terrorism. Yet more than one out of three believes privacy is over, and that

in the future, all information about people, organizations and governments will be available publicly.



Source: Ericsson ConsumerLab, "10 Hot Consumer Trends 2017"

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.

Over the past several years, HRIAs have been initiated in a number of countries, including Myanmar, Iran, and Ethiopia. We also evaluated human rights issues in Cuba in 2016.

Myanmar

In Myanmar, we continue to evaluate the human rights situation and during 2016, we held a human rights training for our staff involved in the Connect to Learn program in Myanmar (p. 54). The training, which focused on child safety protection education, was conducted together with Save the Children.

Iran

In Iran, we continued implementation of the HRIA. 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. Additionally, all sales for Iran are assessed through the Sales Compliance Process. We continue to evaluate the human rights situation and monitor international developments.

Ethiopia

A HRIA was conducted for Ethiopia in 2015 identifying the following areas as prioritized: Workers' discrimination, Occupational Health and Safety, right to privacy issues, transport and tower accidents, delayed payments and lack of due process. During 2016, we acted upon identified mitigation actions within all the above areas. Some examples include:

- In the area of workers' discrimination, one measure identified was to strengthen the interview process, for example, to hide names on a curriculum vitae (CV) and to train local hiring managers on how to conduct competency-based interviews.
- Suppliers are already requested to sign the Ericsson Code of Conduct (CoC), which includes our OHS standards. One additional mitigation measure identified is to increase the number of suppliers subject to CoC audits, with a focus on those at higher risk of adverse human rights impacts. Another example is to further strengthen the understanding of the CoC by translating it into Amharic, the official language of Ethiopia.

UK MODERN SLAVERY ACT

A topic of increasing importance is modern slavery and the requirements of new legislation around that topic. In line with the UK Modern Slavery Act, a separate statement published on our website describes how we are tackling the challenge of modern slavery and human trafficking throughout our operations and supply chain. The statement outlines our policies and business practices and the plans for future improvements. Regulations and procedures for driving are already included in supplier contracts. One example of additional mitigation actions identified is to strengthen the response to accidents in remote areas.

All our HRIAs include our salient human rights issues (the right of freedom of expression, the right to privacy, and labor standards) and have also provided additional insight on how the salient issues arise and how they can be mitigated.

Customized HRIA

Based on our experience from developing HRIAs in Sudan, Myanmar, Iran and Ethiopia, we decided to develop together with Shift a more simplified process for human rights impact assessments to take the exercise to scale and be able to carry out these assessments in somewhat lower-risk contexts. This process will be a good complement to our more in-depth HRIAs for highest-risk contexts. We developed and tested in 2016 this type of simplified HRIA in Cuba in which we are looking at our salient human rights issues. The process will be tested in additional countries during 2017.

Taking action and remediation

Under the third pillar of the UN Guiding Principles, both states and companies have roles to play in ensuring that victims of business-related rights abuses have access to effective remedy. Remedy means putting right any harm to people.

One way in which we provide remedy is through the Ericsson Compliance Line (p. 21) where alleged violations of the Code of Business Ethics including in relation to human rights may be reported through a whistleblower tool. In 2016, we held an internal workshop with Shift to study present practices on remediation and to better understand the "remedy" part of the UNGP in the context of our company and the industry. We will continue to explore this aspect of the third pillar of the UNGP.

Building leverage

Another important way to take action in support of the UNGP is to use leverage. Leverage is considered to exist where the company has the ability to effect change in the wrongful practices of an entity that causes harm (principle 19, UNGP). Our aim is to build leverage, both within the company and across our value chain, to prevent and mitigate potential human

Spotlight on cybersecurity

As the world becomes more interconnected, cybersecurity is a growing concern. The evolution of cloud and mobile technologies, as well as the emergence of the 'Internet of Things,' bring huge benefits but also reinforce the importance of effective security and risk management to protect critical infrastructure and privacy from increasingly sophisticated hacking attacks machine-to-machine strikes. As the rate of incidents continues to escalate, the magnitude of right to privacy issues, related brand, reputation, and fiscal impact is driving organizations to address cybersecurity risk.

Our focus is on protecting critical assets in a rapidly changing environment and responding proactively to existing and emerging threats, so that both communications and the right to privacy are protected.

Privacy by design

Our Privacy by design approach encompasses both our corporate IT network and products. The framework requires that privacy is considered from the outset of any product release as an integral part of product development. Mandatory Privacy Impact Assessments are used to assess and manage privacy-related risks in our products. 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. 20).

We are involved in driving dialogue that brings greater clarity and consistency to how the industry works with privacy, including development of industry standards. We contributed to the work of developing the Security Assurance Methodology (SECAM), a new security assurance and evaluation framework for mobile network products developed by 3GPP, a standards-setting body. Appropriate public policies and rigorous internal processes can help to mitigate potential risks. To reduce vulnerability of interconnected energy infrastructure to hacker-induced blackouts, for example, strong cybersecurity measures like access control, encryption of data and the use of secure communication protocols are needed. An example of growing legislation in this area is the EU Directive on Network and Information Systems, which sets out obligations for operators of critical infrastructure to ensure cyber-resilient systems.



Protecting the rights of children

In addition to our salient human rights issues, respecting and promoting children's rights are also important. As a more vulnerable population, children's human rights often require particular emphasis. At the UN High-Level event on Solutions to Achieve the Sustainable Development Goals for Children in 2016, we presented a first-of-its kind mobile application that equips adults – caretakers, teachers and parents – with the skills and resources necessary to recognize, prevent and respond to child sexual abuse. The "Stewards of Children Prevention Toolkit" mobile app was developed together with World Childhood Foundation in the US, and the non-profit organization Darkness to Light, and is available at www.socapp.org.

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. During 2016, we also developed guidance for how to use images of children in media.



rights risks. In collaboration with Shift, in 2016 we further developed insights gained from workshops in 2015 on how to build leverage to address some of our key salient human rights. This includes strengthening the language in contracts as well as the processes within the sales compliance process.

Engaged in dialogue

Stakeholder engagement is central to our approach. As understanding of the increasingly important interrelationship between ICT and human rights matures, stakeholder expectations are evolving rapidly over the role ICT companies can and should play. There is growing awareness surrounding the possible risks that misuse of ICT poses to human rights and rising expectations for greater transparency on business and human rights, including increased legislation in this area. Given the complex and fast-changing landscape of ICT and its intersection with human rights, there is a need for ongoing dialogue. In order to enhance competence development, we provided training in 2016 to key functions in the company.

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.

- In 2016 this engagement included:
- > Holding consultations with civil society and human right organizations among others to gather input for the HRIA for Ethiopia. The right to privacy was highlighted as an issue and mitigation actions were further strengthened as a result of these consultations.
- > Sponsoring an international multi-stakeholder event at Wilton Park with the Institute for Human Rights and Business on safeguarding rights in the big data revolution. The roundtable explored how to ensure safety and security, and protect digital privacy, in relation to state responses to threats and dangers and considered steps business can take to ensure rights are respected. Challenges facing data controllers regarding ownership, consent, transparency, accountability and trust were also discussed. Insights from the event inform our right to privacy work.

- > Taking part in a consultation with the UN Special Rapporteur on Freedom of Expression focusing on the nature and scope of a company's obligation to engage in due diligence and assess human rights impacts.
- Involvement with the Stakeholder Advisory Group of the Global e-Sustainability Initiative (GeSI) working group on human rights, where right to privacy and other topics were discussed.

HUMAN RIGHTS IN SALES COMPLIANCE

As part of our approach to managing human rights across our business, we integrate human rights due diligence into the sales process.

We apply a human rights lens to our sales process in order to assess, prevent and mitigate potential impacts related to human rights. Specifically, we focus on two of our most salient human rights issues, the right to freedom of expression and the right to privacy. The aim is to reduce the risk that third parties use our technology, services and knowledge directly or indirectly in a way that impacts negatively on human rights.

All sales and business engagements are subject to sales compliance as part of the Ericsson Sales Compliance process. All engagements that meet specific criteria are reviewed to identify risks for unintended use. Technical mitigations may be applied as appropriate, or we may use leverage to extend our influence.

- The process includes the following:
 The Sales Compliance Policy and Directive protect the Ericsson brand and its stakeholders' interests, and uphold the responsibility of the company to respect human rights
- The Sales Compliance Board is a cross-functional forum for ensuring that business engagements are conducted according to the Sales Compliance Policy. It consists of relevant Group functions and business units. Sales can be approved, approved with conditions or rejected. The board can request a country human rights impact assessment as needed for its decisions.
- > The cross-functional Sales Compliance Core Team analyzes risks, suggests mitigating actions and prepares the input to the Sales Compliance Board. It is represented by all relevant Group functions and business units.

Sales compliance risk methodology



> The Sales Compliance Unit conducts all initial reviews of cases and provides input to the Core Team and the Board.

Taking action

As noted above, the Sales Compliance Board decides about mitigating conditions as applicable. For example, the Sales Compliance Board has taken measures such as requesting that the customer's staff involved in the operation of lawful interception must undergo training prior to deployment. The Sales Compliance process includes procedures to follow up decisions and corresponding mitigation activities. In 2016, we put particular focus on the possibility to strengthen contractual mitigation and use leverage within the sales compliance process.

Criteria for evaluation

Ericsson evaluates the following criteria in the Sales Compliance process:

- Portfolio: Whether the sale includes sensitive products, services and knowledge.
- > *Purpose:* The purpose and context in which the customer intends to use the product, service or knowledge.

- > *Customer:* The type and ownership structure.
- > Country: We place careful attention to countries under sanctions as well as those ranked as high-risk countries by external rankings. 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 right to privacy (introduced in 2016); corruption; democratic governance; freedom of opinion and expression. We continuously follow international developments.

Outcome of cases in 2016

In 2016, more than 600 cases were reviewed in the Sales Compliance Process (see graph). This implies an increase of 37% compared to 2015. We continually work to improve both the sales compliance process and adherence to it.



Source: Ericsson

STRENGTHENING GLOBAL ANTI-CORRUPTION INITIATIVES

At Ericsson, we have zero tolerance for bribery and corruption. This guiding principle is embedded at the highest levels of the company and is implemented through a comprehensive set of policies and processes.

This commitment is central to our corporate culture and is continually reinforced. The way we implement this essential policy is constantly evolving and we strive to go beyond legal requirements of what it means to be an ethical company today.

We recognize the threat corruption poses to sustainable economic and social development. That is one reason why we endorse the United Nations' Sustainable Development Goals, which in SDG16 set a clear goal to reduce bribery and corruption in all forms, and call for more accountable organizations. Corruption is an enormous obstacle to the realization of all human rights - civil, political, economic, social and cultural. With rising stakeholder concern, negative impacts to people and society and increasing legislation, it is important to take a strong stand on anti-corruption.

With customers in 180 countries, many of which are considered at high risk of corruption, we are aware that prevention and accountability are paramount. That is why we are investing considerable time and resources – continuously and systematically – to strengthen our anti-corruption processes. And we are attentive and responsive to improvements that stakeholders and authorities may believe are necessary.

Keeping pace with best compliance practice is also at the heart of a thorough review of our anti-corruption program. We are looking closely both at our compliance policies and processes and at how they are implemented and continuously evaluated. Over the last year we intensified our efforts, adding both internal resources as well as engaging outside counsel to support the overall process and give an outside view of the robustness of our programs.

Our anti-corruption program, headed by the Group's Chief Compliance Officer, is evaluated annually by the Audit Committee of the Board of Directors. It has six central elements:

- > Top-level commitment
- Risk assessment
- > Due diligence of business partners
- > Policies/directives and process
- Implementation (including training and communication)
- > Monitoring and review of the program.

Top-level commitment

Our zero tolerance of corruption has strong top management support. Our approach to anti-corruption is continuously reinforced at employee and executive-level meetings. All Ericsson employees must periodically review and acknowledge the Code of Business Ethics. In 2015, 99% of employees acknowledged the Code of Business Ethics; the next such acknowledgement will be in 2017. We will also ensure that anti-corruption is highlighted at all major leadership meetings during 2017.

Risk assessment

Corruption risks are evaluated as part of Group Risk Assessment performed by all units to ensure that they are aligned with Ericsson's strategy and targets. The Compliance Office also performs corruption risk assessment continuously. Furthermore, anti-corruption has been a focus of the Corporate Audit and has been covered by selected audits during the year.

Focus on due diligence

In 2016, an automated anti-corruption screening tool for supplier and third-party due diligence was tested in our regional operations in Eastern Europe and Central Asia, and is now being expanded. To bolster this approach, in 2017 we intend to establish "Business Partner Review Boards" in each region with the responsibility to ensure that our business partners fulfil our compliance and ethical requirements. Ericsson's Ethical and Compliance Board, comprised of several members of the Executive Leadership Team, was also established in 2016 to ensure overall governance of compliance within the Group.

Training and awareness

By the end of 2016, more than 95,900 active employees had completed an anti-corruption e-learning course aimed at raising awareness of risks, dilemmas and appropriate courses of action. Yet we still see that awareness about the newly introduced Compliance Line (i.e. Ericsson whistleblower procedures) is low. In 2016, a survey covering some 10% of employees, shows that 29% of employees are not aware of the Compliance Line, and 44% of employees are not aware or aware to a low extent, so we have set a new target to raise these numbers.

Key personnel in sales and other relevant functions, including regional leadership teams, receive additional specialized training. A new compliance e-learning course was also launched during 2016 which focuses on anti-corruption, competition law and trade compliance. In 2016, additional resources were added to the Compliance Office, including nine regional compliance officers now reporting directly to that office.

Reporting concerns

Through Ericsson's Compliance Line, an independent whistleblower tool, 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 a year and enables people to report in 188 countries and in over 75 languages.

Handling of reported cases

In 2016, 145 cases of alleged violations of law or the Group's Code of Business Ethics were reported to the whistleblower systems (including the internal channel and Compliance Line but excluding unrelated spam e-mails) and through certain other channels.

A united front

Since 2012, we have been a signatory to the World Economic Forum Partnering 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: a zero tolerance policy towards bribery, and an effective program to counter bribery and ensure its implementation.

Inquiries from US Authorities

Ericsson is currently voluntarily cooperating with inquiries from the United States Securities and Exchange Commission and the United States Department of Justice regarding its compliance with the U.S. Foreign Corrupt Practices Act. As of today, these inquiries concern a period from January 1, 2007 and onwards, and we will make additional disclosures regarding these inquiries to the extent required. It is important to underline that Ericsson has a zero-tolerance approach to corruption and we continuously strengthen our compliance processes and how they are implemented.

MAINTAINING HIGH STANDARDS FOR SUPPLIERS

Ensuring our suppliers meet high social, ethical, human rights and environmental standards is a fundamental part of our responsible business approach.

Managing the social and environmental impacts in our supply chain is part of our value chain approach to embedding corporate responsibility throughout our business. Sustainable management of supply chains is of growing importance to our stakeholders, including customers and investors. While we have long set social and environmental requirements for our suppliers, including a ban on the use of forced or bonded labor and child labor. This issue in particular is rising on stakeholders' agenda, reflected in increasing legislation such as the UK Modern Slavery Act passed into law in 2015 (p. 17).

Supplier Code of Conduct

The foundation of our Responsible Sourcing program is our Supplier Code of Conduct, to which all suppliers must comply. It covers six main areas: employee conditions, occupational health and safety (OHS), supplier compliance, Environmental Management System (EMS), elimination of discrimination, and anti-corruption. 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 OHS requirements are included in the Code.

Assessing risk

Suppliers must complete mandatory Supplier Self-Assessments before they are selected. We also audit certain suppliers. We use a risk-based approach for Code of Conduct audits to identify relevant suppliers to audit. 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 set a target to address all suppliers in the top 80% of supplier spend.

Third-party auditors

In late 2016, we strengthened our approach by introducing third-party audits for the supplier Code of Conduct. We foresee that moving from internal auditors to third-party audits will make supplier audits and assessments more effective and robust. Third-party auditors are expected to bring additional, and more tailored expertise, obtained through their extensive audit activities in various industries.

Continued focus on anti-corruption

In 2016 we piloted an automated anticorruption screening tool for suppliers and other third parties to help ensure that suppliers meet our business integrity standards. Global rollout of the program is scheduled during 2017, see Objectives and Achievements (p. 62–63).

Close collaboration

Working together with suppliers with the aim of continual improvement is an important part of our approach. We offer free online training to all suppliers in four areas: the Supplier Code of Conduct, anticorruption, OHS, and conflict minerals. Both the OHS training for our site-services suppliers (see OHS, p. 25) and a specific training on conflict minerals (p. 24) were introduced in 2016.

Outcome of audits 2016

In 2016, over 330 supplier Code of Conduct audits were performed on identified high-



risk suppliers by Ericsson's Supplier Code of Conduct auditors, and by a third-party auditor. We view each audit as an improvement opportunity and expect suppliers to address identified non-compliances. Audit results vary, but commonly identified areas of improvement include working hours, fire prevention, training and awareness, use of personal protective equipment, and environmental management.

Year on year, analyses of our audit results demonstrate significant advances in all audit areas. In 2016, we exceeded the target in the closing of 85% of critical and warning audit areas, after follow-up (see graph p.22). By closing, we mean evidence has been provided that the supplier has appropriately addressed the nonconformance. In 2016, we strengthened initiatives to ensure timely and well-documented closure of supplier Code of Conduct audit findings. All closed findings must be accompanied by detailed evidence, enabling off-site verification by third-party auditors.

This has further strengthened the robustness of the audit program and the confidence in the results. Any suppliers who repeatedly fail to comply with our Code of Conduct risk being disqualified from further business.

Joint Audit Cooperation

Our own performance as a supplier is also monitored by external stakeholders. We participate in the yearly Joint Audit Cooperation (JAC) Forum comprising 13 of our largest telecom operator customers. JAC members conduct supplier Corporate Responsibility audits of Ericsson factories and suppliers and share results. Several Ericsson sites have been assessed by JAC auditors in the past few years, with good results.

Selected Ericsson suppliers have also been audited by JAC. When findings were observed, corrective action plans were implemented by our suppliers, and approved by JAC member companies. Working hours is the most common finding in JAC supplier audits. Where such findings exist, reports on working hour reduction are regularly provided by the audited suppliers, and reported to JAC for follow-up and approval.



Our approach is to engage with suppliers; this supply chain seminar held in Nanjing, China is one example.

MANAGING RAW MATERIALS IN THE SUPPLY CHAIN

Responsible management of raw materials in our supply chain includes the important issue of conflict minerals.

We are committed to raising transparency and to improve the management of raw materials in supply chain. Electronic components contain many different metals, including tantalum, tin, tungsten, and gold. These four are defined as conflict minerals since they are partly mined in areas where some of the trade is known to contribute to the financing of armed conflict and related human rights violations.

The Democratic Republic of Congo (DRC) is one of the areas where this is known to take place, and where industry organizations and others have been working actively to find more viable and sustainable solutions.

Myanmar is another region where raw materials are increasingly in focus and an important issue that we are closely following. When we reentered Myanmar in 2012 responsible business was a core part of our analysis. We conducted a human rights impact assessment of our operations and concluded that the sourcing of hardware for foreseeable business was expected to be with international suppliers already included in our responsible sourcing program.

Focus on increasing transparency

There are several tiers of suppliers between Ericsson and the mines and also between Ericsson and the smelters and refiners; hence we do not have any direct purchasing relationship with mines and smelters. We believe that collaboration with our direct suppliers and industry peers is vital in improving the business practices in the mineral supply chain. We have actively chosen not to ban any minerals from the DRC or other conflictaffected regions as an embargo can result in severe negative consequences for the most vulnerable groups. Instead we work together with our suppliers to increase the transparency by identifying smelters and refiners in our supply chain as an important first step for improvements in the supply chain.

Through engagement with the Global e-Sustainability Initiative (GeSI), 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 companies can source metals from smelters and refiners certified as conflict free. Ericsson does not source metals from smelters and refiners directly.

Today the scheme focuses on the DRC and adjoining countries but since similar issues exist in other parts of the world we would support expansion of the certification to cover additional geographies. Given the complexities of such an expansion and the risks of losing momentum in improving the work focused on the DRC, expansion must be handled carefully.

In 2016, 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.

Our approach

We are working to find a viable solution to the issue of conflict minerals to ensure responsible and conflict-free sourcing through legitimate trade and positive development in the affected regions. Three basic elements of our approach are as follows:

1) Our suppliers shall establish due diligence processes consistent with the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas;

2) The due diligence shall make it possible to reasonably verify whether conflict minerals originate in the DRC or an adjoining country;

3) Suppliers shall identify smelters in their supply chain through the latest version of the CFSI Conflict Minerals Reporting Template and are recommended to use conflict-free smelters when possible. In addition, we work to build capacity among our suppliers through a freely available training and via the feedback and follow-up within the specific conflict minerals program.

We also encourage our suppliers to contact smelters that are not yet validated as conflict-free to undergo the Conflict-Free Smelter Program (CFSP). In 2016, 94% of the smelters identified among the supplier responses collected were conflict-free validated or active in the validation process.

Ericsson is directly affected by the U.S. Dodd-Frank Act on conflict minerals. In 2016 we continued to work towards the annual filing with the U.S. Securities and Exchange Commission.

Conflict-free certification of smelters

Metal	Number of smelters	Number of compliant smelters	% compliant
Tantalum	37	37	100
Tungsten	41	38	93
Tin	74	65	88
Gold	91	88	97
TOTAL	243	228	94

A SAFE AND HEALTHY WORKPLACE



Safeguarding the health and safety of employees and anyone working on our behalf is a top priority. We actively seek to prevent injuries and work-related illhealth and our vision is zero major incidents.

We aim for a safe and healthy working environment for all. Our inclusive approach to occupational health and safety (OHS) includes all persons employed by Ericsson as well as suppliers working on the company's behalf. Improving global governance of our OHS work has been a focus of our work in 2016.

OHS is integrated with the Ericsson Group Management System (EGMS), which is certified to the OHSAS 18001 standard. We apply a risk-based approach to avoid incidents and prevent work-related hazards. Selected operations undergo internal and external assessments to ensure compliance with OHSAS 18001. Suppliers must also comply with specific OHS requirements (see p. 22).

Continuous improvement

Our global program aims for zero major incidents and a key component of this is Ericsson's Zero Tolerance Safety Rules, established to improve understanding of – and adherence to – workplace safety. The rules exist in 10 languages and are featured in videos on our website in 14 languages. A central focus of the program is increasing OHS training and awareness of project managers, field-service personnel and sub-contractors. Reinforcing governance and inspections, and improving global management tools are also high priorities, including the use of a global incident tool. Among our targets are to increase the frequency and quality of incident reporting and handling, and raise knowledge and awareness of incident handling for selected job roles.

During 2016, we ran campaigns across several regions to raise awareness of the new rules and the zero incident program. Regional OHS representatives presented

Zero Tolerance Safety rules



a training package to a group of suppliers in each region on how to implement the rules in their organizations and the improved simplicity of the new work methods was seen positively by suppliers.

Reporting on incidents

In the event of a major incident our first priority is to take care of the injured and then support others affected such as family and colleagues. The next priority is to report on and learn from any major incidents and near misses to help prevent reoccurrence and deliver our aim of zero incidents.

No fatal incident involving any Ericsson employee has been reported in 2016. Ericsson takes an inclusive and transparent approach which includes engagement with suppliers. We report on both the company's own incidents and fatalities and those of suppliers building and servicing networks on behalf of Ericsson. In total, 17 workplace fatalities were reported by contractors in 2016, compared to the 27 reported in 2015. Of these fatalities in 2016, 14 were contractors' employees and three were members of the public. Half of the fatalities were traffic accident-related.

Traffic was also the biggest cause of major incidents followed by working at heights and working with electricity.

Strengthening our efforts

Any workplace fatality is unacceptable. We have therefore intensified our efforts to manage traffic-related risk by adding more safety requirements to vehicles used by those working for Ericsson as well as emphasizing proper driver safety equipment and providing more training for drivers of motorcycles and cars. Particular effort is being focused on countries where we have significant operations that could present high risk to health and safety, and where the largest number of traffic-related incidents occur. Since 98% of major incidents occur with contractors the focus on improving OHS in the supply chain is key. We follow up to ensure that measures implemented are effective.

Targeting high-risk situations

With over 50% of major incidents related to traffic, in 2016, we scaled up training on motorcycle safety, as many people working for Ericsson, especially in developing countries, use motorcycles to perform their duties. More than 90% of the motorcycle drivers in India, who patrol the fiber networks and often work in a dangerous traffic environment, have been trained in defensive driving techniques. This includes techniques for keeping distance, changing lanes, observing speed limits, and using helmets.

In view of the high number of incidents occurring during Ramadan, we carried out a special information campaign in 2016 on taking extra precaution and care while driving after a long hot day without eating and drinking.

Although the statistical basis is limited and covers a relatively short period of time, the number of major incidents for these two high-risk areas has declined significantly in 2016.

Working at heights is another important risk area for health and safety. We have strengthened oversight to ensure that people working at heights use proper safety equipment and observe our Zero Tolerance Safety Rules.

Use of drones

An innovative way to enhance safety for those working at heights is through the use of drones. We have piloted the use of drones in several countries with successful results, such as reduced exposure to working at heights and improved ability to verify existing structures before carrying out the work, thus minimizing the probability of incidents related to working at heights. However, due to permitting and legal restrictions it is not widely implemented. We will continue to explore and

FINDING THE BALANCE

The Networked Society enables new flexible ways that can boost health and well-being. To promote work-health and to raise awareness in this area we have developed a global sustainable work-life toolkit available to all leaders and employees.

In 2016 several activities were held to increase awareness of the sustainable work-life toolkit. Leaders were encouraged to use the workshops with their teams and complete the learning program on sustainable work-life. In 2017, the toolkit will be developed further with the addition of healthy lifestyle and mindfulness techniques to supporting health and well-being longterm.

monitor use of this approach since it helps us to reduce working at heights activities which may lead to incidents.

Governance fora

In addition to regular management reviews, two key fora for governing OHS were established in 2016:

The Incident Review Board examines all major incidents and decides if root causes of major incidents were within Ericsson control or caused by external factors outside Ericsson's control. The





The lighter purple shows figures for 2015 and the darker purple shows 2016 figures. Source: Ericsson



Ericsson's Zero Tolerance Safety Rules were established to improve understanding of – and adherence to – workplace safety.

board also receives reporting on focused and general actions to improve work methods and reduce risks.

The Global OHS Board provides decisions and guidance on the development and implementation of OHS strategy and practices. Managers are expected to work with their teams and engage employees in health and safety, with regional and country boards supporting implementation. The OHS policy has also been revised to reflect the zero major incidents vision, our risk-based approach, and the Zero Tolerance Safety Rules.

A new system for consequence management governed by the Sourcing Board will be rolled out during 2017. Health and safety is emphasized in all new supplier contracts; if persistent violations occur, the supplier contract may be ended.

VIEWPOINT



"At an OHS workshop organized by Ethio Telecom's Human Resource division, Ericsson helped create awareness, identify areas for improvement and to share best practice. The workshop helped us to improve and enhance our practice as well as to understand gaps in relation to leading companies in the industry."

Enanu Mekonnen, Personnel Management Department Officer, Ethio Telecom

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 2016, Ericsson actively contributed to the finalization of a new version of the standard 62232 from the International Electrotechnical Commission (IEC), which provides methods and procedures for assessing the exposure to radiofrequency electromagnetic fields from base stations. The standard was amended to cover also 5G base station equipment using frequency bands up to 100 GHz, and will be published as an international standard in 2017.

IT STARTS WITH OUR PEOPLE

Our employees are key to ensuring our company's future success and our continued technology and services leadership.

Values at the core

We focus on attracting the best talent, supporting competence development and enabling a work culture of engagement, high-performance, and diversity.

Our core values – respect, professionalism, and perseverance – define our company culture and guide us in our daily work and in the way we do business. They guide us in our commitment to our customers – a commitment that is bound by trust, innovation and performance.

People strategy

Our people strategy has three central elements:

- > Culture: High performance to win; diverse and inclusive environment, and our core values of professionalism, respect and perseverance are our cultural foundation
- Collaboration: Digital enterprise ways of working; share knowledge to drive innovation and be the best brand ambassador for Ericsson
- > Capabilities: Build organizational capability; top competence to build and deliver the best solutions and change makers to drive growth.

Organizational changes

A cost and efficiency program that had been underway since 2014 was expanded in 2016 to secure the company's competitiveness. Actions included headcount reduction activities that were announced and initiated in Sweden, the US, Finland, Spain and the UK. Information and consultation with unions have taken place in accordance with national legislation and when applicable with collective bargaining agreements. We take steps to reduce the negative impact of reduction activities on employees in a number of ways, including supporting affected employees with career counselling or job re-training. The activities vary based on national legislation and collective bargaining agreements.



Strong sense of purpose

Sustainability and CR are critical elements of the Ericsson brand for both current and prospective employees. Our employees share a strong sense of purpose that is associated with the company commitment to sustainability and CR - that Ericsson is a "human company," where it is possible for employees to make a huge impact, given the company's leading role in the digital transformation. Employees engage through volunteering on sustainability and CR issues (p. 32) and have a sense of pride over the many programs that contribute to bringing the benefits of internet to all (p. 51). Given the importance of diversity and inclusion (p. 30) for our company, we recruit and retain talent, regardless of age, race, gender, nationality or sexual orientation.

Employee survey

Each year we take the pulse of our employees' level of engagement and satisfaction with the workplace through employee surveys. In 2016, due to organizational changes that took place from July 1 and a new organizational structure that was not yet complete, we conducted a poll of a representative sample of 25% of the global employee population. Complex industry and organizational changes were reflected in overall engagement levels; the engagement index was 68% in 2016 compared to 76% in 2015. However, for Ericsson as an organization, our employees continue to report a very high sense of pride, with 82% stating that are "proud to work for Ericsson," compared to 88% in 2015.

LEADING FOR THE FUTURE

Central to our approach for employees' career enrichment is to give people the freedom and flexibility to take their career in many different directions. Another important aspect is to develop within the supportive structure of a large organization, with clear development plans and training opportunities.

Career and competence development

We advocate and support proactive career planning by our employees so they take control of their career and progress in a direction – and at a pace – that suits them. This can involve classroom learning, on-the-job training, mentoring and ad hoc learning and development initiatives. We call it 'career agility', because it helps to ensure that our employees can adapt to deliver the agile solutions that our customers and end users require from Ericsson.

Empowered employees

In 2016, we took further steps to transform our performance management program in the spirit of co-creation rather than a topdown approach. Through all-employee meetings, targeted workshops, webinars, several hundred employees shared ideas on the development of the program. The approach was piloted in 2016 and will be rolled out 2017–2018. An important aspect of the new approach is to ensure employees' health and well-being (p. 25) as well as accountability and building trust.

Global perspectives

In a complex, fast-changing world, sustainability and CR related challenges are increasingly on the agenda of our leaders. Our emerging executive candidate program, Global Perspectives, is an integrated program that is primarily experiential. In 2016, as in past years, program participants spent time in Tanzania to better understand the changes occurring in sub-Saharan Africa - both from a socioeconomic perspective and in terms of digital transformation. The leaders work with NGO representatives to better understand how organizations on the ground respond to challenges with limited resources, and to gain insight into the power of publicprivate partnerships. The aim is for the candidates to not only gain an understanding of the sustainability and CR challenges but also to get a view on the emerging business opportunities - and how the sustainability approach is a key component of leveraging those opportunities.

Our learning approach

We realize our number one asset as a company is our people and our customers expect the best and the brightest to help them transform their businesses. We stress that our employees own their development and careers in partnership with their managers. Ericsson Academy enables our employees to get equal access to a wide variety of learning opportunities to grow and succeed.

Strategy drives competence focus

Critical technical and non-technical skill gaps are identified through a rigorous annual process that is part of our annual business planning process aligning our strategy to competence needs. Our structured formal and on-the-job training programs build competence in emerging technology areas across the key functions of sales, services and product development. Every employee has clearly defined development goals that are reviewed throughout the year. In 2016 we closed over 95% of the identified targeted employee critical competence gaps through training.

Learning anywhere, any time

People learn on the go in order to stay at the edge of current and future trends. 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, which is 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.



FOCUS ON DIVERSITY AND INCLUSION

A diverse and inclusive workforce drives innovation, fosters creativity, helps attract and retain top talent and is a crucial aspect of our company strategy in an increasingly global, diversified and competitive market.

For Ericsson, diversity extends beyond gender, race, nationality, religion, ethnicity, disability, sexual orientation, age, and gender identity 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.

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.

A gender-intelligent organization

Our goal is to encourage a gender-intelligent organization which recognizes and values the differences that both men and women bring to the organization.

Increasing gender diversity has been a central focus since 2013. Our 2020 gender diversity target is for 30% of all employees to be female, including leaders and executives. We are still not where we want to be but in 2016 we moved in the right direction. Women account for 23% of Ericsson employees compared to 22% in 2015. Female line managers increased by 2 percent (20% compared to 18% in 2015). Female representation on the Executive Leadership Team remained the same in 2016, but there was an increase in female representation among the top 250 leadership positions in the company (25% in 2016 compared to 22% in 2015). A focus on sponsoring, mentoring, leadership development and focusing on strengths contributed to the progress among executive-level women.

A focused effort

We realize there is more to be done to reach our gender diversity target. 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 (see Case, Building for the Future). We are therefore confident that we are moving in the right direction. Our program Connect to Learn (p. 53) is directed at increasing access to girls' education, especially in developing countries.

Equality a shared goal

Building a gender-intelligent organization requires the engagement of men and women. Gender equality can only succeed with equal focus on both genders. We want a constructive dialogue, to extend our network of role models and to confirm that equality is a human issue. The goal is to involve everyone in our efforts to improve gender relations, drive gender equality and break traditional prescribed gender norms and to minimize biases and stereotypes.

November 19, International Men's Day, was an opportunity to confirm that diversity at Ericsson embraces everyone. Employees were encouraged to participate in activities such as the grassroots Movember movement supporting men's health.

Building for the future: Girls in ICT

The lack of women in Science, Technology, Engineering and Math (STEM) careers has long been a challenge facing the ICT industry. During 2016, we doubled the number of girls in our Girls in ICT program from 1,445 girls participating in 2015 to 3,000 girls taking part in 2016. We have found this a successful way to build our pipeline of talent and attract more women to ICT. Girls In ICT Day, which has a mission to empower and encourage girls and young women to consider studies and careers in the growing field of ICT, is celebrated each year at Ericsson. In 2016, for the second year in a row, Ericsson South Africa marked its participation in this initiative by joining Techno Girl - a job-shadowing program aimed at increasing and enhancing the participation of girls in STEM careers. For the next three years, six girls from the Alexandra High School will visit Ericsson's Johannesburg office for three weeks each year (during their school holidays). During their time at Ericsson, they'll receive continued education in the world of computing as well as mentorship from some of the company's top innovators in the region. The aim of Techno Girl is to help create a more diverse and inclusive technology industry by increasing female representation in STEM fields.





The social media platforms for Ericsson's Diversity and Inclusion campaigns saw a 270% increase in results from 2015 and a 190% increase in engagement.

Stronger together

Employee resource groups are voluntary groups created when employees come together around a common goal. They support, promote and drive a diverse and inclusive working environment and provide the organization their unique perspectives and insights. Through these forums, employees are connected and participate in networking opportunities, information forums, mentoring programs, recruitment events, professional development and various volunteer events. Two types of groups are:

Women's networks: There are six chapters of Women in Leadership (WIL) networks within Ericsson across the globe comprising North America, Canada, Sweden, Africa, India and Europe. They advocate leadership and innovation as a means to connect members, establish collaboration and knowledge sharing; support professional development and developing relationships internally and externally while connecting with our customers and local communities.

LGBT networks: Our LGBT (Lesbian, Gay, Bisexual, Transgender) networks promote equal treatment and opportunities at Ericsson. The aim is an inclusive and diverse working environment that encourages a culture of respect and equality for everyone regardless of their sexual orientation or gender identity. In 2016, Ericsson Globe in Ireland was launched by a group of Ericsson employees to promote greater awareness and understanding around the LGBT community. Globe has attended LGBT events; in 2016 Ericsson was represented in the Dublin Pride parade for the first time.

A dialogue on 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. We conduct face-to-face training for business leaders to address unconscious bias and to raise awareness about unconscious bias and its impact on decision-making. As of end of 2016, 70% of the Ericsson leaders have taken the workshops and 40% of our employee workforce has completed e-learning.

Sharing experiences

A number of events and activities highlighting diversity and inclusion are observed at Ericsson each year. In 2016, that, included International Women's Day in which several hundred employees signed a pledge to accelerate gender parity. We also highlighted 18 different podcasts from women around the world at Ericsson as a way to share our experiences. In Global Diversity Awareness Month in October we held 150 local and regional events including workshops, social media activities, network group events, and educational webinars. These focused on diversity aspects such as gender, generational, cultural, sexual orientation and disability.

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. Other organizations with which we engaged in 2016 are Women for Sustainable Growth, a network for leaders in academia, business and society within the Gulf Region and Scandinavia; Women in Technology and Science, a forum supporting women in science, technology, engineering and mathematics (STEM) to reach their full potential, and the Grace Hopper Celebration of Women in Computing, the world's largest talent fair of women computer scientists.

Enhancing supplier diversity

We are committed to utilizing minority, women and disabled veteran-owned businesses as Ericsson suppliers to build a "best-in-class" supplier diversity program. Ericsson North America in 2016 continued to build upon the program partnering with Global Diversity & Inclusion expanding the program with a global reach. In addition, Ericsson sponsored the Student Entrepreneurial Pitch Competition with Women's Business Enterprise National Conference with Ericsson-sponsored student Emily Bocchino taking third place in the Entrepreneurial Pitch competition.

Ericsson offered a matchmaker event, mentorship program, sponsorships, twotier diversity reporting portal and growth opportunities for diverse suppliers. The program has won the AT&T Supplier Diversity Crystal Award four consecutive years and was a 2015 Bronze & 2016 Silver winner of America's Top Corporation for Women's Business Enterprises.

HELPING SPARK POSITIVE CHANGE

Being part of the solution for a more sustainable world is what drives employees to engage in the Technology for Good volunteer program.

The Technology for Good employee volunteer program provides employees with an opportunity to volunteer their time and skills to make a positive contribution to society and complements local volunteer activities that have taken place over many years. During 2016, employees from over 72 countries across Europe, India, Latin America, North Africa and the Middle East participated.

Some employees mentor students in ICT skills in their local communities; others contribute to Ericsson's Technology for Good projects, such as refugee reconnection (p. 57) or Connect to Learn (p. 53). In 2016, we launched a training and accreditation program for Ericsson employees to deliver training and coaching through the Ericsson Academy on the Connect to Learn platform. As the scale of Connect to Learn expands (p. 53), this support is vital in helping us reach our ambition of impacting more children. As we reach a growing number of marginalized communities there will be an increased need to train even more local people on how to use our technology. Employees trained and accredited by Ericsson Academy will then be able to deliver this training.

Another long-established volunteering opportunity is the Ericsson Response

humanitarian response and disaster relief program (p. 56).

Many new volunteering opportunities were initiated in 2016. These include:

Italy: We are collaborating with the Ministry of Education on the Ericsson@School program to demonstrate the benefits of ICT technologies for skills, in partnership with operators. We provide an advanced digital totem, a touchable screen with fully integrated ICT services, providing access to several features such as e-learning. The aim is to enable the digital transformation of schools. The project engages 1,200 students, their parents and the school personnel.

Hungary: Some employees are mentoring students and elderly people in ICT skills in their local communities; others contribute to Ericsson's Technology for Good projects.

The United Arab Emirates (UAE): Employees volunteer in different Technology for Good projects such as Connect to Learn or refugee reconnection as well for Ericsson Response.

Sweden: Employees in Stockholm mentor high school students with the aim of providing support for their personal and future professional lives. In Lund, employees support Commitment Skåne, a cooperation between Arbetsförmedlingen, the government employment services agency; large companies in the region and the University of Lund, to increase the possibilities for employment. More than 30 of our employees run a mentorship program for people with an engineering background. Latin America: Employees working for Ericsson in Latin America have engaged as virtual volunteers to support the Whitaker Peace & Development Initiative (WPDI) (p. 58), which helps youth affected by conflicts and violence to foster safer and more productive communities. The 48 volunteers work virtually with the Harmonizer Program which is currently active in Mexico and designed to address conflict transformation in urban settings where violence has affected youth. For the past three vears, volunteers have worked in both Tijuana and Chiapas where the program is active. Volunteers coach the youth in many different areas, including ICT and computer skill training, outreach in their communities, as well as problem and conflict resolution.

Aligned with the SDGs

In line with our S&CR strategy of adopting the SDGs as a platform for measuring our societal impact, we have improved our employee volunteer program framework by connecting every volunteering project with its impact on the corresponding SDG (see diagram). This provides a good visibility dashboard on the impact of employee volunteering activities on the SDGs.



Volunteering through Ericsson's projects allows us as employees to connect and improve our communities. It's a two-way match, because we learn from the youth as much as they do from us."

Paola Reyes,

virtual volunteer for Ericsson's project with Whitaker Peace and Development Initiative (WPDI) in Mexico





FACTS AND FIGURES

Employees

No.	2016	2015	2014	2013	2012
Year end	111,464		118,055		110,255
Average	114,302	119,718			112,758
Temporary employees	1,142	1,413	776	493	766
Employees who have left Ericsson	18,998		15,536		12,280
Employees who have joined Ericsson	15,048	14,836		17,110	18,010
Turn-over (%) 1)	7.9	7.8	-	-	-

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

Employee satisfaction

%	2016	2015	2014	2013	2012
Engagement index	68	76	78	77	77
Response rate	61	94	93	93	94

Employee diversity - Background

%	2016	2015	2014	2013	2012
Executives with a back- ground other than Swedish (Top 250 positions)	60	54	54	48	55
Executives with a back- ground other than Swedish (Executive Leadership Team)	29	23	29	29	29

Employee diversity - Female representation

%	2016	2015	2014	2013	2012
Overall workforce	23	22	22	21	22
Line manager	20	18	19	18	18
Executive (Top 250 positions)	25	22	20	19	18
Executive Leadership Team	35	31	29	29	29
Board of Directors	40	36	30	25	27

Employee diversity – Age and gender 2016

No.	Under 25	25–35	36–45	46–55	Over 55
Female	2,037	10,554	7,022	4,357	1,472
Male	2,766	32,107	27,560	17,755	5,396

Responsible sourcing

Audits and assessments					
No.	2016	2015	2014	2013	2012
Auditors	215	205	197	195	179
Audits	301	338	444	479	494
Assessments	34	8	151	144	152

Occupational health and safety

Fatalities (Ericsson employees)

	2016	2015	2014	2013	2012
Total	0	0	1	0	1
North America	0	0	0	0	0
Latin America	0	0	0	0	0
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	0	1	0	1
China & North East Asia	0	0	0	0	0
South East Asia & Oceania	0	0	0	0	0

Major incidents (Ericsson employees)

	2016	2015	2014	2013	2012
Total	127	76	25	29	20
North America	4	0	0	0	0
Latin America	34	11	12	16	19
Northern Europe & Central Asia	8	7	2	4	0
Western & Central Europe	11	37	8	2	0
Mediterranean	28	8	0	0	0
Middle East	8	2	2	0	0
Sub-Saharan Africa	0	1	1	0	0
India	6	4	0	5	1
China & North East Asia	13	2	0	0	0
South East Asia & Oceania	15	4	0	2	0

Fatalities (Supply chain and others)

	2016	2015	2014	2013	2012
Total	17	27	21	15	6
North America	0	0	2	2	0
Latin America	4	3	5	0	1
Northern Europe & Central Asia	0	1	0	1	0
Western & Central Europe	0	0	0	2	1
Mediterranean	2	0	1	1	1
Middle East	2	13	5	7	2
Sub-Saharan Africa	1	6	1	0	1
India	4	4	6	0	0
China & North East Asia	2	0	0	1	0
South East Asia & Oceania	2	0	1	1	0

Major incidents (Supply chain and others)

	2016	2015 ¹⁾	20141)	2013 ¹⁾	20121)
Total	37	92	44	35	78
North America	0	2	4	2	1
Latin America	7	9	13	11	40
Northern Europe & Central Asia	3	3	1	2	10
Western & Central Europe	1	17	0	2	5
Mediterranean	7	2	1	1	2
Middle East	6	34	7	9	5
Sub-Saharan Africa	0	12	1	1	7
India	1	12	16	2	2
China & North East Asia	4	0	0	4	4
South East Asia & Oceania	8	1	1	1	2

¹⁾ Suppliers working on Network Rollout and Managed Services

Source: Ericsson

ENERGY, ENURONMENT & CLIMATE ACTION
COMING FULL CIRCLE

The circular economy encapsulates our approach towards a low-carbon economy. We use a life-cycle approach to manage our energy, environment and climate change impacts. We aim to establish leadership in energy performance, use a circular approach in management of materials, waste and water, and aim to develop and deliver solutions to support climate action. During 2017 we will continue to work with academia and industry peers to finalize a climate positive definition. Our circular economy approach builds on nearly 20 years of life-cycle assessment (LCA) experience. Our well-established LCA methodology includes raw material extraction, design, manufacturing, transport, use of products, disassembly and closing the loop with proper end-of-life management.

1. Design

Avoidance of hazardous materials and materials difficult to recycle as well as design for ease of disassembly.

2. Raw materials

Key material streams include ferrous metals, plastics and precious metals.

9. Reuse & recycling Reuse of components and parts.

8. End-of-life treatment More than 98% of the material content is recycled.

7. Product take-back

Ericsson Global Product Take-Back program is offered free of charge to our customers in 180 countries. 9,600 tonnes collected during 2016.

O^e CIRCULAR ECONOMY

Re-use/cycle

3. Own activities & manufacturing 45% reduction of CO_2 e emissions per employee compared to a 2011 baseline.

4. Transport of products

Shifting from air to surface transport resulted in savings of 26 ktonnes CO_2e .

5. Products in operation

Products in operation represent about two thirds of the carbon footprint of ICT and is now decreasing in mature ICT countries.

6. Transformation of other sectors

ICT can play a transformative role across all sectors of the economy. We reduced 2.6 times our own emissions by reducing societal emissions.

In a 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.

ICT FOOTPRINT ON DOWNWARD ENERGY TREND

A new Ericsson-Telia study shows decreasing energy use within ICT and E&M (Entertainment and Media) despite a significant growth in data traffic.

Our extensive research on the energy and carbon footprint of ICT from a life-cycle perspective shows 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. Despite the significant increase in data traffic in ICT networks in recent years, our own and others' studies show that the increase in energy and carbon footprint of ICT networks does not follow the same curve.

New study shows decoupling effect

In fact, a 2016 state-of-the-art study by Ericsson and Telia shows that despite a continuing exponential increase of data traffic, the energy and carbon footprint of ICT started to decrease around 2010.

The study concludes that the total ICT and E&M carbon footprint is about 1.9% (1.2% ICT and 0.7% E&M respectively) of Sweden's total carbon footprint, with a decrease from 2010 of around 10%.

Sweden has the highest data traffic per capita in the world and the total number of PCs, tablets and smartphones amounts to three per capita. Only Finland has slightly higher mobile data traffic.

Since Sweden is a very mature ICT country, the same trend of declining energy use is expected to be seen in other countries as they mature in the ICT sector.

An important contributing factor is the trend of using tablets and smartphones with a low energy consumption (small screens) instead of PCs and TVs. Sales of the latter have decreased by nearly 20% in recent years, according to the Swedish electronics industry association. However, embodied emissions from PC and TV manufacturing abroad remains the largest source of ICT-related carbon emissions in Sweden. The carbon footprint related to operations is low in Sweden due to the low-carbon electricity mix based on hydro and nuclear.

This is a significant observation since Sweden is world leading in many ICT and E&M metrics and the study is based largely on measured data. Therefore, the study can be seen as an excellent leading case on how the impact of the ICT and E&M sectors will develop globally in the future.

Based on a life-cycle approach, a consumption perspective (production abroad included) is also taken. Historically, the footprints have been increasing since real measurements began around 1990; now a 20-year-old trend has been broken. The network impact is lesser in comparison to the user equipment. The larger impact relates mainly to number and type of user devices put on the market and their usage.

To reflect the global situation, the Swedish electricity model was replaced with a world-average mix, making the impact from the declining trend in large user equipment more apparent.

Based on current trends, device sales and network plans, it can be forecasted that the energy and carbon footprint continues to decrease at least until 2020.



ICT and E&M sectors total carbon footprint in Sweden

Energy and carbon footprint of ICT started to decrease around 2010, despite a continuing exponential increase of data traffic. Sweden is a very mature ICT country and this trend is expected in other countries as they mature in the ICT sector.

Reference: Malmodin, J., Lundén, D. (2016). *The energy and carbon footprint of the ICT and E&M sector in Sweden 1990–2015 and beyond.* Paper published and presented at: *ICT for Sustainability* (ICT4S), Amsterdam, Netherlands, 30–31 August 2016.

* Scenario with global electricity mix instead of Swedish mix

ENERGY IN FOCUS AS NETWORKS EXPAND

As mobile networks expand to reach new markets, and existing network traffic rises, growth must be managed to achieve optimal energy performance.

Between 2016 and 2022, smartphone traffic is expected to increase 10-fold and total mobile traffic for all devices eight-fold, according to the Ericsson Mobility Report (November, 2016). Operators face three distinct challenges:

- > Reach new users in unserved or underserved markets.
- Maintain and enhance the performance, quality and efficiency of their 2G and 3G networks as they build out 4G LTE and future 5G networks.
- > Build energy-efficient networks that reduce energy consumption and carbon emissions.

Energy performance of products and solutions is a priority for the industry. Operators need to balance their investments across all technologies to make the most efficient use of available radio spectrum, while delivering more consistent network performance and high-quality user experience everywhere. Our focus is therefore to help operators expand their networks in the most energy-efficient way.

Improved energy performance

According to the latest research from the GSMA, in 2014 mobile operators spent USD 17 billion annually on energy. Global mobile access networks have seen significant improvements in energy performance in recent years, declining from 34 kWh per Gigabyte transferred data in 2010 to 2 kWh in 2015, and expected to reach 0.25 kWh per Gigabyte transferred data traffic in 2021. Our research shows however that absolute mobile access network electricity consumption will grow by 20% between 2015 and 2021 based on the current practice of building and modernizing mobile networks, according to the Ericsson Mobility Report (November, 2015).

Ericsson will continue to innovate to allow for alternative energy sources to be economically feasible in 25% of the total installed base of an operator, thereby reducing diesel consumption significantly.

There has been a shift in the industry from single-standard products to multi-standard and mixed mode capable hardware and software, combining 2G,



"One of Telenor's global sustainability goals is to bring energy efficiency into its mobile networks worldwide. This is especially relevant in a country like Myanmar where coverage is challenging in remote areas. The pure solar powered site is a good trial and we are excited with the possibilities as it worked well even during the monsoon season.

We would be pleased to explore how to deploy more green energy sites in Myanmar and contribute to the country in this area."

El THEINGI, Head of Technology Strategy, Telenor Myanmar

Going solar in Myanmar

Operators in developing regions are challenged in finding a viable way to extend network coverage to areas that are off the electricity grid. In Myanmar, 70% of the population lacks access to electricity. Rural off-grid sites typically use a diesel generator and battery solution, leading to significant costs and CO₂ emissions. Faced with this challenge, together with mobile operator Telenor, Ericsson has succeeded in deploying in 2016 the world's first 500 Watt solar-powered site in Myanmar, making solar more economical than diesel for the first time. A number of innovations, including our unique Psi coverage solution (p. 38) were deployed at the site. The result is a 75% reduction in total site power consumption while retaining full coverage, service quality and performance. With economy comes scale and with millions of radio base stations worldwide, there is opportunity to decrease the dependency on diesel fuel for off-grid sites, making a significant contribution against global warming and extend cost effective mobile broadband to the 50% of the world population that are currently without Internet access.





Energy performance enables cost efficient mobile broadband (MBB) coverage with up to 40% Total Cost of Ownership (TCO) savings.

3G and 4G into one product. Radio base stations today come in all sizes and formats to meet the diversified needs from both networks and applications. This is a trend that will continue with 5G. We have evolved technology, methods and tools that enable operator networks to use energy optimally while also managing expected growth in data traffic and providing increased app coverage, meeting the needs of current and 5G-enabled use cases, including IoT.

Greater reach with less energy use

Mobile Broadband Expander, a set of innovations launched in 2016 as a solution to bring internet to all (p. 51), enables operators to expand from 2G to 3G on the same GSM sites without adding power consumption. This makes it possible to bring mobile broadband to all without increasing the energy budget for operators and to lower the total network energy consumption without compromising network quality or coverage. The Mobile Broadband Expander innovations increase mobile broadband coverage almost threefold for the same energy footprint.

Our systematic approach to energy efficiency includes using capable hardware, boosting performance with software, building networks with precision, and optimizing networks on site. The radio access network (RAN) consumes the most energy, and is therefore a key focus for energy-efficiency improvements. The Ericsson Radio System platform launched in 2015 established a generational shift in mobile networks for the 5G future, providing a 50% improvement in energy efficiency for the radio base station compared to previous generations.

One energy-efficient solution made possible through the Ericsson Radio System platform is our unique Psi Coverage solution which provides app coverage in low-traffic density areas (see Myanmar case, p. 37). It uses a single radio unit to provide the same coverage as an ordinary three-sector radio base station equipped



Optimizing energy in the network

Polish operator Polkomtel is seeking ways to increase the energy performance of its networks to save on rising OPEX (operating expenditure). As a supplier of Polkomtel's Radio Access Network, we provided software features to help Polkomtel achieve that goal for its 2G and 4G networks. These include energysaving features for 2G and 4G that adapt to traffic levels by turning off unnecessary capacity and reducing output power. A test on a limited number of sites, equipped with smart meters, allowed us to accurately measure the impact of the features. Total annual savings of these features are estimated to be over 5.5 million kWh, resulting in considerable OPEX (operating expenditure) savings and reducing CO2 emissions by 5.1 ktonnes.

with three radio units. Using less hardware reduces energy consumption by more than 40% while maintaining the same performance.

Some 150 million subscribers are currently served by networks for which we provide Energy Management Services. This includes operating the infrastructure on behalf of operators with the aim of reducing energy-related costs, promoting efficient use of energy and improving network availability. The service includes around-the-clock, real-time infrastructure monitoring, with remote and onsite problem resolution available whether or not operator sites are connected to utility grids.

Energy lens on 5G

Ericsson plays a leading role in development of next-generation 5G mobile communication systems, with the rollout of the first commercial 5G networks expected in 2020. 5G will lead to an increased number of use cases for the Internet of Things across all sectors of society, including manufacturing and mining, health, transport and energy and public safety.

We are involved in standardization activities for 5G, with high energy performance, aimed at reduced network energy consumption, as one of the new key requirements for 5G. It enables reduced total cost of ownership, facilitates the extension of network connectivity to remote areas, and provides network access in a sustainable and more resource-efficient way.

Networks today, and in the future, will have to cope not only with high traffic loads and coverage demands but also with large traffic variations and low average load. This calls for sufficient sleep mode possibilities to optimize energy performance. 5G systems should therefore be designed to be active and transmit only when and where needed. Ericsson has identified a number of key technologies to achieve this. These include ultralean design, advanced beam-forming techniques, a flexible and scalable system plane on the radio interface, as well as network slicing, virtualized network functionality and cloud technologies. Together they provide a scalable, manageable and flexible network design that both facilitates improved energy consumption and maximizes energy-saving possibilities.

Ericsson will strive to ensure that the 5G product portfolio shall be ten times more energy efficient (per transferred data) than current 4G in 5 years' time.



EVOLVING TECHNOLOGY

Ericsson has been a key driver in the evolution of mobile communications standards over the past 35 years:

2G: enabling voice calls and limited data transmission

3G: enabling mobile phones, computers, and other portable electronic devices to access the internet

4G: enabling wireless Internet access at a much higher speed

5G: the coming fifth-generation wireless broadband technology that will provide better speeds and coverage than 4G. A Telia-Fricsson 5G field trial in 2016 showed speeds more than 40 times faster than the current maximum speeds achievable on 4G.



TECHNOLOGIES WILL ALWAYS COEXIST

Enabling a smooth and timely technology shift with changing business demands.

FROM WASTE TO RESOURCE

Managing e-waste and taking extended producer responsibility is an important element of the circular economy.

Around the world, electronic waste – or e-waste – is growing due to increasing consumer demand, high product turnover and falling prices. E-waste contains hazardous substances that, if treated inappropriately at end-of-life, can damage human health and the environment. It also contains complex valuable materials, such as precious metals which need to be treated properly to effectively recover them with minimal environmental impact. 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.

Ericsson Product Take-Back Program

Our global Ericsson Product Take-Back program is designed to minimize the potential environmental impact associated with the disposal of decommissioned electrical equipment (e-waste). It is offered to our customers globally in 180 countries.

Since its inception in 2005, customers in more than 107 countries have taken advantage of the program. We offer the program to all customers globally, not only in Europe where it is required by law. This guarantees that e-waste does not end up in trade-restricted areas, landfill or in places where unethical business practices are taking place. As part of our commitment to this area, we are involved in a UNEP project involving 13 countries on preparing for uniform e-waste legislation.

Highest standards

We conduct product take-back with a limited number of recycling partners meeting our requirements and certified according to internationally recognized environmental and recycling standards. The key material streams Ericsson deals with are ferrous metals, precious metals and plastics. The majority of these materials eventually re-enter the market where they are sold to industry as raw materials.

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. In 2016, we retrieved 9,600 tonnes of electronic waste (e-waste), as well as close to 370 tonnes of batteries from customers. We did not reach our target of 12,000 tonnes collected due to growth of the gray market and changing business conditions for used equipment. Our target is to retrieve 20,000 tonnes by 2020.

New collaboration in Chile

We work closely with our customers to ensure their e-waste is handled and treated in an environmentally sound way. We see increased volumes in a number of regions, including Latin America. In 2016, we entered a partnership with Entel, a leading mobile operator in Chile to handle e-waste under the global Ericsson Product Take-Back Program to cover the collection, decommissioning, transport, storage and disposal of electrical equipment. As a



In partnership with Entel in Chile, we handle e-waste under the global Ericsson Product Take-Back program.

result of this partnership, the program has enabled take-back of more than 400 tonnes of materials during 2016.

Chile, like an increasing number of countries, has passed an Extended Producer Responsibility law, soon to be enacted. It gives manufacturers and companies dealing in products such as electrical and electronic equipment the responsibility of organizing and financing recovery and waste management of their derivative products.



"Entel's commitment to the environment is one of the cornerstones of our business. Currently in Chile, we are undergoing a major change in the treatment of waste generated by businesses. The new Extended Producer Responsibility law, or EPR, poses a major challenge for all companies, especially larger ones. Entel has had recycling programs for our technological materials, such as mobile phones, in place for some time now. We are very excited about this new partnership with Ericsson, one of our main network implementation partners, especially because it is aligned to the highest standards in regard to the treatment of recycled materials."

Antonio Büchi, CEO, Entel Chile

TRACKING THE CARBON FOOT-PRINT OF OUR OWN ACTIVITIES

We manage the environmental impact of our own activities with particular focus on our carbon footprint.

We continuously work to reduce the carbon footprint with four focus areas: reducing energy usage in facilities (offices, production sites, data centers and test labs); shifting from air to surface product transport; reducing business travel impact, and improving fleet vehicle management.

Towards a Low-Carbon Future

Over the past five years, we have reduced CO₂e emissions per employee by 45%. In 2016 this represents 4.32 ktonnes CO₂e emissions per employee (see graph). This achievement implies a reduction of over 315 ktonnes CO₂e in absolute emissions from our own activities compared to the baseline. We are on track with our long-term objective to maintain absolute CO₂e emissions from our own activities in 2017 at the same level as in 2011.

Managing energy in facilities

More efficient use of our buildings is achieved through better workplace functionality, a shift to more energy-efficient buildings and by driving building requirements (e.g. Leadership in Energy and Environmental Design (LEED) level gold or equivalent). We prioritize the use of renewable energy in our facilities. In markets where there is a high availability of renewable energy, our facilities reflect a high degree of renewable energy. For example, over 80% of the electricity purchased in Europe comes from green sources. We look for opportunities to increase the amount of renewable energy in all markets where we operate. At year-end 2016, our facilities had a 2.5% increase of green certified electricity use compared to 2015.

Flexible use of building space, i.e., "free seating," and teamwork workspaces also helps reduce our carbon footprint. Energy audits assist in meeting the EU Energy Efficiency Directive.

Global ICT Centers

We have an ongoing transition to establish three high-tech, Global ICT Centers. In 2016, all three centers were operating, and consolidation activities continue. The centers use the latest cloud technology, allowing our 24,100 R&D engineers to collaborate beyond borders and ramp up innovation in testing future communication technologies. The ICT centers - two in Sweden and one in Canada - are situated in areas with access to renewable energy and a reliable power grid. The centers feature leading-edge design that is modular and scalable, and efficient use of resources. As one example of that approach, we are now able to recycle waste heat by sending it to the heating plant to be reused. We announced an agreement in 2016 with a district heating company in Stockholm to deliver the recycled heat from our Global ICT Center in Rosersberg and from one verification center in Kista. A similar agreement was announced at the verification center in Jorvas. Finland. There is a significant environmental benefit from recycling excessed heat. The agreement in Stockholm is expected to reduce our CO₂ emissions by 7,200 tonnes per year.

Product transportation

In 2016, we continued the ongoing shift from air to surface transport to reduce CO₂e emissions. Product volumes transported were comparable to 2015; however we have achieved a reduction of 26 ktonnes CO₂e in absolute terms and are below 1 tonne CO₂e per tonne goods transported.

Business travel

Business travel emissions dropped by approximately 4% per employee compared

to 2015. Virtual meetings have become a standard way of how we work as a substitute to travel.

Fleet vehicles

Our aim is to reduce CO₂e per kilometer in our vehicle fleet by using vehicles more efficiently, implementing telematics, and trialing alternative fuels.

Water consumption

We are signatories to the UN Global Compact CEO Water Mandate (p. 11), which commits companies to a number of steps within water management. This includes taking action in our direct operations as well as our supply chain.

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. In 2016, water consumption within our own activities was approximately 25 cubic meters per employee.

Managing water consumption is an increasingly important part of our supply chain management. We require our suppliers 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.

Tonnes CO2e/Employee Mtonnes 8 0.8 6 0.6 0.50 4 4.32 0.4 Carbon footprint intensity Tonnes CO₂e/Employee 0.2 2 Carbon footprint absolute emission. Mtonnes Source: Ericsson 0.0 0 2012 2013 2014 2015 2016

Carbon footprint intensity target, Ericsson's own activities

FACTS AND FIGURES

Consumption

Recycling (%)

Energy (%)

Landfill (%)

Energy consumption (fa	acilities ene	ergy use) (GVVh)		
	2016	2015	2014	2013	2012
Electricity	788	759	761	845	808
District heating	34	30	36	47	56
Other energy	60	81	89	96	121
Business travel (Mpkm))				
	2016	2015	2014	2013	2012
Air travel	1,134	1,177	1,392	1,320	1,200
Road travel	71	91	113	77	74
Fleet vehicles	377	386	411	390	339
Commuting	440	448	438	430	415
Product transportation	(Mtonnekr	n)			
	2016	2015	2014	2013	2012
Air transport	178	231	274	294	452
Road transport	304	232	280	264	372
Sea transport	370	296	276	309	338
Rail transport	5	9	6	5	53
Production and office v	vaste (tonn	e)			
	2016	2015	2014	2013	2012
Total	13,670	14,490	18,100	16,100	29,512
Recycling	5,060	6,180	8,180	6,025	13,500
Energy	3,990	3,610	5,080	5,215	9,900
Landfill	4,590	4,680	4,580	4,510	5,400
Hazardous	25	24	49	150	712
 Product Take-Back (T-I	B) and End	-of-Life tre	eatment		
	2016	2015	2014	2013	2012
e-Waste treated (tonne)	12,535	15,590	15,860	9,870	7,750
Reuse (%)	0	0	0	0	1
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Ericsson follows ISO 14040 and ISO 14044 standards when performing Life-cycle assessments.

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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

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Emissions (CO₂e)

	2016	2015	2014	2013	2012
Total	633	675	766	829	909

Direct (ktonne)					
	2016	2015	2014	2013	2012
Total	260	266	298	357	355
Facilities energy use (S1)	14	18	20	20	30
Fleet vehicles (S1)	61	64	68	66	62
Facilities energy use (S2)	185	183	210	270	263

Indirect (ktonne)					
	2016	2015	2014	2013	2012
Total	373	410	470	472	554
Business travel (S3)	154	163	193	172	159
Product transportation (S3)	146	172	204	229	326
Commuting (S3)	73	75	73	71	69

Other indirect (Mtonne)					
	2016	2015	2014	2013	2012
Total	34	30	35	28	26
Products in operation (S3) – future (life time)	34	30	35	28	26

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 ₂ /kWh	Sites in Sweden uses "Good envi- ronmental choice" from Telge Kraft
Green electricity	0.0010 kgCO ₂ /kWh	
District heating, Other regions	0.22 kgCO ₂ /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 ₂ /pkm	GHG protocol (average for long/ medium air travel). DEFRA GHG indicators for long haul air travel.
Car travel	0.16 kgCO ₂ /pkm	"Vägverket" (average car in the EU (Vägverket = Swedish Road Adm.)
Air transports	0.65 kgCO ₂ /tonnekm	Based on an investigation of air transport by Ericsson.
Road transports	0.08 kgCO2/tonnekm	GHG protocol, average Swedish road transports according to Swedish Road and Transport Research Institute.
Sea transports	0.017 kgCO ₂ /tonnekm	Average of Maersk Line and Ericsson typical TEU, TEU = Twenty foot container eq. unit.
Rail transports	0.03 kgCO ₂ /tonnekm	2012 Guidelines to Defra/DECC's GHG Conversion Factors for Company Reporting.

Source: Ericsson

A CATALYST FOR THE LOW-CARBON ECONOMY



At COP22, the UN climate change negotiations, we played a proactive role in presenting ICT as an essential tool for decarbonizing the economy.

The rapid expansion of broadband and ICT is poised to accelerate the path towards a more sustainable, low-carbon economy, providing opportunities for innovation and creating new business models.

ICT has a unique potential to enable other industrial sectors move towards the low-carbon economy that will be central to meeting the SDGs. According to Ericsson research, ICT solutions could help to reduce GHG emissions by up to 15 percent by 2030, amounting to around 10 gigatonnes of CO_2e – more than the current carbon footprint of the EU and US combined. However, ICT must be implemented with the intention to address climate change, to measure carbon reduction progress and to support decision makers to take correct measures.

In the Networked Society, mobile broadband and the cloud set the stage for ICT-enabled solutions across the economy, for example, within transportation and energy. Such solutions are being applied to the challenge of sustainable urbanization (p. 45) and climate change, helping to build climate resilience (p. 47).

As noted in Ericsson peer-reviewed research, major CO_2 reductions are deliv-

ered when the economy can be dematerialized e.g. by substituting services for products, or leapfrogging and change entire value chains. One example is the sharing economy illustrated by car- and home-sharing services. Another powerful potential is to use batteries for dynamic electricity storage, intelligent management of home appliances as well as advanced service management to reduce fuel use.

Focus on utilities and transport

ICT can play a transformative role across all sectors of the economy. Utilities and transport are two sectors in which digital technologies demonstrate significant potential to cut carbon emissions.

Transforming the energy sector

Decoupling global GDP growth from energy consumption is key to achieving both SDG 7 (Affordable and Clean Energy) and SDG 13 (Climate Action). The energy sector must undergo a dramatic transformation in the way energy is delivered and utilized. According to the World Energy Outlook 2016 (International Energy Agency), the energy sector is the source of at least two-thirds of greenhouse-gas emissions and transformative change is essential to reach the objectives of the Paris Agreement on climate change (p. 47). Innovations such as smart metering and smart grid communications can enable greater efficiencies as well as higher levels of renewable energy in the electricity grid. Intelligent sensors and controls that tailor energy consumption more precisely to demand can help reduce building energy consumption, a benefit being explored in the Smart Energy project at Stockholm's Royal Seaport (p. 45).

Resilience for utility industry

The utility industry today faces significant challenges in both security (increasingly within cybersecurity, p. 18) and integrating increasing proportions of renewable energy sources into the power generation mix.

In 2016 we launched two new research projects, which we coordinate; both are supported by the ACS Institute of the E.ON Research Centre at RWTH Aachen University. In view of the challenges of keeping power networks secure and resilient, the SUCCESS project will develop new concepts for security, resilience, survivability and privacy of data and implement them in simulations and field trials. The aim of the RESERVE project is to develop and field test new techniques that can enable a stable supply of purely renewable resources. One of the project outcomes will be contributions to standards for power networks in the form of new proposals for harmonized European network codes. 5G will be crucial to both projects, enabling nearreal-time control of infrastructure and closer integration of power and communications networks.

BETTER SAFETY RESPONSE

ICT solutions enhance safety and security in disaster and emergency management and contribute to a more rapid, coordinated response for first responder networks. We provide a number of such solutions around the world; for example, since an emergency response system was deployed by Ericsson in 2013 in São José dos Campos, São Paulo, Brazil, the crime rate declined. Other cities across Brazil are looking at implementing similar models.



Employees at Ericsson were invited to experience driverless buses at headquarters in Kista, Sweden in 2016.

Smart, sustainable cities

The role of smart sustainable cities to lead the energy and climate transitions is the focus of a strategic innovation program, Smart Sustainable Cities, announced in 2016. We will work in a public-private partnership under the framework of VINNOVA. Sweden's innovation agency, the Swedish Energy Agency, and the Swedish Research Council Formas on a long-term project starting in 2017. With its leadership in smart sustainable cites, the ambition is to strengthen Sweden's role in smart and sustainable urban development, building on the country's strengths in research, innovation and business creation. The project will be carried out with other leading countries and cities to form a global center of excellence.

Towards intelligent transport

The transportation sector is a large consumer of energy; in 2016 the total share of global energy used for transportation was about 20% (World Energy Outlook, 2016, International Energy Agency). Transport infrastructures worldwide are under pressure due to urbanization, rising global population and environmental challenges.

Through ICT-enabled connectivity between commuters, logistics operators and transport infrastructure such as roads, rail, shipping and other public transport systems, more efficient traffic flows can help to ease congestion, avoiding the need for new transport infrastructure while providing efficient, safe and cost-effective transport of people and goods around the world.

Connected vehicles can help reduce accidents, address environmental impact,

and improve traffic efficiency and accident response communications. Our Connected Vehicle Cloud platform is aimed at meeting the global automotive industry's existing and future demands for scalability, security and flexibility in the provisioning of connected car services to drivers and passengers. In a strategic partnership, Ericsson and Volvo Cars are working towards fully connected and integrated car and infrastructure services.

Collaborating on joint research

With sustainable transport leader Scania, we are collaborating on joint research to demonstrate how the use of 5G networks will open up new possibilities for transport in the areas of remote operations, driver-assist features, including vehicle platooning and, ultimately, autonomous vehicles.

Connected automation

Employees at Ericsson as well as commuters in the area were invited to experience driverless buses at the headquarters in Kista, Sweden in 2016, as part of Kista Mobility Week, a joint event organized by Ericsson, Nobina and Kista Science City. The buses are automated, run on electric power and use 5G technology components to deliver a live camera feed and positional data to a remote control center. The demonstration showed how ICT can transform the efficiency, responsiveness and sustainability of transport systems in cities around the world.

The event marked the launch of a test site in Kista for Drive Sweden, a strategic innovation program where leading partners are cooperating to develop, test and implement new transport solutions, benefiting from connected automation and new mobility services. Leading players, such as Volvo, Scania and Ericsson, are teaming up with authorities, cties and academia to develop and test world-leading solutions.

VIEWPOINT

The UN-Habitat and Ericsson partnership is evidence that Public Private Partnerships work and are worth investing in. From this engagement UN-Habitat - Urban Basic Services Branch has been able to tap into Ericsson's disruptive technologies and technical expertise. We are now implementing projects that use ICT to improve water supply in informal settlements, as a citizen participation tool that visualizes urban planning, and to bring together young people and local governments for digital social inclusion. This partnership has offered us an opportunity to leverage smart

solutions using communication networks, connected devices and big data in our substantive work. Our continued collaboration with Ericsson in our work will result in smarter and more sustainable solutions that address the diverse challenges of urbanization."

Andre Dzikus, UN-Habitat Urban Basic Services Branch Coordinator.



SUSTAINABLE URBANIZATION CHALLENGES

We see ICT as an essential infrastructure to address the challenges of urbanization. A key business focus is providing solutions that enable cities to deliver citizen services in a smart and sustainable way.

By 2050, 70% of the world's population will live in urban areas, according to UN-Habitat, posing a number of sustainability challenges including increased traffic congestion and climate impact. Cities represent over 70% of GHG emissions and 60%–80% of global energy consumption. At the same time, cities create wealth, generate employment and drive human progress.

The largest UN conference in history, the Habitat III conference in 2016, set a roadmap for sustainable urbanization over the next 20 years with the New Urban Agenda. As a result of joint advocacy work by Ericsson, the ITU (the UN agency for ICT) and UN-Habitat, ICT was considered for the first time at the conference as a basic infrastructure and enabler for sustainable urbanization. ICT will be one key technology to address SDG 11: to make cities and human settlements inclusive, safe, resilient and sustainable.

New report launched at Habitat III

At Habitat III, we launched jointly with UN-Habitat, a report on ICT and sustainable urbanization. The report underscored ICT as a vital infrastructure for cities, providing solutions within energy, transport, water and other areas to support smart, sustainable cities.

Ongoing work with UN-Habitat

As part of our partnership with UN-Habitat, we have also conducted a number of

applied research projects. For example, we have explored the use of digital technologies to improve safe and secure water supply in informal settlements and the value of ICT tools to enhance citizen participation. For 2017 we will continue to focus on smart sustainable cities, looking at challenges such as urban planning, air pollution and climate change. Our joint research projects in 2017 will address these challenges, particularly in the African continent, as well as the use of IoT and sensors, 3D models and mixed reality visualizations in the redesign of public spaces.

Smart Energy City: Stockholm

The Stockholm Royal Seaport is transforming a previous industrial area into a sustainable urban district, aiming to be carbon neutral by 2030; Ericsson has been a partner in the Stockholm Royal Seaport for more than five years. In 2016



We are partners in Stockholm Royal Seaport, transforming a previous industrial area into a sustainable urban district aiming to be carbon neutral by 2030.

the SmartEnergyCity.se was inaugurated, a smart home and smart grid research and demonstration program in the Stockholm Royal Seaport area. The focus of this new program is to explore the potential of demand response by home energy management services (HEMS) and smart grid control and automation services enabled by IoT technologies.

The partner companies in the program are ABB, Electrolux, Ellevio, Ericsson and Fortum, supported by Swedish Energy Agency, Royal Institute of Technology and the City of Stockholm. In the program, we have deployed HEMS for 150 apartments for the residents to use. We are collecting data from the power and heat consumption of residents and their usage of the HEMS systems to understand the potential of flexible demand-based changes in consumer behaviour. It is one of the first cases of its kind in the world where we can see how people use and adapt their behavior during a full year. This is a important input to develop products and services on a global scale to achieve flexible demand in practice.

Tackling urbanization impacts with ICT

Separately, in the Digital Demo Stockholm initiative, we are working with the city of Stockholm to understand how to utilize ICT to address resource use and the impacts of urbanization. Traffic management, social inclusion and water quality monitoring networks are some of the areas we are exploring within the initiative. The purpose of the water project is to develop an end-to-end solution for water monitoring with small sensors connected through a cellular network to the cloud. Several parameters for the property of the water will be examined and sensors will be deployed at locations important for the city and the local water utility. Network connection through narrow broadband-IoT will be preferred, using the Ericsson cloud platform and big data management. This project is co-financed by the Swedish strategic innovation program for IoT (IoT Sweden), a cooperation between Vinnova, Formas and the Swedish Energy Agency.

The importance of multi-stakeholder partnership for achieving collaborative urban climate action was underlined in the business view we provided for the 2016 Cities report of the Carbon Disclosure Project; the mayor of Stockholm provided the city perspective.

Smart City solution in India

Bhopal, a city of 1.4 million people in the state of Madhya Pradesh, is one of 20 smart cities selected by the Indian government to implement smart city solutions. Ericsson will deploy pan-city ICT solutions including its Zero Site technology with the aim of increased energy efficiency, greater public safety, environmental awareness, improved mobile broadband coverage and electric vehicle charging. Ericsson will also deploy a state-of-the-art command and control center from which civic agencies can monitor and control the complete deployment.

Smart Africa Alliance developing Smart City Blueprint

In 2016, we became partner to the SMART Africa Alliance. Our collaboration is aimed at developing a smart city blueprint for Africa. This builds on the work with the Rwandan government on using ICT to transform other sectors such as the financial sector, transport, utilities and the public safety and security sectors. Kigali, Rwanda is being developed to become a world-class reference model project of a smart city for the Smart Africa Alliance. SMART Africa is aimed at accelerating sustainable socioeconomic development in Africa and to usher in the knowledge economy through affordable access to broadband and usage of ICT.

With an enabling policy framework and public-private partnership, ICT can enable cities characterized by resiliency, collaboration, participation and mobility.

Hot Consumer Trends 2017

Ericsson ConsumerLab has identified 10 hot consumer trends for 2017. Some of these, highlighted below, show consumers' increasing interest in ICT as it relates to sustainability.

Internet of Things (IoT): Consumers are increasingly using automated applications, influencing overall IoT adoption. Almost three in four believe multi-

ple wearables and sensors will help them interact with other devices and physical things around them. One in two



believes they will be able to talk to household appliances.

Autonomous cars: One in four pedestrians would feel safer crossing a street if all cars were autonomous; 65% of them would prefer to have an autonomous car.

Augmented personal reality: More than half of advanced internet users would like to use aug-



mented reality glasses to illuminate dark surroundings and highlight dangers.

The insights in ConsumerLab Hot Consumer Trends are mainly based on an online survey of 7,138 advanced internet users in Berlin, Chicago, Jakarta, Johannesburg, London, Mexico City, Moscow, New York, San Francisco, São Paulo, Shanghai, Sydney, Tokyo and Toronto that was carried out in October 2016. The full report is available online at ericsson.com.

ADVANCING THE CLIMATE AGENDA



In the Connected Mangroves project, Malaysian mangrove conditions are monitored in real-time enabling better management of new sapling growth.

We provide innovative ICTenabled solutions as well as advocacy to address the interlinked global challenges of climate change and sustainable development.

The complex challenge of climate change, linked to many SDGs, makes it imperative that we use all the tools at our disposal, including ICT, to get off the path of business-as-usual.

In 2016, under the Marrakech Action Proclamation on climate and sustainable development, 196 countries at the UN Climate Change Conference of the Parties (COP 22) in Marrakech, Morocco agreed to stand by the Paris Agreement, which entered into force on November 4. The Paris Agreement set a commitment to keep the increase in global average temperature this century to well below 2°C pre-industrial level, recognizing that the aim needs to be 1.5°C.

Part of the solution

We advocate for ICT's transformative capacity to address climate change and the role of the private sector in climate change in different fora. These include the World Economic Forum CEO Climate Leaders, the UN Sustainable Development Solutions Network, the Business and Sustainable Development Commission, and the UN Broadband Commission for Sustainable Development.

In 2016, under the proactive leadership of the Moroccan government, the SMARTer 2030 Action Coalition was launched. We are a founding member of the initiative, launched by the Global e-Sustainability Initiative (GeSI), which sets a roadmap for ICT's contribution to the Paris Agreement and the SDGs. There are two main objectives:

- > to ensure that the world's growing use of ICT does not exacerbate carbon emissions
- > to leverage the enabling potential of ICT to reduce CO₂ emissions in a broad range of industry sectors starting with energy efficiency in buildings and mobility.

At COP 22, we also took part in the Low-Emissions Solutions Conference hosted by COP 22 to discuss strategies for decarbonizing the economy, including the contribution of ICT.

Creating momentum

We contributed a thematic report in 2016 on digitalisation and sustainability for the Swedish Digitalisation Commission to advance the role of ICT as vital to reaching the Paris climate agreement. The official government report explored ICT's role within climate adaptation and mitigation, using ICT to improve carbon efficiencies throughout the value chain, for example, in energy, transportation, as well as in industries and agriculture/food production.

Connected Mangroves

With growing climate change, ecosystems are more vulnerable. 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



Matilda Gennvi Gustafsson, Ericsson Sustainability Director, demonstrates the technology behind Connected Water which, monitors water quality and the condition of water infrastructure.

and tsunamis. In the Connected Mangroves project, through a customized deployment, 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. In 2016, the project won a UN Framework Convention on Climate Change (UNFCCC) Momentum for Change award, which honors initiatives that contribute to climate resilience.

Connected Water

Wise water management enables climate-resilient societies. ICT can play a

pivotal role in monitoring water quality and the condition of water infrastructure. In a customer-tailored deployment developed in 2016, Ericsson Connected Water wirelessly connected water sensors report water quality data every 30 minutes, creating an ongoing ecological signature of a particular point in the water system as well as real-time leak detection systems for water utility pipelines. Together with AT&T, Ericsson is monitoring water quality at key watershed locations in the City of Atlanta. In 2016, Connected Water won first place in the category, "Everything for Good," in the 10th Annual E-Tech Awards of the CTIA, an international wireless communications trade group.



"Ericsson's Connected Manaroves project, the first of its kind in the world, is helping our communities that live near the mangrove plantation to better manage this vital but vulnerable ecosystem. These communities previously have not had resources to monitor the mangrove forest, and had low mangrove survival rates that put them at greater risk of flooding. Through our efforts and projects like this one, we are witnessing higher survival rates and hope to see a reduction in the damage of flooding on our communities. Universities can also access the sensors' data to study the impact of climate change in mangroves and from this data, draw up potential actions to improve the productivity of seedling plantations and conservation. NGOs that are driving reforestation programs can leverage on ICT to improve their programs. We hope to see more success in these kinds of conservation projects that help mitigate climate change and improve the quality of life for the community in the long run. The ripple effect can be felt far beyond the initial project."

YB Dato Sri Dr. Haji Wan Junaidi bin Tuanku Jaafar, Malaysian Minister for Natural Resources and Environment

INTERNET FOR ALL

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LEAVING NO ONE BEHIND

There is an enormous opportunity to bridge the digital divide and bring mobile broadband coverage to the nearly four billion people who are underserved or without mobile broadband access.

Mobile broadband is a key backbone of national infrastructure development, especially in emerging markets, which represent the majority of the offline population.

Forecasts predict 5.6 billion unique mobile subscribers globally by 2020 – which is likely to be more than the number of people with electricity at home (5.3 billion), bank accounts (4.5 billion), or running water (3.5 billion), according to GSMA Intelligence.

Extending the reach of internet for all is essential to meet the challenges set out in the SDGs. We support the International Telecommunications Union (ITU) Connect 2020 targets calling for 60% of the world's population to be online by 2020. The ITU estimates that it will take global investment of USD 450 billion in network infrastructure to connect the next 1.5 billion unconnected people worldwide, which means connecting 700 million people between now and 2020.

Addressing affordability and accessibility

In recognition of the need to scale efforts to reach this goal and make mobile broadband more affordable and accessible to all, in 2016 we launched a suite of core business solutions to make mobile internet investments in developing markets viable (p. 51).

Technology for Good

Through our Technology for Good initiatives, we channel our leadership and advocacy, often in collaboration with public and private partners, to address a range of global challenges. The role of ICT to boost socio-economic development cannot be underestimated. It can play an instrumental role in tackling urgent global issues such as poverty and hunger, enhancing financial and social inclusion, improving access to education and health, and addressing humanitarian issues such as refugees, peace building and disaster response.

New report charts ICT's role

Achieving the SDGs will require leveraging existing and widely deployed technologies, such as broadband, but also new innovative services and the improved reach of technological solutions. This was underscored in our 2016 report, "ICT & SDGs: How Information and Communications



Joint research between Ericsson and the Earth Institute at Columbia University in this 2016 report highlights ICT's role in accelerating achievement of the SDGs.

Technology Can Accelerate Action on the Sustainable Development Goals," published in collaboration with the Earth Institute at Columbia University, GSMA and ITU. As the fastest and most global technology uptake in history, mobile broadband has the potential to positively impact all of the 17 SDGs.

Measuring our impact

We measure the impact of mobile broadband in bringing Internet for All, the impact of our business solutions in underserved or unserved markets, and the impact of our Technology for Good projects.

Business-as-usual will not be sufficient to achieve many of the SDGs. Embracing broadband as critical infrastructure for the 21st century can help create the foundation for unprecedented global social and economic progress. With an enabling policy framework, strong public-private partnerships and sufficient public and private investment, technology and innovation can help deliver transformational change at the pace and scale required.



BRINGING INTERNET TO ALL

We are committed to serving the next wave of internet users by making mobile broadband access more affordable and accessible for all.

Today the vast majority of people in developing markets first experience the internet on a smartphone, usually due to limited access to fixed broadband. Greater device affordability is encouraging new subscribers in developing regions. Yet only four out of ten people in developing countries are connected to the internet.

Innovative approaches that address the challenges of affordability and accessibility are urgently needed if everyone is to fully enjoy the benefits of the internet. We are leveraging our technology and core competence to bring scale and impact to these challenges.

By bringing high-quality connectivity to unserved and underserved areas and enabling operators to invest where it will have the most impact, we aim to help bridge the digital divide.

Unserved areas are those without any connectivity today, mostly in developing countries. The underserved are those with 2G/GSM coverage. While 2G provides significant value to everyday life, including some very basic data services, it does not offer the full benefits of mobile broadband.

By 2022, Ericsson forecasts that there will be 8.9 billion mobile subscriptions and the number of smartphone subscriptions is forecast to reach 6.8 billion, with more than 95% of the subscriptions registered on 3G WCDMA/HSPA, 4G LTE and 5G networks.

Evolving technology expands access

We have been a key player in the evolution of mobile networks over the past 35 years, with the goal of bringing communication to all. We have continuously upgraded our technology, from 2G enabling voice calls and limited data transmission, to the growing reach of 3G and 4G mobile broadband that makes possible internet access for all.

A sound investment case

In response to this opportunity, and to channel our core business towards addressing the digital divide, in 2016 we launched a new suite of innovations that make mobile internet investments in low-ARPU (average revenue per user) markets viable.

New innovations reduce TCO

The new suite of solutions, which includes software and hardware additions to Ericsson Radio System, provide the capabilities needed to reduce the total cost of ownership (TCO) by up to 40% when rolling out Ericsson's total site solution for mobile broadband.

The suite of solutions not only improves the user experience through upgrades to 3G/4G from the existing 2G/GSM footprint but also enables operators to increase the pace of network build-out by selecting locations where the solutions will have the greatest impact and a much faster return on investment.

To complement deployment of the solutions are new unique mobile broadband tools that allow operators to identify which sites in a 2G/GSM/EDGE coverage area have the highest number of users who already have internet-ready devices. Operators can then determine where it makes more sense to convert those sites first to 3G/HSPA or 4G/LTE, so that the greatest number of people will enjoy the benefits of mobile broadband.

The new suite of solutions includes Psi Coverage, the energy-efficient mobile broadband coverage enabler; Antenna Integrated Radio, Ericsson Site Manager software paired with Ericsson Site Controller, which saves on energy costs by switching sites from "always on" to an "always available" state, and MINI-LINK, microwave radio units that lower the total cost of ownership (TCO).

Mobile Broadband Expander

Also introduced in 2016 to address internet access in developing areas was a trio of solutions:

- Mobile Broadband Expander with Intelligent Antenna Sharing, which lowers total cost of ownership for operators by 60% and simplifies expansion of 3G by enabling antenna reuse between existing GSM sites and new 3G/WCDMA equipment, as well as reuse of site power, microwave and transport infrastructure.
- Zero Touch WCDMA, which substantially lowers operations cost through simplifying network operations.
- > Flow of Users, allowing operators to maintain an optimal flow of smartphone users through a WCDMA network.

Reaching more users, faster

Rolling out new networks and services for underserved communities requires a sound investment case for mobile operators. The suite of solutions helps operators create viable business even in rural or offgrid settings. We will continue to provide solutions that help operators bridge the digital divide, cost-effectively extending the reach, maturity and increasing affordability of today's 3G technology, while laying the foundation for their 4G and 5G evolution.



Ericsson estimated net addition of internet users enabled by mobile broadband networks based on the Ericsson Mobility Report.

DRIVING FINANCIAL INCLUSION

Greater financial inclusion is an important driver for attaining the SDGs. Mobile financial services offer the possibility to bring millions into the formal economy, boosting individual livelihoods and transforming economies.

More than one quarter of the world's population lacks access to formal banking services. Despite the growth in mobile financial solutions, including 700 million new account holders between 2011 and 2014, nearly half of all adults in the developing world still do not have bank accounts or access to services from financial institutions, according to the World Bank.

Ericsson Mobile Financial Services (MFS) aim to drive greater financial and social inclusion. Financial services need to be accessible, affordable and convenient particularly if they are to benefit users in more rural or hard-to-reach areas. The MFS 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.

An open interoperable system allows traditional and non-traditional authorized financial service providers to quickly launch products and reach new consumer groups, achieving economies of scale and at the same time lowering operating expenditure and start-up costs. For instance, our research shows that the falling cost of digital technologies, notably mobile connectivity, could help utilities, local authorities, non-governmental organizations (NGOs) and community-based organizations effectively charge for water, generating revenues which could be used to build out new infrastructure and ultimately lead to dramatic improvements in public health and economic growth.

Mobile financial solutions can also address other sustainable development challenges, such as enabling the distribution and use of digital aid in emergency situations (p. 55).

Bim launched in Peru

The benefits of a fully enabled financial ecosystem are evident in the mobile wallet service called Bim (short for Billetera Movil, or Mobile Wallet), launched by ASBANC, Peru's National Bank Association in 2016 as the world's first interoperable, shared mobile payment platform targeting financial inclusion. Ericsson implemented the technology platform, which is shared by 34 financial institutions and three mobile operators, and provided operational and business services. Bim make it easy for subscribers to send, receive and spend money with mobile phones and smart-



The benefits of a fully enabled financial ecosystem are evident in the mobile wallet service called Bim as the world's first interoperable, shared mobile payment platform targeting financial inclusion.

The financial ecosystem



phones throughout Peru. The initiative is in line with Peru's National Financial Inclusion Strategy, launched in 2015, in which the government pledged that 75% of adults would have access to a transaction account by 2021. ASBANC estimates that 2.1 million Peruvians will benefit from and own a mobile wallet by 2019. Bim had 256,442 active users as of January 2017.

Growing support for digital payments

Peru is not alone among governments launching initiatives for financial inclusion based on digital payments. This is important, as technical solutions are only half the answer; regulators and central banks first need to create the underlying legal and regulatory foundations that pave the way toward full interoperability and inclusion.

Among the countries for which we are providing mobile financial solutions is Pakistan. Easypaisa, the country's first and largest branchless banking solution, deployed Ericsson Wallet Platform in 2016 to replace its existing platform. This increase volumes and payment transactions, enabling wider mobile money adoption. Launched jointly by Tameer Micro Finance Bank and Telenor Pakistan, Easypaisa supports more than 21 million active consumers, one of the largest mobile money service offerings in the world.

With increasing international recognition of the importance of financial inclusion for stimulating economic development and individual livelihoods, mobile financial services are critical for empowering those currently excluded from today's traditional financial system.

DIGITALIZING EDUCATION FOR GREATER IMPACT

Since Connect to Learn was launched in 2010, it has showcased how mobile broadband can deliver a quality education to students everywhere. Today it is in 23 countries, and benefits some 80,000 students.

An unprecedented global effort is required to achieve the bold education agenda set out by SDG 4: "that all girls and boys complete free, equitable and quality primary and secondary education" by 2030.

Girls are more likely than boys never to set foot in a classroom, despite all the efforts and progress made over the past two decades. Some 61 million girls are not in school, according to UNESCO. Lack of education has serious implications for development, especially for girls. A child who is born to a mother who can read is 50% more likely to survive past age five (UNICEF). One additional school year can increase a woman's earnings by 10% to 20% (The World Bank).

Education key to reach many SDGs

A focus on girls' education is particularly important for tackling SDG 5: "Achieve gender equality and empower all women and girls." Each additional year of schooling beyond primary offers greater payoffs for improved opportunities, options and outcomes for girls and women, including their health and those of their families. Education is therefore intrinsically linked to SDG 3 (Ensure healthy lives and promote well-being for all at all ages), and, since it is critical to building peaceful, inclusive societies, it also has positive impacts on SDG 10 (reduced inequalities) and SDG 16 (peace and justice and strong institutions).

Innovative solutions driven by all sectors of society will be essential to reaching the "inclusive and equitable quality education and promote lifelong learning opportunities for all" set out in SDG 4.

From innovation to impact

Connect to Learn is a global education initiative launched in 2010 by the Earth Institute of Columbia University, Millennium Promise and Ericsson. It is designed to channel innovation in mobility, broadband and the cloud to help overcome the obstacles to increasing access to quality education. There are considerable challenges in introducing mobile broadband technology to schools in developing countries. These include logistical difficulties in bringing connectivity to rural areas; access to electricity; security; low levels of IT knowledge among teachers; and the lack of a strong business model to ensure efforts are sustainable.

Connect to Learn is helping to meet many of these challenges by demonstrating business opportunities to operators, and by engaging governments in dialog to promote the inclusion of ICT in national education policies and budgets.

Ericsson is deploying a cloud-based ICT solution in schools that lowers both initial costs and total cost of ownership for schools, and which significantly reduces the complexity of technology solutions for teachers and students alike. Using cloud technology removes ICT support tasks from teachers and provides them with technology that is simpler to manage, so

CONNECT TO LEARN AROUND THE WORLD





Elaine Weidman-Grunewald, SVP & Chief Sustainability Officer, in the Connect To Learn classroom in Myanmar where a unique public-private partnership collaboration aims to improve access to the internet, deliver teacher training and enable students to experience a 21st century education.

they can focus on improving the quality of education.

The aim is to scale up access to quality secondary education, in particular for girls, in some cases providing scholarships and bringing ICT to schools in remote, resource-poor parts of the world, using mobile broadband and cloud.

Broad outreach in Myanmar

In 2016, the impact of the initiative was clearly evident in its largest deployment to date, Connect to Learn in Myanmar, a unique public-private collaboration with a range of partners which is breaking new ground in building capacity for the program. 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™ and the external evaluator EduEval. The deployments are supported by mobile operator Myanmar Post and Telecommunications. The project also receives support from the Ministry of Education and the Ministry of Communications and Information Technology in Myanmar.

Only 54% of secondary school-aged children are enrolled in secondary school in Myanmar, according to the World Bank. Connect to Learn is improving literacy in both the local language and English, as well as improving numeracy for over 21,000 students in total in Myanmar; more than half of those benefiting are girls. To date, 155 teachers from all 31 schools involved in the project have successfully completed a series of UNESCO's ICT-pedagogy integration, which allowed teachers in 2016 to begin integrating ICT into their classroom teaching, to use the internet to enrich the learning experience of students, and to transfer the ICT-pedagogy integration knowledge further to more teachers.

The project was largely made possible through the strategic partnership between Ericsson and DFID's Girls' Education Challenge, recognizing that the innovative approach piloted by Connect to Learn can help Myanmar modernize its schooling more broadly, with positive impacts for the learning, health and well-being of girls as well as for their families and communities.

Building capacity

Ericsson Academy, our internal learning organization, has developed a course delivery platform focused on improving ICT skills for youth globally that was successfully launched for university students in the Middle East and Sub-Saharan Africa in 2015. In partnership with local universities we are providing an accreditation that prepares students who take part in Connect to Learn for a career in the ICT industry, promoting their participation in STEM (Science, Technology, Engineering and Mathematics) subjects, particularly for young girls, and opens more opportunities for young people to choose a career with Ericsson. For Connect to Learn users, we first launched the platform at a high school in Rome. Italv.

Reaching out to refugee children

Armed conflict poses a major barrier to education. Some 50% of out-of-school children of primary school age live in conflict-affected areas (UNESCO).

New UNESCO data shows the devastating impact of the civil war in Syria. Before the conflict, nearly every child was enrolled in primary school but by 2013 about 1.8 million children and adolescents were out of school. It took just two years of civil war to erase all education progress made since the start of the century.

As part of our global partnership with the International Rescue Committee (IRC), we are deploying Connect to Learn in Domiz refugee camps in Northern Iraq with operator AsiaCell 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 guality educational content to refugee camps.

The benefit of the global 21st century resources that cloud-based education can bring is vital for teachers working in refugee camps who face isolation, limited resources and a higher level of instability in their jobs. In 2016, we provided Connect to Learn to 10 schools in the Domiz refugee camps in Northern Iraq, doubling the number of schools in the camps benefiting from the Connect to Learn Iraq project since 2015, impacting more than 6,700 students and 100 teachers.

WITH ICT, ENHANCED HUMANITARIAN RESPONSE

As the world faces increasing conflicts, an unprecedented refugee crisis, natural disasters and other challenges, ICT can play a critical role in improving humanitarian response – including more effective distribution of aid to those in need.

The number of people affected by humanitarian crises has almost doubled in the past decade, resulting from conflict or global challenges such as climate change and environmental degradation. More than 130 million people around the world need humanitarian assistance in order to survive.

Given the growing urgency and complexity of the world's humanitarian challenges, UN Secretary-General Ban Ki-moon convened the first World Humanitarian Summit in 2016 to support a new shared Agenda for Humanity and take action to prevent and reduce human suffering.

Connecting Business Initiative

At the World Humanitarian Summit, we committed to the Secretary-General and OCHA's Connecting Business Initiative. This multi-stakeholder initiative provides a mechanism for the private sector to engage with the UN system, national governments and civil society in a coordinated manner on crisis risk reduction, emergency preparedness, response and recovery.

We are signatories to the Humanitarian Connectivity Charter launched by the GSMA which aims to strengthen access to communication and information for those affected by crisis.

ICT can play a critical role in this mission and is already increasingly seen as a vital element of humanitarian response. For the past 15 years, we have been demonstrating the powerful role of technology to help transform humanitarian response, starting with Ericsson Response (p. 56), our disaster relief program. Our humanitarian partners include the World Food Programme, leading the UN Emergency Telecom Cluster, which serves hundreds of organizations. In addition, we also work with OCHA (UN Office for Coordination of Humanitarian Affairs), the International Rescue Committee, UNICEF; MSB, the Swedish Civil Contingencies Agency, and Save the Children. Our technology is also assisting refugees in reconnecting with loved ones (p. 57) and helping to foster peace and conflict resolution among youth in conflict-affected countries (p.58).

There is a critical need to help countries and communities to better adapt and quickly recover when emergencies occur – and to create long-term solutions that support a more effective response before the next crisis. We are constantly looking at new ways to innovate to improve resilience and humanitarian response, without drawing from already limited resources on the ground. A key consideration is knowing what technology to leverage and how to best make use of equipment, data and partners. In the future not just basic connectivity, but services such as data analytics and digital aid will play a greater role.

Ericsson Emergency Wallet

Digital financial services solutions for emergency situations can be of great use to the humanitarian community. The Ericsson Emergency Wallet, announced at the World Humanitarian Summit, was launched as a prototype for use in emergency situations where financial infrastructure is lacking. It will enable the distribution and use of digital funds by relief workers and impacted populations, which can help address issues such as safety, expense and traceability that are associated with handling cash. The solution design and prototyping is co-funded via the Level One Project from the Bill & Melinda Gates Foundation.

Big data for social good

Big data is increasingly used to contribute to social good. In one example, we are working with the non-profit organization Flowminder, which provides data analytics aimed at improving public health and welfare in low- and middle-income countries. A joint research project examined mobile communications data to understand the impact of travel restrictions on the response to the Ebola epidemic in Sierra Leone in 2015.

The research found that mobile phone data provides an important source of near



"At the IRC, we understand and recognize the importance of technology in humanitarian response to help make a positive impact on people's lives, and our public-private partnership with Ericsson and Asiacell is a concrete example of that.

Together we are supporting teachers with tools and training to provide students in northern Iraq with a 21st century education and a future beyond the refugee camp border."

David Miliband, President and CEO, the International Rescue Committee

real-time data on human mobility during an emergency and can be a valuable source of information about the impact of travel restriction policies during an emergency. However, strong regulatory guidelines that protect individual privacy must be considered. There are many practical issues to be solved regarding how the mobile industry should provide access to this data, and to whom. These are vital considerations for the international community before we face new pandemics.

When public-private partnerships bring their respective strengths to bear in addressing humanitarian crises, we are much better positioned to fill a vital gap in preparedness and response.

ERICSSON RESPONSE ON THE GROUND IN HAITI

When Hurricane Matthew struck Haiti, Ericsson Response responded quickly to offer essential connectivity, part of its long-standing mission to assist in humanitarian crises.

On October 4, Hurricane Matthew violently struck Haiti and resulted in the country's largest humanitarian emergency since the 2010 earthquake. It caused extensive flooding and mudslides, damage to road infrastructure and buildings, as well as electricity and water shortages. According to the UN Office for the Coordination of Humanitarian Affairs (OCHA), the hurricane affected 2.1 million people, with 546 deaths and 1.4 million people needing humanitarian assistance.

Ericsson Response, the employee disaster relief program, immediately responded on behalf of our partner, the World Food Programme (WFP). Our volunteers deployed and ran emergency telecoms equipment and provide technical expertise.

Ericsson Response, deployed under the ICT Humanitarian Response Working Group for Haiti, established 16 sites to support humanitarian users. There were six Ericsson Response volunteers deployed in 2016 to Haiti, with two additional volunteers supporting the deployment through the end of January 2017.

Long history of humanitarian support

Since 2000, hundreds of employees have supported over 40 humanitarian relief efforts in 30 countries. There were 148 active volunteers during 2016.

For over 15 years, Ericsson Response has played a leading role in the Emergency Telecommunications Cluster (ETC), a global network of organizations that work together to provide shared communications services in humanitarian emergencies. We support the ETC's 2020 vision to move towards not just supporting humanitarian assistance on the ground but providing connectivity to the local population.

Towards greater resilience

We are also supporting ETC in assisting national governments with increased communications resilience to disasters and improved response readiness. Ericsson Response is part of an ETC2020 pilot project in the Philippines, working with the government, humanitarian and private sectors. The overarching goal is to empower mobile network operators in Philippines with the ability to recover connectivity and communication services as quickly as possible to serve affected populations, government and the humanitarian response community, especially after a disaster.

Ericsson Response continues to collaborate 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.

Focus on training

Ericsson Response doubled the number of training opportunities during 2016, for example, in providing wifi solutions, one of the areas of assistance most requested by our partners. This made it possible to respond to the crisis in Haiti, greatly improving our capacity to assist.



An Ericsson Response volunteer installing internet access for WFP in Haiti.

HELPING REFUGEES RECONNECT

A digital platform to help refugees reconnect reached almost 600,000 users in 2016.

Global forced displacement due to wars and persecution has hit a record high, according to the UN Refugee Agency (UNHCR). The total number of displaced people at the end of 2015 reached 65.3 million– or one out of every 113 people on Earth, according to UNHCR's June 2016 Global Trends report. It is the first time in the organization's history that the threshold of 60 million has been crossed.

Daunting challenge

Addressing the needs of the large refugee outflows from countries experiencing conflicts is a daunting challenge for governments, humanitarian organizations, UN bodies and other institutions.

Refugees or long-term internally displaced persons (IDPs) are often separated from loved ones, which compounds the trauma they experience. Since 2010, Ericsson has been the lead technology partner to Refugees United (REFUNITE), a non-profit organization dedicated to help displaced persons locate missing family and loved ones. Ericsson has supported the development of an online family reconnection platform, providing technical expertise, and engaging with mobile network operators and others. The mobile phone platform is cost- free and works over low bandwidth on the most basic devices for ease of use and can also be accessed via the internet from any smartphone.

REFUNITE has assisted thousands of forcibly displaced families, resulting in hundreds of family reconnections. By the end of 2016, the platform had nearly 600,000 users and is available in 17 coun-

Refugee registrations Number of refugees registered



tries. These include Kenya, Ghana, the Democratic Republic of Congo, the Republic of Congo, Liberia, Jordan, Malawi, Niger, Nigeria, Pakistan, Philippines, Iraq, Rwanda, Somalia, South Africa, Tanzania, and Chad.



In partnership with REFUNITE, Ericsson has supported an online platform to help displaced persons locate missing family and loved ones.

FOR YOUTH, TOOLS TO FOSTER PEACE

We work with the Whitaker Peace & Development Initiative (WPDI) to help youth affected by conflicts and violence to foster safer and more productive communities in Africa, Latin America, and the United States.

Founded in 2012 by artist and humanist Forest Whitaker, UNESCO Special Envoy for Peace and Reconciliation and UN Advocate for Children Affected by War, WPDI provides holistic support to groups of young women and men who are empowered as leaders who can bring positive change in their communities. Support from WPDI includes first a unique training mix that focuses on mediation, conflict transformation, life skills and vocational skills in ICTs and entrepreneurship; secondly, the young leaders receive resources and mentoring in the development and management of educational projects and small businesses uniquely tailored to the needs of their communities. As the technology partner to WPDI, we provide ICT equipment and specialized training on ICT and business skills for the youth based on Connect to Learn (p. 53).

Working with partners like mobile operator Zain, we enable connectivity and internet access for the Initiative via computer-equipped Community Learning Centers and also deliver comprehensive virtual and face-to-face education in ICT and professional skills. WPDI also provides youth continued training in basic business and life skills and supports the youth as they develop and implement their community-building projects.

Through its flagship program, the Youth Peacemaker Network (YPN), WPDI fosters young leaders in conflict regions of Africa such as in South Sudan and post-conflict regions like Northern Uganda. The program is also currently active in Mexico, where it is designed to address conflict transformation in urban settings where gang-related violence affects youth.

Since the launch of the different programs, around 15,000 people have been positively impacted with youth trainings, community learning centers and community projects led by the youth.



WPDI foster young leaders through a unique training mix that focuses on mediation; conflict transformation; life skills and vocational skills in ICTs and entrepreneurship as well as resources and mentoring of educational projects and small businesses.

A SECOND CHANCE

In India, we are helping young people gain a second chance for an education through the Ericsson STeP centers. These centers impart basic training in computers, soft skills and personality development, retail and management skills, along with proficiency in spoken and written English. The aim is to help prepare youth who had to leave school due to financial constraints. The four-month course provides the necessary skills required for future employment as the program also provides placement assistance.

We are running 70 centers in eight major cities in India: Delhi, Noida, Gurgaon, Bengaluru, Kolkata, Chennai, Mumbai and Hyderabad. The program is implemented by the non-profit Smile Foundation. In 2016, 6,566 youth were trained and 48% of them placed in jobs. All our initiatives in India are in compliance with Section 135 of the Company's Act, which is focused on corporate social responsibility. Given our long history of sustainability and CR initiatives, we were able to respond rapidly to meet the new requirements in India and are well positioned to meet similar legislation that is evolving in other countries.

The project helps those living in difficult circumstances. One of our centers in Chennai is in one such community, Swami Nagar, where the majority of the local population consists of migrants who live without potable water and work in a highly polluting stone quarry and brick kiln. In this highly patriarchal community women have little control over their lives and decision-making rests largely with men. Young women are not allowed to complete their schooling or pursue higher education opportunities.

The Ericsson STeP program has given women in these communities many new opportunities, such as their first experience with computers. Approximately 80% of the young women who were part of the first group of students to complete the



S. Kannagi, a stone quarry worker, joined the Ericsson STeP center in Chennai.

program have been placed in different companies where they have now more than doubled their salaries. They have now become role models in their community and continue to encourage other young women to join the program.



Mobile healthcare in urban slums

Access to affordable healthcare is a critical need in India. Our support of the Smile on Wheels Programmes in six cities in India is helping to address this problem by increasing access to basic healthcare in the communities surrounding our project sites in Chennai, Kolkata, Mumbai, Noida, Bangalore and Gurgaon. The project has been developed to meet the primary healthcare needs of the underprivileged through mobile medical units (vans). It is implemented in urban slums where the local population lacks reliable sanitation services, supply of clean water, electricity and other basic services which lead to poor health outcomes.

The program has a special focus on women and children and provides a wide

range of curative, preventive and promotive health services to the underprivileged. Equipped with both the necessary tools and personnel, the medical unit travels to around 10 urban slum areas, bringing healthcare to their doorstep. By the end of 2016, Smile on Wheels vans had reached 100,000 people in these locations.

The program also disseminates health education with awareness sessions on topics such as dengue and malaria. The program has in place an online monitoring system that helps to capture the beneficary health records in real time. The analytics provide insight into the disease pattern in each of the cities and to better assist in planning appropriate healthcare activities.



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™ social media channels and websites below.





Empowering the next generation to use ICT for problem solving, In Stockholm, Sweden, Ericsson held a hackathon in 2016 with IBM Sweden, entrepreneurial coaching Drivhuset, and three Stockholm high schools, where students applied their ingenuity to societal challenges such as refugee integration, the environment and recycling. Winning solutions earned prizes. For more, see the Technology for Good blog.

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











Connect to Learn - Myanmar



World Economic Forum

Connect to Learn - Iraq



OBJECTIVES AND ACHIEVEMENTS

In line with our wanted position to be a relevant and responsible driver of positive change, our objectives and achievements reflect our efforts to mitigate risks and increase positive impacts.

Risk mitigation objectives

Status 2016	Long-Term Objectives (2020) *	Objectives 2016	Achievements 2016	Objectives 2017
	Identify and mitigate supplier risks related to Responsible Sourcing.	Close 65% of suppliers Code of Con- duct audit findings.	Closed over 85% of suppliers Code of Conduct audit findings.	See new target next row
	Address 100% of high risk suppliers within 5 years.			Address all suppliers in the top 80% of supplier spend.
New target				Define specific risk mitigation activities for high risk suppliers, including anti-corruption and employee safety for building and managing networks.
٠	Increase completion rate of anti-corrup- tion e-learning for employees to achieve 90% attendance of active employees.	Continue to deploy anti-corruption train- ing targeting all employees and achieve 85%, in line with our zero tolerance policy.	As per December 31, 2016, over 95,900 of the active employee, repre- senting over 84% of all active employ- ees, had completed the anti-corruption training for employees.	Continue to deploy anti-corruption train- ing targeting all employees and achieve 85%, in line with our zero tolerance policy.
New target				Increase the level of knowledge among active employees about Ericsson Compliance Line to 60%.
New target				Set the tone from the top by including responsible business on main company agendas throughout the year.
New target				Implement the anti-corruption screening tool in each region to achieve 95% of active and preferred suppliers screened from a compliance perspective.
	Reduce risk by increasing take-back of products at the end of life stage from our customers.	Achieve 12,080 tonnes e-waste take- back at the end of life.	Achieved 9,600 tonnes of e-waste take- back. Less than 5% of e-waste is dis- posed of in landfill.	Achieve 12,000 tonnes e-waste take- back at the end of life.
	Reduce major Occupational Health and Safety (OHS) incidents and track mitiga- tion on risks for major incidents, working toward our long-term vision for zero fatalities.	Increase maturity level of incidents by increasing reporting volume and report- ing quality with 30% globally.	Increased over 70% in reported volume of incidents and reporting quality. Solid adoption and implementation of the Global Incident Reporting Tool.	Implement site inspections for 50% of active Authorized Service Providers and implement site inspections for 8% of total work orders for Managed Services, including high risk activities.
	Secure Regional and Business Unit adherence to the Sales Compliance process.	Increase percentage of adherent cases among all cases subject to Sales Com- pliance to 85% ¹⁾	Achieved over 77% adherence to Sales Compliance. Reduced human rights risks by closing	Increase percentage of adherent cases among all cases subject to Sales Com- pliance to 85%.
	Manage Corporate Responsibility risks including human rights risks.	Reduce human rights risks by complet- ing identified mitigation plans in Human Rights Impact Assessments (HRIA) for Ethiopia and initiate a new HRIA.	mitigation activities identified in human rights impact assessments for Ethiopia and initiated a human rights study for Cuba.	Reduce human rights risks by closing mitigation activities identified in human rights study for Cuba and initiate a new HRIA.
•	Maintain absolute CO ₂ e emissions from Ericsson own activities for business travel, product transportation and facili- ties energy use in 2017 at the same level as 2011.	Monitor and report the CO ₂ e emissions per employee reduction performance for final two years.	Achieved a 45% reduction CO ₂ e emis- sions per employee compared to the 2011 baseline, resulting in an absolute emission reduction of 315 ktonnes.	Monitor and report the CO ₂ e emissions per employee reduction performance for the final year.
New target	Reduce Ericsson own activities, in- cluding business travel, product trans- portation, facilities energy use and fleet vehicles by 30% in absolute terms compared with 2015.	During 2016 we will define new long terms target for climate action.	New target defined (See Long Term Objective below).	Reduce Ericsson own activities, in- cluding business travel, product trans- portation, facilities energy use and fleet vehicles by 5% in absolute terms.

* 2020 unless otherwise stated.

¹⁾ Restatement to ensure a greater alignment to our Long-Term objective, our internal target and more balance and complete information on Sales Compliance Process.

Positive impact objectives

Status 2016	Long-Term Objectives (2020) *	Objectives 2016	Achievements 2016	Objectives 2017
•	Demonstrate energy performance improvements in line with the strategy to be the undisputed leader in energy performance.	Research and evaluate technologies that would enable a decrease of total accumulated mobile network energy consumption with 40% in a 2020 sce- nario, in addition to the concepts pro- vided by the EARTH project.	Developed 5G algorithms and tech- nologies have been evaluated and demonstrated (ER Day demo, see 3.4) to decrease total network energy con- sumption with 52% in a 2020 sce- nario.	See target next row
New target	Ericsson commits to 35% of energy saving in our newly launched Ericsson Radio System versus legacy portfolio thereby lowering the overall energy consumption by operators			
New target	Ericsson will continue to innovate to allow for alternative energy sources to be economically feasible in 25% of the total installed base of an operator, thereby reducing diesel consumption significantly.			
New target	Ericsson will strive to ensure that the 5G product portfolio shall be ten times more energy efficient (per transferred data) than current 4G in 5 years' time.			
•	Reduce societal emissions from Ericsson selected Industry & Society offerings by 2016.	Reduce societal emissions from Ericsson selected Industry & Society offerings with 2 times Ericsson's own emissions. This should result in at least an additional 1,5 million tonnes CO ₂ e reduced.	Achieved over 2.6 times reduction in societal emissions from selected Industry & Society offerings compared to Ericsson's own emissions, equating to more than 1.6 million tonnes CO ₂ e reduced.	Reduce societal emissions from Ericsson relevant offerings with 3 times Ericsson's own emissions.
•	Impact positively 28.4 million people through Technology for Good™ initia- tives by 2016.	Positively impact a minimum of 8 mil- lion additional people through Tech- nology for Good™ initiatives, in order to meet the Long -Term Objective.	Positively impacted 37 million people through Technology for Good™ initia- tives. Between 2014 and 2016, 89 million people were positively impacted by Technology for Good™ initiatives.	Positively impact 30 million through Technology for Good™ initiatives.
٠	Increase to 30 percent the female rep- resentation of all executives, line man- agers and the employee workforce.		Achieved 35% Ericsson Leadership Team (ELT), 25% Executives Managers, 20% Line Managers and 23% Overall Workforce female representation.	

* 2020 unless otherwise stated.

Target achieved Partly achieved

🔷 On track

GRI INDEX

The Standard Disclosure Items listed below have been externally assured (Assurance Statement p.68). Disclosure of Management Approach (DMA) covering identified significant issues can be found online. Omissions to Standard Disclosure Items are described, when applicable, in GRI Disclosure 2016 online. Standard Disclosure Items listed are an indicative description. For a full Standard Disclosure Items description please visit GRI Sustainability Reporting Guidelines.

STRATEGY AND ANALYSIS G4-01 Statement from the most senior decision maker of the organization AR p.2-5 (S&CR p.2-3) ORGANIZATIONAL PROFILE Sector p.2-3 G4-03 Name of the organization GRI G4-04 Primary brands, products, and/or services AR p.6-23 G4-05 Location of organization's headquarters AR p.184 G4-06 Countries where the organization operates AR p.24-25 G4-07 Nature of ownership and legal form AR p.136 G4-08 Markets served AR p.24-25 G4-09 Scale of the organization AR p.136 G4-10 Total workforce AR p.44 G4-11 Collective bargaining agreements coverage GRI G4-12 Organization's supply chain description AR p.48 G4-13 Significant changes during the reporting period AR p.18 G4-14 Commitment to external economic, environmental and social principles or inititatives GRI G4-16 Memberships of associations and national or international advocacy GRI Imarcal statements IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES GGI Imarcal statements p.110-111	GRI	Standard Disclosure Items	Reference St	atus
G4-01 Statement from the most senior decision maker of the organization AR p.2-5 S&CR p.2-3 G4-03 Name of the organization GRI G4-04 Primary brands, products, and/or services AR p. 6-23 G4-05 Location of organization's headquarters AR p.184 G4-06 Countries where the organization operates AR p.24-25 G4-07 Nature of ownership and legal form AR p.24-25 G4-09 Scale of the organization AR p.184 G4-10 Total workforce AR p.24-25 G4-10 Total workforce AR p.24-25 G4-11 Collective bargaining agreements coverage GRI G4-12 Organization's supply chain description AR p.48 G4-13 Significant changes during the reporting period AR p.1 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 DENTIFIED MATERIAL ASPECTS AND BOUNDARIES GA-17 G4-18 Process for defining report content and aspects boundary outside the organi	STRAT			
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G4-04 Primary brands, products, and/or services AR p. 6-23 G4-05 Location of organization's headquarters AR p.184 G4-06 Countries where the organization operates AR p.24-25 G4-07 Nature of ownership and legal form AR p.24-25 G4-09 Scale of the organization AR p.24-25 G4-09 Scale of the organization AR p.24-25 G4-10 Total workforce AR p.24-25 G4-10 Total workforce AR p.94-95 G4-11 Collective bargaining agreements coverage GRI G4-12 Organization's supply chain description AR p.48 G4-13 Significant changes during the reporting period AR p.1 G4-14 Precautionary approach application by the organization GRI or international advocacy GRI Imancial statements G4-16 Memberships of associations and national or international advocacy Imancial statements G4-17 Entities included in the organization sconsolidated financial statements p.110-111 G4-18 Proceas for defining report content and aspects boundaries p.12-13 G4-20 Aspect boundary within the organization for each materia			GRI	
G4-05 Location of organization's headquarters AR p.184 G4-06 Countries where the organization operates AR p.24-25 G4-07 Nature of ownership and legal form AR p.24-25 G4-08 Markets served AR p.24-25 G4-09 Scale of the organization AR p.136 G4-10 Total workforce AR p.94-95 G4-11 Collective bargaining agreements coverage GRI G4-12 Organization's supply chain description AR p.48 G4-13 Significant changes during the reporting period AR p.1 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 DENTIFIED MATERIAL ASPECTS AND BOUNDARIES GA-17 G4-18 Process for defining report content and aspects boundary within the organization for each material aspect GRI G4-21 Aspect boundary within the organization for each material aspect GRI G4-22 Effect of any re-statements of information provided in earlier reports GRI G4-23			AR p. 6-23	
G4-06 Countries where the organization operates AR p.24-25 G4-07 Nature of ownership and legal form AR p.136 G4-08 Markets served AR p.24-25 G4-09 Scale of the organization AR p.24-25 G4-10 Total workforce AR p.94-95 G4-11 Collective bargaining agreements coverage GRI G4-12 Organization's supply chain description AR p.48 G4-13 Significant changes during the reporting period AR p.1 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 G4-17 Entities included in the organizations consolidated financial statements P.12-13 G4-17 Entities included in the organization or international aspect GRI P.12-13 G4-19 Material aspects identified in the process for defining p.12-13 G4-20 Aspect boundary outside the organization for each material aspect GRI P.12-13 G4-20 Aspect boundary outside the organization for each material aspect GRI <	G4-05	•		
G4-07 Nature of ownership and legal form AR p.136 G4-08 Markets served AR p.24–25 G4-09 Scale of the organization AR p.24–25 G4-10 Total workforce AR p.49-5 G4-11 Collective bargaining agreements coverage GRI G4-13 Significant changes during the reporting period AR p.13 G4-14 Proceutionary 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 G4-17 Entities included in the organizations consolidated financial statements P.12–13 G4-19 Material aspects identified in the process for defining the report content S&CR G4-20 Aspect boundary outside 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 G4-23 Salinificant changes from	G4-06			
G4-08 Markets served AR p.24-25 G4-09 Scale of the organization AR p.ii G4-10 Total workforce AR p.94-95 G4-11 Collective bargaining agreements coverage GRI G4-12 Organization's supply chain description AR p.48 G4-13 Significant changes during the reporting period AR p.1 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 G4-17 Entities included in the organizations consolidated financial statements AR p.110-111 G4-18 Process for defining report content and 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 G4-22 Effect of any re-statements of information provided in earlier reports GRI G4-24 Askeholder groups engaged by the organization for each material aspect S&CR p.10 G4-24 Stakeholder groups engaged by the organization for each material aspect boundary S&CR p.10	G4-07	Nature of ownership and legal form	AR p.136	
G4-10 Total workforce AR p.94-95 G4-11 Collective bargaining agreements coverage GRI G4-12 Organization's supply chain description AR p.48 G4-13 Significant changes during the reporting period AR p.1 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 G4-17 Entities included in the organizations consolidated financial statements AR G4-18 Process for defining report content and aspects boundaries S&CR G4-19 Material aspects identified in the process for defining the report content S&CR G4-21 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 G4-24 Stakeholder groups engaged by the organization fore each material aspect S&CR p.10	G4-08		· · · · · · · · · · · · · · · · · · ·	
G4-11 Collective bargaining agreements coverage GRI G4-12 Organization's supply chain description AR p.48 G4-13 Significant changes during the reporting period AR p.1 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 G4-17 Entities included in the organizations consolidated financial statements R.110–111 G4-18 Process for defining report content and aspects boundaries p.110–111 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 G4-23 Significant changes from previous reporting periods in the scope and aspect boundary S&CR p.10 G4-24 Stakeholder groups engaged by the organization for each material aspect S&CR p.10 G4-24 Sakeholder grou	G4-09	Scale of the organization	AR p.ii	
G4-12 Organization's supply chain description AR p.48 G4-13 Significant changes during the reporting period AR p.1 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 G4-17 Entities included in the organizations consolidated financial statements AR p.110–111 G4-18 Process for defining report content and aspects boundaries p.12–13 G4-20 Aspect boundary within the organization for each material aspect GRI G4-21 Aspect boundary within the organization for each material aspect GRI G4-21 Aspect boundary outside the organization for each material aspect GRI G4-23 Significant changes from previous reporting periods in the scope and aspect boundary GRI G4-23 Significant changes from previous reporting periods in the scope and aspect boundary S&CR p.10 G4-24 Stakeholder groups engaged by the organization for each material aspect S&CR p.10 G4-24 Stakeholder groups engaged by the organi	G4-10	Total workforce	AR p.94-95	
G4-13 Significant changes during the reporting period AR p. 1 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 JENTIFIED MATERIAL ASPECTS AND BOUNDARIES G4-17 Entities included in the organizations consolidated financial statements AR p.110–111 G4-18 Process for defining report content and aspects boundaries S&CR G4-19 Material aspects identified in the process for defining the report content S&CR 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 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 G4-24 Stakeholder groups engaged by the organization s&CR p.10 <td>G4-11</td> <td>Collective bargaining agreements coverage</td> <td>GRI</td> <td>0</td>	G4-11	Collective bargaining agreements coverage	GRI	0
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 JENTIFIED MATERIAL ASPECTS AND BOUNDARIES G4-17 Entities included in the organizations consolidated financial statements AR G4-18 Process for defining report content and aspects boundaries S&CR G4-19 Material aspects identified in the process for defining the report content for each material aspect GRI G4-20 Aspect boundary within the organization for each material aspect GRI GRI G4-21 Aspect boundary outside the organization for each material aspect GRI GRI G4-22 Effect of any re-statements of information provided in earlier reports GRI GRI G4-23 Significant changes from previous reporting periods in the scope and aspect boundary GRI GRI G4-24 Stakeholder groups engaged by the organization S&CR p.10 GRI GRI G4-24 Stakeholder groups engaged by the organization S&CR p.10 GRI GRI G4-24 Stakeholder groups engaged by the organization S&CR p.10 GRI </td <td>G4-12</td> <td>Organization's supply chain description</td> <td>AR p.48</td> <td></td>	G4-12	Organization's supply chain description	AR p.48	
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environmental and social principles or initiatives G4-16 Memberships of associations and national or international advocacy IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES G4-17 Entities included in the organizations consolidated financial statements AR p.110–111 G4-18 Process for defining report content and aspects boundaries p.2-13 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 G4-24 Stakeholder groups engaged by the organization for identification and selection of stakeholders with whom to engage S&CR p.10 G4-26 Organization's approach to stakeholder engagement engagement, and how organization responded S&CR p.10 G4-27 Key topics and concerns raised through stakeholder engagement, and how organization responded S&CR p.10 G4-28 Reporting period for information provided S&CR p.10 G4-29 Date of most	G4-14		GRI	
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	G4-33			

ECONOMIC PERFORMANCE INDICATORS

EC 02	Risks and opportunities due to climate change	AR p.48-49 S&CR p.47-48	
EC 04	Financial assistance received by the organization from governments.	GRI	
EC 08	Significant indirect economic impacts, including the extent of impacts	S&CR p.49-59	0
EC 09	Percentage of the procurement budget used for significant locations of operation spent on suppliers local to that operation	AR p.48 GRI	

ENVIRONMENTAL PERFORMANCE INDICATORS

EN 01	Materials used by weight or volume	GRI	0
EN 03	Energy consumption within the organization	S&CR p.41-42	
EN 04	Energy consumption outside of the organization	S&CR p.42	
EN 06	Reduction of energy consumption	S&CR p.41-42	
EN 07	Reductions in energy requirements of products and services	S&CR p.34-39	
EN 08	Total water withdrawal by source	GRI	
EN 15	Direct greenhouse gas (GHG) emissions (Scope 1)	S&CR p.42	
EN 16	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	S&CR p.42	
EN 17	Other indirect greenhouse gas (GHG) emissions (Scope 3)	S&CR p.42	
EN 18	Greenhouse gas (GHG) emissions intensity	S&CR p.41	
EN 19	Reduction of greenhouse gas (GHG) emissions	S&CR p.41-42	
EN 21	NOX, SOX, and other significant air emissions	GRI	
EN 27	Impact mitigation of environmental impacts of products and services	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	n 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.15-20	
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.94-98	0
LA 06	Type of injury and rates of injury, occupational dis- eases, 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	GRI	0
LA 11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	GRI S&CR p.29	0
LA 12	Composition of governance bodies and breakdown of employees per employee category according to indicators of diversity	AR p. 94-98,	
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	st 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	
Societ	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, 151-153	
SO 04	Communication and training on anti-corruption policies and procedures	S&CR p.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 out- comes	AR p.50	
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.22-23	
SO 11	Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms	GRI	0

Reference

	Sustainability and Corporate Responsibility Report 2016
AR	Annual Report 2016
	GRI disclosure 2016 (online)
Ghi	
Degree	o of reporting

UNGP REPORTING FRAMEWORK

This index is designed to help stakeholders to identify the location of answers Ericsson has provided to the United Nations Guiding Principles on Business and Human Rights Reporting Framework.

The Framework is made up of three sections. Part A: Governance of Respect for Human Rights; Part B: Defining the Focus of Reporting, and Part C: Management of Salient Human Rights Issues.

Each section includes several questions to be answered by the reporting company. For a full UNGP Reporting Framework with overarching and supporting questions' description, visit http://www.ungpreporting.org/

Section	Overarching and supporting questions		Reference S&CR Report
Policy commitment	What does the company commitment state on the duty to respect human rights	A1	15, 16
	How was develop the company public commitment on the duty to respect human rights?	A1.1	7, 15
	Whose human rights does the company public commitment address?	A1.2	
	How is the company public commitment communicated?	A1.3	15, 22
Embedding respect for human rights	How does the company demonstrate the importance of the implementation of its human rights commitment?	A2	2, 3, 15, 17, 19, 21
	How is responsibility for respect of human rights performance organized within the company, and why?	A2.1	15
	What kinds of human rights issues are discussed by senior management and by the Board of Directors, and why?	A2.2	2, 15
	How are employees and contract workers made aware of the ways in which respect of human rights should inform their decisions and actions?	A2.3	15, 17, 18
	How does the company make clear in its business relationships the importance it places on respect for human rights?	A2.4	22, 23, 27, 31
	What lessons has the company learned during the reporting period about achieving respect for human rights, and what has changed as a result?	A2.5	
Statement of salient issues	State the salient human rights issues associated with the company's activities and business relationships during the reporting period	B1	2, 16
Explanation of salient issues	Describe how the salient human rights issues were determined, including any input from stakeholders	B2	12, 16
Geographical focus	If reporting on the salient human rights issues focuses on particular geographies, explain how that choice was made	B3	
Additional severe impacts	Identify any severe impacts on human rights that occurred or were still being addressed during the reporting period, but which fall outside of the salient human rights issues, and explain how they have been addressed	B4	24

Section	Overarching and supporting guestions		Reference S&CR Report				
			General	Right to privacy	Freedom of expression	Labor rights	
Specific policies	Does the company have any specific policies that address its salient human rights issues and, if so, what are they?	C1	20	18		25, 27, 30	
	How does the company make clear the relevance and significance of such policies to those who need to implement them?	C1.1	16			25, 31	
Stakeholder engagement	What is the company's approach to stakeholders' engagement in relation to salient human rights issue?	C2	10, 19				
	How does the company identify which stakeholders to engage with in rela- tion to salient issue, and when and how to do so?	C2.1				28	
	Which stakeholders has the company engaged with regarding each salient issue, and why?	C2.2	10, 12, 19				
	How have the views of stakeholders influenced the company's under- standing of each salient issue and/or its approach to addressing it?	C2.3	16, 22	12, 19			
Assessing impacts	How does the company identify any changes in the nature of each salient human rights issue over time?	C.3	17, 18, 23	18, 20	18	18, 22, 25	
	Were there any notable trends or patterns in impacts related to a salient issue and, if so, what were they?	C3.1	17				
	Did any severe impacts occur that were related to a salient issue and, if so, what were they?	C3.2					
Integrating findings and taking actions	How does the company integrate its findings about each salient human rights issue into its decision-making processes and actions?	C.4	7			17, 18, 25, 26	
	How are those parts of the company whose decisions and actions can affect the management of salient issues, involved in findings and imple- menting solutions?	C4.1	15, 20,			27, 30	
	When tensions arise between the prevention or mitigation of impacts related to a salient issue and other business objectives, how are these tensions addressed?	C4.2					
	What action has the company taken to prevent or mitigate potential impacts related to each salient issue?	C4.3	17, 19, 20, 22, 23	18, 19		22, 25, 26, 28	
Tracking performance	How the company know if efforts to address each salient human rights issue are effective in practice?	C5	7, 15, 20, 22			25, 30	
	What specific examples from the reporting period illustrate if each salient issue is being managed effectively?	C5.1	20, 22, 28			23, 26, 27, 30	
Remediation	How does the company enable effective remedy if people are harmed by its actions or decisions in relation to the salient human rights issues?	C6	18				
	Through what means can the company receive complaints or concerns related to each salient issue?	C6.1	18				
	How does the company know if people feel able and empowered to raise complaints or concerns?	C6.2	18				
	How does the company process complaints and assess the effectiveness of outcomes?	C6.3					
	What were the trends and patterns in the complaints or concerns and their outcomes regarding each salient issues, and what lessons has the company learned?	C6.4					
	Did the company provide or enable remedy for any actual impacts related to a salient issue and, if so, what are typical or significant examples?	C6.5					



Independent Auditor's Combined Assurance 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 2016.

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 carbon dioxide emissions data regarding Ericsson's own activities on page 42.

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. 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. Since this assurance and the limited 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 recognize that Ericsson is committed to being accountable to its key stakeholders and has the necessary competencies and processes in place to engage with stakeholders, particularly at group level. We have seen evidence of how Ericsson actively seeks to understand stakeholder expectations and collaborate with stakeholder organizations on significant sustainability and corporate responsibility issues, locally and globally. We have no specific recommendations regarding inclusivity.

Regarding materiality

We consider Ericsson to have a systematic process for identifying and assessing material sustainability and corporate responsibility topics through internal analyses and stakeholder engagement. An employee survey has been conducted in 2016 to inform the materiality assessment, and there are ongoing dialogues with customers and investors that also address material sustainability and corporate responsibility issues. We have no specific recommendations regarding materiality.

Regarding responsiveness

We appreciate that Ericsson is attentive to stakeholder concerns, and works systematically in responding to stakeholder input. This is also the case where issues raised by stakeholders are deemed important but not necessarily among the most material aspects on the sustainability and corporate responsibility agenda, for instance Ericsson's role in promoting the rights of children. Ericsson has continued to develop an approach to working with the UN Sustainable Development Goals during the year, which is in line with the interests of certain stakeholders. We have no specific recommendations regarding responsiveness.

Stockholm, February 28, 2017 PricewaterhouseCoopers AB

Bo Hjalmarsson Authorised Public Accountant Fredrik Ljungdahl Expert Member of FAR



Independent Auditor's Report of Factual Findings

To Telefonaktiebolaget LM Ericsson (publ)

Introduction

We have been engaged by the Executive Leadership Team of Telefonaktiebolaget LM Ericsson (publ) ("Ericsson") to perform the procedures agreed with Ericsson and enumerated below with respect to Ericsson's Conflict Minerals Program.

Our work has been performed with guidance from the International Standard on Related Services (ISRS 4400), applicable to agreed-upon procedures engagements. The procedures were performed solely to assist Ericsson in evaluating the design of the Conflict Minerals Program in relation to the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas ("OECD Guidance").

Procedures performed

We have assessed if Ericsson's Conflict Minerals Program substantially conforms to the OECD Guidance as it relates to "downstream" purchasers of products and components that are included in Ericsson products. In particular, we have assessed if Ericsson has applied the five-step framework in Annex I (and supplements) of the OECD Guidance:

- 1. Appropriate management systems have been established (step 1)
- 2. Risks in the supply chain have been identified and assessed (step 2)
- 3. A strategy to respond to identified risks has been implemented (step 3)
- 4. Third-party audits of smelters' due diligence practices have been carried out (step 4)
- 5. Annual reporting on supply chain due diligence has been performed (step 5)

Factual findings

We found that Ericsson's Conflict Minerals Program substantially conforms to the OECD Guidance (Annex I with supplements) as it relates to "downstream" purchasers of products and components that are included in Ericsson products. Ericsson's participation in the Conflict-Free Sourcing Initiative (CFSI) is a key component of the Conflict Minerals Program and an important means to secure audits of smelters and refiners.

Because the above procedures do not constitute either an audit or a review made in accordance with International Standards on Auditing or International Standards on Assurance Engagements (ISAE 3000), we do not express any assurance on the Conflict Minerals Program. Had we performed additional procedures or a reasonable or limited assurance engagement in accordance with ISAE3000, other matters might have come to our attention that would have been reported to you.

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