

Contact

Final issue of Contact magazine



ICT to the rescue

New ICT-based alarm systems enable fast emergency response Pages 16-25



ZIN LE, HEAD OF ENGAGEMENT PRACTICES AT ERICSSON IN VIETNAM:

"I really believe in creating enjoyment at work" Pages 14-15

How it works:

HTML5/
WEB RTC Page 5



Contact through the years Pages 30-31



ERICSSON

GLOBAL NEWS SUMMARY

Catch up with the top internal news, views
and videos with our new global newsletter.
It's coming to your mailbox soon.





Digital mining

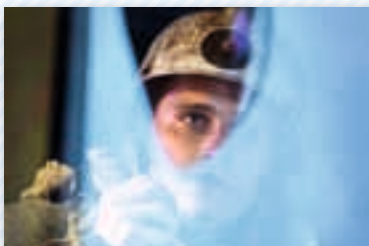
Ericsson goes underground

Pages 26-30



NEWS

- 8 A network for assistants
- 9 **Heroes shine** after Hurricane Sandy
- 9 Students and smartphones
- 10 Smartphones spot **skin cancer**
- 12 Twenty years of SMS
- 13 **Compete and win!**



THEME – ICT AND THE EMERGENCY SERVICES

- 17 How Ericsson's **CoordCom solution** is connecting emergency services around the world
- 20 Leif Jonsson, Production Manager at Södertörn Fire and Rescue Service: "CoordCom has helped us and **SOS Alarm** save a considerable amount of time"
- 19 ICT comes to the rescue during **Hurricane Sandy**
- 23 WIDER – Ericsson's alarm system for disaster-relief operations



PLUS...

- 4 Have your say
- 5 How **HTML5/WebRTC** works
- 14 Zin Le, Head of Engagement Practice in Vietnam: "I really believe in creating **enjoyment at work**"
- 32 Get the lowdown on **patents** and licenses
- 36 Test your general knowledge – compete against yourself

End of an era

This issue of Contact Magazine is the very last. We have taken the decision to close down the magazine, and emotionally, it has not been an easy decision at all. Contact has been a big part of Ericsson's internal communications for more than 70 years, and many employees have had a long-term relationship with the magazine. From a logical perspective, however, the decision was straightforward.

Our internal communication has gradually been moving from print media to digital. People today are increasingly connected, including of course us working at Ericsson. That is why it feels natural for our future internal communication to be based on digital channels that allow us to reach more people more quickly, and stimulate a better dialog between everyone working here. From an environmental perspective, it is also difficult in the long term to defend a printed magazine distributed to so many locations all around the world. This, together with the financial situation, where we need both to improve efficiency and reduce costs, makes the decision even more necessary.

We know, however, from reader surveys and spontaneous comments from you, that much of the content of the magazine has been greatly appreciated. We are therefore looking at how some of the content and Contact's way of illustrating different issues can be transferred to other formats and digital channels. Personally, I think Contact's strength in recent years has been the way it has explained and nailed down what we do within Ericsson in an external, global context. We want to continue to do that in our future communications with you.

That's why I think you will also enjoy this final issue. We look at how digital alarm systems are helping emergency services around the world to become more efficient and save more lives. We also describe how specially adapted telecom systems from Ericsson are being used in disaster zones, struck by catastrophes such as earthquakes or civil wars.

With that said, I would like to thank all of you who have been reading Contact magazine. This is undoubtedly the end of a long era in communications but also the start of something new.



Helena Norrman,
Head of Group Function
Communications

Contact

Editor Jenz Nilsson, jenz.xx.nilsson@ericsson.com, +46 8 588 331 38 **Assistant editor** David Callahan, david.callahan@jgcommunication.se, +46 8 588 331 84 **Publisher** Helena Norrman, helena.norrman@ericsson.com
In charge of internal channels (acting) Roger Tilzey, roger.tilzey@ericsson.com **Reporters in this issue** Hendrik Bergstén, hendrik.bergsten@jgcommunication.se, David Callahan, david.callahan@jgcommunication.se, Sofia Falk, sofia.falk@jgcommunication.se, Anders Jinneklint, anders.jinneklint@jgcommunication.se, Michael Masoliver, michael.masoliver@jgcommunication.se, Benny Ritzén, benny.ritzen@jgcommunication.se
Art director Carola Pilarz, carola.pilarz@jgcommunication.se **Graphics** Svenska Grafikbyrån
Address Contact, Box 49031, 100 28 Stockholm **Fax** +46 8 522 915 99 **E-mail** contact.comments@ericsson.com **Print V-TAB**, Vimmerby **Contact online** http://internal.ericsson.com/page/hub_inside/news/magazines/kontakten/index.html



Have your say

E-mail us your questions, opinions, reflections or work-related images. global.editorial@ericsson.com

WHICH READER'S PICTURE IS BEST?

Over the past year, Contact has published several pictures taken by employees with their mobile-phone cameras. Now we want you to select the picture you like best. Go to internal.ericsson.com and click on the "Best readers' picture 2012" banner. There you will find all the pictures published during the year. You can also find the photos here: internal.ericsson.com/page/hub_inside/news/magazines/contact/readers/pictures/index.jsp. Select your favorite picture, and e-mail us at: global.editorial@ericsson.com. Please

write "best reader's picture" and the number of your favorite image in the subject field, and send it to us by January 14. The winning photo will be published on the intranet later in January.

Editorial

CONTACT IS NOT FOR RECEPTION AREAS

I wondered if it's okay to display copies of Contact magazine in reception areas, where customers may read it?

Jan Sjögren, Sweden

ANSWER Hello Jan, Contact magazine is a strictly internal publication, only intended for employees to read. The magazine must therefore not be made available in any public areas where customers and other visitors gather.

Editorial

CORRECT NAME

In 3 have their say on page 10 in the last issue of Contact magazine we unfortunately misspelled the name of Tatenda Mudariki.

Editorial

FINE FEEDBACK

You didn't miss the first issue of the digital newsletter Global News Summary, which was sent to your mailboxes on November 1, did you? You really should check it out. Judging by the responses sent to global.editorial@ericsson.com, most people have been extremely pleased to receive a summary of Ericsson news in this format. Thank you for all your praise, as well as your suggestions for improvements.

Editorial

Readers' pictures



Here's a photo I took using my Xperia Arc high up in the sky above Almaty in Kazakhstan about a year ago. The sun was just about to rise as I was returning home from a business trip.

Haluk Saktas, Turkey



This picture was taken during a customer visit in Hong Kong with my Sony Ericsson X10.

Johan Axelsson, Sweden



Here's a winter photo taken with my Xperia X10 mini in Tashkent, Uzbekistan.

Narmina Gadjeva, Uzbekistan

Welcome ...

PHOTO: STEFAN BÖLKE



... to Ericsson, Tazrian Khan

who moved to Sweden from Bangladesh in 2007 with her husband. She now works as a Systems Developer at Business Unit Networks in Stockholm.

What did you do before you joined Ericsson?

I worked for a year and a half for a Swedish software-development company on a management-training solution, which is used by companies such as (insurance

firm) If, Telenor and the Swedish Transport Administration. Before that, I studied at KTH Royal Institute of Technology in Stockholm. Before coming to Sweden, I worked for telecom and software-development companies in Bangladesh.

How can you use your previous experience in your new job?

I'm used to the work environment from similar companies

in Sweden and Bangladesh. The technology I worked with at my previous company wasn't exactly the same, but still comparable. In Bangladesh, I used the same technology when I was working at Banglalink and at other companies.

Where do you work now?

I work for the Common Operations and Maintenance unit, where I mostly develop components.

Web poll

83

... percent of 195 Ericsson employees say they liked the You Me We Live 2012 webcast.

Source: Intranet

Have you been asked ...

...HTML5/WEB RTC?

HTML5/Web RTC

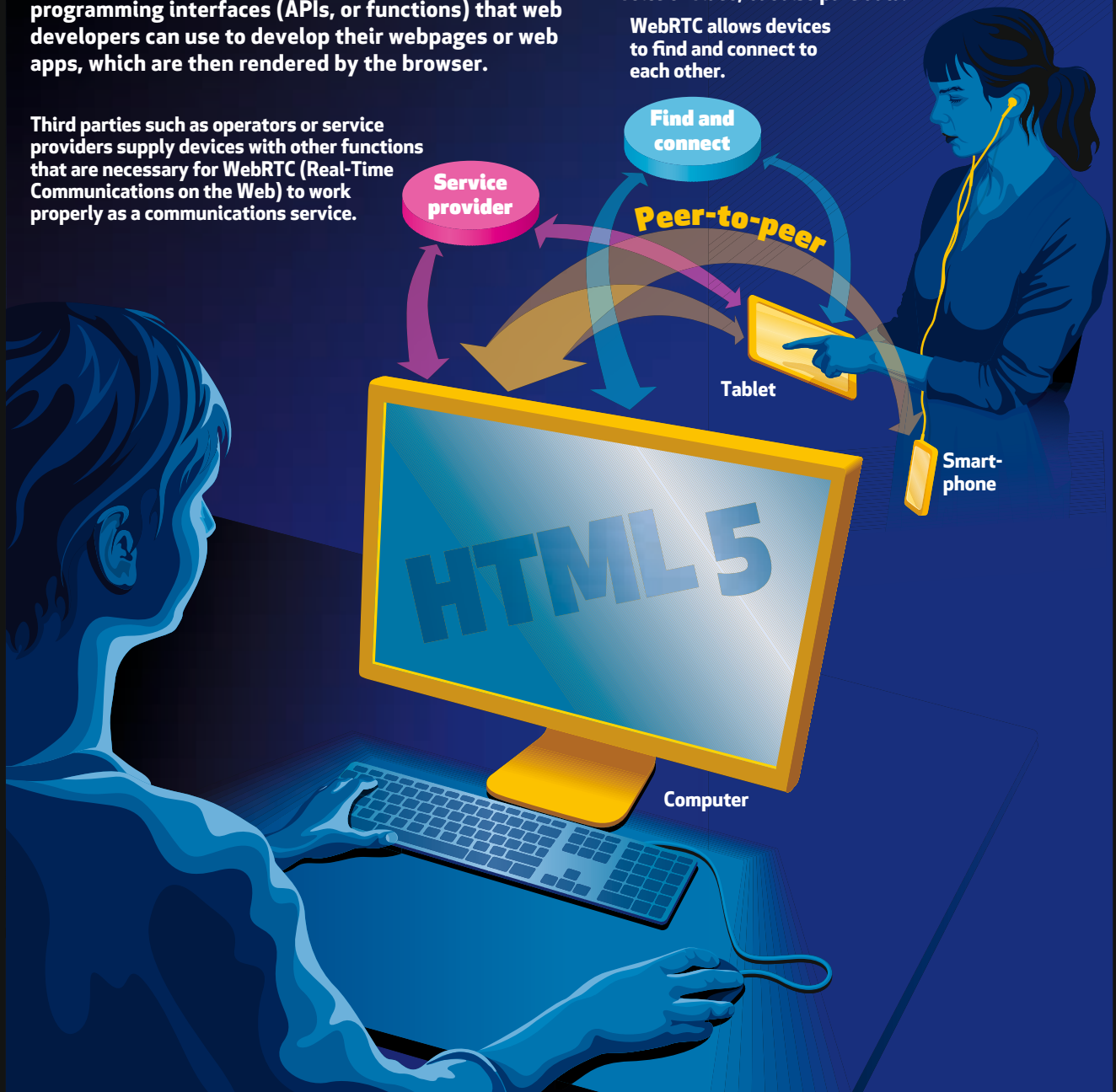
HTML5 (HyperText Markup Language version 5) is a collective term for all the functions that modern web browsers make available to web developers. It is a standard issued by the World Wide Web Consortium (W3C) which specifies a number of application programming interfaces (APIs, or functions) that web developers can use to develop their webpages or web apps, which are then rendered by the browser.

Third parties such as operators or service providers supply devices with other functions that are necessary for WebRTC (Real-Time Communications on the Web) to work properly as a communications service.

WebRTC

WebRTC is a new function that is now being standardized by both the Internet Engineering Task Force (IETF) and W3C, and will be part of HTML5. It enables two browsers to enter into direct **peer-to-peer** communication for real-time media – this may include voice or video, but also pure data.

WebRTC allows devices to find and connect to each other.



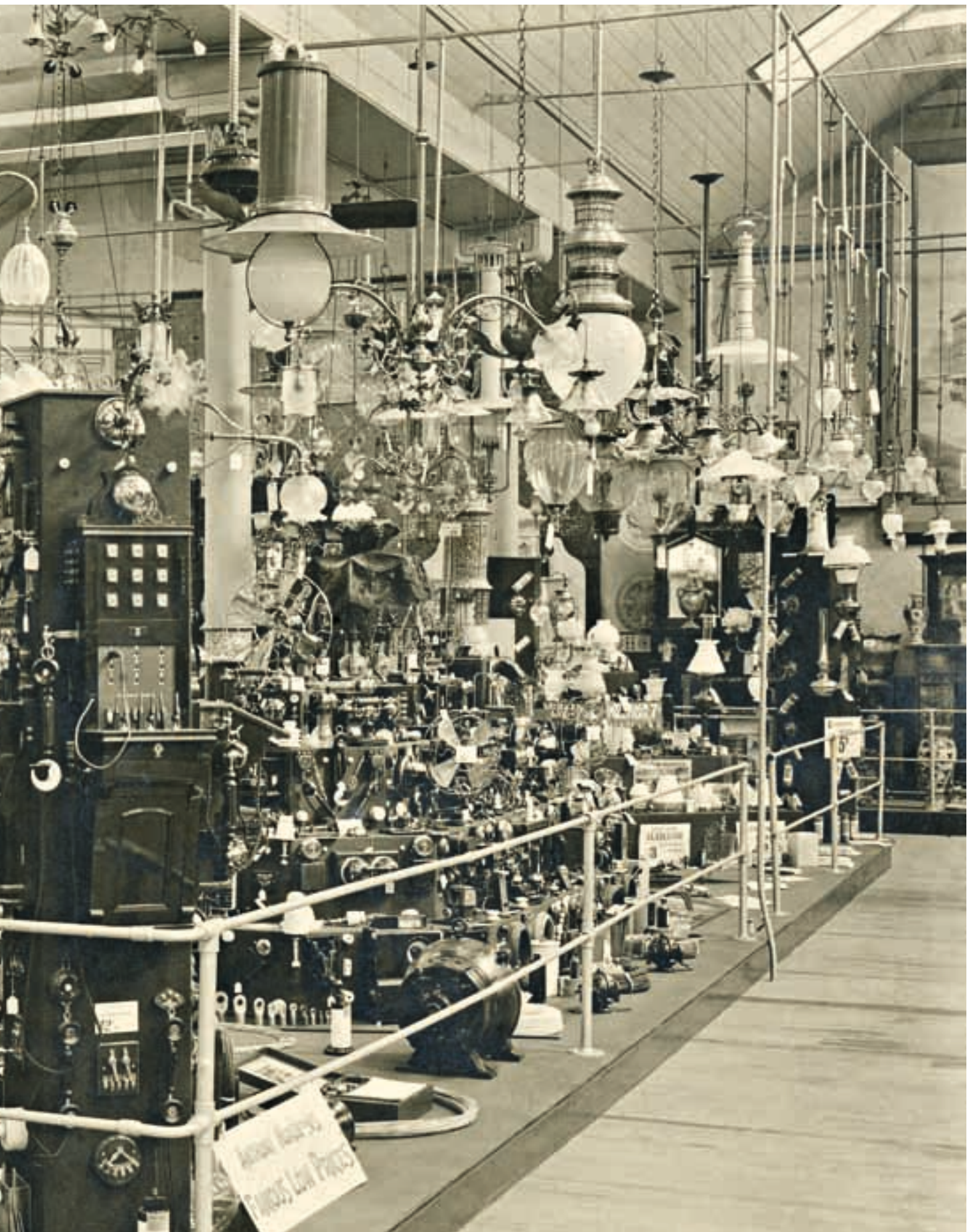
Melbourne, Australia, 1920s . Photo: Centre for Business History



A photo of Ericsson products from a fair in Melbourne in the 1920s. Ericsson began sales in Australia in 1890 through its agent CA Fahlstedt in Sydney. Initially, sales consisted exclusively of telephones and spare parts for telephones, not telephone stations.

Telephone sales were very successful, however, and during the 1890s, Australia and New Zealand became among Ericsson's largest markets outside Europe. In fact, in 1900, sales in Australia were greater than in Sweden.

Source: ericssonhistory.com





Phone sales rise in China

SMARTPHONES China is still behind the US when it comes to smartphone sales. However, the analyst firm IDC has found that, in terms of the number of units sold, China will surpass the US by a good margin before the end of the year. In a new report, IDC predicts that 26 percent of global smartphone deliveries this year will be destined for China. The corresponding figure for the US is expected to be just under 18 percent.

A cat's tail for people

GADGETS Ever felt so happy, you wish you had a tail to wag? Well, now you can, thanks to the quirky new mobile accessory Shippo from the Japanese gadget company Neurowear. An iPhone app is used to "read your brainwaves" with the help of a headset that monitors brain activity and a clip-on monitor that measures your heart rate. The app interprets what mood you're in, and sends a message to the tail you're wearing, which then moves accordingly.

Source: Mobil.se

32

...percent of 5,000 participants in the Time Mobility Poll favor SMS as a means of communication.

Assistants unite

A source of new energy and a good way of exchanging experiences: that's how Charlotte Andersson describes Ericsson's network for assistants, ENA.

AT WORK Andersson has been working as an assistant for more than 10 years, mostly at Ericsson. Her role as Executive Assistant at Development Unit Core & IMS in Stockholm involves a lot of fast-paced work and a lot of contact with other people.

Opportunity to meet "It involves anything from preparing meetings to addressing staff issues in collaboration with HR," she says. "As an assistant, you have to be a team player and like working with people. Being able to handle stress and having a structured approach



Charlotte Andersson has been part of ENA for five years and advises all assistants to join a network.

to work are other useful qualities."

Andersson has been part of ENA for the past five years. The purpose of the network is to give assistants an opportunity to meet and to share their experiences, as well as to promote administrative issues, offer competence development and spread important information

related to being an assistant. The network members meet twice a year and they offer both seminars and training courses. They also work closely with HR and IS/IT, for example.

"I came into contact with the network through a colleague," Andersson says. "It's very valuable for me; it's an important part of the

job and something I develop through. I've also done several training courses through ENA, including one on efficient ways of working and another on being a leader without being a manager.

Andersson strongly recommends that all assistants join a network.

"It really gives you energy and an opportunity for people to exchange their views and share experiences with others who work with the same things," she says.

▣ Hendrik Bergstén

ENA

If you would like to find out more about ENA to perhaps try to start a similar network, contact the network chairperson Eva Gustavsson, eva.c.gustavsson@ericsson.com, or vice chairperson Jill Andersson, jill.andersson@ericsson.com.

"Smartphones and campuses with wireless networks allow very shy students to ask their teachers questions in class." Professor Bill Rankin, Abilene Christian University, Texas, US, in a survey on students' use of smartphones in the classroom and teachers' views on that. Source: edudemic.com



Meals on wheels

TREND Ericsson's Brian Jones (right) buying lunch from a food van outside the office on Farragut Square in Washington, D.C. A smartphone, a credit card and an appetite are all that busy office workers need these days to buy food from one of more than 50 vans where an iPad is used to handle orders and payments. An interactive map and a Twitter feed help hungry people find the closest food van.



PHOTO: ISTOCK

Many operators were affected when Hurricane Sandy caused power failures in thousands of base stations. The physical damage caused to the networks was on the same scale as that caused by Hurricane Katrina in 2005.

Quick response after Sandy

Hurricane Sandy ravaged large parts of the East Coast of the US in late October. A team from Ericsson worked day and night in the wake of the super storm to restore customers' damaged networks.

EVERYDAY HEROES

Sprint, Clearwire, T-Mobile and MetroPCS were just four of Ericsson's customers that were hit by serious network outages, mostly due to power loss. At the storm's peak, thousands of cell sites were without power.

Resembled Katrina

"This has represented the largest outage-disaster-recovery-event for our customers in their history," says Greg Stover, National Field Operations Director, Region North America (RNAM). "This storm resembled Hurricane

Katrina in terms of physical damage to networks and our response activities."

Unreachable sites

Teams from the Field Services Organization (FSO) started planning to support customers as soon as they saw the weather reports predicting severe damage on the East Coast of the US.

"At the FSO, we never shut our phones off. We have to be available for our customers," says Janine Griffin, Disaster Recovery Administration Section Chief for Field Services.

The response for Sprint and Clearwire focused on inspecting sites to check whether or not they could be restored. At first, many of the sites were unreachable because of damage and flooding. Acquiring fuel after

Sandy struck was challenging. Fortunately, Ericsson has strong relationships with vendors and was able to obtain enough fuel to meet the customers' needs.

In all, more than 200 employees helped restore Sprint and Clearwire's networks. In addition, employees at the Network Operations Center (NOC) in Overland Park, Kansas, continually monitored the situation and restoration effort. Both customers' networks were almost completely back in service at the time of writing.

Quick response

T-Mobile's network was severely affected in New Jersey. RNAM Operations' Customer Support team quickly responded and began restoring the customer's network

before they asked.

"Once a customer puts traffic running on the equipment, Customer Support's responsibility is to identify and resolve any faults with the equipment," explains Keith Mathies, Vice President of Ericsson Customer Support. "In this particular case, once our teams secured their homes, they went immediately to T-Mobile and started helping them identify problem areas and work on remote recovery."

Editorial Services

► *Read the other Everyday Hero stories on the intranet. Search for "Everyday Heroes"*

EVERYDAY HEROES

is a series highlighting inspirational individuals and teams who go the extra mile in their daily work at Ericsson.

When do students use smartphones?

SURVEY ... On a particular occasion?

- In bed just before they go to sleep: 46 percent.
- In bed just after they wake up: 54 percent.
- While traveling: 74 percent.

... At the same time as they are doing something else?

- Listening to music: 52 percent.
- Visiting the restroom: 22 percent.
- Watching TV: 42 percent.

Source: edudemic.com

Are we mobile-phone addicts?

STUDY How long can you manage without your mobile phone? Time magazine and Qualcomm put this question to 5,000 people in eight countries: 11 percent answered that they could cope for a maximum of one hour; 34 percent said several hours and 29 percent answered one day; 19 percent said they could manage one week. When asked how often they check their mobile phones, the respondents answered:

- At least once every five minutes: 4 percent.
- Every 10 minutes: 14 percent.
- Once every half hour: 19 percent.
- Once an hour: 17 percent.
- Once a day: 38 percent.

67

percent of all smartphones sold in Europe between July and September this year were Android phones. This compares with 51 percent during the same period last year.

Source: Kantar



Songs from the heart

APPS Researchers at the University of Virginia in the US have developed an automatic music-recommendation system for smartphones. Sensor-equipped earphones enables the Musical Heart application to monitor the heart rate and activity level of the user while they're listening to music. This data is sent to a server, which suggests music to help the user maintain a desired heart rate.

What is trade compliance?

AT WORK Effective trade compliance is crucial to Ericsson's success, but not everyone knows what it is all about. In a nutshell, Ericsson needs to comply with EU legislation, US export law and the particular national trade legislation that applies in various countries. Such legislation is primarily designed to limit or even prevent companies from trading with embargoed countries, and to ensure that certain sensitive products don't end up in the wrong hands.

► Read more on the intranet. Search for "Trade compliance vital to business"



Mobile data traffic doubled between Q3, 2011 and Q3, 2012.

Source: Ericsson Mobility Report



With the help of smartphones and a new app, patients who visit their doctor in the morning to get their skin changes checked can receive a diagnosis later on that day.

Smartphones help fight skin cancer

Smartphones and a new app are helping cut waiting times for skin-cancer treatment by up to a month, thanks to a research project in Sweden.

APPS District doctors in the Swedish province of West Götaland can take photographs of patients' skin changes using a dermatoscope, a special magnifying glass attached to a smartphone. The images are transmitted using a mobile app to one of two skin clinics taking part in the study.

Less waiting

The new method dramatically reduces operation waiting times. For patients with malignant melanomas, the average waiting time has been



John Paoli

cut from 46 days to 14, which can save lives. Even initial assessments are made much faster than they were using traditional methods.

"In 98 percent of cases, the skin clinic has been able to assess the images from the local health center within 24 hours," says John Paoli, Project Manager for the trial and Senior Lecturer at the skin clinic at Sahlgrenska University Hospital.

"This means many of the patients who visit their doctor in the morning can receive a diagnosis later that day. Normally patients can be made to wait up to three months, which can

cause intense anxiety."

The technology can also lead to significant savings, even though the initial cost of the equipment is about SEK 12,000 per health center.

Millions can be saved

"Health centers are surgically removing lesions at a cost of SEK 300 million per year. Seventy percent of these are benign, non-cancerous changes in the skin that are removed unnecessarily. There is also money to be saved on unnecessary visits to skin clinics."

Paoli has long thought about how convenient it would be to transmit images in referrals to specialists, but it was not until smartphone technology

arrived that it became practical and possible.

He even uses his phone for assessing the images he receives. "We can look at the images in our phones, on the computer or on a tablet. It is very flexible and can be done by anyone anywhere in the world. All you need is a good 3G or Wi-Fi connection."

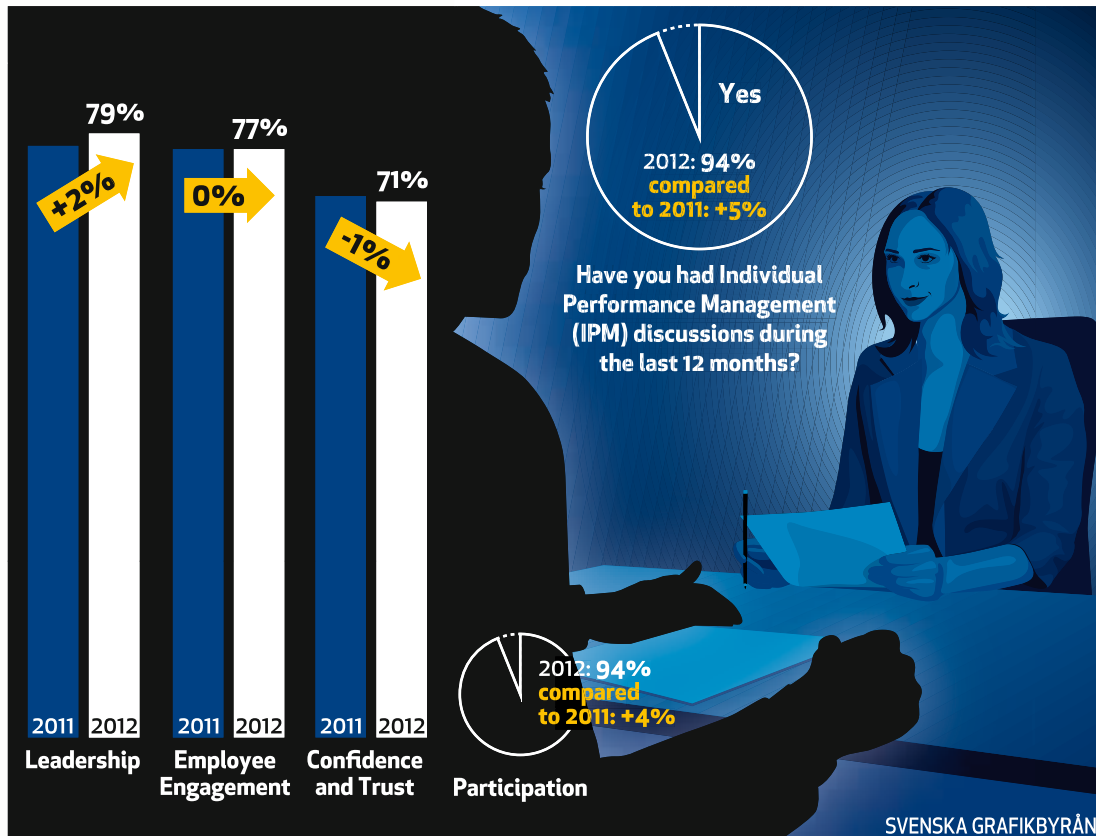
▣ Anders Jinnekint

Background

The technology, called tele-dermatology, requires a smartphone with the iDoc24 app and a special dermatoscope. The trial in West Götaland, the first of its kind in the world, started in January and will involve 950 patients, 20 health centers and two skin clinics.

Snapshot: Dialog 2012

EMPLOYEE SURVEY TRIGGERS RECORD RESPONSE RATE



Hello...



PHOTO: ERICSSON

... Bina Chaurasia,
Vice President, Head of Group Function Human Resources & Organization

What are the highlights from this year's Dialog?

"The overall results were exceedingly positive. They showed that engagement is very strong at Ericsson, especially compared with other companies. Looking at the Engagement index, there is no change from last year's Dialog score. Still, 77 percent is high, and compared with external benchmarks, the 2012 score is 8 percentage points higher than the average reported by 252 other companies, and 12 percentage points higher than the average of ICT companies that we looked at.

The Leadership index is up two points from 2011, which shows that the previous year's focus on leadership is paying off."

What will be the focus area for 2013?

"We see a slight decline in the Confidence and Trust index from last year's Dialog score. So our focus will be on communication of Ericsson's strategy as well as on the execution of the strategy in the year ahead."

How many participated?

"A record 94 percent. Compared with other companies, that is incredible - not just because it's a high rate, but because it indicates that many Ericsson employees feel that their voices will be heard. That in itself is a sign of employee engagement."

☒ David Callahan

AUSTRIAN CENTENARY CELEBRATIONS



PHOTO: ERICSSON

ANNIVERSARY On September 26, Ericsson celebrated its 100th anniversary of working in Austria. About 150 customers, partners and employees took part in the festivities. Among the guests were C-level representatives of all our Austrian customers, the Swedish Ambassador Nils Daag (to the right), who held a presentation on Austrian-Swedish business relations and cultural similarities and differences. Standing next to him is Maria Bambury, Internal Communicator and Magnus Mandersson, Executive Vice President and Head of Global Services.

☒ Editorial Services

3 HAVE THEIR SAY

How many text messages do you write every day? What is the best thing about SMS? And the worst?

► **Therese Littmann, Mechanical Designer, Enclosure & Power, Sweden**



Three a day. The best is that it is a fast and easy way to ask

something or tell somebody something. The worst is that you always expect a rapid reply – it feels as if you should always be available and able to answer.

► **Michael Herman, Manager Hub South, REFM, South Africa**



Eight to 12 a day. SMS is especially good when you are in

meetings – if you need to respond urgently or connect you can do so without disrupting the meeting. It is effective and less costly and you can communicate very quickly indeed, depending on the network.

► **Aubrey McCarthy, Account Manager, Connected Devices, USA**



250 a day. The worst thing about texting is that it prevents

people from picking up the phone and actually calling each other. The best thing about it is how it can help me stay in touch with my friends and family. I recently moved to New Jersey from Texas. Texting helps me keep in touch easily and inexpensively.

☒ Maria Nilsson



PHOTO: ISTOCKPHOTO

In 1995, the average user sent only 0.4 text messages per month. Today, more than 25,000 text messages per second are generated in global mobile networks.

SMS 20 years on

We are sending more text messages than ever, with an estimated 14.7 trillion of them likely to be sent this year alone, according to Juniper Research. Now SMS, one of the world's most popular mobile-phone services, is 20 years old.

SMS The world's first text message is usually cited as being the one sent on December 3, 1992 over Vodafone's GSM network in the UK. The text said: Merry Christmas. Since then, SMS has developed into one of the most widely used mobile-phone services. And there are plenty of stories to be told about how it came about and who was responsible.

A popular one, told in the book *Changing the World – The Story of Lars Magnus Ericsson and His Successors*, is about three Finnish engineers who came up with the idea of the text message over a few beers at a pizzeria in Copenhagen, Denmark, in 1982.

Finnish enthusiasm Matti Makkonen and his two colleagues had traveled to Copenhagen to attend a meeting with Nordic work group Framtida mobila kommunikationer, or Future Mobile Communications, who were commissioned to look into the possibilities for producing a digital mobile system.

The three men were enthusiastic about the possible practical applications such a system might have. The pager was popular at this time, and the group contemplated how they could use the system in a mobile phone and incorporate written text. The advantages that the group identified were the ability to: send and receive texts without disturbing people nearby; and read and respond to them at a convenient moment. The working name of the new innovation was “textknäpparen” (or “text clicker.”) It is uncertain what then happened to their idea. But Makkonen has sometimes been referred

to as the “father of text messaging,” though he rejects this epithet.

The most likely explanation of how the SMS function used extensively all around the world today came about is that it was developed during the work on GSM.

☒ Hendrik Bergstén

The power of prepaid

The development of the prepaid business model helped mobile telephony, and in particular, SMS services, to grow. Ericsson was one of the first companies to make real-time charging for SMS possible, and SMS then became a mass-market service.

PHOTO: ERICSSON



SMS offered early on by Ericsson

LOOKING BACK Many Ericsson telephone models from the early 1990s featured SMS. The first GSM phones, the GH172 and GH174, which were known as the Olivia series, were able to receive – but not send – text messages. The same was true of their successors, the GH197 and GH198, or Sandra as they were both nicknamed. The first phones able to send as well as receive text messages were the GH388 and GF388 – also known as the Jane 2 series – which were launched commercially in 1996. Olivia also became the world's first commercially available GSM pocket telephone. In 1992, 30,000 units were shipped to German operator Mannesmann (which was later acquired by Vodafone) under great time pressure. Shipping 30,000 phones may not sound like a big deal today, but in 1992 it proved to be a real challenge for the factory in Kumla, Sweden.

Sources: Ericsson/The Ericsson Chronicle



PHOTO: ELIOSE

Consumption rate kit

GADGETS ELIQ Online alerts consumers to the amount of electricity they are using in the home by sending notifications to their mobile phones, and warning them if anything particularly noteworthy happens – for example, if the consumption rate increases unexpectedly. All you need is a small transmitter on your electricity meter and a device that connects to a broadband socket or a router via a network cable for internet connection. Users can also compare their electricity consumption with other households and compete to reduce the amount.

Source: mobil.se

“Sometimes it seems more important to put a lot of time and effort into writing the perfect message than it is to make it quick and concise.”

Ylva Hård af Segerstad, at the University of Gothenburg, Sweden, who has written a thesis on the language used in text messaging, among other things. Source: idg.se

COMPETE AND WIN A PRIZE!

COMPETITION How carefully do you read Contact? The answers to the three questions below can be found in this issue of the magazine.



1. What is the name of the Ericsson system that has been sold to several emergency call centers worldwide?
2. What does the acronym FRAND stand for?
3. How many text messages does Juniper Research predict will be sent around the world in 2017?

Write your answers after each question in an e-mail, write “competition” in the subject field and send your entry to global.editorial@ericsson.com

son.com no later than January 28. The winner will receive a copy of the Ericsson book *Changing the World*. If we receive several sets of correct answers, the name of the winner will be drawn from a hat. Good luck!

The winner of the last competition was Diego Luís Perez, Spain. Answers to the quiz from issue X, 2012:
 1. Rezkast.com
 2. 1971
 3. 100MHz

Don't miss this on ericsson.com

The social media hub aggregates all Ericsson's social media feeds around the world. ericsson.com/social-media

On the Line is a new film about Ericsson's history. During the turn of the year, a campaign will be spun around it on ericsson.com

A Learning & Education page has been launched with the latest relevant information. Take a look at the video *The Future of Learning*. ericsson.com/thinkingahead/networked_society/learning_education

Ericsson Facebook has a lot of interesting content and the number of followers is growing. Join them and become a fan! facebook.com/ericsson

Ericsson on YouTube: From now on, Ericsson will publish all its YouTube material on this branded channel. It looks great, is easy to use, and features lots of interesting videos. youtube.com/ericsson

City Life is a new page with videos, reports and other material discussing how cities can become more sustainable using ICT. ericsson.com/thinkingahead/networked_society/city-life

The app that cleans up

APPS The SeeClickFix app enables citizens to take photos and report issues, such as potholes in the road or broken traffic lights, to the authorities. Each matter reported also appears on a map on seeclickfix.com, where anyone can comment on it and vote on what they consider to be the most important to attend to. SeeClickFix is now used by 70 different authorities on six continents.

Source: nytteknik.se

28.2

... trillion text messages will be sent all over the world every year by 2017, according to Juniper Research.

INTERVIEW: ZIN LE

Zin Le's work group has been judged as the **most successfully** cooperative Ericsson team in the country. Le, who is Head of Engagement Practice at Ericsson in Vietnam, leads a united group of people who **achieve their goals** and have fun at the same time. Her leadership style is all about engaging her team.

A leader who listens

How do you build a really creative team?

First, you have to know what you want to achieve: what the goal is. You have to create a vision for the work group. For us, the vision is that Engagement Practice should be the chief value creator for our business. In other words, we and the key account managers must ensure that we maintain top quality in everything we do, and our team must be regarded as an excellent partner both by internal and external customers.

How do you achieve that?

By taking small steps that create motivation along the way. As a leader you have to listen, provide support and give feedback.

We often hold small internal competitions in the team as well, to generate the best ideas; it's been proven that you learn more and quicker that way.

I really believe in creating enjoyment at work. As well as the competitions we have annual game shows and sometimes take excursions together, inviting everyone's families as well.

How do you avoid internal competitions having a negative effect?

“If you don't listen to your employees, you might miss hearing about their most innovative ideas”

Competing should be fun. But holding competitions to raise motivation may not work for everyone.

How important do you think it is for a manager to listen?

Extremely important; if you don't listen to your employees, you might miss hearing about their most innovative ideas, among other things.

How much do you decide on, and how much freedom do you give your team members?

I usually say they have complete freedom within the budget framework. Working should be fun. I encourage them to lead others and make decisions. But I think we need a certain amount of pressure on

us to avoid taking the easy way out and becoming lazy.

What do you consider to be the advantages and disadvantages of being a woman in a male-dominated industry?

The positive side is that you're unique, visible, admired, encouraged and respected. The negative side is that you perhaps have to spend much more time on your work to achieve all this.

Why do you think your team is doing so well?

Because we have fun together and because we're good at solving internal problems. We do that by talking a lot; it's easy to communicate with the group. We've built up a fine relationship, simply because I care about them.

What is your biggest challenge now?

The financial crisis has hit Vietnam hard in general, so working when the market has slowed down is a challenge in itself. But I always think that when we are in a difficult situation, we have a chance to shine even more.

✉ Text: Sofia Falk Photo: Tim Barker/Getty Images

ZIN LE'S TOP MOTIVATIONAL TIPS

- Set clear goals
- Encourage everyone to put forward ideas
- Arrange creative forums such as workshops one morning a week
- Eat lunch or dinner together
- Arrange small internal competitions with modest prizes, such as cinema tickets
- Let the team nominate candidates for talent pools such as the Young Advisory Board
- Provide support, give feedback and listen.



**ENGAGEMENT PRACTICE TEAM
AT ERICSSON IN HANOI**

Principal task: To strengthen customer engagement by creating an awareness of customer needs, discovering new sales opportunities, adapting Ericsson's solutions to customer requests, and then presenting proposals and winning the contract.

Number of members: 15

Gender division: 12 men and three women

Age range: 30-35



Ericsson's **CoordCom** platform has made it easier for fire fighter Ricardo Cazorla to save lives and property.



ICT & SOS

Emergency services around the world have long relied on Ericsson's **ICT-based alarm** system to carry out their vital work. Now the company is working with them to improve **system performance** and reduce response time when an emergency occurs.

Every minute counts



STOCKHOLM
SWEDEN, EUROPE

Sometimes just a few minutes can mean the difference between life and death: when someone has a heart attack or stroke, for example, or when curtains catch fire in an apartment block.

Södertörn Fire and Rescue Service (SBFF) is one emergency organization that has managed in recent years to reduce its response time between the alarm signal and a rescue operation being carried out. From its offices in Lindvreten southwest of Stockholm, SBFF manages emergency



Leif Jonsson

services across large parts of Stockholm County.

The reasons for SBFF's success include the ambitious goals it has set, the hard work that has been

done and its effective collaboration with both SOS Alarm (which manages the 112 emergency services number in Sweden on behalf of the Swedish state) and local emergency services, says Leif Jonsson, Production Manager at SBFF. And then there is CoordCom, Ericsson's technical platform, which enables SBFF, the emergency ▶



From the operating room at Södertörn Fire and Rescue Service alarm operator Mats Sohlén checks up on what is happening in Greater Stockholm.

Did you know...

... that SOS Alarm handles emergency calls among many other things, runs SOS centers all counties, county councils and governmental rescue organizations the opportunity to sign agreements to connect emergency services?

► medical services and SOS Alarm's 18 emergency control centers (ECCs) nationwide to collaborate within the same technical environment, with a common communication center receiving calls.

The CoordCom platform links all the communications necessary for the emergency services. This includes integrating radio traffic, telephony and data communication in a single system. As a result, alarm operators, those running emergency services, nurses and ambulance staff can all listen to, or actively participate in a conversation with, anyone calling the emergency number. This also means they can work together and in real-time using the same system when handling emergencies.

In practice, the technical platform has removed both physical distance and unnecessary barriers to communication, Jonsson says.

"Everyone gets the same cases and maps," he says. "Because we come in at an earlier stage, we can further

optimize our efforts and resources right from the start. This makes the lead times shorter, which means we stand a better chance of saving lives and property."

SOS Alarm controls the central hub of the CoordCom platform. The hub is located in the largest of the country's 18 SOS centers is housed in a rock shelter 36m below ground in central Stockholm. This is where signals from automatic, assault, fire and burglar alarms are received, as well as more than 2,000

of the over 13,000 calls taken by SOS Alarm each day. The same greeting is used for each call: "SOS 112, what has happened?"

On a Friday afternoon in October, about 10 operators are sitting at their computer screens in a modern office environment. Several nurses, doctors and staff running rescue services are also present. Group Manager Monica Nordström takes a seat at one of the available desks and shows us the list of cases for the afternoon. Judging by the emergency calls that have come

COORDCOM IN BRIEF

WITH THE HELP of CoordCom, SOS Alarm now functions as a virtual call center with its own workplaces at 18 locations in Sweden as well as at some customer workplaces? Three regional CoordCom

systems provide backup to the national CoordCom system, which is used in normal production. Logging into the system is competence-based, which means that operators can easily log in for the assignment and

geographical area for which they have the right competence. This makes it easy for SOS Alarm to maximize the use of its resources across the country, regardless of physical location and geography.

“Because we come in at an earlier stage, we can further optimize our efforts and resources right from the start. This makes the lead times shorter”

Leif Jonsson

in, there is plenty of drama going on: boat accidents, people who are unconscious, suspected suicides, poisonings and knife fights, and those who have suffered a stroke or who are having chest pains or breathing problems.

The operators are first in the alarm chain and they ensure that ambulance, police and rescue services deploy the right resources at the right time and to the right place. This means the operators have to pass on exactly the right information from distressed and concerned callers to those running emergency services. In these cases, people’s lives and health are often at stake. It’s often a battle against the clock.

But despite all the drama, the atmosphere in the room is one of restrained calm. All around us, operators are talking into their headsets as they categorize each incoming case according to a program that prioritizes it, poses counter-questions and finally gives advice relevant to the incident in question.

On another screen, the operator can follow available resources in the form of ambulances and emergency vehicles that look like yellow and red rectangles on a map. The same map also shows a caller’s almost-exact position, depending on whether they are calling from a fixed telephone or a mobile device.

“We also ask the caller where they are so we have an exact address,” Nordström says.



Monica Nordström



Per Palm

In one simple operation, the operator can then connect nurses, doctors and those running ambulance or rescue services so they can then listen in. The latter can immediately start planning a rescue operation based on the existing information about what



CoordCom has helped minimize the time that elapses from an alarm going off to a rescue operation being carried out by fire fighters such as Ricardo Cazorla.

has happened. In this way, the right resources can be deployed to the right place immediately.

The police, who also have their own alarm center, can also be connected so they can listen in,” says Per Palm, Technical Manager at SOS Alarm. “Those who listen in to our conversations with callers get answers to their questions quickly. Another advantage of CoordCom is that those working with the ambulance and rescue services can see what the operator writes on their screen and vice versa.

“Listening in also allows doctors or nurses to take over a call and make a medical assessment depending on the problem. They can then go on helping out until the ambulance arrives at the right place.”

When SOS Alarm began using the first generation of CoordCom in 1986, it was a solution that enabled incoming calls from fixed telephony, radio telephony and automatic alarms to be connected to one common case-handling system. Since then, additional

functions – such as maps and mobile telephony – have been added to the platform continuously.

Since the first system was introduced, a series of new generations of the technology have been implemented, the most recent of which was the fifth generation of CoordCom, delivered in 2005. An increasingly sophisticated approach to product management has led to the continual change and expansion of CoordCom’s attributes and functions with each product release. In 2010, Ericsson delivered a release of CoordCom that has the Swedish radio system for emergency services – the RAKEL system (previously TETRA) – integrated into the platform. As a result, the communication between ambulances and rescue services is managed using CoordCom.

The vision is to develop a system that involves volunteers who can help out if someone has a heart attack, for example, or in the event of a road accident. This could consist of having a select body of taxi drivers, who could step ▶

“Another advantage of CoordCom is that those working with the ambulance and rescue services can see what the operator writes on their screen and vice versa.” Per Palm



The central hub of the CoordCom platform is controlled by SOS Alarm. The company manages the emergency services number 112 in Sweden on behalf of the Swedish state.

Did you know...

... that CoordCom enables rescuers to save people's lives and property in several countries and regions in Europe, including Slovakia, Romania and the Valencia region in Spain?

Source: Ericsson

► in if they happen to be close to the scene of an accident.

In the future, the system will also be able to search for available resources itself and then propose which alert to send out depending on the nature of the incident. The idea is that the operator will then only have to implement the system's suggestion. There are also great hopes for future functions that will make it possible to track down the right resources and the right people even faster than today. These may include people with specific professional competencies, or specially equipped rescue vehicles.

Such solutions help sos Alarm and its customers economize even more effectively with their existing resources, says Jonny Möllenhoff, Ericsson's Key Account Manager for sos Alarm.

“Our collaboration is based on developing functions that are adapted to a certain organization and can help to evolve the customer's opera-

tions,” he says. “The result is a partnership that has a resounding effect around the world. Every so often, delegations from other countries come here to see how we've solved difficult problems.”

Jonsson says: “CoordCom has helped us and sos Alarm save a con-

siderable amount of time in recent years. This means we have a better chance of saving lives and property. A major advantage of the platform is that a function can be expanded, so we can continue to develop the business in the future.”

✉ Text: Michael Masoliver Photo: Håkan Lindgren

ICT HELP DURING SANDY

DURING a disaster – and afterward – information is vital. Here are a few innovative examples of how mobile technologies helped US residents on the East Coast get through Hurricane Sandy, one of the worst storms in history.

► The US Federal Emergency Management Agency was

among many city, state and national agencies that provided continuous advice and alerts to citizens via Twitter (@FEMA). During the storm, and for days afterward, FEMA asked people to save valuable network capacity by limiting mobile voice calls and staying in contact with loved ones through social media

and SMS messages.
 ► FEMA's smartphone app offered safety tips, emergency meeting location information, and a map with open shelters.
 ► The Red Cross Hurricane App offered preparedness tips, update citizens on conditions in their area and directed them where to find help.



Alarm operator Lili Rebane in the operating room at Södertörn Fire and Rescue Service.



Martin Falebrand, Richard Kappling and Tore Andre, all from Ericsson Response, receive training on the Ground Antenna Transmit and Receive (GATR) system, which is used for satellite backhaul.

When disaster strikes



ALL AROUND
THE WORLD

On January 12, 2010, Haiti was hit by one of the most powerful earthquakes of modern times. For the aid organizations in the field, this marked the beginnings of a completely new way of using telecommunications in disaster-relief operations.

The 2010 earthquake in Haiti caused a major humanitarian disaster, with tens of thousands of people losing their lives. Many others were injured, became victims of epidemics or lost their homes and possessions.

The world reacted quickly to the disaster and just a few days later aid organizations and UN agencies arrived on the scene to help with the humanitarian efforts. Volunteers from Ericsson Response were also there to supply aid workers with communications equipment.

Their main priorities were to set up a mobile network, provide the aid workers with mobile phones, and offer internet access through the Wi-Fi solution WIDER (Wireless LAN in Disaster Emergency Response).

To begin with, the employees from Ericsson Response established a container solution for mobile telephony at the UN area next to the international airport. They then set up another container to bring coverage to the capital city, Port-au-Prince, which had been severely affected by the earthquake.

The container solution used here is an independent network that can be integrated with the UN's network via microwave, satellite links or cable, for example, during such operations. The system contains a mobile switching center (MSC), a base station controller (BSC), a home location register (HLR), an RBS, a MINI-LINK microwave-link device and a GSM mast.

The basic configuration comprises three sectors, but it can be expanded with additional equipment, says Mar-



At work in Haiti in 2010.

tin Falebrand, Project Manager GRAN PLM (GSM Radio Access Network Product Line Management) within Business Unit Networks (BNET) and an Ericsson Response volunteer.

“Our solutions were simple, accessible and stable, in accordance with the UN’s request,” he says. “The container solution was highly appreciated, even though we provided only the simplest possible service level with GSM on the 900 frequency band. A system like this has to be up and running as quickly as possible, so we do most of the configuration work in advance. Then all that remains is setting up an external interface.”

Falebrand’s colleagues were based in the disaster area for six months. It was an important assignment for Ericsson Response, with several volunteers with various competencies being commissioned to help out.

The assignment in Haiti was also the first time technically advanced equipment was used in aid assignments. Evaluation reports produced by both the UN and Ericsson Response highlighted the fact that international aid organi-

zations would probably demand more technically advanced functionality in future, not least because of the need for support for the use of more demanding applications, smartphones and other equipment.

This was why Product Area Radio at BNET donated a new multi-standard container capable of supporting GSM WCDMA and LTE. This new container, which is slightly larger than previous versions, has already been adapted in terms of the systems involved. The challenge now is to integrate it into an Ericsson Response environment to create a complete, independent system.

“Our task is to ensure that everything fits inside the container,” Falebrand says. “We have to be totally self-sufficient in the field, so we have to bring all our equipment with us.”

Ericsson Response will now also have enough capacity to connect calls externally. The ability to connect calls through satellites has previously been limited, especially in disaster areas, Falebrand says.

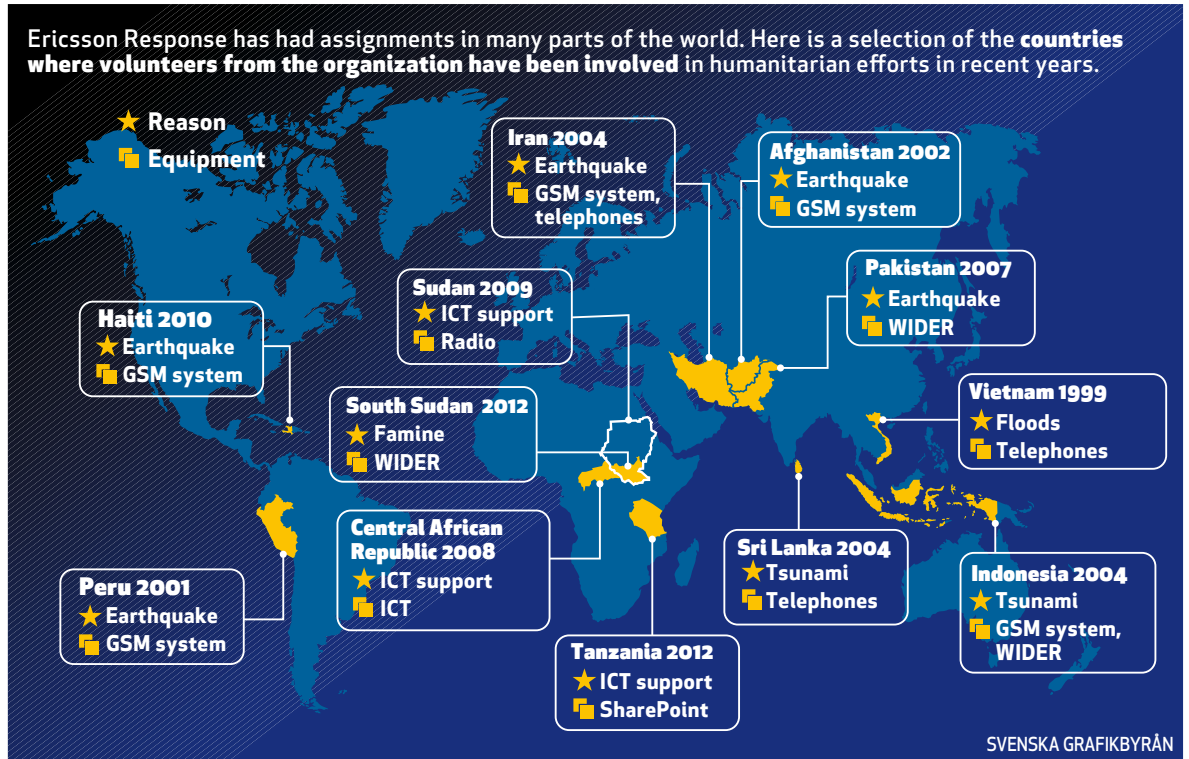
“But this will now be possible ▶

“It’s an easy way to offer people in disaster areas the chance to stay in contact with relatives and employees via the internet”

Martin Falebrand

Tips

Would you like to join the Ericsson Response team? Send your cv to ericsson.response@ericsson.com



► thanks to a new contract with the SingTel, which allows us to connect our system via the operator’s satellite backhaul service,” he says. “There is usually a demand for container solutions in places where the infrastructure has been destroyed following a major natural disaster. But often, the need for a stable broadband connection is far greater – especially in Africa, where the expansion of the mobile-phone network has come a long way.”

WIDER has also been upgraded

since the earthquake in Haiti. At the beginning of 2012, the third generation of WIDER was set up at four sites in South Sudan and at two sites in Mali. In its present form, WIDER is smaller, more adaptable and easier to use than previous versions of the solution.

“It’s an easy way to offer people in disaster areas the chance to stay in contact with relatives and employees via the internet using smartphones,

tablets or PCs, for example,” Falebrand says. “Before we offered these services in South Sudan, I sometimes met aid workers who were prepared to travel several kilometers to use the internet. Use of the solution is based on registration and authorization being handled in Sweden.”

The next step will be to produce the fourth generation of WIDER, which will principally comprise products from Product Development Unit (PDU) Wi-Fi, created following the acquisition of BelAir Networks earlier this year. As a result, this will also make Ericsson the owner of a functionality in a solution that is in high demand.

Falebrand says: “With the new multi-standard container and our new WIDER solution from PDU Wi-Fi, we’re ready to meet the demands that are placed on communication when disaster strikes.”

Text: Michael Masoliver Photo: Ericsson Response

A CARING INITIATIVE

SINCE 2000, Ericsson employees have provided essential mobile communications to support disaster relief and humanitarian aid through

Ericsson Response. ► This non-profit activity engages Ericsson employees in volunteer work with no commercial objective. Not only does

it inspire those who participate but is a source of motivation, empowerment and value creation for all Ericsson employees. ► Ericsson Response

works in partnership with many of the UN’s different humanitarian organizations to meet their communication needs in times of disaster.

LTE network to support US responders

Ericsson is providing LTE technology and services for a nationwide, interoperable public safety broadband network that will help first responders in the US stay safer and work smarter. Rollout of the network is likely to pick up significantly in 12-18 months, says Darren McQueen, Corporate Vice President and General Manager with Motorola Solutions' Public Safety LTE group, Ericsson's alliance partner in the project.

How is Ericsson involved with Motorola in this project?

Motorola Solutions wanted to partner with a company that had market-leading LTE technology and presence, not just in the US but globally. We now work with Ericsson developers on key LTE features, and include Ericsson's base stations and gateway products as part of our overall public safety LTE solution. Ericsson also provides essential network deployment services for our public-safety customers.

Can you give us some idea of how first responders can use LTE?

High-speed broadband makes it possible to connect the scene of an incident to a command center in real time. With LTE, if there is a hostage situation, 360-degree video from all areas of the scene can be streamed to a video wall in the command center. People

there can alert officers at the scene to critical real-time information. It gives the officers another set of eyes and ears and better situational awareness. It's about bringing new multimedia tools and capabilities into the public-safety world that leverage and improve on the technology and apps available to consumers.

Why can't public safety rely on commercial broadband networks?

When first responders arrive at a scene, they can't be placed in a situation where they compete with me or you or whoever is trying to take a video of that scene and upload it to YouTube. The national public-safety broadband network will ensure that the public-safety agency gets 4G access when they need it, so they can effectively respond to critical incidents.

How will this network affect emergency dispatch?

Voice communication is mission-critical – it's the lifeline of every first responder. As data comes in, we don't see voice and data as being separate, but working together. The emergency dispatch system will be able to receive multimedia, such as texts, photos, videos and security analytics, and immediately get that information back out to first responders in the field who need it.

✉ Text: David Callahan Photo: Motorola



Darren McQueen, Corporate Vice President and General Manager with Motorola Solutions' Public Safety LTE group



Susanne Marjavaara inspects a **drill bit** used to drill 50m-long holes that will be filled with explosives. Drilling the blast holes is done by remote control.



MINING & ICT

Smart mining

Ericsson is participating in several projects **around the world** to come up with smart communications solutions for the mining industry. Contact has visited a mine in Kiruna in the north of Sweden, where gigantic loaders are managed by **laser and WLAN**.



You drive deep into the mountain by car, the meandering tunnels stretching some 400km into the rock. The pitch-blackness is broken by the lights of countless oncoming trucks. Iron ore has been mined in Kiruna for more than 120 years, and in recent times the global demand for it has increased dramatically. About 80,000 tons of iron ore is blasted in the mine every day: the amount of raw material required to produce the steel contained in four whole Eiffel Towers. Most of the iron ore is delivered to destinations in Sweden, Germany and the Middle East.

LKAB (Luossavaara-Kiirunaraara Aktiebolag) is testing a new system to control its loaders deep inside the mine remotely, primarily with a view



Tommy Arngren

to introducing more efficient and safer ways of working. The control room from which the loaders are operated is located at a depth of 545m.

Anders Johnsson, who works in the control room, says: “We save time and the work is also made safer using this method. When we blast the rock in the shaft, a poisonous gas is formed, and this takes several hours to air. But thanks to the remotely controlled driverless machines, we can start loading the iron ore much more quickly.”

Tommy Arngren is a member of a group of Ericsson researchers who are identifying the communications requirements of the ►

“Good and efficient communications solutions are extremely important to the industry”

Tommy Arngren



Markus Fjellborg and Anders Johnsson monitor the machines in the mine shafts. WLAN antennas are mounted along the shafts and communication is made to the control room via fiber cable.

► mining industry and studying communications solutions that are appropriate for this as well as other industries. He says the work is based on assessing how standardized 3GPP solutions can meet current demands and complement existing solutions that can also be used in various types of industries.

“We’ve helped to produce a national program in Sweden for process automation, the purpose of which is to strengthen the process industry in terms of IT and automation,” he says. “We’ve also just begun to cooperate with universities and industry, the goal being to come up with a platform for different types of software for communications services within the industry.”

It has a lot to do with creating services that link all the sensors used in automating the industry, Arngren says. In terms of the mining industry, this is based on the vision of having a zero-entry production area, where no people are placed in the production area of the mine. The main reason for this is to make the production process more efficient, safer and environmentally sound.

It is possible to drive the machines down into LKAB’s mine, edging forward through the dark and bumpy mine shafts, but sitting in a control room and managing the loads is preferable. The machines are gigantic; each weighs 57 tons, and on top of that, the enormous buckets on the loaders hold 21 tons of iron ore.

WLAN antennas are mounted in the mine shafts, and communication with the control room is made via fiber cable. The loaders are equipped with computers and laser scanners at the front and back. Four video cameras enable the person controlling the loader remotely to see how it is working. The solution includes a surveillance system that makes it impossible for anyone to enter the area while the machine is in use.

Markus Fjellborg sits in the control room, using the levers to load and unload the machine, which drives along the passageways automatically. It’s a bit like playing a console game – small, gentle movements being enough to control the enormous machine.

“You could actually sit above ground and manage the machines from there, but by working underground we can get to them quicker and operate them manually if anything happens,” he says. “It’s a fun job and the working environment is better in the control room. The only drawback so far is that you can’t yet load as much into the buckets when you do it by remote control as you can when you’re driving yourself.”

Other aspects of the mining process are also controlled remotely. At each loading stop, huge stone crushers break up large pieces of iron ore that have become stuck and are delaying the loading process. The crushers are handled from control rooms similar to those used for the loaders, though these are placed above ground. Drilling

the blast holes and transporting the iron ore by train up above ground has also been done by remote control for a long time.

Arngren says Ericsson is involved in a test project that has begun in Kaunisvaara just south of Kiruna. Mining company Northland Resources has opened a new mine there and it will test a new logistics solution for transporting the iron ore from the mine.

“This is a collaboration being run by Scania and the Swedish Transport Administration, along with transport company Clifton and Ericsson,” he says. “The purpose is to come up with a solution that guarantees the safe and efficient transport of the iron ore using 90-ton trucks, such as by ensuring that the trucks avoid colliding in narrow passageways and being able to control the flow of the traffic easily.”

Ericsson is also the driving force behind several projects elsewhere around the world, such as in mines in Australia and Indonesia. “The priority for us is to find common denominators for this type of solution, so we don’t need to come up with specific solutions for each industrial sector,” Arngren says.

“Good and efficient communications solutions are extremely important to the industry, and we’ve established a good dialog with the industry and universities so we can better understand the needs. This covers everything from surveillance, remote control, positioning, communication and logistics – the need is enormous.”

Text: Hendrik Bergstén Photo: Håkan Lindgren

Did you know ...

that every 28 seconds a truck filled with iron ore leaves a Swedish mine? In 2011, 67 million tons of iron ore were produced in Sweden, and that figure has increased steadily since then. Source: Metaller och gruvor

NEW MINING SYSTEM SAVES LIVES

► ERICSSON’S vision of more than 50 billion connected devices by 2020 also has an impact on the mining industry. Researchers at Luleå University of Technology have come up with a new wireless

surveillance system that could save lives in the mining industry. ► Jerker Delsing, Professor in industrial electronics at Luleå University of Technology, tells Swedish magazine

Ny Teknik: “The future of automation is about getting sensors, machines and IT systems to speak to each other in the same language and to make their own decisions.”



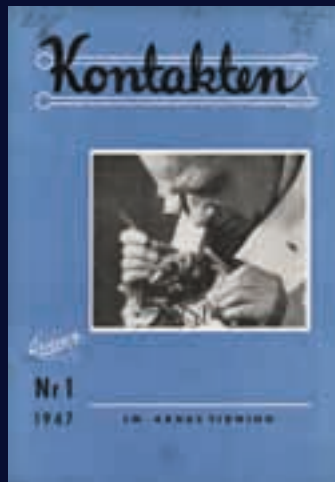
Work leader Mikael Winsa at LKAB inspects the large bucket on the loader that is controlled remotely at 800m below the surface in LKAB's mine in Kiruna. The driverless machine weighs 57 tons and the gigantic bucket can hold 21 tons of iron ore. The machine is controlled using lasers and WLAN.

The news team has browsed through issues of Contact, **from in the very first** in January 1939 to the latest, which you hold in your hand – a journey through dust, **printer's ink**, nostalgia and major news stories.

Contact 193



1939



1947



1955



1963

What are the most memorable moments in Contact's history? As we flipped through past issues of Contact, we unearthed these gems.

Reader outrage

For its first six years, Contact was a magazine only for salaried employees at L.M. Ericsson. In 1945, it became a magazine for all employees – all “LM-ites” – as it stated on the masthead. The news staff was quickly forced to back down over that single, apparently controversial word. “For many years, I’ve regarded myself as an LM-er and have been proud of that,” one reader commented. “Then suddenly one morning when I was still half asleep, I find out that I am not an LM-er but an LM-ite. Not even the most well-balanced and restrained individual can stand such a shock.” The masthead was soon changed to LM-cr...

Contact's role as a news breaker

Contact reporters have written about many technological advances over the years – new telephones, the first calls with new switches, different radio-access technologies and the first videophone call. The list is extensive.

Celebrity features

Contact can even hold its own against the gossip newspapers. Celebrities pictured in the magazine include members of Swedish royalty, football legend Pelé, world heavyweight boxing champion Ingemar Johansson, various prime ministers, presidents and ex-presidents, the Shah of Iran, Steve Ballmer of Microsoft, James Bond, Miss Universe and Miss World.

Cooliest pensioner

Albert Milton was called “The world’s longest-serving Ericsson employee” in a headline from 1972. At the time, he was 80 years old and retiring from Ericsson for the second time. He retired for the first time in 1958.

Constant change...

Contact has changed shape many times over the years, alternating between a tabloid design and a magazine format, depending on media trends during that period.

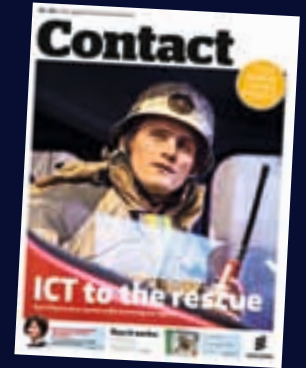
... leads to an award

Change is often for the better. When issue N°1, 2008 came out, Contact had a new look (again) – the one that it still has today. The Swedish Association of Custom Publishers liked the new version so much that it presented Contact with the Guldbladet award for Best Redesign. The magazine has also been awarded for its content and illustrations.

Greatest linguistic achievement

Contact reached a milestone in 1986 with the birth of the English version. The magazine has also been published in Spanish. Other languages? Not according to the news team's investigations.

2012. The look of today's magazine was created in 2008.



9-2012



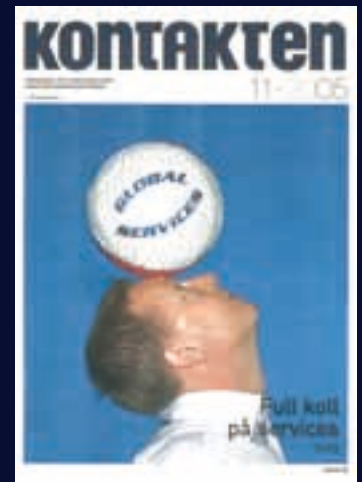
1970



1985



1993



2005

Heartfelt hopes

Three Ericsson employees imprisoned in Iraq were released in September 1993.

Editorial heroes

Bert "Bend" Ekstrand worked for Contact from 1967 to 1989, and is the only editorial staff member whose retirement was announced in the magazine. His colleague, Sigvard Eklund, worked even longer at Contact – for 28 years between 1942 and 1970. Other heroes are reporters Gunilla Tamm and Lars Cederquist, both retired.

Recurring topics

Some say that everything goes in circles; this sometimes applies to the articles in Contact, with some topics turning up again and again. The open-plan office was in focus in 1969 and appeared again in 2008; reorganizations have been featured every few years. In 1991, there was a special on broadband. It included a look at the importance of fiber as a future technology for coping with increasing data

traffic. This is still a hot topic today. Articles on holiday days around the world, and the female entrants in Lucia competitions, a traditional Swedish Christmas festival, were for many years also a recurring feature.

Contact as a competition forum

All sorts of readers' competitions have brought out employees' competitive instincts. In recent years, tens of thousands of employees have participated in competitions such as Pick the Best Reader's Picture, the Strategy Competition, and Compete and Win! There has been a surprisingly high level of participation, even when the honor of coming first is all the entrants stand to win. We'd like to thank you for that.

Most obscure stories

This is a close call between the story about animal life in India and the one on the Swedish right of public access for mushroom picking.

Digital revolution

Contact has long been published on the internet in PDF format, but in 2009 a new step was taken with the introduction of a complementary digital newsletter as well as the Contact brand becoming a more definite part of the global intranet portal.

Collection campaign

In 1939, Ericsson arranged a collection for the people of Finland affected by the Winter War against the Soviet Union.

Most popular article in Contact?

Few articles have triggered such a positive response from readers as the one entitled 33 Acronyms to Learn in Contact issue 4, 2011, in which common technical abbreviations used at Ericsson were explained. The editorial team received e-mails from readers that contained feedback such as "Now I finally understand" and "More of this please."

☒ Text: Jonas B. Kaiser / Jenz Nilsson

Patents and licensing – behind the headlines

Samsung, Apple, ZTE and Ericsson are among the companies that have been involved in **legal cases** relating to Intellectual Property Rights (IPR) over the past year. The media are calling it a **patent war**, and the widespread public interest in the matter proves it's a hot topic. But why are patents and licenses so important to a company?

In an interview published in the Fierce Telecom newsletter in March 2012, Thomson Reuters analyst Bob Stembridge says: "Historically, patents have been treated by some departments as the 'necessary evil' to protect innovation. However, as corporate value shifts, they are starting to become a product unto themselves rather than just a mere measure of defensive protection. It provides them with a strategic advantage over competitors and also creates the potential to generate additional revenue through licensing and sales."

IPR and licensing are also becoming increasingly important to Ericsson. The results of careful work in this domain can bring the company great return on its R&D investments – money that may be spent on further research. Besides this, the company gains control over the technology that it develops, and can sign mutual licensing agreements with other companies, with each party granting the other the right to utilize the technology they own patents for.

For the ICT industry as a whole, IPR is also important. Companies are more inclined to help bring about open standards and contribute to the whole ICT ecosystem if they are certain of

getting a reasonable return on their R&D investments.

Ericsson has the strongest portfolio of essential patents within mobile telecoms (see "Standard-essential patents" opposite), and has more than 100 licensing agreements with other companies in the ICT sector. In 2011, these agreements earned the company SEK 6.2 billion in revenue – money that is being ploughed back into the R&D organization.


Ericsson's extensive patent portfolio also favors its customers. The fact that Ericsson is the principal patent holder within mobile telecom, and that it has mutual licensing agreements with other big manufacturers and patent holders in the industry, means that the company's products are properly licensed. This gives customers legal protection with regard to the products they buy from the company.

Ericsson also advocates charging reasonable royalties (in accordance with FRAND, or fair, reasonable and non-discriminatory terms: see "FRAND" on page 34), which helps its customers understand what a reasonable license charge is. By signing a licensing agreement with Ericsson, customers can benefit from this experience

later on during negotiations with other companies.

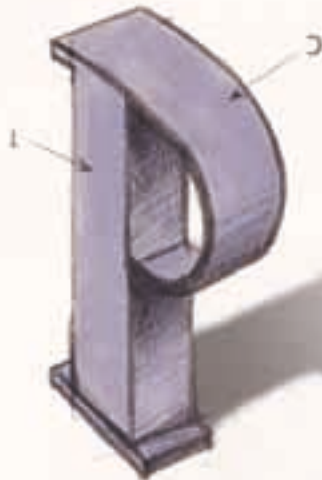
Today, there is no international authority that determines how royalties should be fixed and shared. The European Telecommunications Standards Institute (ETSI), for example, flatly states that it does not regulate the commercial aspects of the patenting business. Nor does ETSI have anything to say about the relative relevance or importance of the patents that are registered with the organization as "essential" (see Standard-essential patents opposite).

Licensing questions are resolved in the first instance through negotiations between the respective parties involved, and they usually come to an agreement. If, on the other hand, they are unsuccessful, and enter into a conflict instead (as was the case with Ericsson and ZTE in 2001, for example), the patent holder may choose to sue for patent infringement and demand compensation, and then the case has to be resolved in a court of law. This means both parties often base their preliminary negotiations on their assessment of what the court would decide if it were ever presented with the case.

 Text: Benny Ritzén Illustration: Ebba Berggren

The facts

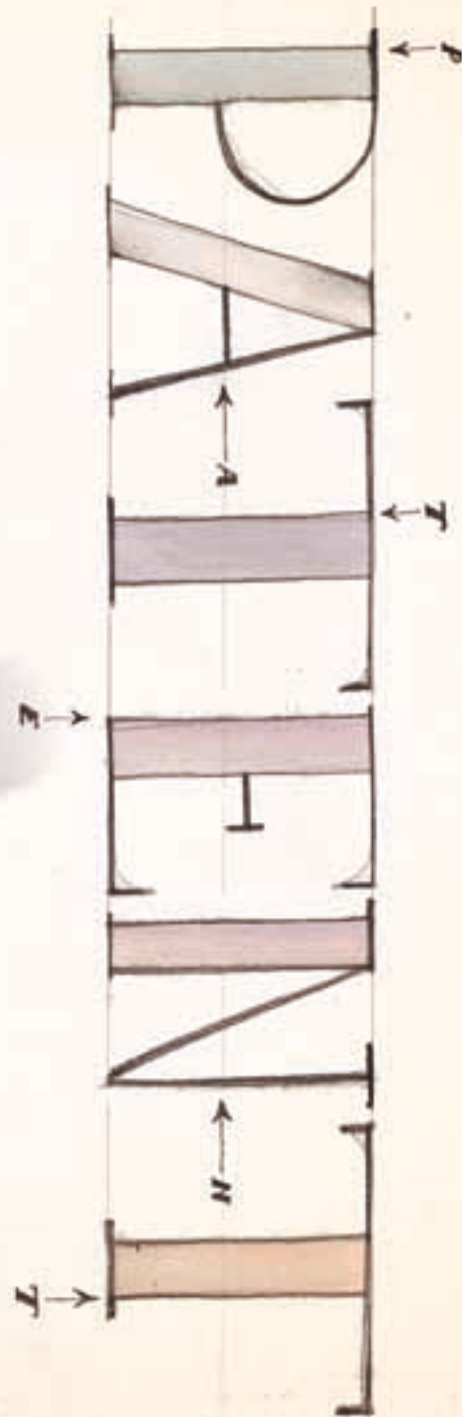
- ➔ Holding a patent gives you the right to prevent others from using your invention or innovation.
- ➔ Patents are granted for a particular country and you have to apply for one to the authorities in every country you'd like the patent to apply in.
- ➔ Licensing means giving others the right to use your innovation or invention (often in return for a fee).
- ➔ A design patent (protection of registered designs and models) protects the appearance of a product or pattern. It is often used to prevent consumer products from being copied.



Standard-essential patents

A standard-essential patent is used for a product that constitutes part of an open standard established by a standardization body. To develop a standards-compatible product, you need licenses from all the holders of the patents that are essential for this standard. In order for the standard to be accessible to all, the patent holder gives up their sole right to essential patents and licenses them in accordance with FRAND terms (see "FRAND" on page 34).

Fig. 1.





FRAND

Fair, reasonable and non-discriminatory, FRAND is a commitment made by innovators during the process of developing a standard to license their essential patents on fair, reasonable and non-discriminatory terms. FRAND may be regarded as a balance between the return on investment and the willingness to share technology with others. Ericsson is a supporter of FRAND and the custom within the industry for royalties to reflect the value that a licensed technology adds to an end product, with all other relevant standards-related intellectual property for that product taken into account. According to the same custom, the amount of royalties collected for a product should be reasonable, and not too high.



Three questions to key people working in IPR & Licensing at Ericsson

What is Ericsson's position with regard to LTE patents?



Gustav Brismark, Vice President, Strategy and Portfolio Management

Our research and development division has had a strong focus on LTE from the start, and Ericsson invested in this technology even in its early stages of development. We took a calculated risk, and were the first to focus exclusively on LTE for 4G. We are set to own approximately 25 percent of all LTE essential patents, and thereby hold the biggest portfolio in the industry. Thanks to our extensive history, many of our LTE patents are of the "multi-generation" variety, which guarantees compatibility with 2G and 3G technology.

The media have provided intense coverage of the patent struggle between Samsung and Apple. Exactly what kind of patent is the fight all about?



Christina Petersson, Head of IPR Legal, Legal Affairs

It mainly involves the protection of registered designs and models, as well as patents on implementations made to protect the design and proprietary features of Apple's products. None of these are

part of any standard, and are therefore not included in any FRAND-like commitment, which is all about the need to get different telecom parts to work together (in other words, it's a question of interoperability). The law gives the inventor the sole right to use their invention, and thereby to stop others copying it. Without taking sides, it is possible to say that what Apple is trying to do here is to maintain sole possession of its own "look and feel."

Can we draw any conclusions from the way in which last year's dispute between Ericsson and ZTE was resolved?



Kasim Alfalahi, Chief Intellectual Property Officer

It shows that Ericsson takes both the handling of patents and FRAND very seriously, and that we also want to ensure that there are no "stowaways" or freeloaders who get unfair competitive advantages. If we had chosen not to ensure licensing with ZTE, and rather allowed them to carry on infringing our patents, it would have been unfair to others who have to pay license fees. It would also have been bad for Ericsson and the ICT ecosystem in the longer term, because FRAND ensures that developments in the ICT arena can continue.

TWO RECENT PATENT CONFLICTS

Apple and Samsung Electronics

In August 2012, a jury in the US decided that Samsung Electronics would have to pay Apple USD 1.05 billion in damages for patent infringement. Samsung has announced that it will appeal this judgment, and has responded by suing Apple for USD 399 million in damages in the US. The two technology giants – which together accounted for more than half of all global smartphone sales last year – have been fighting a legal battle in several countries since April 2011. The majority of judges have favored Apple, even though a Japanese court ruled in Samsung's favor in one patent case, and another case brought to a South Korean court remained unsettled.

Ericsson and ZTE

In 2011, Ericsson made summons applications in Germany, the UK and Italy, where the Chinese telecom provider ZTE was charged with the infringement of several of Ericsson's GSM- and 3G/UMTS-related patents. Following negotiations, the parties involved ended the dispute, and reached a settlement at the end of 2011, when a mutual licensing agreement was signed according to FRAND principles (see "FRAND" above). Ericsson's policy on licensing issues is to go to court only when the negotiation route leads nowhere. This is an example of such a dispute.



30,000

WITH 30,000 PATENTS AND 90 LICENSE AGREEMENTS, WE HAVE THE INDUSTRY'S STRONGEST WIRELESS INTELLECTUAL PROPERTY PORTFOLIO.

THINKING AHEAD

To enable the networked society, we need to be more than just market leaders. We need to be thought leaders.

We make sure that the knowledge we gain is shared with our people. This keeps our thinking – and our business – one step ahead.

Point to Point Communication

Instructions: Read the subject category and question. Start with the five-point question and continue to the right until you have an answer. When you have gone through all six categories and guessed a year for the picture below, calculate your total score and compare it with the maximum tally, which is 35.

Subject	5 points	4 points	3 points	2 points	1 point
Geography Which country?	Ericsson sold its first telephone station here around 1900.	Ericsson became established here around 1920.	It gained independence in 1822, with Dom Pedro I as emperor.	Zico and Sócrates are two sports legends who have represented the nation.	South America's biggest country in terms of both land mass and population.
History Which year?	Ericsson delivers Malaysia's first mobile network.	Rock band U2 releases the album The Unforgettable Fire.	In the Gregorian calendar, it was a leap year.	Apple launches the Macintosh computer.	It's the title of George Orwell's most famous novel.
Culture Which film?	This US film, based on a play by Frederick Knott, was made in 1954.	Grace Kelly and Ray Milland played the lead roles.	A new version of the film, called A Perfect Murder, was made in 1988.	It was directed by Alfred Hitchcock.	Its title relates to making a phone call.
Technology Which computer game?	It was originally an amusement-arcade game created by Japan's Toru Iwatani.	It was first launched in Japan, in May 1980.	It's one of the world's most famous computer games.	It features the monsters Blinky, Inky, Pinky and Clyde.	It features a maze and a yellow circle with a mouth that eats pellets and fruit.
Sports Which football team?	The club is best known for football, but it has basketball and chess teams too.	Its home stadium is the Allianz Arena.	Deutsche Telekom's sponsorship deal with this club was extended in August 2012.	Franz Beckenbauer once played for them, and Franck Ribéry still does.	It's Germany's most successful football team of all time.
Telecom Which person?	He was born in Sweden in 1864.	He began in the Ericsson workshops in 1884, later rising to office manager.	He was elected to Ericsson's board of directors in 1896.	A great automobile enthusiast, he died tragically in a car accident in 1909.	He took over from Lars Magnus Ericsson as Ericsson President in 1900.

The picture
Which year was this photo taken?
5 points for the right year
4 points for the year +/- 1 year
3 points for the year +/- 2 years
2 points for the year +/- 3 years
1 point for the year +/- 4 years

TURN THE PAGE FOR THE RIGHT ANSWER.

Geography: Brazil; History: 1984; Culture: Dial M for Murder; Technology: Pac-Man; Sports: Bayern Munich; Telecom: Axel Bostrom; Bilden: 1930; The basketball team at Ericsson in Mexico.



PHOTO: CENTRE FOR BUSINESS HISTORY