

#4 • 2011 The magazine for Ericsson employees

# Contact



Win an XPERIA X10!  
PAGE 4

## Farms going 'moobile'

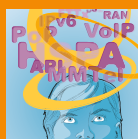
Dairy farmer Rickard now does much of his work using his mobile phone.

Pages 16-25



**WENDY WINKELER, A MANAGER IN THE US,** created her own knowledge program for employees. Pages 14-15

Learn more about: **IPV6** Page 5



**33 ACRONYMS!** Contact deciphers the jargon Pages 32-34





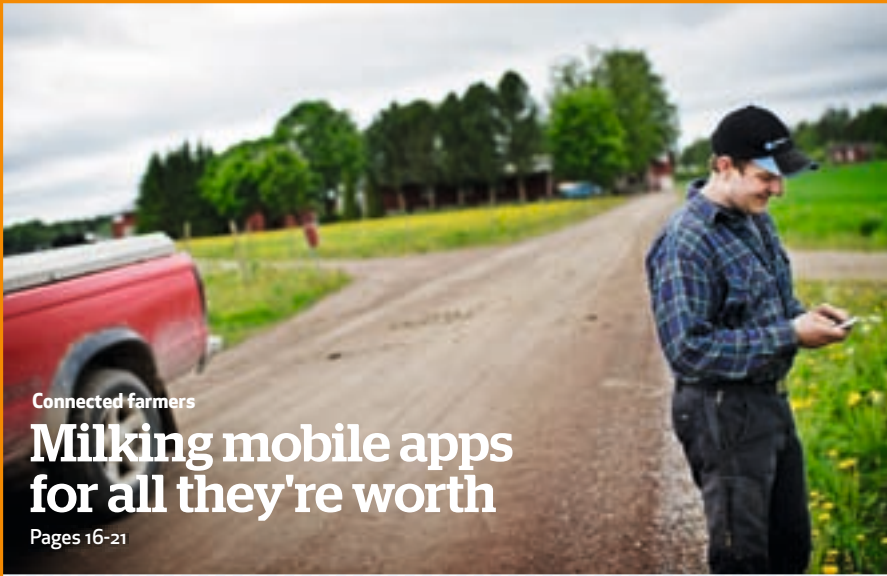


# CONTACT PLAY

On-demand content covering the latest Ericsson news and trends – in less than five minutes.



ERICSSON



Connected farmers

# Milking mobile apps for all they're worth

Pages 16-21



Seoul.

### NEWS

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## Contact

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## In the right direction

**R**eturning from my summer vacation, I wonder how I ever found my way home before. Okay, I am exaggerating a bit because I usually managed to make it home, but I do have a shocking sense of direction. I have spent countless hours over the years looking for hotels, beaches, shops, train stations and restaurants. I know of only one person who is worse at finding their way around – and that is my husband. So you can imagine how much better our recent vacations have been, now that we both have smartphones equipped with the latest GPS-based mobile apps.

I understand completely that some people choose to restrict their mobile-phone usage when on vacation. But in our family, no chance – especially with two small children who simply do not tolerate long delays when we are trying to get where we are going. Sure, we had maps before, but they could never tell you where you actually were, or what direction you were heading.

**And when I look** away from my phone, I see lots of other people following our example. Tourists who used to wrestle with paper maps are now using their mobile phones instead. They are surfing, searching and talking – and almost all of them look pretty happy about it.

This is exactly what we at Ericsson want mobile communication to do: to make day-to-day life simpler and richer for an increasing number of people, no matter where in the world they work or live.

In June we held our annual management conference, the Leadership Summit, in Stockholm. And just like at last year's summit, we discussed how Ericsson can contribute to connecting an increasing number of people and things.

**But there was** one big difference: What last year were ideas have now in many cases evolved into activities. In this issue of Contact Magazine, we have included a special supplement that concisely and simply spells out Ericsson's strategy and business goals – which is especially useful for those of you who did not take part in the Leadership Summit. I encourage you all to read it. Work is more fun and more meaningful when you know where we all are heading and how we are going to get there.



**Helena Norrman**, Head of Group Function Communications



## Have your say

E-mail us your questions, opinions, reflections or work-related images. We will publish a selection of the material on this page. [contact.comments@ericsson.com](mailto:contact.comments@ericsson.com)



### BECOME A STRATEGY EXPERT - WIN AN XPERIA

As in previous years, we are now offering you the chance to win a brand new mobile phone from Sony Ericsson - and the honor of calling yourself an Ericsson strategy expert. All you need to do is correctly answer 10 questions about Ericsson's strategy. You can find the questions on the Contact Online portal or on [internal.ericsson.com](http://internal.ericsson.com). Click on the Strategy Quiz banner to the right on the webpage and

follow the instructions. E-mail your answers to [contact.comments@ericsson.com](mailto:contact.comments@ericsson.com), please name the e-mail Strategy quiz. We need your answers by October 3.

Hint: Read the strategy pullout section in this edition of Contact carefully. You can also find some information on the strategy site on the Ericsson intranet: [Global > Company information > EGMS > Management and Control > Strategies > Strategy 2011](#)

### INCORRECT CAPTION

The picture caption on page 31 of issue 2 of Contact from 2011 is incorrect. The picture does not show a PCM system; it shows an intermediate amplifier in a frequency division multiplexing (FDM) system (analog coaxial system). At that time, PCM systems were in their infancy.

Tord Pählman, Sweden

**ANSWER** Thanks for your e-mail. The picture and the corresponding factual information come from *The Ericsson Chronicle, 125 Years in Telecommunications* (page 270). We often refer to this book to find out about Ericsson's history. The book must be regarded as being a reliable source, but we apologize if the information is incorrect in this case.

Editorial team

### CREATE YOUR OWN QUIZ!

Would you like to test your colleagues on your knowledge of telecoms? Get in touch with us at editorial. We would like you to contribute innovative and tricky quizzes for the back page of the magazine. The rules are simple, and are published here: [http://internal.ericsson.com/page/hub\\_inside/news/magazines/contact/readers\\_quiz.jsp](http://internal.ericsson.com/page/hub_inside/news/magazines/contact/readers_quiz.jsp)

Editorial

## Readers' pictures



Here is a snapshot taken with my C903 mobile phone during a recent holiday in Singapore. My daughter is shown in the photo.

Balachandrar S, India



This one is from my recent trip to the Pacific Coast Highway in California. It shows two surfers at Pismo Beach.

Bob Schuster, USA



An emotional moment captured on camera as Team Ericsson crosses the finish line after a grueling 300km cycling journey for the Ride to Conquer Cancer, 2010.

Christine Horton, Canada

## Welcome...

PHOTO: VYACHESLAV DUDIN



### ... to Ericsson, Natalia Sviridova

... who worked in B2B marketing for 10 years for leading ICT vendors such as Lucent Technologies, IBM and Microsoft before joining Ericsson in April 2011. As Strategic Marketing Manager she now supports Russia and the rest of the countries in the Commonwealth of Independent States (CIS) as part of Region Northern Europe and Central Asia (RECA)

from her office in Moscow, Russia. **What areas are you focusing on?**

I am developing the regional marketing plan and global market category initiatives to position Ericsson for growth and thought leadership. I am also involved in establishing an Ericsson Studio in Moscow and organizing the RECA Road Show for Russia, Ukraine and Kazakhstan.

**Where would you recommend visiting in Moscow?**

Visiting Red Square should be top of every tourist's agenda. There are a lot of cultural attractions - ranging from classical-music concerts to museums - in the city, and in the summer there are many open-air events.

## Web poll

# 57.9

... percent of 233 Ericsson employees find mobile apps useful in their daily work.

Source: Intranet



# Have you been asked ...

## ...ABOUT IPV6?

### IPv6 (Internet Protocol version 6)

There are no longer enough unique IP addresses - the string of numbers that identify every device connected to the internet. The solution is IPv6, which provides for an almost unlimited number of IP addresses. The biggest challenge is in the mobile network, where the number of continually connected smartphones is growing dramatically. The mobile network is also used increasingly for machine-to-machine (M2M) communication between devices such as electricity meters, cars and alarms.

- On February 3, 2011, the Internet Assigned Numbers Authority (IANA) - the organization that distributes IP addresses around the globe - officially ran out of IPv4 addresses
- The Internet Society (ISOC) held World IPv6 Day on June 8: a "test flight" for IPv6, involving most of the major internet players. Even our own [www.ericsson.com](http://www.ericsson.com) was available using IPv6.

#### Background

Work on IPv6 began in 1994, when it became obvious that the number of addresses available using IPv4 would not be sufficient. The transition was slowed because of the introduction of Network Address Translation (NAT).



### IPv6

340,282,366,920,938,463,463,374,607,431,768,211,456 addresses



#### New uses

More devices are being connected to the internet and require new addresses. (Ericsson's vision of more than 50 billion connected devices.)

#### Advantages

- More addresses means more connected devices
- Restores the internet to being a network where everything gets a unique IP address so that everyone can access everything, a quality that the internet's success was built on.

#### Transition

The problem is that IPv4 and IPv6 don't talk to each other. Proxy/NAT64/DNS64 (Domain Name System 64) is used for translating the protocol and applications. This means that devices using the IPv6 network can access almost all IPv4 services.

#### Tunnel

You can use a "tunnel" to transport IPv6 communication over IPv4 infrastructure.

#### Proxy/NAT64/DNS64



#### Data center



#### Dual stack

In order to see both IPv4 and IPv6 addresses, every device can run with parallel addresses for a certain time.

#### Today's protocol

IPv4 was developed in 1981.

### IPv4

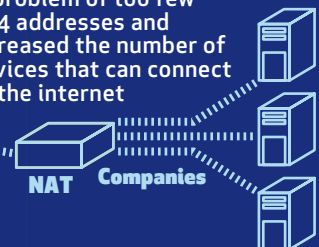
4,294,967,296 addresses

IPv4-connection



#### NAT (Network Address Translation)

Connects a local network to the internet with the same public IPv4 address. Has temporarily solved the problem of too few IPv4 addresses and increased the number of devices that can connect to the internet



**15.30/June 9, 2011/Stockholm, Sweden**

### **One moment in time**

This snapshot was taken during the webcast for the Leadership Summit 2011. A total of 250 managers from all of Ericsson's regions and business areas met on June 8 and 9 outside Stockholm to discuss the company's strategy and future. The issues covered included how to continue the work regarding verticals, whether we will see more cross-industry partnerships, and how to create the right conditions for Ericsson employees to achieve our common goals. The full webcast is available on the intranet. Click on the Company Info tab and then on the link marked Strategies. PHOTO: BODÉN & CO







PHOTO: APPLE

## Tim Cook takes over after Jobs

**APPLE UPDATE** Steve Jobs announced in August that he was stepping down as Chief Executive Officer of Apple. Having founded the company in 1976 with Steve Wozniak, Jobs has been the creative force behind some of its most successful products. Chief Operating Officer Tim Cook becomes Apple's new CEO while Jobs has been appointed chairman of the board of directors.



PHOTO: ISTOCK

## Cars with no drivers

**INNOVATION** Robotic cars may sound like science fiction, but according to the New York Times, Google is already testing self-driving vehicles on California's highways in the US. A combination of radar, GPS and proximity-detecting sensors, as well software with artificial intelligence, is due to make these driverless cars safer and more energy efficient than those controlled by humans.

Source: New York Times



...billion USD is what Microsoft paid to acquire voice over IP company Skype in May 2011. Source: Wired.com

# On the bright side of life

**The availability of more affordable connected devices and low-power, wireless-data standards is providing bright ideas for smarter homes.**

**SMART HOMES** One of the new connected devices that will soon hit the market is the IP-enabled lightbulb. But why connect a lightbulb? In addition to a number of practical applications related to security and energy conservation, Jim Lindop, General Manager for NXP's low-power radio frequency business, says that connected lighting truly demonstrates the technology that is at the heart of smart homes. New, low-power, wireless-data standards,

such as IPv6 over low-power wireless personal area networks (6LOWPAN) is making it easier to connect a broad range of devices.

Interest in energy savings, consumers are now much more willing to introduce smart devices into their homes. The technology

its power supply, LED driver and enclosed light fixture (the glass bulb), a connected lightbulb includes a simple wireless microcontroller that gives the light an IP address, wireless connectivity and controls functions such as on/off and dim.



The benefits of IP-enabled light bulbs include the ability to remotely control light levels and to monitor energy use.

**Simple technology** With an increased familiarity with cloud-based services and a greater

involvement in connecting a lightbulb to the internet is actually quite simple. In addition to

**Networked Society** "We are getting to the point where we can connect a device to the internet for USD 1," Lindop says. That low-cost connectivity is a fundamental factor that will make it possible to create a Networked Society that will feature more than 50 billion connected devices.

David Francisco

## "One of Sweden's most important contributions toward lifting people and nations out of poverty, misery and oppression has been the dissemination of mobile technology."

Carl Bildt, Swedish Minister for Foreign Affairs Source: Radio Sweden

# THE LIVING GETS EASY



PHOTO: ERICSSON MEDIABANK

**REPORT** Two recent reports from Ericsson ConsumerLab highlight how technology is impacting life in our homes. In the first study, Dynamics in the Home, Ericsson's consumer behavior experts investigate how technology is influencing the way decisions are made in US homes. Likewise, its Smart Cities report highlights, in part, how an increasing interest in issues relating to security, safety, and time savings is motivating more consumers to install smart home solutions, such as surveillance and monitoring.

David Francisco

To learn more go to: [internal.ericsson.com](http://internal.ericsson.com) > Sales & Marketing > ConsumerLab





Henric Bergenwall and Thomas Luvö are members of the Mobile Broadband Modules firmware development team in Gothenburg, Sweden, who has worked on the Anti-Theft PC Protection technology.

PHOTO: ANNA REHNBERG



PHOTO: PER MYREHED

## Qureshi ranked 12th-most influential

**TELECOM WOMEN** Fierce Wireless has named Rima Qureshi, Senior Vice President and Head of CDMA, Ericsson, one of the most influential women in the telecom world. Qureshi ranked 12th overall because of her role in developing the North American CDMA market. According to research from the Dell'Oro Group, sales of CDMA-EV-DO infrastructure represented nearly a third of mobile infrastructure sales during Q1, 2011.

Source: Fierce Wireless, Dell'Oro Group

## Google buys Motorola Mobility

**ACQUISITION** In August 2011, Google announced it was buying US mobile device manufacturer, Motorola Mobility for USD 12.5 billion.

Source: Tech Crunch

## Dialog 2011

**SURVEY** The annual Dialog Employee Engagement survey features several changes, including benchmarking with over 190 companies globally. The 2011 survey will also be shorter, only 54 questions, and will focus on engagement and motivation. The first day to submit your responses is September 14, 2011. For more information, visit: [internal.ericsson.com](http://internal.ericsson.com) > [Employee Info](#) > [Ericsson Employee Engagement survey \(Dialog\)](#).

# Secret weapon fights laptop crime

**Anti-Theft PC Protection technology, one of various solutions developed by Ericsson and Intel, makes it possible for laptops to be recovered if they are lost or stolen.**

**SECURITY** Since 2007, Ericsson and Intel have combined their experience in the ICT and computing industries to develop compelling offerings for their customers.

"Intel is a strong player in the computer industry and Ericsson leads the telecom industry," says Mats Norin, Vice President of Mobile Broadband Modules

at Ericsson. "Our collaboration with Intel drives creativity. Combining our experience, footprint and presence in the marketplace helps ensure our products are compatible and well optimized."



Mats Norin

**Seamless integration** Ericsson has ensured that its mobile broadband modules can be seamlessly integrated into various Intel platforms, including Huron River which is featured in a broad range of devices and laptops

from various electronics manufacturers. Huron River includes the latest Anti-Theft PC Protection technology that Ericsson has helped to develop.

### New opportunities

The solution works via an encrypted text message that disables a lost or stolen laptop. Its location can be pinpointed using GPS technology and, if it is recovered, it can be unlocked by sending another encrypted text message. The solution is enabled by third-party service providers such as Symantec/PGP, WinMagic, Mformation and Absolute.

Ericsson and Intel have also collaborated to optimize power consumption and utilization by mobile-broadband modules in laptops as well as 3G connectivity in Intel's M2M Reference Design processors.

"We are working with Intel to create a digital signage offering," Norin says. "Interactive material could be downloaded by people from billboards in airports and shopping malls in real time. This is a new area for Ericsson and a great opportunity to reach a different type of customer."

Jonathan Rothwell

# Hello...



PHOTO: EVA OLSSON

...**Katarina Larsson**, MSc in Computer Engineering, who in June received the Future Female Leader Award 2011. The award is given to the year's most distinguished female technology graduate at KTH Royal Institute of Technology in Stockholm and includes a six-month training course at Ericsson.

### What made you choose to work with IT?

"I've had an interest in computers since childhood. But it wasn't until I began studying interaction design at Umeå University (in northern Sweden) that I realized what programming was all about. I used to think it was very difficult. But then I realized that wasn't the case at all. It was great fun."

### What should the IT industry do to attract more women to leading roles?

"First and foremost, more women need to be brought into the industry. But unfortunately, many of them think technology is difficult, just as I did. That's why we have to offer interdisciplinary courses that include more than just technology. We also need to go out to the high schools and speak about what we do."

### What qualities are important in a leader?

"I believe that leadership is about getting the best out of your employees. A good manager gives people space to develop."

Michael Masoliver



PHOTO: TOMMY PETTERSSON

Parisa Pakniat at Ericsson in Linköping, Sweden, has learned how to use e-mail much more efficiently.

# Efficiency site guarantees peak performance

**Increase your productivity at work by consulting hands-on information on the Personal Efficiency website. For employees in Linköping, Sweden, the ideas presented on the site have been a great success.**

**EFFICIENCY** The Ericsson Academy Personal Efficiency website can help make your day more efficient. Here you will find hands-on guides to everything from how to manage your time better to how to set up automatic rules, as well as eLearnings, seminars and support material.

In October 2010, the Ericsson R&D site in Linköping, Sweden,

began operating the personal efficiency program for all employees – some 1,300 people. So far, 85 percent have taken the course.

Parisa Pakniat, a Solutions Verification Engineer in Linköping, took the e-mail seminar in November 2010 and came away with some important lessons about efficient communication.

### To the point

One of the best-practices taught at the course was to state directly in the subject line whether an e-mail is a question, information, or a request for action. Pakniat says that employees now use e-mail much

more efficiently and don't spend nearly as much time as they used to handling the large volume of messages.

"It seems that everybody appreciates clear e-mail headlines, even external recipients. That's good," Pakniat says.

### A lot of meetings

According to surveys, Ericsson employees spend much more time at meetings than necessary. And a recent web poll showed that 60 percent of the respondents thought that meetings often had no proper goal or agenda. Only 30 percent said that meetings started on time. But the efficiency program has

made quite a difference, making meetings more efficient.

### Improvements

Program ambassador at the Linköping site, Stefan Öggemar, who works as a Test Environment Engineer, says that the overall changes are positive, but much work remains. "A lot has improved already, but we have to remind each other and keep it on our agenda," he says.

Johan Kvickström

► For more information, go to the Innovation and Personal Efficiency sections of the Ericsson Academy site: [Intranet Home/Employee Info/Ericsson Academy/General skills](#).



# Singapore, Stockholm and Seoul top ICT list

**The Networked Society City Index has ranked 25 cities according to their ICT development. Singapore, Stockholm and Seoul topped the list.**

**STUDY** The top three cities have achieved many of their social, economic and environmental targets through the use of the latest technology from the ICT industry. The Networked Society City Index is a joint study conducted by Ericsson and the management consultancy firm Arthur D. Little.

Erik Almqvist, Director at Arthur D. Little, says the list should be used to trigger discussions with city officials about development and encourage them to learn from other cities.

**Learn from each other** "We have best-in-class cases throughout the list



PHOTO: PETER NORRAHL

The gap between top- and lower-ranked cities will narrow according to Erik Almqvist, Director at Arthur D. Little.

so even the top-ranked cities can learn from others," Almqvist says.

According to Alm-

qvist the list will continually change and the gap between top- and lower-ranked cities

will narrow, thanks to ambitious development initiatives. Almqvist is currently monitoring 80 such initiatives around the world.

## E-health

E-health initiatives, for example, are improving the national health care in Egypt while so-called "i-school" learning centers in Manila are educating Filipinos to improve their ICT skills and help prepare them for employment in technical roles.

Cities such as Cairo and Manila will rise up the rankings if they continue to embrace such initiatives. Almqvist's advice is to focus on the basics. "Good quality fixed and mobile networks, a reasonably ICT-literate population and incentives to encourage investment – these are the pillars of development," he says.

Jonathan Rothwell

## Ericsson earns top supplier award

**HONOR** Ericsson was honored with the Sustainability Engagement Award at Vodafone's 2011 Global Supplier Awards for its "commitment to reduce CO<sub>2</sub> emissions and follow Vodafone's code of ethical purchasing". The annual awards ceremony, held in July of this year, recognized Vodafone's strategic suppliers whose outstanding performances and support have helped the company increase efficiency.

## App Awards name winners

**APPS** An application that keeps track of items in your fridge and one that provides product advice received top honors at the 2011 Ericsson Application Awards. "What's in my kitchen" received first prize in the "student" category while newcomer, HipSnip, won in the "company" category with their personal shopping assistant. More than 150 teams submitted entries to the second annual contest organized by Ericsson Research and Sony Ericsson.

## Nimble fingers

**SHORTCUTS** Texting shortcuts are great for saving time, but decoding them is not always that easy. Here are a few of the more popular abbreviations:

- ▶ bfn – bye for now
- ▶ brb – be right back
- ▶ foaf – friend of a friend
- ▶ l8r – later
- ▶ omg – oh my god
- ▶ rofl – rolling on floor laughing
- ▶ ^5 – high five!

Source: Dagens Nyheter

## June 16, 2011; Linköping, Sweden



PHOTO: MIKAEL TOFTGÅRD (FIRST PLAY)

## Phone feast

**JUBILEE** A 3.6-meter-long cake in the shape of an early-model GSM telephone is served at Mjärdevi Science Park in Linköping, Sweden. The mobile-phone cake marked 20 years since the first GSM call was placed on a commercial network. In total, 950 colleagues from Development Unit Radio in Linköping and Product Development Unit GSM in Kista participated in the celebrations.

# 3 HAVE THEIR SAY

When did your children get their first mobile phones?

► **Marianne Etheridge, Glen Gardner, USA**



My son was 14 when he got his first mobile

phone. We wanted to wait until he was old enough to be responsible for taking care of it properly and understand that it was to be used primarily for emergencies and to keep in contact with us.

► **Jenny Hai, Beijing, China**



In Beijing, it is quite common for parents to provide

children between the ages of seven and nine with a mobile phone. Our daughter is only four years old, but in a few years when she starts primary school, we plan to buy her a phone. We want to make sure that she is safe, but also that she can have basic communication with her classmates and teachers.

► **Pat McDonagh, Sydney, Australia**



We decided to get mobile phones for our twin boys

when they started high school. The boys had just turned 12, and this was the first time they would regularly be on their own. We felt it was important for them to be able to contact us.

David Francisco

## DIGITAL NATIVES

# Staying connected



PHOTO: RICARDO PINZON HIDALGO



The Acosta family uses a variety of devices and applications to enhance their daily lives.

**Juggling a personal and professional life can be challenging; particularly for parents of young children. Claudia Acosta, Ericsson employee in Colombia, uses the latest technology.**

**APPLICATIONS** Acosta, Head of Statistical Analysis & Reporting in Tactical Planning and Operational Development, Region Latin America, lives with her husband and two children in bustling Bogotá, Colombia. She uses applications and technology to maximize efficiency and overcome some of the challenges associated with being a working parent.

“Typically, I start my day around jam listening

to the news on my mobile while sipping on a cup of Colombian coffee,” Acosta says. “I download the latest podcast from yogaamazing.com and perform yoga for 20-30 minutes. At 7am – after we have eaten breakfast – I leave for the office and the children go to school.”

### In control

For Acosta, going to the “office” is more a state of mind. Regardless of the time or her location, she aims to be contactable and in control using RACOM for secure access to the Ericsson network and the Dynamic Mobile Exchange application, which pushes work e-mails directly to her phone.

“I work in a region

consisting of several time zones,” she says. “Even in the late evening I check my mobile regularly for important e-mails from colleagues in the Caribbean.”

When Acosta is away on business, the family conducts video calls using Skype or FaceTime

on the iPad.

“When I am traveling, I use video conferencing to wake my youngest son up in the morning. Seeing his expression enhances the experience and helps keep us connected with one another.”

Jonathan Rothwell

## Claudia's apps:

**DME:** Use the application to sync your mobile with e-mail, tasks and contact information. DME supports secure e-mail via EriCA. For more information search for “DME” in the IT Service Catalog on Ericsson’s intranet.

**RACOM:** Enables remote and secure access via internet to the Ericsson IT environment using fixed broadband, mobile broadband or Wi-Fi. For more in-

formation search for “RACOM” in the IT Service Catalog on Ericsson’s intranet.

**SKYPE:** Free and premium versions available on a variety of platforms, including Android and iOS.

**FACETIME:** Video calling available on iPhone 4, iPad 2, the new iPod touch or Mac over Wi-Fi.



PHOTO: ERICSSON ARCHIVE

Kabelverket's office building in Älvsjö.



## Kabelverket in Älvsjö – a live wire business

**LOOKING BACK** In 1921, LM Ericsson purchased cable-manufacturing facilities in the Stockholm suburb of Älvsjö in an effort to meet the increasing demand for telephone cable both in Sweden and abroad. In 1956, capacity at Kabelverket in Älvsjö was expanded greatly and, by 1976, the site became the home for the company's new data center. The Kabelverket office building, designed by renowned Swedish architect Ture Wennerholm, was selected specifically because of its durable and secure construction. In 1984, Ericsson Data Services was established there, providing data-recovery services to major corporations until operations ceased in June 2011.

Source: Ericsson Review



ILLUSTRATION: TOYOTA.COM

## Toyota builds social network

**CONNECTED** Toyota and Salesforce.com have teamed up to create a social network for drivers and their vehicles. Toyota Friend "connects" drivers with their vehicles by sending alerts to their mobile phones when, for example, maintenance is due or the oil needs to be changed. Using social media owners can also link up with dealerships or other Toyota drivers. The first vehicles capable of connecting to the network will be manufactured during 2012.

## "I believe this is the first time a constitution is being drafted basically on the internet."

Thorvaldur Gylfason, member of Iceland's constitutional council. After the financial collapse in 2008, the national parliament of Iceland entrusted a group of 25 ordinary citizens with the task of rewriting the country's constitution. This constitutional council has, in large part, used social media to gain feedback for the revisions. Source: guardian.co.uk

## COMPETE AND WIN A PRIZE

**COMPETITION** How thoroughly do you read Contact? You can find the answers to the three questions below in some of the articles in this issue.



1. What are YR.no and Klart.se?
2. What does the abbreviation IPv6 stand for?
3. What is the name of the program that Wendy Winkeler runs with her staff in Dallas to increase knowledge about Ericsson?

**Write your** answers to each question in an e-mail, with the subject "competition"

and send it to contact.comments@ericsson.com by September 26. The winner will receive a copy of the Ericsson book Changing the World. If we receive several correct answers, the name of the winner will be drawn from a hat. Good luck!

## Tips from the blog files

### INTERNAL BLOGS

**Leadership Summit blog:** Delegates to the 2011 Leadership Summit share their thoughts on this year's event and their outlook for the future. [https://ericoll.internal.ericsson.com/sites/Leadership\\_Summit\\_Blog\\_2011/default.asp](https://ericoll.internal.ericsson.com/sites/Leadership_Summit_Blog_2011/default.asp)

**One step beyond:** Gerald Meinert writes about knowledge management, collaboration, innovation and branding. [https://ericoll.internal.ericsson.com/sites/One\\_step\\_beyond/default.aspx](https://ericoll.internal.ericsson.com/sites/One_step_beyond/default.aspx)

### EXTERNAL BLOGS

**GadgetLab:** Wired.com's contributors offer their tips on the latest hardware and digital toys. <http://www.wired.com/gadgetlab/>



**Games Alfresco:** Ori Inbar, former Senior Vice President at SAP, covers the world of augmented reality. <http://gamesalfresco.com/>

Have you come across any thought-provoking blogs or blog posts? Let us know by sending an e-mail to [contact.comments@ericsson.com](mailto:contact.comments@ericsson.com)



PHOTO: KEITH TSUJI / ISTOCK

## Apple launches iCloud

**SERVICES** Apple announced a range of cloud-based services at the Worldwide Developers Conference in June. The new iCloud service is capable of wirelessly transmitting users' data to a range of Apple devices while iTunes in the Cloud allows users to sync any songs purchased on iTunes to an Apple device, without any additional cost.

# ONE

... billion mobile broadband subscriptions will be exceeded during 2011.

Source: ABI Research

INTERVIEW: WENDY WINKELER

# Wendy's way

**W**ith more than 80 percent of her team joining Ericsson in 2010, Wendy Winkeler, manager at Ericsson in Dallas, the US, faced a big challenge in getting her colleagues better informed about the company. In response, she created the program Everyday Ericsson.

*What are your team's main activities?*

"We are part of the Radio Access Network (RAN) Transport organization in Services Operations. We perform engineering and provide transport expertise for our major customers in the western region of the US."

*How was the idea of Everyday Ericsson born?*

"After receiving Dialog feedback and holding Individual Performance Management discussions, I saw that I needed to provide a wide range of information and support to my team, so I began producing topic-based e-mail newsletters that shared interesting information about Ericsson. These included important links to relevant parts of the company's intranet and also provided professional development tips. I called them Getting to Know Ericsson, and the feedback was very positive."

*What other activities have you done?*

"I have occasionally arranged guest speakers from the business to come in and share knowledge with the group."

On top of this, I created an intense, team-building competition that took two months for the team to complete. There were four major competitions and four mini competitions in which the teams

accumulated points to win the overall competition."

*How long have you worked with this program?*

"It has been a work in progress since I started in this role in early 2010. I'm adapting it as I go, depending on the needs of the team."

**"I can see everyone becoming more involved and engaged in the business, and there is a lot of laughter in the team."**

*Do you have a start-up package for new employees?*

"We are addressing the need for a more comprehensive introduction program for new employees. We will create an online version of the team-building competition, and we hope to incorporate segments for remotely based employees in the future. On our Everyday Ericsson EricOLL site, we will also create consolidated technical start-up guidelines that will be helpful in training new engineers."

*Did you receive help centrally to create this program?*

"I met Geoff Hollingworth, who was

the Head of Brand Management at Region North America, and shared my ideas with him for support. He has given me some great ideas for improvement. But, for the most part, this has been a local activity tailored toward my team. I wouldn't say it is anything more than an individual initiative to empower others."

*Where did you find the time to develop the program?*

"The majority of the work was done after hours, simply because of time constraints. However, there are things that must be done during office hours, of course. For example, I appointed my senior leads as team sponsors for the competition, and they provided support in making that happen. We've still got a lot of work to do."

*Have you seen any results yet?*

"I can see everyone becoming more involved and engaged in the business, and there is a lot of laughter in the team. I can also see that they have become more confident, and have really stepped up their involvement in providing innovative solutions for the business."

*Why aren't more initiatives like this one happening?*

"Many wonderful, innovative events are occurring in the teams, but maybe we are so busy meeting the demands of the business that we just don't get exposed to them or we take them for granted. I think we need to take the time to step back and look around us, network and ask more questions, and take more risks by trying new things."

Text: Sofia Falk Photo: Martin Adolfsson





Dairy farmer Rickard Janpers' **work day** starts at 04.00 and finishes 14 hours later. He has his **mobile phone** with him the whole time, for making calls, fighting weeds, tending crops, checking the **status of the milk** – and, not least, keeping an eye on the weather.





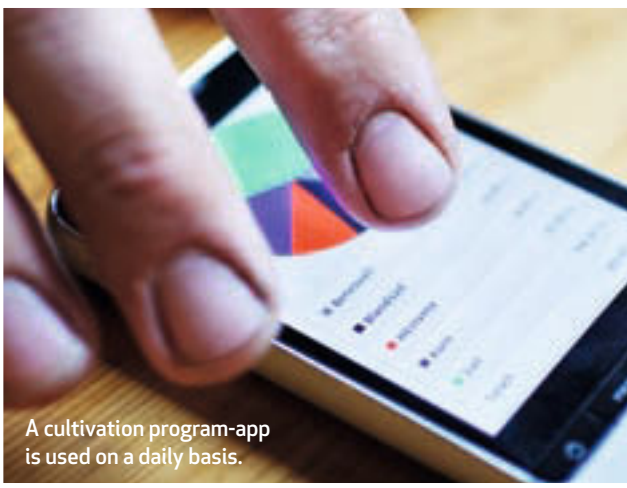
A common sight on the Janpers' farm: constantly updated weather forecasts are just as important for a farmer as good coverage is for a mobile operator.

CONNECTED FARMERS

# Agriculture online







A cultivation program-app is used on a daily basis.



"There should be applications for everything"

Rickard Janpers



## “Before, I had to run around all the time to get to the computer”

Rickard Janpers



SÅTER  
SWEDEN, EUROPE

**W**e are sitting in the staff room at the family farm in the Swedish province of Dalecarlia, on a visit to follow Janpers and see how modern mobile technology can be used on a farm. As we drink coffee, count flies and talk about mobile phones, Leif Johansson, Janpers' 63-year-old dad, leans forward and says: “You have to have a touchscreen. The technology has moved so quickly. You have to keep up even if you are 100.”

He is keeping up. He shows us a film he published on YouTube from when the cattle went for their first stroll around the farm's new barn. Being creatures of habit, and herd animals, it all got a bit chaotic. First they all stood still, and then they all got moving. Round and round and round.

“All change is negative for cows, and it all got a bit chaotic for a while there,” Janpers says. “They got worried, and that isn't good. Worried cows give poorer milk, so we have to keep them happy.”

Janpers takes out his smartphone to check the weather for the rest of the week. The weather is as important for a farmer as good coverage is for an operator. The 240 cows need food, so Janpers has to cut grass from the property's fields and produce silage, an important part of their diet. But silage production requires a day without rain. Heavy rain ruins the silage, which would mean having to buy expensive soya protein instead. Bad weather hurts the wallet.

Yr.no and klart.se, two Nordic weather sites, are the ones he checks most often.

“I probably go in once an hour to see if the forecast has changed. It rarely does, but I feel calmer after I have checked,” Janpers says.

**We head out to** the two barns, where we slosh through the manure. The air is fresh, though, smelling of animals and nature. Everything is quiet and calm, cow calm, with lots of cud being chewed. A calf is being born in a stall. As we walk among the animals, Janpers points to the slits in the floor.



Digital management programs show how much milk a cow produces and how much it is moving. A lot of movement can mean that a cow is in season, which the farmer can't afford to miss.

“If you only knew how many touchscreens we have dropped down there... Our phones have to be shockproof,” he says. “And it's important that we have internet access everywhere. You need to be able to make calls on them too... it sometimes feels like they forget about that.”

There is a deep significance in what he is saying. He needs his phone all the time, wherever he is. Janpers makes and receives a steady stream of calls: colleagues, suppliers, the vet, the dairy that collects the milk – he has to have contact with them all.

But he does a lot more than call. The entire farm and surrounding land has a local network to ensure good internet coverage.

**Janpers uses** a plant protection program to get an overview of the measures in place and report back to the central system. A cultivation program helps when he is out in the fields: the screen on his mobile shows how different areas have been fertilized and what the next steps should be. He accesses the program several times a day during sowing season. The Board of Agriculture's weed database, available as both an app and a site, is another mobile friend. Janpers also has access to figures showing the quality of the milk. The figures determine the cattle

feed, and are good to have when the feed merchant calls.

He can also log into the farm's bookkeeping program, lodge orders with Lantmännen, an agricultural cooperative, surf the web and look for information.

“The mobile phone saves me a lot of time and makes everything so much simpler,” he says. “There should be applications for everything. If I'm sitting at the computer, I use that, but usually I'm outside and want something done right away so I don't forget. It makes things so much easier when I have just about everything with me. Before, I had to run around all the time to get to the computer.”

It is time for the day's second milking. All the cows are milked three times a day on a cow carousel. Each cow produces an average of 2.5 liters per minute, around 10,000 liters a year.

**The latest milk-production** technology uses robots, a completely automated process and can be monitored by SMS. Janpers doesn't have that sort of machine yet, but two transponders provide the farm's control program with a stream of data: which cows have been milked, how much they have produced and how much they are moving around. A lot of movement might mean a cow is in season, and that is something they cannot afford to miss.

“But we can't see exactly where in the barn a cow is. That would be good to know. Sometimes it can take a while to find the right one,” Janpers says.

That is not a problem for Janpers' partner Elin, who is in charge of the cattle. She recognizes every single one, and knows their names (which are number-based). Elin can also see if a cow is getting sick. She has, as they say, good cow eyes.

I suggest that sensors could monitor the cows' pulse and temperature, setting off an alarm if something went wrong. Yes, that could help, says Janpers.

“But it's best if you can see them. Technology is good in many ways, but you can never replace cow eyes,” he says.

Text: Jonas Blomqvist Photo: Jesper Frisk

# “There is an enormous potential for apps”

Charlotte Hallén Sandgren, De Laval

## Old industry, new ideas

### Did you know...

... that there are 1.3 billion cows in the world? If all of them were connected, the world would take a step closer to Ericsson's vision of more than 50 billion connected devices.

... that one cow eats more than 50kg of fodder a day and drinks up to 150 liters of water?

A video of the cattle's first stroll through their new barn can be watched on YouTube: <http://korta.nu/bg5tv>



**Milk production is an age-old industry, but it uses the latest technology in many ways. In the future, even more use will be made of IT.**

The technology used in agriculture is traditionally production technology, such as automated milking machines and feeding systems. But, in recent years, IT has become another important part of the dairy farmer's day. In terms of maximizing the use of technology in these areas, Denmark, Sweden, the Netherlands, Israel and the US lead the way.

“I'm convinced that the use of IT will continue to increase,” says Charlotte Hallén Sandgren, who works for DeLaval, the world's leading supplier of systems and solutions for dairy farmers.

There are two main reasons for this. Firstly, dairy farmers already have a wealth of data on milk quality and cattle health that could be made more accessible. Secondly, dairy farming

is becoming an ever larger industry, which makes it more important to be able to get a simple overview of livestock and the property. GPS-controlled fertilizer systems and milk analysis results sent as text messages are just the beginning.

“There is an information revolution taking place,” says PG Lindberg from Swedish dairy association Svensk Mjök. “We are heading toward an industrial information system, whereby farmers can monitor production using key performance indicators in the same way as other industries have done for a long time. The technology can do a lot there.”

The farmers' most valuable assets are their cattle. The animals are sensitive and every disruption in their lives puts milk quality and quantity at risk.

“There is an enormous potential for apps,” Hallén Sandgren says.

The people at Svensk Mjök are putting a lot of thought into which platforms would be best and which services would most benefit farmers.

Lindberg identifies the deciding factor: “They have to be easy to use.”

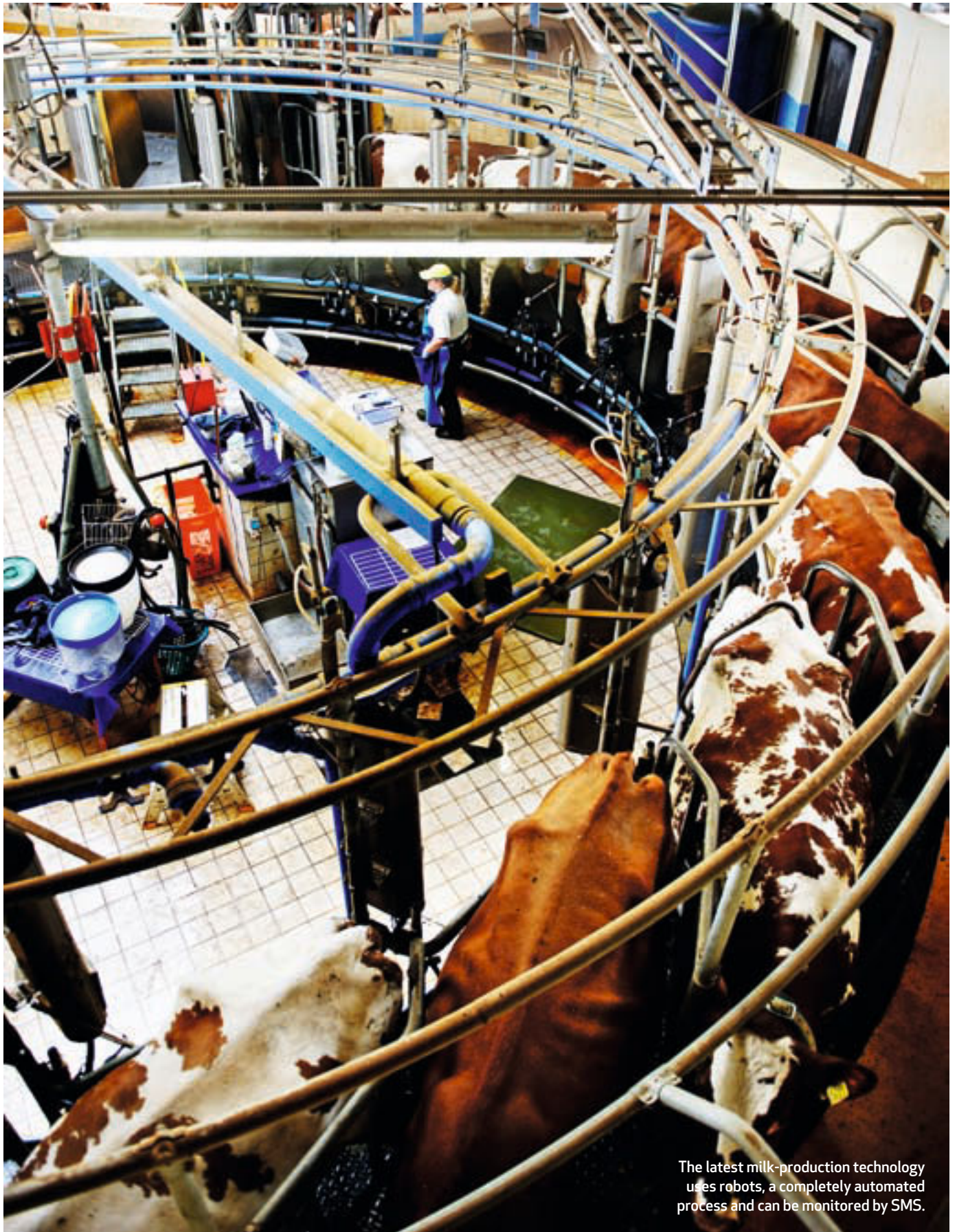
Text: Jonas Blomqvist Photo: Jesper Frisk

### FIVE POSSIBLE APPS

We asked PG Lindberg from Svensk Mjök and Charlotte Hallén Sandgren from DeLaval to come up with a list of smartphone apps that dairy farmers might find useful.

- 1.** An app that can, through the use of sensors, detect when it is time to inseminate a cow, and notify the farmer via text message. Insemination is one of the most important issues for dairy farmers. If they miss an opportunity, they have to wait three weeks for the next one.
- 2.** Milking is becoming completely automated, with little human interaction required. Some cattle are more “proactive” than others. An app that could notify the farmer that a particular cow has not yet been milked would be helpful.
- 3.** Sensors can be used to monitor the health of cows, linked to an app that notifies the farmer when something is wrong. This would allow for an early indication of impending illness before it becomes visible to the naked eye.
- 4.** Farmers whose cattle move over large territories would be interested to know the cows' exact location and to monitor their movements. This would enable the farmers to locate the cattle more easily, especially if a particular cow has not moved for some time.
- 5.** Countries at the forefront of IT, such as Sweden, have central databases with detailed information on each cow. Such databases can yield plenty of historical data, such as that pertaining to heritage, milk quality and animal health. This information is useful for the industry as a whole, and for individual farmers, dairies, fodder advisors and vets. This information is available in Sweden, but not yet via an app.





The latest milk-production technology uses robots, a completely automated process and can be monitored by SMS.









In this photo, two engineers from Ericsson are measuring an intermediate **amplifier** for a coaxial cable system running between the capital, Cairo, and the southern city of Aswan. Ericsson installed its first telephone exchange in Egypt in 1897, and by the early part of the 20th century it had sold so many phones that "Ericsson" had become a **generic term** for telephone. When Egypt became a republic in 1953 it was one of the company's most important markets in Africa, and by the end of that decade Ericsson was receiving major orders from the Egyptian state-owned phone company.

Source: Center for Business History

# 33 acronyms to learn

Do you know the difference between FDD and TDD? And how do you **explain** OFDM? Don't worry – there won't be a test. But this list will help you understand 33 common **technical abbreviations**.

**API – Application Programming Interface.** An interface that helps designers develop applications and services. APIs let them access data and various functions in a mobile phone or network server, such as a mobile phone's position.

**BSS – Business Support System.** A system used by telecom operators to manage their customer-oriented operations, including order management, invoicing and payment handling. BSS is closely linked to the Operational Support System (OSS), which operators use to manage telecom networks. When combined, the two systems are referred to as OSS/BSS.

**DSL – Digital Subscriber Line.** DSL enables digital data transmission over the wires of a telephone access network. Several varieties of DSL are available, under the collective name XDSL. Asymmetric DSL (ADSL) is currently the most common form of DSL but it is gradually being replaced by Very high-speed DSL (VDSL).

**EV-DO – Evolution-Data Optimized.** A standard for wireless data transfer via radio.

**FDD – Frequency-Division Duplex.** A technology that enables two-way radio communication by using one frequency

band for upstream signals and another frequency band for downstream\* (compare with TDD).

**FTTx – Fiber to the x.** A general term for broadband connections using optical fiber cables, in which X defines the target of the connection. X can be replaced with B (Building or Basement), C (Cabinet or Curb), H (Home), N (Node) and so on.

**HSPA – High Speed Packet Access.** A mobile broadband standard that offers high download speeds. Ericsson presented an HSPA network that provided speeds of 168Mbps for downloads and 24Mbps for uploads in demonstrations in 2011.

**ICT – Information & Communication Technology.** An umbrella term for modern information and communications technologies and all the services they can provide. Also found as Information & Communications Technology, and other permutations.

**IMS – IP Multimedia Subsystems.** A standardized multimedia control system that enables interoperable IP-based services. Multimedia telephony is the most prominent example of an IMS-based service for end users.

**IPv6 – Internet Protocol version 6.** This latest version of the

Internet Protocol provides an almost unlimited number of IP addresses. IPV6 has been designed to resolve the problem of a lack of IP addresses under the preceding protocol, IPV4, which is restricted to about 4 billion unique IP addresses.

**LAN – Local Area Network.** A network limited to a relatively small area, such as a building or a group of buildings. A Wireless LAN (WLAN) is a wireless local network that can, for example, be used in the home to link computers, smartphones, media players and other equipment. A Virtual LAN (VLAN) is a virtual network for a specific user group whose members are connected via a LAN or Wide Area Network (WAN). A VLAN is primarily used to ensure network privacy.

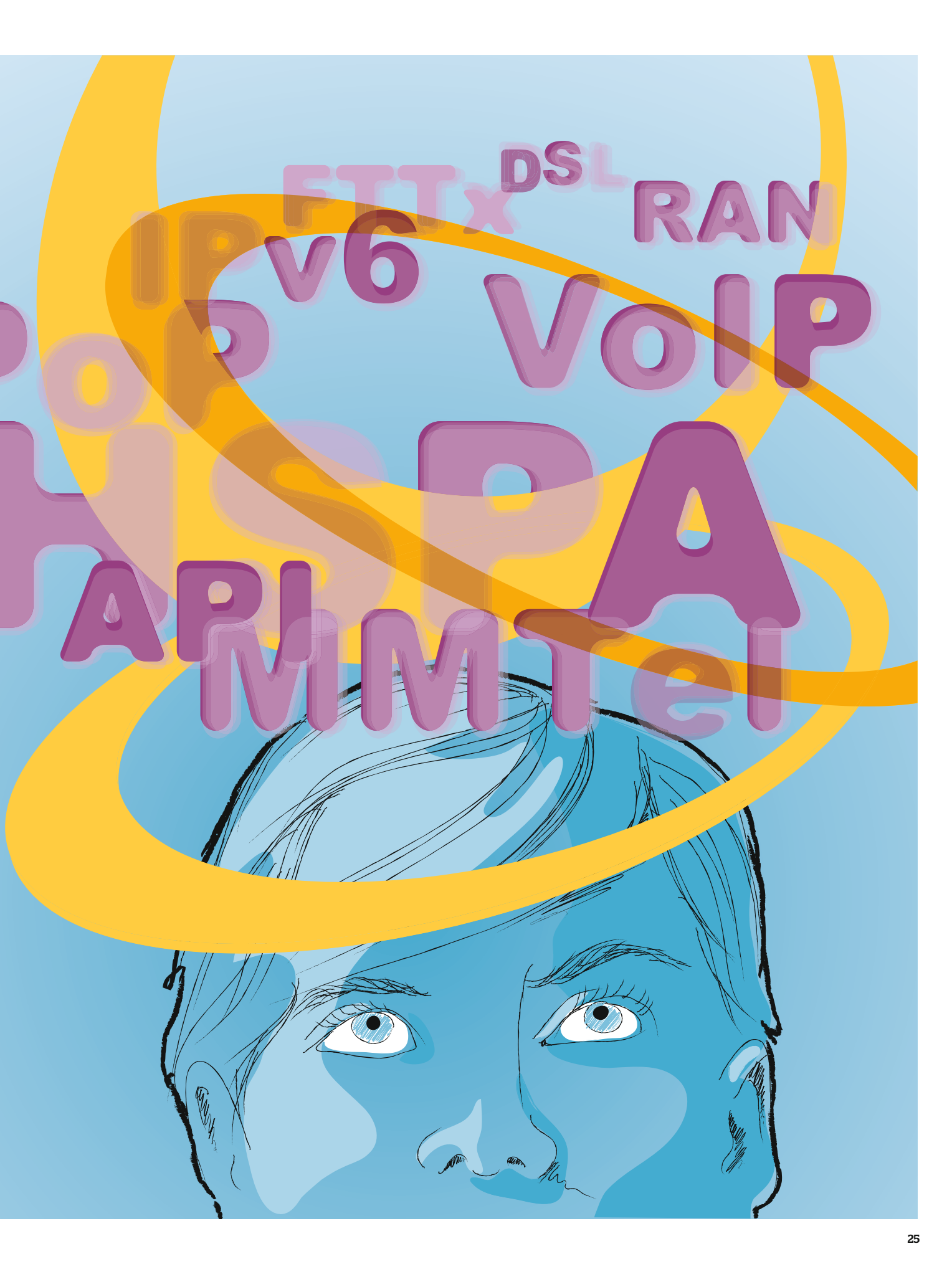
**LTE – Long Term Evolution.** The latest 3GPP (3rd Generation Partnership Project) mobile 4G standard, offering data-transfer speeds of at least 100Mbps over a wide area.

**MIMO – Multiple Input Multiple Output.** A technology that uses multiple antennas both to send and to receive data. This increases transfer speeds between the mobile device and the network.

**MMTel – Multimedia Telephony.** MMTel is an IMS

\*Upstream and downstream mean, respectively, that data is uploaded to or downloaded from a network.





FTTx DSL RAN

v6 VoIP

PARIMMTEL

▶ application – a standardized, interoperable multimedia application that includes support for voice, video, file transfer and messaging. Voice over LTE is based on MMTEL. MMTEL allows users to send text messages and share films and videos during voice or video calls.

**M2M – Machine to Machine.** When various everyday appliances are connected to servers, a variety of applications are possible, including long-distance health-care services, remote readings of electricity meters and more efficient traffic control. An important part of Ericsson's vision of more than 50 billion connected devices by 2020.

**OFDM – Orthogonal Frequency-Division Multiplexing.** A technology for transferring digital signals in a large number of parallel data channels. Uses include include LTE, WiMAX (Worldwide Interoperability for Microwave Access) and digital TV.

**OSS – Operations Support System.** A system used by telecom operators to manage their telecom networks. Typical tasks for OSS include inventory, configuration and fault management. OSS is closely linked to the Business Support System (BSS), which manages customer-oriented business operations. When combined, the two systems are referred to as OSS/BSS.

**OTT – Over The Top.** Traditional services such as telephony and TV, which are distributed via the internet directly to consumers. Skype is the best-known example of an OTT service for voice, but OTT is also becoming increasingly common in TV and video.

**PON – Passive Optical Networks.** A system that enables data transfer using optical fiber cables all the way, or almost all the way, to end users. No active equipment is required between network and line termination point.

**PoP – Point of Presence.** The physical point in a network where two or more communications devices establish contact. A traditional example of a PoP is a switchboard, which connects voice calls. Today, PoP often refers to the point where a user is con-

nected to the internet.

**QoS – Quality of Service.** The ability to prioritize a specific service, application or data flow in a network to guarantee a certain level of performance.

**RAN – Radio Access Network.** The part of a telecom system that controls and allows data and voice traffic between a mobile device and the core network.

**RCS – Rich Communication Suite.** A joint industry initiative focusing on how IMS can be used to offer mobile users advanced communications services, including improved phonebooks, chat functions and the ability to share multimedia files during calls.

**SAE – System Architecture Evolution.** An evolved core network that supports LTE (4G) and all its functions. SAE is an evolution of the General Packet Radio Service (GPRS) core network.

**SIP – Session Initiation Protocol.** A signaling protocol defined by the Internet Engineering Task Force (IETF) and used to manage multimedia communication over IP, such as for voice and video calls. SIP is used in IMS.

**SSO – Single Sign-On.** With this function, a user needs to log in only once to access several services and systems that are all supported by sso, instead of having to log into each specific service.

**TDD – Time-Division Duplex.** Two-way radio communication in a single frequency band upstream and downstream\* (compare with FDD).

**T-SCDMA – Time Division Synchronous Code Division Multiple Access.** A 3G standard developed in China to compete with the previously established Wideband Code-



Division Multiple Access (WCDMA) and CDMA2000.

**VoIP – Voice over Internet Protocol.** A technology for transferring voice calls and multimedia over an IP network, primarily the internet.

**VoLTE – Voice over LTE.** A standard for LTE voice calls based on MMTEL.

**WAN – Wide Area Network.** A computer network that is large enough to cover an entire country or continent. The internet is probably the most obvious example, but a WAN can also be specific to a certain organization and require a log-in procedure.

**WDM – Wavelength-division Multiplexing.** A fiber-optic technology that makes it possible to transmit several optical signals through a single optical fiber by using various wavelengths (colors) of laser light. This technology enables two-way communications and increases capacity.

**Wi-Fi –** A term for Wireless LAN (WLAN) based on the IEEE 802.11 standard. Wi-Fi is a trade name owned by the Wi-Fi Alliance, the industry organization that promotes Wi-Fi.

✉ Text: Anders Jinnelint & Benny Ritzén  
Illustration: Ebba Berggren





# CONTACT NEWSLETTER

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ERICSSON

# 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 / Points	5 points	4 points	3 points	2 points	1 point
<b>Organization</b> Which humanitarian organization?	About 10,000 people work for this organization.	It was established in 1962.	This is one of the United Nations' many specialized agencies.	This is the world's largest humanitarian agency fighting famine worldwide.	In 2002, Ericsson deployed a GSM network for this organization in Kabul, Afghanistan.
<b>Technology</b> Which technology?	This technology was created by Ericsson in 1994.	It was originally conceived as an alternative to data cables.	It is used for exchanging information over short distances from both fixed and mobile devices.	It is featured in various products including PlayStation 3, the Nintendo Wii and the iPod touch.	The technology is commonly used in mobile-phone hands-free headsets.
<b>Geography</b> Which country?	This country borders onto the Black Sea, Russia, Turkey, Armenia and Azerbaijan.	Various forms of wrestling are popular in this country.	Lari is the local currency.	The Rose Revolution took place in this country in 2003.	Ericsson's main office in this country is in the capital, Tbilisi.
<b>Culture</b> Which author?	He has written 13 books about information technology in business and society.	He has contributed to The New York Times, The Huffington Post and The Wall Street Journal.	He was chairman of nGenera Insight.	He and Anthony Williams wrote Wiki-nomics: How Mass Collaboration Changes Everything.	He was featured in Ericsson's Shaping Ideas 2020 series of videos.
<b>Sport</b> Which sport?	Variations of this Gaelic game have been played for at least 3,000 years.	The players use a wooden stick to hit a ball called a sliotar.	The ball can travel at 150km/h, and it is said that this field sport is one of the fastest in the world.	Camogie is the name of the equivalent sport played by women.	The Cork County Board of the sport's governing body is sponsored by the UK operator O2.
<b>Communications</b> Which operator?	It offers services in the Nordic and Baltic countries as well as in Russia, Turkey and Spain.	It is modernizing its network using Ericsson technology.	Ericsson will replace the operator's 2G and 3G radio base stations with RBS 6000.	Its stocks are traded on the Stockholm Stock Exchange and the Helsinki Stock Exchange.	This company is a result of the merger of Telia and Sonera in 2002.

## 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 +/- 5 years

**TURN THE PAGE FOR THE RIGHT ANSWER.**

Organization: The World Food Programme. Technology: Bluetooth. Geography: Georgia. Culture: Don Tapscott. Sport: Hurling. Communications: TeliaSonera. Which year (photo): 1912. The main exchange room in Johannesburg, South Africa.



PHOTO ARCHIVE