

Contact

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SWEAT YOUR ASSETS LOVE YOUR CUSTOMERS

Ericsson helps operators save 25% on network costs by managing its network outsourcing and enables it to focus in its customers lives and experiences.



Great teamwork

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Contact

Editor Jenz Nilsson, jenz.nilsson@jgcommunication.se, +46 8 588 331 38 **Publisher** Henry Sténson, henry.stenson@ericsson.com **In charge of internal channels** Christine Cornelius, christine.cornelius@ericsson.com, +46 10 717 70 51 **Reporters in this issue** David Callahan, david.callahan@jgcommunication.se, **Sofia Falk**, sofia.falk@jgcommunication.se, **Johan Kvickström**, johan.kvickstrom@jgcommunication.se, **Christine Luby**, christine.luby@jgcommunication.se, **Benny Ritzén**, benny.ritzen@jgcommunication.se, **Staffan J Thorsell**, staffan.thorsell@jgcommunication.se **Art director** Pelle Bouveng, pelle.bouveng@jgcommunication.se **Layout** Carola Pilarz, carola.pilarz@jgcommunication.se **Graphics** Svenska Grafikbyrån

Address Contact, Box 1042, 164 21 Kista **Fax** +46 8 522 915 99
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Henry Sténson, head of Group Function Communications and publisher of Contact

The journey has begun

It seems like I only just welcomed you to a new decade and we are already into the second quarter of the year. But, as we know, time goes quickly when a lot is happening, and the last few months have definitely proved that. Many employees were affected by our global reorganization. On April 1 we went from 23 market units to 10 regions. This is a major change but also a natural step if you consider how our company has developed in recent years.

Ericsson will focus on improving our customers' businesses in close cooperation with them to an even greater extent. There will be fewer build-outs, more contracts within managed services and more systems integration engagements, which demands much closer cooperation with individual customers. Many of the former market units were too small to have the right competence and be able to benefit from economies of scale to sell a broader product portfolio. With 10 larger regions, we increase our power with better access to experience and resources.

As usual, reorganizations of this kind represent a balancing act between doing things quickly and taking the time to think. For the new structure to have the maximum effect, we need crystal-clear role descriptions, common ways of working and an ability to work across regional boundaries to reuse experience and business models, and to build new competence within new areas.

The 10 regional managers recently gathered at Ericsson's headquarters in Kista to determine the new work structure and agree on seven engagement practices, which will reflect Ericsson's total offering from a well-defined customer requirement. With these engagement practices now in print, it will be easier to find the right competence in each sales situation, which in turn increases our chances of being innovative and creating commercially marketable business models. In other words, the journey has really begun.

Keep up to date! Under the heading "Stay informed about the 10 regions" on the start page of the global intranet portal, you will get the latest news about the reorganization.

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

CONTACT AS AN AUDIO FILE?

Have you ever considered the possibility of making Contact available as an MP3 file? I believe this would be useful for, and very much appreciated by, people who are used to driving to and from work.

Dino Petrone, Italy

ANSWER *Thanks for another good employee suggestion. The editorial team is planning to carry out a reader survey about Contact this year.*

When we have the results, we will go through all the suggestions and decide what can be realized.

Editorial

WHY LIST THE LEAST-READ ARTICLES?

Regarding the Contact Newsletter, why do you list the articles that are read the least? There are always some from the end of the month that people do not think are very interesting. Why not list more of the most interesting articles instead?

My Saxin, Sweden

ANSWER *The reason for this is that the articles that are the least read are not necessarily the least interesting ones. An article could have been read less because the headline did not*

convey very much, or because the introduction did not capture the reader's interest. The article could also have been hidden away on a local site. By listing the least-read articles, our aim is to give them a second chance; we hope that more people will follow the links in the Contact Newsletter, start reading the articles and then realize that they are actually interesting.

Editorial

CORRECTION

Unfortunately, we spelled the name of the reader who sent us the picture of the butterfly incorrectly in issue 6/2009. The photographer who took the picture was Deepak Gujar. We apologize for this error.

Editorial

Readers' pictures



This picture was taken last year around Midsummer in Roslagen, north of Stockholm.

Roger Jonsson, Sweden



I can't resist sharing this photo I took in Canada with my W760. It was taken on Dec. 9 as the Olympic Flame passed the ski resort Mont Tremblant.

Martina Branagan, Canada



I took this picture with my C902 on my way to work, the morning of Oct. 6, 2009. The picture shows Järva-fältet, just south of Kista.

Jonas Boegård, Sweden

Welcome...

PHOTO: GILBERT ACEDILLO



... John Welder, a new Ericsson employee.

After 14 years at Cisco in roles ranging from software engineer to head of software engineering operations, John Welder started work at Ericsson in Silicon Valley in Jan 2010. He works as Director of Operational Excellence for DU IP and Broadband (DU1B). John is looking forward to helping Ericsson capitalize on the transformation to IP that is happening

in the mobile market.

What have you learnt from working at Cisco that you think can be useful in your work at Ericsson?

"I believe my experience at Cisco provides a solid networking background and I am very excited about Ericsson's opportunity to dominate the mobile networking market. There is a transformation

occurring in IP Networking. IP Networking is moving away from desktop computers towards hand-held mobile devices. Applications are becoming more and more virtualized into the network and people are becoming much more productive. I can see that Ericsson is well positioned to win in this new market."

Web poll



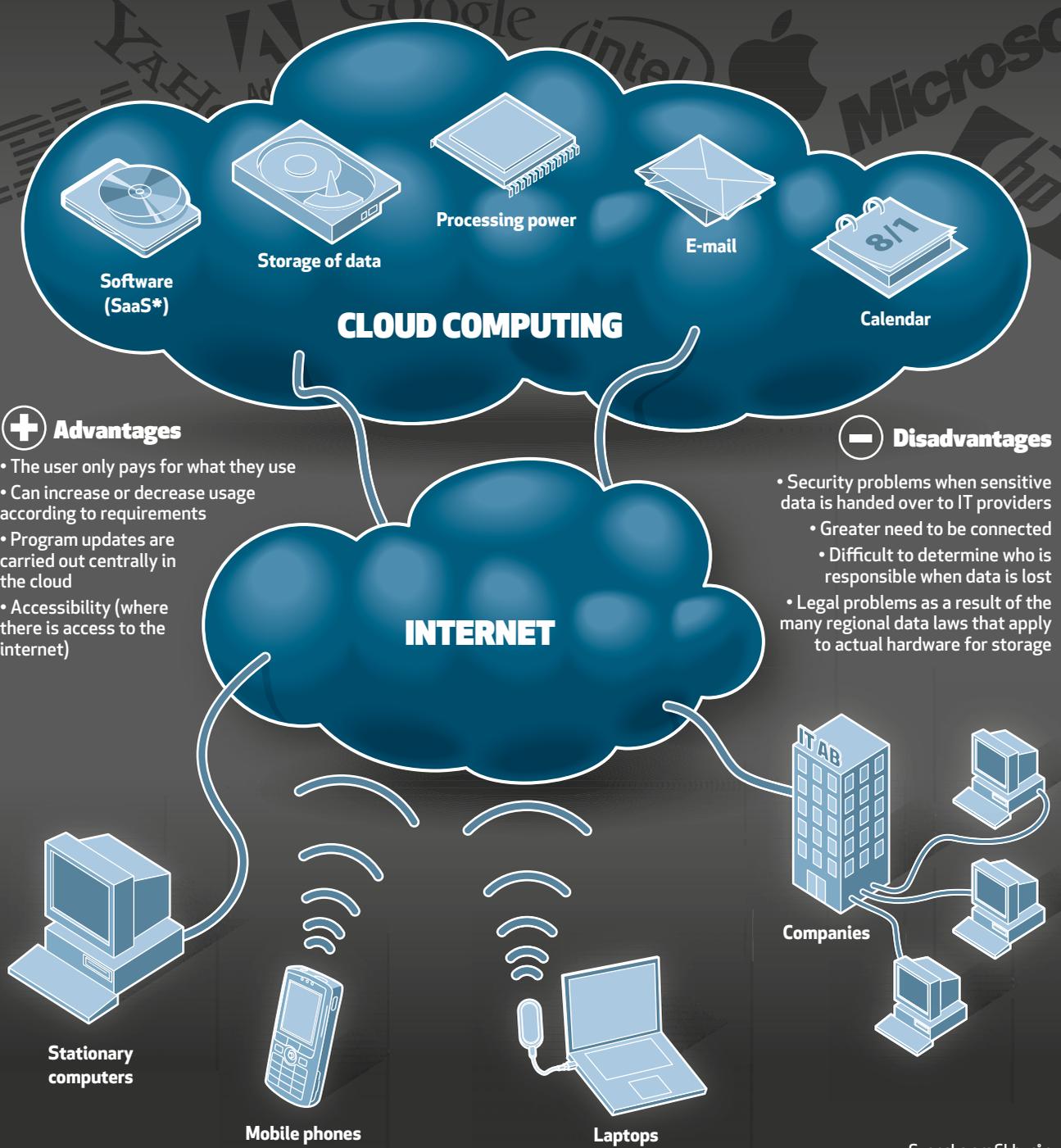
... percent of 675 Ericsson employees say that they have visited You Me We - CEO space, Hans Vestberg's page, which you can access from the global intranet portal.

Source: Global intranet portal

Have you been asked ...

...ABOUT CLOUD COMPUTING?

Cloud computing allows users to store files and install software on servers on the internet, rather than on their computers. With the help of web browsers or special clients, these services are flexible and users only have to pay for what they use.



+ Advantages

- The user only pays for what they use
- Can increase or decrease usage according to requirements
- Program updates are carried out centrally in the cloud
- Accessibility (where there is access to the internet)

- Disadvantages

- Security problems when sensitive data is handed over to IT providers
- Greater need to be connected
- Difficult to determine who is responsible when data is lost
- Legal problems as a result of the many regional data laws that apply to actual hardware for storage

* Software as a Service



The customer gets the whole picture

Andreas Brodén, one of Ericsson's business builders, at the Mobile World Congress (MWC) in Barcelona. Here he is demonstrating a video conferencing application based on IMS technology for François Richard, from operator Orange in France and, in doing so, he is bringing Ericsson's "Evolve Communication Services" message to life. The idea is for Ericsson to work with the customer with this type of service to make communication built on HD technology for sound and vision as simple as a regular telephone call. By building the open standard for IMS, the aim is to create a mass market for visual communication for both the business-to-business sector and for the regular consumer. The MWC was also the first major event at which Ericsson's new brand was profiled for an external audience.

PHOTO: JONAS PERSSON

Footnote: See page 12, What customers thought of Ericsson's appearance at the MWC. Also see the video from MWC on the intranet: [Global/News&Events/Internal Video/Contact TV/Sights and sounds from Barcelona](#)

10.10am / February 17 / Barcelona, Spain





PHOTO: ERICSSON

Connected tree a success

TECHNOLOGY The Twittering orange tree – which reacted to touch and movement with its built-in sensors – was hugely popular at this year’s Mobile World Congress. The tree received almost as much attention at the event as Google’s CEO Eric Schmidt. The idea behind the tree was to visualize the development of the “Internet of Things,” where objects can communicate with people through the help of technology.

E-waste growing

REPORT The United Nations Environment Programme (UNEP) reports that there is a growing need to create sustainable and regulated recycling processes for discarded electronic devices, according to Metro. The report, which details the expected increase of e-waste in 11 countries, says the amount of discarded computers in India alone is expected to rise 500 percent by 2020. UNEP states that vigorous recycling efforts will not only benefit the environment and public health, but will also create job opportunities.

4.6
... billion mobile phone subscriptions were registered in the world in 2009, according to the International Telecommunication Union.
Source: Feber.se



PHOTO: CAROLINE KARIAN

March 9 was the premier of the Abu Dhabi Media Summit in the United Arab Emirates. Ericsson CEO and President Hans Vestberg met News Corporation Chairman and CEO Rupert Murdoch, AOL CEO Tim Armstrong and Google CEO Eric Schmidt to discuss mobile broadband, entertainment and marketing, among other things. Vestberg spoke about Ericsson’s role in the future networked world, where machine-to-machine communication will be just as prevalent as people-to-people communication.

“You have really succeeded. The young don’t call it a mobile phone, but a phone. That’s a victory for you here.” Google Chairman and Chief Executive Eric Schmidt, in his keynote address to the mobile world’s many representatives at the 2010 Mobile World Congress in Barcelona. Source: Ny Teknik February 18, 2010

By the way...

NOTED ... **Urban Wiklund**, head of Development in Solution Area Consumer Business in Business Unit Multimedia, was nominated for Manager of the Year 2010 in Swedish newspaper Chef.
... **Ericsson was one** of the sponsors of the 2010 Paralympics in Vancouver.
... **Marie Westrin**, head of DU Radio in Business Unit Networks, and Henrik Almeida, a broadband expert at Ericsson Research, have been

appointed as honorary doctors at two Swedish universities, Linköping and Lund.
... **there is a** new section, Thinking Ahead, on Ericsson.com. Take a peek and discuss technology, communications and the future.
... **don’t forget** to check out Ericsson Consumer-Lab in Sales on the intranet, and read the latest reports on trends and developments in telecoms.

NEW CONTRACTS

► **Sweden, Norway and Denmark.** A 10-year frame agreement has been made between Ericsson and Scandinavian broadband company Ice.net, which offers CDMA in Sweden, Norway and Denmark. Ice.net will now replace its current equipment with Ericsson’s and also expand its CDMA network.
► **Greece.** Ericsson has signed a contract with Greek operator Cosmote for environmental and sustainability services. A comprehensive study of the operator’s network and data centers in Athens has been conducted, and

energy-saving measures suggested. Cosmote will now be able to reduce energy consumption and costs, yet increase the capacity of its networks.

► **China.** On February 10, Ericsson signed a contract with SmarTone-Vodafone in Hong Kong to develop the operator’s network over the next three years. The agreement is to provide solutions and products from Business Units Networks, Multimedia, and Global Services, for rollout, systems integration, network design, support and spare parts management.

Scoring a World Cup success

Ericsson South Africa and its largest customer, MTN, are making sure that the expected half a million football fans stepping onto South African soil during the 2010 World Cup in June will experience world-class communication and multimedia capabilities at all high traffic venues across the country.

NETWORK “The lead-up to this tournament has been exceptionally exciting, and with just a few months remaining – the time to impress the world is now,” says Göran Söderholm, head of marketing and communications at Ericsson South Africa.

High expectations

“Spirits are high, but so are expectations. As one of the largest mobile operators in Africa, MTN not only has to ensure its 19 million local network subscribers do not experience network problems or quality issues with their mobile connections (especially during the expected heavy traffic peaks), but that all international visitors also have a valuable and quality mobile connection experience.”

Amanda Lopes, project manager and CTO for the MTN account at Ericsson South Africa, says:

“The success of this project is imperative to MTN and Ericsson and the over 60 people involved in the management of it, coupled with various core sales teams and 12 full time customer project man-



Kevin Cherry, KAM MTN in South Africa, Loueen Blunden, Mathias Hirn, program managers, Amanda Lopes, project manager, and David Clayphan, head of Global Customer Account MTN, have been working for more than a year to improve the customer's network to the 2010 World Cup.

agers certainly demonstrates this fact.”

In the project scope, venues that have been targeted include the 10 that will host the games, stadiums, all major airports, hotels, shopping malls and various forms of infrastructure such as roads and passport control points.

Breakthrough for MMS?

“Supported by technologies such as MMS, GPRS, EDGE and 3G, the network must therefore be available and sufficiently dimensioned to sustain this need,” Lopes adds.

While sending images via mobile phones has not really taken off among South African mobile users, for many international visitors the MMS service will be a necessity, and as such

they are likely to want to capture and share their experiences with families and friends abroad.

Annabel Cele, manager for external communications at Ericsson South Africa, says:

“MTN's outlook on multimedia excellence during June and July represents a great opportunity for them to have all their equipment upgraded with the very latest technology and,

of course, this allows Ericsson to showcase our technology superiority, capability and excellence.

“We are all privileged to be part of this “historic” event.”

✉ Editorial Services

Footnote: The 2010 World Cup will be held in South Africa between June 11 and July 11. A total of 32 nations will compete in the tournament.

MORE TECHNOLOGY AND FOOTBALL

▶ **FIFA**, the international governing body of association football, has purchased a technical platform from Ericsson that allows mobile operators to offer their customers a subscription for TV clips of locally-tailored highlights. For example, a Danish

customer would be able to subscribe to watch Denmark's goals.

▶ **Ericsson has also delivered** the platform to African mobile operator MTN's Ayoba! portal. Ayoba is slang originating in South Africa, meaning “great,” “cool” or “awesome.”

Hello...



... **Karel Pienaar**, managing director at MTN South Africa. South Africa will welcome around 500,000 visitors during the 2010 World Cup.

Is MTN South Africa promoting the Ayoba brand (see fact box) overseas to capture these potential mobile phone roamers when they arrive?

“MTN South Africa has not promoted the Ayoba brand overseas, but some of the visitors coming for the World Cup are already aware of Ayoba, thanks to locals living overseas. We do plan to inform South Africa about Ayoba, and this will include international visitors that will be in the country from May onwards.”

Will you have special offerings for international visitors?

“We have signed deals with international partners to provide MTN services to visitors even before they leave their respective countries. Also, the MTN International Starter Pack will be marketed and/or given away to the 20,000 international media representatives covering the World Cup.”

What have you done specifically to prepare for the 2010 World Cup?

“Among many things, MTN South Africa invested USD 941 million during 2009 to upgrade its network and infrastructure, which now covers 98 percent of the country. This investment will ensure that MTN customers enjoy a seamless and quality service during this tournament and beyond.”

✉ Editorial Services

PHOTO: ERICSSON

Hello...



PHOTO: ERICSSON

... Emilia Peciola, HR manager at Ericsson Italy, where the R&D Italy Excellence Program and its 2009 pilot project, Home Working, has been a success. Why was the project started?

We wanted to test the opportunity, within the framework of the R&D Italy Excellence Program, to work in environments other than our usual offices to stimulate the employees and to create a better work-life balance. It was a challenge to our technicians, who usually work in teams in a lab environment. It also put demands on line managers and project managers, who had to think in new ways in terms of staff administration, activity control and follow ups.

Who took part?

Thirty people with different roles and responsibilities applied voluntarily. We had to have a big enough group to be able to test this way of working from home, but still as a team.

Do you think this way of working will spread within the company?

Managers and employees are very pleased with the results. In accordance with Italian law, you periodically have to have meetings at your usual offices and this has made it easier to meet and coordinate projects. I see no problems in developing this way of working within other R&D departments - we've already done it within the business and market units here. We'd like to contribute with our ideas and experiences.

☒ Sofia Falk

Top marks for Ericsson

More Swedish students than ever in engineering, IT and finance want to work at Ericsson, according to research firm Universum's annual Career Barometer survey. The survey shows - among other things - which company students see as their ideal employer. This year, Ericsson was the number-one company of choice, and was duly commended at the Universum Awards on March 17.

REWARD "We work long-term to secure the recruitment base for Ericsson, so this is good news," says Charlotte Eriksson, who works with Student Relations at Group Function Human Resources at Ericsson Sweden. "Because we have a pressing need for skilled civil engi-

neers, we are currently prioritizing working with civil engineering students, but we also carry out targeted activities with civil economists."

Aim high

The study showed an increase in female engineering students who have chosen Ericsson as an ideal employer. There has been a conscious effort behind this positive outcome.

"We work with organizations and universities, including the Royal Institute of Technology (KTH), where we have been awarding the Future Female Leader Award (FFLA) since 2005, along with five other big Swedish technology companies," Eriksson says. "The purpose of the competition is to attract more female students to KTH and



PHOTO: UNIVERSUM

Charlotte Eriksson, Student Relations, Group Function Human Resources, at the Universum Awards in Stockholm on March 17.

motivate them to aim high. All of the winners of FFLA are now working at Ericsson. They are, in turn, role models for female students and very good representatives of the company."

Strong brand

"The FFLA is a confirmation that we have a strong brand as an employer and we are communicating the right

things," Eriksson says. "We succeed in getting young people to recognize the exciting aspects of the assignments they can be given with us in an industry that plays a role in worldwide development. Our technology changes and shapes human life, no matter where you live. We know this attracts many students."

☒ Sofia Falk

PHOTO: JONAS PERSSON



Calm before the storm

BARCELONA This photo was taken at Ericsson's stand during the 2010 Mobile World Congress in Barcelona, before the visitors arrived. The message "Time to act, space to think" on the orange sign is targeted at operators, and means that now is the time to think and act as we face the challenges ahead.

Mobile World Congress would held February 15-18 and the total number of visitors at the event was 49,000.

Two million delivered

At the beginning of March, MINI-LINK passed the 2 million mark with a delivery from the supply unit in Borås.

SUCCESS “This is proof of our strength in delivering major projects and volumes,” says Lars Lönnstig, head of Transmission & Access Supply. “We’ll benefit from having 2 million MINI-LINK units on the market for a long time to come with upgrades and maintenance.”

Milestone celebrated
The large-volume milestone will be cele-

brated in different ways internally. It will also be externally highlighted in conjunction with a large global customer event in Gothenburg at the end of May.

MINI-LINK is a microwave system in which



Lars Lönnstig

the airway transports telephone and data traffic, principally in mobile networks.

The system is a major seller and has so far been sold to hundreds of customers in more than 150 countries.

Henrik Grönberg



PHOTO: PEDER WAHLBERG

Ericsson is a market leader in microwave transmission and has about one quarter of the total market.

Barbie does geek chic

GADGET Barbie fans have had their say in the doll’s development, and an internet poll showed that they want her to take on computer engineering, writes NyTeknik. The toy’s manufacturer Mattel collaborated with the Society of Women Engineers and the National Academy of Engineering to develop a “geek chic” Barbie: blonde, curvaceous and sporting a shirt with a binary-code pattern. She also wears a Bluetooth headset, carries a laptop and comes with a code that unlocks related online games.



Organized effort for Digicel

Digicel’s network was severely damaged by the devastating January earthquake in Haiti. But teamwork within Ericsson helped the Caribbean’s largest operator replace its damaged equipment.

TEAMWORK “We felt the quake here in Kingston,” says Niclas Wadestig, key account manager for Digicel in Jamaica. “Within 10 minutes, we spoke to the customer, who said that they were having problems in Haiti.”

Digicel’s headquarters in Kingston lost contact with its systems and all of its employees after the quake. But Ericsson’s system was working, allowing them to measure the extent of the catastrophe in real



PHOTO: STEPHEN CURRAN

The radio base station and mast on the roof of a house in Port-au-Prince that was hit by the earthquake. The roof gave way but the site remained intact.

time and to make decisions.

Swift decisions

“Because e-mail and chat were working for us, we

were able to communicate with the rest of the world and quickly order equipment for Digicel from Sweden,” Wadestig says. “Thanks to quick

decision making, we produced a new core network for 2 million subscribers. It’s a huge apparatus.”

The equipment was then sent by a chartered plane to the Dominican Republic, bypassing Port-au-Prince’s damaged and crowded airport. The equipment was then driven in trucks across the border into Haiti.

Hard work pays off

“The entire chain, from factory to supply, helped out and worked around the clock,” Wadestig says. “As our communication was working, we were able to make a contribution.”

Digicel’s network has now returned to 100 percent capacity.

Sofia Falk

Puma’s sunny mobile

NEW HANDSET Puma has designed a sporty mobile phone that includes various training functions, such as a pedometer, in cooperation with French telecommunications company Sagem. But what make the phone really smart is that it can be recharged using a solar charger – and the more you charge, the more points you earn to use in Puma’s online store. The phone will be released in Europe in April, but the price is unknown.

Source: Mobil.se

3.55

... million mobile phones were sold in Sweden 2009 – the highest annual figure yet, according to trade organization Mobiltelebranschen.

3 HAVE THEIR SAY

What was your impression of Ericsson's new brand here at the Mobile World Congress 2010?

► **Brian Buus Pedersen, CEO of Tele Greenland**



"What really struck us about the new brand was the

heightened focus on customer engagement. Ericsson has the capabilities required to be a close partner on most of the projects we do. I think they have the know-how and the expertise, and they are familiar with some of the best practices regarding the end design needed in the future. I think they can really help us with that, instead of us trying to do it ourselves."

► **Per Borgklint, CEO of Ice.net**



"What we saw at Barcelona really confirmed why we are

working with Ericsson. Ericsson fits very well with the challenges we face, being a trustworthy, strong local partner with an extremely good service organization."

► **Phil Hartling, senior vice president of Consumer Marketing, Rogers Communications**



"I was impressed by the focus on the other industries at the

Ericsson stand. Telecom is not an isolated business and it's good to know that as we think of exploring different opportunities, Ericsson can support us."

☒ Christine Luby

A DAY WITH INMACULADA GARCIA

Full speed in Barcelona



Normally, Inmaculada Garcia, or Inma as her friends call her, works as a salesperson within Product Area Core & IMS at Ericsson in Spain. She says it is her calling: to meet people and speak about the work she is passionate about. During the Mobile World Congress 2010 in Barcelona, she did this every day from morning till night – and loved it.



PHOTO: JONAS PERSSON

Inmaculada Garcia is a salesperson within Product Area Core & IMS. She had a busy schedule during the Mobile World Congress, but loved it.

06:45 My alarm goes off and I wake up ready for another hectic day in Barcelona at the Mobile World Congress. I get ready quickly and head straight over to La Fira, the huge area where the event is taking place. On my way, I listen to music to give me more energy.

08:30 I eat breakfast while we have our daily employees' meeting. At last, I get my first bottle of water – during the event it is extremely important to drink a lot of water if you want to be able to talk all day.

09:00 We open the demonstration area and wait for the first customers. I'm standing at the demo area, where my colleague and I are showing the User & Data Management portfolio. Today, people are starting to arrive a little later than on previous days. Maybe they are a bit tired after two long days.

10:00 Now the floodgates open. The operators are arriving and we show our solutions, talk and exchange information the whole day. Today, a lot

of operators have come who do not have our core network or the high capacity that this enables. What we show them surprises and impresses many of them.

11:30 In two of the demonstrations, the visitors showed such a lot of interest in that most probably, we have the possibility to swap the equipment they have for ours. "Really impressive" and "wow" are some of the comments. This gives me renewed energy and inspires me even more – this sort of thing makes me proud to work for Ericsson.

12:00 Today I have enough time to eat lunch. I sit with a colleague for eight minutes and eat some pasta.

12:30 The most difficult customer I

have spoken to so far turns up. He is an operator who is not pleased with what we have supplied and I ask him to sit down with me. Taking a pen and some paper, we draw up a proposal that he is pleased with. When we finish, he asks when we can implement the solution. This is a real turnaround and he is now a satisfied customer. The time we get to spend with customers in Barcelona is invaluable.

19:00 We close for the day, go to the

staff room and breathe a sigh of relief. We are tired, but happy.

21:00 I get changed at the hotel and go into town with a friend who lives in Barcelona. We eat, drink and have fun together.

23:30 I crawl into bed. Before I fall asleep I reflect that this has been one of the most exciting experiences of my career.

☒ As told to Staffan J Thorsell

This is Inmaculada Garcia

- Age: 37
- Years at Ericsson: 15
- Family: Husband
- Lives: Madrid, Spain
- Hobbies: Jigsaw puzzles, listening to music and spending time with friends

Inmaculada prefers:

- ✓ City
- ✓ Book
- ✓ Evening at home
- Individual sport
- Countryside
- Morning paper
- Evening out
- ✓ Team sport

PHOTO: THE CENTRE FOR BUSINESS HISTORY



Payback power on meter

LOOKING BACK During the depression of the 1930s when export markets fell and Televerket, the Swedish public utility company for telecommunications, reduced its orders to Ericsson, the company became involved with products that bore no relation to telephone equipment.

After an agreement with ASEA, which at the time was the leader in the weak-current market, it was decided that ASEA would focus solely on high-tension current, and Ericsson received the exclusive right to "manufacture, sell and install all equipment, transmissions and so on intended for weak-current supply." This included an electricity meter, which ASEA bought from Ericsson. The meter in the picture is a coin-operated version, into which you insert a coin to activate the power. If you did not have a Swedish 25 öre coin, you could turn a knob on the meter to borrow energy for which you later paid back when you inserted your next 25 öre.

Source: The Centre for Business History



PHOTO: KRYCZKA/ISTOCK

Emissions not dangerous?

REPORT Emissions from mobile phones, masts and wireless networks are not dangerous to your health, according to a new report from the Swedish Radiation Safety Authority's international scientific council. Experts from Sweden, Finland, France, the US and the UK evaluated more than 100 research studies from the last two years and found no health risks, according to the news desk at Swedish national radio broadcaster Sveriges Radio. However, the experts have reserved judgment because the technology is still too young to determine the health risks.

Follow the trip

WEB SERVICE Lufthansa's MySkyStatus web service, which launched in October 2009, makes it possible for your nearest and dearest to follow your trips. Enter your flight number and the site will send automatic updates about the airplane's position, altitude and departure and arrival times to your Twitter or Facebook pages.

Source: Lufthansa.com

"106 people have played with my leaves the last hour. Are there no phones to play with in this place?"

The Twittering Orange Tree at the Mobile World Congress in Barcelona, February 15, on Twitter.

COMPETE AND WIN A PRIZE

CONTEST 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 HTE?
2. What is the name of Ericsson's business system?
3. Who is heading the Business Unit CDMA?

Write your answer after each question, put "competition" in the subject field and send your answers to contact.comments@ericsson.com

ericsson.com no later than May 21. The winner will receive a luxury Ericsson Racing Team beach towel. If more than one person answers all the questions correctly, the name of the winner will be drawn from a hat.

The winner of the last competition was Ersavav Gudul, Turkey.

Answers to last month's quiz:

1. 11134
2. Ericsson Emergency Response
3. New Homers and Modern Selective Parents

What was happening this time...

...25 years ago

1985 British Telecom announced it had chosen Ericsson as the supplier of the AXE stations for the British telephone network. The contract was prestigious because using foreign-based systems in the network during the early 1980s was a political hot potato. However, Prime Minister Margaret Thatcher's liberalization and privatization policies made it possible for British Telecom to take up offers from foreign companies.

...10 years ago

2000 Sales of mobile phones increased dramatically. Seventy percent of the group's total sales consisted of mobile systems.

...5 years ago

2005 The Venus Express satellite was launched from Kazakhstan on a five-month journey to Venus. The navigational computer system was manufactured by Saab Ericsson Space, jointly owned by Saab and Ericsson.



... out of 10 internet users give up after looking at the first 20 search results, while 41 percent only look at the first 10 hits, according to InSites Consulting, a Belgian internet research agency.

“We gain access to new customers”

As head of Business Unit CDMA Mobile Systems, Rima Qureshi has a clear idea where **this technology is heading**. In an extensive interview, she explains how the Nortel acquisition is making Ericsson a **big CDMA player** again.

Can this be described as a comeback for Ericsson?

Yes. And I would say that we are in a better position now than we have been in the past because in the past we weren't able to break into the very important North American market. And now with the acquisition of the Nortel CDMA business we are much better placed in North America, which puts us in a great position regarding CDMA and gives us a very good chance to make this comeback a success.

Have there been any concrete results from the Nortel acquisition?

Well, the acquisition has given us access to some customers that we haven't had before. It has, you could say, cemented our relationship with certain customers in North America, such as Verizon where we obviously have the LTE contract. This also gives us a very strong market share in Verizon with their CDMA network.

Any customer response?

Customer response overall has been very positive; it is a relief that they have a future for their installed base, and a very good feeling about the fact that Ericsson has taken over. And this is the response pretty much everywhere when I ask the customers what they want us to do. In the majority of cases the customers say “don't change anything.” There's a lot of loyalty to the Nortel products and to the Nortel employees. So that's all very good.

Have you noticed any reactions from the competitors?

“No, none that I can directly point out. We have our usual competitors in North America and Europe. The reaction has been more about Nortel previously having had financial problems. This gave ZTE and Huawei the opportunity to come in and use the customers' uncertainty and by doing so break into the market. Now we're going to strengthen our business and reconfirm that there is a future for these products.”

How much market share have ZTE and Huawei managed to take in CDMA as a result of Nortel's previous problems?

“They have built their business cases on CDMA growth over the last 18 months. They have also built their business cases on migrating from CDMA to LTE, and I think that the problems that Nortel had last year have also given ZTE, Huawei and other competitors the opportunity to strengthen their roadmaps.”

What are the three biggest challenges for Business Unit CDMA?

First of all we have the challenge of the integration. We need to ensure that during the focus of the integration we do not impact the business. This is crucial. There is also the challenge of making sure that we can have a very competitive roadmap and identify gaps that may have occurred and how to make up those gaps and exceed what our competitors are doing. And last but not least there are the issues we are facing with supply as an industry problem. This is also affecting CDMA. The question is: what are we going to do to try to meet the demand

on data growth that we are seeing? It is a very good problem to have but we have to ensure that we can meet the commitments. The major customers are seeing tremendous growth in North America and now we are scrambling to try to do whatever we can to meet that growth.

What is your view on CDMA's possibilities as a technology in this migration to lte, if you compare it to other technologies, like GSM?

I am not really religious about one technology over another because we will, within this business unit, also have GSM coming in from Nortel. So you could say it is the migration from 2G to 3G and LTE. We see more of what we, as part of Ericsson, can do to strengthen our relationships with the existing customers, to gain access to new customers and increase the market share with certain customers. So that's really what I'm religious about, if you will, and not so much whether it's CDMA over GSM.

Wasn't the Nortel acquisition a way to make noise in the American market as a whole?

I don't know about that. The actual scope of what we could buy was not even developed or determined by us. It was determined by Nortel – it was a stalking horse. They identified what was in scope and what was out of scope, so we could either bid or we could not bid. It was not about making noise, it was a good business and it was good business for Ericsson.

☒ Text: Johan Kvickström Photo: Per Myrehed

Footnote: Read the interview with Rima Qureshi on page 24.



RIMA QURESHI

- ▶ **Age:** 45
- ▶ **Born:** Pakistan
- ▶ **Lives:** Montreal
- ▶ **Family:** Husband and two daughters
- ▶ **Work background:** 17 years with Ericsson and six years as an IT consultant before that



“Los Lonely Boys’ office? You’re looking at it.” Glenn Felton hits his stride before showtime, attending to dozens of production, promotional and financial details from a makeshift command center backstage.

CDMA

A family business that is constantly on the move, Grammy Award-winning rockers **Los Lonely Boys** rely on CDMA mobile broadband to keep their concert tours running smoothly and to **stay connected** with their management, vendors, fans and families.

"I'm effective because I'm connected"



COLORADO
USA

It's 9:43pm in Aspen, Colorado, and according to the day sheet that appears on Glenn Felton's laptop screen, the band should be halfway up the three flights of stairs to the Wheeler Opera House stage entrance.

Within moments, Los Lonely Boys – comprising brothers Henry, Ringo and Jojo Garza – are led to their mark behind a side curtain. The group's tour manager, Felton, pauses so everyone can catch their breath – it is after all more than 2400m above sea level. He begins directing the stage

manager. "Dim house lights. Fade music ..."

Out in front, the house grows quiet with anticipation. "All right, here we go," Felton says as he points a flashlight to illuminate the floorboards for the three musicians as they step out of the shadows and into the stage lights' glare.

The 16-song performance that follows is the culmination of a full day of activity, and of planning that dates back weeks. At each stop of the concert tour production routines are repeated, but countless variables enter the picture every day. Out of the ►

CDMA



CDMA mobile broadband is a critical enabler for managing a concert tour. From the wings at the Wheeler Opera House in Aspen, Colorado, Los Lonely Boys' tour manager Glenn Felton logs onto Facebook to upload a snapshot of the band performing, before getting back to business on his always-connected laptop.

“I don't think you can operate a tour without broadband”

Glenn Felton

Did you know that...

... CDMA mobile technology now connects at least 512 million 3G subscribers worldwide, or more than double the number of users in 2005. The majority of CDMA users, 280 million, are in Asia and the Pacific. North American subscribers total 157 million.

► spotlight, Felton, one of 40 million Verizon CDMA EVDO broadband network customers in the US, pulls it all together with a crew of five men, his phone, a laptop and a mobile broadband connection.

“Our business is constantly on the move,” Felton says. “I don't think you can operate a tour without broadband.”

Tour management requires keeping one foot in the future while managing the present. Felton says mobile broadband enables him not only to plan for upcoming shows, but to convey updates on stage requirements and catering, while attending to dozens of daily issues like stage wardrobe needs, band and crew laundry, ordering meals and procuring gear.

Felton snaps a photo from the side of the stage and uploads it to the group's Facebook page, then retreats to a cor-

ner of the dressing room where he has set up operations. He checks e-mail whenever he can, and no detail is too trivial for his immediate attention. “It could be a request for documents, hotel room lists, or an update to our (contract) rider,” he says. “I'll just take care of it right there and then, by text or e-mail or a phone call.”

A 20-year veteran of tour production, Felton has been on the road with Los Lonely Boys since shortly after the band won the 2005 Grammy Award for Best Song with its breakout hit, “How Far Is Heaven?” This swing through the Colorado Rockies is one leg of a small tour of mid-sized venues, such as the 500-seat Wheeler.

“As you get into bands that are bigger, operations become more centralized,” Felton says. “Like the Grateful Dead – they have their own building in San Francisco. We have a manager

in Austin, but the center of operations is wherever the band is.

“As for the Los Lonely Boys' office,” Felton says, making a sweeping gesture to indicate the small seating area around a coffee table, “we're sitting in it. It's me, my laptop, a Verizon wireless MiFi unit, and my plastic tub of office supplies.”

The MiFi Felton depends on is designed to enable users to create their own mobile hotspots on the Verizon EVDO network, says Stanley Zadrozny, Verizon's executive director for network technology development. “It's a compelling service for businesses, as well as consumers and families that tend to be mobile.”

As both a business and a family, Los Lonely Boys see a clear benefit. On his MiFi-connected laptop and phone, Felton uses specialized tools, as well as common programs and online

CDMA at a glance

- ▶ **What it is:** Code Division Multiple Access (CDMA) is a spread spectrum technology that enables many users to occupy the same time and frequency allocations in a given space, or band.
- ▶ **CDMA in 2G networks:** 2G CDMA standards are branded CDMAOne and include IS-95A and IS-95B.
- ▶ **CDMA in 3G networks:** The two dominant IMT-2000 standards, CDMA2000 and WCDMA, are based on CDMA. CDMA2000 Evolution-Data Optimized (EVDO) introduces new high-speed packet-switched transmission techniques specifically designed and optimized for a data-centric broadband network. EVDO can deliver peak data rates beyond 3Mbps in a mobile environment.
- ▶ **CDMA to LTE:** Evolved High-Rate Packet Data (EHRPD) is a set of protocols added to EVDO to enable interoperability between CDMA and LTE.

sites to administer the band's business, production, logistical and promotional needs. "I'm taking care of finances, I'm budgeting, I'm watching payroll and making sure we're getting paid, making sure my crew is happy and the band is happy," he says.

"I'm effective because I'm always connected."

Felton constantly monitors Facebook and posts regular messages and photos from the tour. He keeps fans engaged by streaming live performances or Q&A sessions from his laptop camera. With the mobile connection, the touring party also maintains a precious link to home. "There's no one on this tour that doesn't want to be home," he says. "We're on the road as many

as 200 days a year, and staying connected with our families is important for all of us. We Skype with our wives and children every day. My wife and I just adopted a baby girl, so every night I talk to my wife and I listen to my baby cry – and that's home."

Such demanding use is possible because, as Verizon's Zadrozny says, the operator has a long-term commitment to building a quality network. Verizon's deployment of 4G/LTE in as many as 35 US metropolitan areas will improve the experience even more and "open up a whole new suite of mobile broadband services for our customers."

The Garza brothers are launching into the second half of their set when Felton's financial duties call. The

show's promoter enters the dressing room with the night's box office receipts and seats himself on the sofa beside Felton. They review the contracts, ticket sales and expenses in a matter of minutes. As soon as the check passes hands, Felton scans the documents into a program that generates PDFs, which he will distribute over the broadband connection to Los Lonely Boys' management office, accountant and the booking agency. "These people want to see how the gig did – they want attendance, they want expenses, they want information as soon as the show is done," Felton says. "With mobile broadband I'm able to generate an e-mail with all those documents and within seconds everyone has what they need. It saves me from making a lot of FedEx drops."

The day's business now complete, Felton packs up and makes his final rounds through the theater, checking on the production crew one last time before the encore. By midnight everyone is back on the bus, preparing for the night's drive eastward to the university town of Boulder.

Settling into a leather booth in the forward lounge area, Felton begins checking e-mail and the latest weather forecasts. A snow storm from the south promises to wreak havoc on ▶

CDMA HERITAGE SUPPORTS VERIZON'S 3G/4G VISION



Angel Ruiz

Verizon is the biggest CDMA operator in the US. And meeting the operator's demands is crucial for Ericsson to remain the top CDMA supplier in North America.

Angel Ruiz, head of Ericsson North America, says Verizon is right on target where CDMA is concerned. He says that Verizon, and all other CDMA operators, are getting the most out of the CDMA technology with the advent of all the new smart devices. And Ericsson is right there with them.

"When we acquired Nortel we got a significant market share in North America," Ruiz says. "Now we have the technology we need, Nortel having been one of the top two CDMA suppliers in North America."

In Nortel Ericsson acquired a CDMA

business with expertise in developing wireless solutions that meet Verizon's quality needs. "Our strategy is to channel that CDMA heritage and knowledge into Ericsson's business practices and solutions, leading to the LTE portfolio," Ruiz says.

Ericsson is in a unique position to develop wireless solutions that support Verizon's 3G/4G vision of reliable, seamless broadband. A good example is Ericsson's evolved High Rate Packet Data (EHRPD), a set of protocols over CDMA that make a seamless hand-off between CDMA and LTE possible. Ericsson has also implemented an integrated support organization for Verizon that will enable the delivery of the rapid service the operator needs to stay competitive and meet its customers' quality expectations.

The introduction of smartphones has led to increased data traffic demand on the Verizon EVDO network. Ericsson will need to deliver capacity solutions that meet that demand and support the reliability requirements Verizon expects. As more users depend upon the EVDO network, Ericsson will also want to develop network enhancement features that improve the user experience.

The development of mobile devices is going faster than anyone could have imagined. "We don't know exactly where it will all end up," Ruiz says. "It took off with the iPhone, and now a number of different handsets are out on the market. And this will just keep going. What we've seen so far is only the tip of the iceberg."

✉ Johan Kvickström

CDMA

“There’s nothing I’ve run into that I can’t send over the CDMA network” Glenn Felton



Fans capture the moment with their mobile handsets. Many of these photographs and videos will be shared on Los Lonely Boys’ website or Facebook page, where Felton and the band regularly post their own tour content and messages.

► the band’s travel plans. “This table is where my day starts and ends,” Felton says. “Often I’ll leave some work for the bus, and I’ll catch up on e-mails to friends and family, because once you get on the bus the distractions are almost over.”

Sudden blizzards are frequent in the Rockies in winter, and trucks are required to have chains on their tires in heavy snow. So when Los Lonely Boys’ bus breaks a chain later in the storm-swept Loveland Pass, the driver is compelled to pull off the road until daybreak, when the state highway patrol reopens Interstate 70. Felton monitors the time closely because he will need to provide the next venue with advance notice if the band expects to arrive late.

“With the technology we can get a quick text, e-mail or phone call to the promoter so they can adjust the

time,” he says. “If they know in time that we’re running behind schedule, they can inform their crew to come in later and save an hour in labor costs. We save everyone money and no one is standing around for two hours waiting for us to show up.”

He recalls that tour managers used to deal with delays by pulling off the road to place a call, only to delay themselves another 15 minutes or more. “In 15 years we’ve gone from laborious to instantaneous,” he says, recalling the days before broadband. “I remember guys walking around with huge bags, full of files and paper and phone cards. There would be 10 landlines in the production office so people could call in and you had to make sure all the numbers were working, because those were the lines that were given out to the management, to the wives of the band and crew – to everyone.

It was archaic.”

Los Lonely Boys arrive at the Boulder Theatre at 11am sharp under a warm, sunny sky, and while the crew rolls flight cases through a loading door, Felton sets up his office at a weathered, gray desk a few meters from the stage. He begins checking payroll timesheets e-mailed from the accountant, then starts examining routes for upcoming dates. Using the Master Tour management system produced by Eventric, Felton enters dates provided by the booking agency, along with the addresses of all hotels, venues and other stops on the itinerary. The database includes contact information for promoters, radio station managers, catering companies, restaurants, laundry services, electronics and hardware dealers, and music shops – plus anything else that a touring band would need on the road.

Synchronizing with Google Maps, the database creates a route map that Felton uses to budget how much fuel the tour will use, how many days to rent a bus and pay the driver, and how many hours of travel and rest time the group can look forward to. Using the CDMA connection, Felton updates the Eventric server in Chicago, and the information is pushed out to the phones and laptops of everyone in Los Lonely Boys’ organization, including the families of the band and crew. When management wants to add a promotional radio station appearance to the itinerary, they can see in detail where and when such events can be fit. Felton gets the update immediately.

“There’s nothing I’ve run into that I can’t send over the CDMA network,” Felton says. “It saves us money, time and paper, and we keep everyone happy and productive. The bottom line is: everyone keeps working.”

✉ Text: David Callahan Photo: Martin Adolfsson



Barely finished with a successful run of dates on the West Coast of the US and in the Rockies, Felton has his eyes on upcoming tours of the Midwest, the East Coast and Europe.

»» **CDMA migrates to LTE** »»

CDMA



The team behind the CDMA/LTE handover at Ericsson's labs in Ottawa, Canada. From left, Evangelos Paravalos, Rick Morris, Atif Siddiqi, Guoqiang Xue and lab manager Brent Norman.

Back in the driver's seat



On a suburban street at the western edge of Ottawa, Canada the occupants of an inconspicuous white van are helping to write mobile communications history. Their daily excursions are part of a longer journey – linking CDMA and LTE – and their team is at the center of one of North America's most ambitious telecom projects.

We put these signs on the passenger doors so that the neighbors don't call the police," Guoqiang Xue, manager of the Over The Air network testing crew, says as he fishes through a stack of magnetic Ericsson logos, as well as older Nortel ones. He points out that a van full of men with laptops easily draws suspicion when parked on a quiet street.

Except for a bank of electronic equipment in the middle row and even more gear in the luggage hold, the van's interior resembles a typical hotel shuttle bus. But the vehicle is a key tool for the Ottawa-based project team that is helping to create seamless interoperability between Verizon's CDMA and LTE broadband networks – a prerequisite for the operator's migration to 4G.

The project, which is about to deliver the first version of handover functionality to Verizon, is anchored in the nearby Ericsson Lab 9 facility. On a raw March morning as the van pulls away from the facility, Evangelos Paravalos, manager of the system design team for Evolution Data Optimized (EVDO) CDMA networks, points out the LTE and CDMA base station antennas perched on the roof of the lab. He explains that the live verification tests performed on short drives around Lab 9 are essential for establishing radio frequency parameters that enable uninterrupted handover.

"We're testing the fundamental building blocks for the Verizon LTE

network," Paravalos says. Because there are no commercially available LTE devices, the Over The Air crew uses terminal prototypes. Along with a spectrum analyzer, they monitor the radio signal, as well as the frequency converters that match user equipment frequency spectrum with the base station frequency spectrum.

"Here you can see the signal-to-noise ratio, and how the user equipment is operating, the channel conditions, the throughputs, the error rate. Based on that, you know how your network is performing," he says.

Rick Morris, manager of the handover project, says that an "absolutely mandatory" condition of Verizon's migration from 3G to 4G is that its customers can move between CDMA and LTE coverage zones without interrupting a given data session. "This makes it possible to have a pocket of LTE in a bigger CDMA area, and when people transition between the two they won't notice anything," Morris says.

Cutting through the facility's southern parking lot, Paravalos motions to the main road outside the campus, where the handover team first made headlines in August 2009 by performing the first uninterrupted handoff of a live LTE data session to a CDMA network, using a dual-mode terminal designed by LG Electronics.

Progress on the handover came in increments. "It was a long, difficult and painful job to get everything working – we had a lot of late nights," Morris says. "There were a lot of things to work out from an end-to-end network perspective – we worked on getting the signaling working first, then the data path because we couldn't get it going all at once. So it was sort of a rolling sequence of 'eureka' moments."

Only the Ericsson team was present for the first live handoff, but this functionality has since been demonstrated to customers riding in the back seat of the van. Xue says that Verizon in

HANDING OVER IN CANADA

Project name: CDMA/LTE Inter-Radio Access Technology (IRAT)

The goal: Interoperability between Verizon's CDMA and LTE networks.

The "handover" functionality enables network subscribers to move between CDMA and LTE coverage zones without any interruption in a data session.

Who is involved? The LTE and CDMA teams at Lab 9 in Ottawa, Canada work in close cooperation with Business Unit Networks (BNET) and Product Development Unit (PDU) LTE in Sweden.

What's in Ottawa? Lab 9 houses Ericsson's CDMA/LTE systems, software and hardware development, integration and verification teams and the Business Ericsson Test Environment (BETE) lab team.

Progress: World's first live handover performed in August 2009. First delivery of handover functionality expected in May 2010.

particular is impressed by how the Ottawa live test environment emulates an operator's actual site. "Verizon really likes it," he says. "They say it is unique in North America, and they know they can rely on features that come out of this facility."

New network features are brought out for Over The Air testing after they've been integrated and verified in a lab environment. While these features vary somewhat, they have the common purpose of enabling communication – and maintaining the link – between base stations and terminals.

Because it enables observation in a real-world setting, Xue says that Over The Air testing has in many cases revealed problems that could not be detected in the controlled lab environment. "Conditions are always changing in reality, causing shifts in the attenuation of a signal, or the ►

“It was a long, difficult and painful job to get everything working - we had a lot of late nights”

Rick Morris

► reflection of a signal off different surfaces,” Xue says. “You can simulate that in a lab, but you cannot capture every aspect.”

Paravalos says the Over The Air LTE network range is currently 4km. “We usually drive until we lose coverage,” he says. There are other LTE sites in Ottawa that are not yet operable, but eventually the handover will be tested on the highway.

Visitors to Lab 9 instantly notice the traces of a recent corporate acquisition, such as the vinyl Ericsson banner that covers the Nortel logo at the entrance. But as Morris explains, the former Nortel engineers had been coordinating on standards with Ericsson since 2008 for the handover project, as well as with key user equipment vendors. On the CDMA side, team members appear to have readily embraced their Ericsson identity in the few months since they were integrated into the group under the new Business Unit CDMA Mobile Systems. On the LTE side, the team is in the middle of an important integration into Product

Development Unit (PDU) LTE, based in Sweden.

“It’s great to be a part of Ericsson,” says Atif Siddiqi, who manages user equipment interoperability design and testing (IODT) for the PDU LTE IODT project. “We are back in the driver’s seat.”

Siddiqi’s role is to make sure that end users’ devices communicate with the access and core networks, and the way to do that is to establish dual CDMA/LTE user equipment interoperability activities for the chipsets – or brains – of the end-user terminals.

Under a bright red and white Canadian flag in the atrium of Lab 9, a doorway leads to a cramped room where two teams of interoperability engineers from Ericsson, as well as a team from a chipset company, sit side-by-side tapping on laptops. “Verizon is interested in the user equipment vendor we have here today,” he says. “We are validating that their product works with the end-to-end network.”

Morris says this phase of the handover project is critical for bringing LTE

to market. “Operators always have a valid concern about the ecosystem of terminal providers,” he says. “That is one of the first and foremost things that determine whether a technology will take off.”

For the time being, the handover project has a potentially long road ahead. “It all depends on how far our customers want to take handoff performance optimizations,” Morris says. After a simplified version of the handover functionality is delivered in May, work at Lab 9 will continue on the CDMA and LTE platforms to improve the interoperability of the two standards.

Beyond Verizon, the project promises benefits for other operators. “There are Japanese and Chinese customers in the same situation as Verizon,” Morris says.

“It’s good for a CDMA customer to keep its investment and even grow that infrastructure with new features and capabilities, and at the same time offer its customers the ability to go back and forth between 3G and 4G.”

Text: David Callahan Photo: Martin Adolffson

RIMA QURESHI GIVES THE GLOBAL PICTURE



CDMA is well established globally, though many tend to view it as mainly a North American technology with business opportunities on that continent alone.

“We have CDMA in a huge number of countries,” says Rima Qureshi, head of Business Unit CDMA Mobile Systems. “It is a technology developed in North America, but it is deployed globally. A total of 512 million subscribers worldwide and more than 300 customers are working with CDMA. Those are high numbers.”

CDMA business is particularly

welcome outside of North America. For Ericsson, deals such as the recent agreement with Ice.net (see fact box on page 25) are important for several reasons, Qureshi says.

“I think Ice.net is a good example of where we see growth in CDMA and what we can do with CDMA on the 450Mhz band. This is also a good example of what we can do versus our competition, because this is a replacement of existing vendors.

“Another reason this was important is because certain customers, such as Ice.net, who

want to target public safety, have concerns about using a non-European technology for that. Having Ericsson as a provider gives them an opportunity to go and get customers, like the police, they would not have been able to get with their previous suppliers. It’s a very good example of the kind of business we are going after. Ice.net is also very keen on developing machine-to-machine type applications. And when you look at machine-to-machine, which typically requires large numbers of smaller data transmissions over potentially long distances, you have a technology

in CDMA 450 which could be very good for them for a long time to come.”

Ericsson has CDMA business in Brazil and customers in the Czech Republic, Israel, in several African countries, Indonesia, India and China. The last two countries, with huge populations, are generally viewed as tomorrow’s markets when it comes to the telecom business. China is the biggest market and Ericsson is looking into the business possibilities there, she says.

Johan Kvickström

Footnote: Also read the interview with Rima on pages 14-15.

"A really good start"

Through the acquisition of Nortel assets, Ericsson is again investing heavily in CDMA. Renowned analyst Peter Jarich from Current Analysis gives his view on what this means.

Why is Ericsson investing in CDMA?

It's a way to get closer to customers Ericsson already had – to reinsert some life into a very good product line. It was good for the Nortel side of things but also good for Ericsson.

How's that?

You can look at CDMA as a business, where the primary goal is to sell CDMA infrastructure, CDMA base stations and base station controllers. Or you can look at it more broadly – as a way to extend professional services and business relationships to build channels for LTE. If we look at the acquisition like that, it makes sense.

I think a lot of people were saying: "What is this all about? Ericsson is getting back into CDMA?" In the bigger picture, however, it's more about Ericsson getting into Nortel's CDMA business, in order to support customers like Verizon, and to better support the transition of Verizon to LTE.

What is happening globally with CDMA? There are CDMA networks in a large number of countries, not just in North America.

Traditionally, the world's major CDMA operators are in North America, Korea or Japan. But when you look more broadly you have fairly recent upgrades in China and India and in a number of emerging markets in Eastern Europe and the former Soviet republics – places where it's got a good foothold.

You're still going to see users on those 3G networks, and you're going to see those 3G networks needing to be upgraded.

So what are Ericsson's chances?

In North America the position that Nortel had gives Ericsson a great foothold. Particularly because it's not just that Ericsson comes in and takes over the Nortel products – instead they can really invigorate those products with new life, and new credibility in the minds of operators. Many operators saw Nortel and said: "We'd really like to work with them, but we just don't know what's going to happen to them in the long run."

Ericsson coming in means that operators know what to expect. It's the same thing outside North America. A good example is the recent Ice.net (*see fact box*) deal where you have a new win for Ericsson in CDMA outside North America.

What are Ericsson's major CDMA challenges?

Ultimately, CDMA is still a declining market. It may not be dead but it's not growing as fast as HSPA is and it doesn't have the buzz of LTE. That means that the revenues are not going to be as stellar as other Ericsson business lines.

So Ericsson has to make a little bit more noise around their

CDMA commitment. They have to say: "Look, this is an important business for us. We didn't just acquire it for the customers – we're going to help those customers take these products forward and innovate with them." And that's not the easiest thing in a market that isn't growing very fast.

Text: Johan Kvickström Photo: Andrew Shurtleff



SERVING RURAL SCANDINAVIA WITH CDMA

A 10-year frame agreement with Scandinavian operator Ice.net announced in February is the first major CDMA deal for Ericsson in Europe, following the acquisition of Nortel's wireless division in July 2009.

The operator is replacing its current vendor equipment with Ericsson's, and expanding its CDMA network to provide better coverage and faster speeds. Ice.net provides CDMA 450MHz mobile

internet coverage to subscribers in rural and coastal areas, on mountains and at sea, in Sweden, Norway and Denmark. Among Ice.net's customers are the Swedish police force and rescue organizations, for whom quality and coverage are of utmost importance.

The improved coverage also enables machine-to-machine applications, such as reading energy meters.

Peter Jarich,
Current Analysis



"You don't need a tough ruling project manager if you have a team where the members themselves take responsibility."

Mattias Ahlander

Great teamwork

The development unit had lost motivation and product management's confidence. Something had to be done to regain job satisfaction and **improve results**. The solution was HTE, the method of working that places the **team in focus**.



STOCKHOLM
SWEDEN, EUROPE

It is a normal working day, the time is 10am. Mattias Åhlander is gathering his design team for the daily meeting at the Ericsson office at Telefonplan, a southern suburb of Stockholm. People are steadily entering the team's meeting room.

"Asko got stuck in a snowdrift and won't be here today," someone says.

"Not everyone gets to the meetings every morning. If someone can't be involved, it's OK. We sync things up the next day," Åhlander says.

Åhlander leads one of the five teams working with the development of Session Border Gateway (SBG), one of the core nodes in Ericsson's IMS solution. The work group is responsible for software within "Security Improvements."

Åhlander explains that the node now follows a "scrum-inspired" methodology (see *Did you know... on next page*). This can be seen by the colorful post-it notes that are spread out on the large board in the room. Each note represents an activity. The color indicates the type of activity, its position shows how far they have come – the farther to the right it is, the less there is left to do.

Beside the board hangs the team's

burn-down chart. It shows a downward curve that represents the days remaining on the task the team is currently working on.

Sometimes, people who are not team members participate in the meetings. These include representatives from the line or project managers. This is part of the high-performing team environment (HTE) philosophy.

"It creates confidence within the team and in the organization as a whole, and contributes to the work progressing the way it should," Åhlander says.

On this particular day, six of the eight team members, the node manager, the closest line manager, and the program manager, attend the meeting.

Åhlander leads the discussion without bossing people around. In accordance with HTE, it is the team that is responsible. The team leader's task is to ensure that things happen and to help solve problems. But a team leader should not have too high a profile – otherwise the team will not grow as a group working together.

"Let's go through what everyone has done since yesterday, what you're planning to do today, and what could

“It’s a lot quicker than before. I’m sure that you gain a lot of time from working this way”

Bo Fröderberg



The burn-down diagram shows how much remains to be done on the team’s current task.

Did you know that...

... Scrum is an agile software development method. The basis for scrum is called sprint – work that is focused on a well-defined goal for a period of roughly 30 consecutive days. A scrum team typically consists of five to nine people. The team organizes itself and its members and has a common responsibility for the result. Scrum has been applied within the software industry since the early 1990s and was formalized in 1995.

► slow down your work. We’ll start with Lars,” Åhlander says.

“Today I’ll be continuing with the same thing I was doing yesterday,” Lars replies. “I’m trying to sort out the firewall module. It’s a little harder than I thought, so it’s not likely to be ready for delivery the day after tomorrow as planned.”

“OK, we’ll follow it up tomorrow. Do you need any help?” Åhlander asks.

“No, not right now.”

The meeting progresses until all the team members have reported on how things have been going since last time. Åhlander then summarizes the results and enters it on the burn-down diagram.

“**There are now** 78 days left of effective work in the team for this iteration (a work step),” he says. “We’re following the plan, so that’s good.”

Then the other participants get their chance. The program manager asks if it is possible to bring forward the date of a planned release. The line manager wonders if the team is actively working and acting on the risks. After a while, everyone has had their say and the meeting comes to an end.

Åhlander has been working within the same organization for almost 10 years, several years of that as a designer, team leader, and project manager.

“You don’t need a tough ruling project manager if you have a team where the members themselves take responsibility,” he says. “I realized that when we began working with HTE just

over a year ago, and it’s much more fun working now. The motivation is higher and many colleagues have grown in their roles. It’s also easier to work if your colleagues feel involved, take responsibility and want to achieve something.”

Åhlander maintains that the atmosphere in the organization has vastly improved, and that managers’ roles have changed a lot. It’s gone from being traditional bosses who mostly give orders, to leading the way and providing support. It’s also become much easier to develop and test the software due to all the improvements that have been made based on the team’s initiatives.

Bo Fröderberg is one of the members of the node team. He has been working with the SBG for the last two years and thinks that the new way of working has many advantages.

“**You gain a completely** different understanding of the product as a whole and a different type of control over things,” he says. “And we ask the managers to help out with the things that we can’t solve by ourselves, which gives us shorter lead times. It’s a lot quicker than before. I’m sure that you gain a lot of time from working this way.”

Åsa Hallström was the head of department for software development within the SBG node when it had a complete overhaul a year-and-a-half ago with a totally new management group.



Åsa Hallström

“The organization was facing a real challenge,” she says. “Product management had lost confidence in us. We weren’t delivering on time, doing the right things, or communicating in the right way. Our task was to address the problems, find the way forward and create motivation and confidence.

“I’d been working with HTE before, so I suggested that we should test it as a first step. We started by getting help from an HTE coach within Ericsson, who gave us the support we needed.”

Hallström describes the present organization as mature, flexible and positive towards changes. She thinks that the new way of working has brought major advantages, both for Ericsson and its customers.

“At New Year, we had a product release that was bang on schedule for the first time in a long while,” she says. “The customers have become much more satisfied. They get releases much more often and with better quality. Our dialog with them is also much more open than before.”

Another major benefit is far greater commitment among the staff, Hallström says. “The organization has done employee surveys three times since November 2008, and there is a clear improvement in how they view the organization.

“I’m convinced that HTE is what has helped us come so far in such a short time and I recommend others who are facing similar changes at work to do what we have done.”

✉ Text: Benny Ritzén Photo: Stefan Borgius

WHAT IS HTE?

- **High-performing team** environment (HTE) has been identified as an important tool to lead Ericsson forward. It is now included in the offering from R&D Processes, Methods & Tools. The purpose of HTE is to create conditions for high-performing teamwork.
- **HTE is based on** the philosophy of placing the team at the center. The team, not the individual, is responsible for the result. The coach has a central function

in HTE, with a neutral, supportive role and can help with everything from how to introduce HTE into your organization, to supporting line managers, project managers, team leaders and individual team members in their work.

- **HTE supports all forms** of teamwork and does not require a special model. It achieves its best effect when it is applied throughout the entire organization.



After the meeting, Mattias Åhlander (right) and his colleagues Henrik Blomberg and Hans Tjäderqvist solve a problem together.

“HTE is suited to all operations that are based on teamwork, and at all levels, such as within different programs, projects and management teams” Eva Idesjö

“I see a similarity to elite sports”

Did you know that...

... agile methods is an umbrella term for several ways of developing software. They stand for a more flexible way of working, compared with previous “waterfall models,” and are based on regular meetings between developers and customers.

Eva Idesjö works at R&D Processes, Methods and Tools and is head of HTE at Ericsson. Contact asked her to clarify some points about this method of working.

To which operations is HTE best suited?

It was originally developed for R&D. But HTE is suited to all operations that are based on teamwork, and at all levels, such as within different programs, projects and management teams. HTE is intended for entire organizations and its aim is to liberate the untapped potential in your operations by creating conditions for high-performing teamwork. I see a similarity to elite sports. Athletes are extremely resolute, motivated and focused. They are also focused on constantly improving and learning new things. HTE helps with all of this; motivation, focusing and learning. Constant learning is one of the main principals of HTE. If we want to be a top team, we must learn from our experiences.

Where is HTE being used within Ericsson today?

It is not so widespread yet, but the potential is enormous. It has been used by many platform organizations, such



Eva Idesjö, head of HTE at group level, says that HTE works best if it is used by the entire organization to create conditions for high-performing teamwork.

as Connectivity Packet Platform (CPP) and IP Multimedia Core Network Subsystem (IMS), and as a basis for coaching within the Global Graduate program for many years.

It is important to understand that HTE does not require a certain way of working within teams. HTE is a support regardless of the model you choose. And you achieve the greatest effect if it is applied throughout the entire organization. Often, management teams also need to be supported and the interfaces between different groups managed.

What are the experiences from having used HTE?

Organizations that have tested out HTE generally report that they have become more efficient, and that the employees have become more motivated and committed. Project managers who have been coached have drastically improved their leadership index that is measured in the Dialog survey.

What are Ericsson’s ambitions for HTE? We have a market that is moving out there – and it is constantly getting faster. And within Ericsson we are now working a lot with agile methods. So the ability to build and coach high-performing, self-learning teams is now much more important than before.

HTE has been identified as an important tool driving Ericsson forward and it is now a part of R&D Processes, Methods & Tools’ offering. It is an important part of our product portfolio around how we work within Ericsson.

I recommend everyone within Ericsson to consider how well the teams within their organizations are performing. Can HTE be a way of improving results? Dare to try it. We know that HTE works and produces results. And the work also becomes more fun.

Text: Benny Ritzén Photo: Per Myrehed

HOW TO BEGIN WITH HTE

1. Ensure that you have received the backing from the organization’s management team.
2. Appoint an HTE coach, via the group function R&D Processes, Methods and Tools, to help you get started properly.
3. Do not start by introducing rules. First, create a supportive environment and an organization that is characterized by team spirit.
4. Let HTE form the foundation in a set of regulations that are adapted to what the business needs.

MAKE CALLS GROW COUNTRIES

One quarter of the world's
population is making calls
thanks to Ericsson.



Partnership for better lives

As part of its efforts toward achieving the **Millennium** Development Goals before the 2015 deadline, Ericsson is partnering with local organizations and operators in two initiatives designed to **improve people's lives** through mobile broadband services.

The eight Millennium Development Goals were adopted by all United Nations Member States in 2000 and have become a framework for meeting the needs of the world's poor. Much still needs to be done, but a lot of things is also happening.

One example is a project in the rainforest in Brazil where Vivo, Ericsson and the nonprofit project Saúde & Alegria ("Health and Happiness" in English) are leading a group of eight companies to bring mobile broadband connectivity to 175 isolated villages in the Amazonian state of Pará.

The Amazon rainforest is the largest and most species-rich tropical rainforest in the world. However, according to Roberto Lima, president of Brazilian operator Vivo, the region is not just about beautiful flora and fauna.

"When we think about the Amazon, we shouldn't just think about the rainforest or river, in fact, there are more than 3 million people living in this region, some of them in isolated communities," he says and continues:

"When we were launching our 3G network,

we thought it was natural to be present in these villages with mobile broadband services, principally because we believe that people everywhere should be connected.

"These people should have access to health services, educational services, and even entertainment content just as much, if not more so, than those people living in urban areas."

However, Lima says that building such a network in the Amazon is not like building one in a developed region because of its remote location away from economically developed centers. "This is why we partnered with others, including Ericsson, to make something special and to build something that can provide not just data traffic, but new services that have never been used before in this area," he says. "It is a complete project that takes into consideration several aspects of the lives of the people in this region."

The initiative will give more than 30,000 people access for the first time to e-health



**Roberto
Lima**

and e-education services through mobile broadband. So far, the solution has been implemented in 15 out of the 175 villages.

Mobile communication plays an important role in helping sustainable development in rural communities. Now that these villages have access to health care, education and information, people can make a living in their own communities without having to travel or move to cities.

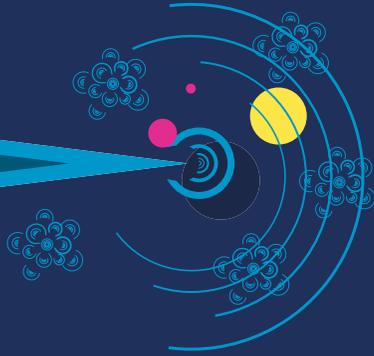


**Rachid
Chihani**

A project with a similar focus is also taking place in Morocco. Rachid Chihani, head of customer unit Maghreb in region Mediterranean (former Morocco's Country Manager), describes the Rhamna area, where the project will be implemented.

"Rhamna is situated close to Marrakesh in central Morocco. It is an impoverished region, with approximately 300,000 people living in 6,000 sq km. Sixty six percent of the region's population has never finished secondary school and the literacy rate is 40 percent. The main industry in the region is agriculture, which ▶





“Mobile communication plays an important role in helping sustainable development in rural communities”

Roberto Lima

THE MILLENNIUM DEVELOPMENT GOALS

1. Eradicate extreme poverty and hunger
2. Achieve universal primary education
3. Promote gender equality and empower women
4. Reduce child mortality
5. Improve maternal health
6. Combat HIV/AIDS, malaria, and other diseases
7. Ensure environmental sustainability
8. Develop a global partnership for development

For more info, check out Ericsson's Corporate Responsibility page: http://www.ericsson.com/ericsson/corporate_responsibility/

► can be difficult because the land is difficult to farm. We started the ‘Lumière De Rhamna’ initiative to meet the needs of the people.”

“Lumière De Rhamna,” which means Light of Rhamna in French, was started in 2007 when Ericsson Morocco partnered with the Rhamna Foundation, Maroc Telecom and the Moroccan Ministry of Education and Ministry of Health. The initiative’s main objective is to promote e-learning and mobile health services, generating economic opportunity with internet access.

“We saw the project as having three phases; the last two phases are about e-health and e-agriculture, but in 2009, we started with the first phase, e-education,” Chihani says.

So far, 60 classrooms across the region have been connected to the internet and equipped with interactive white boards and computers.

“What really strikes you is the happiness of the children that are being educated, and

their motivation to receive an education,” Chihani says. “Previously, there wasn’t high attendance in schools because not only was it a long distance away, but many students chose to focus on working and providing money for their family. Now, we see the classrooms are absolutely full.”

When the e-education program is in place in other classrooms in the region, the “Lumière De Rhamna” project will begin its next step: working with e-health.

“Right now, we are working to start a program using one minivan equipped with some basic medical supplies and staffed by a nurse and a doctor that will be connected with the Ericsson e-health solutions,” Chihani says.

He says that e-health is an exciting area to develop in the Rhamna region because there is only one doctor for every 10,000 people, and only one dentist for the population of 300,000.

“If the people who live in this region really need health care, they have to go to the big cities. When they need to travel like that, their CO₂ emissions are increased. We’re hoping that our e-health initiative will keep people in the region healthy, reduce their emission levels and improve their personal finances, as getting into the city can be expensive.”

The final stage of the project will focus on developing e-learning programs to support farmers working under difficult conditions.

But the work toward meeting the Millennium Development Goals doesn’t stop there.

Across the world, companies and organizations that have dedicated time and energy to improve lives will continue their efforts, with mobile technology as one of the keys to achieving the goals. As the work in Morocco and the Amazon shows, mobile technology has been successful in closing the digital divide and raising the standard of living in rural areas.

✉ Text: Christine Luby Illustration: Ebba Berggren

Rio de Janeiro, Brazil, 1965



Miss Universe 1964 – Greek beauty Corinna Tsopei – tries out the Ericofon. Ericsson do Brasil participated in an exhibition at the Museum of Modern Art in Rio de Janeiro.

Photo: **The Centre for Business History**

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
Communication Which person?	He was born in May 1984, in White Plains, Westchester County, New York.	He is a young American IT entrepreneur.	Three former fellow students filed a lawsuit against him in 2007 for breach of copyright laws.	His initials are MZ.	He founded the Facebook community.
Culture Which music group?	The group was originally called Festfolket	People Need Love was the group's first single release.	Their debut album Ring Ring was released in 1973.	The first letter of each of the band members' names forms the name of the group.	The group met its Waterloo in 1983.
History Which year?	The first GPS Block II satellite is launched.	Heisei Akihito becomes the new emperor of Japan.	Ericsson forms the joint venture company Ericsson GE Mobile Communications with General Electric.	Spanish artist Salvador Dalí dies.	In Roman numerals the year is written MCMLXXXIX.
Business Which company?	This semiconductor company was founded in 1930.	The current CEO is Richard K Temperton.	Despite its name, it has nothing to do with drums or trumpets.	A major US state is part of its company name.	To the general public, it is probably best known for its calculators.
Geography Which country?	The country became independent in 1821.	The first AXE station went into operation in this country in 1981.	The Mayan peoples, Aztecs and Purépecha are names of indigenous ancient civilizations.	Felipe Calderón is the country's president.	Mexeric is the name of Ericsson's company there.
Technology Which technology?	The standard that the technology works with is called IEEE 802.16.	It is marketed as an alternative to fiber and ADSL.	Nokia helped to found this technology at the start of the 21st century.	US company Clearwire builds one of the world's few major mobile networks with the technology.	The name stands for Worldwide Interoperability for Microwave Access.

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.

Communication: Mark Zuckerberg
 Culture: ABBA
 History: 1989
 Business: Texas Instruments
 Geography: Mexico
 Technology: WiMAX
 Which year (photo): 1987
 One of the ads in the Harry Hotline campaign between 1987-1992



PHOTO ARCHIVE