Contact



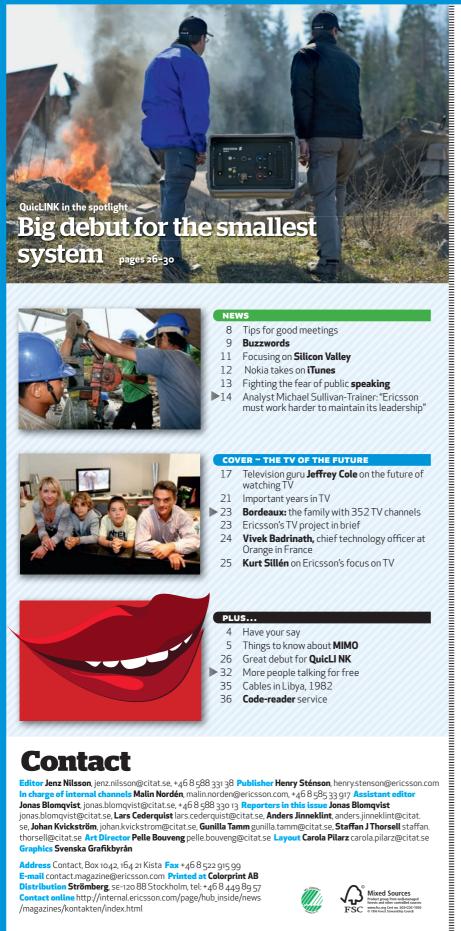


ESTER GONZALEZ DE LANGARICA, ERICSSON RESPONSE IN SPAIN: **'QuicLINK is just** what we need" Page 27

Worth knowing: INFO ABOUT MIMO Page 5

The trend towards free voice calls







- Tips for good meetings
- **Buzzwords**
- 11 Focusing on Silicon Valley
- Nokia takes on **iTunes**
- Fighting the fear of public speaking
- Analyst Michael Sullivan-Trainer: "Ericsson must work harder to maintain its leadership"



COVER - THE TV OF THE FUTURE

- Television guru Jeffrey Cole on the future of watching TV
- Important years in TV
- 23 **Bordeaux:** the family with 352 TV channels
 - Ericsson's TV project in brief
- Vivek Badrinath, chief technology officer at Orange in France
- Kurt Sillén on Ericsson's focus on TV



- Have your say
- Things to know about MIMO
- Great debut for QuicLI NK
- 32 More people talking for free
- Cables in Libya, 1982
- 36 Code-reader service

Contact

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Promise me one thing

ow can one best sum up the first half of the year? There are of course several ways. Personally, I have seen how easy it is to get fixated on annual reports and quarterly results. This is sometimes at the cost of forgetting what lies behind those figures: all the work, all the contracts and acquisitions, meeting new colleagues and bidding farewell to workmates who sadly had to leave the company. And then there are our fantastic and innovative solutions. There are now so many that you could almost take them for granted, and sometimes they turn up when you least expect it. Just when you have given up hope, one or more bright sparks cry out: "Eureka!"

Take the extremely compact Quiclink 3G system as an example. After years of furrowed brows, this fascinating little box is now out on the market. And Quic-LINK's performance was tested recently with a simulated earthquake. The exercise produced extremely positive results (see page 26). Just think about how solutions such as this one can help in global disasters such as the recent tragic earthquake in China.

These types of technical innovations give some hope for the future and a strong motivation to continue working in this multifaceted and fascinating company.

In other respects, the past six months have been a bit of a roller-coaster. At the start of the year, our annual report got some in the media writing doom-andgloom headlines. At the end of April, we presented a quarterly report that gave the share price a well-deserved boost and got some of the company's foremost critics to lift their hats. Things can shift that quickly in our industry, somewhat of a comfort when things are going badly but also something important to bear in mind when business is going well.

Contact is now taking a vacation. We will be back at the start of September with a packed strategy special. Promise me you won't miss it. But first try to take a long, well-deserved break.



Henry Sténson head of Group Function Communications and publisher of Contact

Have your say

E-mail us your questions, opinions, reflections or workrelated images. We will publish a selection of the material on this page.

contact.comments@ericsson.com

CONTACT IN ENGLISH?

I am getting Contact Magazine in my inbox but it's in Swedish and I wish to change it to the English version. Can you arrange

Anjali Virmani Paul, Sweden

ANSWER Those of you who work in Sweden and want to receive an English version of the magazine instead of a Swedish one can send an e-mail with your request to

hr.direct@ericsson.com or call them at +46 8 56866500. Editorial

CORRECTION

In the last issue of Contact, in a news item on page 9, it was stated that Ericsson's share of revenue for wireline was 6 percent in 2006 and 2007. The actual figure is 4 percent. We apologize for this. **Editorial Team**

CONTACT AS PDF?

Is Contact Magazine available in pdf format on the intranet? Guilherme Sepe, Brazil.

ANSWER Yes! You can find the

latest version of Contact as a pdf via the Global Intranet Portal's start page. Click on "News & Events" in the list at the top of the page, and then click on "Ericsson Magazines." Here you also can find back issues of Contact as pdfs. **Editorial Team**

REGARDING WEB 2.0

The feature was very relevant, because new ways to share information are crucial for Ericsson's business. However, I think too much space was dedicated to the subject. It felt a bit as if the entire issue was only about Web 2.0 and I would prefer the magazine to cover more different topics per issue. Cleber Souza, Brazil



Cherry trees in bloom in Kista. Photo taken with my Sony Ericsson K610i. Anna Pellnäs, Sweden



This photo was taken with mu Sonu Ericsson W810 while I was on a moving bus recently. I took hundreds of photos of my country and I was amazed to see the quality of the pictures.

Barnali Dey, Bangladesh



This photo was taken with the SEM W910i walkman phone while cycling home on 14th April 2008 where the path crosses Enoggera Creek, Brisbane, Queensland. The photo was taken from the cycle-track bridge facing east with the setting sun reflecting off a thunderstorm.

Rob Sykes, Australia



... Ikuko Shigi, who is new at Ericsson.

Ikuko Shigi started at Ericsson in Shin-Yokohama, Japan, in April this year, where she is deputy manager for the network technology project office in the service delivery division.

Where did you work before and why did you apply to Ericsson?

"I was previously a project leader at a Japanese company which supplies the Ethernet transmission technology. Before that, I studied in the US and I have also worked for my previous employer in Taiwan. I really wanted to work at an international company and have the chance to broaden my competence and Ericsson is therefore very suitable. It's stimulating to have work

colleagues with different cultural backgrounds."

Is there a difference in the company culture at Ericsson compared with your previous employers?

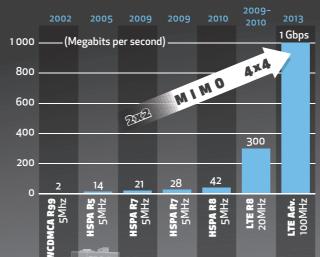
"Yes, it's a more relaxed and friendly place, but at the same time everyone is very professional."

percent of 1427 Ericsson em ployees say they are interested in job rotation or swapping jobs with a colleague,

Have you been asked...

... ABOUT MIMO?

- A base station with four antennas sends a coded data stream (the same streams or different ones) from each antenna to each antenna on the terminal. These signals are sent at the same frequencies and times. When you have good signal/noise conditions, the terminal can decode and separate each channel.
- The antennas also send reference signals thousands of times per second to the terminal, which assesses the radio conditions and reports back which modulation and code speed it can manage.



MIMO overcomes interference

- When the terminal determines that reception for all four antennas is weak, as though they were whispering, it reports that they all must send the same content - "beamforming" - with a common lobe and stronger signal level.
 - If the antennas send different content but one of them is dominant, the terminal reports that this particular data stream must be silent for the terminal to be able to interpret the other three.
 - If the terminal moves quickly around the network, the base station realizes that it will not have time to adjust its

transmission schedule. It then sends the same data stream from all antennas but in several ways (open loop).

SVENSKA GRAFIKBYRÂN

The terminal's physical size is important when you work with several antennas. At lower frequencies, such as under 900MHz, you need a certain distance between the antennas, which is easier to manage in a laptop than in a mobile.

*MIMO stands for Multiple-Input Multiple-Output and is a technology for wireless digital data transfer, where both the transmitter and receiver have several antennas.

Ericsson is also looking at LTE Advanced, which could have up to 100MHz bandwidth and more than 1Gbps. It will be ready by 2010 at the earliest.

☑ Lars Cederquist

With Multiple-Input Multiple-Output (MIMO), the base stations and terminals are equipped with more antennas to increase data-transfer speeds.

There can be two antennas in the transmitting base station and one in the terminal, or 2x2, 4x4, and so on. Doubling the number of antennas roughly doubles the capacity. The technology works best over short distances with high signal

мімо will come into use soon, when coding and modulation cannot be further improved. With мімо, speeds of 100Mbps or more can be reached for bandwidths all the way down to 5-10мнz. мімо is already an obvious part of the existing 3G and HSPA, and the future ITE standards

WHAT IS ERICSSON DOING WITHIN MIMO?

Ericsson participates in sev-

eral research projects, some of which are financed by the Eu. Ericsson Research is contributing towards getting 3GPP Release 8 – which includes LTE – ready this year. So far, a customer testbed in the field has shown that $4x_4$ мімо works. The optimal performance level for practical мімо applications mostly depends on how many antennas an operator is willing to build their networks with, but with four transmitting antennas on the base station side, the limit should soon be reached – especially for the lower frequency band, under 900МНZ.



3:56pm / December 22 / Montevideo, Uruguay



Huawei mobile phones to go?

RUMOR Chinese vendor Huawei might sell part of its mobile telephone unit, reports the Wall Street Journal. The most likely purchaser will be a foreign company that can increase the likelihood of sales to North American operators. Huawei has had difficulties breaking into the us and European mobile phone markets, reports newsletter Fierce Wireless. Its biggest success was a deal with Vodafone for 3G phones in Europe.

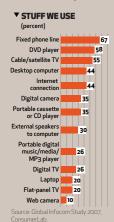
Ericsson best in Sweden

AWARD Ericsson is Sweden's best company for investor relations, according to Institutional Investor, which ranks European companies' corporate information and investor relations efforts.

Fixed phone still on top

GEAR Did you know that more people use digital cameras than portable digital media players? Ericsson ConsumerLab has checked the use of a series of products among the world's population.

▼ STUFF WE USE (PERCENT)



Source: Global Infocom Study 2007, ConsumerLab

MEETING SCHOOL

Efficiency on agenda

Meetings are often not as
productive as they could
be. Here are some tips for
holding a good meeting.ter as an organizer or
participant (see fact box
This isn't rocket scient
It has to do with prep

BETTER AT WORK Employees at Ericsson view meetings as a big "thief of time." Hossam Kandeel, project

leader for the Personal Operational Excellence program, says: "We feel pressure



Hossam Kandeel

teel pressure and stress from all our meetings."

Kandeel backs up his argument with results from the Dialog survey, his own global internal web poll and workshops with a couple of market units. In the web poll, 57 percent of employees said they would save at least a couple of hours every week if they had fewer, more productive meetings. "That is alarming," he says.

To improve Ericsson's meeting culture, the program has consolidated suggestions from employees on how you can make meetings bet-

ter as an organizer or participant (see fact box). This isn't rocket science. It has to do with preparing before a meeting, arriving on time, having and keeping to an agenda, and not doing other things during the meeting.

Kandeel says meetings are important, but are not always the best way for a group to communicate. Having a collaboration space to share work material and discuss related topics can reduce the time a team needs to spend on meetings. The important thing is for meetings to be productive. Booking meetings as a matter of course should be avoided.

"Having fewer but more productive meetings, we save time for ourselves and our colleagues," Kandeel says. "It reduces stress and gives us time for other work tasks."

☑ Jonas Blomqvist

Importips about meetings and personal efficiency: http://internal.ericsson.com/page/hub_inside/support/index.jsp.



Meetings play an important role at Ericsson.

Do you want better meetings?

▶ Prepare. Establish a detailed and timed agenda. State the purpose of the meeting, so everyone will know why it is being held. Prepare for the meeting. Do not forget to set aside time for summarizing what has been said and determining the next step.

Invite the right people.
Who has to be there and who does not?
Ensure that key people attend. Can someone take part via the web or telephone? Appoint one person to run the meeting, one to keep an eye on the time, and another to take the minutes.

▶ Start and end on time.
Plan things so you get to
the meeting on time. Do
not book two meetings
directly after one
another – the participants may be late.

Focus on the agenda.
Switch off your phone
and shut down your
e-mail account and
computer if they are not
needed for the meeting.
A meeting is a meeting
- focus on it. If other
issues crop up, address
them another time. The
agenda rules.

 Summarize. Invest time at the end of the meeting to summarize and share the minutes.

WHAT'S YOUR VIEW ON MEETINGS?



Ildikó Pogonyi, Hungary "Working in a marketing and communications department there is no difference

between the traditional and the "tech version" of a meeting anymore. For new and creative ideas we need a good atmosphere, spirited chairpersons and sometimes cake and coffee together with different teams. Diversity is very important. Ericsson's culture supports this."



John Baldwin,
United Kingdom
"Most meetings work
well, but the chairperson needs to be very
aware of their responsi-

bility. Ericsson's size means that many meetings are held using teleconferences and success is dependent upon the chairperson controlling the time and who gets to speak. Of course, the really important meetings occur around whiteboards next to coffee machines!"



Eva Haglund, Sweden

"I prefer short meetings on time with an agenda with actual topics to be discussed or decided

upon. As a chairperson you have to keep track of time as people often are very talkative. Too many of us don't reflect on why we are invited to a certain meeting – maybe we should sometimes. At Experience Center we are always discussing new ways of meetings."



Winners!

FOOTBALL The Vixens team from Guildford has won the Ericsson World Cup for the second consecutive year. The competition, which was held in St Albans in the UK for the third consecutive year, attracted 245 players from Market Unit North Western Europe. The players from Dublin traveled furthest to the competition. It was warm and slightly breezy on the day of the competition when the 35 seven-a-side teams met. Referees from the English Football Association kept order on the four pitches where the games were played simultaneously.

Vixens captain Kate Hutchings thinks the competition this year was tougher than last.

"We have three new players and have been training for five weeks with some guidance from our boyfriends and partners," she says, and hopes there will be more women's teams next year. The winning men's team was FC Porter from Dublin.

The victorious Vixens team (pictured) consisted of Nicola Jutsum, Kate Hutchings, Emmeline Walter, Janine Connor, Laura Smith, Liz Goulbourn and Joanna Burton.

☑ Adam Lloyd/Gunilla Tamm

Pope in digital push

RELIGION The Pope will be keeping his thumbs busy during July. During World Youth Day, a sixday-long event in Sydney, Australia, the leader of the world's Roman Catholics plans to send text messages to 225,000 young Catholics expected to take part, Reuters reports. A social networking site for Catholics is also planned. These are new ways for the Pope

... approved Ericssan patents.

to reach out to

young believers.

"We definitely have the strength to challenge Ericsson and others, even in mobile systems." Patricia Russo, CEO of Alcatel-Lucent, to Swedish business daily Dagens Industri.

Words creating a buzz

There are more than 600,000 words in the English language. Some of them are used more than others at Ericsson.

LANGUAGE) In a poll conducted for publication on the global intranet's news portal, readers were asked which buzzwords from a

list they use most often. Here are the results from more than 1600 reader responses.

Many people chose to list additional common buzzwords in the comments field. Operational excellence was the most frequently added word, and another popular one was alignment. Other words that appeared several times were consolidation, redundancy, collaboration, ecosystem, process and strategy.

But to the editorial team's surprise, the following words appeared just once or twice: crisp, knowledge sharing, focus, challenge and synergy.

▼ BUZZWORDS USED DAILY

Efficiency	39.6 %
Leadership	22.6 %
Synergy	10 %
Leverage	9.2 %
Convergence	7%
No answer	11.6 %

New tool puts staff on course

COMPETENCE The new MyLearning tool lets you search the entire Ericsson course catalog and find courses that suit you. You can find the tool via the Learning Portal. MyLearning brings together information on all e-learning, teacher-driven courses and other educational material in one place, replacing e-Gate and Skillport to begin with. It will be launched in several stages. At the end of June, all global e-learning courses will be transferred to MyLearning, with the global programs' teacher-driven courses and local programs added soon afterwards. All other material will be transferred gradually over the rest of the year. Ericsson's product-related courses are already available through MyLearning.

WHAT IS HE DOING?

HUNGARY Why is Gábor Éry, president of Ericsson Hungary, busy scooping sand?

Well, team building can be done in many ways. At Ericsson Hungary, managers and staff picked up spades and helped to renovate a children's playground, after being invited to help out by the mayor's office in Szentendre in conjunction with a VDSL2

broadband customer project in the city.

The Ericsson staff dug, laid rubber bricks and painted a fence. There was also high drama when an old artillery shell was uncovered and the police and army had to be called to remove it safely. But subsequently the work resumed and resulted in a fine playground.



Not your average day at the office for Even Gábor Éry in red shirt closest to the camera.

Hello...



head of Ericsson in China, where the government has reorganized the telecom industry into three equal operators that can offer both fixed and mobile services, to pave the way for 3G.

Ericsson has long talked about being the only complete vendor. What does this development in China mean for the company?

I don't consider us the only complete supplier of fixed and mobile networks. But we are without doubt the strongest supplier of complete "end-to-end" solutions, including services and applications. In the short term, a greater number of operators in China would have led to higher investments, but we welcome the decision to consolidate into three very strong operators. This is the best arrangement for continuous major investment in China.

Is this the first real example of "convergence"?

In China, this will definitely be a breakthrough for genuine convergence solutions, an area where Ericsson is strong today. Is this a win for Ericsson?

Not at all. It is just the prelude to a new war in the market.

What are the challenges?

There are many. We're very well equipped for 3G in China, but battling with Chinese vendors on their home turf isn't easy.

■ Staffan J Thorsell

Modules give broadband bounce

The inclusion of inbuilt **HSPA** modules in new notebook computers will provide a boost for every part involved. Ericsson has announced a link-up with two leading PC suppliers, Dell and Lenovo.

TREND Ericsson's HSPA modules are being built in to both suppliers' new notebooks. Philippe Davy, vice president for Strategic Alliances at Lenovo, sees the shift as breaking down the price barriers that have held back progress so far. In July, the company is launching its new Think-Pad generation of notebooks, equipped with HSPA modules.

Mass market

"This opens the way for a 3G mass market," he savs. "Us-

ers will get broadband straight away, without being limited to

Wi-Fi hot spots. The overall notebook market is growing all the time and we manufacturers expect to be



able to ship tens of millions of HSPAequipped units annually."

Lenovo is selling notebooks

to small and mediumsized enterprises through operators.

Talking with the cus-



Philippe Davy

tomers, Lenovo pushes the value of mobility. But there are still some hurdles.

"Certification is without doubt the biggest challenge," Davy says, "Especially if we need separate certification programs for every country. This is where we hope that the PC industry, with the help of strategic partners such as Ericsson, can influence operators so they see the value of simplifying the process."

☑ Lars Cederquist

"It is extremely likely that Sony Ericsson or LG, or possibly both, will overtake Motorola this year." (arolina Milanesi, Gartner's head mobile phone analyst, to Swedish daily Svenska Dagbladet.

Focus area pays off

"Establish a software business practice" is being wound up as a strategic focus area (SFA). The line organization will continue to drive the software work, with support from a new focus area aimed at implementation.

STRATEGY The task to "Establish a software business practice" began in 2006, with the aim of producing a new business model with a focus on software. Four long-term goals were set for the group: to secure clear growth in software sales; to introduce an element of recurring revenue in Ericsson's pricing; to be efficient in rolling out new software: and to ensure that the terms and conditions of deals with customers and suppliers reflect the new way of doing business.

The new business model is now in place. This means that the SFA's task is complete, the work can be handed over to the business and market units, and there will now be a new focus area with an emphasis on implementation. This area will be called "Commercial leadership."

Across units

Business Unit Multimedia already offers Software Upgrade Subscription (swus) with its entire product portfolio. swus allows customers to pay a certain sum every quarter to receive all new software automatically instead of buying individual releases.

BU Multimedia also works on simplifying the offerings and pricesetting process to introduce a price list for every product that applies all

over the world, while looking more at prices than margins for software sales.

The work is also underway at other business units. BU Networks is driving the introduction of software subscriptions and license keys for software, among other things, on a broad

Business Unit Global Services can increase its add-on sales with the right combination of software and services. One way is to combine swus with services to implement upgrades in the customers' networks according to the Software Assurance concept.

Bearing fruit

There is also a vision of all codes and all licenses reaching the customer in one minute. Two important steps

in this work have been Software Gateway and the Electronic License Information System (ELIS). Many products are already delivered via Software Gateway, a common tool which distributes upgrades to market units and Global Service Delivery Centers more effectively. Already underway, the rollout of both systems will be carried out gradually over the next 12 months.

All the work is beginning to bear fruit. Although the sales results are not expected to be particularly clear for one or two years, software sales are increasing. And, for instance, in three years they are expected to account for almost half of Ericsson's total mobile business.

☑ Editorial Services



This is the place to be. Ericsson is strengthening its combined expertise in order to become number one in next-generation mobile broadband and internet.

Getting serious in Silicon Valley

Ericsson is making a serious push into Silicon Valley, aiming to lead the development of mobile broadband and convergence in North America.

News with a Silicon Valley connection has come in thick and fast during the first half of the year. Ericsson heavyweights such as Bert Nordberg and Jan Uddenfeldt have moved to San Jose, California, where a new research office and Product Area Packet Networks are located.

Best of two worlds

Redback Networks, Entrisphere, TANDBERG Television and Ericsson are gathering all their expertise in mobile and fixed-line IP products at the one location in San Jose. Just one year ago there were two buildings with 700 Redback employees; now there are four buildings with

1,000 Ericsson employees and the space to add 500 more.



Bert

Arpit

. Joshipura

Bert Nordberg

Nordberg, chairman of Redback and Entrisphere. "We combine the best of the Internet and mobile worlds. We aim to build and lead the ecosystem for mobile broadband, both in networks and applications."

Arpit Joshipura, head of IP Solutions Marketing at group function Sales and Marketing, says: "As the internet and mobile worlds combine, Silicon Valley is driving much of the progress."

This is where you find Google, Yahoo,

YouTube, Apple, Cisco and other leading internet companies. Silicon Valley is renowned for the number of patents created, high risk capital, IP expertise, worldrenowned application developers, well-educated workers and gifted university students. The thinking there is different than in telecom companies.

Picking up speed

Ericsson is establishing itself in Silicon Valley in order to become more of

a mobile Internet player, to pick up speed in next-generation fixed and mobile applications, create new ideas and shed its image as just a mobile telephony company.

"It will take time, but combining the best brains from two worlds is a positive step," Nordberg says. "We must be present in Silicon Valley if we are serious about driving next-generation networks and mobile broadband globally."

THIS IS SILICON VALLEY

- ► There is no clear geographical boundary, but Silicon Valley covers about 2980 sq km. The cities there include San Jose, Palo Alto, Fremont and Sunnyvale.
- 2.5 million people live in the region and there are around 1,320,000 jobs.
- ► The average annual wage is usp 73,300 - significantly higher than in the rest of the us.
- ► 68 percent of the population have some kind of college education.
- ➤ 36 percent of the population are in the 20-44 age range, and 25 percent are aged between 45 and 64.
- ➤ 11.6 percent of us patents originate in Silicon
 Valley

Source: Joint Venture Silicon Valley Network index 2008.

First EAB unit now in ONE

Business Unit Global Services switched over to the ONE business IT platform on June 1, becoming the first unit within Ericsson AB (EAB) to make the move. On September 1, it will be the turn of EAB Group Functions, followed by Business Unit Networks, **Business Unit Multime**dia, EAB Supply and R&D. The transitions will continue until 2010 when the standardized ONE platform will be in use across all of Ericsson. ONE replaces the numerous business systems currently in use for financial transfers, order handling, logistics, supply and project management.



Usher chooses Sony Ericsson

SPONSORSHIP Megastar Usher will promote Sony Ericsson music mobiles in the us, Canada and more than 20 European countries. In the us, operator AT&T will join a combined push to give subscribers access to exclusive content and to a competition where the winner can meet the R&B star. Sony Ericsson is sponsoring Usher's tour of North America.

... of to Indians will have state-owned us their mobile operator by the end of 2009 if the country's government has its way (Telecom Tiger).



Nokia competes with iTunes

SERVICE Nokia has entered the battle for listeners with its Nokia Music Store service, which challenges the position of iTunes.

A song on iTunes costs SEK 10 in Sweden, while Nokia charges SEK 9 and also offers a streaming service; for SEK 100 per month you can listen to as many songs as you

Metro reports that on the sales front, iTunes has now overtaken traditional retailers for the first time. In the us, iTunes is the biggest sales platform for music, with 19 percent of the market share. In Sweden, the figure is 12 percent.

like. The newspaper

Happy birthday in Romania

ANNIVERSARY In May 2007 Ericsson's 20th Global Service Delivery Center (GSDC) was opened in Bucharest, Romania. It was a new center for management of multimedia applications, billing solutions, and operations support systems and is serving operators around the world. Today it has 240 employees. On behalf of Ericsson colleagues around the globe, Contact says congratulations on the center's first birthday.

Fiber feels the power

PRODUCT Ericsson Network Technologies' new cable solution breaks new ground, bringing together power and optical fiber in the same cable. Using a new method – by which the optical cable is pushed into the tube with the help of high-pressure pumps and liquid – long sections of fiber can be installed inside the power cable.



Faster, higher, stronger

SPORTS Katarina Strömberg, Arvin Farid and Anna Moberg work hard together in the tug-of-war competition at the Sponsor Olympic Games in Stockholm in May. Ericsson finished second out of the eight companies that competed in 14 events. There were 59 participants in the Ericsson team, with Hans Vestberg, Ericsson's cFo, as captain. Ericsson gave its best performance in the rowing, gaining first prize thanks to Henrik Sundelöf, Mikael Sundström, Malin Ericson and Ulrika Wester. Veronika Fridén also gave a great performance, winning both the high jump and long jump. Astra Zeneca won the overall competition.

"This industry always gets hyped up about new technologies, but all of these big ideas are expensive, and they require lots of little things to be in place first." Analyst Jane Zweig of The Shosteck Group discussing 4G with Market Watch.

What was happening this time...

. 25 years ago

The first full-scale model of the radar for the JAS Gripen 39 fighter plane was delivered in June for inclusion in a flight simulator at Saab.

The EQ project began at the start of the year. The E stood for Ericsson and the Q for quality. Lasting more than a year, the project aimed to raise quality awareness at all levels throughout the group.

... 10 years ago

1998 **In June, Ericsson** and Nokia jointly presented the wireless Bluetooth standard in a special simultaneous media launch on three continents. Bluetooth was initially intended to be a tool for businesspeople.

In Australia, new mobile licenses were auctioned off for the 800MHz and 1800MHz bandwidths. At that time, Australia had one of the highest mobile penetration rates in the world: 30 percent.

In May, CyberLab East, Ericsson's research and development center for the internet, opened in New York. One year earlier, Ericsson CyberLab had opened in Silicon Valley on the Us west coast.

.. 5 years ago

2003 Operator 3 launched 3G in Sweden. Even though the network was launched commercially, those who had signed subscriptions had to wait a month for their 3G telephones.

Operator Telecom Egypt was the first in Africa to launch Ericsson's ENGINE solution commercially. It was a solution to upgrade fixed circuitswitched networks to the next generation for both circuit-switched and IP/ATM-based packet traffic.

In May, Algeria suffered a devastating earthquake, which left more than 2000 people dead and 200,000 homeless. Ericsson Response was quick to react, sending four containers of radio equipment to boost the country's damaged telecommunications network.



Mats Norin is now comfortable speaking in public. The turning point came when he read a book on the subject.

Stage fright disappeared

Ten years ago, Mats
Norin was always
uncomfortable about
addressing a large
group of people. Today,
he has overcome his
stage fright and can
take the podium with no
problems.

SPEECH "Once or twice, I even declined to give a speech," recalls Norin, head of Product Area Mobile Broadband Modules. "I had two problems to overcome. The first was speaking to groups of more than 15-20 people – there was a threshold there that made me uncomfortable and unsure about my message. The other problem was giving presentations in English."

Over the years, he has given presentations for up to 3000 people. In his current role, he regularly addresses different types of meetings for 50-100 participants, but it took him several years before he got used to speaking in front of an audience.

"It takes time to get used to being a representative for an organization and not just speaking as an individual," he says.

The change came when he found a book on public speaking which gave concrete advice about how to construct a narrative. Norin then began getting help from colleagues on the content and structure of his presentations. And

he went on a course, led by professional speakers.

Nerves keep you sharp

"They pushed me beyond my comfort zone. It was really uncomfortable at the time, but I got a lot out of it. Today,

I am much more secure in the speaker's role – I am always nervous, but these days it is more controlled. I think you need to be a little nervous, to keep yourself sharp."

MATS NORIN'S TOP TIPS

- Take on some speaking engagements and then do speaker training. Nobody is so bad that they totally embarrass themselves, so don't turn down a chance.
- Get help from colleagues with the content and flow of your presentation.
- Think about body language and how

- you construct your presentation
- Put extra time into preparing the introduction and conclusion.
- **5.** If you know members of the audience, ask them for constructive criticism afterwards.
- **6** Choose a topic with which you are completely comfortable.

Professors in your computer

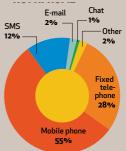
COMPETENCE Here's a chance to learn from some of the world's leading business researchers. Ericsson employees can watch three one-hour online lectures delivered by Harvard Business School professors. "What really matters in business today?" can be watched right now, while "Managing people for competitive advantage" will be available in August and "Creating competitive advantage through organizational learning" will be available in September. You will find the lectures through the Learning Portal.



Mates with the mobile

FRIENDS Contact with friends is important for most people and communications services make it easier. When we are outside the home, conversations via mobile phones are the most common service.

▼ COMMUNICATION CHANNELS WITH CLOSE FRIENDS WHEN NOT AT HOME



Source: Global Infocom Study 2007, Consumer Lab.



KEEPING IN TOUCH

UGANDA A man sits with his mobile phone outside his home in a rural village in Uganda. People in developing countries see every call as an investment. For example, they use the telephone to

organize a day's work or to sell their produce. This man uses the Celtel network. The photo was taken when Ericsson took marketing pictures for its Communications Expander winning proposition.

Hello...

...Jan Hedlund, chairman of the Metall union organization, recently took part in the Ericsson meeting for union representatives in Sweden.

Why do you have these Ericsson union meetings?

"They give all the local union leaders the chance to meet Ericsson management and ask questions. This is unique to Sweden, and the basis for good cooperation with the unions. The dinner afterwards, where people get to know each other on a personal level, means a lot."

What was the most interesting this time?

"The analysis of Huawei was the highlight for me."
How is the relationship between the management and the unions working?

"For us at Metall, there are no problems. We have always put our foot down. But on the white-collar side, which has seen major reductions, it is harder to get time for union work and more difficult to fill union positions. But I am not seeing any negative shift in attitudes; rather the new managers haven't always learned the ground rules."

What is the most important union issue today?

"For us, it is the job losses in Kumla, Borås, Gävle and Kista from the cost-reduction program. But Ericsson's challenges are ours too. There is still a risk of new waves of outsourcing, especially on the development side."

☑ Lars Cederquist



Ericsson needs to work even harder to maintain its lead in services, a top analyst says.

Competitors in service push

Ericsson is No.1 in telecom services. But that position is under challenge.

MARKET Technology
Business Research (TBR)
has been ranking telecom
service companies since
2003, and Ericsson was
the leader right from the
start. In 2007, its lead
was three percentage
points over its closest
competitor.

Michael Sullivan-Trainor, TBR's services expert, does not expect major changes during 2008, but he says the other players are pushing harder. This means the competition will get tougher.

Work harder

"Ericsson will have to work harder to stay ahead," he says. "I would be equally afraid of Alcatel-Lucent and Nokia Siemens Networks since they have become bigger and are concentrating on services growth, just as Ericsson is, and of Huawei, which is seriously building its services business."

He lists other factors behind the increased competition.

IT companies want to enter the telecom arena and telecom companies want to enter the IT arena, and it may be difficult to maintain levels of profitability when operators in developing markets start looking at services. And Ericsson is not the same obvious choice in markets outside Europe, where demand for services first arose.

"It's a more level playing field now," Sullivan-Trainor says. "Vendors are on a similar growth path and it puts them on a collision course. Vendors want to do more services on the products they have delivered to operators and they also want to win services business, for instance

systems integration, with managed services, is a competitor products." strength. He also men

Growth may slow

Sullivan-Trainor expects solid growth in the market this year, though it may be a little slower.

Ericsson's Mats Agervi, head of marketing and sales at Business Unit Global

Services, agrees that the services market will

become even tougher.

"Competitors are talking more and more about the importance of services," he says. "It is a sign that they are investing in this area, but we feel confident that we still have a competitive advantage."

Agervi says that Ericsson's broad services portfolio, ranging from education to customer support, consulting, systems integration, network rollout and

managed services, is a strength. He also mentions Ericsson's global and local presence, which makes it possible for the company to deliver superior economies of scale.

"Through common processes, methods and tools, Ericsson Global Services has the ability to share and reuse knowledge and experience," he says. "We have gained that experience because we have the customer references."

☑ Jonas Blomgvist

▼ TELECOM INFRASTRUCTURE SERVICES MARKET LEADERS' MARKET SHARE, 2007

Alcatel-Lucent 9 % Nokia Siemens Networks 8 % IBM 7 % Hewlett-Packard 7 % Accenture 4 % Motorola 4 % Huawei 4 %		
Nokia Siemens Networks 8 % IBM 7 % Hewlett-Packard 7 % Accenture 4 % Motorola 4 % Huawei 4 %	Ericsson :	12 %
IBM 7 % Hewlett-Packard 7 % Accenture 4 % Motorola 4 % Huawei 4 %	Alcatel-Lucent	9 %
Hewlett-Packard 7 % Accenture 4 % Motorola 4 % Huawei 4 %	Nokia Siemens Networks	8%
Accenture 4 % Motorola 4 % Huawei 4 %	IBM	7%
Motorola 4% Huawei 4%	Hewlett-Packard	7%
Huawei 4 %	Accenture	4 %
	Motorola	4%
FDS 2 %	Huawei	4%
	EDS	2%
Nortel 2 %	Nortel	2 %

Source: Technology Business Research

Project improves cash flow

Ericsson can save huge amounts every year by being clearer about what is written in customer contracts. Soon there will be improved methods and tools to make this possible.

DELIVERIES Ericsson has won many contracts in recent years. But some deliveries have taken longer, which is partly down to how the technical performance requirements (KPIs, or key performance indicators) have been worded in contracts.

Increased costs

This has affected both Ericsson's margins and cash flow. Delivery times in projects have been longer than originally thought, resulting in increased costs for service. And payments have not been made until the KPIS have been fulfilled.

The KPI-Based Acceptance project, intro-

duced to improve performance in predicting and handling such issues, lays down some important principles.

Lindgren,



Marielle

Lindgren

Henrik Bergman

sponsor of the project, says: "We must be clearer about what we're responsible for, what the customer is responsible for and what is required for us to commit to the KPIS. The contract we sign should divide the payment between hardware, software and services, where payment is made continuously over time for well-defined sub targets."

Dialogue with customer

The project looks at which KPIs are the most important to measure a network's perform-

ance, and which levels are acceptable to gain customers' acceptance before the networks are put into commercial use. With this work as the foundation, Ericsson can lead a dialog with customers about the KPIs to be included in a contract, the number of them, the appropriate levels and how they should be measured.

Agreement vital

Henrik Bergman, responsible for the "Secure best-in-class growth, margins and cash flow" strategic focus area, says: "A project's end result is largely determined by how it is specified in the signed contract.

"It is vital that the customer and Ericsson agree on the acceptance for us to be able to run the project effectively. If we improve in this area, it will have a positive effect on our cash-flow work."

DO YOU WORK AT A MARKET UNIT?

THIS CAN HELP YOU

► The KPI-Based Acceptance project has produced the following support tools, which will be released during Q3:

A kit for the Core
3 team which
explains the argument
about KPIS, measurement
levels and measurement
areas.

A place on the intranet where all necessary information is collated, including contract templates and KPIS.

Workshops about KPI-based acceptance at which people can share experiences and knowledge.

An expert team that can help in connection with negotiations.

Setting the pace

FITNESS Employees of Market Unit Australia and New Zealand (ANZA) have again signed up for the world's biggest corporate health event.

In the annual Global Corporate Challenge

(GCC), more than 420 ANZA staff members will each aim to walk a minimum of 10,000 steps a day over the next four months.

The GCC aims to increase the daily physical activity of people working in corporate environments. Previous participants have experienced health benefits such as weight loss and improved fitness. Research shows the GCC benefits companies too, by decreasing absenteeism and increasing productivity. The program even helps the environment because, to reach their target, participants use their cars less.

The program also fosters teamwork. Participant Alan Green says: "In my GCC team I am interacting with people I usually wouldn't work directly with. This benefits our working environment in terms of better communication across business units."

American Idol sets new record

US Popular TV talent show American Idol generated more than 78 million sms text messages during its seventh and latest season. That was a new sms record for AT&T says the operator. sms has grown to play a significant role in the program's interactive experience since it was introduced in the second season.

NEW CONTRACTS

- ▶ **Netherlands.** Ericsson and T-Mobile are expanding their cooperation with a four-year strategic-partnership contract.
- ▶ Brazil. Ericsson will maintain Telefónica's new fiber network, deliver a wcdma/hspa network and integrate ims for Brasil Telecom.
- ▶ Honduras. Digicel Group and Ericsson have signed a GSM/EDGE contract. The companies already have an agreement to cooperate in the Caribbean and El Salvador.
- Switzerland. Sunrise has chosen Ericsson to expand its wcdma/HSPA network.
- Singapore. Ericsson will improve the coverage and data speed of SingTel's GSM/WCDMA/HSPA networks.
- ▶ Indonesia. Telkomsel is to buy Ericsson's Mobile Softswitch Solution (мss).
- Mexico. Ericsson will provide field maintenance for more than 3800 sites in Telcel's GSM, тDMA and transmission networks.
- ► Ireland. Meteor Mobile Communictions has chosen Ericsson as sole supplier for a wcdma/HSPA network.

Fun for families

pony riding, competitions and activities for children and adults alike, including a raffle and dinner, were on the program when Market Unit Kingdom of Saudi Arabia

arranged its second family day. Clowns handed out presents, and there was face painting and an Arabian tent where families could relax and enjoy their coffee and tea.









Future TV viewers will record programs and watch them when they want and where they want – often on three or more screens. They will also **watch TV away from home**, in the back seats of cars, at airports and on airplanes, in parks and even on the street. TV will become our constant companion and fill all those little gaps in our lives.

The future of watching TV



TV over the internet will mean we watch more in the future, not less, says Jeffrey Cole, head of the US-based Center for the Digital Future.

Our TV viewing habits are obviously about to change in a big way, he says.

ole says: "When TV was new, people watched individual programs. Today, people just watch TV – you turn on the set when you come home from work and it just stays on. You might surf around until you find something you like, or you might settle for a show you can put up with. But the next stage of TV-watching will once again involve watching specific shows you are interested in."

As a leading us researcher in dig-

ital media, Cole - who recently visited Stockholm - knows what he is talking about when it comes to the future of television. And he holds interesting views - such as his rejection of the argument that a new medium must always outcompete the old. He refers to earlier claims that video cassettes would kill off the film industry or that TV, for that matter, would make books redundant - examples that in fact show that different channels or media can exist in parallel. But he does believe that the coming changes in behavior may well be greater than any earlier ones.

"When a person is waiting at an airport and finds out that the flight is delayed, what is the first thing he does? He pulls out his mobile. So far, mobiles have



Anders Erlandsson and Niklas Rönnblom at Ericsson ConsumerLab say there is no doubt that people will want to choose their own content on τv . But according to their research, younger consumers still differentiate between the τv screen and the computer screen.

"I record 95 percent of what I watch. I don't even know what time the programs I watch are screened." Leffrey Cole

Did you know that...

...the record for throwing τν sets through a window is 61 in three minutes. Two employees at Kerrang! Radio in Birmingham, the υκ, were given this unusual task during a morning program on January 19, 2007.

Source: Guinness World Records 2008 mostly been used for conversations, so people make despairing phone calls in such situations. Things have gone so far that when I call my old Ma, she asks if I am waiting for a train," Cole says with a laugh.

"The point is that this behavior – constantly pulling out your mobile – will become significant now that the content in our mobiles is changing. Why not watch a TV program if you can?"

Mobile TV has been around for a while, but it is only now that the sound and picture quality are becoming acceptable. That is why Cole believes people will start to use this channel more frequently.

"For a long time, we have said people will only watch short clips of a few minutes on their mobiles, because the screens are so small. Our studies show

that is not correct. Young people today are already watching 30-to-60-minute clips, entire episodes of many TV series. This trend will continue."

But, Cole believes, things will not stop there. He takes one of the world's most famous films as an example: "Remember Star Wars? The first scene? After the opening titles, a spaceship appears at the bottom of the screen - first just a tiny bit of it, but it grows and grows until it is obviously enormous. What I am trying to say is that the scene is clearly done for the big screen. But say you have already seen the film, liked it and want to see it again. In that case, a mobile phone screen can work fine because you still have the epic scale from the big screen in your mind. The smaller images are enough to create the association with something bigger, which keeps your interest."

Cole emphasizes the importance of sound quality for TV viewers. He tells the story of when he was once stranded by bad weather, stuck in a hotel room with only a TV for company, and the picture was faulty. "I listened to the TV for two days and got a lot out of it, much more than if the sound hadn't been working and the picture was."

His reasoning is based in large part on the research done by his center. The conclusions he gives are confirmed on most points by Ericsson ConsumerLab, which carries out studies into end users' behavior, demands, expectations and wishes. ConsumerLab's Niklas Rönnblom and Anders Erlandsson chart and analyze opinions about TV.

Erlandsson says: "There is no doubt that people will choose their content for TV. But according to our stud-

TV on the road

The Televisionary Campaign is Ericsson's first global campaign involving the business units and selected market units. It is not a campaign on τν, but marketing activities in market units about Ericsson TV solutions.

The campaign aims to increase Ericsson's reputation in TV and to increase sales of end-to-end IPTV and mobile-TV solutions

The objectives of the TV Campaign are to:

- Establish Ericsson as one of the top TV players before 2009 in selected target groups.
- Generate sales leads in selected target segments.

Support sales of key deals covering all three businesses - infrastructure, professional services and multimedia.

The TV roadshows are an important market unit activity, where eight market units were selected to host their own customer seminar and present Ericsson's TV

offerings from a consumer's perspective. In mid-May, Ericsson in Taiwan hosted the very first TV roadshow, visited by 174 local custom-

The external launch of the Televisionary Campaign took place at Mobile World Congress in mid-February 2008 in Barcelona. The campaign will run until 2009.

ies, vounger consumers differentiate between the TV screen and the computer screen."

ConsumerLab studies show that the TV is seen as a TV, with a traditional program schedule. Younger end users still see it as a something stationary that displays films, TV series and so on. The screen they use for different sorts of interactivity is a laptop. The TV can stay in the background while they use other screens for other purposes.

Rönnblom explains: "While the TV is pumping out a series in the corner, a young person today is also checking out clips from YouTube on the computer, which they are also using to chat to friends and so on."

Cole says his own relationship with TV has changed. "My own TV habits have changed a lot. The us still hasn't progressed too far in terms of mobile technology, so I use just two screens: the computer and the TV set. And I record 95 percent of what I watch. I don't even know what time the programs I watch are screened, and neither do I watch advertising on TV."

While more people, particularly Americans, are using personal video recorders (such as Tivo) so they can watch ad-free TV, Cole believes advertising will still be essential in the future - something that might sound contradictory.

"I don't believe that TV can work without advertising, just as the web can't function without advertising," he says. "Advertising is quite simply the solution to free content, regardless of the channel."

In the end, everyone is pushing the development of TV, Cole says, be they consumers or industry players. "But ultimately, you can't escape the fact that TV - with the exception of public service programming, which does not rely on viewer numbers in the same way – always has to produce programs that appeal to both advertisers and viewers. That means viewers drive development. Throughout TV history, we have seen programs that have earned fantastic reviews but not won an audience, so they have disappeared. It is simple mathematics: Win the viewers and the advertisers follow."

Studies show that it is the young and the old that watch TV most. And Cole says advertising agencies have never cared about the old - by which he means people over 49.

Those aged 18-34 have long been the target group. "When it comes to TV becoming digital, I think you can say that teenagers are the single most important group in terms of development. They develop completely new viewing habits that they then take with them for the rest of their lives. Previously, the thing that made teenagers stand out was what they were watching. Now, the big difference is how they are watching. And it is this last

TANDBERG: MAKING ERICSSON A LEADER IN IPTV



Ericsson acquired TAND-BERG Television in April 2007. With more than 180 IPTV system deployments at the time of the acquisition, it immediately enhanced Ericsson's position as a leading IPTV supplier. Contact spoke to Eric . Cooney, CEO of TANDBERG Television.

What exactly does TAND-BERG Television contribute to Ericsson's portfolio? TANDBERG Television pro-

vided three key components

of Ericsson's IPTV offering: digital video-compression ware solutions and expertise in IPTV deployment.

Digital video compression is the foundation of TAND-BERG Television's business and the cornerstone of today's successful IPTV offerings. Our video-encoding

products make it possible to compress video signals and enable the delivery of hundreds of channels of broadcast-quality video, including

ever-increasing numbers of high-definition channels.

We also provide a range of advanced software products that further augment the IPTV operator's consumer

TANDBERG Television brings our industry-leading video-on-demand software solutions to the Ericsson end-to-end IPTV offering.

Our range of software applications also includes next-generation advertising solutions and interactive-TV technologies.

What are the main challenges that you face in the short term?

The most obvious challenge is how to distribute the TANDBERG Television video expertise within the broader Ericsson organization. Our core value proposition relies on being first to market, with a best-in-class technology offering. The Ericsson and TANDBERG Television product suites offer numerous opportunities for us to integrate products and deliver on that promise.

"Youngsters today don't want 15 minutes of fame; they want 15 megabytes!"

point that is important for the path this development will take."

Today's teenagers see watching scheduled programs as weird. Rönnblom compares their behavior with the way people, particularly the young, consume music.

"Few young people today want to buy an entire album from one performer. And that really isn't so strange: how many albums do you have where you like every single track? Not many. Rather, you like specific tracks, and are prepared to pay for each track. It might be the same with a TV series: you might want to buy your favorite episode, rather than a whole season," he says.

Young people are living with and consuming media so differently than people did just a few decades ago that Cole jokingly paraphrases artist Andy Warhol: "Youngsters today don't want 15 minutes of fame; they want 15 megabytes!"

Expanding on his reasoning, he says that - unlike most other media, which will decrease in scope and significance - TV will continue to grow.

"We will watch more TV on more screens. We have small screens in our pockets and we buy bigger screens for the home. Just as we are moving

music from the radio to the CD to the iPod, we will move TV from the server to a big screen to a mobile. We will send large files and small ones

"TV will also function together with interactive services. There will be chat about TV and chat on TV, on screen."

As TV and the internet converge, the way people consume TV content will change fundamentally. On that subject, Cole agrees with the research at Ericsson ConsumerLab. For TV viewers, the underlying technology is uninteresting, as long as they can see what they want to see, when they want to see it.

"It will become unimportant whether TV is a URL on the internet or the internet is a channel on the TV. The point is that it makes no difference to the user," Cole says with a smile.

☑ Text: Johan Kvickström Photo: Stefan Borgius

Jeffrey Cole has worked for the administration of US President George W Bush, as well as with former President Bill Clinton and former Vice President Al Gore. Since 1977 he has taught more than 35,000 students. His recent visit to Sweden included a lecture in Sigtuna.

Did you know that...

...the average Swedish TV viewer now spends about eight years of their entire lives in front of the TV.

11, images are broadcast from the

COLE'S HOT TIPS

Contact asked Jeffrey Cole what he believes will be popular in the mobile-TV arena in the short and long term. He replied:

Mobile TV has a bright future. People will want to watch TV on their mobiles, not just short clips.

The next big thing on the market will be foldable screens for mobiles. These will

not only be used for watching TV, but just as much if not more for internet surfing, which will also become popular.

Everyone will want to be able to save programs and watch them whenever they like.

TV consumers are likely to want to be able to move content from one screen to another - for example, from a mobile phone to a bigger computer or TV screen.



Family investigates the world of IPTV \gg



BORDEAUX FRANCE, EUROPE

The French (TV) connection

The Laufenburger-Lalbin-Laguillon family in Bordeaux, France, has 352 TV channels available via its broadband connection. Technology means they can see whatever they want, whenever they want, even if they use only a fraction of the capacity. It would probably take ages to get through the entire offering, but that is not their ambition.

lain Laufenburger says, as he glances at the family's 32-inch flat-screen TV: "The program offering seems endless, but even if you have 10 cars in the garage, you can't drive all of them at the same time."

The family rents their home in a middle-class area of central Bordeaux. There is heavy traffic in the street and the streetcar station is just one block away. Alain Laufenburger and Myriam Laguillon are sitting on their black leather corner sofa, which dominates the open, ground-floor level of the apartment. On the floor by the walls are paintings waiting to be hung, but this is the only visible trace that the family has recently moved in. Now and then Myriam's son Thomas Lalbin, 14, and Alain's son Tom Laufenburger, 10, come into the room, chat with their parents and surf a little between TV channels.

The family is not the only one with IPTV in France. With its 5 million subscribers, France is one of the leading IPTV countries in the world. One explanation could be that the French operators were quick to see the potential of broadband TV.

"We were early," Vivek Badrinath, Executive Vice President for IT, Networks and Product Support at Orange/ France Telecom, says. "Back in December 2003, we launched Ma Ligne TV, our first TV offering over the ADSL network. Since then, TV has become a regular part of every broadband offering. Today we have almost 1.5 million IPTV customers in four countries and we're continuing to expand."

Alain Laufenburger and his son Tom, who was then six, were among the first to embrace the new technology. They had just moved from the countryside to Bordeaux and lived in an old, heritage-listed house, so they could not drill holes for cable TV or put up satellite antennas. Tom was missing the Disney channel and Alain did not want to miss the games in the approaching Euro 2004 football tournament in Portugal.

"Then France Telecom launched the Ma Ligne TV service," Alain says. "I barely understood what it was, just that the TV signal was to go through the telephone socket, but the channel offering seemed to suit us so we signed a subscription."

They regained the channels they had been missing and could watch all the Euro 2004 games with very good picture and sound quality.

"But sometimes the picture froze and we had to wait or reboot the system as we understood updates were going on," Alain says. "The technical Orange/France Telecom call center was very busy, so it was just boot and wait."

Today the family is more than happy with the technology. The best aspects are the sound and vision quality, but they have also begun to check out some of the services on offer to make watching TV more flexible and interesting.

"We record two or three films per month on the box to watch later," Alain says. "We also record some programs that are on late in the evening and Tom, who loves football, might ask me to record games that are televised when he isn't home."

They also use the video-on-demand service, which lets them choose

STUDIES FROM THE LAB

Ericsson ConsumerLab

infocom study 2007, as well as the Ericsson 2007 IPTV study, indicates that interest in new TV services could be grouped around a couple of key areas. **Very high interest ground:**

- ▶ Personalization, through services like Time-shifted TV, is rated very highly (more than half the population is interested in this)
- ► Control, through services like parental control and caller id on the TV (also rated high by a significant portion of the population)
- ▶ **Simplicity**, through services like networked personal video recorder, which enables effortless TV recording and handling (e.g. no more looking for an empty video cassette or DVD) **Slightly less interest around:**
- ▶ Interactivity, through services that enable interactive information, purchasing, and messaging and community services on the TV.

Did you

know

...an esti-

mated 300 million view-

ers watched

the football

final between

2006 - more

viewers than

any other live

FIFA says that

30 billion (non-

unique) viewers

watched the

tournament.

World Cup

broadcast sporting event.

Italy and France

World Cup

on July 9,

that...

"The best thing about TV over broadband is that we avoid having a big, ugly antenna on the roof" Myriam Laguillon

between the latest film offerings and rent films for about EUR 3.50 directly via the box.

Vivek Badrinath at Orange explains: "The video-on-demand serv-



Vivek Badrinath

ice is increasingly popular. Another popular service is 24/24 TV, where customers can watch programs from the France Television Channels up to seven days later. If you weren't at home yesterday at 5pm when the program was broadcast, you can watch it this evening instead. Consumers today watch TV in a non-traditional way and want programs to start when it suits them."

Badrinath says TV brings great opportunities for the telecoms industry.

"Video services are central to broadband deals. They are what people use bandwidth for, and it's important that we're part of that chain," he says. "We offer a new type of TV on three screens – the television, the PC and the mobile – with our triple-play service."

Sitting on his sofa in Bordeaux, Alain is sure that the children in the family will soon get mobile TV and start downloading films from the internet – they can do that straight to the TV using a

USB connection from the box. But he finds it hard to imagine watching TV on the mobile phone or on the computer. He says that the mobile-phone screen is too small, and the sound and vision quality is not the best. And he associates the computer with work.

Tom and Thomas come downstairs after doing their homework and join their parents on the TV sofa. Tom puts down a batch of football stickers, grabs the remote control and finds a sports program about a cycle race. When we ask to take his photo, he pauses the program with a simple touch of a button on the remote control.

"We can freeze the broadcast – like when the phone rings – and then go back to watching it when we have time," says Myriam, who likes to watch travel programs, political debates and factual programs on TV.

The family has not yet developed any shared TV habits, but on a normal day Tom is the one who starts watching TV with half an hour of cartoons before school. At lunch, Alain comes home and watches the news, while in the evening the TV is at the entire family's disposal.

Alain likes to watch news channels such as CNBC and CNN. As well as football and other sport, Tom likes cartoons and films. When Thomas watches TV at all, he watches extreme sports and detective series.

"The TV is already competing with the computer," Myriam says. "Thomas is a computer fanatic and spends more time on MSN and network games than on watching TV at set times. The traditional TV channels are losing viewers in France to the new niche channels, including those that are only available over the internet."

Alain says the best aspects of IPTV compared with traditional TV are the sound and vision and being able to watch anything anytime.

"When my parents bought our first TV we had two channels to choose from," he says. "Back then, the TV offering was very basic. Today, I can find the entertainment or information I'm looking for anytime."

Tom's view of TV is of course completely different. He barely remembers anything other than IPTV and has nothing with which to compare it. But it is Myriam who names the most unexpected advantage of the new technology.

"The best thing about TV over broadband is that we avoid having a big, ugly antenna on the roof," she says with a laugh.

Orange/France Telecom would of course like to see families such as this one adopting more of the new services on offer.

"We have a great challenge in getting customers to take up our innovative services beyond traditional broadcast," Badrinath says. "Right now, we're hoping that our new football offering will lead customers towards new services."

He realizes that the technology is a major challenge.

"We must focus on the fundamental quality of our products," he says. "When it comes to TV, we can't have any technical problems. If the equipment doesn't work when the football match starts on Saturday evening, we have a big problem. For the telecoms industry, this is something totally new and something we need to work hard on together with all our suppliers."

☑ Text: Anders Jinneklint Photo: Patrick Bernard



The family often records τv programs and films to watch later. This means they can enjoy their dinner in peace and quiet.

Simple solutions are the solution

New ways of watching τν herald the start of a new era, Media 3.0. The borders between τν and other media forms are being erased as interactivity increases. Ericsson has a good starting point, thanks to its position within mobile τν, Kurt Sillén, head of Ericsson Mobility World, says.

Sillén believes that Ericsson is in a good position within mobile TV, but the most important thing is to offer triple play, in other words access to all services on three screens: the mobile phone, the computer and the TV.

"The opportunity to get your services regardless of which screen you have is very important; we're talking about service mobility," Sillén says. "The mobile phone is central to this. There is nothing that is more personal than your mobile. The vendor that makes the mobile environment easy to use has an advantage and Ericsson is therefore in a good position."

What has Ericsson succeeded at within mobile TV?

"We've had many world firsts, such as personal mobile advertiser, which means that, as a customer, you can decide the type of adverts you want. It is fascinating behavior-wise – if you get information you have indicated an interest in yourself, you'll see it more as valuable information than as an advert. You'll also be happy when you get what you've been asking for and send it on to your friends.

"What we're seeing now is the start of what some call Media 3.0. Media 1.0 was watching the TV while lying on your sofa, Media 2.0 is more participation via SMS and the like. With Media 3.0, I'm halfway through the screen."

How will Ericsson utilize Media 3.0?

"Me on TV is a concept that Ericsson has created together with TV production company Endemol. Viewers can film themselves with their mobiles and be included live in a TV broadcast, or use the telephone as a mobile TV camera and make their own features."

What needs to be improved within mobile TV?

"Not all networks have the coverage and capacity required when many consumers choose mobile TV. We now have solutions being rolled out that improve the quality considerably. For example, it's extremely important that the audio keeps going. Even if the picture freezes for short periods, we can still to a large extent have a satisfied audience as long as the sound is intact. Our brains can fill in missing images, but not missing sound. If the sound breaks up, customer satisfaction will immediately drop to the bottom. Such findings about how our brains function are important to increase the quality you experience."

What is Ericsson's position within IPTV?

With TANDBERG Television, we have a totally new position and can offer good triple play. The potential with IPTV is that, as consumers, we care less about the type of screen we use, while we want to choose what we want to watch and when. If I as a consumer find it hard to use my favorite web community or watch YouTube clips on IPTV, I may go to the computer instead and get them delivered without problems. On the other hand, if I find a supplier who can easily give me content regardless of the screen, I'll be more loval. It's vital to Ericsson's success that the solutions are very simple to use and that the user experience is optimal."

☑ Text: Anders Jinneklint Photo: Bob Rives







QUICLINK TO THE RESCUE

Baptism of fire

The flames get higher, there is smoke everywhere and houses are collapsing. In a gap among the ruins, rescue staff **raise a 15m radio mast**. They hammer in the ties for the support cables, hook up the antennas and then raise the mast.



ttakes just a few minutes. The Quic-LINK system is carried over and connected to the mast. After a few basic calibrations (most have already been preprogrammed), the staff can turn to saving lives, equipped with their 3G telephones, cameras and satellite connections to the internet.

This was just an exercise, a simulated earthquake, in late April at the rescue services' premises north of Stockholm. Half a dozen volunteers from Ericsson Response – the organization prepared to deploy rapidly to disaster areas around the world – ran the first real live test for the new QuicLINK portable mobile network.

"This is exactly what we need," says Ester Gonzalez de Langarica from Ericsson Response in Spain. She knows what she was talking about: she was in Pakistan when an earthquake struck in December 2005.

"There's total chaos in the first few hours after an earthquake," she says. "It's like a nightmare. You have to get the rescue work and the communications started quickly."

And speed – as well as portability and simplicity – are Quiclink's strengths. The un and other organizations have been craving a simple system for some time, one that does not require complex technical expertise.

For that reason, the QuicLINK exercise was carried out without any specific preparations. The volunteers



It takes just a few minutes for the rescue team to raise the mast for the QuicLINK system. Once the supporting cables are secure, Ester Gonzalez de Langarica from Ericsson Response winches up the antennas to a height of about 15m, which provides good coverage.

"It's like a nightmare. You have to get the rescue work and the communications started quickly" stig Lindström

had just a short introduction and then solved the tasks themselves.

"QuicLINK proved as simple and stable as we'd hoped," says Stig Lindström, who led the exercise for Ericsson Response.

Lars Ruediger, a volunteer from Germany who was recently on a mission to support unocha (un Office for the Coordination of Humanitarian Affairs) in the Central African Republic, agrees. He says QuicLINK is easy to handle.

"Simplicity is always needed; you're under great pressure to get things up and running quickly in a disaster situation," he says.

Mehran Namazi, who has worked within the UN peacekeeping and computer organizations, says QuicLINK is just what the UN needs. "It can be set up and put into operation in less than an hour," he says.

Look closely at QuicLINK, and you see only a box filled with circuit boards. Each board, or group of boards, is equivalent to an entire network node. What would usually be large cabinets are small boards here, put on a rack. It is a complete, portable WCDMA system, including core and radio network nodes.

The only additional things you need are the antenna mast and a 1kW diesel generator. Satellite or microwave links are optional.

This seems incredible, even though we have got used to high-tech equipment getting smaller. Quiclink obviously has less capacity than a full-blown 3G system. But it can cope with 50,000 provisioned users, and up to 10 systems can be connected together - and be automatically configured - to provide coverage over tens of kilometers.

Philip Nyströmer is also pleased. Quic-LINK's product owner, he has driven the development project since its inception in 2006, something that has been far from easy.

Technologically, the AXE part was the biggest stumbling block for some time. It seemed impossible to get the AXE switch's considerable software onto one circuit board. And it was not possible to shrink the AXE hard-

But just as they were about to give up and make do with a less suitable third-party product, the researchers at Ericsson's R&D unit in Montreal solved the AXE problem.

The solution was as simple as it was ingenious. They started with a test tool, Simulator Environment Architecture (SEA), which is usually used to emulate the AXE hardware platform.

Mark Armstrong and Adrian Wilson from the Montreal office say they were able to run the AXE PLEX code on SEA, then get SEA to run on top of the Linux operating system, and finally to get

Linux to run on one Connectivity Packet Platform (CPP) board. This means that in a Quiclink system, the MSC, HLR and authentication center are Mark all running on a single Armstrong CPP board. Effectively, they disabled



everything that was not needed. QuicLINK can be used for positioning, supervising sensors, telemedicine, web cameras as well as voice, video and data communication. The twobox portable version can cope with

Ericsson Response is a typical customer. But QuicLINK is also suitable for peacekeeping assignments and for

temperatures from -33C to +50C.

companies prospecting for oil or minerals, far from civilization.

During the assignment in Stockholm, a couple of people arrive carrying a complete IMS system in small box, which they connect to the QuicLINK. One of them, Friedrich Eltester, shows what you can do when you add multimedia capabilities. He demonstrates how commercial WeShare IMS clients and a multimedia application with messaging and location information could be used to direct a rescue team. This solution is part of a future "IMS in a box" solution that allows the deployment of IMS applications together with QuicLINK, he says.

The test in Stockholm went well. The next challenge for Quiclink will be in September this year, when it will be used in a major UN simulated flooding exercise in northern Scandinavia.

☑ Text: Lars Cederquist Photo: Gunnar Ask



Lars Ruediger and Mehran Namazi test MobiMed telemedicine technology during the exercise. Patient data - in this case blood pressure and ECGs - is sent over the Quic-LINK network to the field hospital.

Ericsson Response...

...WAS FORMED in 2000. The organization is based in Kista, Sweden. When natural disasters happen, Ericsson Response is ready to be mobilized at short notice together with the un or other organizations. In total, Ericsson Response has about 80 volunteers around the world. They have all completed a basic training course, which is arranged by Ericsson Response in Sweden, before they go on assignments with partners.

They have placed equipment in six places: complete gsм systems or WIDER (WLAN in Disaster and Emergency Response) in

containers which weigh a few tons and can be flown out to the place in question. Ericsson's mobile systems are usually connected together with the local operator's network there.

QuicLINK could replace or complement these types of equipment.

"We began with a scaled-down version with few functions and developed the product further together with the customer" PALLIN NAME AND ADDRESS OF THE PROPERTY OF THE PROPERTY

Did you know that QuicLINK...

- began to be developed within Ericsson in 2006.
- provides a WCDMA "network-in-box" including the MSC,HLR, AUC, GSN, MGW, RNC, and RBS nodes.
- has a maximum packet data rate of 384kbps in the first release, while the next release will enable High Speed Packet Access (HSPA) rates up to 7.2Mbps.
- exists in a two-box portable version in the first release, while a onebox vehiclemounted version will come in the next release
- > can serve 50,000 users and handle up to 70 simultaneous calls, depending on the traffic mix.
- has a coverage radius of 4km per QuicLINK system.
- began being sold commercially in June 2008.



R&D vision: Philip Nyströmer wants to see a small R&D unit with competence drawn from across Ericsson.

A mini R&D unit to reflect all of Ericsson

Philip Nyströmer, who led the development of QuicLINK, has a vision of how R&D could work more effectively in quickly coming up with new products in future. This is roughly how they worked with QuicLINK.

"I think that if we had a small, specially-composed R&D unit that reflected the whole of Ericsson with representatives for different business and development units, we'd be able to quickly produce prototypes that we then tested on customers," Nyströmer says. "It would also be easier to balance resource priorities between our mainstream development and faster prototype development.

"And we could do with new decision processes, even though the old ones worked in this project."

It is all about quickly adapting to how this dynamic market is moving and working with early prototypes, which are produced by the dedicated R&D unit and agreed on with the customer. Such a way of working

would reduce the risk of investing in something wrong. Once you have established that the business concept works, you move on to full-scale product development.

Nyströmer then talks about how the development of QuicLINK happened. It was a different way of working when across Ericsson they shrank an entire 3G-radio system into a small, portable box weighing barely 40kg including AXE-based switchboards and subscriber databases. In practice, they got rows of 200kg cabinets down to a number of thin cards on a rack.

"We decided early on that Quic-LINK would be built on existing software for the nodes, we would utilize what already existed and affect the software as little as possible," Nyströmer says. "A major challenge was of course that many development units were involved, which usually run their own decision processes. Financing the business has also occurred from two product councils. Coordinating all of this has been an exceptional job." The early development work for Quiclink was done in Boulder, Colorado. The project leader was Dean Miller.

"They did an excellent job," Nyströmer says.

Those who achieved the feat of eventually cracking the AXE problem and who have been responsible for the system integration were the developers in Montreal, where Charles Meubles was responsible.

But despite everything, the biggest challenge was perhaps to market QuicLINK internally and externally without having a finished product to sell.

"Ever since the beginning, in 2006, we were looking for interested customers who motivated Ericsson's management team to go on investing in our product," Nyströmer says. "We began with a scaled-down version with few functions and developed the product further together with the customer."

☑ Text: Lars Cederquist Photo: Gunnar Ask

EVERYTHINGI WATCH HAS TO BE HD QUALITY

What does it take to be a Televisionary? A deep understanding of what people want and need. An ability and expertise in making television more individual and more personal. As a global leader in TV technologies, multimedia infrastructure and services, Ericsson is uniquely positioned to enable The Individual Television Experience.





Free to talk?

No, Voixio, Jaxtr and Blyk are not recently discovered planets... but rather operators that offer free calls, among other things. If consumers won't pay for a service, why not just give it away and make someone else pay?

ree telecom, pioneered by the likes of Skype, is moving from cumbersome computer calls for the internet-savvy to regular handsets, fixed and mobile. "Free" is rapidly coming of age.

Internet-based telephony is nothing new, but fresh initiatives from Microsoft and new approaches such as Voixio's Flash-based system indicate that integrated communication is going mainstream. Voixio has developed an internet telephony system that eliminates the need to download a separate application for making calls by employing Adobe Flash. This makes it easier to make voice and video calls directly from a web browser and to 3G video mobiles, as well as fixed calls to landline and mobile phones.

Users can also divert calls to a landline or

mobile number when not logged into the site. They can make calls to standard domestic and international, landline and mobile telephone numbers, or other Voixio users, or any Session Initiation Protocol (SIP) address. Voixio also allows free conference calls.

Talkster, based in Toronto, Canada, provides free long-distance, international and conference calls from mobile phones, landlines, computers or VoIP phones. No registration or credit card is required and callers need no new software or downloads – only their existing phone. A short advertisement or a personalized offer covers the cost of each call without being disruptive.

The local numbers that Talkster assigns to users to be able to access the service are regular landline phone numbers. In a disclaimer Talk-

ster adds: "We don't charge you for calling your Talkster number from your landline or mobile phone, but your phone provider may charge you something for this call."

Much-discussed Blyk, launched in September 2007 in the υκ, describes itself as a pan-European free mobile operator, funded by advertising. Blyk operates as a mobile virtual network operator, meaning it buys wireless services from an existing operator and resells them under the Blyk brand – or gives them away to the users and charges the advertisers instead.

Blyk targets 16- to 24-year-olds, who receive up to six advertising messages per day and in return are given an allowance of free text and voice minutes (presently 43 minutes). When they sign up for Blyk, users must fill out a questionnaire about their interests. Blyk uses the information

How are you? fine... Visit Mallorca in And You? Free sample! Imok, No extra charge. a bit tired...



talkster mem

to target them with relevant advertising messages, enabling companies to market to very specific groups.

The format that advertisers start with is the short message service (sms), then multimedia messaging service (mms), and then messages can be linked to the web.

Blyk claims to build on in-depth customer research programs, which explains its high response rates: on average, 29 percent.

Mosh Mobile is due to offer a similar service in the us, though users will be asked to reply to sponsored messages. Mosh's homepage says: "Up to three times a day we may open a dialog with one of our sponsors. You may receive one-sentence surveys to help us get to know our members better, you may get exciting videos delivered to your phone about things you like, you may get free downloadable games from our sponsors, coupons you can present to stores for discounts and much more. Each day, if you complete the actions you get more free services. If you want even more, you can request more dialogs and receive even more service credit to use."

Another variant on the free-calls theme is Pumbby, a Brussels-based operation. With Pumbby, users get paid to watch advertisements, regardless of which mobile network they subscribe to. When they sign up on the homepage, they indicate which network they use and how many ads they are willing to receive each day, up to a maximum of 10. The ads are then sent as Wireless Application Protocol (wap) links via SMS to their mobile phones, and for each one that gets displayed, the users get credited with EUR 0.44. The money can be used to help pay their mobile bill, to purchase the advertised goods, or can be put in a bank account.

California-based Jaxtr was launched in March

2007 and calls itself the world's largest social communications company.

Jaxtr works with any mobile or landline phone. When members add their Jaxtr link to their e-mail signature, friends and family can call them from their regular phones from anywhere in the world without paying international toll charges. They simply click on the member's Jaxtr link to generate a local number in their country.

Jaxtr allows users to link their phones with their online social networks to hear from callers worldwide, while keeping their phone numbers private. There is no need to have a phone that provides Wi-Fi access or includes an internet plan. Callers simply use the minutes included in their domestic calling plan to make international calls from their mobile phone. Jaxtr is currently used by over 5 million people.

Another Californian start-up, Pudding Media, is offering an ad-supported VoIP service that is free as long as users are willing to allow their calls to be monitored. Voice calls are scanned by a machine that attempts to pull key words out of the conversation in order to generate relevant ads. According to the company, "When certain key words are spoken, interesting and timely news, entertainment and offers are displayed on the screen."

Advertising-funded content offers new ways of reaching audiences, along with the potential to generate new business models within the industry. Orange uk is running a trial of new advertising-supported content on its mobile internet platform, Orange World.

Some 800,000 of Orange's 15.6 million mobile customers have been given the option of downloading a range of music content (urban, pop, rock and dance) to their mobile handsets for free or for half-price, while ads are displayed on the handset.

It looks as if paying for airtime is becoming old-fashioned.

☑ Text: Mats Thorén Illustration: Ebba Berggren

Libya 1982



Mobile Adventures by Jola Cederschiöld

