ascom

**Workplace mobility
Technology and trends**

Stefan Brämberg CTO
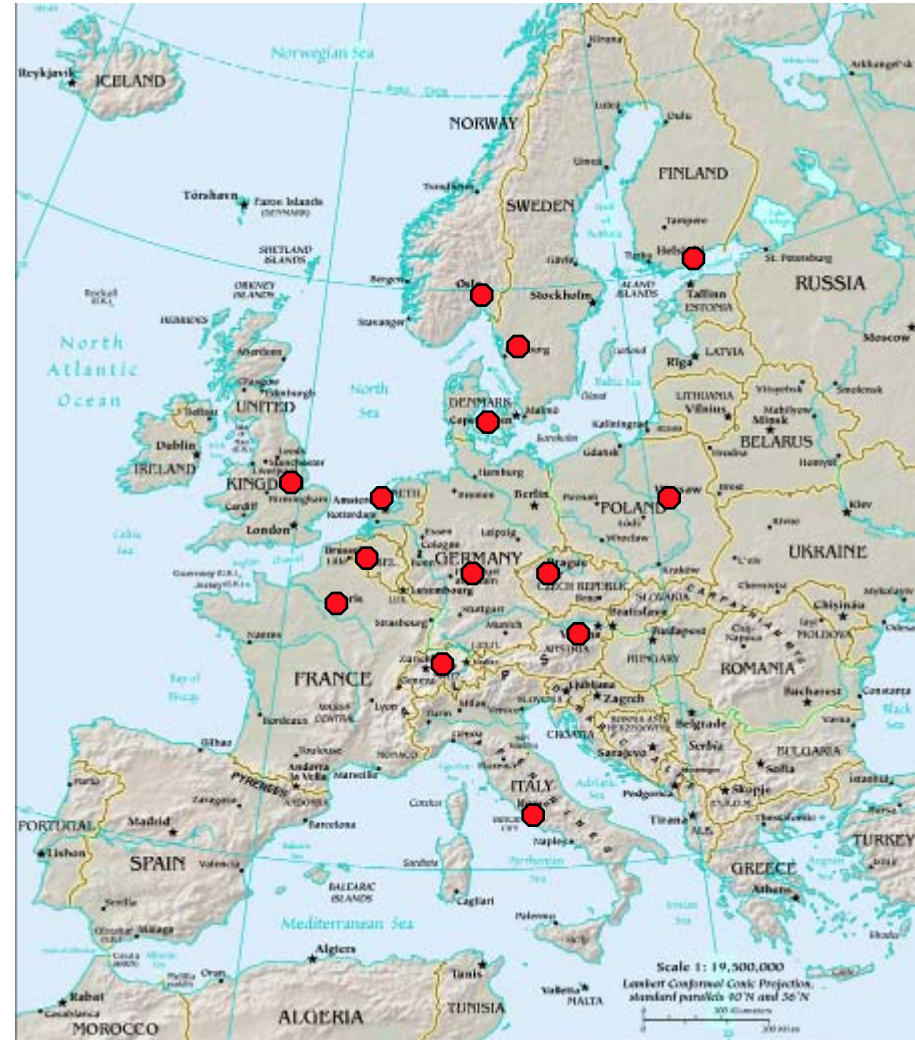
ascom

The Ascom Group

- **Mission critical communication strategy**

- **Two divisions – Security Solutions and Wireless Solutions**

- **Swiss-based with headquarters in Bern**

- **2 100 employees worldwide**

- **Quoted on the Swiss stock exchange**

- **Revenue 2006, MCHF 565 (M€351,6)**

Sales Companies

- **Sweden**
- **Norway**
- **Denmark**
- **France**
- **Netherlands**
- **Belgium**
- **United Kingdom**
- **Germany**
- **Switzerland**
- **USA**

Sales partners – international

- **Australia**
- **Austria**
- **Brazil**
- **Egypt**
- **Greece**
- **Finland**
- **Hong Kong**
- **Hungary**
- **Iceland**
- **Indonesia**
- **Ireland**

- **Israel**
- **Lebanon & Middle East**
- **Malaysia**
- **Portugal**
- **Singapore**
- **Spain**
- **Taiwan**
- **Thailand**
- **United Arab Emirates**

ascom

Our Mission is

**To provide tailor-made on-site wireless
communication solutions that enables quicker response,
to companies where "mission-critical" communication
is of utmost importance.**

ascom

Our business areas

- **Industry**
  - Food industry
  - Chemical industry
  - Process industry
  - Automotive industry
  - Utility industry

- **Hospital**
  - Laboratory departments
  - Radiology departments

- **Elderly care**
  - Intramural care
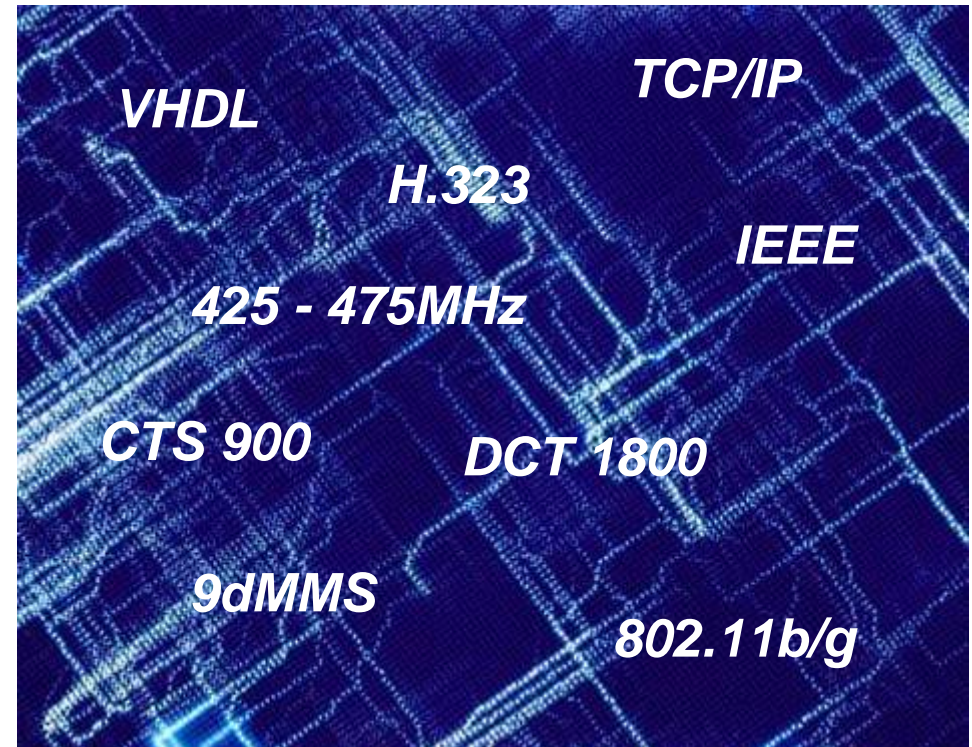 - Extramural care

- **Secure establishments**

- **Retail**

- **Hotel**

Communication solutions – regardless of technology

- **Nurse call**
- **Paging/Alarm**
- **Dect**
- **IP-DECT**
- **WiFi**

VHDL *TCP/IP*

H.323

IEEE

425 - 475MHz

CTS 900 *DCT 1800*

9dMMS

802.11b/g

Technology and trends

Internet and IP communication is here!

- IP communication has become everyone's tool
- Intranet and internet access is very common in most organisations
- Bandwidth and quality of networks are constantly improving
- More and more business critical applications are depending on IP networks

How about mobility with VoIP ?

- **There are today in reality two wireless VoIP technologies**
  - **WLAN (VoWiFi)**
  - **IP DECT**

- **GSM/3G are still mostly TDMA speech centric but data profiles can carry VoIP(eg GPRS), over time 4G will be fully packet based**

- **WiMax(IEEE802.16) is specified to be a standard for long range high data speed, but is not primarily intended for handheld devices, more for backhaul of data to internet core switches**
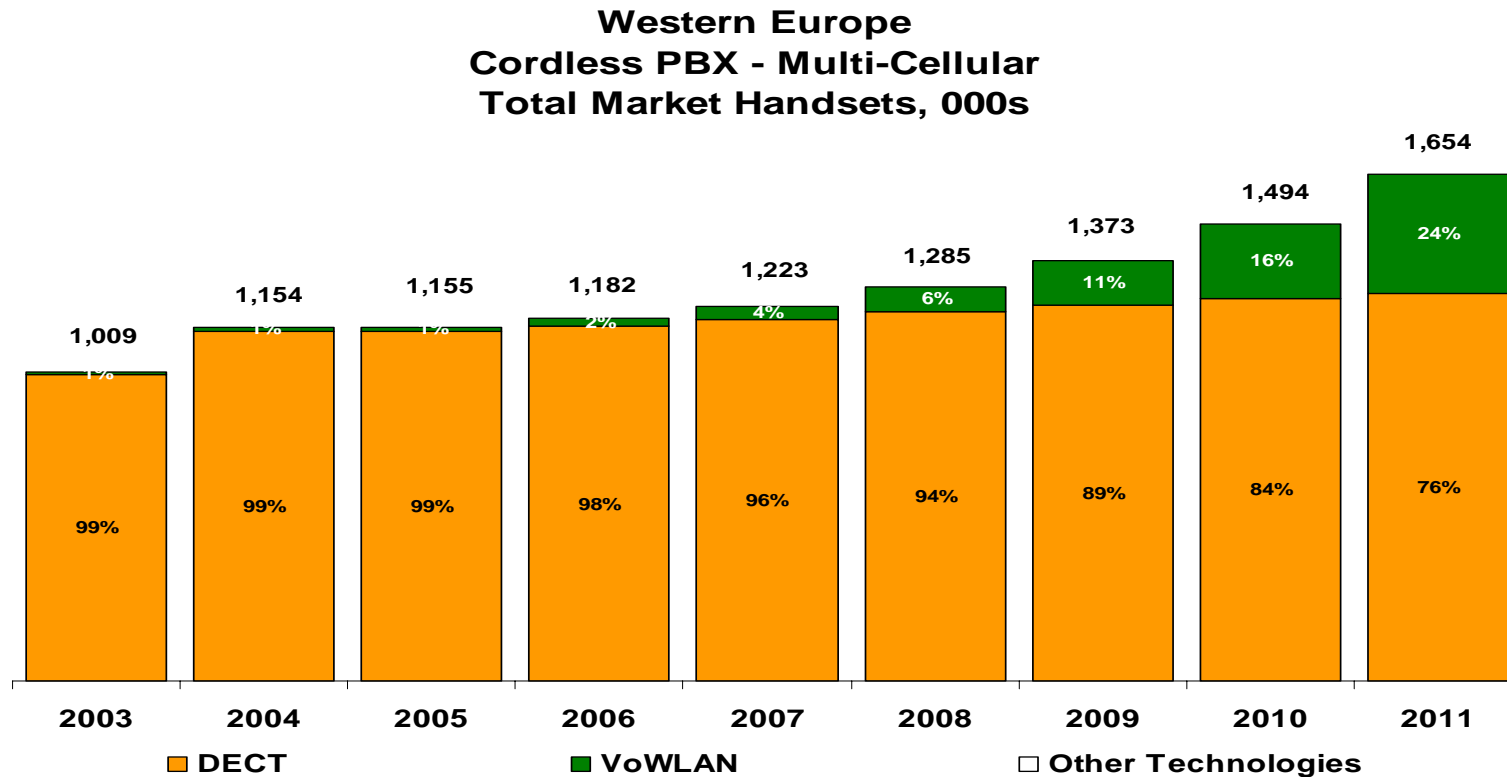
VoWiFi or IP DECT ?

- **From the IP PBX point of view the solutions are equal, with SIP enabled systems, both can be "wireless SIP extensions"**

- **If there is an installed DECT system in use, upgrading to IP DECT is normally the best solution**

- **For sites with a well designed and fully covering WLAN network, VoWiFi could the right choice**

- **Don't forget the gradual migration possibility! An IP enabled DECT system can co-exist with a VoWiFi network and users can be moved as the WLAN is extended and upgraded**

Total Market - Multi-Cellular

Western Europe - Total Handsets, by Technology

Source MZA

Western Europe
Cordless PBX - Multi-Cellular
Total Market Handsets, 000s

	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total	1,009	1,154	1,155	1,182	1,223	1,285	1,373	1,494	1,654
VoWLAN	1%	1%	1%	2%	4%	6%	11%	16%	24%
DECT	99%	99%	99%	98%	96%	94%	89%	84%	76%

■ DECT   ■ VoWLAN   □ Other Technologies

Workplace mobility

Different user profiles

Operative users

Office workers

Road Warriors

Office workers

- **Normally stays inside the building or campus**
- **Speech quality and ease of use its important**
- **Moves between wireless handset and fixed/soft phones**
- **The demand for large displays and sophisticated terminals are limited**

Operative users

- **Normally stays inside the building or campus**
- **Demand purpose build terminals**
- **Information is time critical**
- **Connectivity to process data is very important**
- **Moves between different devises but requires a unified interface**
- **The demand for large displays and multipurpose terminals are limited**
- **Complicated data (X-ray images, drawings, etc) can be accessed via computer terminals**

Road warriors

- **Typically works mostly outside the company premises**
- **Demand multi mode /purpose terminals**
- **Information prioritisation is more important then time**
- **Connectivity to corporate information systems is very important**
- **Needs to be part of the company number plan also while travelling**
- **Need several connectivity options WiFi,GSM,3G**

Next generation onsite mobility

- **Remote management, SW download OTA**
- **Integration with office application, mail, calendar, tasks..**
- **Advanced integration with business critical equipment**
- **Advanced integration with workflow systems "collaboration"**
- **Positioning**
- **High resolution Colour screens**
- **………..**

Already today the Ascom UNITE Suite can interface with most critical process systems

ascom

Fire alarm
PACS
Database
Clinical
E-mail
HIS
Admin
Nurse call
RIS
LIS
Network Management
LAN

WEB	Mail	Contacts	Serial	TCP/IP	
Applications & Information routing					OAT/OAS/ OJS
Messaging	DECT	GSM	E-mail	WLAN	