Proximus

presents

Mobile
Data

Agenda

The Proximus Network

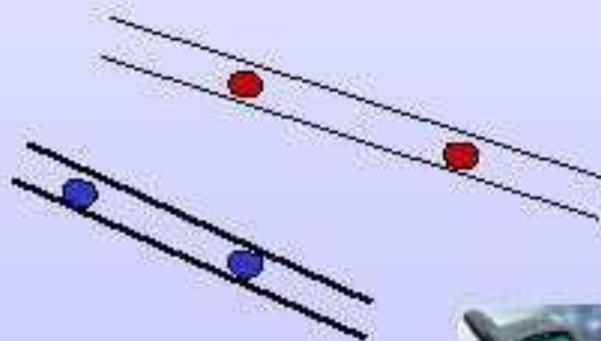CSD – GPRS - UMTS

GPRS

How does it work ?

What is it used for ?

Q & A

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The Proximus Network

Circuit Switched Data (GSM= Global System for Mobile communications)

- Several frequencies per antenna (region)
- 1 frequency = 8 Time Slots (TS)
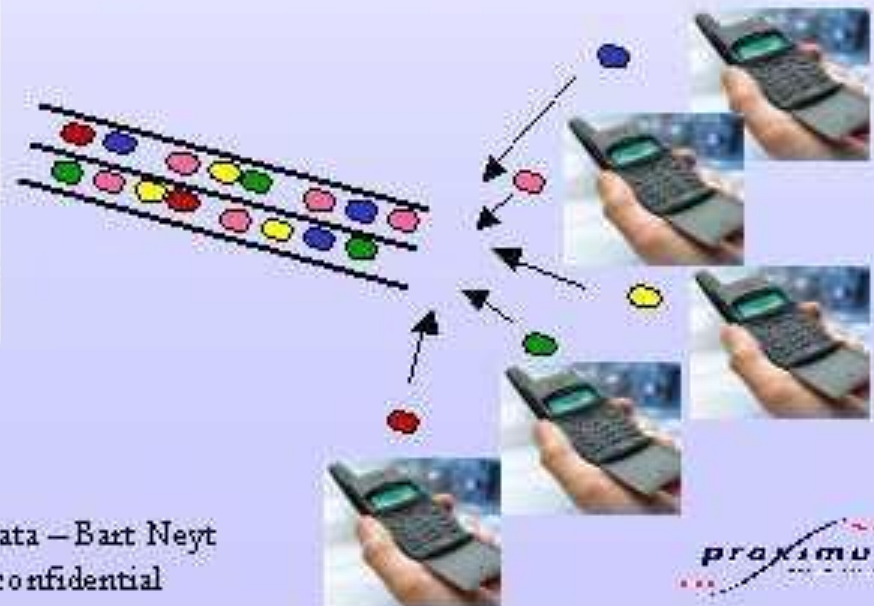- Each end-user uses 1 TS

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General Packet Radio Systems

= Packet Switched Data

- IP-principle : data is split in « packages »
- 1 Time Slot can be used by several end-users

Optimisation of network resources

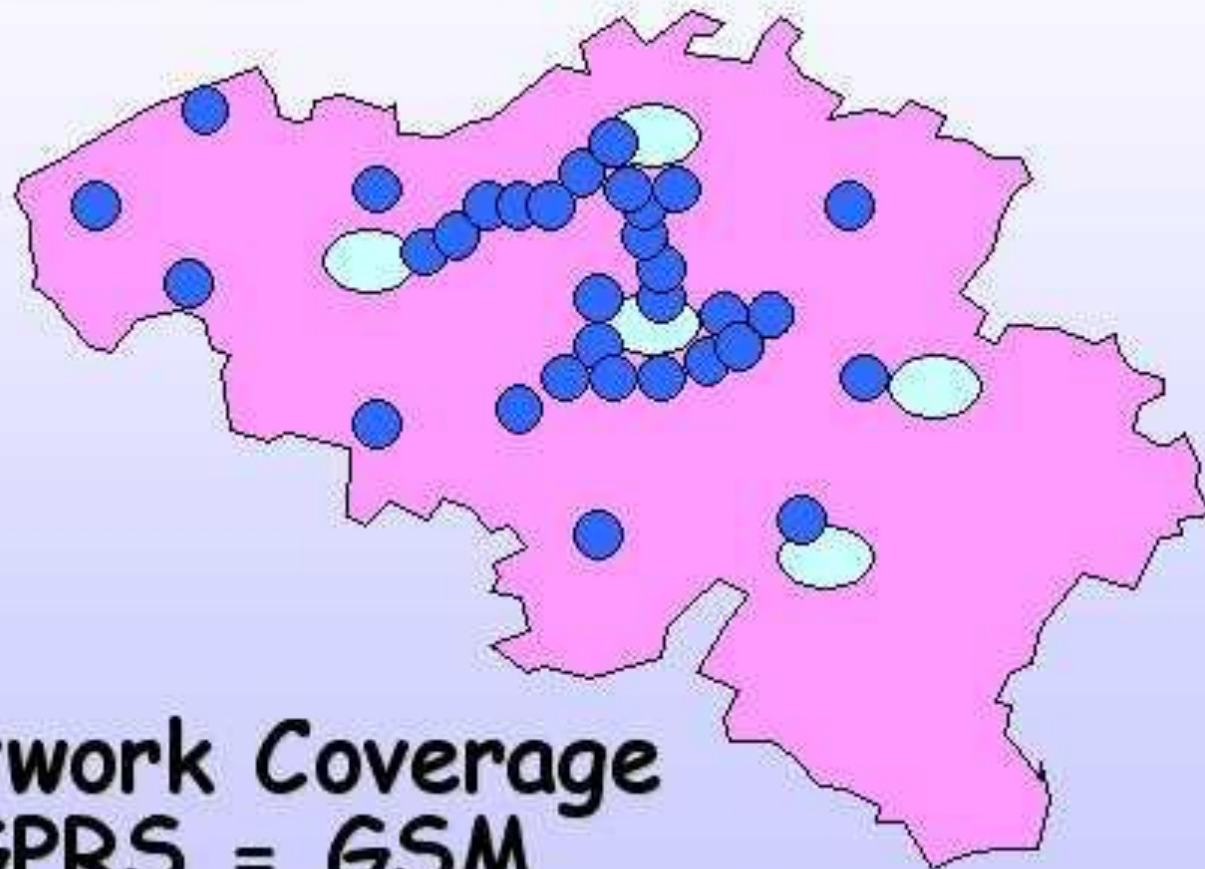proximus

The Proximus Network

- ## UMTS

Universal **M**obile

Telecommunication **S**ystem

- ### Need for High data rates
- ### Need for new services
  - Video telephony
  - Electronic business cards
  - Streaming video for security
  - Virtual workgroups
  - ...

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Do we need GPRS ?

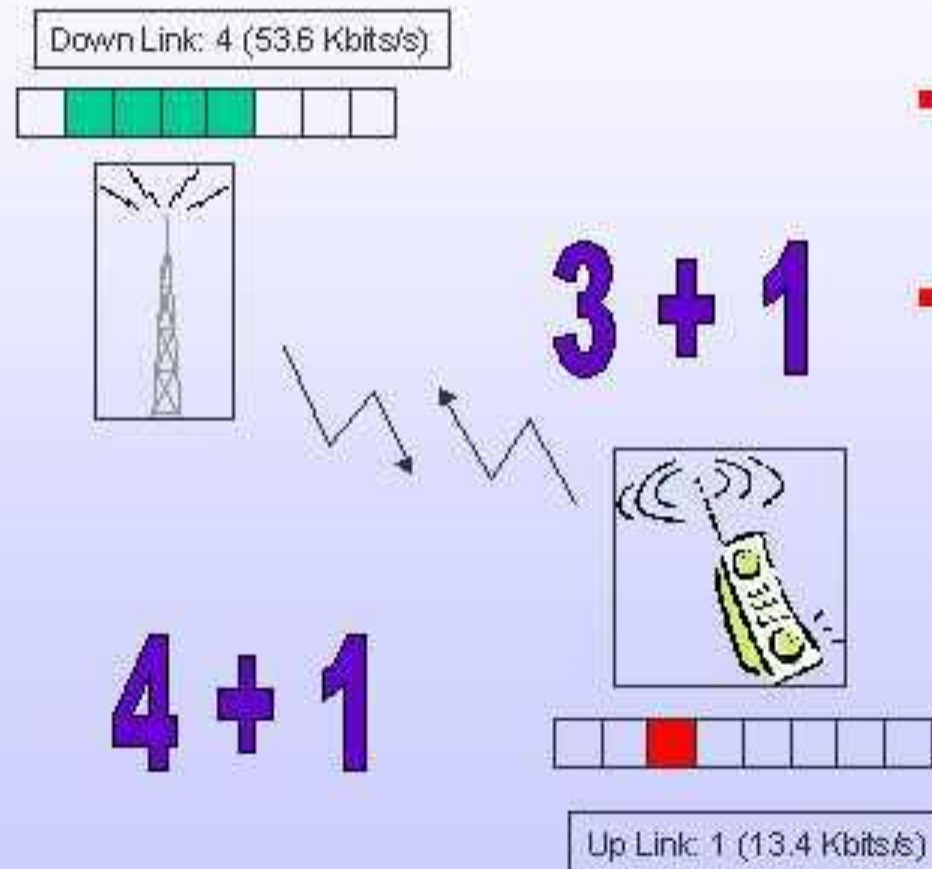## Network Coverage
GPRS = GSM

The Proximus Network

From CSD => GPRS is a revolution

From GPRS => UMTS is only an evolution

- GPRS is based on current GSM network
  Same coverage roll-out => 99,9 %
- GPRS uses IP principle
- Always on possibility
- Billing is volume-based > < time-based

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GPRS Data Rates

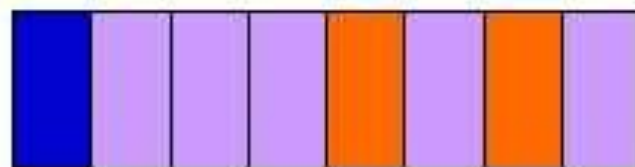Down Link: 4 (53.6 Kbits/s)

3 + 1

4 + 1

Up Link 1 (13.4 Kbits/s)
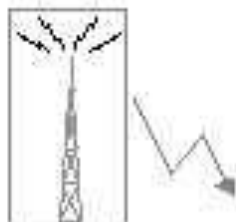
- **Up Link :**
  - **from handset to network**
  - **1 timeslot = 13.4Kbits/s**
- **Down link :**
  - **From network to handset**
  - **3 TS = 40.2 Kbits/s**
  - **4 TS = 53.6 Kbits/s**

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GPRS Data Rates

Slot not used

Control Channel

GPRS

GSM

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GPRS Handsets

Cable Data Suite

Bluetooth

Application Trends

Several major application groups are defined

Mobile office

Applications that enable the user to wirelessly access
any type of office functions or
access to other applications/content typically available in an intranet

Field support

Salesforce enablement	Workforce management

Remote monitoring and tracing

Telemetry	Security	Traffic telematics	Logistics

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Data Services

Mobile office

- **Mobile Intranet**

- **Mobile Internet**

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Data Services

- Emails (No time-waste when meeting is cancelled...)
- Newsgroups (Medical appl. for urgent consulting, Net meeting...)
- Browsing (look for information : traffic / maps / ...)
- Audio streaming (Media-player...)
- Always latest version available
- For some specific professions (waterways...)

B2B **RES**

IP/VPN Tunneling   pop3 <-- **Email** --> Webmail, pop3

Chat

DB access via website <-- **Browsing** -->Surfing

Cy tailor made appl.   Audio

FTP/ T-FTP
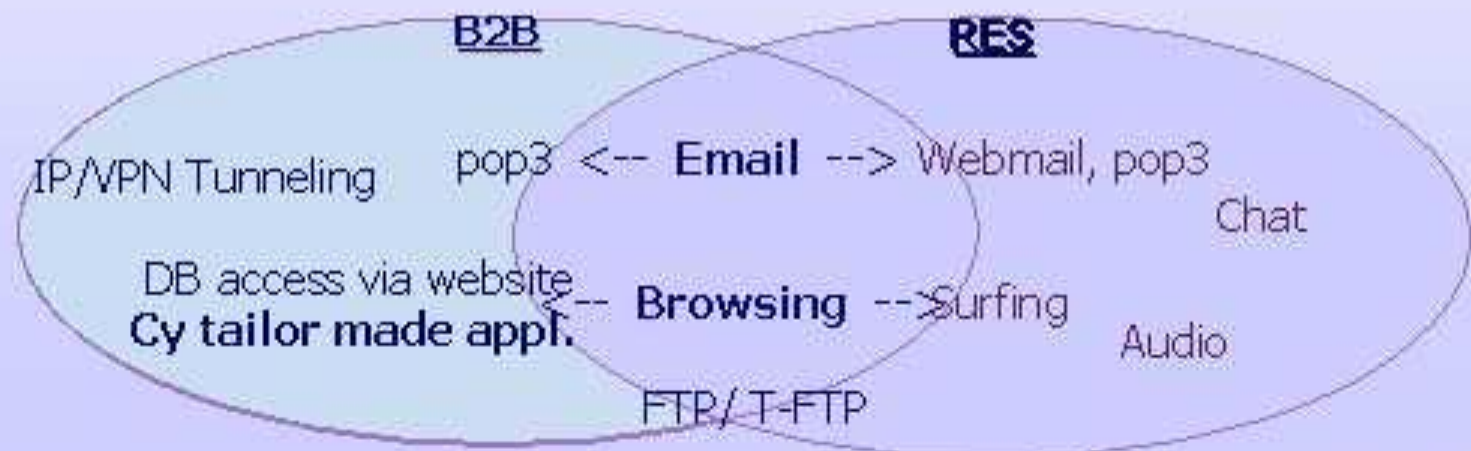
B2B Mobile Data — Bart Neyt
Company confidential

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Data Services

I do not have that information with me,
Let's make an appointment for next week

Press Communiqué : My clients
are sooner informed than I am

An advertising campaign
discussion. Check Online
Media-buying availability

My catalog is not the most
recent, but the last version is
available on our web-site

Architect & constructor on
site, changes plans and
sends them immediately to
client for approval.

It's just a start

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Data Services

Mailservices – SAP – CRM – Workorders ...

APN
Acces Gateway

Leased Line

Or BiLAN

Base Station
Subsystem
(BSS)

SGSN

IP Backbone
network

GGSN

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Q & A ?
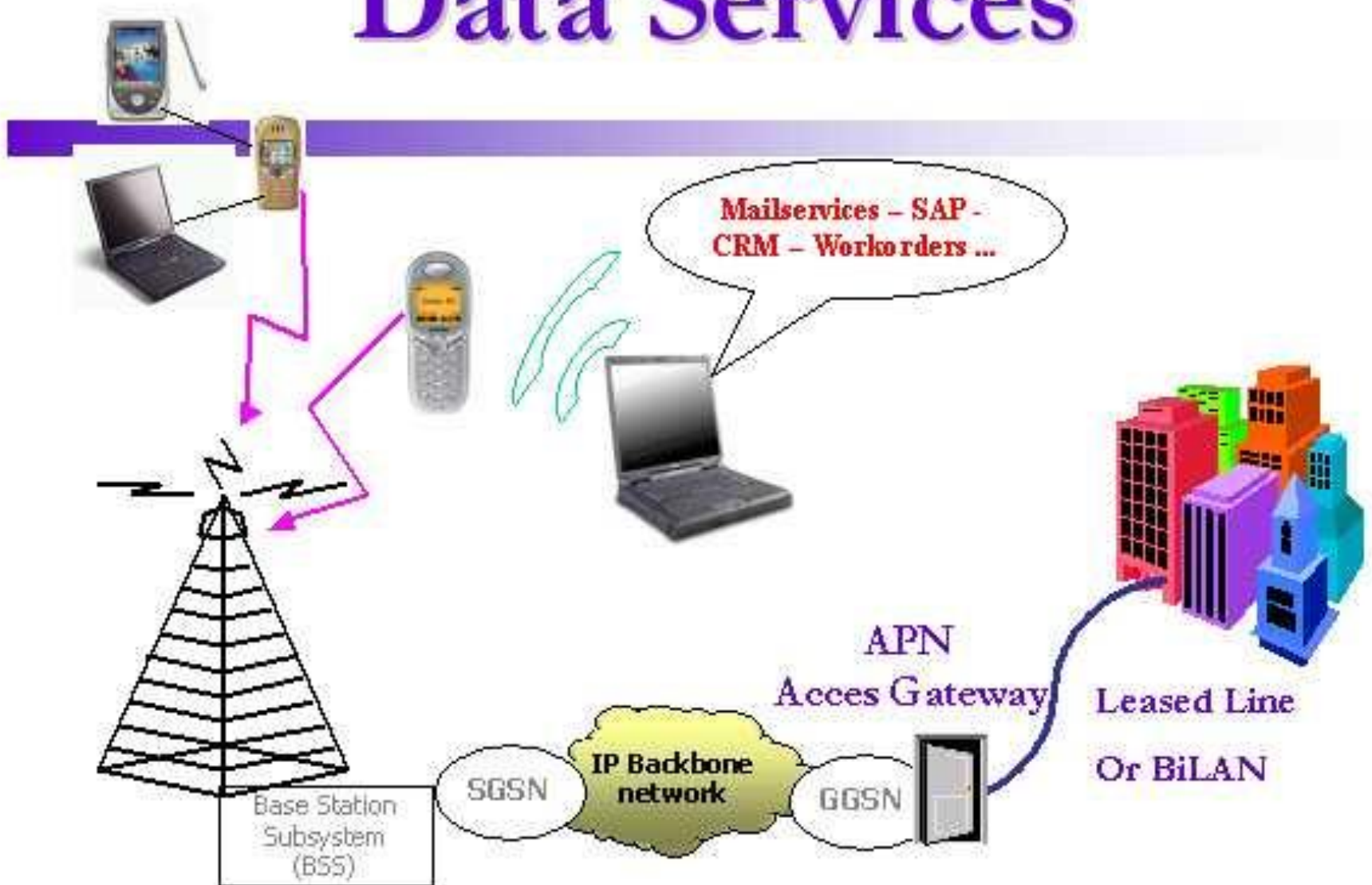
Demo

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Conclusion

Multiple Devices
for multiple purposes
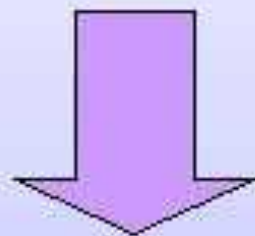
Find out the Mobile Need

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THANK YOU

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