

Service Platform and Network Infrastructure for Ubiquitous Services



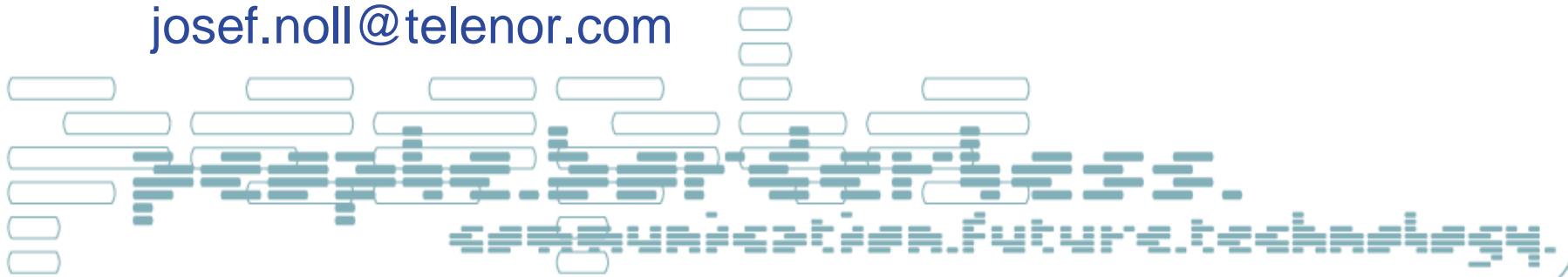
Seamless access and authentication to networks and services

Dr. Josef Noll

Telenor R&D, Norway

Research Manager

josef.noll@telenor.com



Focus



- User expectations for future services
→ Functionality of service platforms
- Role of personalisation

(Private) Customer expectations & Operator constraints

Customer expectations

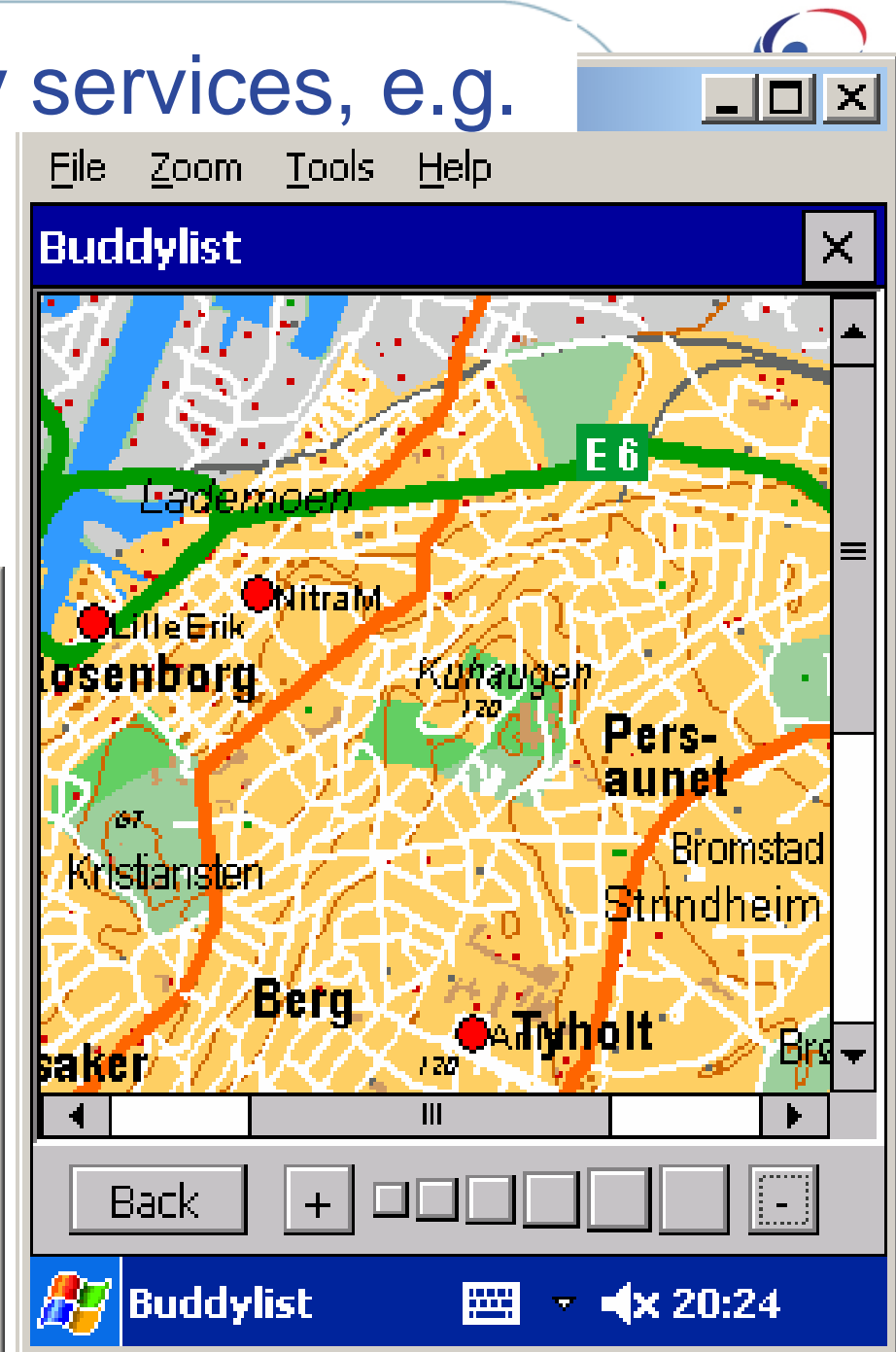
- Works first time and ever
 - Like a phone
 - Unlike a PC
- Easy
 - ~~Plug & Play~~
- “Value for money” - affordable

Operator guidelines

- Help the customer to the very end (it shall work)
- It shall make money
 - Limit support to selected configurations
 - As little help from customer service as necessary

Supporting Community services, e.g. group communication

- Define “dynamic groups”
- Finding your group members
- Check availability
- Establish group communication



Future Service composition

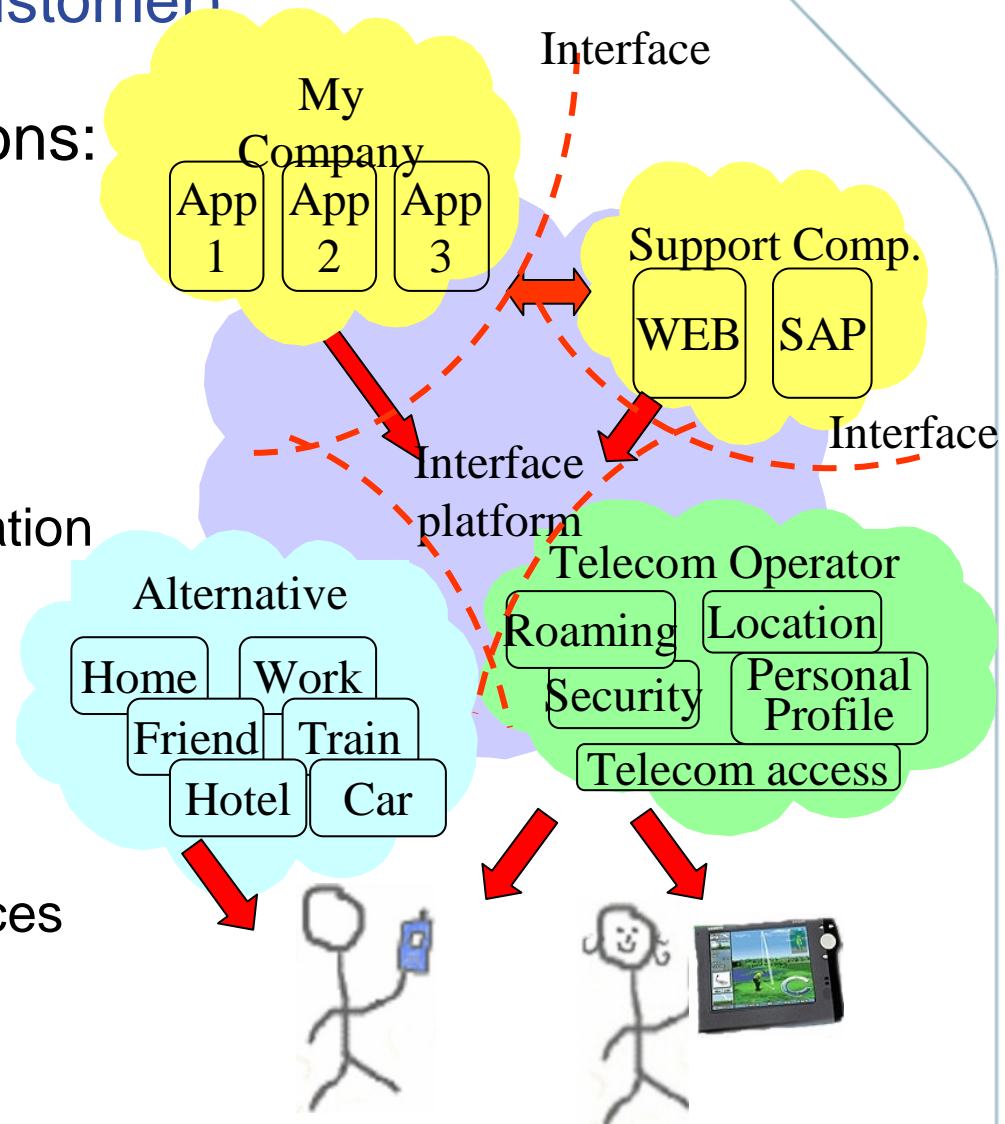
(transparent for the end customer)

- Next Generation Applications:

- Customized services
- Complex to manage
- High flexibility
- Short time to market
- Complex Telecom-IT integration

- Telecom challenges

- Support the customer: security, personalisation
- Join forces with others
- Adaptive & composed services



“Personalisation is adaptation”

Situation today: 1 phone (+ 1 laptop), not integrated (partly integration of mailbox)

2003

- Integration of calendar and contacts, later on: travel agency, secretary, group information
- Content adaptation (example: Opera 7 on P800)
- Structural characteristics of a text, semantic author annotations (as from e.g. CognIT)

2004

- Phone capability on laptop or phone, decide where to take the phone call. Later on "virtual terminal".
- Architecture for distributed user profile, selection of standards for profile components
- WEB content adjust to usage profile (terminal capabilities: Java or html, size, colours, other constraints)
- Voice based authentication to WEB server, or Mobile Phone/Bluetooth based authentication (adv. SAP profile def.)
- Dynamic network discovery and selection, e.g. Bluetooth, WLAN, GPRS, "phone at home", CPA over fixed network

“Personalisation is adaptation”

2005

- Basic user preferences (notice of relevance, example: indicating important emails as MMS on mobile phone)
- Advanced user profiles for "people with ordinary needs", e.g. big characters (need user profile, context adaptation, service composition, service platform reconfiguration)
- Interconnected devices, "my virtual terminal world"

2006

- Profile migration (typical: automatic update of profile according to habits)
- Advanced context awareness (location & role)
- Advanced security through SIM, PKI and one-time-password (OTP)

2008

- Network composition (define automatically which service shall be distributed over which network)

Requirements for service platforms, support:

- Wireless: “The last time we were connected by a wire was at birth!” [Motorola]
 - Various radio systems
 - Limitations: battery, integration
- My terminal(s)?
 - Every device is a communication terminal
 - Need to personalise: communication and content
 - Supply with adequate security
- Seamless login and application related security



Related projects



- Advanced Service platform, dealing with semantic WEB services
FP6 Adaptive Service Platform - <http://asg-platform.org>
- Operator strategies for advanced home services
Eurescom P1401 study OSIAN – www.eurescom.de - P1401
- Personalised services in the home
FP6 ePerSpace – <http://www.ist-eperspace.org>