Addendum to Lecture 2: GPRS/ 2.5 G

INSE 7110 – Winter 2009
Value Added Services Engineering in Next Generation Networks
Week #3
2.5 G

Target solely data services
- Use packet switching principles between mobiles and bases stations for:
  - Faster connection set up
  - Higher data rates
  - Lower cost
- Rely on new nodes which communicate using packet switching principles

No impact on telephony
- Still based on circuit switching principles
- No change at all on the circuit switched part of 2G
GPRS as illustration

New class of nodes:
- **GPRS Support Node (GSN)**
  - Serving GPRS Support Node (S-GSN)
    - Entry point
  - Gateway GPRS Support Node (G-GSN)
    - Gateway to the external packet switched network (e.g. Internet)

New interfaces
- Interface S-GSN / G-GSN
- Interface S-GSN with the existing GSM nodes
GPRS as illustration (Simplified version)

Mobile station

Base Station

SMS Message Center

SGSN

Operator domain

HLR

VLR

GGSN

Internet
Reference: