

# Development of GSM, GPRS and UMTS

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# Architecture of the Siemens GSM Solution

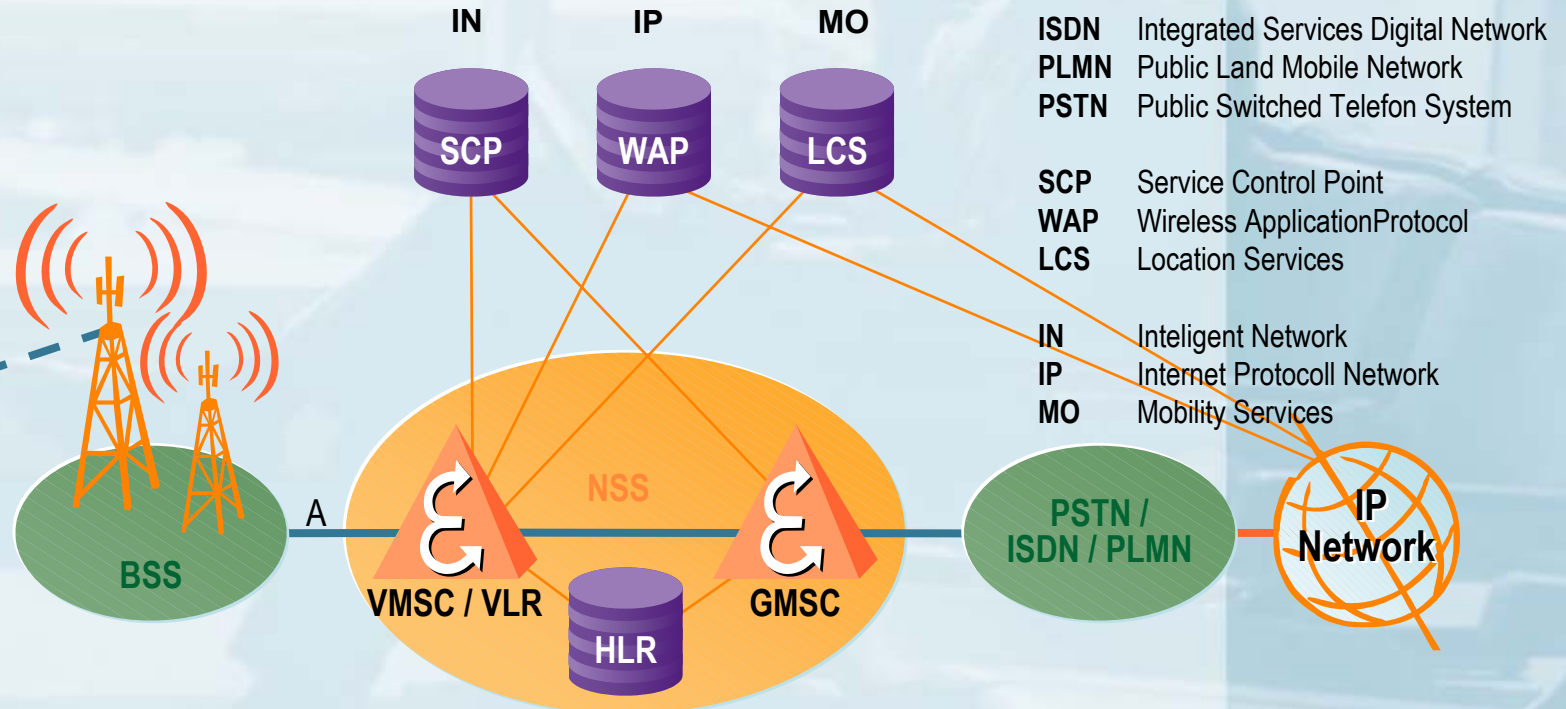
## GSM

Full turn-key provider for high flying applications and services,



e.g.

- Prepaid
- WAP
- Location Services



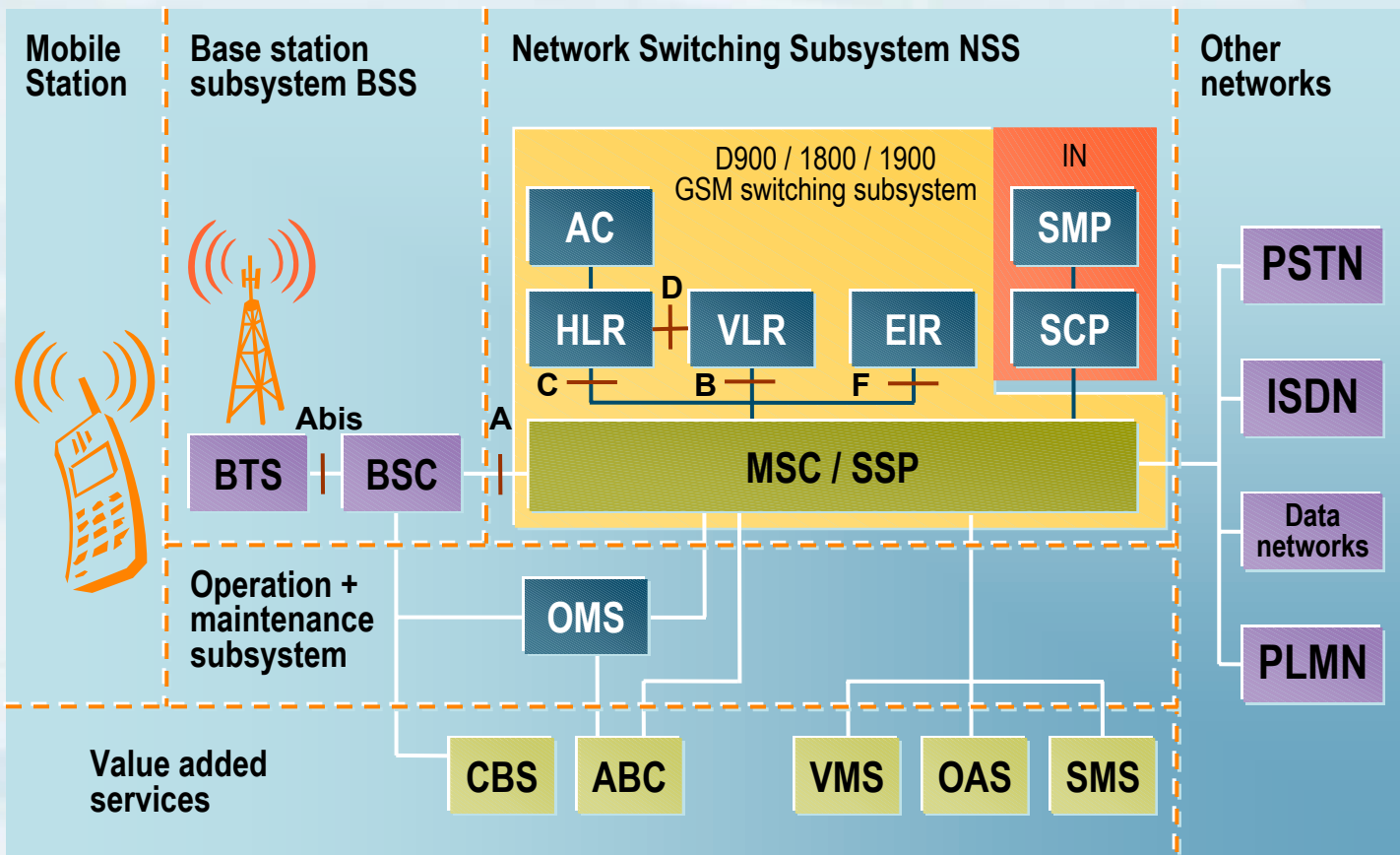
**NSS** Network Switching System  
**MSC** Mobile Services Switching Center  
**GMSC** Gateway MSC  
**VMSC** Visited MSC

**BSS** Base Station System  
**VLR** Visitor Location Register  
**HLR** Home Location Register

**ISDN** Integrated Services Digital Network  
**PLMN** Public Land Mobile Network  
**PSTN** Public Switched Telephone System

**SCP** Service Control Point  
**WAP** Wireless Application Protocol  
**LCS** Location Services

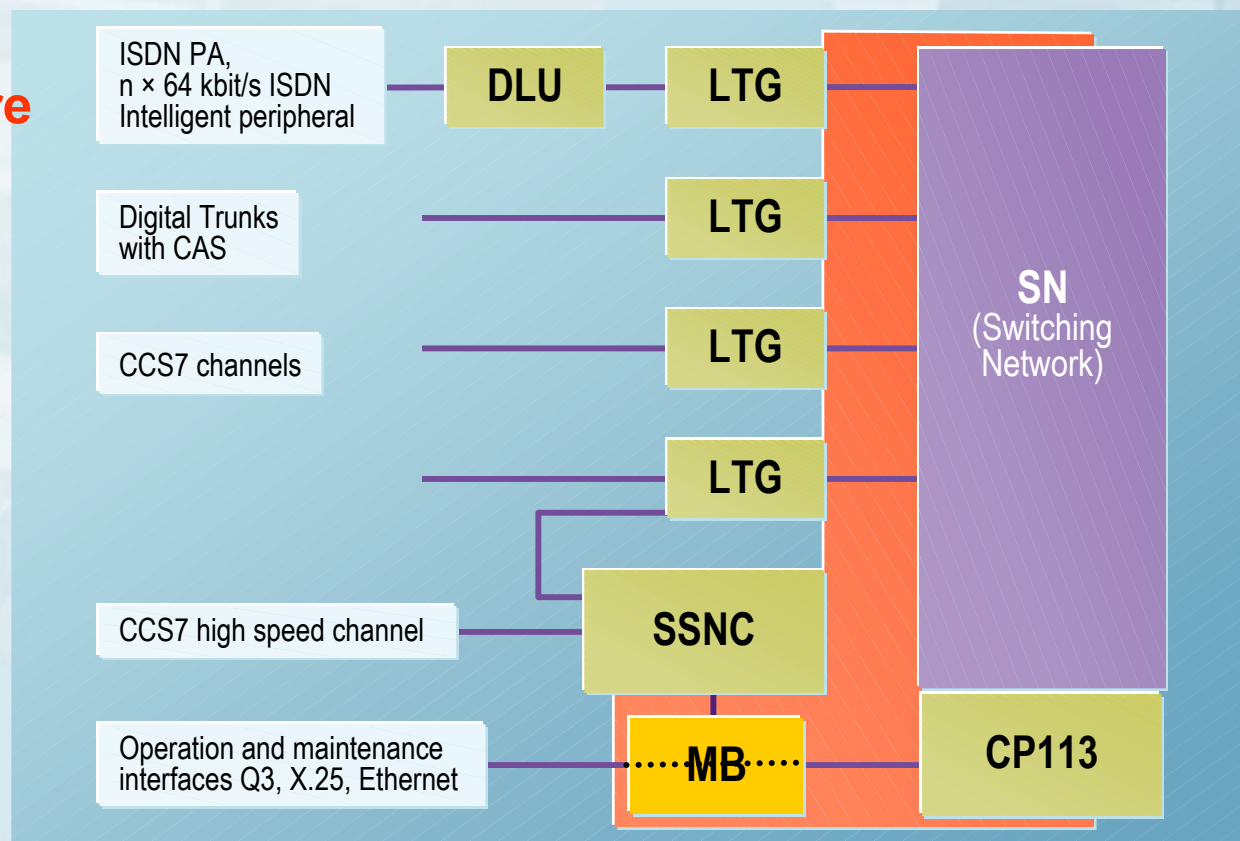
**IN** Intelligent Network  
**IP** Internet Protocol Network  
**MO** Mobility Services



- MSC** Mobile Services Switching Center
- SSP** Service Switching Point
- BSC** Base Station Controller
- BTS** Base Transceiver Station
- VLR** Visitor Location Register
- HLR** Home Location Register
- AC** Authentication Center
- EIR** Equipment Identification Register
- SCP** Service Control Point
- SMP** Service Management Point
- ISDN** Integrated Services Digital Network
- PLMN** Public Land Mobile Network
- PSTN** Public Switched Telephone System
- ABC** Administration and Billing Center
- CBS** Cell Broadcast Service
- VMS** Voice Mail Service
- OAS** Operator Assistance Service
- SMS** Short Message Service

## Future proof platform upgradeable to 3g-Architecture

- Based on multiservice platform
- Smooth upgrade towards 3G Architecture
- Outstanding reliability and availability figures



**MSU** Message Signaling Unit  
**SSNC** Signaling system network control

**CP** Coordination processor  
**MB** Message buffer

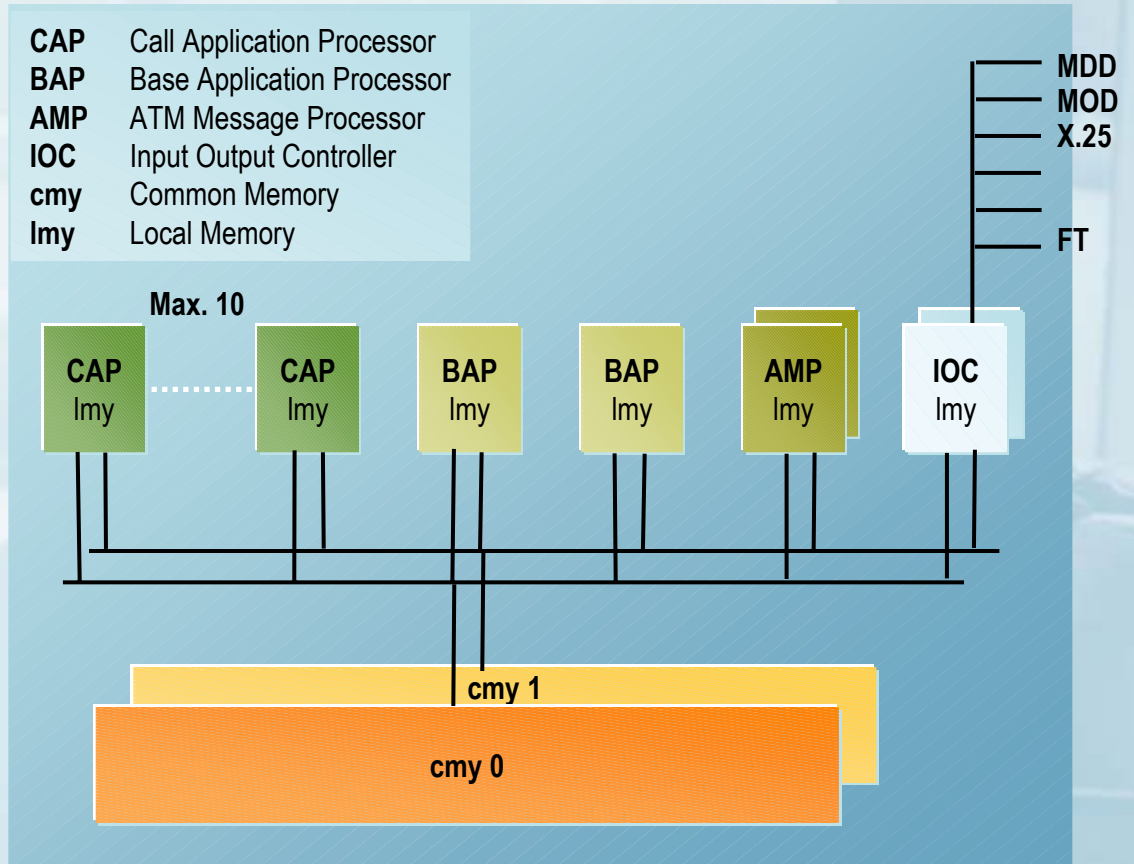
**DLU** Digital Line Unit  
**LTG** Line Trunk Group

**Line Trunk** Subscriber Line  
Node Interconnection Line

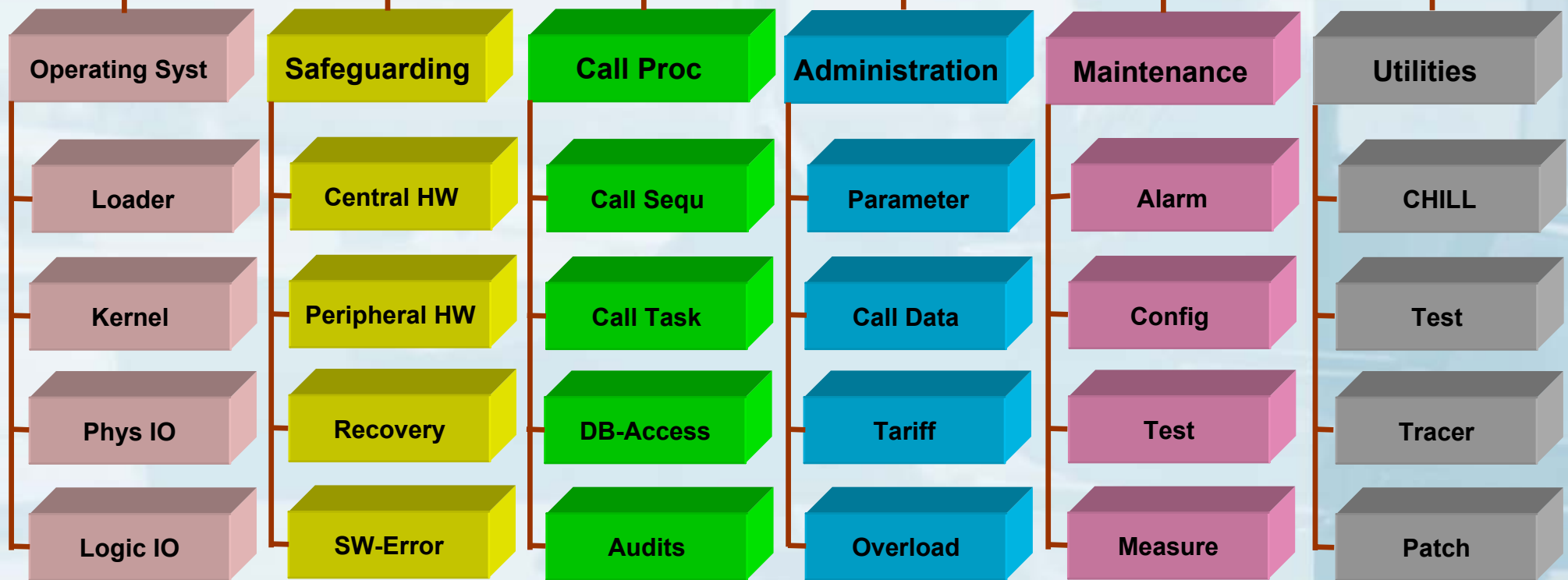


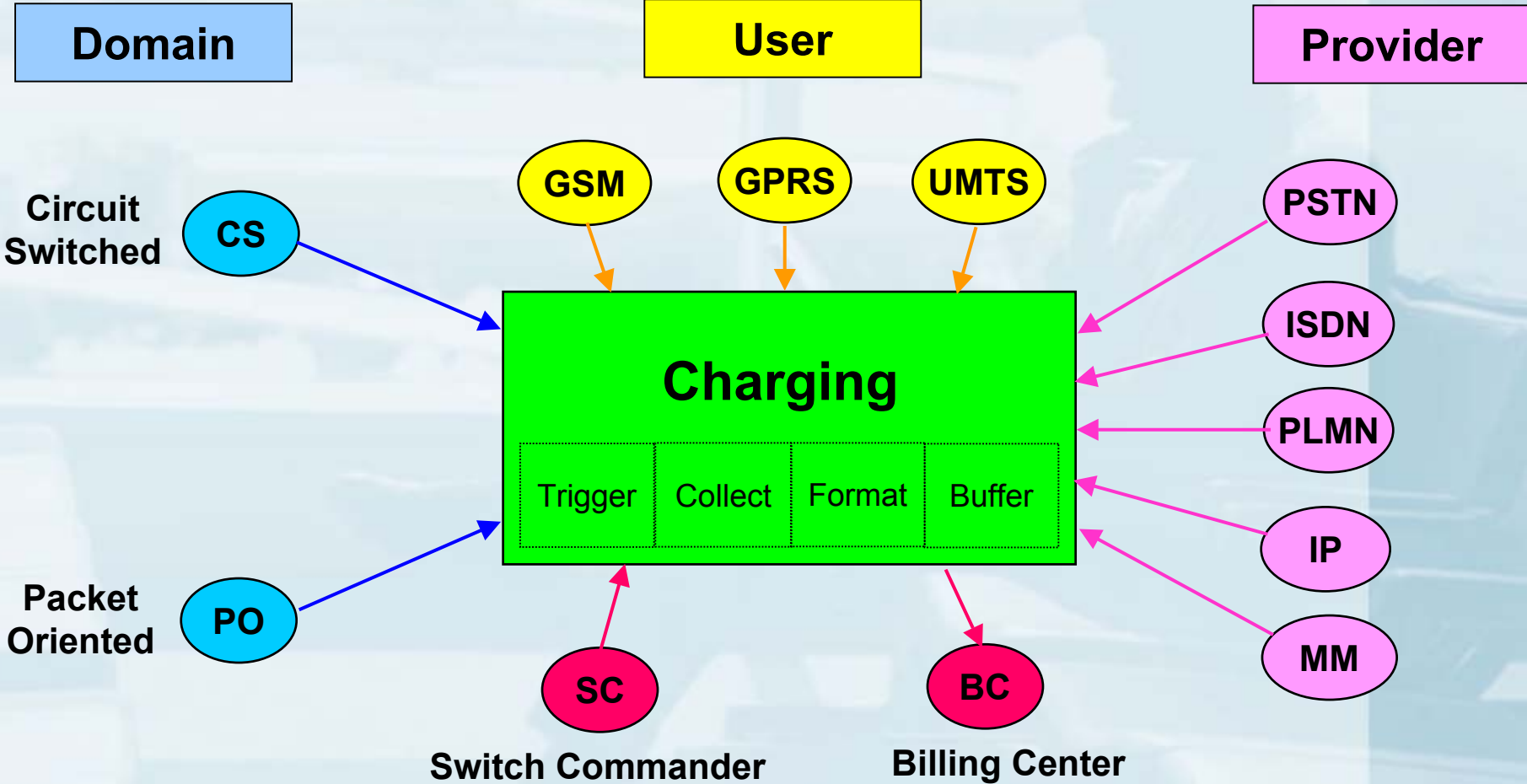
## New Coordination Processor Architecture

- New Motorola 68040-CPU
- Increased Common Memory
- New Common Memory Access High Speed Link
- Reduction of Local Memory Access Time
- Reduced floor space



## CP-SW







# CS Project Organization

