



We change the shape of the world



## SOS (Sea of SIMs) Server Application



**SOS** is an upgrade platform for NovaTec's **Mobile Gateways** (NMG) to allow a centralized SIM and GSM engine management.

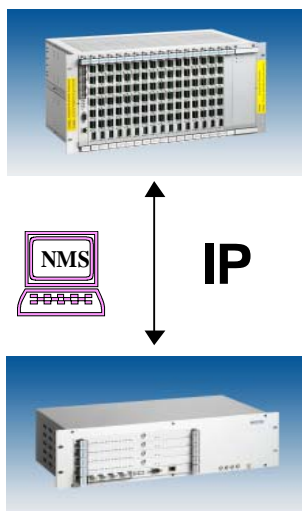
**SOS** is a pool of SIMs which must not necessarily be located at the same place as the NMGs. The new Enhanced Wireless Access Unit (EWU) in the NMG sends a request for the necessary SIMs according to their configuration via IP network to the SOS. The SOS which holds the SIMs, will select the appropriate SIM out of its pool and provide the data of this SIM to the EWU, again via IP network.

EWU also allows an optional local SIM reader card with up to four SIMs per channel for local SIM provision. The local SIMs and the remote SIMs located in the SOS can be configured as one common pool.

Due to the non physical connection between the SIMs and the GSM engines a number of advantages can be attained.

### The benefits:

- Central SIM storage & management.
- Intelligent, automatic SIM-to-GSM channel mapping based on network, tariff, remaining budget, etc.
- Each SIM can be dynamically allocated to each GSM channel.
- Optimal use of prepaid SIM cards.
- SIM and IMEI of an existing pool can be centralised in one system and dynamically allocated to the GSM channels.
- Secure placement of the SIM cards as they are stored away from the NMG location.
- Each EWU is directly linked to corresponding SCU on the SOS side giving complete back to back communication between NMG and SOS.
- In connection with the NMS Network management system all SIMs can be configured from a centralized remote location, for any number of NMGs and SOS being operated.
- All reports for prepaid SIMs being empty or any errors or ASR values can be monitored and managed by the NMS (alarm generation via E-mail and SMS).
- The optional local SIMs can be used as automatic back-up in case of eventual disconnected IP link or during SIM board maintenance in the remote SCU.





# We change the shape of the world

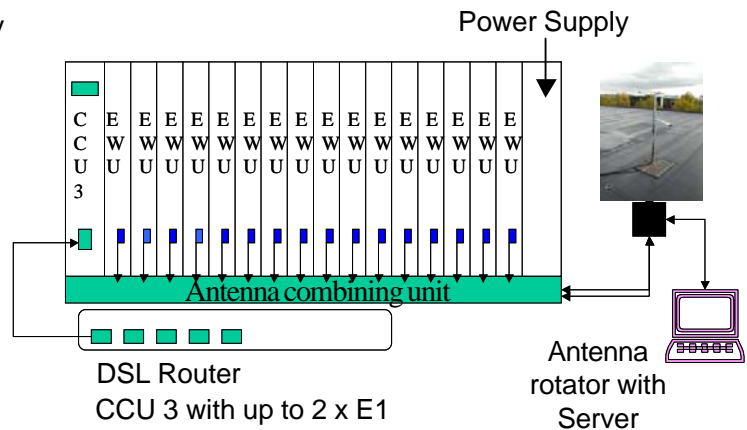
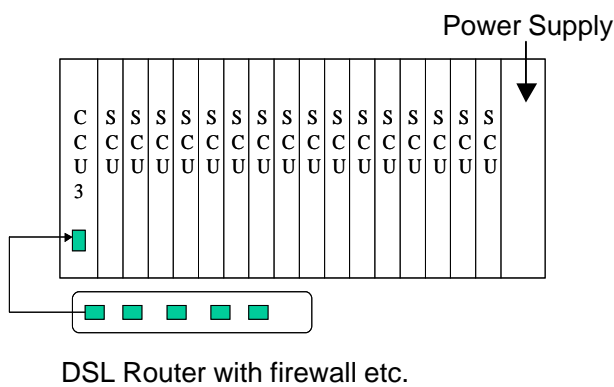


## Typical Build Up of SOS (remote side)

One CCU is required and up to 16 times SCU can be held in the unit, each SCU can hold 20 SIM cards and only an IP connection is required (no E1) making a total of 320 SIM cards per SIM server.

## Typical Build Up of NMG (local side)

One CCU is required and up to 16 times EWU can be held in the unit, each EWU has 4 GSM Channels. An IP and E1 connection is required. On each EWU are 4 local Backup SIM cards per channel available in case of Internet breakdown.



## Rack to Rack or Channel to SIM

NMG's equipped with CCU (Central Controller Unit) and EWU's (Enhanced Wireless Access Unit).

SOS equipped with CCU and SCU (SIM Carrier Unit). All SIMs are located here.

