



Customer Profile

Nawras is a joint venture between Qatar's Qtel, European telecommunications company TDC and several prominent Omani partners. As the second operator in Oman, Nawras has the widest network coverage in the country, serving approximately 92 percent of the population.

A dynamic mobile services provider, Nawras always strives to improve its operations and bring its customers the best mobile services the world has to offer.

Website: www.nawras.om

FULL SCOPE

Nawras significantly improves capacity on its network in Oman with Ericsson's GSM Packet Abis solution

To cope with growing capacity requirements and as part of a move towards all-IP, Nawras selects Ericsson to introduce IP in its backhaul and radio access network nodes.

Nawras was quickly running out of capacity in the metro area radio access network (RAN) backhaul. The decision was made to improve network efficiency by migrating to IP in the backhaul as well as in the RAN nodes. Ericsson was selected as a partner as it could provide an all-IP RAN, for both GSM and WCDMA and even LTE in the future.



“ GSM Packet Abis is an indispensable enabler for IP when creating efficiency in the radio access network, resulting in reduced backhaul cost.”

Nasser Esfahani,
Director of Engineering, Nawras

Ericsson delivered its GSM Packet Abis solution, which consists of a Site Integration Unit together with the features Abis Optimization, Abis over IP and Abis Local Connectivity. This was integrated with the Ericsson Satellite Backhaul Solution, allowing cost effective IP transport and coverage of remote areas Nawras wanted to maximize the stability of IP transport for voice services and the Ericsson Abis over IP solution proved to be reliable, meeting all radio KPI's. In addition, the Ericsson inbuilt synchronization over IP solution is extremely stable. The overall result is significant capacity gain, decrease in backhaul costs and the realization of Nawras' vision for an all-IP RAN. Ravinder Narula, Sales Manager, Nawras account, Ericsson explains: "Abis is the interface between the Radio Base Station (RBS) and the Base Station Controller. The introduction of IP in the Abis interface is a prerequisite for packet transport in the RAN backhaul."

The GSM Packet Abis brings four main advantages for Nawras. Through traffic optimization and silence removal in mobile voice calls, the solution reduces the RBS backhaul bandwidth and enables a saving of up to 50 percent on capacity. Via the Abis over IP feature native IP transport is introduced and capacity need can be reduced even further. The solution also provides Abis Local Connectivity which enables regional switching of voice calls. Local switching in the RBS means that for total voice traffic a very large portion of load on the Abis link is eliminated. Finally, the Ericsson solution opens up the possibility of using true 2G/3G transport sharing and traffic aggregation for 2G and 3G. This will ensure improved efficiency when 3G traffic grows on the customer's network.

Nawras' business objective when it embarked on this project was to achieve a 20 to 50 percent gain in capacity. Ericsson's GSM Packet Abis has performed well above expectations, achieving a 70 percent capacity gain in total. Nasser Esfahani, Director of Engineering, Nawras sums up the success: "GSM Packet Abis is an indispensable enabler for IP when creating efficiency in the radio access network, resulting in reduced backhaul cost."

For Nawras, this solution makes it possible to take the next steps towards its all-IP vision for the network, encompassing GSM and WCDMA together with a packet core network. With high network efficiency it is possible for Nawras to expand its business while keeping operational expenditure low. In a time when growth is key, both in terms of geographical footprint and the introduction of advanced services, this places Nawras in a very strong position for the future.

Overview

Customer
Nawras, Oman

Customer Objective

- Address increasing backhaul capacity needs
- Increase network efficiency
- Reduce opex

Ericsson Solution

- GSM Packet Abis solution
- Satellite Backhaul solution
- MINI-LINK microwave transmission

Customer Benefits

- The first step in the move to all-IP
- More capacity for growth
- Cost effective remote coverage
- Improved competitive position.