

Telenor Satellite Services



Network Background

Telenor Satellite Services (TSS) provides mobile data and voice communications services, over satellite, to customers around the world via multiple satellite networks, including Inmarsat. The services over Inmarsat include telephony, telex, high-speed data, Internet, and packet data communications. These services are provided via Telenor's network of teleports located worldwide to route communications efficiently within the ocean regions

- Southbury, Connecticut—serving the Atlantic Ocean Region-West (AOR-W) and the Atlantic Ocean Region-East (AOR-E)
- Santa Paula, California—serving the Pacific Ocean Region (POR)
- Eik, Norway—serving the Indian Ocean region (IOR) , the Atlantic Ocean Region – West (AOR-W) and Atlantic Ocean – East (AOR-E) Region

The Challenge

TSS needed to upgrade the telex switching system located in Southbury, Connecticut to improve the telex communication services to their customers.

The Solution

TSS chose the NSGDatacom's PAC III TURBO product solution to upgrade the existing telex switching system as it best fit the technical specification. Additionally, TSS had over ten years of excellent experience using NSGDatacom's TURBO and X.25 products and were impressed by both the performance and reliability of the products.

The PACIII-based switching system provides automatic and manual facilities for setting up national and international telex calls, using specialized signaling schemes required for INMARSAT and other satellite services. Inherent in the system is the ability to convert these telex circuit protocols to TCP/IP as defined in CCITT Recommendation U.61 and in Telenor's requirements.

The PACIII switching system services the telex network, operating at a speed of 50 baud and using CCITT International Alphabet No. 2 (ITA2). Additionally, it services the Internet Protocol (IP) network via a 10/100 Base T interface using Transfer Control Protocol (TCP) and the ASCII alphabet. The system is capable of routing calls originating from a telex port to either a terminating telex port or to a "virtual" trunk group on the TCP/IP interface. The system is also capable of routing calls originating from a TCP/IP "virtual" trunk group to either a terminating telex port or back out to another TCP/IP "virtual" trunk group.

Supports conversion to TCP/IP per CCITT Recommendation U.61

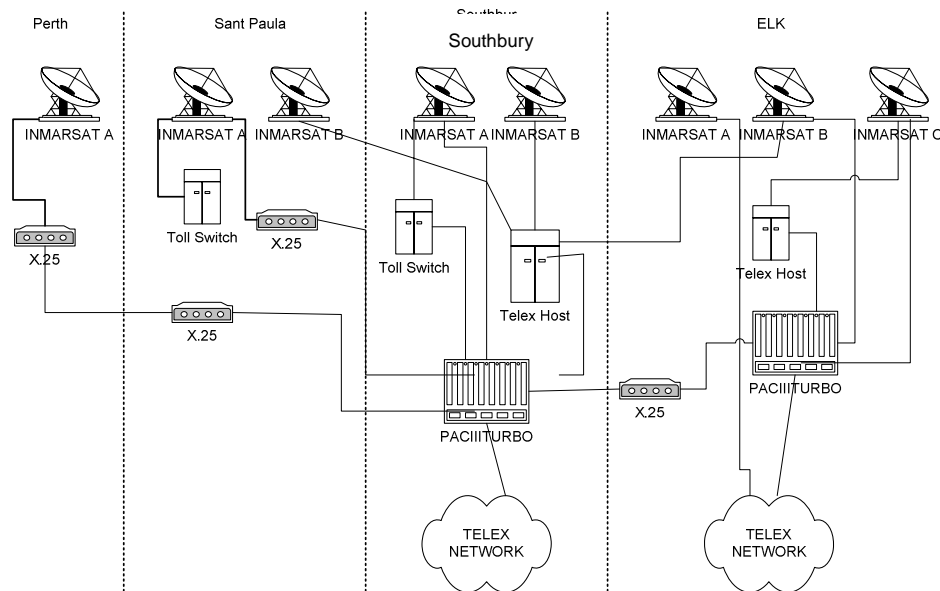
Flexible routing of calls to TCP/IP or Telex Port

Migration path for network growth

Key Reasons For Choosing NSGDatacom Solution	Benefits of implementing the NSGDatacom Solution
<ul style="list-style-type: none"> • Flexibility of TURBO product and NSGDatacom's ability to adapt to TELENOR's requirements 	<ul style="list-style-type: none"> • Flexibility enabled quick implementation without large investment • Migration path for network growth
<ul style="list-style-type: none"> • Good experience with TURBO Products and NSGDatacom 	<ul style="list-style-type: none"> • Reliable solution • Familiarity with product minimized engineering effort for related system • Ability to make operational changes quickly

Application Diagram

TELEX INMARSAT A/B/C Project



About Telenor Satellite Services

Telenor Satellite Services (TSS) is the world's preferred provider of global communications via satellite for customers on land, at sea, and in flight. Telenor delivers innovative high-speed data, voice and video communications and turnkey network solutions to corporate markets worldwide. Featuring an innovative portfolio of value added services – including prepaid calling solutions, easy Internet access, direct calling to satellite modems, IP-telephony, and video conferencing – Telenor also offers The Source™, a web-based account management system available exclusively to Telenor Service Providers. Telenor owns and operates a global network of gateway teleports located at Eik (Norway), Southbury (Connecticut) and Santa Paula (California) in the United States. With its own premium gateway systems and customer provided tele-housed hub equipment, Telenor offers direct access to satellite systems including Inmarsat, Intelsat, Iridium,

About NSGDatacom

NSGDatacom designs, manufactures, sells and supports a wide range of voice and data products focused on real world business communication needs.

Combining key strategic acquisitions with its own core development team, NSGDatacom utilizes a wide range of proven, stable technologies. NSGDatacom creates solutions with these technologies to maintain and preserve organizations' network investments and mission-critical applications while enabling a smooth migration to newer technologies.

NSGDatacom products are deployed worldwide in corporate, financial, government, military, carrier, satellite, and cellular networks.

NSGDatacom

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