

Major Programme 3:



Communications

1 HR

2 HRS

4 HRS

6 HRS

10 HRS

1 DAY

2 DAYS

1 WEEK

2 WEEKS

Major Programme 3: Communications

HIGHLIGHTS OF THE ACTIVITIES IN 2005

At the end of 2005, 199 VSATs had been installed out of the 259 planned for the GCI network (about 80%).

The volume of traffic carried by the GCI and special links to the IDC increased slightly from about 6900 Mbytes/day at the start of the year to slightly over 7500 Mbytes/day at the end of the year. The average GCI virtual circuit availability was 96.5% over the year.

The new network management system (NMS-II) was released with a unified reporting interface (URI), allowing both the PTS and States Signatories to view near real time statistics on the performance of the GCI network.

GCI IMPLEMENTATION

GCI coverage continued to expand throughout 2005, with 14 new very small aperture terminals (VSATs) installed. As of 31 December, an additional 5 GCI site surveys had been completed. Fifteen radio frequency licences, including several which had been outstanding for a long time, were obtained. Of the total planned number of 259 VSATs, GCI site surveys had been completed for 239 (92%); 199 VSATs (77%) had been installed at IMS, NDC and development sites; and 206 licences (80%) had been obtained in 63 of 91 countries (69.2%).

The volume of traffic carried by the GCI and special links to the IDC increased slightly from about 6900 Mbytes/day at the start of the year to slightly over 7500 Mbytes/day at the end of the year. This daily data volume is the equivalent of sending 11 full compact discs every day. In the other direction, almost 5100 Mbytes/day were transported from the IDC to remote sites.

The average GCI virtual circuit availability was 96.5% over the year. It included all outages in the GCI VSAT and terrestrial circuits. With only the outages counted against the GCI contractor (Hughes Network Systems) taken into account, the adjusted average GCI virtual circuit availability was 99.3%.



IS26, Freyung, Germany.



PS23, Makanchi, Kazakhstan.



IS2, Ushuaia, Argentina.

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1 HR

To support the testing at tsunami warning centres, including two internationally recognized centres, three virtual private network (VPN) connections were established between the IDC and each centre.

In conjunction with the move of the computer centre, the GCI network infrastructure located at the IDC was also moved to the new centre with no loss of circuits; the move was completed on schedule.

NETWORK MANAGEMENT

The introduction of an enhanced NMS has resulted in better statistics on and monitoring of the entire GCI network. A new Web based URI was included to allow for a better representation of the operational status of the GCI. This interface is now also available to station operators and NDCs via the dynamic VPN interface.

CONNECTION TO POLAR REGIONS

Regarding the continued GCI coverage of the polar regions, discussions were held on how to increase the real time data transmission capability from auxiliary seismic station AS114 (South Pole), which was only 12 hours a day. A solution utilizing an Iridium satellite will be implemented in 2006 to add another 12 hours of coverage.

INTERNET COMMUNICATION

The performance of the current Internet links (two links each of 4 megabits per second) was consistent during 2005, with an availability of greater than 99.9%. The two links are sharing the normal Internet traffic as well as the VPN traffic for the GCI. The capability to monitor usage and load sharing for each Internet connection was integrated with the NMS in late 2005 to ensure that the quality of service is maintained.

NEXT GCI CONTRACT

With the objective of ensuring a smooth transition from the current GCI contract, the terms of reference for expressions of interest in the next GCI contract were issued. This exercise was undertaken by the IDC Division under the guidance of a steering committee and in cooperation with the IMS Division, the Procurement Section, the Financial Services Section and the Legal Services Section. Following the evaluation of the expressions of interest, the PTS prepared the final request for proposals, which was released to selected invitees on 30 November 2005, requiring responses to be received by 21 March 2006. The PTS also held a bidders' conference.



IS47, Boshof, South Africa.



PS41, Chiang Mai, Thailand.



NDC, Tashkent, Uzbekistan.