FACT SHEET

INTRODUCTION TO INMARSAT M4 SERVICES

Stratos' Inmarsat M4 service extends your office functionality to places you were never able to reach before. With a portable, lightweight and easy-to-carry multi-media satellite terminal you can now get high-speed data services and PSTN (public switched telephone network) quality voice connectivity from countries where telecommunications are unavailable or unreliable

The M4 service is optimized to work with the Integrated Services Digital Network (ISDN) available in many countries providing high-speed data connectivity at 64 kbps from your mobile satellite terminal linked to the ISDN at your destination. Through an ISDN connection you avoid the inherent problems of analog circuit-switched data transmission and achieve much higher data throughput. Stratos' Inmarsat M4 service provides customers with a blend of services from both the Inmarsat-B and mini-M services in addition to several new benefits to suit a range of high-speed data applications requirements.

Stratos' Inmarsat-M4 service extends a company's WAN (wide area network) via satellite to the world's most remote regions, allowing your company worldwide accessibility. With the appropriate software and hardware, Stratos' Inmarsat M4 service supports high-speed data applications such as Internet Web access and e-mail, G3/G4 fax, large file transfers, video conferencing and high-resolution image transfer capabilities. Additionally services such as remote diagnostics, telemedicine, remote monitoring, encryption systems (STU III/STE), audio-quality broadcasting, store-and-forward video and data streaming are also supported by the Stratos Inmarsat M4 global service.

Similar to mini-M service Stratos M4 service will be supported with SIM (subscriber identity modules) cards enabling individualized billing over shared mobile satellite terminals.

The benefits of ISDN

Available in many parts of the world, the Integrated Services Digital Network (ISDN) provides end-to-end digital connectivity ensuring reliable data transmission. Although most modern terrestrial networks are digital, many telephone sets, fax machines and data modems are analog, and use analog signals that do not get digitized until they reach the telephone company's central office switch.

Data not transmitted over the ISDN must go through analog modems via the PSTN and are subject to the disadvantages of analog transmission. These include interference, and possible attenuation problems (decrease in signal strength) which may cause loss, or corruption of data. But the most significant disadvantage of sending data via analog modem is the limitation on data speed, which is typically a maximum of 28.8 kbps.

Loss of data and higher data speeds are therefore achieved through ISDN as it not only provides guaranteed end-to-end data transmission, but is also faster and more efficient in its data throughput. The ISDN enables data to be sent at 64 kbps, whereas those users who do not have ISDN connections at their office will have to use analog modem PSTN connections and the highest modem data rates achievable over the M4 system are in the range of 28.8 kbps.

However, while many businesses do not have ISDN connectivity back at their office, they will still benefit from M4 services through an analog modem connection to the satellite terminal since their data thoughput will be approximately three times faster than the next best available Inmarsat service, Inmarsat-B at 9.6 kbps.

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Office connectivity from anywhere

The M4 service from Stratos provides four levels of service, three of which are available today, and the fourth (IPDS) will be launched in 2000:

Mini-M Voice and Data Services:

- 4.8 kbps voice
- 2.4 kbps data
- 2.4 kbps fax

4.8 kbps voice is equivalent to mini-M voice and is a more cost-effective choice than 64 kbps voice.
N.B. 2.4 fax and data is not be available on all terminals.

PSTN Quality Voice and Data Services:

- 64 kbps voice (3.1 KHz)
- G3 fax
- STU III (secure telephone unit – encryption)
- Analog modem high-speed (up to 28.8 kbps) data services:
  including Internet e-mail, Internet Web access, FTP, STU III

While many services available through the ISDN are also accessible via modem over a circuit-switched connection, it will depend on the application, as to whether it works adequately under these conditions or should be restricted to an ISDN connection. (Eg. Most imaging applications, such as videoconferencing, require at least 64 kbps of data speed to operate well).

ISDN Voice and 64 kbps Data Services:

- Hi-quality audio (for broadcasters)
- Internet email and Web access
- Videoconferencing
- Store-and-forward video transmission
- G4 fax
- STE (secure telephone service via ISDN)

By mid-2000 Stratos will be introducing the **Inmarsat Packet Data Service (IPDS)**, which will prove extremely cost-effective for Web browsers. While all the M4 services mentioned above are charged on a per minute basis, the IPDS service will be charged per Megabyte of data. The advantage to this is that Web browsers will only be charged for the data they send or receive and not the time they use in reading or scanning downloaded sites.

The Stratos Advantage

Stratos' Inmarsat M4 customers benefit from Stratos' global, round-the-clock customer support. As a full solutions provider, Stratos will work with individual customers to determine the service best suited to their requirements and also help to specify network connectivity and terminal adapters for various applications. Stratos provides consultative services based on a customer's specific needs.

For more information on our equipment pricing please call:

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