

## Asia-Pacific Region

## "Explosion" in Satellite Capacity Leads to Demand for Ground Equipment

The market for satellite equipment in the Asia-Pacific region is expected to grow substantially during the 1990s. As one expert puts it, "We are facing an explosion of satellite capacity." By 1995, forecasts predict that the number of transponders in the region will almost double to over 600 units, from the 327 already in place.

The growth in space segment capacity is expected to stimulate requirements for ground equipment. Rapid growth is expected in the VSAT (Very Small Aperture Terminal) and SCPC (Single Carrier per Channel) areas, particularly for earth-station hardware that is suited to specific market conditions (fewer frills and increased durability for tropical environments). Specialized earth stations for public switched telephone network applications and business voice services, suited to regional requirements, could represent major opportunities. Given the rapid expansion of the sector, a market will also be created for those who can offer training to operators and users. However, the greatest potential may lie in the areas of data and voice satellite-based services to small businesses through local dial-up access. These applications may include E-mail, store and forward facsimile options, on-line data retrieval, bulletin board services and news broadcasting services.

Yet the market remains complex. The broad diversity of economic and national priorities, with varying degrees of co-operation among nations, creates opportunities throughout the region. Through the Palapa series, extended by the launch of the next generation of high-powered, multiple-spot beam satellite, Indonesia will ensure its status as a regional service provider.

However, one must look beyond Palapa to see the large number of companies offering satellite-based services in Indonesia. A direct broadcast service for the country is planned by PMediacitra Indostar. The satellite, *Indostar 1*, will provide S- and L-band television and radio services. Citra Sari Makmur offers VSAT services jointly with PT Telekom, and Lintasarta provides services to the financial sector. GTE Spacenet is setting up a network across Indonesia for the tourism industry.

In Thailand, the Shinawatra Group will start offering narrow band services this year from *Thaicom 1* and 2. Compunet Corporation in Bangkok offers a broadcast service aimed at the financial and news sectors, while Smart Telecom has VSAT customers for a high-speed data network.

Hong Kong's AsiaSat, having changed the television viewing habits of much of Asia through its distribution of Star TV, is planning for next year's launch of *AsiaSat 2*. However, AsiaSat has a new competitor. APT Satellite plans to launch *Apstar 1* next year as well. Although it is a Hong Kong-based company, APT has Chinese and Thai ownership, which may give it a certain edge with customers in those countries.

A Malaysian-Filipino organization, led by Binariang Sdn. Bhd. is planning the launch of *MEASAT* which will have 12 C-band and one or two Ku-band transponders.

For further information on the Asia-Pacific satellite sector, contact the Department of Communications, International Telecommunications Division, or EAITC's Aerospace and Defence Programs Division.

### Canada-Japan Technical Seminar Set for November

The fourth Canada-Japan Communications Industry Technical Seminar is being planned for November 1993. This seminar gives Canadian and Japanese companies an opportunity to compare developing technologies in the telecommunications field and to seek areas where co-operation would be beneficial to both sides.

Before planning this year's program, industry representatives were canvassed for their suggestions. Many felt that the seminar should be expanded to give visitors from Japan the opportunity to see the work and research being done by Canadian companies. This could be achieved through on-site visits or through mini-trade shows. Respondents also felt it was important that the Japanese visitors saw more than one region of Canada. Incorporating these suggestions in the planning process promises to make the event more interesting and valuable for both the Canadian and Japanese companies taking part.

If you wish to participate in the seminar, please get in touch with the International Trade Policy, and Science and Technology Co-operation Division of the Department of Communications or the Japan Trade Development Division of External Affairs and International Trade Canada (see contacts box).

## Telecom Markets in China—Look to the Provinces!

Growing decentralization in China is having a major effect on how one should market to the telecommunications sector. China's Ministry of Posts and Telecommunications (MPT), which is responsible for all telecom operations and, through subsidiary companies, for much of the telecom manufacturing in the country, has given considerable procurement decision making powers to its regional offices.

In terms of operations and procurement, the MPT is divided into five levels: international, national, provincial, municipal, and county. The international level is responsible for international communications, while the national level is responsible for the backbone networks (such as the new fibre lines and the packet-switching network) that link the provincial capital cities. The decision makers for these levels are based in Beijing. To capitalize on opportunities at the other levels, telecom business people must visit officials outside Beijing.

At the provincial level, Post and Telecommunications Authorities (PTAs) are responsible for telecommunications networks that interconnect major cities within a

province (or autonomous region). While the PTAs are responsible to the MPT, they receive much of their funding for network expansion from provincial governments. Because the provinces have vastly different capacities for funding, there are great disparities in the sophistication of the networks from one province to another. Provincial funding, when available, gives the PTAs a considerable degree of independence from the MPT in procurement decisions.

Municipal level PTAs, responsible for intra-urban networks, are often dependent on municipal government funding. They can also be involved in the establishment of microwave links to neighbouring cities, if the funding and demand exist. In Special Economic Zones and coastal cities, municipal PTAs will often set up switching centres in duty-free areas, thus eliminating considerable tariff barriers on telecom equipment.

The county level of the MPT is responsible for the rural telecommunications networks including small switches, point-to-multipoint systems and small power generators.

*Continued on page IV—CHINA*

## France

*(continued from page I)*

private corporate networking — particularly networking for the multinational client market.

Cable television is finally catching on in France. It is predicted that by 1995, the cable infrastructure will pass 8 million households, with 2.7 million of those homes subscribing for service. To reach these goals, various *câblo-opérateurs* will need equipment, software and more quality programs to attract new customers (see *CanadExport*, March 1, 1991).

With congestion on France's present telecommunications systems increasingly becoming a factor, observers expect to see a boom in mobile communications over the next few years. France Télécom appears to be the most enthusiastic promoter in Europe for both GSM digital cellular and telepoint cordless service. Paging is also another area with development potential.

### Advice and Plans for 1993

Companies need to consider the political and regulatory side of the telecommunications industry in France if they hope to be successful. Attempts at market entry should only be made if a product is technically superior and less expensive than products already available in Europe. Canadian companies that have worked hard over a number of years to develop a market for their products in France are finding themselves well represented in the marketplace and are meeting with increasing success.

Companies primarily based in Canada that envision a long-term European marketing strategy may be well advised to establish partnerships with local firms. By integrating Canadian equipment into their installations, foreign partners may enhance the local image of the Canadian company.

### Upcoming Events

Médiaville, an annual event focusing on the cable and satellite broadcasting sector, will take place May 26-28, in Versailles. Telecom Network 93, the largest trade show covering the French telecommunications market, will take place September 14-17, in Paris.

In the fall of 1993, the Canadian Embassy in Paris will be organizing a telecommunications mission to France for Canadian firms wishing to develop partnerships with French companies. To obtain more information on this mission, or on the French telecommunications sector in general, please contact either the Canadian Embassy in Paris, the Western Europe Trade Division of External Affairs and International Trade Canada, or the International Telecommunications Division of the Department of Communications (see contacts box).