SBS survives difficult times with new owners

communications satellite ever launched, is an experimental and research and development spacecraft but does have commercial applications, such as educational and national TV. Its raison d'être was to provide a market (which has not yet materialised) for large communications satellite buses. In hardware terms, however, its applications are valuable for the future.

ORION

Originally established in 1983 to compete with Intelsat in the Atlantic region, the Orion satellite venture finally ordered two Ku-band satellites in 1989 from British Aerospace. BAe is a member of the Orion company and has formed a joint company, BAe-Tel, with a Government licence to provide domestic services in the UK. Orion will provide services to such companies as BAe-Tel, which will market them. No bids were placed for the Orion satellites, and the contract went straight to BAe.

PALAPA

The Palapa system operated by Perum Umum Telekomunikasie (Perumtel) is a C-band system providing PTT telephony, TV, radio and Government communications service to the Indonesian mainland and its 5,000-plus islands. The system has been leased also to other countries such as the Philippines, Malaysia and Thailand. Perumtel's marketing of the system has been hit, however, by delays to Palapa B2, which was deployed in orbit in 1984 and stranded. The Shuttle recovered the satellite, which was resold to Indonesia and will be launched this year.

PAS

Pan American Satellite, owned by Alpha Lyracomm which is headed by a Spanish entrepreneur, operates the first satellite to compete with the Intelsat monopoly, providing lower-cost specialised services to North America, Europe and Latin America, filling a substantial gap in US-Latin American data and broadcast coverage. PAS, which was originally the ASC 3 communications satellite, was brought secondhand from GE Astro Space and launched at a bargain price of $8 million on the first Ariane 4.

SATCOM

Originally operated by RCA American Communications, better known as RCA Americom, the Satcom fleet is now owned by GE Astro. Satcom was the second US domestic communications satellite system, after Westar, and offers C-band and Ku-band services for TV distribution in the USA. Originally, the service for cable TV distribution was a commercial success, but more recently a fall-off in turnover for terrestrial TV services has resulted in the disposal of several Satcom satellites to other companies as GE Astro comes to terms with the changing domestic satellite industry.

SBS

Satellite Business Systems (SBS) was formed by IBM, Comsat and Aetna, which invested $1 billion in a high-speed digital data transmission business on SBS 1-5. The result was a dramatic disappointment and SBS turned to digital voice services. SBS 3, 4 and 5 are now owned by MCI and SBS 1 and 2 by Comsat, which plans to launch the final satellite on Ariane in mid-year. Comsat has been negotiating with the Christian Broadcasting Group regarding use of SBS 6.

SPACENET

These satellites are the second in the fleet operated by GTE Spacetnet and are used for video distribution and business traffic, primarily GTE's own Sprint service. GTE claimed $107 million for the loss of Spacenet 3 of the Ariane V18 failure in 1986 and a replacement satellite, the original Spacenet 4 ground spare, was launched in 1988 as Spacenet 3R.

SUPERBIRD

These satellites are operated by Space Communications of Japan, which is competing with JCSat to provide cable TV, videoconferencing, telephony, newspaper transmission, business applications, banking and other services. It was established with backing from Ford Aerospace, which provides the Supersat satellite bus.

TDF

This is the French equivalent of the West German TV-Sat, an expensive result of a bid to develop national DBS systems, creating business for the satellite builders and an international market for the resulting buses. The project was almost cancelled by the French Government because it had so little prospect of success. Despite this, two satellites will be launched.

TELECOM

France's domestic telecommunications satellite system, owned by the French PTT and France's space agency, CNES, provides TV, telephone, digital data communications and also a military channel called Syracuse, covering home and overseas territories. The system is operated by France Cables et Radio.

TELE-X

This is the Scandinavian version of the TDF and TV-Sat DBS satellites and was originally a Swedish project which has since been joined by Norway, Finland, Iceland and Denmark. It is regarded as a semi-operational satellite. It will be operated by Notelsat.

TELSTAR

This is the AT&T commercial domestic C-band telephonic satellite system and is a successor to the first demonstration communications satellite, Telstar 1, which was launched in July 1962, beginning the revolution in satellite communications. It replaces the Comstar C-band capacity. AT&T has ordered three new Satcom 7000 satellites for the Telstar 4 series from GE Astro.

TV SAT

This is the West German DBS satellite system, operated by Deutsche Bundespost, which has found few takers but suffered the loss of TV SAT 1 when a solar panel failed to deploy in 1987. A second satellite was launched in 1989.

WESTAR

Westars were the first domestic US communications satellites, launches starting in 1974, after the FCC decision to proceed with "domsat". The first satellites were successful, but, with competition increasing, Western Union became stretched financially and plans to launch further satellites, such as Westar VLS have been shelved. Westar 6, which was stranded in orbit in 1984 and later recovered by Shuttle, was sold elsewhere. The satellite provides domestic C-band capacity, which includes voice and data traffic as well as TV distribution services.