



orbit) and the satellite proper are designed. The most critical parameter for the satellite is its 5 year service life (provision for 7 years is also taken care of).

Since in Ukraine there is a shortage of reliable electronic and radioelectronic components for satellite transponder it is going to be manufactured in cooperation with foreign companies.

Ukraine faces certain difficulties with the absence of its own space launching site. Previous launches of "Zenith" and "Cyclon" had been made from sites of the former USSR - Baikonur and Plesetsk. At Baikonur site there are two grounds for launching "Zenith" one of which is to be reconstructed after the accident. In 1994 Russia has leased Baikonur site from Kazakhstan for 20 years term and now Ukraine is negotiating with Russia the possibility of using the above mentioned grounds for its own purposes.

As for the ground infrastructure we plan to establish the earth station feeder line for TV channels as well as VSAT switches, TV receiving stations network and transceiving stations for TV channel exchange.

According to the preliminary estimates for the ground segment the following equipment will be required:

- equipment for upgrading "Azimuth - L"

- earth terminal (Lviv Region);
- feeder earth stations - 2 sets;
- reporting TV stations - 2 sets;
- trans-receiving TV stations - 12 pcs;
- receiving TV stations - 300 pcs;
- VSAT stations - 500 pcs.

At the first stage to ground infrastructure will be created by means of purchasing foreign made equipment and licenses for its subsequent license manufacturing by Ukrainian companies. At latter stages an extensive cooperation with foreign companies will be required for aligning ground equipment with that of the space segment.

### PROSPECTS FOR BUSINESS

Currently, Ukraine is the region of risky business. Nevertheless foreign businessmen unanimously note that the country equalling France in size, located between Eastern Europe and Russia, in some time could become an area of a interesting and profitable business.

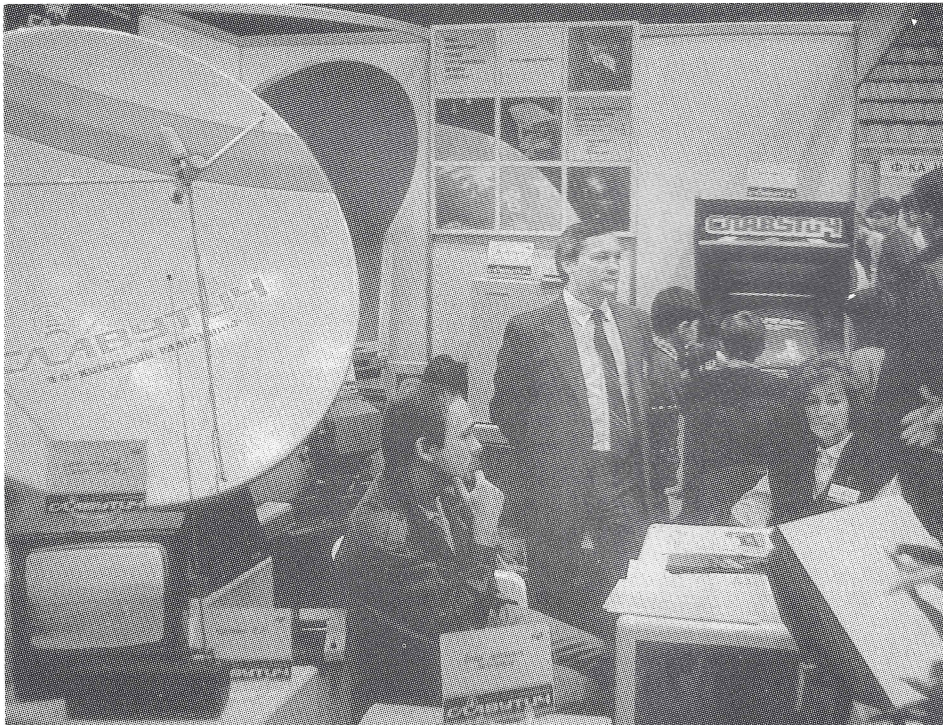
Prospects for the Ukrainian satcom system are as follows:

- in space segment - increased leasing and purchase of transponders;
- in ground segment - purchase of earth

- stations, joint manufacturing and sales (in third countries) of equipment and services;
- sales of environmentally clear and comparatively cheap "Zenith-4M" launchers.

The Ukrainian ministry for Communication is trying to achieve a rapid and harmonious development of communication in this country by means of monopoly on it. Possessing a majority of shares, it established 3 joint ventures for 15 year term (UTEL, UKRTECH, UKRAINIAN MOBILE COMMUNICATION) and has given them the rights to issue licenses for all types of communication, including the satellite one (JV UKRTECH).

However, we cherish hopes that the Law on Communication which is going to be considered by the Ukrainian Parliament shortly would be enable a real competition in the Ukrainian market thus favouring the further development of modern telecommunications in Ukraine.



*Recent international trade show in Kyiv.*