

Transition from the analogue to the digital system and wider introduction of satellite networks are the major aims of the country's telecommunication plan. Fibre optical systems will increasingly be used as junctions or for long distance connections.

US \$2,400 million has been allocated in the five-year economic development plan (1990-1994) for the purchase of telecommunication equipment. Also equivalent of US \$730 million has been set aside in rials to cover the local costs of buildings, installations, etc. It is estimated that US \$345 million was spent on telecommunication equipment in 1990 and this figure may rise to US \$1,400 million in 1995. The market in 1991 reached US\$ 483 million, with more than half of it accounted for by switching and transmission purchases.

#### **PUBLIC SWITCHED TELEPHONE NETWORK**

There are some 2.2 million lines currently in operation. Of the approximately 600 exchanges, 65% are connected to the national network through the automatic toll exchanges and the remaining ones are low capacity automatic exchanges (100-200 lines) serving the needs of rural subscribers. The installed exchanges are mainly electro-mechanical.

TCI hopes to be able to increase the number of subscriber lines to 3.2 million by the end of the five-year plan. Some sources put this figure nearer to 5 million. TCI intends to introduce the digital system where possible. There is also emphasis on the expansion of rural area telephone networks.

#### **TELEGRAPH AND TELEX NETWORK**

The national telegraph network consists of point-to-point and Gentex systems. The telex network has about 12,500 subscribers in Tehran and 9 other major cities. The telex exchanges are computer controlled analogue, electromechanical and digital types. Plans are to increase the nominal capacity to 28,500 in the near future.

#### **SATELLITE NETWORK**

Satellite telecommunications projects are expected to play an important part in TCI's activities. As part of developing a national microwave satellite grid network, installation of 56 earth stations supplied by Alcatel Telspace, which are mainly in rural areas, has started. Total number of VSAT earth stations will eventually reach 10,000. TCI is currently using 5 transponders of the Intelsat network and is working on a project to build an Iranian domestic satellite with a capacity of 14 transponders worth approximately US \$300 million. There are also plans to launch a satellite tracking service using the Inmarsat system.

#### **MICROWAVE CHANNELS**

The number of microwave intercity channels is to be increased by between 1200 to 5000 from the present 20,600. The number of international channels is being increased from the present 850 to 2,400 by the end of the five-year plan.

#### **FIBRE OPTICS**

During the five year plan 5,000 km of fibre optics lines will be installed and utilized as junctions or for long distance connections. Longer term plans call for increasing the fibre optical network to 20,000 km.