

JPRS 69644

19 August 1977

TRANSLATIONS ON TELECOMMUNICATIONS POLICY,
RESEARCH AND DEVELOPMENT
No. 10

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BIBLIOGRAPHIC DATA SHEET	1. Report No. JPRS 69644	2.	3. Recipient's Accession No.
4. Title and Subtitle TRANSLATIONS ON TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT, No. 10		5. Report Date 19 August 1977	
7. Author(s)		6.	
9. Performing Organization Name and Address Joint Publications Research Service 1000 North Glebe Road Arlington, Virginia 22201		8. Performing Organization Rept. No.	
12. Sponsoring Organization Name and Address As above		10. Project/Task/Work Unit No.	
		11. Contract/Grant No.	
		13. Type of Report & Period Covered	
		14.	
15. Supplementary Notes			
16. Abstracts This serial report contains translations from the world press and radio relating to worldwide political, economic and technical developments in telecommunications, computers, and satellite communications. Coverage will be worldwide with focus on France, Federal Republic of Germany, United Kingdom, Italy, Japan, the USSR, People's Republic of China, Sweden, and the Netherlands.			
17. Key Words and Document Analysis. 17a. Descriptors Worldwide Computers Satellite Communications Electronics and Electrical Engineering Telecommunications Telemetry			
17b. Identifiers/Open-Ended Terms			
17c. COSATI Field/Group 09B, C, F, 17B, 22B			
18. Availability Statement Unlimited Availability Sold by NTIS Springfield, Virginia 22151		19. Security Class (This Report) UNCLASSIFIED	21. No. of Pages 55
		20. Security Class (This Page) UNCLASSIFIED	22. Price

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INTERNATIONAL

BRIEFS

GREEK, SYRIAN TELECOMMUNICATIONS CABLE--Greece and Syria will be connected with a subaquatic telecommunications cable which will facilitate both the Greek telecommunication requirements in the direction of Syria and other Middle East countries, as well as the needs of Syria and its neighboring Arab countries for easier telecommunications connection with Greece and the rest of Europe. Specifically the subaquatic cable will connect Iraklion, Crete and Tarsus, Syria. The cable will be ready in approximately 2-1/2 years and will permit the simultaneous conduct of 460 telephone conversations between Greece and Syria. The relevant agreement was signed today between representatives of OTE [Greek Telecommunications Authority] and the Syrian Telecommunications Authority. International bids will soon be opened for installation of the cable. [Athens Domestic Service in Greek 1130 GMT 29 Jul 77 AT]

CAO: 5500

INTER-ASIAN AFFAIRS

BRIEFS

INDIA, SRI LANKA TELEPHONE SERVICES--The telephone system between Madras and Colombo has improved with the recent introduction on operator-dialing system at both the places. The third India-Sri Lanka Telecommunications Meeting held in Madras yesterday reviewed the performance of the existing circuits between the two countries and explored further measures to improve the system. The two countries are at present linked by two semi-automatic and three manual telephone circuits and three teleprinter circuits. The India-Sri Lanka broadband microwave system is under construction and is expected to be completed by 1980 at a cost of about rupees 75 million. The equipment for this project, including a tower, will be Indian-made. [Text] [Delhi General Overseas Service in English 1000 GMT 6 Aug 77 BK]

INDONESIA, PHILIPPINES SATELLITE SYSTEM--Jakarta, 3 Aug (ANTARA)--Indonesia's Manado and the Philippines' Davao cities have been agreed by the two governments to be used as the sites for the bilateral border communications within the framework of the PALAPA Satellite Communication System. Public Relations Officer of the Directorate General for Posts and Telecommunications Dr Syamsuddin said here Tuesday the agreement to this effect was reached at a meeting between the Indonesian and the Philippine delegates in Manila last week. The Indonesian delegations to the Manila meeting from July 26-30 was led by Director General for Posts and Telecommunications Suhardjono and President Director of Perumteli Dr Willy Munandir. Among other decisions of the meeting was that the Philippines' Domestic Satellite (DOMSAT-PHIL) will positively use facilities extended by Indonesia's PALAPA Satellite services. The Manila meeting was the followup of earlier similar meetings in Yogyakarta, Central Java, in April, in Bandung in June, in Manila in June and in Kuala Lumpur in June this year, Syamsuddin said. [Jakarta ANTARA in English 0748 GMT 3 Aug 77 BK]

JAPANESE TELECOMMUNICATIONS AID--Japan is to give Pakistan \$4.5 million for the establishment of a central telecommunications research laboratory in Islamabad. Notes to this effect were exchanged in Islamabad 30 Jul. Japan has already given \$3.4 million for this project. [Karachi Domestic Service in Urdu 1500 GMT 30 Jul 77 BK]

BANGLADESH

BRIEFS

SYLHET TELEVISION STATION--The 10-kw Sylhet Satellite Television Station was inaugurated on 29 June by Saifur Rahman, presidential advisor for Commerce. [Dacca Domestic Service in Bengali 1330 GMT 29 Jun 77 BK]

CSO: 5500

INDONESIA

BRIEFS

INDONESIAN TV, RADIO POWER--Pontianak--TVRI (Television Indonesia) needs more powerful transmitters to enable Indonesians all over the country to enjoy its programs, Information Minister Mashuri Saleh said in Pontianak Friday. TV set owners in Singkawang, Pemangkat and Sambas can only enjoy TV Malaysia programs. A 10-kw television relay station is now under construction in Pontianak, West Kalimantan, but upon its completion, TV viewers in Singkawang, Pemangkat and Sambas still cannot receive TVRI programs from Jakarta. The transmitter power of the Pontianak RRI (Radio Indonesia) studio has meanwhile been increased from 10 to 50 kw, enabling Indonesians the country over to enjoy its programs. [Excerpt] [Jakarta INDONESIA TIMES in English 12 Jul 77 p 2 BK]

CSO: 5500

JAPAN

BRIEFS

EARTH STATION FOR SATELLITE--Tokyo, 2 Aug KYODO--Kokusai Denshin Denwa Company (KOD) will shortly start the construction of an earth station to communicate with a maritime satellite (MARISAT) placed over the Indian Ocean. The projected earth station will be constructed in the compounds of the KOD Yamaguchi Satellite Communications Laboratory in Yamaguchi City in Western Japan. It is scheduled for completion in the summer of 1978. The new earth station will provide communications between ships in the Indian Ocean and ground stations in Japan via the MARISAT hovering over the Indian Ocean. At present, three MARISATs have been put into geosynchronous orbit--one over the Pacific, another over the Atlantic and the third over the Indian Ocean. Ships at sea which used to communicate with ground spots via short-wave radio are now using MARISAT communications systems. This April, KOD started communication services to ships in the Pacific and Atlantic by using the MARISAT communications systems owned by the United States. However, due to the absence of a coastal earth station in Japan to communicate with the MARISAT over the Indian Ocean, ships in the Indian Ocean currently are not able to benefit from KOD's MARISAT communications services. [Text] [Tokyo KYODO in English 0015 GMT 2 Aug 77 OW]

CSO: 5500

NEW ZEALAND

NEW ZEALAND SIGNS ACCORD ON ASIAN BROADCASTING INSTITUTE

Hong Kong AFP in English 1223 GMT 4 Aug 77 BK

[Text] Kuala Lumpur, 4 Aug (ADP)--The New Zealand high commissioner, Mr Jack Shephard, today signed the project document pertaining to the formal establishment of the Asian Institute for Broadcasting Development (AIBD) on behalf of the New Zealand Government.

New Zealand is the third country to join the Asian Institute for Broadcasting Development. The other countries are Bangladesh and Sri Lanka.

Mr Shephard said that he was pleased that New Zealand had been able to contribute to the institute's activities through the provision of a rural broadcasting training coordinator.

"It is my government's intention to continue its programme of assistance to the institute in future," he said.

The UNESCO project manager for the institute, Mr R. Balakrishnan, said that he was grateful for the assistance and help provided by New Zealand in the last few years and hoped that it could maintain such aid.

He also said that Belgium, Indonesia, the Philippines and Thailand were expected to sign similar documents with the institute before 10 September.

Korea, India and Singapore were also expected to sign but the dates had not been fixed yet.

CSO: 5500

PEOPLE'S REPUBLIC OF CHINA

MODEL XB-J-I LASER COMMUNICATOR

Peking JINMIN CHUGOKU in Japanese May 77 p 60

[Article by Ma Shou-ts'en (7456 1108 1478)]

[Text] In laser communicators, there is the single-channel type and the multi-channel type. The XB-J-I laser communicator, which is being displayed in the heavy industry section of the current PRC Exhibition, belongs to the former type.

The use of laser in communication is a modern, new method. This communication method uses the laser beam, which is invisible to the naked eye and is highly directional, as a signal carrier wave. Since this wave travels in a fixed direction, it has an excellent security feature. The laser beam is not affected by other electrical waves in the atmosphere and the transmitting sound as well as the receiving sound are exceptionally clear.

Therefore, in preventing jamming, it is incomparably better than the conventional radio communication.

This laser communicator, which utilizes gallium-arsenide diodes, uses light signal as the carrier wave and optical transmitting lens to set the direction. As power sources, both alternating and direct currents can be used.

The communication range is 20 km but if this instrument is used as a repeater, the communication range can be lengthened.

The XB-J-I laser communicator was researched and manufactured at the wireless factory in Ch'ang-Ch'un City, Kirin Province. During the research and manufacturing stages, factory laborers and staff employees strictly observed the operational procedure calling for the "three union" of the research department, production department and utilization department, and the "three union" of laborers, cadres and technicians.

Furthermore, great efforts were expended to raise the reliability of this laser communicator and to enable dependable communication of good quality under any weather condition.

They climbed mountains and crossed rivers and repeated tests outdoors for a long period.

As the result of such tests and constant improvements they built the XB-J-I laser communicator which can carry on normal communication under weather conditions of any and all kinds, including sandstorms, rain, fog, lightning, etc.

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CSO: 5500

PEOPLE'S REPUBLIC OF CHINA

PEOPLE'S DAILY CALLS FOR POSTAL, TELECOMMUNICATIONS MODERNIZATION

Peking Domestic Service in Mandarin 2230 GMT 6 Aug 77 OW

[PEOPLE'S DAILY 7 August editorial: "Strive To Achieve Modernization in Postal and Telecommunications Services"]

[Excerpts] Chairman Hua and the party Central Committee are greatly concerned for and have attached great importance to the modernization of the postal and telecommunications services.

To achieve postal and telecommunications modernization--Telephone automation, using circuit carrier telecommunications equipment, using radiophoto equipment for telegrams and using motorized vehicles for mail delivery--is not only a task for the Postal and Telecommunications Departments but also a task for the whole party and the people of the whole country.

Party committees at all levels must strengthen their leadership over postal and telecommunications work and make conscientious efforts to grasp it well.

We are confident in looking forward to the future. Postal and telecommunications modernization will be basically completed in the country's 2,000 counties by the year 1980. Circuit carrier telecommunications equipment and microwave telecommunications trunk lines will form a network and will be in general use. By the year 1985, the Postal and Telecommunications Departments will be using electronically controlled, automatic and mechanized equipment. Postal and telecommunications services will catch up with and surpass advanced world levels within this century. We cannot feel at peace and at ease if we do not realize Chairman Mao's behests and if we fail to change the backward outlook of the postal and telecommunications services. The target of achieving postal and telecommunications modernization must be achieved.

CSO: 5500

PEOPLE'S REPUBLIC OF CHINA

YENSHOU COUNTY ACHIEVES POSTAL, TELECOMMUNICATIONS MODERNIZATION

Peking Domestic Service in Mandarin 2230 GMT 6 Aug 77 OW

[Report: "The Way To Achieve Postal and Telecommunications Modernization As Viewed From the Experience of Yenshou," published in the 7 August issue of PEOPLE'S DAILY]

[Summary] Yenshou County, Heilungkiang Province, is a small county where the mass movements to learn from Tachai and Taching are being vigorously launched. This county has made outstanding achievements in modernizing its postal and telecommunications services.

The Yenshou County Postal and Telecommunications Office is very small. Before the Great Cultural Revolution, it used old-fashion telephone equipment which dated back to the 1930's and other backward equipment. But now it uses modern telecommunications equipment.

In a comparatively short period of time, Yenshou County has introduced the use of automatic telephone equipment for communications among the county's towns, carrier equipment for telecommunications between towns, villages and communes, radiophoto equipment for sending telegrams and motorized vehicles for mail delivery in the rural areas where conditions permit.

Encouraged by support from higher levels, the workers labored even harder and successfully built a semielectronic, automatic telephone terminal capable of handling 600 circuits. Following this success, they continued to undertake the task of building a-channel carrier equipment and (?automatic parcel packaging equipment).

To overcome the shortage of processing equipment, the workers made their own tools, meters, instruments and machine tools, using indigenous equipment instead of foreign machines. Thus, they have proven that indigenous equipment is equal to foreign machines.

CSO: 5500

PEOPLE'S REPUBLIC OF CHINA

KU MU ADDRESSES NATIONAL POST, TELECOMMUNICATIONS CONFERENCE

Peking NCNA in English 1512 GMT 5 Aug 77 OW

[Excerpts] Peking, 5 Aug 77 (HSINHUA)--Vice-Premier Ku Mu called on the Postal and Telecommunication Departments to "Follow the example of the Taching oilfield and modernize China's telecommunication service at the soonest possible date."

Addressing the National Conference of Postal and Telecommunication Departments on learning from Taching held in Peking recently, Vice-Premier Ku Mu pointed out that in so doing, these departments "will contribute to the all-round modernization of China's agriculture, industry, national defence and science and technology, the historical mission of the Chinese working class and the rest of the Chinese people in the twentieth century."

Vice-Premiers Wang Chen and Yu Chiu-li also attended the closing session on 30 July and delivered speeches.

Vice-Premier Ku Hu told the session that China had in the past few years laid a fairly good foundation for modernizing the telecommunication service. This includes specialized scientific research institutes and factories, mastery of main telecommunication techniques and building of most of the specialized equipment. In addition, 1,800-channel carrier telecommunication equipment and 960-channel micro-wave telecommunication equipment have been developed and built, and trunk lines using such equipment have been built and extended. Acting on the directives of Chairman Mao and Premier Chou and displaying the spirit of self-reliance and hard struggle, the Postal and Telecommunication Workers have found a way to develop the postal and telecommunication service with greater, faster, better and more economical results.

He stressed that the Postal and Telecommunication Service should lead the way in modernizing agriculture, industry, national defence and science and technology to meet the needs of the national economy and serve strategic purposes.

The conference commended a number of advanced units and individuals in learning from Taching, and highlighted the experience of the Posts and Telecommunications Bureau of Yenshou County, Heilungkiang Province in northeast China. The workers there made modern equipment themselves and introduced automatic telephone service, carrier telecommunication lines and telefacsimile service throughout the county within a short period of time.

HUNGARY

BRIEFS

PRODUCTION, INSTALLATION OF MICROWAVE EQUIPMENT--A brigade at the Orion Factory undertook to facilitate the switch to production of a family of high-performance, new microwave equipment. The family developed can transmit 960 telephone calls and several color television programs simultaneously, without wires. The first chain will become operational 7 November instead of the end of the year and will operate between Gyor and Taliandorogd. In this way a link will be established with the Interszputnyik communications network now being built at Taliandorogd. Work is progressing well. The microwave line from Taliandorogd-Kabhegy-Szony-Gyor will probably be finished in October. [Budapest NEPSZABADSAG in Hungarian 31 Jul 77 p 1]

CSO: 5500

YUGOSLAVIA

LAW ON PROGRAM FOR CONSTRUCTION AND MODERNIZATION OF THE TECHNICAL FACILITIES OF RADIO YUGOSLAVIA BETWEEN 1976 AND 1980

Belgrade SLUZBENI LIST SFRJ in Serbo-Croatian No 34, 8 Jul 77 pp 1376-1377

[Law enacted by the SFRY Assembly in a session of the Federal Chamber on 29 June 1977]

[Text] Article 1

This law establishes the Program for Construction and Modernization of the Technical Facilities of Radio Yugoslavia Between 1976 and 1980 for whose fulfillment funds have been provided for by federal law.

Article 2

The Program for Construction and Modernization of the Technical Facilities of Radio Yugoslavia Between 1976 and 1980 encompasses the following:

- 1) preparation of preliminary and working designs for modernization of the Short-Wave Broadcasting Center and the Production Center;
- 2) construction of buildings and installations for the Short-Wave Broadcasting Center and the Production Center;
- 3) purchase and installation of equipment for the Short-Wave Broadcasting Center;
- 4) purchase and installation of equipment for the Production Center;
- 5) purchase and installation of radio relay devices to link the Production Center with the Short-Wave Broadcasting Center;
- 6) purchase and installation of radio relay devices to link Radio Yugoslavia with radio broadcasting centers in the republics and autonomous provinces;
- 7) advance training of personnel.

Article 3

The funds supplied to finance construction and modernization of the technical facilities of Radio Yugoslavia shall be used in conformity with the Program for Construction and Modernization of the Technical Facilities of Radio Yugoslavia Between 1976 and 1980, which is an integral part of this law.

Article 4

The rights and duties of the investor shall be exercised and discharged by Radio Yugoslavia in performing the operations of building and modernizing the technical facilities of Radio Yugoslavia, in conformity with this law.

Article 5

By the end of the month of February of each year Radio Yugoslavia must submit a report to the SFRY Assembly for the previous year concerning expenditure of funds and fulfillment of the Program for Construction and Modernization of the Technical Facilities of Radio Yugoslavia Between 1976 and 1980.

Article 6

This law shall take effect on the eighth day after publication in SLUŽBENI LIST SFRJ.

PROGRAM FOR CONSTRUCTION AND MODERNIZATION OF THE TECHNICAL FACILITIES OF RADIO YUGOSLAVIA BETWEEN 1976 AND 1980

The technical facilities of Radio Yugoslavia shall be built and modernized in annual stages between 1976 and 1980.

Construction and modernization of the technical facilities of Radio Yugoslavia encompasses the following:

1) preparation of preliminary and working designs for modernization of the Short-Wave Broadcasting Center and the Production Center, as follows:

i) preparation of the investment program, technical and technological reports and studies for modernization (expansion and replacement) of the technical facilities of the Short-Wave Broadcasting Center and the construction of the Production Center;

ii) preparation of the preliminary and working designs for the Short-Wave Broadcasting Center and the Production Center;

iii) trips to obtain information, preparation of specifications for purchase of imported equipment, taking of bids for imported and domestic equipment;

2) construction of buildings and installations for the Short-Wave Broadcasting Center and the Production Center, as follows:

i) construction of the building and accompanying structures of the Production Center with a total floor space of 2,345 square meters;

ii) construction of accompanying installations and acoustic preparation of five studio rooms of the detached control center and the teleprinter and equipment room of the Production Center;

iii) construction of installations for radio relay devices to link Radio Yugoslavia with the radio broadcasting centers of the republics and autonomous provinces;

iv) addition of a new broadcasting studio in the Short-Wave Broadcasting Center for transmitting power of 250/500 kw;

v) adaptation of the present broadcasting studio of the Short-Wave Broadcasting Center;

vi) adaptation of the 35-kv transformer station in the Short-Wave Broadcasting Center;

vii) construction of the building of the antenna divider (razdjelnik) in the Short-Wave Broadcasting Center;

viii) preparatory work, supervision, technical acceptance and final computation of the cost of construction of projects included in the Short-Wave Broadcasting Center and the Production Center;

3) purchase and installation of equipment for the Short-Wave Broadcasting Center, as follows:

i) purchase and installation of four short-wave transmitters with a power of 250/500 kw;

ii) purchase and installation of antenna systems, impedance transformers, antenna dividers, automatic controls for antenna systems and cables;

iii) purchase and installation of the field for signal distribution following modulation (distribucijsko polje) and for the agreement (dogovor);

iv) purchase of measuring instruments for transmitters and antenna systems;

v) purchase and installation of equipment for radio relay links to connect the Short-Wave Broadcasting Center to the Production Center;

vi) purchase and installation of equipment for the 35-kv transformer station and the 6-kv transformer substation;

4) purchase and installation of equipment for the Production Center, as follows:

i) purchase and installation of equipment for five outfitted studios, divider (razdjelnik), receiving teleprinter group, automatic telephone system and continuous unit;

5) purchase and installation of radio relay devices to link the Production Center with the Short-Wave Broadcasting Center, as follows:

i) manufacture and installation of the mounts of the antenna system for the radio relay link;

ii) purchase and installation of equipment for the radio relay link;

iii) preparatory work, supervision, technical acceptance and final rendering of accounts;

6) purchase and installation of radio relay devices to link Radio Yugoslavia (Production Center) with radio broadcasting centers in the republics and autonomous provinces, as follows:

i) manufacture and installation of the mounts of the antenna system for radio relay communications;

ii) purchase and installation of equipment for radio relay communications;

iii) preparatory work, supervision, technical acceptance and final rendering of accounts;

7) advance training of personnel, as follows:

i) advance training of three specialists with university training in the field of telecommunications for jobs in the Short-Wave Broadcasting Center;

ii) advance training of three specialists with secondary training in the field of telecommunications for jobs in the Short-Wave Broadcasting Center;

iii) advance training of three specialists with university training in the field of telecommunications for jobs in the Production Center;

iv) advance training of three specialists with secondary training in the field of telecommunications for jobs in the Production Center;

v) advance training of 12 university-trained specialists in foreign languages.

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CSO: 5500

ARGENTINA

BRIEFS

MICROWAVE SYSTEM--Santa Rosa, La Pampa, 2 Aug--La Pampa Province will be connected to the national microwave network in March 1978. The local organization will have seven complete transmitters and receivers, instruments, command modules and other elements, which are to be built or manufactured in France. The provincial government will also have five transmission towers installed. The total cost amounts to approximately 50 million pesos. [Buenos Aires TELAM in Spanish 1507 GMT 2 Aug 77 PY]

RADIO AND TV ORGANIZATION--Posadas, 29 Jun--The provincial executive branch has ordered the organization of an autonomous entity--to be formed by LT85 Television Channel 12 and the broadcasting stations LT17 Radio Provincia de Misiones and LT46 Radio Bernardo de Irigoyen--of which the [provincial] government's relations secretariat will be fully in charge. The two broadcasting stations and the television channel operated as part of the Broadcasting Institute for Radio and Television of Misiones Province [Instituto de Difusion--Radio y Television de la Provincia de Misiones--IDIRATEMI], which is dissolved by the same decree. While the two broadcast stations will be under the direct control of the province's public administration, the television channel--due to its commercial activities--will be considered a state enterprise with authorization to operate in the private sector. [Buenos Aires TELAM in Spanish 2204 GMT 29 Jul 77 PY]

CSO: 3010

CUBA

BRIEFS

TWO NEW RADIO STATIONS--Two new radio stations have been inaugurated in the Camaguey municipalities of Guaimaro and Santa Cruz del Sur. Nivaldo Herrera Sardinias, president of the Cuban Radio and Television Institute, presided over the inauguration ceremony. The new radio stations are CMJJ Radio Rectangulo in Guaimaro, and CMJU Radio Santa Cruz del Sur. At the end of the ceremony in Guaimaro Nivaldo Herrera noted that it is most impressive to know that the work of organizing, building and readying the radio stations was done with the support of the people. In Santa Cruz del Sur he said that projects such as these form part of the evolution of each municipality and highlighted the fact that the new radio station is to be operated by women. [Text] [Havana Domestic Service in Spanish 2300 GMT 30 Jul 77 FL]

CSO: 5500

PERU

RELAY ANTENNA INAUGURATED IN SANTA CRUZ

Lima EL COMERCIO in Spanish 2 Jul 77 p 27

[Text] Chiclayo, 30 Jun--The first relay antenna of Channel 4 Television in Chiclayo, Channel 5 in the Department of Cajamarca, was officially put into operation in the province of Santa Cruz.

The inhabitants were at Cerro Cotrumi 2,200 meters above sea level and 230 meters from the center of the city where the 21-meter antenna and the relay station were erected.

They sponsored the inauguration ceremony after Father Jose Antonio Salazar blessed the antenna.

The ceremony was attended by provincial authorities headed by the mayor, engineer Francisco Chong Arrascue, and the chairman of the Health and Welfare Committee, Dr Cesar Llontop, as well as the directors of the Santa Cruz Humanitarian Society of Lima and the Santa Cruz de Chiclayo Cultural Club.

Managers

The television manager in Santa Cruz, Dr Oscar Valdiviezo Smith, and his helpers--engineer Francisco Chong, radio technicians Carlos Benitez and Aurelio Tenorio and Benjamin Quiroz, Cristian Hoyos, Ramon Calderon, Humberto Tenorio, Humberto Orrego and Pedro Villegas--were also present.

Blessing and Inauguration

The blessing and inauguration ceremony took place on Saturday, 25 June, at 1100 hours.

The city of Santa Cruz is 142 kilometers east of Chiclayo. It takes 6 hours on a winding highway to reach it in a truck, the only vehicle that connects these places on the coast and in the mountains of Peru daily.

First Television

On the same day at 1830 hours in the Santa Cruz sector of San Roque, the first television was blessed and donated to that town by Dr Juan Eduardo Orrego and his wife, Georgina Ugaz de Orrego. Professor Benjamin Quiroz and the director of the Santa Cruz Educational Center, Berzelina Becerra de Vera, spoke at the ceremony about its significance.

Later, at 2140 hours, directors of the Santa Cruz Humanitarian Society of Lima headed by its president, Leopoldo Ugaz, gave a television to the city of Santa Cruz. It was accepted by the mayor, engineer Chong, who tuned in the picture and the sound on the Chiclayo channel.

7717

CSO: 3010

INTER-ARAB AFFAIRS

BRIEFS

DUBAI RADIO TO ARAB WORLD--Dubai, 28 Jul--Dubai is expanding its commercial radio station to reach the whole Arab world with the purchase of two 750 kw transmitters, the director general of Dubai Radio and Color Television said here today. The transmitters, in addition to powerful short-wave and other equipment, are being supplied by Marconi of Britain under a 5.5 million pounds sterling contract, he added. Dubai's commercial radio started transmissions in 1971 but it has so far been received only in the Gulf region. The new equipment would enable its signals to be heard clearly in the Middle East, part of North Africa and southern Europe and the Indian sub-continent, he added. The station will continue to broadcast 21 hours of Arab programs a day and 8 hours of English programs, he said. The only other major commercial radio station covering the Middle East in Arabic is Radio Monte Carlo. [Text] [Amman JORDAN TIMES in English p 4 29 Jul 77 JN]

CSO: 5500

IRAQ

BRIEFS

NEW INA DIRECTOR--Muhammad Manaf al-Yasin has been appointed director general of the IRAQI NEWS AGENCY. Al-Yasin has been acting director general since 10 April 1977. Taha Yasin, former under secretary of the Information Ministry, will be deputy director. [Baghdad INA in Arabic 0750 GMT 9 Aug 77 JN]

CSO: 5500

LIBYA

BRIEFS

CENTIMETER WAVE STATION--The grand al-Fatih of the December revolution added a new accomplishment to its numerous accomplishments in the field of postal services by inaugurating, yesterday noon, the centimeter wave station in the city of al-Abyar. A special ceremony, held on this occasion, was attended by the political and popular leaderships in the al-Abyar area. The post office supervisor in Benghazi, in an interview with the reporter of the Arab Revolution News Agency, mentioned that the new station's capacity is 3000 telephone circuits, 2 radio circuits and 48 telegraph circuits. One automatic mechanical telegraph line and two lines, Arabic and Latin, in the post office, will be operated by means of this station. The al-Abyar municipality will also be connected with Tripoli and Benghazi by means of direct lines. The post office supervisor added that the objective of this project is to make the telephone and telegraph services available for citizens, institutions and public services in the area and to secure connection with the different parts of al-Jamahiriyah within the framework of the plan of the General Institute of Postal Services. In conclusion, the post office supervisor said, "By inaugurating this station and the connected projects the connection with al-Abyar and its branches will be at a high level of services and the al-Jamahiriyah will be among the progressive countries in this field of services." The total cost of this station is estimated at 1 million Libyan dinars. [Text] [Tripoli AL-FAJR AL-JADID in Arabic 21 Jun 77 p 1]

8988

CSO: 5500

SAUDI ARABIA

ARAB SATELLITE TO GO INTO OPERATION IN 1981

Jiddah 'UKAZ in Arabic 29 Jun 77 p 6

/Article: "Arab Satellite Will Go into Operation in 1981 To Serve 90 Percent of the Citizens of the Arab Countries"/

/Text/ His Excellency Dr Ibrahim Ahmad 'Ubayd, undersecretary of post, telephone and telegraph for telegraph affairs and chairman of the board of directors of the Arab Space Communications Organization, gave a special interview to 'UKAZ in which he dealt with the discussion he made at the International Symposium of American Businessmen in Washington on the Arab Space Communications Organization's role in linking the nations of the Arab world to those of the rest of the world by space satellite and on the increasing need of the Arab nation in general and the Kingdom of Saudi Arabia in particular to use space satellites in the area of telephone and telecommunications.

He also talked about the study the International Telephone and Telecommunications Federation had previously made on the Middle East's need to use these satellites. This study took 2 years.

He talked about the studies made in the Kingdom on this matter prior to promulgation of the second development plan. These studies confirmed the need for expansion and development in the area of such communications, in view of the fact that they are among the basic equipment for the economic infrastructure. The second five-year development plan had had the objective of expanding the space communications system by 30 percent per year during the years of the plan. Following these studies, it became clear that the Arab world's requirements for space satellites exceed all else and therefore there occurred the Arab Space Communications Agreement, which 21 Arab countries have already signed in Cairo.

Dr Ibrahim added that as far as the Arab satellite which the organization is intending to construct goes, the Arab world's actual requirements must be determined and then economic feasibility studies for the project must be carried out. After these two matters, it will be possible to fix and set forth the specifications for the Arab satellite and thus the greatest possible service will be made at the smallest possible cost.

From the study presented by the Federation of Arab Radio Organizations and the Arab Telephone and Telecommunications federation, it became clear that the Arab world's need will be as follows: from 10 to 20 broadcasting frequencies for direct broadcasts, two television channels to be allotted to remote areas, two other frequencies to be allocated to national exchange programs, three telephone frequencies at the startup of operation, and 6,000 telephone channels by the beginning of 1985.

Dr Ibrahim stated that the studies have proved that the costs of artificial satellite communications are not influenced by distance. Therefore, they will bring about big savings in construction and operation. It has become apparent that three satellites will be required for the Arab satellite project. One will be sent up into space to operate, the second will be sent up as a reserve for it, and the third will remain as a reserve on ground. He stressed that the Arab artificial satellite, when built, will serve 90 percent of the inhabitants of the Arab world. A choice will be made between the revolving satellite system and the fixed triaxial system. He reviewed the frequency range among other space issues.

Ground coverage of the artificial satellite will include a surveillance and long-distance measuring station, one or more major ground stations for television and telephone transmission, and a ground station for reception to be placed in remote areas.

Dr Ibrahim talked about the benefits which will accrue to the Arab world from the artificial satellite project and said, "The benefits are numerous; among them are the elimination of illiteracy in the Arab world, the educational and training system's reliance on television, the provision of health and guidance services to social centers and remote areas through communication by specialists, the spread of television transmission to all Arab countries, and the exchange of television and radio programs among Arab countries. It will also provide all telephone, telegraph and telex services in a large-scale, immediate manner."

Regarding the benefits of the Arab satellite for the Kingdom, he said that the age of the Arab artificial satellite will be that of the linkup of television and telephonic services to all remote areas of the kingdom and the linkup of these areas to the Saudi system at lowest cost.

He said that the project will be operated on commercial bases and pricing will be determined by the Arab organization to recoup the capital invested in the project within 4 years from startup of operation.

He concluded his talk by stating that the executive steps of the project have actually begun and an international bid has been announced for consulting services to the organization. The task of the consultants will be to

determine the system's programs and specifications and participate in analyzing data presented by contractors, conduct maintenance and operation, and train Arab experts.

It is expected that project service will start in the early part of 1981.

The government of His Majesty the Honorable King has encouraged the technical organization with all its means, has contributed the major portion of its capital, and will grant it a large plot of land to be confined to the organization in Riyadh. His Royal Highness Prince Fahd ibn 'Abd-al-'Aziz, the crown prince and deputy prime minister, is also giving all attention and concern to the work in the organization and is providing it with all the help it requires.

11887

CSO: 5500

MADAGASCAR

RADIO-NEDERLAND DELIVERS TWO MEDIUM WAVE RELAY STATIONS

Tananarive MADAGASCAR-MATIN in French 22 Jul 77 pp 1, 2

[Excerpts] Yesterday at Antsirabe still another forward step was taken by cooperation between Radio-Television Malgache [Malagasy Radio and Television] and Radio-Nederland [Netherlands Radio], which has just formally delivered to the Malagasy government two medium wave relay stations, one installed at Antsirabe, and the other at Maintirano.

The ceremony took place in the "city of waters" in the presence of secretary general Ramambazafy of the Ministerial Council at the Presidency, the chairman of the Fivondronamparitany of Antsirabe, the two deputies of Vakinankaratra prefect, director of Radio-Nederland in Madagascar Van Wijngaarden, and Denis Ranaivoarisoa, technical director of Radio-Television Malgache, and many Malagasy and Dutch engineers and technicians.

Since 1968

After he had shown the facilities at this new medium wave relay station to those present Van Wijngaarden in a short speech talked about the broad outlines of cooperation between Radio-Madagascar and Radio-Nederland, cooperation which took concrete form in the installation of this relay station at Antsirabe and installation of a similar station at Maintirano several months ago.

He then reminded his listeners of the close collaboration between the Malagasy government and Radio-Nederland since the signing of a convention in 1968. Up to now six 1-kilowatt medium wave transmitters have been supplied by Radio-Nederland and installed by Radio-Madagascar at Majunga, Tulear, Tamatave, Fort Dauphin, Diego Suarez, and Fianarantsoa. Van Wijngaarden also reminded of the offer by Radio-Nederland, over a period of 10 years, to have two technicians and two employees of Radio-Madagascar follow a 1-year technical training course in the Netherlands.

High Quality Reception

As provided in the convention there have been many official contacts, at the technical level as well as at the general and program levels. In this way, Wijngaarden emphasized, he came to learn of the problems with which

Radio-Madagascar had to contend in order to provide good reception throughout the island. That is why, he continued, that Radio-Nederland is pleased to contribute a little toward improving communications in order to enable Radio-Madagascar to achieve its goal--high quality reception throughout the country. Next he gave some idea of the activities initiated toward that end by Radio-Nederland. Since January 1975 the budget of 5 million Malagasy francs per year, intended for instruction of four trainees in the Netherlands, could also be used for improving Radio-Madagascar's transmitters. In 1976 advantage was taken of this budgetary provision to finance modification of the 100-kilowatt transmitter at Fenoarivo and to construct several transmitting antennas and provide various lots of spare parts. And in this year, 1977, various lots of spare parts also are being, or will be, provided by Radio-Nederland to Radio-Madagascar.

Van Wijngaarden then stated that we have now come to the latest important change which affects this cooperation, namely, the delivery and installation of six medium wave relay stations, starting 1 January 1977, a project whose cost is estimated at 20 million Malagasy francs. With this project Van Wijngaarden emphasized "we advance the hope of Radio-Madagascar to cover the territory with several medium wave relays which receive the short wave transmissions from Tananarive, that is to say Fenoarivo, and retransmit them by medium waves over a limited radius. We are very happy to deliver to you this day the first two stations, the one at Maintirano and that at Antsirabe. Work on the other four stations can begin as soon as the Malagasy government decides upon their locations."

This Antsirabe relay station is a transmitter-receiver complex which includes two short wave receiving antennas connected by means of two coaxial cables to the receiver. The received signal is retransmitted by a medium wave transmitter connected to a transmitting antenna. The transmitter power is 250 watts. It can be received within a radius of 20 kilometers. The Maintirano relay station has the same characteristics.

11,706
CSO: 5500

REPUBLIC OF SOUTH AFRICA

BRIEFS

COMPUTER BODY ESTABLISHED--The SA computer bureau and computer services industry has been experiencing such good growth that a national body to represent its interest has been formed under the title, SA Computer Services and Bureaux Association (SA Cosba). The main aims of Cosba will be to ensure that high standards are maintained in the industry and that its members behave in a responsible manner to clients and each other. [Text] [Johannesburg THE STAR in English 5 Aug 77 p 21]

CSO: 5500

TOGO

TELEVISION NETWORK COVERS 75 PERCENT OF COUNTRY

Lome TOGO PRESSE DENYIGBA in French 22 Jun 77 pp 1, 5

[Statement given on 21 June 1977 by Kwaovi Benyi Johnson, minister of information]

[Excerpts] As of yesterday, Tuesday, 21 June 1977, all our compatriots living in the maritime regions, the Plateau regions, the Central region, the Kara region, and as far as the Mango Pass, will now be able to watch Togolese television. The news was announced yesterday by Kwaovi Benyi Johnson, a member of the Central Committee and minister of information. Through this expansion of the national television network, Gen Gnassingbe Eyadema has once more proved his desire to lead our country out of underdevelopment. For in addition to the informational role, television in particular and all the mass media in general, have the task of forming and transforming the attitude of the citizens. With this expansion of its network, national television now covers approximately 75 percent of the country.

Here, in extenso, is Mr Johnson's statement.

Television pictures used not to be received beyond Kpalime. But those that you see now can be seen simultaneously in Lome, Aneko, Tabligbo, Vo, Tsevie, Notse, Amlame, Badou, Kloto, Atakpame, Sotouboua, Tchaoudjo, Bassar, Bafilo, Lama-Kara, Niamtougou, Pagouda, Kante, and the Mango Pass.

All the audiovisual means, and particularly television, are neither a luxury for us nor some kind of gadget, nor yet a delusion. We consider them to be preferential means of development.

To inform, form, and transform--that is, to give to a country of responsible, competent men living in full awareness the adventure of the modern world.

To inform, form, and transform is to root the Togolese citizen in his origins and his traditions and to preserve his personality and his authenticity.

To inform, form, and transform, but also to distract. We do not want our development to be compulsion, but rather participation, joining, blossoming.

The Togolese television programs reach the district of Lama-Kara on the very day that the anniversary of the Pya martyrs is being celebrated. A fortunate coincidence and striking evidence that the sons of this country are truly worthy of "those who died so that Togo might live."

Today most world-famous economists and sociologists are in agreement in recognizing the functions of the mass media as a booster of development. They readily rank the media as one of the prerequisite conditions to an economic take-off.

It is, then, not a luxury but on the contrary a necessity to equip oneself with the most modern means in the area of mass communication. If it is known that everywhere here in the Third World, the State has preceded the Nation and that consequently a national consciousness must be forged by winning the necessary victory over ethnic, regional, or other divisions, and as soon as there is cultural homogeneity, the way must be opened for dialogue and the learning of the different cultures, and that finally, after there is a cluster of societies, a strong and indivisible united nation must be built, at that same time the question of developing mass means of communication must be raised. It is clear that there must be an interaction between information and economic development, although for the time being, we must take care not to have a causal relationship. Interaction between information and development is constant and cumulative.

In order to achieve this, a third transmitter, with 10 kw vision and 2 kw sound, had to be set up in Aledjo Kadara. The two other transmitters in existence before that in Aledjo Kadara--the 100-watt transmitter in Lome and the 10 kw transmitter at Mong Agou, permitted coverage of approximately 35 percent of the total area of the country.

Now, with Aledjo Kadara, we cover around 75 percent of the national territory.

A fourth transmitter is planned which, when installed further north, will permit a total coverage of Togo. The few areas of darkness that will still exist will be opened up thanks to relay transmitters, the establishment of which is now being studied.

Over and beyond these considerations, I would like to stress the fact that this expansion of our television network, not only in black and white but also in color, is in its experimental stage, and we ask the indulgence of our viewers during this period of final adjustments.

We in this country thus find ourselves in control in the area of collective broadcasting. We thus find ourselves responsible for our destiny in the area of audiovisual communications. However, freedom and independence are never acquired in a definitive manner. They must be maintained and preserved, and that necessitates a constant effort and unfailing vigilance.

11550

CSO: 5500

USSR

BRIEFS

FAR NORTH TV RELAY STATION--Dikson, Taymyrskiy (Dolgano-Nenetskiy) National Okrug--an "Ekran" television station has been set up here. Inhabitants of the island and mainland settlements can now match central television transmissions. This is a great gift to Kikson, beyond the Arctic Circle, in jubilee year. Television sets have already been installed in the foyers of some organizations and in the "Polar Explorers Club." People in the settlements of Khatanga and Karaul in Taymyr will also be able to watch television broadcasts soon. [Text] [Moscow SOVETSKAYA ROSSIYA in Russian 3 Aug 77 p 4 LD]

PHOTOCOSMIC SYSTEM TO Khabarovsk--Khabarovsk has become the first place in the country to receive central papers via a photocosmic communications system. The apparatus, (Gazeta-2SK), developed by Leningrad specialists, speeds up the process of photographing the papers and improves the quality of printing. Of the 1.3 million copies of central papers to be printed in Khabarovsk, 940,000 will now be available in the morning. Receipt of the papers is achieved via the Raduga Satellite and the Orbita Ground Station, simultaneously with television programs. [Moscow Domestic Service in Russian 0430 GMT 2 Aug 77 LD]

CSO: 5500

CREDITEL FINANCIAL OPERATIONS, LIMITATIONS DESCRIBED

Paris REVUE DES PTT DE FRANCE in French No 5, 1976 pp 4-9

[Article by Jacques Cortot: "Financing and Payment Activities of CREDITEL."]

[Text] It should be recalled that CREDITEL'S mission, like that of other similar organizations, is to assure financing through property and real estate lease-lending of equipment and buildings intended for telecommunications and ordered by the administration of the PTT.

Accredited as a financing company for telecommunications in October 1972, CREDITEL immediately made an agreement with the PTT administration, regulating for a five year period its general operating conditions and its fee calculation basis. Within the legal framework thus defined, yearly formal agreements, by arrangement with the administration, set the sums to be financed by CREDITEL and the practical modalities determining its fee levels.

With regard to the company's operating modalities, two essential points only will be emphasized: the individualization of these operations and their purely financial character.

It will be noticed first of all that the sums noted in the agreements are allocated to the financing of individual operations; for example, construction of a given building, the creation or extension of a given telephone exchange, supplying of a given set of equipment; each of these operations being the subject of a particular contract made by the administration with a building contractor. Financing of each of these contracts is guaranteed by signature of a construction contract and a lease-lending contract between the administration and CREDITEL. This method makes it possible to apply to the company's operations the techniques and legal regulations of lease-lending, which implies, of course, at management level, the necessity of individual execution of contracts.

The second point, which from this point of view is worth remembering, is the following: CREDITEL operations retain an exclusively financial character, and in conformity with the text of the 24 December 1969 law instituting telecomm-

unications financing companies, in no way affect the rights and responsibilities of the administration arising from the PTT code. Thus, the administration retains sole responsibility for the conception and realization of equipment which is the subject of contracts, notably of the choice of construction contractors. Thereafter it operates the properties which are the subject of lease-lend contracts under the same conditions as those it has directly acquired. Finally, at latest at the end of the lease-lend period, it acquires legal ownership of these properties.

It is up to CREDITEL to gather the necessary capital for the financing of the subscribed contracts, to pay builders and suppliers according to invoices verified and countersigned by the administration and to place completed equipment and buildings at the PTT's disposal according to lease-lend techniques. Of course, the company cannot be totally unconcerned about the nature of the equipment, to the extent that it may have financial or legal implications, for example on payment timing or delivery time of the equipment involved. But in no case has it to take any initiative in this area.

The operating technique just described makes it possible, to reconcile, on the one hand, the need to individualize operations so as to rest on the legal framework, now classical, of lease-lending, and on the other, absolute respect of the PTT's monopoly and the public service character of telecommunications.

This presentation of CREDITEL continues with an examination of the means of financing operations, the essential aspect of the company's activity.

To guarantee financing of contracts subscribed within the framework of the annual agreements signed with PTT administration, CREDITEL has recourse to three categories of resources: private funds; loans; short term loans.

Private funds (capital and self-financing) and loans (bonds and bank loans, long term) are applied to the financing of lease-lend contracts, which come into force when equipment is put into service (interim acceptance), and which have a duration of 10 years for contracts on private funds and 15 years for contracts on borrowed funds.

Short term loans -- essentially bank overdraft -- provide the greater part of financing for advances paid out to builders during the equipment building phase, while planned long term resources are awaited.

Company receipts also fit into three categories connected with the type of financing:

Interest rates on private funds are determined according to a cost-pegging formula of which details will be given and on which comments will be made later;

Interest rates on loans, not pegged, are calculated on the basis of the prime cost of loans used for the corresponding financing, increased by a lump sum intended to cover expenses of contract management and complete repayment of the private funds;

Interest on advances are invoiced to the PTT at a rate revised yearly, and, since 1974, pegged according to the cost of the various resources used, in the year under consideration, to finance advances paid to builders before the equipment is put into service.

It seems pointless to stress the last two categories of income. Indeed, interest rates of contracts on loans bring in only a fixed repayment complement, justified by services rendered by the company to the PTT in diversifying the administration's means of access to the financial market, and in taking upon itself certain risks connected with the chanciness and limitations of that market, which do not always make it possible to procure funds at the precise time when they can be used. As for the interest on advances, their relative size declines rapidly, as will be seen later, as interim acceptance occurs.

It may be profitable, on the other hand, to devote some explanatory passages to the pegging formula applicable to interest rates of contracts on private funds, a formula which constitutes the most original element of CREDITEL's operations, and which, moreover, will determine the future evaluation of the company's achievements.

The CREDITEL formula is simple; it is composed of a fixed term and a variable term according solely to the development of the turnover of telecommunications. It is therefore relatively easy to calculate the profit rate of contracts on the basis of the various hypotheses which can be made regarding the evolution of this turnover.

This formula is attractive to shareholders. It does indeed guarantee a progression in interest rates linked to the development of telecommunications income, a development which is itself a function of the volume growth of the sector and possible service rate increases.

Since the incidence of pegging is spread over the entire lifetime of contracts on private funds, which is 10 years, a CREDITEL share is a longterm investment par excellence.

The CREDITEL formula appears furthermore to be very appropriate for the goal envisaged when telecommunications financing companies were founded: association of new categories of investors, especially those interested in acquiring shares, with the financing of the national effort for telephonic equipment. It accomplishes this association by very direct means, by interesting the company, and consequently its shareholders, in the growth of the telecommunications turnover, which they have helped to develop by financing new equipment.

In addition, pegging according to a turnover figure, thus to a value dependent on the service rate level, is of a nature to reassure some shareholders who are especially attentive to the effects of monetary erosion.

Seen from this angle, the PTT administration's recourse to telecommunications financing companies can be compared to the issue, realized in the past by other public services, of bonds pegged, for example, to service rate evolution or production earnings. Although they fall within very different legal frameworks, both techniques make it possible, while scrupulously respecting the prerogatives of public service, to adjust the cost of financing to the level necessary to involve wide strata of new investment.

Company Organization and Operation

Perhaps the preceding explanations have given some readers the impression that CREDITEL amounts merely to a financial arrangement, an abstract, disembodied organism. We hope to remove this false impression by showing that behind the coldness of figures there exists an active enterprise, associating shareholders, lenders of capital, and management, responsible at various levels for the good operation and development of the company.

Who are CREDITEL's shareholders, and how are links with them organized -- these are the first questions that may occur to a reader interested in the organization of our company.

The increase of capital, raised from 100 million to 400 million francs in May-June 1975, by a public appeal for investment, brought about broad diffusion of CREDITEL shares. In addition, since their admission to the official share list of the Paris stock exchange, these shares have been the object of an active market (daily average transactions reached 2,880 shares for the first semester of 1976).

Although the composition of the CREDITEL shareholder body is constantly being modified, and is in any case only partially known, its general aspect can be described.

According to our estimates, CREDITEL has at present about 11,000 shareholders. A few hundred institutional investors, mutual fund organizations, insurance groups, retirement funds... share about 70 percent of capital (however, a single shareholder, the Joint-Stock and Deposit Bank Group, holds over five percent of the capital). Over 10,000 private persons, therefore, own 30 percent of CREDITEL shares.

One of the major concerns of the company's directors is to assure the best possible information of all these shareholders, whatever the number of shares they hold. Aside from the legal information that any listed company must publish, notably at the time of its general meetings, CREDITEL makes an effort

to communicate to its shareholders the maximum of elements likely to enlighten them about its achievements and its development. Thus, arrangements have been made to have the activity report for the fiscal year 1975 sent out, through banking channels, to all shareholders whose addresses could be learned, that is to say to all owners of registered securities or of securities deposited in banks.

Answering questions asked by shareholders (present or potential) who write, telephone, or even visit the company constitutes one of the most profitable and educational forms of the information activity. Indeed, it is often by this means that note is taken of the need to render more explicit one or other aspect of our activity of which understanding may have escaped a portion of the interested public.

This activity will be pursued and strengthened, notably by sending letters regularly to shareholders and, whenever it seems necessary, holding information meetings.

But relations with shareholders represent, of course, only one of the many aspects of CREDITEL management.

Management seems to us to have three principal characteristics: the important role of information processing; the subcontracting widely practised for certain work; and lastly the slightness of the administrative organizations, a characteristic which results largely from the other two.

As for the origin of CREDITEL, it was planned that information processing would play an important part, notably to guarantee contract management, which represents one of the heaviest elements of company operation. Indeed, for every contract, a relatively large number of operations have to be recorded and negotiated: payments to builders, calculation of interest on advances, then (after interim acceptance of equipment) calculation of interest rates, with a whole set of complex adjustments arising out of the invoicing modalities laid down in the agreements made with the PTT.

To this end, CREDITEL has at its disposal a terminal linked to an IBM 370 computer. The capacity currently used for storage of the data corresponding to contracts already subscribed by the company already includes one million bytes and is rapidly increasing as agreements are executed. The programming finalized with the technical support of a company specializing in remote information gathering and of one of the founder banks, now makes it possible to assure, in excellent security and speed conditions, payment to builders and the whole invoicing process, as well as the corresponding accounting deductions used as a basis for establishing monthly statements and the year-end balance sheet. This data-gathering tool is capable of handling economically and without large additional investments, the foreseeable expansion of our company. In addition it is widely used for internal work, such as the establishment of short- or long-term estimates.

With the same concern for lightening management, it was decided to turn to frequent use of subcontracting for certain essentially technical tasks not related to our specific activity, and which it would probably have been more costly to try to provide through the company's own means. Thus, a portion of administrative and accounting management (notably all general accounting) has been entrusted to a service company, the Real Estate and Financial Union (UFFI).

Taking into account this organization which frees personnel from numerous repetitious or routine tasks, CREDITEL can manage with particularly light administrative structures. Thus, the company has only seven salaried employees, and only three of them are full-time.

The president and director general and the managing director both devote only a part of their activity to CREDITEL. They represent the company at its highest level, conduct negotiations with the PTT administration and banking pools, make important decisions, and determine, in agreement with the administrative council and the general assembly, the major directions of present and future activity.

The secretary to the council becomes involved principally in the preparation and meeting of company organs, councils, and assemblies, and insures that their operations are in compliance with legal requirements.

A technical advisor, also part-time, assists in finalizing and maintenance of data-gathering programming, as well as preparing negotiations on agreements, which requires very thorough estimate studies.

The permanent staff of CREDITEL comprises only three persons: a manager, a research officer, and a secretary. It assures in a way the continuity of the company: answers to current questions, day-to-day administration, inspection of invoices, correspondence... It also takes part in the preparation of various negotiations. Lastly, one of its main functions is assuring consistent coordination among the different elements contributing directly or indirectly to administration (data gathering, accounting, outside services); assuring synthesizing of current information on the enterprise's progress, and informing general management.

This internal organization, characterized by its great flexibility, is expected to make it possible for the company to face its future development in very economical conditions.

Development and Prospects

CREDITEL has already made a significant contribution to the financing effort undertaken for the development of telecommunications. Thus, the five annual agreements signed by the company, since its creation, with the PTT administration, amount to a contract total of 2.5 billion francs before tax, or over

22 percent of the total before taxes of the overall contribution of the four private financing companies, a percentage which must be appreciated if the fact is taken into account that CREDITEL is the most recent of these companies.

This sum, fully committed, was applied to the following investments:

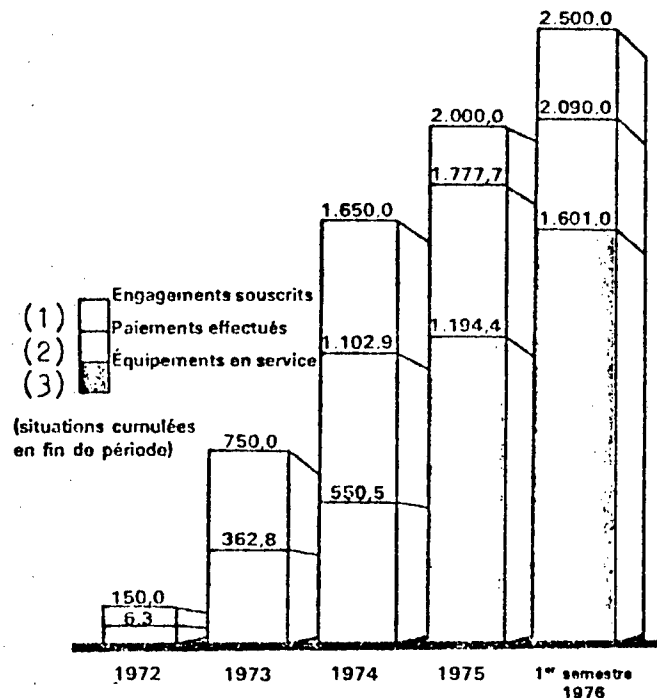
	No of contracts	Totals before taxes	
		In millions of francs	As percent of total
Equipment			
Telephone exchanges	85	431.0	17.2
Extensions	101	386.4	15.5
Transit centers	7	60.0	2.4
Nodal centers	18	80.3	3.2
International centers	5	39.3	1.6
Materiel for operations centers	38	1,290.9	51.7
Equipment for automatic switching	14	160.9	6.4
Telephonic live speech compressors	2	25.1	1.0
Automatic telegraph switching	2	4.6	0.2
Buildings	6	20.6	0.8
Total	278	2,499.0	100.0

CREDITEL's contribution is therefore intended, for the greater part, for the installation of materiel intended to improve traffic flow (notably of equipment for operations centers). It will be noted, however, that the 186 contracts for creation or extension of exchanges financed by the company, which amount to only one-third of its total commitments, are to make it possible to hook up over 600,000 new subscribers situated over the country as a whole.

Execution of the contracts already signed is at widely differing stages, from the 1972 program, of which the construction operations are fully discharged, to the 1976 program, on which the first payments occurred last May.

The accompanying graph 1 represents the overall evaluation of programs financed by CREDITEL, thus diagramming the company's development. It is seen that on 30 June 1976, 2.090 billion francs in payments (or 84 percent of the total debt)

had been made, including 1.601 billion corresponding to equipment or buildings in service at the same date.



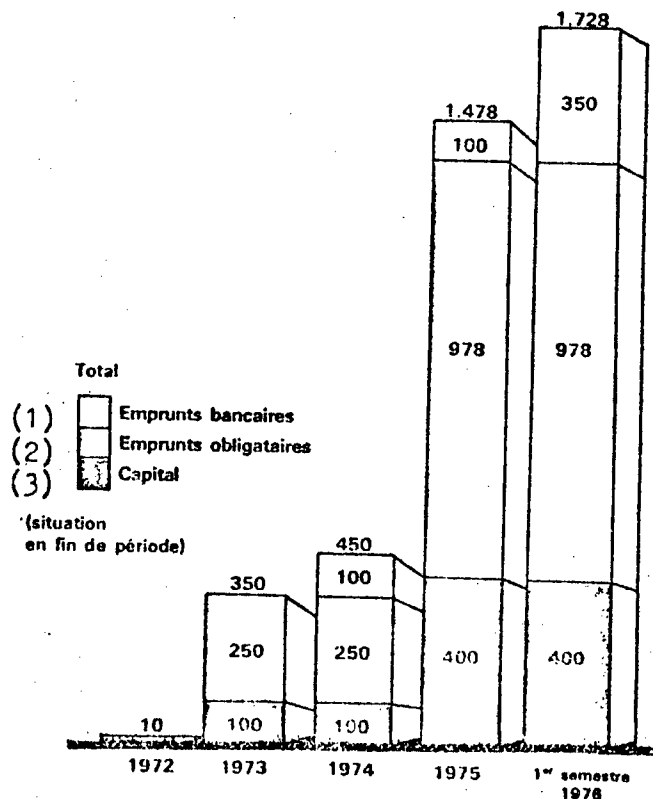
Graph 1. Development of Programs Financed by CREDITEL (in million francs)

Key:

1. Bonds subscribed
 2. Payments made
 3. Equipment in service
- (Status at period ends)

When the agreements were signed, CREDITEL undertook to assure the financing of 2.5 billion francs' worth of subscribed contracts, on the basis of 400 million francs out of private funds and 2.1 billion out of loans.

Graph 2 shows that on 30 June 1976, the company had assembled 1,728 billion francs in permanent resources, including the 400 million in private funds (capital) planned for the agreements in force, as well as 1,328 billion in loans, or three bonds of a total of 978 million francs and two long-term bank loans for 350 million francs. Additional loans will be issued as the equipment they are intended to finance is put into service.



Graph 2. Development of Long-Term Financing Resources Provided by CREDITEL
(in millions of francs)

Key:

Total

1. Bank loans

2. Bond loans

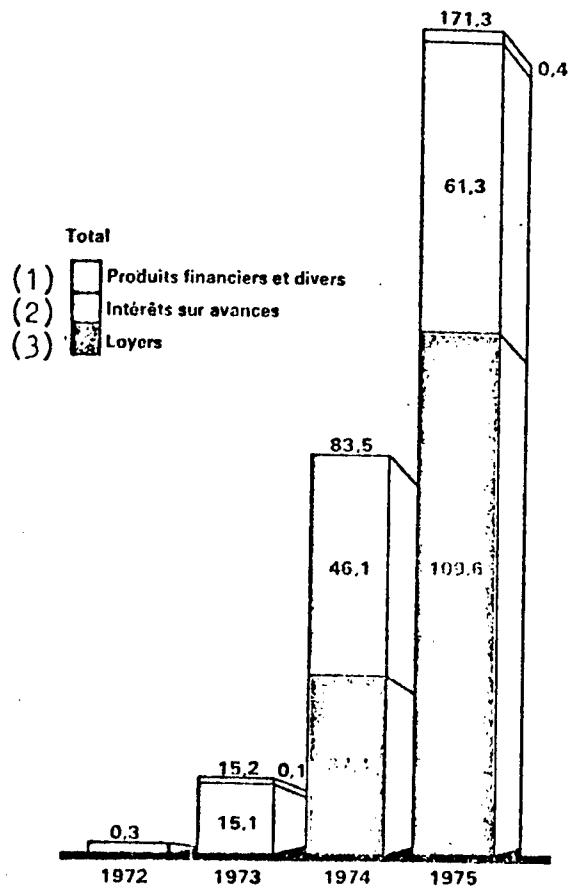
3. Capital

(Status at period ends)

This description of CREDITEL's development would be incomplete without a presentation of the results already achieved. However, it must be stressed that because of the recent creation of the company, these results do not yet have their full significance.

Thus, the role of the interest rates in the turnover figures, which became preponderant in 1975 at 64 percent of the total, will continue to increase as the equipment is put into service. From the turnover, of which the evolution is traced in graph 3, in order to determine the net result, the financial costs must be deducted; that is to say the interest paid on bonds and to banks, the amortizations used for repayment of loans and for reconstitution of liquid

capital in expectation of later re-use, and general expenses, of which the total, given the nature of the company and its organization, is very moderate.



Graph 3. Development of CREDITEL Turnover (in million francs)

Key:

1. Financial and miscellaneous earnings
2. Interest on advances
3. Interest

The net result thus shown in 1975 made it possible to pay shareholders a dividend corresponding to remuneration on capital of 9.85 percent pro rata temporis, or 9.85 francs for older shares with full dividend eligibility and 4.40 francs for new shares eligible for dividend on 22 July 1975.

This rate of remuneration will increase, of course, in accordance with the pegging of interest rates on private funds, the effects of which have been mentioned above.

As the end of this presentation of CREDITEL is reached, it remains now to discuss the company's future prospects.

It is well known that the telecommunications financing companies, bearing in mind the time when the PTT administration, disposing of sufficient resources, will cease to have to recourse to their sources, were given a statute extending to them the possibility of undertaking the activities of a building society for commerce and industry (SICOMI), thus of financing through lease-lending or ordinary leasing any building not equipped for industrial or commercial use.

If such diversification of activities is not to be excluded as an eventual possibility, it is not presently part of the intentions of CREDITEL, which for the immediate future hopes to reserve all its means for the financing of telecommunications.

Indeed, the priority character of the development of telephonic equipment was reaffirmed by the VIIth Plan bill. Bringing the number of main lines from seven million at end 1975 to 15.5 million in 1980 and almost 20 million in 1982, while also pursuing improvement of service quality, implies the placement of considerable financial means.

Certainly, the administration's own means (self-financing) are in noticeable progression, as is the contribution of the new company for financing through public capital, FRANCETEL, which finds the greater part of its resources on the money market at medium term.

It nevertheless remains true that private financing companies again this year brought in 10 percent of the resources needed for realization of the telecommunications investment program. In the present context, and without prejudging the contribution they will be asked for in the future, these companies represent an immediately available source of additional financing, of great flexibility and well adapted to the collection of investments ready to give their support to the effort undertaken by the PTT administration.

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FRANCE

TELECOMMUNICATIONS' PLACE IN GOVERNMENT PLAN REVIEWED

Paris REVUE DES PTT DE FRANCE in French No 1, 1977 pp 19-24

[Article by Daniel Gourdellier, Engineer, and Alain Hoffmann, Economist, in the Service of Programs and Financial Affairs of the General Directorate of Telecommunications]

[Text] The development of means of telecommunication was not among the priorities of the first French development plans. It was only the adoption of the Sixth Plan that started this vast effort, which is presently at its peak, for recovering the delay of French telephone equipment with respect to its principal partners.

The main decisions which mark this "recovery" effort were:

Spring 1971: Adoption of the Sixth Plan, one of whose outstanding orientations was the total automation of the country;

25 January 1973: Taking into consideration the magnitude of the demand, an interministerial committee re-evaluates the Sixth Plan;

1974: With an equipment budget of 10.3 billion francs for the year, telecommunications becomes the largest public investor, ahead of EDF (Electricity of France);

22 April 1975: An interministerial committee agrees on an additional program of 4.2 billions for 1975 and 1976, and supports the "priority" assigned at that point to telephones in France;

June 1976: Adoption of the Seventh Plan, in which improvement of the country's telephone equipment is considered the number four "priority action program."

An Uneasy Gestation

The preparation calendar of the Sixth Plan was disturbed by the May 1968 crisis, and then by the resignation of President de Gaulle in spring 1969, with the result that the plan was adopted during the parliamentary session of spring 1971, six months after it came into force.

The consequences of the oil crisis at the end of 1973, followed by the death of President Pompidou in April 1974, led to an identical situation: the projects studied under the Messmer government since the end of 1973 were interrupted; the preparation calendar of the Seventh Plan and the final organization of the project within the General Plan Board were released only at the end of 1974, under the Chirac government. But telecommunications did not passively undergo these 12 months of incertitude: by the end of summer 1973, working groups had already begun thinking and studying the future.

Summer 1973 - Fall 1974: Before the Official Preparation

As early as the beginning of 1973, the General Plan Board had been asked to write a report on the evolution of the planning, and on its position in the economic and social context of the times; it had also been charged with the task of advancing concrete proposals for the organization of the preparation of the Seventh Plan.

At this stage of its preparation, the Seventh Plan was more ambitious than the preceding ones: it included a debate on the major choices of a society, and an elaborate consideration of the social aspects of development. Telecommunications were classified under "productive activities." The transmissions commission of the Sixth Plan was carried over with the same working methods; it maintained its three committees: "Mails and Financial Services," "Telecommunications," "Radio and Television Broadcasting."

Presented in August 1973, this report was examined by the government within the interministerial committees of 6 December 1973 and 2 January 1974, in the context of a very disturbed international economy: the recent decisions taken by the oil producing nations to considerably increase their prices, had not only brought to the forefront problems of short term economic balance, but also threatened to produce lasting effects on the French economy. On 23 January 1974, the prime minister gave the General Plan Board its directives:

Before preparing the Seventh Plan, conduct a study of the consequences for France of the new conditions in the world's economy, and establish action programs for 1974, 1975, and 1976, aimed at assuring the most satisfactory economic and social development possible; this study should serve as reference for the first preparations of the Seventh Plan;

Update and introduce more flexibility in the methods for preparing the Seventh Plan; for greater efficiency, reduce the number of commissions and their memberships; without abandoning specific goals in priority sectors, shift emphasis toward the statement of preferences and hierarchies in the plan's content; increase the participation of administrations in planning work.

But this time, the death of President Pompidou in April 1974, postponed everything again.

During these events, the internal preparation in Telecommunications continued nevertheless. It began as early as the summer of 1973 within the General Directorate of Telecommunications, with the creation of four work groups: "Evaluation of Demand for Telecommunications Services," "Network Equipment Policy, Consequences for Industry and Research-Development," "Personnel Policy," and "Rates Policy." The reports of these groups, delivered in April 1974, served to start a large number of studies which were then conducted on a permanent basis. In August 1974, these studies resulted in a first file, to be used as a foundation for coordination as soon as the government could establish the framework for the preparation of the Seventh Plan.

January-July 1975: Preliminary Orientations

Following his election as President of the Republic, Mr Giscard d'Estaing designated Mr Chirac as prime minister. Given the worrisome economic situation, the new government team began by taking short term measures (Plan Fourcade of June 1974), with the result that problems concerning the Seventh Plan were not attacked until the fall of 1974. On 11 December 1974, the prime minister delivered his directives to the new plan commissioner, Mr Ripert; the preliminary orientation of the Seventh Plan was to be the topic of a report which would be submitted to Parliament at its spring 1975 session. The future plan would present a limited number of goals in strategic domains for the 1976-1980 period, and retain a group of very selective programs of action designed to allow the fulfillment of these goals, joined by a guarantee of implementation from the state.

In accordance with the letter from the prime minister, four coordination commissions were installed in mid-January 1975; they were composed of representatives from employees' unions, professional organizations, heads of enterprises, local elected officials, administrations, and universities. The topics of their projects were respectively: "Growth, employment, and financing of the Seventh Plan," "France's economic and financial relations abroad," "Social inequalities," and "Territorial preparation and life environment." At the same time, questionnaires were sent to regional groups, requesting their points of view.

During this preliminary orientation phase, telecommunications were of concern especially and indirectly to the commission on "Territorial preparation and life environment," which was the only one which had a representative of the PTT. This commission recognized that the means of telecommunication were

a necessary factor in the endowment of the country and to individual lives, as well as a fundamental priority in industrial and tertiary decentralization.

In parallel to this, the priority granted to telecommunications in the Seventh Plan became an irreversible statement. Indeed, on 22 April 1975, an interministerial committee examined various scenarios for the development of telecommunications, all of them leading to a goal of the order of 20 million main lines at the end of 1982.

The next day, at the end of the session of the Council of Ministers, measures aimed at encouraging production investments were announced, among which was an additional program of 4.2 billion for telephones in 1975 and 1976. In the words of the President of the Republic, this fact would fit "within a broader perspective, which the Seventh Plan will have to draw, and which will be the priority devoted to France's telephone equipment during 1975-1980."

July 1975 - July 1976: Formulation of the Seventh Plan

The law project on the preliminary orientation of the Seventh Plan was adopted by Parliament in July 1975. The organization of the second phase, that of the preparation itself, was covered by the directives of the prime minister and the plan commissioner during the summer of 1975. They contained two principal decisions: 27 topics of interministerial studies, capable of leading to the formulation of "priority action programs," were retained; 19 commissions and ancillary committees, joining civil servants, experts, and social partners in a coordination process designed to perfect the content of the Seventh Plan, were created.

Taking into account the orientations of the interministerial committee of 22 April 1975, the "development of telecommunications" was naturally one of the 27 topics of interministerial studies. To this end, a group of interministerial studies was created, gathering together representatives of the Ministry of the Economy and Finances, the Ministry of Industry and Research, the PTT State Secretariat, DATAR, and the General Plan Board. This group delivered its report on 1 October.

In order to support the work of the group, the Service of Programs and Financial Affairs of the General Directorate of Telecommunications, studied various simulations of intermediate range development of telecommunications. Ultimately, the group retained two ambitious telephone development scenarios (one corresponding to an average connection delay of 15 days at the end of 1982, the other to a delay of three months).

After examination by the government of the various reports concerning interministerial study topics, the development of telecommunications as a whole was the subject of detailed studies based on the report of the interministerial study group, and conducted by a limited group consisting of representatives of the Ministry of Finances, the General Plan Board, and the PTT State Secretariat. Once more, in this instance, several

scenarios were studied by the Service of Programs and Financial Affairs, primarily focused on problems raised by the financing of telecommunications development.

But together with the administrative step which we have just described, the plan is also the culmination of an entire coordination process.

The commissions of the plan were installed in October 1975. One of the "sectorial" commissions was the Transportation and Communications Commission. Its area of coverage was very broad: urban transportation, territorial transportation, international transportation, mails, and telecommunications.

The principal scenarios for telecommunications development studied by the interministerial study group, were examined and discussed by the commission, who also considered a certain number of documents established by the General Directorate of Telecommunications, specifically concerned with the economic and social implications of telecommunications, and which intended to show how telecommunications could contribute to the achievement of the major goals of the Seventh Plan.

The Transportation and Communications Commission presented its report in March 1976. This report showed the necessary priority which would have to be devoted to telecommunications in the Seventh Plan, and insisted that a significant effort would have to be made in this domain, as part of a priority action program.

We thus reach the final phase: synthesizing the work of the interministerial study groups and of the coordination commissions, the General Plan Board established the Seventh Plan project, which was adopted by the government in April 1976, and approved by Parliament in June 1976 on the advice of the Economic and Social Council.

Among the 25 programs of priority action which were retained as a function of their contribution to the achievement of the ultimate objectives of the plan, the priority action program number 4, "improving the country's telephone equipment," effectively gives Telecommunications the means to place a quality telephone at the disposal of all French people. The financial effort which has been accepted will make it possible to reduce the average connection delay to three and one half months in 1980, to reach a level of 19.3 million main lines in 1982, and bring the quality of service up to international standards, whether in terms of subscriber line quality, or communication quality.

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TURKEY

SATELLITE COMMUNICATIONS SYSTEM TO BE INSTITUTED BY 1978

Istanbul HURRIYET in Turkish 4 Jul 77 p 3

[Article by Bulent Erandac]

[Text] Ankara--It has been announced that a system is being established that will make Turkey independent in the field of communications and that will prevent Bulgaria and Greece from interfering in its telephone, telegraph, and telex ties with Europe and America. Turkey will become part of a worldwide satellite communications system by the middle of 1978.

The system was planned in 1972 by the PTT [Post, Telephone, and Telegraph Administration Directorate General]. Because of domestic communications limitations and the inability to develop the system sufficiently, it was only in 1976 that construction could begin. By the middle of 1978, a ground station which will make satellite communications possible will be put into operation, and Turkey will become one of the 73 nations benefiting from communications satellites.

The PTT, which is responsible for the international satellite communications system in Turkey, gave information on the work of telecommunications experts:

"Turkey's joining the satellite communications system is a more important event than the building of the Bosphorus Bridge. Turkey has maintained communications with Europe and America by using Greek and Bulgarian communications channels. The transition to the satellite communications system is a declaration of Turkey's independence in the communications field.

"Intelsat (International Telecommunications Satellite Consortium), of which Turkey is a member, handles a very large proportion of the international communications traffic through use of five satellites today that are in synchronous orbit at a distance of 35,700 km from the earth over the Atlantic Ocean, Pacific Ocean, and Indian Ocean. Intercontinental communications, with a present capacity of 14,000 telephone channels, are maintained via 137 ground stations located in 73 of the 95 nations that belong to Intelsat."

Specialists spoke of the revolution in Turkey's field of communications thanks to the first ground station that is being constructed near Ankara:

"Because of its first ground station, Turkey will have the potential to communicate directly with countries in North America, South America, Europe, Africa, and the Middle East. It is planned that the ground station will establish connections with America, England, Germany, Holland, Iran, and Israel initially and that the number of nations can be increased as needed.

"A second ground station will be constructed near Ankara as well, next to the first station. This station will be directed toward satellites above the Indian Ocean. In this manner, ties with Asia and Japan will be established.

"In 1979, a resident of Ankara, Istanbul, or Diyarbakir will be able to speak with America or another nation via satellite the moment he wishes by picking up the phone in his home."

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END