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Worldwide Report

TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

(FOUO 6/82)

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WORLDWIDE REPORT

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BRIEFS

ZIMBABWE,ROMANIAN NEWS AGENCY AGREEMENT--Salisbury, 25 Feb (PL)--Representatives from the news agencies of Zimbabwe (ZIANA) and Romanian (AGERPRESS) signed in this capital an agreement for the exchange of information. The agreement was signed by the chairman of the Amalgamated Mass Media of Zimbabwe Davison Sadza and the Romanian ambassador to this country Petre Blajovici. Sadza said he hoped the signing of the agreement would go a long way to improve the relationship between the two countries. In reply Ambassador Blajovici said the signing was a new step forward to improve cooperation between the two countries. [Text] [PA242130 Havana PRELA in English 2020 GMT 24 Feb 82]

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CUBA

COMMENTARY ON 'PANA' NEWS AGENCY REPORTED

PA232140 Havana PRELA in English 1840 GMT 22 Feb 82

[Text] Havana, 23 Feb (PL)--The importance of the Pan-African News Agency (PANA) in the spreading of a correct and truly image of the peoples of Africa was highlighted here.

A commentary carried by the daily GRANMA stated that the recent meeting of the International Program for the Development of Communications held last month in Acapulco Mexico supported the carrying out of this project.

The PANA News Agency with headquarters in Dakar constitutes a kind of pool of national agencies of nearly 50 countries of the African continent with five regional centers of reception and distribution in Tripoli, Lagos, Kinshaza, Khartoum and Lusaka.

The article states that the PANA News Agency requested $1.5 million which were granted mostly by the states of the Persian Gulf.

The U.S. representatives to the Acapulco meeting stated their reserves on the PANA News Agency because its constitutional principles claim that this news agency will contribute to the liberation of the African people and will keep a policy contrary to racism, apartheid, Zionism and all the forms of exploitation and oppression.

To counteract this action the United States defends the private initiatives and the transnationals of information and stated the purpose to carry out parallel programs to those of the PIDC linked, with the Agency for International Development (AID) and the private sector.

With this attitude the U.S. is seeking to place the Third World in front of the dilemma of choicing between autonomous development or continuing relying on the U.S. model, the article added.

However, Third World nations are seeking to develop their own communications and for this they need assistance, though they reject any assistance which may become a link of dependency, it ended.

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USSR

COMMUNICATIONS FACILITIES EXHIBITED AT 'SVYAZ'-81'

Moscow ELEKTROSVYAZ' in Russian No 12, Dec 81, pp 1-4

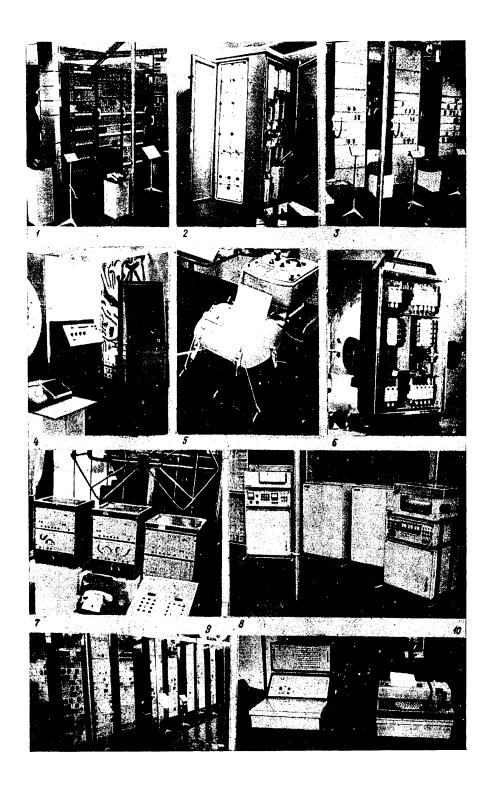[Article by G. Monina: "Communications Facilities in the Service of Man and Society"]

[Text] The slogan for the Third International Specialized Show "Communications Systems and Facilities" -- "Svyaz'-81" -- determine the humanitarian nature of the tasks which face scientists and specialists in this area today. Today's ubiquitous communications provide the most important means of information and education, the means which make all peoples participants in the common affairs of mankind and which promote mutual understanding and cooperation between governments.

The "Svyaz'-81" show, which was held 2-16 September 1981 in Moscow, was an important step toward strengthening international scientific and technical cooperation. This exhibit of the modern achievements of science and technology in the area of creating and utilizing new systems and facilities for processing, transmitting and receiving various types of information had over 600 enterprises, organizations and firms from 23 countries as participants. The show made it possible to find new paths and possibilities of cooperation between various governments in creating and utilizing communications facilities, to expand and strengthen mutually profitable contacts, to compare levels of development of communications achieved by different countries; it was a catalyzer for scientific ideas in research, design and operating activity.

The largest exponent at the show was the Soviet Union. Over 3000 exhibits from 16 ministries and departments presented equipment -- ranging from communications satellites to domestic equipment and mail processing facilities, from complex computer-based systems to components which provide the basis for modern radio electronic equipment.

The editors of the journal ELEKTROSVYAZ' propose to publish a series of articles devoted to the "Svyaz'-81" show -- descriptions of innovations of domestic communications technology, as well as thematic reviews of the trends of development of individual electrical communications subbranches. Presented below are photographs of several exhibitions from the Soviet section of the "Svyaz'-81" show. [Photographs on following pages; key below.]

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Pages 2-3: 1. Starting on the left, the narrow rack is a D-AVU-10 digital delta-modulation transmission system designed to handle 50 subscriber lines to a city-type automatic exchange over 10 pairs of a balanced type T cable with conductor diameters 0.32, 0.4, 0.5, 0.6 and 0.7 mm; next is the IKM-30S primary digital transmission system which is used to organize trunk and subscriber lines; this equipment can form up to 30 voice grade channels by means of pulse code modulation, organize digital transmission channels without occupying any telephone channels, form separate signaling channels (up to four per voice grade channel) and extract the digital stream at an intermediate station by extracting some of the telephone channels.

2. The Elektronika-Svyaz'-11Ts digital radio relay system, designed to transmit digital information at 8448 kbps, can be used to create links up to 250 km long with an average repeater interval of 25 km; this equipment allows up to three telephone channel insertions and extractions. It operates in the 10.7-11.7 GHz band with transmitter power of 0.2 or 1 W.

3. The VOLS-1M-120 fiberoptic communications equipment, designed for use on local, intra-zone and mainline links, can be used to organize four digital supergroups over individual fiberoptic circuits which are combined in a single cable.

4. The APUS equipment for time-charge accounting of local toll calls is designed to compute the tolls on telephone calls within a city telephone system depending upon their duration.

5. The YaL emergency-rescue radio is designed to transmit radio telegraph and radiotelephone alarm and distress signals automatically, and to provide two-way telegraph and telephone communications aboard rescue vessels.

6. The Elektronika-Svyaz'-500 digital radio relay station is designed for operation in inaccessible regions. The autonomous power supply system allows the radio to operate unattended for at least 3 years. The section length is 200 km, with an average repeater hop of 25 km. The radio operates in the 1.7-2.1 GHz band with a data rate of 2048 or 8448 kbps and transmitter power of 0.3 W.

7. The Malyutka four-channel radio relay station, which is designed for local stationary or temporary links up to 300-400 km long along gas and oil pipelines can also be used on local communications links, in transport and in power systems.

8. The TsFFA-Ts digital color photofacsimile equipment is designed to transmit color half-tone images over digital channels.

9. IKM-30, IKM-120, IKM-480, IKM-1920 hierarchical series of digital transmission systems.

10. The PTTs-TsKS-100 circular telegraph transmission panel, which is designed to work as part of the operating equipment in message switching

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centers in the common-user network (TsKS-T), permits the transmission of urgent circular messages to terminal points connected over leased channels to the message switching center.

11. Geys-1, Tsikloida and Sibir' radio receivers designed for use aboard merchant marine and river fleet vessels.

12. The Interval equipment is designed to convert information transmitted from tape-type telegraph machines to the format needed for reception on a page-type machine.

13. The Kolos multichannel rural fixed-frequency radio system, which is designed for duplex telephone communications with mobile platforms without frequency adjustment, serves up to 25 dispatcher services.

14. The TT-144 FM voice-frequency carrier telegraphy equipment is designed to provide 144 two-way mainline telegraph connections by multiplexing standard voice grade channels.

15. The Kadr-3PM four-head video recorder is designed to record and reproduce the complete color television signal, sound accompaniment signals, and for electronic display of videophonograms.

16. The Fonemofon speech synthesizer, which is designed to synthesize Russian speech automatically, is used in mass information service systems and in man-machine systems as a computer output device.

17. General-purpose telephone sets -- table model, wall-mounted and souvenir ("Retro").

18. The Veshchaniye digital broadcast system is designed for PCM transmission of four high-class monophonic or two stereophonic signals, or eight information broadcast signals over wire digital circuits and radio relay links in local, intra-zone and mainline networks.

19. The Orbita-RV satellite broadcast distribution equipment is designed to transmit audio broadcast programs and newspaper columns via satellite.

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ITALY

PROPOSED REORGANIZATION OF TELECOMMUNICATIONS SECTOR

Milan IL MONDO in Italian 22 Jan 82 pp 161-163

[Article by Marco Panara: "All Lines to De Michelis"]

> [Text] The minister wants to give SIP [Italian Telepone Company]
> and Italcable all telephone traffic and transform the state agency
> into a planning agency. But some DC [Christian Democratic]
> members...

Will a war be necessary or will there be a series of peaceful agreements? It depends
on the decisions made by the minister of Postal and Telecommunications, Remo Gaspari,
a Christian Democrat. One thing is certain: the Italian telecommunications system,
which does about 6 trillion lire worth of business, is an indispensable service for
the citizenry, and it must be restructured. The minister of state participation,
Gianni De Michelis, has his proposal all ready; it has been 2 years in the making,
with studies done by a group of experts led by the ministry's economics consultant,
Gianfranco Mossetto, who has also been the SIP vice-president for a few months.
At present, the traffic (all communications over telephone lines) is distributed among
the State agencies by telephone services (ASST [National Telephones State Board])
that control inter-area traffic (Italy is divided into 21 areas that more or less
coincide with the regions) and traffic to other European countries and almost all
the countries on the Mediterranean. SIP is franchised by ASST to manage all urban
and local traffic; Italcable, also on franchise from ASST, controls international
traffic to and from all countries not covered by the State agency. De Michelis's
proposal is to concentrate in SIP all national traffic and in Italcable all interna-
tional traffic, while the State agency would exercise the planning and control func-
tions it is formally entitled to but that it has so far done in name only. Since
both SIP and Italcable are controlled directly by STET [Telephone Finance Corporation]
and telecommunications are financed by IRI [Industrial Reconstruction Institute], De
Michelis's plan means essentially that the whole sector of telecommunications will
come under State participation.

"This aspect of the situation," said Gianfranco Mossetto, "while important, was not
crucial in making the choice. The real motive is to avoid waste and duplication in
plant and personnel and to rationalize structures as much as possible to provide an
ever more efficient service." Indeed, there are many cases of duplication of instal-
lations in SIP and the State agency, not to mention the State agency's investment dif-
ficulties under public agency administrative rules.

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Table No 1: Who's Best

(Coefficients of productivity based on 1980)   Source: ASST

Item	SIP	ASST
Income per worker*	45.3	50.6
Investment per worker*	26.8	30.7
Average cost of a worker*	18.4	15.4
Number of administrators for every 1,000 workers	7.4	6.5

* in millions of lire

At the Post Office and and State agency, De Michelis's proposal has been greeted with
some dissatisfaction, although the positions taken are by no means unanimous. Despite
the concerted silence, some unofficial tendencies are beginning to emerge. At the
State agency, for example, an argument is being raised against the accusation of inef-
ficiency put forth by the State participation men, and they are doing so with figures
comparing the efficiency of SIP and ASST (see tables Nos 1 & 2). On the other hand,
the prospect of SIP and Ttalcable absorbing a large part of the personnel is looked
upon favorably, especially because colleagues in the State participation agency have
higher salaries. However, an emerging concern is how this merger will take place
and what the State agency will have left to do. Up to a short time ago, a proposal
was circulating that would transfer traffic to SIP and Italcable while leaving per-
sonnel and plant and line maintenance with the State agency. "We would decisively
oppose a solution of this sort," said an ASST administrator, "for at least three
reasons: the maintenance of lines and plant does not justify 12,000 workers; circuit
leasing returns about 1/7 as much as direct management (see table 3); if it is true
that the agency's task is to plan and control, it is not necessary to maintain opera-
tional structures." On the other hand, moving all plant and cables from the State
agency to STET [Telephone Finance Corporation] would mean a great outlay from STET.
Indeed, it comes to about 3 trillion lire. "The solution might be to transform the
State agency into a State participation company," said Giovanni Pinto, a deputy
administrator of Italcable, "and then put national service under SIP and international
service under Italcable. To do this, a legislative act would be necessary and suf-
ficient."

But the real obstacle that De Michelis's plan must overcome is a political one. The
Postal ministry has always been a solid DC fiefdom, and the majority party will find
it hard to give up without a struggle its direct control over a structure like the
State agency, which has a business volume of 1.5 trillion lire a year and 12,000
workers, and give it over to State participations, which is falling increasingly
under the effective control of Socialist De Michelis. The leaders of the postal
bureaucracy are also putting up a lot of resistance. Remo Gaspari has the last word,
and he has not been inactive: "I examined a group of workers to examine the problem,"
said Gaspari, "and they have already reported to me. I will make my decision soon."

["ables 2 & 3 and related inset follow]

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Tab. 2	**I conti dei telefoni di stato** (Asst - Consuntivi consolidati anni 1972-1980)								
Voce	Al 31-12 1972	Al 31-12 1973	Al 31-12 1974	Al 31-12 1975	Al 31-12 1976	Al 31-12 1977	Al 31-12 1978	Al 31-12 1979	Al 31-12 1980
1-Numero totale dipendenti	13.189	13.223	13.191	13.054	12.764	12.422	12.821	12.504	12.765
2-Numero dirigenti	107	84	84	84	84	84	85	84	83
3-Sviluppo rete attiva (milioni di km-circuito)	19,6	23,4	23,9	24,4	28,8	30,6	33,8	47,0	56,0
4-Introiti traffico e affitto circuiti (miliardi)	176,7	194,9	228,9	263,4	284,4	427,2	473,9	535,3	645,8
5-Costo dipendenti in servizio (miliardi)	54,4	62,0	64,3	72,4	81,3	94,6	117,6	161,7	197,3
6-Investimenti (miliardi)	72,0	74,7	110,0	129,9	194,1	289,0	346,7	370,7	392,2
a-Numero dipendenti per milioni di km-circuito	673	565	552	535	443	407	379	266	228
b-Introiti per dipendente (milioni)	13,4	14,7	17,3	20,2	22,3	34,4	37,0	42,8	50,6
c-Investimenti per dipendente (milioni)	5,4	5,6	8,3	9,9	15,2	23,3	27,0	29,6	30,7
d-Costo medio di un dipendente (milioni)	4,1	4,7	4,9	5,5	6,4	7,6	9,2	12,9	15,4
e-Numero dirigenti ogni mille dipendenti	8,1	6,4	6,4	6,5	6,6	6,8	6,6	6,7	6,5

Table No 2: State Telephone Accounts
(ASST consolidated balances for 1972-80)   [Column headings: 31 December 1972-80]

Items

1. Total number of workers
2. Number of administrators
3. Active network development (in millions of kilometers of circuits)
4. Income from traffic and leased circuits (in billions of lire)
5. Cost of workers in service (in billions of lire)
6. Investment (in billions of lire)

a. Number of workers per millions of kilometers of circuits
b. Income per worker (in millions of lire)
c. Investment per worker (in millions of lire)
d. Average cost of a worker (in millions of lire)
e. Number of administrators for every 1,000 workers

Table No 3: How Much Leasing Brings In (1980)

No of circuits in ASST traffic	63,971
Income from subscribers (in billions of lire)	563.354
Income per circuit (in millions of lire per circuit)	8.87
No of circuits leased to SIP	59,282
Income from leasing (in billions of lire)	78.446
Income per circuit leased (in millions of lire per circuit)	1.32

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Mossetto: Let's Divide STET Into Two Parts

There is also something new in STET: the financing of IRI for the telecommunications sector. At the moment, the tone of discussion is gentlemanly, but the notes are reaching a high pitch, and the prize is important. It involves a radical restructuring of finances and especially the treasury management group's returning to the confines of individual companies; they have hitherto been concentrated in STET. But how did the companies in the group come to feel the need for recovering their financial autonomy? Why did they not ask for it before? IL MONDO asked these questions of Gianfranco Mossetto, a professor of public economy at Ca' Foscare, in Venice, vice-president of SIP since last August, and economic consultant to Gianni De Michelis, the minister of State participation.

Question: How did the problem of restructuring STET come up?

Answer: The ministry of State participation and STET itself had been studying restructuration for some time, but what really brought it up was the union dispute that is taking place; among other problems, it raised that of straightening out the finance structure and the subsidiary companies in order to make technological development more effective. Also, we either keep up with the more advanced countries or quickly become technologically dependent on foreigners.

Question: What does reorganization provide for?

Answer: The formation within STET of two divisions: a manufacturing and a service division. In the manufacturing division, three specific regroupings have been identified: electronics for telecommunications, civilian and military systems, and microprocessors. In the service division, there would be SIP, Italcable, Telespazio and all the companies that are closely linked to their activities.

Question: The hottest potato will be restructuring treasury services. Who wants this, and why?

Answer: At present, all the group companies' cash flow comes from STET, even ordinary administrative funds. The restructuring plan provides for each company gradually to take over its own management. All the companies in the group want this, as do the ministry of State participation and even IRI.

Question: What would be left of STET once money management is taken away? Controlling expenses and especially the rate of expenditures of the group companies is a powerful instrument of control and financial clout.

Answer: Typical financial tasks: planning, control of management, and financial strategy.

Question: But what are the real, practical advantages of this operation?

Answer: Increased cash flow and easier access to credit for individual companies, which will be the ones putting up the collateral.

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TV SATELLITE PLANS TO BE ANNOUNCED

PM251639 London THE TIMES in English 25 Feb 82 pp 1, 24

[Julian Haviland Report: "Satellite Television: BBC May Get Both 'Space' Channels"]

[Text] Plans for a British satellite which would provide two extra television channels for British viewed within five years are expected to be announced next week by Mr William Whitelaw, the home secretary.

The independent broadcasting authority suspects that Mr Whitelaw has decided to allot both channels to the BBC.

A campaign to persuade him to change his mind was begun with a letter published in THE TIMES yesterday from Lord Aylestone, a former chairman of the IBA, who said the allocation of the channels required further public debate.

Ministers were surprised yesterday by the eleventh-hour challenge to their plans. Both BBC and IBA has taken part in discussions begun last May, by the home office on the feasibility of direct broadcasting by satellite (known as DBS).

The BBC made clear from the start its keen interest in taking part. It would want one channel for repeat programmes, and a second for a subscription service which it believes would generate enough revenue from the viewing public to cover the cost of both channels.

It also pressed the government to bring in early legislation, as did several electronics companies eager to put up the money to develop and launch a British satellite.

By contrast IBA's representative gave home office officials the impression that, while interested in principle, they were for the present preoccupied with plans for the introduction of the fourth television channel in November, and of breakfast television in May 1983.

Senior figures within independent television admitted yesterday they may have been slow off the mark.

The IBA said yesterday it had put forward three proposals. There could be a Pan-European programme service--with a number of member countries of the European broadcasting union contributing and receiving--a subscription service or a "best of British" service--made up of programmes from all four British channels.

There were also dark hints from the programme companies that the BBC has no experience, as they had, of running a commercial service, and ought not to risk the cash of the licence-fee-paying public.

The BBC yesterday kept a dignified and contented silence, but staff said privately they would welcome competition from the IBA, but not at the cost of delaying a service the public wanted.

The solution, on which both sides seem most likely to agree, would be a larger satellite at a higher cost.

CSO: 5500/2130

BRITISH TELECOM ANNOUNCES PLANS FOR SATELLITES

PM021557 London FINANCIAL TIMES in English 2 Mar 82 p 10

[Report by Elaine Williams: "The Satellite Way to Europe"]

[Excerpts] By the end of 1983 British Telecom plans access for UK companies
to satellites for private business communications to Europe.

Services such as electronic mail, teleconferences, high speed computer data
and even conventional telephone calls will be offered.

For organizations needing to send large volumes of information over long
distances as quickly as possible satellites could be more convenient and
cheaper than existing systems.

But in order to assess the potential of such a service, British Telecom
has plans to run 12 trials this year. Small dish aerials perched on office
roof tops will transmit and receive digital data signals via the orbital
test satellite, the forerunner to Europe's first communications satellite
system.

The FINANCIAL TIMES, however, was the first organization in Europe to cooperate
with British Telecom and DEUTSCHE BUNDESPOSTE, the German telecommunications
authority in running business trials on the orbital test satellite.

In November the satellite, linked the FT's London headquarters to Frankfurt
where the international edition is printed.

For two weeks complete fascimile pages of the newspaper were transmitted
from London to Frankfurt for production and distribution by road and rail
across Europe and by air around the world.

As well as demonstrating remote printing in Europe for the first time—an
important milestone for the European newspaper industry—it showed the
tremendous potential for businesses which need to transmit rapidly large
volumes of information around the world.

The data signals representing words and pictures were transmitted from a small dish on the roof of the FINANCIAL TIMES building, via the satellite to a small dish provided by Dornier, the West German aerospace concern, at the company's printers in Frankfurt.

Originally, it had been hoped that the November trials would have involved transmitting pages of the newspapers to Stockholm, Paris and Rome, but administrative and minor technical problems prevented this.

As well as saving money, satellites could improve the service to readers and offer new types of services such as electronic mail for the newspaper--all applicable to any type of business.

British Telecom expects that the total capital cost of providing a small dish satellite service in Europe will be about 100m pounds.

Agreement was reached two years ago to start the service after the launch of ECs, the first European communications satellite run by Eutelsat and Telecom 1, the French domestic satellite.

Coverage will range from the Shetlands to Gibraltar and from Sweden to Greece.

British Telecom has already announced a link up with satellite business systems to allow UK customers access to the private system run by SBS throughout the U.S. by the end of this year.

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CSO: 5500/2138

'BBC' TV TO START SATELLITE BROADCASTING IN 1986

PM051301 London THE TIMES in English 5 Mar 82 p 1

[Report by Kenneth Gosling: "1986 Lift-Off for Two TV Space Channels on BBC"]

[Excerpts] The BBC was given permission by the government yesterday to start broadcasting television programmes on two satellite channels from early in 1986. Making the announcement in the Commons Mr William Whitelaw, the home secretary, said there would be opportunities in the future for independent television to operate similar services.

One channel will be run by subscription, the other by a supplementary licence fee, something the home office proposed but which the BBC made clear yesterday it does not favour. In the long term, it said, it intended both channels to be funded mainly from subscription channel income.

Viewers wanting either or both services will have to buy dish aerials and other equipment which will cost initially 250 pounds, a figure expected to drop to 200 pounds when quantities are produced. The aerial, two varieties of which were shown at a press conference at the BBC television centre, will later be replaced by a flat metal plate fixed to an outside wall.

The independent broadcasting authority, which recently made a bid for satellite channels, welcomed the prospect of public debate on essential broadcasting issues, including assurances to existing viewers that the service from the four terrestrial channels would remain as good as possible.

This assurance had already been given by Mr Alasdair Milne managing director of BBC Television and director general designate, who said: "We are adamant that we will keep faith absolutely with the viewers we now serve. There is no question of taking programmes off existing networks and moving them to satellite channels. We seek to provide additional services through a new means of distribution and the licence-payer will benefit in the longer term."

In the Commons statement, Mr Whitelaw said it was vital to make an early start in an area of keen international competition. The initial two satellite

channels would be increased to a maximum of five to be allocated as and when the demand justified it. An announcement would be made shortly, he said, about the future of cable television.

Television satellite channels could provide additional radio services, and the BBC said it wanted to explore this facility for digital transmission perhaps of high quality music services.

The BBC expects viewers to obtain the subscription service with something like a credit card keyed into the equipment in the home to select the programmes the viewer wanted to watch; a new card would probably be purchased annually.

In Manchester last night, Mr Colin Shaw, the independent broadcasting authority's director of television, said he thought some countries were unwilling to see their television services threatened by invading satellite services without putting up a fight.

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UNITED KINGDOM

NEW JOINT SATELLITE COMPANY TO BE FORMED

PM011303 London THE TIMES in English 5 Mar 82 p 15

[Report by Bill Johnstone: "Joint UK Satellite Set Up"]

[Text] A new British company is to be formed to exploit the world market for satellites. The company, called United Satellite Ltd, is being set up jointly by British Telecom, Marconi and British Aerospace.

The announcement by the three partners comes in the make of the government's approval for a 150m pound direct broadcast satellite system to be built by the British companies and to be operational by 1986.

The partners are expected to have an equal stake in the company, although the methods of financing the group have yet to be determined.

N. M. Rothschild, the merchant bank, is investigating the possibility of some form of leasing being used to fund the British direct broadcasting satellite.

The companies have already investigated potential markets and the technical and operational means to meet broadcasting and telecommunications requirements.

The footprint for the British satellite would take in part of Western Europe for broadcasting signals if a sufficiently large antenna were used for reception.

One-third of the British direct broadcasting satellite will be devoted to broadcasting and the remainder to telecommunications.

The BBC will be given two channels and British Telecom will control the third. British Telecom intends to release its international circuits on the satellite to other satellite organizations.

The complete system will consist of three satellites: one in orbit in operation; one in orbit on stand-by and another on the ground.

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