

JPRS-TTP-88-015
2 DECEMBER 1988



**FOREIGN
BROADCAST
INFORMATION
SERVICE**

JPRS Report

DISTRIBUTION STATEMENT A

**Approved for public release;
Distribution Unlimited**

Telecommunications

REPRODUCED BY
U.S. DEPARTMENT OF COMMERCE
NATIONAL TECHNICAL INFORMATION SERVICE
SPRINGFIELD, VA. 22161

DTIC QUALITY INSPECTED 3

19980528 134

Telecommunications

JPRS-TTP-88-015

CONTENTS

2 DECEMBER 1988

CHINA

XINHUA Official Explains New Transmission	[ZHONGGUO JIZHE 15 Oct]	1
Sichuan Satellite Ground Station in Operation	[CEI Database]	2
Reporters Visit Xichang Satellite Launch Center	[Hong Kong HSIN WAN PAO 14 Nov]	2
New Rockets, Satellite Scheduled for Launch	[Hong Kong TA KUNG PAO 13 Nov]	3
Price of Satellite Launches May Be Increased	[Tokyo KYODO]	3
Tibetan Telecommunications Lines Begin Operation	[Lhasa Radio]	4

EAST ASIA

HONG KONG

BBC Proposes 24-Hour Radio Broadcasts	[HONGKONG STANDARD 24 Nov]	5
Asiasat To Increase Communications With Mainland	[HONGKONG STANDARD 24 Nov]	5
British Telecom Putting Regional Headquarters Here	[SOUTH CHINA MORNING POST 14 Oct]	6
New Fibre Cable Telecom Link to Guangdong Opened	[SOUTH CHINA MORNING POST 22 Oct]	6
Cable-TV Bidding Situation, Franchise Selection Discussed		7
Withdrawal of Bidders	[SOUTH CHINA MORNING POST 26 Oct]	7
Anticorruption Unit's Role	[SOUTH CHINA MORNING POST 26 Oct]	8
Two TV Stations Win Approval of 12-Year Licenses	[SOUTH CHINA MORNING POST 20 Oct]	9

TAIWAN

Policy Group for Use of Satellites Formed	[Hong Kong ZHONGGUO TONGXUN SHE]	10
---	----------------------------------	----

NEAR EAST & SOUTH ASIA

BANGLADESH

President Inaugurates New Transmitter 11 Nov		11
--	--	----

LIBYA

Telecommunications Projects Completed in Al-Marqab	[AL-FAJR AL-JADID 11 Sep]	11
--	---------------------------	----

SAUDI ARABIA

Official Discusses Satellite Telecommunications Links	[ARAB NEWS 13 Oct]	12
---	--------------------	----

WEST EUROPE

EUROPEAN AFFAIRS

EUREKA HDTV Project To Demonstrate European Standard System	[Duesseldorf VDI NACHRICHTEN 12 Aug]	13
---	--------------------------------------	----

FEDERAL REPUBLIC OF GERMANY

Failure of TV-Satellite Project Due to Human Error	[DER SPIEGEL 26 Sep]	14
Bundespost To Create Mobile Telephone System	[DER SPIEGEL 31 Oct]	14

FINLAND

- Communications Minister Given Greater Authority [*HELSINGIN SANOMAT 21 Sep*] 16
Paper Urges Efforts To Increase Phone Competition [*HELSINGIN SANOMAT 22 Sep*] 17

FRANCE

- Ericsson Wins Contract for Mobile Phone System [*Stockholm DAGENS NYHETER 26 Sep*] 17
Matra-Ericsson, Alcatel Contract for Pan-European Radiotelephone [*LE FIG-ECO 28 Sept*] 18

NORWAY

- Government Agency Gives EB Phone Contract To Aid Industry [*AFTENPOSTEN 9 Sep*] 18

SPAIN

- National Telecommunications Plan Previewed [*DIARIO 16 2 Sep*] 19

XINHUA Official Explains New Transmission
OW2611211088 Beijing ZHONGGUO JIZHE
in Chinese No 10, 15 Oct 88 p 33

[Interview by Wen Lu with a senior official of the XINHUA NEWS AGENCY: "Why Is It Necessary To Have a Special Transmission Circuit for Radio and Television Stations?"]

[Text] Beginning on 12 September, a large screen display has allowed people walking east of Beijing Station to read the latest domestic and international news transmitted constantly by the XINHUA NEWS AGENCY. At the same time, Chinese radio and television stations across the country are able to receive a variety of news broadcast by XINHUA at any time. The new special transmission line for radio and television stations and news service through the big screen represents both a major achievement in the reform of journalism undertaken by XINHUA, and a new page in China's journalistic and media undertakings. This is an endeavor to modernize broadcasting. In this connection, this reporter interviewed a senior XINHUA official about the following questions of public interest.

Question: What is a special news transmission circuit for radio and television stations, and why is it necessary to open this new service?

Answer: The special news transmission circuit is an independent broadcasting line through which XINHUA uses modern means to transmit news exclusively for Chinese radio and television stations.

The new transmission line is a major step undertaken by XINHUA to reform its news service. Due to the limitations of technical equipment and the old news formula, XINHUA's domestic transmission used to serve mainly newspapers, and the same news service was transmitted to radio and television stations. Hence, their special needs were neglected. In the course of reforming journalism, we feel it necessary to foster a new concept of targeting our news service to different mass media and to provide the service not only for newspapers but also for radio and television stations. We have opened up different news transmission lines to serve different mass media and provided "products" suited to their needs. This is the direction of XINHUA's news service.

Question: Does the opening of the special transmission line for radio and television stations represent a reform of XINHUA's old news service system?

Answer: You could say that. In the past, as newspapers formed the mainstream of China's mass media, we had practiced, since the 1950's, a system of transmitting news through three lines to the central, provincial, and local newspapers for several decades. Since the early 1980's, the journalistic undertaking has advanced vigorously in China. Radio and television stations in particular have mushroomed, covering a much wider audience than the

newspapers. In view of this, it is imperative to restructure XINHUA's news service so as to ensure that our coverage reaches every corner of the journalistic front.

Question: What are the differences in contents between the special transmission for radio and television stations and the existing "XINHUA NEWS SERVICE" (called "major broadcast" for short)?

Answer: The special transmission is an independent news service based on the special characteristics of news reports used by radio and television stations. This special transmission circuit is XINHUA's fourth news broadcast line. All editorial departments have set up an editorial room and assigned special personnel to compile and edit special radio and television news reports. All XINHUA branches in China and some abroad also compile news reports especially for radio and television stations. These organizational measures have ensured the quality of the special news transmission for radio and television stations.

As radio and television broadcasts are received by an extensive audience, radio and television stations are required to cover a great variety of topics. They are also required to report news promptly and to provide a host of information in their news programs many times daily, and to give continuous coverage of major events and accidents. Their news reports should be written in brief and lively language as the time for each program is limited. We should further study these special characteristics of radio and television broadcasts while learning from our counterparts in radio and television stations about writing news reports suitable for their needs so as to make the news service appropriate for this special transmission.

All major domestic and international news reports shall be carried by the special transmission line for radio and television stations. Therefore, its contents are basically the same as those of the "major broadcast," except that news reports are transmitted more promptly and in more concise language on the special line, and they cover a greater variety of topics and provide more information. On average, between 120 to 150 items averaging 200 characters per item are transmitted daily. The number of items will be gradually increased.

Question: Is the transmission time for the special circuit for radio and television stations the same as that for the "major broadcast?"

Answer: No. In order to accommodate some radio and television stations' round - the - clock operations and news reports, this special news service is transmitted from 0500 to 2400 [2100 to 1500 GMT] daily. The hours may be extended in the event of major news. The service will also carry a series of follow - up reports on major events and accidents so that radio and television stations can keep their audience informed of the development of events.

Question: Would you please give a briefing on the system of XINHUA news transmitted on the big screen at Beijing Station?

Answer: This is China's first outdoor highly luminous news reporting system. On a space 41.6 meters square, the big screen can display highly luminous characters and pictures with musical accompaniments and in various forms. It can also broadcast picture recordings and relay television programs. The reception is good both day and night. Major domestic and international news reported are transmitted by XINHUA on the screen from morning until night.

The system of transmitting news on the screen is an effective way of bringing XINHUA news service directly to the masses. In order to set up a quick XINHUA news transmission network, the China National Corporation for the Promotion of Journalism will set up a computerized rapid display system on big screens in Shanghai and other major cities.

Sichuan Satellite Ground Station in Operation

*HK2811124088 Beijing CEI Database
in English 28 Nov 88*

[Text] Chendu (CEI)—Xichang Satellite Communication Ground Station of the Sichuan Communication Satellite Launching Center has recently passed the examination to join the network of the International Satellite Organization.

The ground station has been officially put into operation and has begun to take charge of communication and control of domestic satellites.

The 13-meter high ground station will provide service for launching satellites from home and abroad. The ground station will also be widely used in space, aviation and telecommunication sectors.

The ground station had previously undergone 100 consecutive hours of test. It had met all requirements and was proved reliable.

Experts from the international satellite organization tested the station in various items. The test showed that the station reached all required standards.

Reporters Visit Xichang Satellite Launch Center

*HK1511134188 Hong Kong HSIN WAN PAO
in Chinese 14 Nov 88 p 9*

["Newsletter" by staff reporter Chen Su-chuan (7115 4790 1227): "Hong Kong Reporters Are Invited to the Xichang Satellite Launching Center"]

[Text] In talking about Sino-foreign cooperation in the launching of satellites, Xichang Satellite Launching Center Deputy Director Wang Yongde disclosed that China and Brazil are cooperating in the study and manufacture

of satellites that can detect resources in the earth. In addition, the Australian Government also plans to buy two communications satellites from the United States and deliver them to China for launching, but the plan is still under discussion.

The Asian Satellite No 1, an international communications satellite jointly undertaken by the China Investment and Trust Technology Corporation, the British Cable and Wireless, and Hong Kong Hutchison Wham-po, will be launched from this center next November, with the approval of the U.S. Congress.

The Xichang Satellite Launching Center is one of China's three satellite launching centers responsible for launching foreign satellites. When a group of reporters was being shown around the satellite launching center, Sectional Deputy Chief Qi Lianglin said that a satellite testing workshop had been built. This workshop is one of the facilities for launching foreign satellites; it is worth tens of millions of yuan and has reached international testing standards. However, it is temporarily "empty." Foreign experts will bring along the necessary instruments when they come to assist the center in launching satellites. If everything goes smoothly, the Asian Satellite No 1 will be the first satellite to make use of this workshop.

The Xichang Satellite Launching Center is situated in Liangshan Autonomous Prefecture, Sichuan Province. It is divided into six large sections: testing and launching; command and control; tracking and surveying; communications; meteorological; and service. This center uses the Changzheng No 3 rocket system, first operational in the 1970s, to launch synchronous and communications satellites.

Some of the center's equipment was made by China and some was imported. For example, there are two antennas on the communications system. The one with a diameter of 13 meters was manufactured by the Nanjing Electrical Engineering Technological Research Institute, and the other was imported from Japan.

The rocket launches that we frequently see on television occur at this launch site. Before a rocket is launched, it must be given horizontal tests in the workshop. Then it is transported to the launch site, where it undergoes vertical testing. Only then is it launched. Seventy or so meters long and weighing over 200 tons, the Changzheng No 3 rocket is divided into three stages. The bottom constitutes the first stage, which is the longest. The fuel contained in this stage can drive the rocket to an altitude of 35,700 km. The third stage, which we generally call the "rocket head," carries a satellite inside of it. When it reaches a certain designated point, the ground communications center opens the capsule to let the satellite go into orbit. The entire rocket is fiber-made. Each stage automatically drops off after use. But there is no need for people to worry, for the fragments will not fall on important cities like Guiyang, Xiamen, or Kaohsiung. The rocket can be detonated if it goes out of orbit or if an "uncontrollable" fault occurs.

The 76-meter high launch pad was built in 1978. Before a rocket is launched, everyone within a radius of 2 km is evacuated for their safety. The launch site is surrounded by mountains, where personnel can take cover in case of emergency. One side of these mountains has been left barren by the fires that blaze out of the rockets upon launching. The air conditioning system near the launch site is destroyed every time a rocket is launched and is reinstalled after the launching. When a rocket is launched, the sound volume reaches 200 decibels.

This center launches five or six satellites a year. It launched a communications satellite on 7 March of this year and will launch a stand-by satellite for it in December.

The Xichang Satellite Launching Center is surrounded by steep mountains. This area was previously used for military purposes. The original purpose in building the launching center here was to prevent destruction, but there is no longer any need for such measures because military science has developed rapidly, Qi Lianglin said. Now the problem is the great difficulty of transporting the rockets from their place of manufacture in Shanghai to the launching center, which is located in Sichuan. However, there are no plans to move it somewhere else. Anyway, there are quite a number of satellite launching centers in China, and they all have their advantages and disadvantages. This launching center will be opened to tourists next year.

New Rockets, Satellite Scheduled for Launch
HK1411031388 Hong Kong TA KUNG PAO in
Chinese 13 Nov 88 p 1

[Report: "China Developing New Changzheng Rocket; Another Telecommunications Satellite To Be Launched Next Month"]

[Text] Xichang Satellite Launching Center is to launch another geostationary telecommunications satellite as a backup to the practical telecommunications satellite launched on 7 May this year, as disclosed by China's Xichang Satellite Launching Center Deputy Director Wang Yongde [3769 3057 1795] to a group of Hong Kong and Macao reporters who visited the center not long ago. A new type of rocket in the Changzhen rocket series for launching the satellite is under development.

Lieutenant Colonel Qi Liangling [2058 7022 2651], who accompanied Wang Yongde told the reporters that the launching of an additional satellite as a backup is international practice. Should something go wrong in the satellite launched earlier, the additional satellite would promptly take its place, preventing blackout and maintaining normal telecommunications operations. Qi Lianglin was deputy chief of the foreign affairs department under Xichang Satellite Launching Center.

Wang Yongde added, the Changzheng-III rocket will continue to be used in launching the additional satellite. Both the rocket and the satellite have already been delivered to the center; close examination and final testing are now under way.

The most recent launch of a satellite by China took place on 8 September from Taiyuan. It was a solar-synchronous satellite for meteorological purposes.

Wang Yongde pointed out that each of China's three satellite-launching centers, located in Taiyuan, Xichang, and Jiuquan, has its work foci. At present, China is developing another type of rocket in the Chengzhen series, aside from the Changzheng-IV rockets.

Regarding the launching of "Asia Satellite-I" entrusted by Cable and Wireless Public Limited Company of the United Kingdom, CITIC Technological Corporation [Zhong Xin Ji Shu Gong Si 0022 0207 2111 2611 0361 0674], and Hutchison Whampoa Ltd., Qi Lianglin said that, if everything goes smoothly, it will have been completed by the end of next year, two or three months ahead of schedule. Earlier, it was reported that the launching would take place in early 1990.

The construction of the whole range of equipment for launching the foreign satellite and the workshop for testing the satellite are already completed. According to Qi Lianglin, Asia Satellite I will probably be the first to use this workshop. The workshop is as large as a basketball court, with independent design for security purposes. It was built in one year, and its cleanliness is up to world advanced standards.

Wang Yongde stressed that China's undertaking the satellite-launching operation is only a supplement to the world's satellite-launching market. Raw materials are cheap and the labor cost is low in China. According to usual practice, a preferential price will be offered when it enters the market for the first time.

Xichang Satellite-Launching Center was inaugurated in the 1970s; it is located in Liangshan Yi Autonomous Prefecture, Sichuan. It lies in a strip of valley in the hinterland of Daliangshan, surrounded by hills in a very precipitous terrain. The valley is called by the local people as "Goat Ravine," while foreigners calling it "mysterious gorge." Since 1984, Xichang has successfully launched four satellites.

Price of Satellite Launches May Be Increased
OW1611114188 Tokyo KYODO in English 1116 GMT
16 Nov 88

[Text] Beijing, Nov. 16 (KYODO)—China may raise the prices of its launch services for foreign satellites, criticized in the past by the United States as being too cheap, space industry officials said Wednesday.

China has come under criticism from the U.S. Government for offering cut-price satellite launches which

Washington said were kept artificially cheap by state subsidies and were competing unfairly with Western companies offering similar services.

China denied the charges, saying that low costs and cheap labor were the reasons they could provide an economical service.

A spokesman for the Great Wall Industry Corporation which sells the launch service to foreign customers said Wednesday that the cheap rates were only a sales tactic and that prices would rise later.

"When the European Ariane and the American shuttle were first launched, they also offered cheap rates," an official from the company said at the Asiandex Defense Exhibition currently being held in Beijing.

"We are only offering cheap rates so we can establish our reputation in the market. Later on we will raise our prices," he said.

A full range of China's rocket launchers is on offer at the exhibition in Beijing, including the two-stage Long March 2E which is still under development and scheduled to go into service in 1990.

Tibetan Telecommunications Lines Begin Operation

HK1811051388 Lhasa Tibet Regional Service in Mandarin 1130 GMT 16 Nov 88

[Text] The Lhasa-Xigaze and Lhasa-Nyingchi satellite telecommunications lines began operation on 15

November. A reporter attended the ceremony held in the Xigaze ground satellite telecommunications station to mark the operation of the lines. It was learned from a phone call that regional People's Congress Standing Committee Vice Chairman Senggen Lozong Gyanincain, regional people's government vice chairmen Puquin and Gyibug Puncog Cedain, and the leading comrades of departments concerned, including Lhasa City Posts and Telecommunications Bureau, had attended the ceremony.

Through the satellite telephone, Vice Chairman Puquin extended earnest greetings to the responsible comrades of Xigaze and Nyingchi and the engineers, technicians, and working personnel who had taken part in the installation of the two satellite telecommunications lines. Through the satellite telephone, he also inquired about the situation in agricultural and livestock production and in the current large-scale inspection of tax, finances, and prices in these two places. The sound over the phone was very clear.

According to a report, a total of some 2.7 million yuan was invested in these two satellite telecommunications stations, which can handle such telecommunications tasks as phone calls and phototelegraph, and [words indistinct] of the 1980s. The operation of the two satellite telecommunications lines marks [words indistinct] in the satellite telecommunications cause of our region. At present, except for the two prefectures, Shannan and Nagqu, the other [word indistinct] prefectures of our region have satellite telecommunications lines.

HONG KONG

BBC Proposes 24-Hour Radio Broadcasts

*HK2411014288 Hong Kong HONGKONG
STANDARD in English 24 Nov 88 p 5*

[Article by Victor Agustin]

[Text] The British Broadcasting Corporation's (BBC) proposed 24-hour radio service is likely to be launched early next year.

"In principle we think it's a reasonable idea," a government official familiar with the negotiations said yesterday.

"No final decision has been taken at the moment," the official said.

But talks with London officials were continuing, he added.

"There are no major sticking points. We are just really discussing what sort of things we want to see on the service," the official said.

The government would announce its decision this year, the official said.

The Beeb, as BBC is affectionately known, already broadcasts about 10 ½ hours here on Radio 3 and Radio 5 of the government-owned Radio Television Hong Kong (RTHK).

The Administrative Services and Information Secretary, Mr Peter Tsao, had said earlier that a separate frequency for the BBC may be granted—the sixth channel of RTHK.

With the reallocation of the radio frequencies, two spare AM frequencies have become available for radio broadcast. One has already been allocated by the Government to the emergency radio, a station devoted mainly to news and public service announcements. The other is likely to go to the BBC.

The military station BFBS (British Forces Broadcasting Service) will be given a lower frequency starting in October 1989.

BFBS's new general manager, Mr Brian Hamilton, said the station would still broadcast round-the-clock to military stations.

He said the British military authorities and the Hong Kong Government had already discussed details of BFBS's scaled-down operations.

A possible stronger BBC presence in Hong Kong comes as China opens its doors to the international media.

In September 1987, the BBC launched a more powerful transmitter in Hong Kong specifically beamed to the mainland after receiving assurances that it would be "business as usual" even after the territory is handed back to Beijing in 1997.

The relay station in Tsang Tsui, in Tuen Mun beams Mandarin and English programmes from Britain through two 250-kilowatt transmitters.

The Tsang Tsui station has also improved reception in Japan and Korea, which in the past had been served by a BBC relay station in Singapore.

Asiasat To Increase Communications With Mainland

*HK2411014888 Hong Kong HONGKONG STANDARD
in English 24 Nov 88 p 2*

[Article by Winnie Fu]

[Text] The 1990 launching of Asiasat, Asia's first domestic satellite, is expected to vastly increase communications transfer between Hong Kong and China.

The satellite will make it possible for major cities throughout the mainland to link up with Hong Kong's telephone, facsimile, broadcasting, and television networks.

Mr Robin Maule, group planning director of Hutchison Telecommunications, said the links should bring the territory less expensive and more convenient service.

Many Hong Kong financial institutions, broadcasting companies and shipping concerns will also look to the system to enhance business penetration of China.

The satellite will be able to carry voice and data information to and from China and the southeast Asian region through cheaper, smaller and more effective ground stations than at present.

Asiasat is owned by a consortium comprising Hutchison Whampoa, China's state-owned investment arm China International Trust and Investment Corporation (CITIC) and Cable and Wireless, the parent company of Hong Kong Telecommunications.

The satellite's 24 transponders will be able to carry signals resembling 24 TV channels, each equivalent to 600 voice channels.

Mr Maule said signal beams would reach four regions: China and surrounding countries, the Philippines, Thailand and Pakistan.

Although its capacity is half that of more advanced satellites, Mr Maule said Asiasat would be more concentrated and more powerful, providing high quality transmissions.

It would also provide easy access for the territory's planned cable television network, which Mr Maule said would likely use the satellite to transfer broadcast material more conveniently from China.

Licences to operate a second telecommunications network and a cable TV system are open for tender.

British Telecom Putting Regional Headquarters Here

55400007b Hong Kong *SOUTH CHINA MORNING POST* in English 14 Oct 88 p 4

[Article by Lulu Yu: "Telecom Giant Makes HK Its Regional Office"]

[Excerpt] In a bid to enhance its position in Asia, telecommunications giant British Telecom yesterday upgraded its Hongkong office into its regional headquarters.

Mr John King, managing director of BT's overseas division, said Hongkong was an ideal launching base for the company, which planned to invest several hundred million dollars in the region over the next 5 years.

"We see Hongkong as much more than a stepping stone to Asia," said Mr King. "The marketplace here is both dynamic and diverse and represents a huge opportunity for us to establish and expand our business."

While BT has no substantial interests in the territory other than the marketing and sale of computerised trading systems for financiers, it is in partnership with local tycoons Mr Li Ka-shing and Sir Run Run Shaw in the contest to introduce cable television into Hongkong.

The government has invited tenders for franchises to operate cable TV network and programming, and the deadline for submissions has been set at the end of February.

BT, one of the world's largest telephone operators, is a major shareholder in Hutchison Cable Vision, the Li Ka-shing led-consortium bidding for the franchises.

The government's decision to prevent Hongkong Telecommunications from operating cable TV has left the Hutchison-Bt alliance the strongest consortium bidding for the cable TV franchises.

It is understood that the Hutchison-led consortium is looking for new foreign partners to enhance its prestige and expertise, and at least one mainland company, the Chinese International Trust and Investment Corporation, has been mooted as a partner.

New Fibre Cable Telecom Link to Guangdong Opened

55400008a Hong Kong *SOUTH CHINA MORNING POST* in English 22 Oct 88 p 5

[Article by Tim Metcalfe: "New Telephone Link to Mainland Opened"]

[Text] Acting Governor Sir David Ford yesterday opened a new \$93.6-million telecommunications link between Hongkong and Guangdong.

The state-of-the-art optical fibre cable system has been heralded as a major milestone in communications between the territory and China and will carry high-quality telephone, facsimile, computer and TV signals to Guangdong.

The 247-kilometer line was installed by Cable and Wireless (HK) and the Guangdong Post and Telecommunications Administrative Bureau (GPTB).

The system, supplied by GEC and Pirelli, boasts 46,000 voice channels—the largest of its kind in the world and the first into China.

Inauguration ceremonies were conducted simultaneously in Hongkong and Guangzhou. The two cities created telecommunications history with a live television link-up through the system.

Cable and Wireless (HK) managing director Fung Hak-ming hailed the opening as a "giant step in Hongkong's communications capabilities."

The system would meet a "tremendous growth in demand" for phone links between Hongkong and Guangdong.

Telephone calls to China last year increased by 75 per cent and represent a quarter of all outgoing calls from Hongkong.

Two years ago there were only 23.9 million minutes of long-distance phone calls between the two cities. Last year that figure leapt to 142 million minutes—or the equivalent of a conversation lasting 270 years.

Mr Fung said: "Telephone communication with China has become increasingly important, especially as Hongkong continues to play a major role in China trade."

The deputy director of GPTB, Mr Yang Peilin, said: "The system will no doubt help bolster economic development in the two territories."

"The project further enhances our friendship and opens further avenues for future co-operation."

Sir David Ford, standing in for Governor Sir David Wilson, said: "A key element to our economic prosperity is the growth of Hongkong's economic relations with China."

The two are now each other's largest trading partners. Much of Hongkong's investment is now in neighbouring Guangdong, where more than one and one half million workers are directly or indirectly employed.

Through this link, Sir David said, "Hongkong is set to become a major economic and financial link between China and the rest of the world. This system is one more important step in fostering that link."

Optical fibres—which transmit digitalised light pulses—are smaller and lighter than copper cable, immune to electromagnetic weather interference and easier to install and maintain.

Chinese University Vice-Chancellor, Dr Charles Kao-kuen, played a key role in inventing the technology and is widely regarded as the father of optical fibre communications.

Cable and Wireless (HK) is also engaged in linking Hongkong with Japan—and Japan with Korea. A 4,571-kilometre submarine optical fibre system is due to open in 1990.

Hongkong will soon be connected to Southeast Asia, Europe and North America via a "Global Digital Highway" being developed by Cable and Wireless with other partners.

Cable-TV Bidding Situation, Franchise Selection Discussed

Withdrawal of Bidders

55400008b *Hong Kong SOUTH CHINA MORNING POST in English 26 Oct 88 pp 1, 2*

[Article by Lulu Yu: "Hutchison Goes It Alone In Bid for Cable TV Network"]

[Text] Hutchison Cable Vision has emerged as the sole bidder for cable television in Hongkong following secret negotiations that will result in the withdrawal of its main rival, Hongkong Telecom.

Under a complicated deal, the various parties that make up Hongkong Telecom's cable TV consortium have agreed not to bid against the tripartite alliance between Hutchison Whampoa, British Telecom and Sir Run Run Shaw.

Cable Television Hongkong (CTHK), of which Hongkong Telecom is the largest shareholder, will be disbanded following an official announcement this week.

The company was set up nearly three years ago as Hongkong Telecom's cable TV arm when the Government decided to establish cable television in the territory.

Hongkong Telecom owns 38 per cent of CTHK.

Its major partners are Swire Pacific, Golden Harvest and the Edko Group, who each hold a 20 per cent shareholding.

The remaining two per cent of the company is shared between Viacom International of the United States and Sumitomo Corporation of Japan.

All the CTHK parties are now free to join the Hutchison camp following Hongkong Telecom's decision to withdraw from the cable TV contest.

The Hongkong Telecom group, which holds the monopoly for telephone and franchised telecommunications services in Hongkong, has been barred from operating the future cable TV network.

The Government decided earlier this year a second network was to be built to carry cable TV and other non-franchised telecom services and that the telephone company should not own more than 15 per cent of that network.

Although Hongkong Telecom is allowed to be a substantial bidder for the programming half of the cable TV franchise, the Telecom group is understood to have lost interest.

The decision to bar Hongkong Telecom from owning the network licence, which will be a separate licence from the programming licence, prompted a threat by CTHK to withdraw from the contest as early as July.

The chief operating officer of CTHK, Mrs Valerie Geoffroy, said at the time if the Government did not allow the company to use the network of the telephone company, CTHK might be forced to withdraw its bid for cable television.

Mrs Geoffroy, who is a Viacom executive seconded to Hongkong under a five-year agreement with CTHK, could not be reached for comment yesterday.

Viacom, which is one of the world's largest cable programming firms, has agreed to join Hutchison Cable-Vision in its bid for the cable franchise.

Other parties of CTHK as well as companies, including China International Trust and Investment Corporation (CITIC), are understood to be holding talks with the Hutchison group for joint venture possibilities.

Hutchison Cable Vision is controlled by Mr Li Kash-ing's Hutchison Whampoa group of companies and has

British Telecom, Shaw Brothers and Commercial Radio as its shareholders.

A reorganisation of the consortium is underway and an announcement of new shareholders is expected next month.

When the Government threw cable TV open to tender in July, it was hoped a large number of overseas companies would bid for the 15-year franchise and that Hutchison would not be left with an absolute advantage.

"Having barred the Hongkong Telecom group from providing a second network, we want to make sure we are not left with one tenderer.

"There must be true competition," the Secretary for Administrative Services and Information, Mr Peter Tsao, told the SOUTH CHINA MORNING POST in July.

A number of international companies have since expressed interest in the project, but there is not likely to be any new contestants for the multi-billion-dollar project.

Contenders are being asked to develop a network that will cost between \$2 billion and \$3 billion and provide programming services covering most of the territory in seven years.

Telecom companies interested in network development include Bell South, the largest regional telecom operator in the US, Japan telecom giant KDD and NYNEX, another US operator.

Bell South is understood to have sought an alliance with the Hongkong Telecom group but negotiations broke down following CTHK's decision to disband.

Most interested parties are said to be having difficulty finding local partners.

Anticorruption Unit's Role

55400008b Hong Kong SOUTH CHINA MORNING
POST in English 26 Oct 88 pp 1, 2

[Article by Lulu Yu: "ICAC To Join Cable TV Panel"]

[Text] The Independent Commission Against Corruption (ICAC) has been asked to advise the Government on how Hongkong's exclusive cable television franchise should be awarded.

The ICAC will be represented on a steering group set up to work out criteria for selecting the franchise winner.

The group, chaired by Secretary for Administrative Services and Information Peter Tsao Kwang-yung, is

meeting for the first time today to discuss how the Government should deal with multi-billion dollar tenders.

Members of the group include Secretary for Economic Services Mrs Anson Chan, Postmaster-General Gordon Siu, Commissioner for Television and Entertainment Licensing Darwin Chan and senior officials of the Attorney-General's Chambers and the Highways Department.

Mr Tsao said yesterday the anti-corruption body had been recruited on to the steering group for its expertise in plugging legal and practical loopholes in a tendering exercise.

"The ICAC will play an advisory role to the Government.

"It will ensure that in the tendering process, nobody is given an undue advantage and nobody is denied any rights," said Mr Tsao.

"We will devise a methodology by which tenders will be judged in the fairest manner."

The Government has yet to receive any tender submissions for the cable TV network and programming licences, but at least one local consortium, Hutchison Cable Vision, is expected to enter the contest.

The steering group will not discuss to today's meeting the scenario where Hongkong is left with only one contender for the cable TV franchise, said Mr Tsao.

With the withdrawal of the cable consortium headed by Hongkong Telecom, Mr Li Ka-shing's Hutchison group has become the only serious bidder for the franchise, which is open to tender until the end of February.

Mr Tsao said if there were no other contenders, the Government would consider the single participant by its merit.

"We don't know at this stage whether there will be other bidders, but it is an international tendering exercise.

"Whatever happens, the bidder will have to meet all the requirements of the tender," said Mr Tsao.

"One local company backing off is in itself not necessarily significant," he said, referring to the withdrawal of Cable Television Hongkong (CTHK).

The break-up of the consortium made up on Hongkong Telecom, Golden Harvest, the Edko group and Swire Pacific, was yesterday confirmed by CTHK chairman Raymond Chow.

"CTHK considered many options before coming to this decision.

"The rationale for CTHK was always to provide cable TV over the existing telecommunications network," said Mr Chow.

It is reliably understood that Golden Harvest and Edko, both film-makers and distributors, will not join Hutchison Cable Vision except as program suppliers.

Swire Pacific, on the other hand, is holding talks with the Hutchison camp, which comprises British Telecom and Shaw Brothers, for the acquisition of a shareholding in Hutchison Cable Vision.

"Programming opportunities were our reason for coming into cable TV," said Mr Chow.

"We envisaged a ready-made network allowing us to begin programming quickly.

"The time-line has now lengthened for the start of the cable television service and we have made our decision accordingly."

Both Mr Chow and the chief executive of Hongkong Telecommunications Limited, Mr Mike Gale, indicated yesterday the Government had forced CTHK to give up its application.

Mr Gale said because of changing circumstances which precluded Hongkong Telecom from owning the cable TV network, the telephone company was withdrawing from the cable contest to concentrate on telecommunications services.

"Hongkong Telephone had planned to use its network for the distribution of cable television programming on the grounds that it would be at a lower cost, faster to install and cause minimal traffic disruption," said Mr Gale.

"We will continue to concentrate our resources on providing Hongkong with the most modern, efficient and cost-effective telecommunications infrastructure."

The chief operating officer of CTHK, Mrs Valerie Geoffroy, said yesterday the company had sunk about \$40 million in preparing the cable TV bid over the past two and one half years.

She said before the decision to wind up CTHK, the company had a projected spending of another US\$2 million (HK\$15.6 million) towards the application of a cable licence.

Mrs Geoffroy, who is an employee of Viacom International, yesterday confirmed that Viacom would be providing consultancy services to Hutchison Cable Vision.

Two TV Stations Win Approval of 12-Year Licences

55400007a Hong Kong SOUTH CHINA MORNING
POST in English 20 Oct 88 p 1

[Article by Lulu Yu: "12-Year Licences for TV Stations"]

[Text] Hongkong's two television stations, TVB and ATV, will each have their broadcasting licences renewed for 12 years in December.

The Broadcasting Authority has given its approval for the licence renewal and drafters are putting the final touches to the licence agreements.

The Executive Council will be asked to approve the agreements before the licences of Television Broadcasts and Asia Television expire on 1 December.

TVB and ATV currently hold a 10-year licence each. Government officials say if the licence duration is too long, the public might be subject to prolonged period of unsatisfactory services, whereas if the duration is too short, the TV companies may not have enough time to carry out long-term planning and investment.

The approval by the Broadcasting Authority followed elaborate steps taken by the television companies to comply with new licensing conditions set down by the government earlier this year.

It also marks a successful bid by the ailing ATV to continue broadcasting despite years of loss-making operations.

In its bid to meet new licensing conditions which require television licensees to demonstrate economic viability in the next 6 years, ATV has undergone its most costly and significant personnel shake-up in recent months.

While Mr Deacon Chiu remains ATV's chairman, television veteran and Legislative Councillor Mrs Selina Chow Liang Shuk-ye has been recruited to head a revamped team of ATV executives.

Under new licensing conditions, both ATV and TVB will be required to hand over revenues to the government because payment of royalties will be based on programming and advertising income rather than net profits.

ATV Ltd, which was a subsidiary of ATV Holdings, was reorganised into a company with two-thirds of its interests owned by the New World group and the Lam family of the Lai Sun group.

The separation of ATV from its former parent company enables ATV to continue to be a licence holder under new licensing conditions, independent of its existing parent, HK-TVB.

TVB, too, is in the process of becoming a company independent of its existing parent, HK-TVB.

From next month, TVB will concentration television broadcasting and related activities while HK-TVB will remain a public company carrying out all the other activities of the HK-TVB group.

Directors of HK-TVB last month announced proposals to make TVB, the broadcasting licensee, a public-listed company separate from HK-TVB.

The new licensing conditions require that licensees are not held by other companies, and do not hold shares in companies which deal in non-broadcast activities.

There will be a mid-term review of the new licences in 1994, when the stations will be asked to submit another 6-year plan before their licences are extended for the second half of the licensing period.

TAIWAN

Policy Group for Use of Satellites Formed

HK1411014588 Hong Kong ZHONGGUO TONGXUN
SHE in Chinese 1510 GMT 10 Nov 88

[Report: "Taiwan Plans To Promote Use of Satellites"]

[Text] According to a report from Taipei, Hsia Han-min, director of the "State Scientific Committee" of Taiwan, yesterday announced that in order to promote the applied satellite technology, Taiwan has officially set up a "policy group for developing the use of satellites." It is expected that the group will put forward its proposal in 5 months.

The policy group has nine members, including the scientific and technological personnel in the defense, transport, communication, and educational departments. Chao Chi-chang, director of the space research institute of Cheng-kung University, is the convener of the group.

Reportedly, the policy group will use scientific methods to find the most practicable scheme for Taiwan to develop satellites by relying on its own strength. At present, they will first study the concentration of manpower and data. Then they will pool the wisdom of more people to make studies and work out a feasible proposal. The proposal may include various plans, such as "buying satellites and launching them by themselves" or "buying satellites and asking other countries to launch them."

BANGLADESH

President Inaugurates New Transmitter 11 Nov
BK1111132288 Dhaka Overseas Service in English 1230
GMT 11 Nov 88

[Text] The Thakurgaon transmitting station of Radio Bangladesh has been formally commissioned. President Ershad inaugurated the station at a simple but colorful function in Thakurgaon today.

Speaking on the occasion, President Ershad said that radio still remains the cheapest medium for disseminating information, which is the key to progress and prosperity of any developing country like Bangladesh.

Recalling the services rendered by radio personnel during the War of Independence and natural calamities like floods, the president said they should now work with the same zeal and spirit to make the country happy and prosperous.

With the commissioning of the 10 kw transmitter every nook and corner of the country now comes under the nationwide radio broadcasting system. The station, which involved an expenditure of over 30 million taka, will relay programs of the Dhaka station of Radio Bangladesh.

LIBYA

Telecommunications Projects Completed in Al-Marqab

55004605 Tripoli AL-FAJR AL-JADID in Arabic
11 Sep 88 p 5

[Article: "Talk of Revolutionary Accomplishments: Numerous Telecommunications Stations Completed in al-Marqab Municipality"]

[Text] The brother secretary of the Public Telecommunications Company in al-Marqab Municipality has said: The great 1 September Revolution has devoted much attention to the telecommunications sector to insure easy communications for all citizens and to serve their interests without difficulty or hardship. This becomes obvious by making a simple comparison between what has been accomplished and what existed prior to the dawn of the great 1 September when only 80 manual telephone lines existed in al-Marqab Municipality. Since the great 1 September Revolution, numerous projects have been completed including stations and telephone voltage dividers. The coastal strip network was completed in 1972 and put into operation in early 1974.

The stations include al-Khums, al-Naqqazah, Qasr al-Akhyar, Zulaytin, al-Ghuwaylat, and Zulaytin al-Mazra'ah stations. In 1976, the network was expanded with the addition of al-Khums Bani Walid network which incorporates a number of stations including, for example, Mislatah al-Qal'ah, Mislatah al-Madinah, Tarhunah

al-Mazra'ah, Tarhunah al-Madinah, Bushatatah, and Bani Walid al-Madinah. The total capacity of these 2 projects is estimated at 955 channels, in addition to radio and television transmission channels, transmission equipment, telex, and facsimile.

In 1985, a number of transmitters and small stations were added to enable the automatic telephone service to cover the municipality's towns and villages. These stations include al-'Allus, Qasr al-Akhyar, Ki'am, al-Dawun, al-Khadra', Sidi al-Sid, Tarhunah, al-'Ama-mirah, Suq al-Khamis, and Suq al-Thulatha' in Zulaytin. Each station has a capacity of 120 telephone channels. Moreover, telex services in these villages have also been developed. This is in addition to (digital) communication equipment with a 12-band capacity installed in the Lubdah Cement Plant and in the areas of Ki'am, al-'Allus, and Suq al-Khamis. These stations are operated and their equipment is maintained by Libyan youths trained on the latest equipment.

Telephone networks and telephones completed and installed exceed 35,000 lines, all of which are tied to the automatic telephone network to make it easy for the citizen to contact all parts of the Jamahiriyah and the outside world. Automatic voltage dividers have been installed in numerous villages and hamlets. The capacity of these voltage dividers exceeds the number of current telephone lines in al-Khums and the area within its jurisdiction, Tarhunah, Zulaytin and Bani Walid and the area within its jurisdiction. The great revolution has been eager to achieve progress in the area of communication by building centimetric-wave networks and numerous stations that are controlled by the maintenance unit of al-Marqab Municipality. It has also built automatic telephone networks to facilitate automatic telephone communication within the great Jamahiriyah.

Central cable networks have also been built in al-Khums, Tarhunah, Bani Walid, and Zulaytin to further enhance the level of communications, make them accessible to citizens, and provide citizens with the best services.

The brother secretary of the Public Post and Telecommunications Company's branch [in al-Marqab] has further said: Attention has also been paid to the postal services. A large number of post offices have been built to sell stamps, collect letters, parcels, and postal orders, distribute mail, and receive and transmit telegrams. A large number of cable transmitters have been installed to provide the best services to Libyan Arab citizens and to those residing in the Jamahiriyah and to convey their messages to any part of the world. These offices are in operation 24 hours a day.

Suq al-Khamis post office building, which used to sort mail manually, was inaugurated recently. The building includes a post office, a telephone voltage divider, an administration wing and a voltage divider tied to the automatic telephone network. New buildings were also recently delivered in Sidi al-Sid, al-Dawun, and Suq

al-Jum'ah in Tarhunah. Each building includes several sections similar to those in the Suq al-Khamis building. A central workshop has been built for the company branch in al-Marqab Municipality. This workshop has all the necessary equipment plus a fuel station. New post office buildings will be soon opened in Mislatah and Zulaytin to perform their full role in this area.

SAUDI ARABIA

Official Discusses Satellite Telecommunications Links

55004502 Jeddah ARAB NEWS in English
13 Oct 88 p 2

[Text] Riyadh, 12 Oct (SPA)—Saudi Arabia is now the world's fifth largest user of satellite telecommunications facilities as the new King Fahd Satellite Telecommunications City near Jeddah (Umm al-Salam) has become operational, said Fu'ad Muhammad Nur Abu-Mansur, posts, telegraphs and telephones undersecretary, here today.

With the addition of Riyadh's second station and the four earth stations of Umm al-Salam, more than 6,000 circuits are now available via satellites, Fu'ad told SPA.

He said the Kingdom has also developed land-based international telecommunications facilities, including coaxial cable and microwave systems, with direct links to Kuwait, Bahrain, the United Arab Emirates, Qatar, Jordan, the Yemen Arab Republic and Sudan.

"More than 5,000 telephone circuits are available through these systems, and the internationally important submarine cable from Singapore to France provides a further 1,800 circuits. Of these 480 are allotted to communications with Egypt," he added.

These systems provide Saudi Arabia's international communications network with access to more than 200 countries around the globe, Fu'ad said.

Prior to the addition of Umm al-Salam, he said, the Kingdom had three standard 'A' earth stations, two located in Riyadh and one in al-Ta'if. "There are additional six non-standard earth stations used for domestic and special telecommunications, some of which are mobile," Fu'ad said.

King Fahd Satellite City offers enhanced facilities that supplement the three existing earth stations in Riyadh. King Fahd City comprises four satellite earth stations, two to communicate with Intelsat, one with Arabsat and one with Inmarsat, the last being for marine, air and mobile telecommunications, Fu'ad said.

King Fahd Satellite Telecommunications City, the largest such complex in the Middle East, is situated at Umm al-Salam along the expressway between Jeddah and Mecca. This satellite city occupies an area of more than one million square meters.

The city was opened by King Fahd in July 1987.

EUROPEAN AFFAIRS

EUREKA HDTV Project To Demonstrate European Standard System

36980014z Duesseldorf VDI

NACHRICHTEN in German 12 Aug 88 p 10

[Article by Claus Reuber: "EUREKA Proposal for an HDTV World Standard Is Making Progress"]

[Text] Strassbourg—The EUREKA Project for High Definition Television (HDTV) is making headway. In September a complete system in the European standard, with 1,250 lines, 50 frames per second, and progressive scanning, is being demonstrated at the International Broadcasting Convention in Brighton. The first associated studio camera has been developed at the Thomson company in Rennes and has already been shown to the European press.

In May 1986, at the CCIR [Comite Consultatif International des Radiocommunications: International Consultative Committee for Radio Communication] plenary session in Dubrovnik a decision about the world standard for the future high-definition television (HDTV) was postponed to the next plenary session of this committee. The main obstacle was the incompatibility of the Japanese proposal—which had been worked out in the mid-1970's—involving 1,125 lines, 60 frames per second, and line interlacing.

In Dubrovnik the Europeans gained time to elaborate their own proposal, and to that end they began in July 1986 EUREKA Project 95, in which the involvement of industry and radio companies has brought in a total of about 30 research laboratories and institutions. A period of 3 years was scheduled for the mission of developing a European HDTV standard compatible with the D2 Mac standard, with 1,250 lines, 50 frames per second, and progressive scanning.

At the camera showing in Strassbourg, Jean Caillot, president of Thomson International, pointed out that at present there are about 760 million TV sets throughout the world, two thirds of them color TV sets. Some 60 percent of these are found in areas with the 625-line, 50-Hz standard. He said that usually a European buyer of a TV set expects to be able to use it for at least 10 years and to be able to adapt it to the advances introduced within this time. This means compatibility for all innovations and the expansion capability given, for example, by the Euro-socket.

But for Caillot the compatibility of an HDTV world standard with motion-picture technology is also of great importance. He said that a 50-Hz cycle suits far better the 24 or 25 film frames per second than a 60-Hz standard. All the TV companies, he said, will have to be broadcasting movie films for years to come and therefore will be far better served with the EUREKA proposal than with a 60-Hz standard, which continues to use the line

interlacing technique. A high-definition television with progressive scanning will be able to also serve the international motion-picture industry in the future, he said.

Finally, he said, the EUREKA proposal involves a quality tolerance large enough so that a code conversion to other repetition frequencies or a playback with line interlacing would not cause any losses of quality.

In the United States as well, interest is growing in a compatible standard for HDTV, to which end the concept of the ACTV—Advanced Compatible TV—has been introduced there. Indeed, in this connection it must not be forgotten that in America the Thomson Consumer Electronics company with the trademark RCA is going to bat for this system, along with the RCA subsidiary company, the NBC (National Broadcasting Corporation). A relevant announcement was made public just on 17 June of this year for the NBC network and 208 affiliated stations.

In the United States, a two-stage ACTV development is planned: Although with ACTV I the intention is to proceed to the new picture ratio of 16:9 and to 1,050 lines per frame, nevertheless the aim is to remain at a transmission bandwidth of 6 MHz. This takes place in a fully compatible way. The hitherto common receiving sets will get the NTSC [National Television System Committee] portion of the ACTV I signal. Whoever acquires an ACTV-I receiving set will notice the improvements, for example in connection with an effective vertical definition of 450 lines. Also the next step up to ACTV II remains compatible. According to a data survey by the David Sarnoff Research Center the receivers designed for this stage should achieve a vertical definition of 800 lines.

In Strassbourg, the quality of the video monitor pictures of the 1,250-line camera with progressive scanning was quite impressive. However, this also has a video bandwidth of 65 MHz (more than 10 times the present bandwidth) and a horizontal sweep frequency of 62.5 kHz, thus 4 times the present frequency. Moreover the large-area flicker at a frame frequency of 50 Hz remains quite visible.

But the EUREKA production standard using progressive scanning permits a great variety of code conversions, for example, also into the "HD-MAC," which while being fully compatible with the MAC system also contains in the vertical blanking intervals for appropriate receiving sets the additional information required for HDTV reproduction.

On the other hand, investigations at the German Thomson Brandt in Hannover have shown that the CCIR requirements on a future HDTV system with respect to filtering and transcoding also can be fulfilled by a reproduction consisting of 900 lines at 50 Hz and progressive scanning. With these specifications, operation at

a horizontal sweep frequency of about 45 kHz is possible, which is likely to bring key advantages for the designing of home TV sets. Also a code conversion into a line-interlacing representation with an increased frame frequency (900 lines, 100 Hz, and 2:1), together with the elimination of flicker disturbances, seems economically feasible for a high-definition TV.

Photo Caption

FRG entertainment-electronics manufacturers are also jumping onto the Super (S)-VHS train initiated by JVC, and for the fall season they are already announcing video recorders and camcorders having the high-definition S-VHS format. VHS users are being assured that they also will be able to play their cassettes on the new system.

FEDERAL REPUBLIC OF GERMANY

Failure of TV-Satellite Project Due to Human Error

55002407 Hamburg DER SPIEGEL in German
26 Sep 88 pp 137-138

[Article: "Small Bag With a Bolt"]

[Text] A mix-up resulted in a costly DM870 million disaster with TV-Sat 1.

They jolted it, they shook it. They let it broil in the gleaming sun, they tortured it with cold shocks. But it did not stir.

For 3 months technicians at the German Oberpfaffenhofen space center near Munich tried with everything at their disposal to unfold the second solar vane of TV-Sat 1, at an altitude of 36,136 km in space. Unnerved, Bernhard Fabis, project director, gave up after a last unsuccessful attempt on 24 Feb 88: "It is scandalous."

Since then the satellite with the paralyzed vane has been pursuing its orbit. Because of the jammed solar collector it is receiving inadequate power. The so-called north vane also covers TV-Sat's receiving antenna. Instead of the scheduled four TV programs from space the satellite is transmitting only a weak noise and flickering toward the FRG.

The celestial flop is costing the German taxpayers millions. The contractor for TV-Sat, the Federal Postal Administration, figures the cost of the artificial celestial body at DM390 million. Of that only DM95 million are covered by insurance.

The total cost of the TV-Sat project is DM870 million. TV-Sat 2, of like construction, was to be launched behind the first as a backup transmitter. The Ministry for Research spent an additional DM340 in the form of development assistance. The jammed paddle has raised doubts about the success of the overall billion-mark project.

TV-Sat 1 appeared at first to have carried with it into space the secret as to why the paddle did not work. The manufacturer of the useless flying object, Eurosatellite, Ltd., Munich, a subsidiary of the German MBB [Messerschmitt-Boecklow-Blohm] Aviation and Space Conglomerate and France's Aerospatiale, established a commission of experts to investigate.

Using a model on the earth, the experts tested the unfolding, rushed uncounted measuring data from space through their computers. The astonished public was informed of 50 various conceivable sources of error. In the end, 13 possible causes remain in the commission's report.

A technician from French Aerospatiale, the TV-Sat partner, knew the true reason in the night when TV-Sat 1 whizzed into space from the Kourou rocket station in French Guyana on the coast of South America. But this truth was so banal that it was poorly suited to be a public explanation of a billion-mark flop.

Each of the two solar vanes, produced by Aerospatiale, was secured by a bolt in the folding mechanism to prevent unintentional opening while being transported from Munich to Kourou. Prior to launch the safety bolts had to be replaced by bolts with a similar appearance which make it possible for the vanes to unfold. In Kourou the French technician replaced the bolts per regulations. But then he made the billion-mark mistake. He packed the safety bolt from the north vane into the little plastic bag where the unfolding bolt had previously been. Then the shift changed.

His colleague on the next shift found the little bag for the unfolding bolt. He thus concluded with razor-sharp thinking that the transport safety bolt had not yet been removed. Therefore, he again removed the bolt which was destined for the space flight from the solar vane—believing in good faith that he had now unlocked the paddle. The safety bolt was back in it.

TV-Sat 1 "in a picture-perfect launch" (MBB) zoomed with a braced folding mechanism into space on the head of an Ariane rocket. Christian Schwarz-Schilling, minister for Post and Telecommunications, who was following the launch on the monitors in Oberpfaffenhofen, was jubilant: "TV-Sat has ushered in a new era in providing radio and television."

But the new era has yet to come. Only contractors of future commercial satellites throughout the world learned something about contract writing from the bolt episode: Payment is not made now until everything works and the costly object actually sends signals from the sky.

Bundespost To Create Mobile Telephone System

55002417 Hamburg DER SPIEGEL in German
31 Oct 88 pp 138, 140

[Article: "New Telephone Worth Billions"]

[Text] Soon it will be possible to get in touch with the Germans anywhere: by 1991 Post and Telecommunications Minister Christian Schwarz-Schilling intends to

introduce a new mobile telephone network. The Bundespost is giving up its monopoly; private firms will have a share of the operation. A good two dozen groups—from BMW to RWE [Rheinisch-Westfälisches Elektrizitätswerk]—are looking forward to some profitable business.

First people needed a machine to get almost anywhere as fast as possible. Now that they have the automobile, they need something to make it possible to get in touch with them anywhere. And they are to get it.

By 1991 Federal Post and Telecommunications Minister Christian Schwarz-Schilling intends to present the Germans with a telephone to connect them at all times with their homes or with anyone in the world. Wherever modern man may be, in a traffic jam on the autobahn, in the line at the ski lift, or listening to Von Karajan at the Philharmonic—he can call or be called at any time.

This innovation—which Scandinavians have had for years—is a further development of the automobile telephone. It no longer needs to be mounted permanently in the car; it will also be mobile, small and handy enough to fit on the car ledge or in the jacket pocket.

With the digital mobile radio system—that is the bureaucracy for the new network—Schwarz-Schilling does not intend only to give the Germans a bit of progress. He intends at the same time to bring about one of his favorite ideas—to allow private firms in on the business, to end the Bundespost monopoly.

The Bundespost will operate the D-1 mobile radio network through its Telecom subsidiary. In addition, current plans in Bonn call for a second network, D-2, which is to belong to a private firm or group of firms. Even Schwarz-Schilling has only a vague idea what shape such a private competitor might take. Still, there are plenty of applicants; industry scents a profitable business. A good two dozen groups are preparing to enter the new field.

Industrial firms, banks and insurance companies, media giants and broadcasting companies want to be in on it from the start. Foreigners too—about half a dozen private telecommunications firms from the United States and Great Britain (including Southern Bell from Atlanta, Georgia, and British Telecom) want to have a share in the German telephone company.

The telephone giants from abroad can boast of one important advantage: They already know how to construct a network and they have experience in collecting the fees.

But applicants like the electricity groups or broadcasting companies have something to offer too. The former, with their transformer stations throughout the Republic, have plenty of land on which to construct the transmission antennas. The broadcasting companies would not even need to construct any new antennas.

Groups which up to now have have nothing to do with the telephone business would like to take the lead in constructing and operating the radio network—automobile firms like Daimler-Benz, BMW, or VW. The automobile manufacturers see an opportunity to win customers for their own mobile radio firms by selling them that first automobile telephone. They also have the money necessary for the huge investment of some DM2 billion.

Daimler-Benz's preparations are the most advanced. Under the direction of Research Director Rudolf Hoernig the company already has a planning group at work that also contains specialists from the possible partners: Besides experts from its own AEG mobile radio subsidiary, Daimler also has been able to bring in managers from electricity giant RWE and New York's Nynex telephone company, along with experts from Suedwestfunk [a broadcasting company]. Daimler's large shareholder, the Deutsche Bank, is ready to serve as financier.

VW in Wolfsburg is considering the possibility of cooperating with the PreussenElektra electricity firm in Hanover. Claude Williams, Southern Bell's lobbyist in Bonn, has offered the two companies his firm's services.

Reportedly joining BMW to provide credit are the Allianz insurance company and Ameritech, a private telephone company from Chicago. There are plans for talks with an automobile club. ADAC [Allgemeiner Deutscher Automobil-Club], for instance, could offer its experience with fee collection and its extensive facilities for maintenance and service.

The possible prime partners would like to see the operating license given not to a central D-2 company, but divided up among several regional groups of firms. BMW would then bring the Bayerischer Rundfunk [a broadcasting company] into a consortium. In contrast to the Suedwestfunk and other public broadcasting companies, which only want to provide the use of their transmission facilities, the Bayerischer Rundfunk hopes to take a share in the business.

In addition, Germany's Siemens, AEG, and SEL electronics groups also hope to be able to play on the team that operates the mobile telephone system. They possess the technology and have already installed similar systems for other countries.

Still, the Bundespost and also some communications electronics suppliers—including Mannesmann and the Bertelsmann media group—are strongly against that. Because, for instance, Mannesmann companies build automobile computers and are developing transport guidance systems, the group's strategists are currently considering whether the company should join one of the consortia.

The Bundespost is acting cautiously. If its main suppliers such as Siemens and SEL have a share in the private operating company, that would immediately exclude all other suppliers. A mobile radio producer in the D-2 operator consortium could to a large extent dictate product prices.

Only at the end of September did Schwarz-Schilling select from a long list of applicants the firms to which the Bundespost is to give the contracts to construct its own network. Those are Siemens, Bosch plus Philips, and the French Alcatel group plus its German subsidiary SEL and AEG and Finland's Nokia.

Sixteen post, telegraph, and telephone authorities are participating in the construction of a Europe-wide mobile radio network. They have agreed on a so-called cellular network system with 5,000 transmission stations and 400 switching facilities. A person in Lapland, for instance, will be able to get through to someone in Gibraltar completely automatically on this network.

Ever since the introduction of the "public mobile land radio service," as it is known in proper bureaucratic German, the FRG has been a Third World country in car telephone terms. Even today the system is far from perfect.

Its prices, on the other hand, are top-of-the-line. With equipment prices of up to DM10,000, a monthly basic fee of DM120, and a call charge of DM0.23 for 8 seconds, the Bundespost is right up with the leaders of the international pack.

Now the current analog system's technical flaws are supposed to be eliminated through digital transmission technology and a dense network of transmitters. Europe's telephone planners expect to have 10 million users—2 million of them in the FRG—by the middle of the next decade.

If mobile radio becomes a mass consumption product and there are two operators fighting for customers in the FRG, fees and purchase prices ought to drop dramatically. Equipment manufacturer SEL anticipates a purchase price of around DM2,000 for a car telephone or hand set.

In order to get his plan moving, not least against critics in his own camp, Schwarz-Schilling has set up a commission. Early next year it is supposed to lay down the terms of the competition for the D-2 and then select the candidate for the license.

The appointment of competition researcher Erhard Kantzenbach to head this commission may mean that one decision has already been made. The former chairman of the Monopolies Commission, who is unhappy at

the concentration of industrial power in the Daimler-Benz group, is hardly likely to propose that the D-2 network be operated by a candidate whose subsidiary—AEG—will also be supplying the necessary radio facilities and telephones.

FINLAND

Communications Minister Given Greater Authority

55002408a Helsinki *HELSINGIN SANOMAT*
in Finnish 21 Sep 88 p 8

[Text] The newly established sub-branch of the Ministry of Communications, due to start operations in the beginning of October, will bring the ministry greater authority in the fields of telecommunications and radio broadcasting. The new agency, called the Tele Administration Center, will be responsible for radio broadcast administration, telecommunications inspection, and technical inspection of radio and television equipment as well as licensing.

The Tele Administration Center will take over responsibilities mainly from the National Board of Post and Telecommunications (PTL). According to the Ministry of Communications, the PTL is becoming more of a private business enterprise, which is why its public duties concerning radio broadcasting and telecommunications properly belong to a neutral governmental agency. After the new agency starts operating, the PTL will no longer be in charge of radio broadcasting frequencies, licensing or inspection.

Responsibilities will also be shifted to the new agency from other authorities, such as telecommunications inspection from the Ministry of Transport, and television licences inspection from the Finnish Broadcasting Company.

The agency will consist of separate departments for radio broadcasting frequencies and inspection operations. The Department of Radio Broadcast Frequencies will oversee the use of frequencies, inspect radio network plans, deal with broadcast interference and unlicensed or unstatutory use or possession of equipment, as well as take care of licensing. Among the responsibilities of the Inspection Department is the inspection of radio and telecommunication equipment. Besides these two departments, the agency will have an administrative office and a central office for television licenses.

Reijo Svensson, an engineer, who formerly served as director of the Union of Telephone Companies, will be the director of the Tele Administration Center. Besides him, the board of directors will include both department chiefs and four government-appointed three-year members, each with an alternate. Two of these members are representatives for the users of radio and telecommunications equipment, one represents manufacturers of equipment, and one the Ministry of Communications.

In addition to a full-time staff of 160 employees, the center will employ part-time inspectors of radio equipment as well as inspectors of television licences.

The projected operating budget for next year is 60 million marks. For the most part, the expenses will be covered by licencing revenues collected by the agency.

The new law on radio communications allows the Tele Administration Center to punish violators of the law by cancelling permits or licenses or imposing conditional fines. Appeals on the decisions can be brought to the Ministry of Communications and further to the Supreme Administrative Court.

Paper Urges Efforts To Increase Phone Competition

55002408b Helsinki HELSINGIN SANOMAT in Finnish 22 Sep 88 p 2

[Text] A private mobile telephone network is being planned to compete with the present state-owned network. Those involved with the project, i.e., private telephone companies, central retail chains, banks and insurance companies, blame the National Board of Post and Telecommunications for overpricing and promise that their network will be able to cut prices by half.

Courteous competition also in the services is beneficial to all and should be encouraged. However, it is paradoxical that the partners in this enterprise are, generally speaking, businesses least involved in price competition. Private telephone companies, for example, hold monopolies in their regions and have no experience in price competition. It is to be hoped that while they are now getting involved with competition outside their own fields, they would also be getting their own houses in order.

The project of creating a private mobile phone network is no simple matter. For competition to be genuine, a complete second telephone network is necessary—but will that be too extravagant for a [sparsely populated] country like Finland? Who will take care of the remote areas? Are they going to be left to the National Board of Post and Telecommunications, like the primary telephone network? Fair competition would mean that both competitors carry the same responsibilities.

The mobile telephone will become more and more common in the next decade. Finland's postal administration has, together with those of other Nordic countries, been at the forefront of developing an international mobile phone network. The Helsinki Telephone Company has long been looking for an opening into this market. It now has brought together a group of mobile phone users, which should have enough clout to secure an operating permit. Time will show how seriously the group is pursuing this matter.

FRANCE

Ericsson Wins Contract for Mobile Phone System 55002406 Stockholm DAGENS NYHETER in Swedish 26 Sep 88 p 16

[Article by Torun Nilsson: "Mobile Telephone System Selection: France Picks Ericsson"; first paragraph is DAGENS NYHETER introduction]

[Text] France has made the selection of a mobile phone system. Sweden's Ericsson joins one of the two syndicates that are included. The French market is an important part of the European mobile telephone system.

The order consists of a combination testing system and a commercial installation. The system, which will start operating in early 1990, will be installed first in Paris and will have a capacity of 10,000 subscribers.

According to Bo Landin, marketing director for Ericsson, this is viewed as France's system selection for the European mobile phone system network.

This means that Ericsson expects that the French will stick with these two systems when they start developing their mobile telephone network.

Nokia

The other syndicate will consist of the French company, Alcatel, the West German company, AEG and the Finnish company, Nokia.

The French order is a part of the so-called pan-European mobile telephone system. So far, 16 countries have signed an agreement about developing a joint mobile telephone system for all of Europe, which today has a number of different systems. The new system will make it possible to use the same mobile telephone in all of Europe. The development of the network is estimated to cost 40-50 billion kroner in the next 10 years.

Great Britain had picked a system for the new network earlier. There too, Ericsson was a member of one syndicate along with Matra.

According to Ericsson, the British and French markets together constitute approximately 40 percent of the pan-European market.

Western Europe and the United States dominate the world mobile telephone market.

Italy

West Germany has also selected a system. Ericsson is not included in that. The selection included the domestic Siemens company, the French company, Alcatel and the West German company, Bosch in cooperation with the Dutch company, Philips.

Among the remaining markets in Western Europe, Italy poses a real piece of the puzzle, according to Bo Landin.

Ericsson is leading globally in the mobile telephone system field. At the turn of the year, more than 40 percent of well over 2 million fully automatic cellular mobile telephones were connected to systems from Ericsson and the number is rapidly increasing. Mobiltelefoni is one of seven business areas within the Ericsson cartel, and the greatest part of its operations is telecommunications, i.e., primarily telephone stations. After a unsuccessful concentration in the computer field in the beginning of the eighties, the Ericsson cartel is slowly making its way out of a deep economic depression.

The radio communications business area, in which the mobile telephone represents the largest part, had over 3 million kroner turnover last year.

Matra-Ericsson, Alcatel Contract for Pan-European Radiotelephone

55002404 Paris, LE FIG-ECO in French 28 Sept 88 p 1

["Matra-Ericsson and Ericsson Win"; first sentence is LE FIG-ECO introduction.]

[Text] France chooses Matra-Ericsson duo and Alcatel consortium for future European radiotelephone.

Not surprisingly, France Telecom has finally chosen the Matra-Ericsson duo and the Alcatel-led consortium to build the future pan-European radiotelephone network—a market of 40 to 50 billion French francs in the next 10 years.

The French Postal and Telecommunications administration sent out a request for bids last spring on this new generation radiotelephone. Initially, the French government is only calling for two 10,000-subscriber test networks to service just the Paris metropolitan area. These are to go on line during the second half of 1991. Alcatel, together with the German AEG [General Electric Equipment Company] and the Finnish Nokia, will build the first network. Matra will join efforts with the Swedish Ericsson and the Italian Telettra to build the second.

The German Bundespost also announced its choice early yesterday afternoon. According to industry sources, it has selected SEL [Standard Electric Lorenz] (the Alcatel subsidiary) and the Siemens consortium, which includes Philips and ANT.

Thus, the new European radiotelephone network, which will finally make communications possible throughout Europe, is beginning to take shape. Great Britain and Norway have already announced their choices, and Italy should follow soon. Spain and Finland are getting ready

to send out requests for bids. Encouraged by this fabulous market, alliances among European manufacturers are multiplying. Although the dice have not been cast, France's Matra is targeting 20 to 30 percent of this market.

NORWAY

Government Agency Gives EB Phone Contract To Aid Industry

55002412 Oslo AFTENPOSTEN in Norwegian
9 Sep 88 p 24

[Article by Ulf Peter Hellstrom]

[Text] The firm of EB has gotten the contract to supply new standard telephones to the National Telecommunications Administration after all, following government action in the matter. "We consider it valuable to have a Norwegian manufacturer like this one," said William Engseth, the minister of transport and communications on Thursday after a meeting during which the Government decided that EB would be preferred over foreign competitors.

The Government thus departed from the National Telecommunications Administration's recommendation preferring a lower bid from Schrack, an Austrian supplier. Schrack supplies telephones manufactured in Taiwan.

Based on information gathered by AFTENPOSTEN, the Austrian bid was between 25 and 40 percent lower in price than EB's, even after all suppliers had been given the opportunity to revise their bids. Schrack's bid is of approximately 170 kroner per telephone for the first 50,000 telephones, whereas the price goes down if demand for the telephones becomes so great that it becomes necessary to supply more than 100,000 telephones during the contract year. In that case, the price would go down to 150 kroner. The EB bid is based on the supplying of 50,000 pieces, the per piece price being approximately 210 kroner.

On this matter, the government has thus deviated from the principle of free competition. The price differential between the two suppliers is so significant that several observers in the telecommunications industry wonder whether the authorities in this matter are operating at the edge of internationally recognized bidding rules which they have pledged to follow.

Minister of Transport and Communications William Engseth emphasized that the authorities want to maintain national production of telephones. "This will help to keep 30-40 jobs at the production plant in Risør. Among other things, when looking at this matter, the government has assessed the situation of the labor market in East Agder," Engseth said.

After Thursday's government meeting, the cabinet member emphasized that the way in which this matter was handled is to be regarded as an exceptional circumstance. No automatic repetition of such an action should be anticipated.

Kjell Almskog, the head of EB, is satisfied with the government's decision. "Jobs in Risor would have been at risk if we hadn't gotten this contract," he said. In fact, he said that telephone manufacturing in Risor would have been dealt a death blow if EB had not gotten the contract with the National Telecommunications Administration.

"All along, the assumption was that the National Telecommunications Administration would evaluate bids from about a dozen suppliers on the basis of price and quality, while the final decision would be made by the Ministry of Transport and Communications. For that reason, there is no conflict between this government agency and this ministry in this matter," Jarl Veggan, the head of information at the National Telecommunications Administration, told AFTENPOSTEN.

SPAIN

National Telecommunications Plan Previewed *55002411 Madrid DIARIO 16 in Spanish 2 Sep 88 p 36*

[Text] Santander—The National Telecommunications Plan, which is supposed to extend to the year 2000, will entail spending more than 2 trillion pesetas during the

first two 4-year periods according to initial estimates, the director general of telecommunications, Javier Nadal, has stated. Almost all of this spending will be in Telefonica.

Nadal, who was speaking at Menendez Pelayo University, added that the National Plan will have to be approved by the middle of next year.

With regard to telecommunications services, Nadal said that the priorities would be mobile services, "with major possibilities for expansion," and the digital network of integrated services (RDSI), to which end the network must be made digital.

According to Nadal, the digitalization process will entail heavy spending on lines, hookups and optic fibers, and thus a timetable for networks and services, which the plan will take care of, will have to be drafted.

The plan, which has been designed for the long term and which the administration must approve, calls for three kinds of broadcasting stations: public, indirectly managed and municipal.

The commercial director of Telefonica, Enrique Used, who also spoke at the seminar, advanced the idea that priority service should go to industry or, what boils down to the same thing, that the services policy that Telefonica envisages ought to have support in the area of supplies and not necessarily industry.

As far as Used is concerned, "it is not possible to move from a demand situation to a supply situation without sufficient supplies in terms of amount, quality and price." Therefore, he reaffirmed that industry should have priority in supplies.

This is a U.S. Government publication. Its contents in no way represent the policies, views, or attitudes of the U.S. Government. Users of this publication may cite FBIS or JPRS provided they do so in a manner clearly identifying them as the secondary source.

Foreign Broadcast Information Service (FBIS) and Joint Publications Research Service (JPRS) publications contain political, economic, military, and sociological news, commentary, and other information, as well as scientific and technical data and reports. All information has been obtained from foreign radio and television broadcasts, news agency transmissions, newspapers, books, and periodicals. Items generally are processed from the first or best available source; it should not be inferred that they have been disseminated only in the medium, in the language, or to the area indicated. Items from foreign language sources are translated; those from English-language sources are transcribed, with personal and place names rendered in accordance with FBIS transliteration style.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by FBIS/JPRS. Processing indicators such as [Text] or [Excerpts] in the first line of each item indicate how the information was processed from the original. Unfamiliar names rendered phonetically are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear from the original source but have been supplied as appropriate to the context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by the source. Passages in boldface or italics are as published.

SUBSCRIPTION/PROCUREMENT INFORMATION

The FBIS DAILY REPORT contains current news and information and is published Monday through Friday in eight volumes: China, East Europe, Soviet Union, East Asia, Near East & South Asia, Sub-Saharan Africa, Latin America, and West Europe. Supplements to the DAILY REPORTs may also be available periodically and will be distributed to regular DAILY REPORT subscribers. JPRS publications, which include approximately 50 regional, worldwide, and topical reports, generally contain less time-sensitive information and are published periodically.

Current DAILY REPORTs and JPRS publications are listed in *Government Reports Announcements* issued semimonthly by the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161 and the *Monthly Catalog of U.S. Government Publications* issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

The public may subscribe to either hardcover or microfiche versions of the DAILY REPORTs and JPRS publications through NTIS at the above address or by calling (703) 487-4630. Subscription rates will be

provided by NTIS upon request. Subscriptions are available outside the United States from NTIS or appointed foreign dealers. New subscribers should expect a 30-day delay in receipt of the first issue.

U.S. Government offices may obtain subscriptions to the DAILY REPORTs or JPRS publications (hardcover or microfiche) at no charge through their sponsoring organizations. For additional information or assistance, call FBIS, (202) 338-6735, or write to P.O. Box 2604, Washington, D.C. 20013. Department of Defense consumers are required to submit requests through appropriate command validation channels to DIA, RTS-2C, Washington, D.C. 20301. (Telephone: (202) 373-3771, Autovon: 243-3771.)

Back issues or single copies of the DAILY REPORTs and JPRS publications are not available. Both the DAILY REPORTs and the JPRS publications are on file for public reference at the Library of Congress and at many Federal Depository Libraries. Reference copies may also be seen at many public and university libraries throughout the United States.