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REPORT AND RECOMMENDATION
OF THE
PRESIDENT OF THE
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
TO THE
EXECUTIVE DIRECTORS
ON A
PROPOSED LOAN
IN AN AMOUNT EQUIVALENT TO US\$23.0 MILLION
TO THE
GENERAL TELECOMMUNICATION ORGANISATION
WITH THE GUARANTEE
OF THE
SULTANATE OF OMAN
FOR A
SECOND TELECOMMUNICATIONS PROJECT

January 22, 1985

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CURRENCY EQUIVALENTS

		<u>Calendar 1983</u>	<u>November 1984</u>
Currency Unit		Rial Omani	RO
US\$1	=	RO 0.345	0.345
RO 1	=	US\$2.895	\$2.895

FISCAL YEAR

January 1 - December 31

ABBREVIATIONS AND ACRONYMS

DEL - Direct Exchange Line
GDP - Gross Domestic Product
GTO - General Telecommunication Organisation

SECOND TELECOMMUNICATIONS PROJECT

LOAN AND PROJECT SUMMARY

Borrower and
Beneficiary:

The General Telecommunication Organisation (GTO)

Guarantor:

The Sultanate of Oman

Amount:

US\$23.0 Million equivalent.

Terms:

10 years, including 4 1/2 years of grace, at the standard variable interest rate.

Project
Objectives

and Description: The proposed project is designed to further strengthen GTO as an institution to enable it to manage most work in the sector by 1990. Through a balanced package of works, the project would expand the local telephone facilities in existing telephone switching centers, provide telephone service for the first time to about 37 rural communities and expand domestic long distance and international telephone facilities to carry the additional traffic generated by local network expansions. The project includes: (a) provision and installation of (i) about 65,000 additional lines of local exchange equipment with associated cables and subscriber plant to provide about 62,000 subscriber connections and about 460 local/long distance public call offices; (ii) a digital international exchange of about 600 lines; (iii) transmission equipment (including satellite communications equipment, microwave and spur links) to carry the projected traffic loads; (iv) equipment for extension of the mobile telephone network; and (v) miscellaneous equipment including a computer for telephone billing and other data processing applications, training equipment, equipment for maritime communications, teleprinters and vehicles; (b) construction of exchange buildings and staff accommodation; and (c) carrying out of tariff studies, establishment of an economic studies unit, computerization of accounting and other functions, development and implementation of technical and financial training programs. The project is expected to benefit, directly or indirectly, all segments of the Omani society. The project faces no unusual risks. The fundamental risk that the major institutional project objective of leaving GTO with sufficient in-house capabilities to manage most development and operational work in the sector by 1990 may not be met is minimal in that regular consultation should lead to identification of appropriate measures and resources needed for timely realization of the objective. The risk that GTO's planning and implementation capacity may not be sufficient to execute the proposed project is likewise minimal in light of GTO's past performance, its intent to delineate management responsibility for planning and project implementation and measures included in the project to establish an economic studies unit and train GTO staff.

Estimated Cost:

	<u>Local</u>	<u>Foreign</u>	<u>Total</u>	<u>Items for Bank Financing</u>
	<u>(US\$ Million)</u>			
Switching equipment	3.1	14.6	17.7	4.8
External plant	8.4	19.0	27.4	5.6
Subscriber plant	10.8	7.1	17.9	3.2
Transmission systems	5.0	33.0	38.0	4.0
Mobile System	8.4	19.1	27.5	
Miscellaneous (gentex, computer, coin boxes, vehicles, etc.)	10.1	19.2	29.3	
Buildings	12.8	11.1	23.9	
Consultancy services and training	<u>4.0</u>	<u>4.6</u>	<u>8.6</u>	<u>1.0</u>
Total Base Costs	62.6	127.7	190.3	18.6
<u>Contingencies:</u>				
Physical	3.0	2.5	5.5	0.4
Price	<u>7.4</u>	<u>24.6</u>	<u>32.0</u>	<u>4.0</u>
Total Project Costs	<u>73.0</u>	<u>154.8</u>	<u>227.8</u>	<u>23.0</u>

Financing Plan:

	<u>Local</u>	<u>Foreign</u>	<u>Total</u>
	<u>(US\$ Million)</u>		
IBRD	—	23.0	23.0
GTO	73.0	83.9	156.9
Government	—	<u>47.9</u>	<u>47.9</u>
	<u>73.0</u>	<u>154.8</u>	<u>227.8</u>

Estimated Disbursements:

<u>Bank FY</u>	<u>FY86</u>	<u>FY87</u>	<u>FY88</u>	<u>FY89</u>	<u>FY90</u>	<u>FY91</u>
	<u>(US\$ Million)</u>					
Annual	6.1	6.2	4.7	2.0	2.5	1.5
Cumulative	6.1	12.3	17.0	19.0	21.5	23.0

Rate of Return: 16 percent.

Staff Appraisal Report: No. 5311-OM, dated January 14, 1985.

**REPORT AND RECOMMENDATION OF THE PRESIDENT OF
THE INTERNATIONAL BANK FOR RECONSTRUCTION AND
DEVELOPMENT TO THE EXECUTIVE DIRECTORS ON A PROPOSED
LOAN TO THE GENERAL TELECOMMUNICATION ORGANISATION WITH THE
GUARANTEE OF THE SULTANATE OF OMAN FOR A SECOND TELECOMMUNICATIONS PROJECT**

1. I submit the following report and recommendation on a proposed loan to the General Telecommunication Organisation with the guarantee of the Sultanate of Oman for the equivalent of US\$23.0 Million to help finance a Second Telecommunications Project. The loan would have a term of ten years, including four and a half years of grace at the standard variable interest rate.

PART I - THE ECONOMY

2. A report entitled "Oman Current Economic Position and Prospects", (2528-OM) was distributed to the Executive Directors in October 1979. A mission to review and update recent economic developments visited Oman in April 1984. Its findings are reflected in the following paragraphs.

3. Oman is an oil-exporting country located southeast of Saudi Arabia and adjacent to the United Arab Emirates in the Arabian Peninsula. This could lead one into placing Oman in the same category as its wealthy neighbors, such as UAE or Kuwait, and thus concluding that modernization and development are easily within its grasp or financial capacity to acquire. The country's more visible signs of wealth and progress, however, tend to obscure the important fact that the history of modern Oman did not begin until barely a decade ago. Prior to 1970, Oman was closed to the outside world under the rule of a Sultan who resisted all modernizing influences and attempted to keep Oman a traditional state. Subsistence agriculture, artisanal fishing and minor handicraft activities were basically the way of life in the country. At the same time, the southern province of Dhofar was subjected to a long and costly guerrilla warfare that continued until 1975.

Past Economic Developments

4. In 1967, oil production started and with it came rising incomes and the possibility of establishing a modern economy. Rapid economic development, however, was initiated only in 1970 when Sultan Qaboos came to power, resulting in a remarkable transformation of the economy. In the short span of 14 years, economic infrastructure has been built up from a very rudimentary stage and impressive gains have been made in education, health and housing. Rapid increases in personal incomes and in the expansion of public services have improved substantially the living conditions of the population, particularly those in the urban centers. In 1970, less than one thousand children were in school, there was only one small hospital, hardly any electricity and piped water, and only 10 kilometers of asphalt roads in a country with an area of some 300,000 square kilometers and about a million

people. Now the schools have almost 170,000 pupils, there are over 2,100 hospital beds and more than 3,200 kilometers of asphalted roads. Urban areas are almost fully supplied with electricity and running water and a growing part of the rural areas are gaining access to these services.

5. Nevertheless, the high average per capita income of \$6,000 estimated for 1983 gives an exaggerated impression of the country's real wealth for three reasons. First, incomes are highly skewed in favor of urban areas largely inhabited by foreigners (two-thirds of the non-agricultural labor force is estimated to be expatriate). Second, vital infrastructure (human and physical) is still lacking compared with countries of a much lower average income, but a longer history of economic modernization. Third, the productive base of the economy is still very narrow, depending overwhelmingly on oil.

6. Diversification efforts have been hampered by the scarcity of skilled Omani manpower, a major factor behind the lack of project preparation, evaluation and implementation capacity. To alleviate this constraint, the Government has pursued a liberal policy towards the import of expatriate labor, while at the same time emphasizing education and training programs for Omani nationals. While in the short and medium term it would be impossible to carry out rapid economic development without expatriate labor, the Government realizes that the presence of a large number of expatriate workers also has its costs, such as the outflow of foreign exchange through worker remittances (almost 20 percent of oil revenues), the physical infrastructure needed to support these workers, their increased consumption of scarce resources, e.g. water, and their socio-cultural impact.

7. The rapid growth of the economy in the 1970's was stimulated primarily by high levels of government expenditures fueled by rising oil revenues. The period 1974-76 witnessed a sharp increase in such expenditures from a very low base. After a period of relatively slower growth due to strains on physical and financial resources, government spending was stepped up again in 1979-83 as oil revenues increased, raising the share of public administration and defense to nearly one-third of gross domestic product (GDP). Nevertheless, the budget recorded surpluses averaging 12 percent of gross domestic product during 1979-81, which were utilized largely to build up a General Reserve Fund. The decline in oil prices changed the fiscal situation considerably; the budget balance deteriorated sharply in 1982 and 1983 resulting in a small deficit (2 percent of GDP) in the latter year.

8. With the gradual elimination of physical bottlenecks and the adoption of liberal labor immigration policies, the large government outlays together with induced private sector investments resulted in a growth of non-oil economic activity at an average rate of close to 10 percent p.a. so that it now accounts for about half of total GDP. Manufacturing, in particular, expanded briskly as new projects came on stream but still accounted for only about two percent of total GDP in 1983. The first full year of production of Oman's first oil refinery, as well as the coming on stream of a copper smelter and a major cement plant, have contributed to this effort.

9. In spite of the rapid development of the non-oil economy, about 50 percent of Oman's GDP is produced by the petroleum sector. Crude oil exports dominate Oman's balance of payments, accounting for over 99 percent of

the country's exports. They were mainly responsible for the large surpluses recorded in the balance of payments during the years 1979-82. In 1983 a sharp decline in oil prices and resulting stagnation in oil revenues together with a continued high growth of imports of goods and services and large increases in workers' remittances being sent abroad caused Oman's current account balance to deteriorate, showing a deficit for the first time in the past five years compared with surpluses at a record level of over \$1 billion in 1980 and 1981.

10. Oil will maintain its dominant position in the medium term even though Oman has set the production ceiling at about the current output level of about 410,000 barrels per day, in order to conserve the long-term output of oil reserves. Higher production, however, might prove necessary if oil prices remain stagnated and high growth in government expenditures and workers' remittances remain unabated. Large amounts are being invested to expand exploration activity, and identified reserves have risen to 3 billion barrels, sufficient to maintain the present production level for another twenty years. Oman also has considerable natural gas reserves; a substantial proportion of these, however, will be conserved for oil field injection and power generation, leaving unallocated proven reserves below the threshold needed for competitive gas exports.

Development Strategy and Economic Prospects

11. Since oil resources are expected to be depleted a generation from now, the long-term prospects of the Omani economy depend on the country's capacity to further diversify its productive base. Almost half of the value of non-oil production has hitherto originated from construction, public administration and defense. However, unlike several of its neighbors in the Gulf, Oman has some potential for exploitation of natural resources besides oil. There are long-established agricultural settlements scattered throughout the country in areas where sufficient water is available. Relatively large increases from the present low crop yields appear feasible through introduction of modern production techniques and improved quality of inputs. There is good potential for coastal fisheries and sufficient deposits of some minerals, such as copper and chromite, have been found to justify further exploration. The productive base could also be widened through development of selected import substitution industries for non-durable consumer goods and downstream copper products. The Government's objective is to encourage the private sector to assume a lead role in non-oil activities.

12. Since the volume of oil production is unlikely to increase much further and prices are projected to improve modestly, oil export earnings are likely to grow from \$3.9 billion in 1983 to about \$5.4 billion in 1988. These earnings would be supplemented marginally by copper and agricultural exports. This modest increase in exports, obviously, will affect growth of Government revenues, the overall savings performance of the economy, and the balance of payments. In particular, continued high growth in government recurrent expenditures and workers' remittances, while maintaining reasonably high investment level, would soon lead to rapidly increasing budget and balance of payments deficits difficult to finance in the longer term. In view of the Government's past record of prudent management, it is likely to take the necessary measures to avoid these risks even at the price of a substantially lower growth of non-oil GDP than that achieved over the last years.

13. To facilitate this adjustment, further efforts will have to be made to mobilize domestic resources and develop demand management tools. Although government revenues from non-oil sources have satisfactorily increased in recent years, several possible options to increase their share remain open. For instance, a moderate indirect tax on selected luxury goods could yield additional revenue and at the same time slow down consumption of such goods. A tax on domestic sales of petroleum products, as well as other indirect taxes, could be introduced. A reassessment of the present income tax structure, improvement of tax administration, and gradual reintroduction of property taxes are among other possible measures to augment non-oil revenues. There is also a need for reconsideration of the rates charged on publicly provided services, particularly electricity tariffs, where revenues fall short of costs. These measures should be combined with further restrictive measures to curb the rapid growth of public recurrent expenditures and private consumption, and with a thorough re-evaluation of the country's development priorities and investment program, in particular those items which had not been specified earlier in the current Plan that may compete for funds needed for the high priority projects.

14. The concept of domestic resource mobilization would apply also to Oman's domestic manpower. The major efforts to upgrade the skills of domestic labor and to increase participation rates will need to be maintained in order to replace the large expatriate population. Such efforts would enable the country, in the medium term, to contain the fairly large and rapidly increasing share of revenues that it spends on expatriate labor.

External Assistance and Foreign Debt

15. Oman's external public debt amounted to about \$1.1 billion at the end of 1983; this corresponds to little more than 14 percent of GDP or 27 percent of total net foreign exchange reserves (including the General Reserve Fund). The debt service ratio had declined rapidly over the last years from 9.3 percent in 1978 to 3.4 percent in 1983. The present foreign debt burden, thus, is very small. The trend, however, is towards an increasing debt burden; total foreign debt outstanding has doubled since 1981, and this upward move is likely to continue over the next years.

PART II - BANK GROUP OPERATIONS IN OMAN ^{1/}

16. Bank lending to Oman began in 1974. As of September 30, 1984, seven loans totalling \$76.4 million (net of cancellations) had been made; of this, about \$66.0 million is now held by the Bank. A summary statement of Bank loans to Oman as of September 30, 1984 is provided in Annex II.

^{1/} Substantially the same as Part II of the President's Report (No. P-3786-OM, dated April 24, 1984) for the Second Education Project, which was approved by the Executive Directors on May 17, 1984.

17. Bank loans to Oman have been principally directed towards the provision of technical assistance in crucial areas, the relief of national manpower constraints, and the development of appropriate policies and investment strategies in priority sectors. A Technical Assistance Project (Loan 985-OM) helped Oman to establish the Development Council, the Government's key institution for economic management and planning. Two Education Projects are helping to increase national educational opportunities and improve standards. Highways Maintenance and the First Telecommunications Projects have helped establish and develop Oman's institutional capacity to manage two of its more important infrastructure programs effectively. These two sectors are viewed by the Government as essential to integrate the various parts and tribes of the country into a whole and to strengthen national unity.

18. Projects under implementation consist of three operations: telecommunications, highways maintenance and education. No major problems have been encountered and implementation is proceeding smoothly. The disbursement rate for Bank loans to Oman that have become effective as of September 1984 is, at 57 percent of appraisal estimates, above those for other countries in the region.

19. The Second Highways Maintenance Project (Loan 2084-OM) was expected to be the last lending operation of the Bank in Oman. However, it was subsequently discussed and agreed with the Government in the context of the Bank's graduation policy that the Bank would resume its lending operations in Oman over a brief graduation period. During this period, the Bank's lending strategy would be directed at: (i) consolidation of gains (particularly institutional development) attained through the implementation of completed or ongoing Bank-assisted projects; and (ii) selection of a few crucial sectors where development still lags behind. In line with this strategy, a lending program up to FY86 includes a Second Education Project (Loan 2419-OM), the proposed Telecommunications II Project and proposed projects in the highways and health sectors. Apart from health, the Bank has had previous involvement in all the other sectors. A health project, however, is particularly crucial in Oman where the prevailing life expectancy is only 50 years.

20. In addition to the lending program described above, technical cooperation between the Bank and Oman will continue to be an important feature of Bank involvement. In this context, the Bank has provided assistance to the Ministry of Social Affairs and Labor towards the establishment of a Manpower Planning Unit. Continuing Bank assistance in the implementation of a manpower planning program through 1985 is proceeding satisfactorily. The Manpower Planning Unit has been established and became the Manpower Planning Department as of June 1, 1983. The Bank will continue to provide technical support to this Department in the implementation of its work program, focussing on the improvement of the data base and the execution of special sector studies. In addition, the Bank, upon request of the Government, has assessed the manpower implications of the Second Five-Year Development Plan and advised on the formulation and implementation of a minimum wage policy and its economic and social implications. It has also assessed the needs for rural training and advised on a strategy for broadening the scope of vocational training in the agriculture, fisheries and rural handicrafts subsectors. The Government has recently requested assistance in the area of national account compilation; this assistance will be included in the economic and sector work program for FY85.

21. To date, IFC has made only one investment in Oman--a \$2 million equity participation in the Oman Development Bank. IFC has at present no project pipeline in Oman but will continue to explore opportunities for further investment.

PART III - THE TELECOMMUNICATIONS SECTOR

Sector Organization

22. The Ministry of Posts, Telegraphs and Telephones regulates the telecommunications services within the country, allocates radio frequencies for all services and licenses private radio installation. Under the Ministry, the General Telecommunication Organisation (GTO)--a state-owned public enterprise--is responsible for all public telecommunications in the country including international telephone and telegraph services. The Civil Aviation and Defense Departments, as well as the national oil company, Petroleum Development Oman, Ltd., operate their own telecommunications facilities but also lease some circuits from GTO. Oman has no telecommunications industry.

Access, Facilities, Usage, Quality of Service and Demand

23. As of end 1983, Oman had an average telephone density of about 1.7 telephone lines in service per 100 inhabitants, which is far below the average of 14 lines per 100 for the other Gulf countries. Telephone service is available in the Capital area^{1/} and in 18 of the 41 Wilayats (government administrative units). The Capital area, with about 14 percent of the country's population, had 65 percent of the telephone lines in service. Nonetheless, with a density of about 7.6 lines per 100 inhabitants, Muscat ranks below other major urban centers in the Gulf region (e.g., Kuwait 11.8, Riyadh 11.5, Abu Dhabi 14.9 and Dubai 15.9). About 17 percent of the lines are in the southern city of Salalah and the remaining 18 percent serve 19 smaller settlements. There are 57 local/long distance public call offices, of which only 9 are located outside the Capital area and Salalah. It is estimated that only about 40 percent of the population enjoys access to telephone service. An automated telex service is available to 978 subscribers, 844 in the Capital area and 134 in Salalah. An international telegraph service is available, and a domestic service has been recently introduced.

24. About 49 percent of telephone lines existing at the end of 1983 were residential, 19 percent were government and 32 percent business. (In the Capital area, about 41 percent were residential, 19 percent government and 40 percent business.) There is no available data on traffic composition,

^{1/} The Capital area is defined as the coastal strip of about 50 km in length stretching from Al Bustan, a little southeast of Muscat, to Seeb on the west of the Capital city.

though the percentage due to business activity is higher than the above data might indicate due to the use of some residential lines for business purposes. The average telephone revenue per direct exchange line (DEL) in 1983 was approximately \$1,900. This is high by international standards, due partly to the fact that supply of new lines has been constrained, and existing lines sometimes have multiple users. About 85 percent of this is call revenue, divided as 42 percent local and long distance and 58 percent international call fees. The average revenue per telex line in 1983 was approximately \$16,400.

25. At end 1983, total equipped telephone switching capacity was 30,096 lines and telex exchange capacity 2,700 lines. The respective percentages of lines connected to subscribers for these services were only 71 and 36 percent. The low exchange fill in the case of telephone lines is due to delays in the past in the provision of cable networks and of subscriber connections, and in the case of telex lines, is due to the fact that adequate capacity was provided only in 1983 to meet demand up to 1988. Switching equipment in the Capital area introduced under the first Bank-assisted Telecommunications Project (Loan 1884-OM) is of the digital type while other equipment in the Capital area and in the interior is mostly of the crossbar type which had been installed within the last ten years. Telex service has been automated and electronic since 1980. The long distance domestic network comprises coaxial cable, microwave radio and some satellite circuits (which provide television relay facilities between Muscat and several inland centers to enable programs to be rebroadcast by regional transmitters). The quality of service is generally acceptable, though there is some congestion in the urban areas due to the heavy traffic usage of connected lines. Line outage is generally acceptable and maintenance standards reasonable, with 13 faults per 100 lines reported in May 1984, for example, and 78 percent of the cable faults cleared within 48 hours and 83 percent of other faults within 24 hours.

26. As of end 1983, lines in service met only 48 percent of the total registered demand for telephone service (working lines plus registered applications for new lines), the ratio being only 42 percent outside the Capital area and Salalah. It is expected that most of the current unsatisfied demand in the urban areas will be met with the commissioning of all new exchanges under the ongoing project. Demand for telephone lines is expected to grow by about 16 percent p.a. from 44,800 in 1983 to about 116,000 by 1990. GTO has initiated, with the help of consultants, preparation of a new Telecommunications Master Plan covering the period up to the year 2005. The preliminary report on demand, which should be available by March 1985, will establish the timing of capacity additions to urban area exchanges under the proposed project and produce (through outside surveys) better estimates of the distribution of prospective subscribers in the new rural centers to be served.

Sector Background and Goals

27. A major increase in the rate of telecommunications sector investment has taken place since 1982. While planned investment for the Second Five-Year Development Plan period (1981-85) was \$160 million, actual investment for the period is now expected to be \$287 million, because the investment originally planned was inadequate to meet the demand for service. As this expanded

investment is utilized, the contribution of telecommunications to Oman's GDP should rise significantly (the share of telecommunications amounted to about 0.7 percent from 1976 to 1982).

28. The higher level of investment is indicative of a strong commitment by the Government to the role of telecommunications in development. Broadly, country sector goals are: (i) the provision of an effective telecommunications service as a prerequisite of economic diversification; and (ii) the continued development of GTO as an efficient telecommunications organization with effective technical and financial management. Specifically, over the development period 1985-1990, total telephone exchange capacity is planned to grow at an average rate of 28 percent p.a. to enable 95 percent of anticipated demand to be met by 1990; the percentage of total population with access to telephone service is to be increased to about 65 percent with the installation of exchanges and public call offices in additional rural townships and village communities; the connected lines per 100 population is to be increased from 1.7 (in 1983) to 7.2 in 1990; GTO's efficiency is to be increased through improvements in organization and management and increased staff training.

Sector Constraints

29. Modern telecommunications facilities in Oman were introduced only in 1975. Expansion of telecommunications facilities has been rapid since then. Constraints on the sector partly reflect the fact that the sector is essentially only 10 years old. Currently, the three main sector constraints on development are: (a) the capacity of GTO to plan and manage a network expansion on the scale envisaged; (b) the availability of data for planning purposes; and (c) the availability of qualified Omani staff.

Bank's Role

30. The Bank has been associated with the telecommunications sector in Oman since 1977 through two projects—a Technical Assistance Project (Loan 985-OM for \$2.75 million) and the First Telecommunications Project (Loan 1884-OM for \$22.0 million). The major construction works under Loan 1884-OM have been completed and final subscriber connections are expected to be completed by 1986. Disbursements are expected to be completed by June 1985 in line with appraisal estimates. All covenants have been met with the exception of that concerning accounts receivable (para. 49). Implementation of the project has been satisfactory.

31. The Bank has made significant contributions towards the achievement of sector goals through these two loans as follows:

- (a) A Telecommunications Master Plan for the period 1979-90 represented the first systematic effort at planning sector development and, pending the revised Plan to the year 2005, remains the most comprehensive planning document available to GTO;
- (b) The establishment of GTO as an efficient, basically well-managed organization;
- (c) continuing technical, financial and economic advice tendered through regular Bank supervision missions under both loans which has been a

crucial factor in the institutional development of GTO. For example, prior to 1980 GTO worked on cash accounts, draft accounts were more than two years late and there were no asset records. GTO now operates a commercial accounting system and accounts are prepared on time with draft accounts ready within two months of year-end. GTO also regularly prepares financial forecasts.

32. The Bank's participation in the proposed project is expected to leave GTO, by 1990, with sufficient in-house capabilities to manage most development and operational work in the sector. The measures that need to be taken to effectively address the sector constraints on development are:

- (a) strengthening GTO's planning and project implementation organization;
- (b) supporting GTO's efforts to increase the number of trained, qualified Omanis;
- (c) creating in-house capability for economic studies and demand forecasting, and helping GTO establish appropriate tariff structures in the light of the foreseen expansion of services to rural areas; and
- (d) supporting activities (including computerization) to improve the flow of financial information and increase efficiency in GTO's finance division.

PART IV - THE PROJECT

33. The proposed project comprises the Government's telecommunications development program for the period 1985-90. The project was prepared by GTO with the assistance of consultants. Appraisal of the project by the Bank took place in July 1984. Negotiations were held in Washington from December 17 to December 21, 1984 with a Government delegation headed by Mr. Mohammed Bin Khamis Al-Rashdy, Manager of International Services, GTO. A report entitled "Staff Appraisal Report - Second Telecommunications Project" (No. 5311-OM), dated January 14, 1985 is being distributed separately to the Executive Directors. The main features of the loan and the project are mentioned in the Loan and Project Summary and in Annex III.

Project Objectives

34. The project, to be partly financed by the Bank, provides for a balanced and integrated development of telecommunications services in Oman. A major thrust of the project will be the continued institutional development of the GTO aimed at enhancing its capabilities to manage work in the sector by 1990. Substantial progress has been made under the first project towards establishing GTO as a sound, well-managed institution. However, the rapid expansion of the network under the new project will require continued institutional improvement in planning, project implementation, administration

and finance, as GTO seeks to accelerate the introduction of new lines. The physical component of the project provides for: (a) expansion of local telephone facilities in urban areas and rural townships to meet 95 percent of anticipated demand by 1990; (b) extension of telephone service to about 37 additional rural towns and village communities; and (c) expansion of domestic long distance and international telephone facilities to carry out the additional traffic generated by local network expansions and extension of service to new areas.

Project Description

35. The main components of the project are:

(a) provision and installation of:

- about 65,000 additional lines of local exchange equipment (36,000 in the Capital area, 10,000 in Salalah and 19,000 in the rest of Oman) with associated cable and subscriber plant to provide about 62,000 subscriber connections and about 460 local/long distance public call offices;
- a digital international exchange of about 600 lines;
- equipment for upgrading one existing coaxial cable and four microwave backbone links and for providing two new microwave links and eight spur links; satellite communication equipment for upgrading the earth station at Salalah, expanding the Al Hajar earth station and establishing additional TV receive-only stations in rural areas;
- equipment for extension of the mobile telephone network;
- a computer for telephone billing and other data processing applications;
- training equipment; and
- other equipment (primarily equipment for maritime communications, teleprinters and vehicles).

(b) construction of exchange buildings and staff accommodations; and

(c) carrying out of tariff studies, establishment of an economic studies unit, computerization of accounting and other functions and development and implementation of technical and financial training programs.

Least Cost Solution

36. As in the case of any country with an existing telecommunications network, the configuration of GTO's present network limits the number of viable alternative solutions that could be considered to achieve the targets proposed for extending and improving service during the 1985-90 period. The

proposed project is based on standard engineering and economic techniques, with appropriate provisioning periods for various plants. GTO introduced digital technology into its network in the Capital area and Salalah under the ongoing project and plans to extend this to the international switch and to switches and transmission links in the interior areas where it is economically viable. In general, the technological solutions adopted in the project are expected to be the least cost solutions both with regard to initial investment and recurrent long-term maintenance and operating costs.

Project Costs and Financing

37. Total project cost is estimated at about \$227.8 million. The foreign exchange component is about \$154.8 million, or 68 percent of total project cost. A detailed cost table appears in the Loan and Project Summary. The project base cost estimates reflect estimated December 1984 prices, and are based on GTO's experience with contracts related to the ongoing project, and on experience in other countries. GTO is exempt from the payment of customs duties on imported goods and pays no taxes on local goods and civil works.

38. Physical contingencies amount to about 3 percent of total base cost. Price contingencies for the project amount to 16.3 percent of total base cost and physical contingencies. These cost estimates are based on local cost increases of 5 percent p.a. from 1985 through 1990 and foreign cost increases of 8 percent in 1985, 9 percent p.a. from 1986 through 1988, 7.5 percent in 1989 and 6.0 percent in 1990. The lower rate of 5 percent p.a. assumed for local costs is considered reasonable on the basis of expected future local price trends in Oman.

39. GTO will finance, from its internally generated resources, 100 percent of local costs (\$73.0 million) and 54 percent of foreign costs (\$83.9 million). The balance of the foreign costs will be met by the proposed Bank loan of \$23.0 million and a loan of \$47.9 million from the Government. The Government agreed that it would make available to GTO the \$47.9 million on terms and conditions satisfactory to the Bank (Guarantee Agreement, Section 2.02 (a)). While the Bank's participation in the project appears nominal in terms of funding (about 10 percent of total project costs and less than 15 percent of foreign exchange requirements), it is viewed as substantial by the Government in terms of technical assistance and is in line with the Bank's role of focusing its attention on the key objectives of manpower development and technical assistance. A similar situation prevailed in the First Telecommunications Project wherein the Government successfully covered the bulk of the financing requirements and utilized the Bank loan as the principal means to acquire needed independent technical advice and institutional development.

Procurement and Disbursements

40. Equipment to be financed by the Bank amounting to about \$22.0 million (including contingencies) would be procured by international competitive bidding in accordance with the Bank's guidelines. All Bank-financed contracts estimated to cost \$1.0 million equivalent or more would be subject to prior Bank review of procurement documentation; other contracts (e.g., off-the-shelf

items) of less than \$1.0 million equivalent each will be subject to selective post award review. GTO has initiated procurement action for these goods and expects to award contracts by end of July 1985. Action for selection of Bank financed consultants (total cost of about \$1.0 million) in accordance with Bank guidelines has been initiated and all consultants are expected to be in place by December 31, 1985. The proposed Bank loan of \$23.0 million would be disbursed against full normal documentation for: (a) 100 percent of foreign expenditures for goods to be procured under the loan; and (b) 100 percent of expenditure for consultants. Items to be financed by GTO and the Sultanate of Oman are expected to be procured through negotiations with existing suppliers and procurement procedures which permit competition. These arrangements are similar to those under the First Telecommunications Project and are satisfactory. The table below indicates how these procurement arrangements are to be applied.

PROCUREMENT ARRANGEMENTS

<u>Item</u>	<u>Under Bank</u> <u>Guidelines</u> 1/	<u>Negotiated</u> <u>Purchase</u>	<u>Others</u>	<u>Total</u>
	<u>US\$ Million</u>			
Switching equipment	7.0 (6.0)	9.2	1.5	17.7
External plant	12.6 (7.0)	—	10.4	23.0
Subscriber plant	8.6 (4.0)	—	—	8.6
Transmission systems	7.8	23.7	8.5	40.0
Mobile system	(5.0)	—	23.1	23.1
Miscellaneous (gentex, computer, coin boxes, vehicles, etc.)	—	4.9	18.4	23.3
Buildings	—	—	13.4	13.4
Consultancy services and training	1.0 (1.0)	—	4.7	5.7
Total	<u>37.0</u> (23.0)	<u>37.8</u>	<u>80.0</u>	<u>154.8</u>

A Special Account would be used for disbursements against all expenditures. The estimated schedule of Bank loan disbursements is presented in the Loan and Project Summary. The loan is expected to be closed on June 30, 1991.

1/ Figures in parentheses indicate the portion of the cost of each item that would be financed by the proposed Bank loan. Costs include proportionate contingency provisions.

Project Implementation

41. Based on the experience it gained under the First Telecommunications Project and with the assistance, where necessary, of experts specifically recruited for the purpose, GTO will implement the project. Installations will be carried out by contractors under GTO's supervision. The project is expected to be completed by December 31, 1990. Bid invitations for procurement of the switching equipment, external plant, subscriber plant and transmission equipment for the Bank-financed component of the project are expected to be issued by April 1985. Issuance of these invitations is a condition of effectiveness of the loan (Loan Agreement, Section 7.01).

42. Organization and Management. GTO will be the Borrower of the Bank loan which will be guaranteed by the Sultanate of Oman. GTO is administered by a seven-member Board of Directors whose Chairman is the Minister of Posts, Telegraphs and Telephones and Deputy Chairman is the Minister of Communications. Its other five members—all from Government—include the President of GTO. According to its charter, GTO's Board of Directors has authority, subject to coordination with the Ministry of Finance on fiscal matters, to determine GTO's development policy, investment program, annual budget, borrowings, and organization and staffing. Tariff proposals have, however, to be approved by the Cabinet. GTO's day-to-day affairs are administered by its President, assisted by three general managers and two advisers. Its organization is similar to that of other autonomous telecommunications organizations and comprises eleven headquarters divisions (general services, administration, purchase and stores, personnel, public relations, training, customer services, finance, planning and projects, telephones and transmission) and one regional office at Salalah headed by a general manager, mainly for maintenance and operations. Field activities in other areas are directly controlled from headquarters.

43. GTO's management is capable of effectively administering the present organization. The decision-making structure is highly centralized, but is generally efficient. Information flow and general coordination between divisions had, in the past, been weak. Some improvements have been realized through the development of a management information system under Loan 1884-OM. Further assistance is, however, needed to update the system in view of the rapid network expansion envisaged under the proposed project. The functions of planning and project implementation currently handled by one manager is expected to be split into two separate divisions. In addition, a unit for economic studies would be established under the project to prepare regular demand forecasts, collate economic and social data and carry out surveys, including tariff studies. The finance division would be strengthened with the addition of a chief accountant, a systems accountant to manage the introduction of computer systems into the division, and a training coordinator to manage the financial training program. GTO has agreed that the accountants and the training coordinator in the finance division will be appointed by December 31, 1985 (Loan Agreement, Section 3.03).

44. GTO proposes to retain and finance out of its own resources consultants to assist in project implementation. Consultancy services for institutional development to be financed under the proposed loan cover tariff study, assistance in establishing an economic studies unit, assistance (including training) in computerization of accounting functions and

development of technical and financial training courses and programs. Assurances have been obtained that GTO would (a) appoint such consultants no later than December 31, 1985, in accordance with Bank guidelines and with qualifications and terms of reference satisfactory to the Bank; (b) furnish to the Government and the Bank, no later than December 31, 1986, the consultants' report on the tariff study and, thereafter, implement such of the recommendations as are agreed among the Government, Bank and GTO; and (c) furnish to the Bank by December 31, 1986, action plans for the establishment of the economic studies unit, the computerization of accounting functions and the implementation of the training program for the financial staff and, thereafter, carry out such plans as shall have been agreed between GTO and the Bank (Loan Agreement, Sections 3.02 (a) and 3.04).

45. Staffing and Training. As of December 31, 1983, GTO's staff totalled 1,494 and operated about 21,500 direct exchange lines (DELs). The staff ratio of 70 per 1000 DELs is high compared to that in industrialized countries where the ratio ranges from 10-20, but compares favorably with that in most developing countries (the average for South Asia is about 100). With the expansion of lines under the present project, the staff ratio is expected to increase to about 50 by end 1985, and to about 26 percent by 1990. About 70 percent of GTO's total staff are Omanis. Of the top management, only the manager for finance is an expatriate. However, there is a high proportion (about 60-70 percent) of expatriate staff in the middle management and senior technical levels and in the finance division. Government intends to move as rapidly as possible toward the total "Omanization" of GTO personnel. However, complete elimination of the need for expatriate staff by 1990 is not foreseen because qualified Omanis will not be available in sufficient numbers, either from outside GTO or from inside GTO, to meet the growing need for skilled personnel. A realistic objective for the period to 1990 would be to develop an extended training program to upgrade as many Omanis as possible from operator to technical staff status, and to develop Omani middle management for the finance division. The training center in GTO provides training for technicians and operators but practical training is limited due to lack of laboratory facilities. The facilities will be expanded under the proposed project to remove this limitation and also provide training in external plant and line techniques. GTO has been utilizing facilities in neighboring countries and this arrangement is expected to continue in the medium term. Some specialized telecommunications training has been, and will continue to be, provided by equipment suppliers. Current facilities for training of financial and administrative staff are inadequate, though some basic courses are given by the Institute of Public Administration. A suitable training program in these areas will be developed under the proposed project through the provision of consultants funded under the proposed loan.

Accounting and Audit

46. GTO switched from cash accounting to commercial, accrual accounting in January 1981. Improvements in budget preparation processes and procedures for control of expenditures and withdrawals, and the establishment of cost center controls have also been effected. Improvements in cash management and stores control are under implementation. Accounts computerization as part of an ultimate integrated financial reporting system is now a high priority which will be addressed under the proposed project. The quality and coverage of the

external audit is considered satisfactory. Unaudited accounts are produced within four months and audited accounts within six months of the end of the fiscal year, as agreed under Loan 1884-OM. GTO will continue to meet the same targets under the proposed project.

Performance Indicators

47. GTO's implementation, operational and financial performance will be monitored closely through a series of indicators discussed during negotiations. GTO will include these indicators in its quarterly project progress reports, except for the financial indicators which will be reported in annual financial statements. It is expected that GTO will progressively incorporate these performance indicators into its internal management systems.

Financial Aspects

48. GTO's financial performance has generally been satisfactory. It has met the revenue covenant under the first project (Loan 1884-OM), though there have been no tariff increases since 1978. The rate of return on revalued assets was about 14 percent in 1981, 21 percent in 1982 and 31 percent in 1983. Net internal cash generation was 89 percent of investment requirements in 1983 and is projected to cover 68 percent of new investment requirements during the period 1985 to 1990. At end 1983, GTO's current assets were 2.9 times current liabilities. The debt service coverage rate has been satisfactory and is expected to remain so.

49. GTO was unable to meet the covenant under the first project to reduce receivables to 60 days of billing by the end of 1984. There has, however, been a significant improvement in performance over the past year due to new control procedures and stricter enforcement of penalties for delinquent payers. Accounts receivable from government subscribers, however, have yet to be appreciably reduced. Under the proposed project, GTO has agreed that it will decrease the level of subscriber accounts receivable to not more than 60 days billing by December 31, 1987, and maintain it at that level thereafter (Loan Agreement, Section 5.05). It was agreed further that the Government will cause all of its agencies to pay bills for telecommunications services rendered by GTO within 60 days of the billing dates (Guarantee Agreement, Section 3.02 (b) (iii)) by December 31, 1987. Specifics of a program to achieve these objectives were discussed at negotiations.

50. GTO's future financial performance is expected to be satisfactory. The rate of return over the project period is expected to average about 13 percent on average current net value of fixed assets. To ensure satisfactory financial performance, including adequate cash generation to carry out the proposed project, GTO has agreed to produce an annual rate of return of not less than 10 percent in 1985 and 1986, 11 percent in 1987, 12 percent in 1988 and 13 percent thereafter on the average current net value of its fixed assets in operation for each of its fiscal years (Loan Agreement, Section 5.04). In the period 1988 to 1990, strong cash surpluses are projected for GTO, over and above the amounts needed to finance local and foreign investment costs. GTO and the Government are presently studying appropriate mechanisms for the distribution of GTO's net income. During negotiations GTO confirmed that it will keep the Bank informed about the results of the study and that its plans

to put into place an appropriate mechanism by December 31, 1985. GTO is reviewing the adequacy of the methods of asset valuation which were introduced under the First Telecommunications Project since the impact of lower inflation and lower equipment costs due to technology improvements have probably rendered them conservative.

Tariffs

51. There have been neither changes to tariff levels since 1978 nor an examination of the tariff structure to determine the costs and economic role of various services. The current structure is based upon differential tariffs among users for connection fees and, no differential vis-a-vis rentals. Local and long-distance calls are pulse coded with different tariffs for day and night calls. Pulse duration is inversely related to distance. In general, tariffs are comparable to other developing countries. It will, however, be necessary to determine tariff structure for certain new services. For example, tariffs for the mobile telephone system should be set to fully reflect the economic cost of the service and should not be cross-subsidized by other services. It will be important to review the impact of tariff structure and level in view of the expected change in real effective demand in the later years of the project. Provision has, therefore, been made under the project to finance technical assistance to help GTO carry out a tariff study (para. 44).

Benefits

52. Telecommunications services benefit all sectors of Oman's economy. Compared with alternative means of communications, telecommunications are usually more efficient in terms of capital and energy consumption and user time. With adequate telecommunications facilities, the level and variety of productive communications can be increased considerably, and activities which would otherwise not be feasible can be realized. Telecommunications can be expected to play an increasingly significant role in Oman as concerted efforts are made to diversify the economy and improve social services. Examples of economic development that will be assisted through the project are: (a) the development of the Musandam peninsula with fisheries potential and the Buraimi area with agricultural potential—the Sultanate of Oman has attached high priority to strengthening the links between these remote regions and the existing economic centers in Oman; (b) increased provision of social infrastructure, particularly schools and hospitals, in the main rural centers; (c) the location of small artisanal industries and agricultural marketing centers in the rural areas; and (d) the planned development of industrial estates in Sohar and Salalah. A further impact of the telecommunications investment program is its ability to mobilize surplus funds for use by the Government in other sectors.

53. The planned increase of line installation rates under the project will permit an increase in the proportion of demand met by services from about 48 percent in 1983 to about 95 percent in 1990 for the country as a whole. The provision of exchange capacity outside the Capital area (in the 20 towns/villages which already have a limited service and 37 other towns/villages, presently without telephone service) and installation of about 180 public call offices in the rural areas will enable service to be extended

to smaller settlements. The upgrading of the microwave transmission network and the addition of spur routes creates the capability for extension of services in the future, at least cost, to new settlements. Benefits should thus be distributed far more widely than was possible under the first project.

Return on Investment

54. The internal financial rate of return on the 1985-90 investment program, based on existing tariffs, is 16 percent. There is some cross-subsidization of the rural program by the program for the Capital area and Salalah because of the lower projections of revenue per DEL in the rural areas. No conversion factors are needed to derive an economic rate of return from the financial rate of return in Oman because: (a) the Omani rial is freely convertible; (b) the trade regime is very open, with negligible import tariffs or other restrictions; (c) there are no major price distortions; and (d) labor is mobile and wages reflect international market prices, largely due to the high expatriate component in the labor force. However, considering that the value in real terms of existing tariffs declines over time, the economic rate of return understates the value to new subscribers of the service.

55. Sensitivity analysis on the economic rate of return was performed to study the effect of: (1) a 10 percent increase in capital and in operating costs, together with a 10 percent decrease in revenue; and (2) a delay in the expansion of the exchanges in the Capital area and Salalah by 2 years, together with a delay by one year in the benefits of the rural component. In the worst case, the economic rate of return based on existing tariffs falls to 11 percent.

Risks

56. The fundamental risk is that the major institutional objective of the proposed project, i.e., to leave GTO, by 1990, with sufficient in-house capabilities to manage development and operational work in the sector may not be met. This risk is considered minimal in that regular consultation should lead to identification of appropriate measures and resources needed for timely realization of the objective. The risk that GTO's planning and implementation capacity may not be sufficient to execute the proposed project is likewise minimal in the light of GTO's past performance, its intention to delineate management responsibility for planning and project implementation and measures included in the project to establish an economic studies unit and train GTO staff.

Environmental Aspects

57. The project will have no significant adverse environmental or health aspects. Telecommunications promote energy conservation and reduce environmental pollution to the extent that it can substitute for physical transportation.

PART V - LEGAL INSTRUMENTS AND AUTHORITY

58. The draft Loan Agreement between the Bank and the General Telecommunication Organisation (GTO), the draft Guarantee Agreement between the Sultanate of Oman and the Bank, and the Report of the Committee provided for in Article 3, Section 4(iii) of the Articles of Agreement are being distributed to the Executive Directors separately. Special features of the Loan and Guarantee Agreements are referred to in the text and listed in Section III of Annex III.

59. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Bank.

PART VI - RECOMMENDATION

60. I recommend that the Executive Directors approve the proposed loan.

A. W. Clausen
President

Attachments
January 22, 1985
Washington, D.C.

TABLE 3A

QMAN QMAN	- SOCIAL INDICATORS DATA SHEET				
	1960 ^b	1970 ^b	MOST RECENT ESTIMATE ^b	REFERENCE GROUPS (WEIGHTED AVERAGES) /c (MOST RECENT ESTIMATE) /b HIGH INCOME OIL EXPORTERS	MIDDLE INCOME N. AFRICA & MID EAST
AREA (THOUSAND SQ. KM)					
TOTAL	300.0 /c	300.0 /c	300.0 /c	.	.
AGRICULTURAL	10.4	10.4	10.4	.	.
GDP PER CAPITA (US\$)	550.0	2490.0	6090.0	14895.6	1149.6
ENERGY CONSUMPTION PER CAPITA (KILOGRAMS OF OIL EQUIVALENT)	..	660.0	914.0	3886.6	622.1
POPULATION AND VITAL STATISTICS					
POPULATION, MID-YEAR (THOUSANDS)	505.0	654.0	1079.0	.	.
URBAN POPULATION (% OF TOTAL)	3.5	5.1	20.0	67.2	48.2
POPULATION PROJECTIONS					
POPULATION IN YEAR 2000 (MILL.)			1.8	.	.
STATIONARY POPULATION (MILL.)			3.8	.	.
POPULATION MOMENTUM			1.9	.	.
POPULATION DENSITY					
PER SQ. KM.	1.7	2.2	3.4	24.2	36.3
PER SQ. KM. AGRI. LAND	48.7	63.1	98.8	292.8	461.7
POPULATION AGE STRUCTURE (%)					
0-14 YRS	43.3	44.1	44.9	45.5	43.6
15-64 YRS	54.0	53.2	51.5	51.6	53.1
65 AND ABOVE	2.7	2.7	2.8	2.7	3.3
POPULATION GROWTH RATE (%)					
TOTAL	2.0	2.6	4.2	5.2	2.8
URBAN	5.8	6.3	16.8	8.6	4.5
CRUDE BIRTH RATE (PER THOUS)	50.6	49.8	47.0	41.6	40.4
CRUDE DEATH RATE (PER THOUS)	27.8	21.7	14.7	10.4	11.5
GROSS REPRODUCTION RATE	3.5	3.5	3.2	3.1	2.8
FAMILY PLANNING					
ACCEPTORS, ANNUAL (THOUS)	..	..	..	..	.
USERS (% OF MARRIED WOMEN)	..	..	..	..	22.2
FOOD AND NUTRITION					
INDEX OF FOOD PROD. PER CAPITA (1969-71=100)	..	100.0	95.0 /d	42.0	97.3
PER CAPITA SUPPLY OF					
CALORIES (% OF REQUIREMENTS)	..	..	..	123.9	110.8
PROTEINS (GRAMS PER DAY)	..	..	..	79.7	70.1
OF WHICH ANIMAL AND PULSE	..	..	..	22.9	17.8
CHILD (AGES 1-4) DEATH RATE	51.8	35.9	21.1	12.5	14.6
HEALTH					
LIFE EXPECT. AT BIRTH (YEARS)	38.5	43.6	51.8	58.7	57.5
INFANT MORT. RATE (PER THOUS)	193.3	158.3	122.5	93.1	101.5
ACCESS TO SAFE WATER (%POP)					
TOTAL	..	..	32.0 /e	84.8	59.7
URBAN	..	..	100.0 /e	98.2	84.5
RURAL	..	..	28.0 /e	71.1	38.4
ACCESS TO EXCRETA DISPOSAL (% OF POPULATION)					
TOTAL	..	..	12.0 /f	49.3	..
URBAN	..	100.0	100.0 /f	93.8	..
RURAL	..	..	5.0 /f	41.5	..
POPULATION PER PHYSICIAN	31180.0 /h	8650.0	1900.0	1353.0	4345.1
POP. PER NURSING PERSON	..	9120.0	500.0	812.5	1831.1
POP. PER HOSPITAL BED					
TOTAL	2830.0 /h	..	650.0 /i	572.8	632.9
URBAN	..	..	150.0 /i	542.2	545.5
RURAL	..	..	1260.0 /i	..	2513.5
ADMISSIONS PER HOSPITAL BED	..	..	52.4 /d	28.7	26.2
HOUSING					
AVERAGE SIZE OF HOUSEHOLD					
TOTAL	..	..	..	..	..
URBAN	..	..	..	..	..
RURAL	..	..	..	..	..
AVERAGE NO. OF PERSONS/ROOM					
TOTAL	..	..	..	..	..
URBAN	..	..	..	..	..
RURAL	..	..	..	..	..
ACCESS TO ELECT. (% OF DWELLINGS)					
TOTAL	..	..	..	..	46.2
URBAN	..	..	..	..	77.7
RURAL	..	..	..	..	16.1

TABLE 3A

OMAN OMAN	- SOCIAL INDICATORS DATA SHEET				
	1960/ ^b	1970/ ^b	MOST RECENT ESTIMATE/ ^b	REFERENCE GROUPS (WEIGHTED AVERAGES) / ^a (MOST RECENT ESTIMATE) / ^b HIGH INCOME OIL EXPORTERS	MIDDLE INCOME N. AFRICA & MID EAST
EDUCATION					
ADJUSTED ENROLLMENT RATIO					
PRIMARY: TOTAL	..	3.0	74.0	83.6	88.3
MALE	..	6.0	90.0	93.2	102.5
FEMALE	..	1.0	57.0	74.2	73.6
SECONDARY: TOTAL	22.0	43.3	43.0
MALE	30.0	50.4	59.3
FEMALE	13.0	37.1	33.0
VOCATIONAL (% OF SECONDARY)	..	26.7 / ₁	1.6	2.4	10.3
PUPIL-TEACHER RATIO					
PRIMARY	..	18.0	27.0	18.3	30.3
SECONDARY	14.0	12.8	23.1
ADULT LITERACY RATE (%)	..	20.0 / ₁	..	33.9	43.5
CONSUMPTION					
PASSENGER CARS/THOUSAND POP	..	4.0	8.7 / ₁	62.4	17.8
RADIO RECEIVERS/THOUSAND POP	240.5	138.8
TV RECEIVERS/THOUSAND POP	2.9 / _a	200.4	46.1
NEWSPAPER ("DAILY GENERAL INTEREST") CIRCULATION PER THOUSAND POPULATION	34.5	31.2
CINEMA ANNUAL ATTENDANCE/CAPITA	1.1 / _a	4.6	1.7
LABOR FORCE					
TOTAL LABOR FORCE (THOUS)	..	177.0	275.0	..	..
FEMALE (PERCENT)	5.3	10.8
AGRICULTURE (PERCENT)	44.6	42.4
INDUSTRY (PERCENT)	19.6	27.9
PARTICIPATION RATE (PERCENT)					
TOTAL	..	27.1	25.5	27.7	26.2
MALE	48.1	46.4
FEMALE	3.2	5.8
ECONOMIC DEPENDENCY RATIO	..	1.7	1.9	1.8	1.8
INCOME DISTRIBUTION					
PERCENT OF PRIVATE INCOME RECEIVED BY					
HIGHEST 5% OF HOUSEHOLDS
HIGHEST 20% OF HOUSEHOLDS
LOWEST 20% OF HOUSEHOLDS
LOWEST 40% OF HOUSEHOLDS
POVERTY TARGET GROUPS					
ESTIMATED ABSOLUTE POVERTY INCOME LEVEL (US\$ PER CAPITA)					
URBAN	274.8
RURAL	177.2
ESTIMATED RELATIVE POVERTY INCOME LEVEL (US\$ PER CAPITA)					
URBAN	402.6
RURAL	284.9
ESTIMATED POP. BELOW ABSOLUTE POVERTY INCOME LEVEL (%)					
URBAN
RURAL
..	NOT AVAILABLE				
..	NOT APPLICABLE				

NOTES

- ^{/a} The group averages for each indicator are population-weighted arithmetic means. Coverage of countries among the indicators depends on availability of data and is not uniform.
- ^{/b} Unless otherwise noted, "Data for 1960" refer to any year between 1959 and 1961; "Data for 1970" between 1969 and 1971; and data for "Most Recent Estimate" between 1980 and 1982.
- ^{/c} Official figure, UN estimate is 212.5 thousand Sq.Km; ^{/d} 1977; ^{/e} 1976; ^{/f} 1975; ^{/g} 1979; ^{/h} 1962; ^{/i} 1972; ^{/j} 1978.

DEFINITIONS OF SOCIAL INDICATORS

Notes: Although the data are drawn from sources generally judged the most authoritative and reliable, it should also be noted that they may not be internationally comparable because of differences in definitions and concepts used in collecting the data. The data are, nonetheless, useful to describe orders of magnitude, indicate trends, and characterize certain major differences between countries.

The reference groups are (1) the same country group of the subject country and (2) a country group with somewhat higher average income than the country group of the subject country (except for "High Income Oil Exporters" group where "Middle Income North Africa and Middle East" is chosen because of stronger east-westward affiliation). In the respect group data the averages are population weighted arithmetically unless otherwise stated. The indicator is the indicator in a group has data for that indicator. Since the coverage of indicators depends on the availability of data and is not uniform, caution must be exercised in relating averages of one indicator to another. These averages are only useful in comparing the value of one indicator at a time about the country and

AREA (thousand sq km.)

Total - Total surface area comprising land area and inland waters; 1960, 1970 and 1981 data.

Agricultural - Estimate of agricultural area used temporarily or permanently for crops, pastures, market and kitchen gardens or its fallow; 1960, 1970 and 1981 data.

GDP and CAPITA (1981) - GDP per capita estimate of current market prices, calculated by some conversion method on World Bank Atlas (1980-82 basis); 1960, 1970, and 1981 data.

ENERGY CONSUMPTION PER CAPITA - Annual apparent consumption of commercial primary energy (coal and lignite, petroleum, natural gas and hydropower, nuclear and geothermal electricity) in billion tons of oil equivalent per capita; 1960, 1970, and 1981 data.

POPULATION AND VITAL STATISTICS

Total Population, Mid-Year (thousands) - As of July 1; 1960, 1970, and 1981 data.

Urban Population (percent of total) - Ratio of urban to total population; different definitions of urban areas affect comparability of data among countries; 1960, 1970, and 1981 data.

Population Projections

Population in year (1960) - Current population projections are based on 1960 total population by age and sex and their mortality and fertility rates. Projection parameters or mortality rates comprise of three levels: (a) life expectancy at birth increasing with country's per capita income level, and female life expectancy stabilizing at 77.1 years. The parameters for fertility rates also have three levels: (b) assumed decline in fertility according to income level and past family planning performance. Each country in the combined set of these also a combination of mortality and fertility trends for projection purposes.

Stationary population - is one in which age- and sex-specific mortality rates have not changed over a long period, while age-specific fertility rates have consistently remained at replacement level (one child per woman) or less. In such a population, the birth rate is constant and equal to the death rate, the age structure is also constant, and the growth rate is zero. The stationary population size was estimated on the basis of the projected characteristics of the population in the year 2000, and the rate of decline of fertility rate to replacement level.

Population Momentum - is the tendency for population growth to continue beyond the time that replacement-level fertility has been achieved; that is, even after the net reproduction rate has reached unity. The momentum of a population in the year 1 is measured as a ratio of the ultimate stationary population to the population in the year 1, given the assumption that fertility remains at replacement level from year 1 onward; 1960 data.

Population Density

Per sq. km. - Mid-year population per square kilometer (100 hectares) of total area; 1960, 1970, and 1981 data.

Per sq. km. agricultural land - Computed as above for agricultural land only; 1960, 1970 and 1981 data.

Population Age Structure (percent) - Children (0-14 years), working-age (15-64 years), and retired (65 years and over) as percentage of mid-year population; 1960, 1970, and 1981 data.

Population Growth Rate (percent) - Total - Annual growth rates of total mid-year population for 1940-60, 1960-70, and 1970-82.

Population Growth Rate (percent) - urban - Annual growth rates of urban population for 1950-60, 1960-70, and 1970-82.

Crude Birth Rate (per thousand) - Annual live births per thousand of mid-year population; 1960, 1970, and 1981 data.

Crude Death Rate (per thousand) - Annual deaths per thousand of mid-year population; 1960, 1970, and 1981 data.

Gross Reproduction Rate - Average number of daughters a woman will bear in her normal reproductive life and who themselves become age-specific fertility rates; usually five-year averages ending in 1960, 1970, and 1981.

Family Planning - Acceptance, Annual (thousands) - Annual number of acceptors of birth-control devices under auspices of national family planning program.

Family Planning - Users (percent of married women) - Percentage of married women of child-bearing age who are practicing or whose husbands are practicing any form of contraception in all married women. Women of child-bearing age are generally women aged 15-49, although for some countries contraceptive usage is measured for other age groups.

FOOD AND NUTRITION

Index of Food Production per Capita (1960=100) - Index of per capita annual production of all food commodities. Production includes wood and food and is in metric tons. Excludes primary products such as oil, sugar, and cotton (instead of sugar) which are edible and contain nutrients (i.e., coffee and tea are excluded). Aggregate production of each country is based on national average producer price weights; 1961-81, 1970, and 1982 data.

Net Calorie Supply of Calorie (percent of requirements) - Computed from energy equivalent of net food supplies available in country per capita per day. Available supplies comprise domestic production, imports less exports, and changes in stock. Net supplies exclude animal food, seeds, fertilizer used in food processing, and losses in distribution. Requirements are based on 2500 based on physiological needs for normal activity and health considering environmental temperature, body weight, age and sex distribution of population, and allowing 10 percent for waste at household level; 1961-81, 1970 and 1980 data.

Net Calorie Supply of Protein (grams per day) - Protein content of per capita net supply of food per day. Net supply of food is defined as above. Requirements for all countries established by USDA provide for minimum allowance of 50 grams of total protein per day and 20 grams of animal and pulse protein, of which 10 grams should be animal protein. These standards are lower than those of 75 grams of total protein and 25 grams of animal protein as an average for the world, proposed by FAO in the Third World Food Supply; 1961-81, 1970 and 1980 data.

Net Calorie Protein Supply from Animal and Pulse - Protein supply of food derived from animals and pulses in grams per day; 1961-81, 1970 and 1977 data.

Child (ages 1-14) Death Rate (per thousand) - Annual deaths per thousand in age groups 1-4 years, in children in child age group; for most developed countries data derived from life tables; 1960, 1970 and 1981 data.

HEALTH

Life Expectancy at Birth (years) - Average number of years of life remaining at birth; 1960, 1970 and 1981 data.

Infant Mortality Rate (per thousand) - Annual deaths of infants under one year of age per thousand live births; 1960, 1970 and 1981 data.

Access to Safe Water (percent of population) - Total, urban, and rural - Number of people (total, urban, and rural) with reasonable access to safe water supply (includes treated surface waters or unfiltered but uncontaminated water such as that from protected boreholes, springs, and springs wells) in percentage of their respective populations. In an urban area a public supply of standpipe located no more than 200 meters from a house and accessible to the house is considered reasonable access of that house. In rural areas reasonable access would imply that the household or members of the household do not have to spend a disproportionate part of the day in fetching the family's water needs.

Access to Sewerage (percent of population) - Total, urban, and rural - Number of people (total, urban, and rural) served by sewerage disposal as percentage of their respective populations. Sewerage disposal may include collection and disposal, with or without treatment, of human excreta and wastewater by water-borne systems or the use of pit latrines and other toilet facilities.

Population per Physician - Population divided by number of practicing physicians; 1960, 1970, and 1981 data.

Population per Nursing Person - Population divided by number of practicing male and female graduate nurses, assistant nurses, practical nurses and nursing auxiliaries; 1960, 1970, and 1981 data.

Population per Hospital Bed - Total, urban, and rural - Population (total, urban, and rural) divided by their respective number of hospital beds available in public and private general and specialized hospital and rehabilitation centers. Hospitals are establishments permanently staffed by at least one physician. Establishments providing principally custodial care are not included. Rural hospitals, however, including health and medical centers not permanently staffed by a physician (but by a medical assistant, nurse, midwife, etc.) which offer in-patient accommodation and provide a limited range of medical facilities.

Hospitalization per Hospital Bed - Total number of admissions to or discharges from hospitals divided by the number of beds.

HOUSING

Average Size of Household (persons per household) - Total, urban, and rural - A household consists of a group of individuals who share living quarters and their safe under a house or under any other structure included in the household for statistical purposes.

Average number of persons per room - Total, urban, and rural - Average number of persons per room in all urban, and rural occupied conventional dwellings, respectively. Dwellings exclude non-permanent structures and unoccupied parts.

Access to Electricity (percent of dwellings) - Total, urban, and rural - Conventional dwellings with electricity in living quarters as percentage of total, urban, and rural dwellings respectively.

EDUCATION

Adjusted Enrollment Ratio

Primary school - Total, male and female - Gross total, male and female enrollment of all ages at the primary level as percentage of respective primary school-age population; normally includes children aged 5-11 years but excludes those in other levels of primary education; for countries with universal education enrollment may exceed 100 percent since some pupils are below or above the official school age.

Secondary school - Total, male and female - Computed as above; secondary education requires at least four years of approved primary instruction, provides access to a department of secondary instruction for pupils usually of 12 to 17 years of age; correspondence courses are generally excluded.

Vocational enrollment (percent of secondary) - Vocational institutions include technical, industrial, or other programs which operate independently or as departments of secondary instruction.

Teacher-student ratio - primary and secondary - Total students enrolled in primary and secondary levels divided by number of teachers in the corresponding levels.

Adult literacy rate (percent) - Literate adults (able to read and write) as a percentage of total adult population aged 15+; 1960, 1970, and 1981 data.

COMMUNICATIONS

Passenger Cars (per thousand population) - Passenger cars comprise motor cars (excluding taxis) and light trucks; excludes ambulances, hearse, and antique vehicles.

Radio Receivers (per thousand population) - All types of receivers for radio broadcast to general public per thousand of population; excludes unlicensed receivers in countries and in years when registration of radio sets was in effect; data for recent years may not be comparable since some countries abolished licensing.

TV Receivers (per thousand population) - TV receivers for broadcast to general public per thousand population; excludes unlicensed TV receivers in countries and in years when registration of TV sets was in effect.

Newspaper Circulation (per thousand population) - Shows the average circulation (daily general interest content) defined as a periodical publication devoted primarily to recording general news. It is considered to be "daily" if it appears at least four times a week.

cinema Annual Attendance per Capita per Year - Based on the number of cinema seats during the year, including admissions to drive-in cinema on mobile units.

LABOR FORCE

Total Labor Force (thousands) - Economically active persons, including armed forces and unemployed but including housewives, students, etc., working population of all ages. Definition in various countries are not comparable; 1960, 1970 and 1981 data.

Female (percent) - Female labor force as percentage of total labor force.

Agriculture (percent) - Labor force in farm, forestry, hunting and fishing as percentage of total labor force; 1960, 1970 and 1981 data.

Industry (percent) - Labor force in mining, construction, manufacturing and electricity, water and sea as percentage of total labor force; 1960, 1970 and 1981 data.

Participation Rate (percent) - Total, male, and female - Participation or activity rates are computed on total, male, and female labor force as percentage of total, male and female population of all ages respectively; 1960, 1970, and 1981 data. These are based on ILO's participation rates reflecting age-structure of the population, and long time trend. A few estimates are from national sources.

Gender Dependency Ratio - Ratio of population under 15 and 65 and over to the working age population (15-64).

INCOME DISTRIBUTION

Percentage of Private Income (both in cash and kind) - Received by richest 5 percent, richest 20 percent, poorest 20 percent, and poorest 40 percent of household.

POVERTY TARGET CRITERIA

The following criterion are very approximate measures of poverty levels, and should be incorporated with considerable caution.

Estimated Absolute Poverty Income Level (1981 per capita) - urban and rural - Absolute poverty income level is that income level below which a minimal nutritionally adequate diet plus minimal non-food requirements is not affordable.

Relative Relative Poverty Income Level (1981 per capita) - urban and rural - Rural relative poverty income level is 50 percent of average per capita personal income of the country. Urban level is derived from the rural level with adjustment for higher cost of living in urban areas.

Estimated Population Below Absolute Poverty Income Level (percent) - urban and rural - Percent of population (urban and rural) who are "absolute poor."

OMAN - ECONOMIC INDICATORS

GROSS NATIONAL PRODUCT IN 1983

ANNUAL RATE OF GROWTH (percent constant prices)

	<u>US\$ Millions</u>		<u>Percent</u>		<u>1979-81</u>		<u>1981-83</u>	
GNP at market prices	6,968.5	100.0			16.3			-14.2
Gross domestic investment	2,142.9	30.8			24.2			-12.0
Gross national savings	2,055.6	29.5			41.8			-36.8
Current account balance	-88.6	-1.3			132.9			23.2
Exports of goods, NFS	4,253.9	61.0			41.4 ^{1/}			-2.6 ^{1/}
Imports of goods, NFS	3,374.1	48.4			38.4			8.5

OUTPUT, EMPLOYMENT AND PRODUCTIVITY IN 1983 ^{2/}

	<u>Value Added</u>	
	<u>US\$ Millions</u>	<u>Percent</u>
Agriculture	233	3.0
Industry	4804	61.0
Services	2837	36.0
Total/Average	7874	100.0

PUBLIC FINANCE

	<u>RO Millions</u>	<u>Percent of GDP</u>	
	<u>1983</u>	<u>1983</u>	<u>1981-83</u>
Current receipts	1489	54.3	56.5
Current expenditures	971	35.4	31.4
Surplus/Deficit (-)	518	18.9	22.8
Investment	576	21.0	19.6

MONEY, CREDIT AND PRICES

	<u>Millions of Rials Omani outstanding at end period</u>					
	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>
Money supply	114.3	123.1	154.1	212.7	240.5	266.8
Bank credit to public sector	69.9	4.2	3.2	0.6	42.2	31.3
Bank credit to private sector	198.4	222.6	283.2	334.8	377.2	468.9
	<u>Percentage of Index Numbers</u>					
Money as percent of GDP	11.9	9.5	7.5	8.5	9.2	9.8
GDP deflator (1978=100)	100.0	129.5	186.5	187.2	170.7	...
Annual percentage change in:						
GDP deflator	...	29.5	44.0	0.4	-8.8	...
Bank credit to public sector	8.5	-94.0	-23.8	-81.3	6933.3	-25.8
Bank credit to private sector	18.7	12.2	27.2	18.2	12.7	24.3

^{1/} Capacity to import.

^{2/} Data on employment are unavailable.

November 1984

OMAN - ECONOMIC INDICATORS

BALANCE OF PAYMENTS

	Millions of US Dollars			
	1978	1980	1982	1983
Exports of goods, NFS	1598	3748	4423	4254
Imports of goods, NFS	1335	2200	3479	3374
Resource Gap (deficit--)	263	1548	944	880
Net factor income	-110	-109	55	-176
Net transfers	-212	-325	-684	-793
Current account balance (deficit--)	-59	1114	315	-89
Grants to government	20	102	42	147
Monetary capital	17	80	199	540
Net errors and omissions	-79	-363	290	8
Overall balance (deficit--)	-101	933	846	606
Gross reserves (end year)	80	1318	3579	4186
Petroleum imports	96	237	280	41

MERCHANDISE EXPORTS (1981-83 AVERAGE)

	US\$ Billions	Percent
Oil	4.1	99.4
Total	4.2	100.0

EXTERNAL PUBLIC DEBT, DEC. 31, 1983

	US\$ Millions
Disbursed only	1,125
Including undisbursed	1,680

IBRD/IDA LENDING, DEC. 31, 1983

	US\$ Millions	
	IBRD	IDA
Outstanding and disbursed	17.4	...
Undisbursed	35.4	...
Outstanding incl. undisbursed	52.8	...

DEBT SERVICE RATIO FOR 1983

	Percent
Public Debt	3.4

November 1984

ANNEX II
(Page 1 of 2)

A. OMAN - STATEMENT OF BANK LOANS^{1/}
(As of September 30, 1984)

<u>Loan Number</u>	<u>Fiscal Year</u>	<u>Borrower</u>	<u>Purpose</u>	<u>US\$ Million</u>	
				<u>Bank</u>	<u>Undisbursed</u>
Three loans fully disbursed				9.4	-
1441	1977	Sultanate of Oman	Highways Maintenance	15.0	2.5
1884	1981	General Telecommunication Organisation	Telecommunications	22.0	9.8
2084	1982	Sultanate of Oman	Highways Maintenance II	15.0	11.8
2419	1984	Sultanate of Oman	Education II	<u>15.0</u>	<u>15.0</u>
Total				76.4	39.1
of which has been repaid				<u>10.4</u>	
Total now outstanding				66.0	
Amount sold				0.3	
of which has been repaid				<u>0.3</u>	
Total now held by Bank				<u>66.0</u>	
Total undisbursed					<u><u>39.1</u></u>

^{1/} The status of the projects listed in Part A is described in a separate report on all Bank/IDA financed projects in execution, which is updated twice yearly and circulated to the Executive Directors on April 30 and October 31.

ANNEX II
(Page 2 of 2)

B. OMAN - STATEMENT OF IFC INVESTMENTS
(As of September 30, 1984)

<u>Year</u>	<u>Obligor</u>	<u>Type of Business</u>	<u>—Amount in US\$ Million—</u>		
			<u>Loan</u>	<u>Equity</u>	<u>Total</u>
1979	Oman Development Bank	Development Finance	<u>-</u>	<u>2.0</u>	<u>2.0</u>
	Total gross commitments		-	2.0	2.0
	less cancellations, terminations, repayments and sales		<u>-</u>	<u>-</u>	<u>-</u>
	Total commitments now held by IFC		<u>-</u>	<u>2.0</u>	<u>2.0</u>
	Total undisbursed		<u>-</u>	<u>-</u>	<u>-</u>

ANNEX III

OMAN - SECOND TELECOMMUNICATIONS PROJECT

SUPPLEMENTARY PROJECT DATA SHEET

Section I - Timetable of Key Events

- (a) Time taken by the Borrower to prepare project: 9 months, from October 1983 to June 1984
- (b) Agency which prepared project : General Telecommunication Organisation
- (c) Project first presented to Bank : October 1983
- (d) Departure of Appraisal Mission : July 1984
- (e) Completion of negotiations : December 1984
- (f) Planned date of effectiveness : May 1985

Section II - Special Bank Implementation Action

None

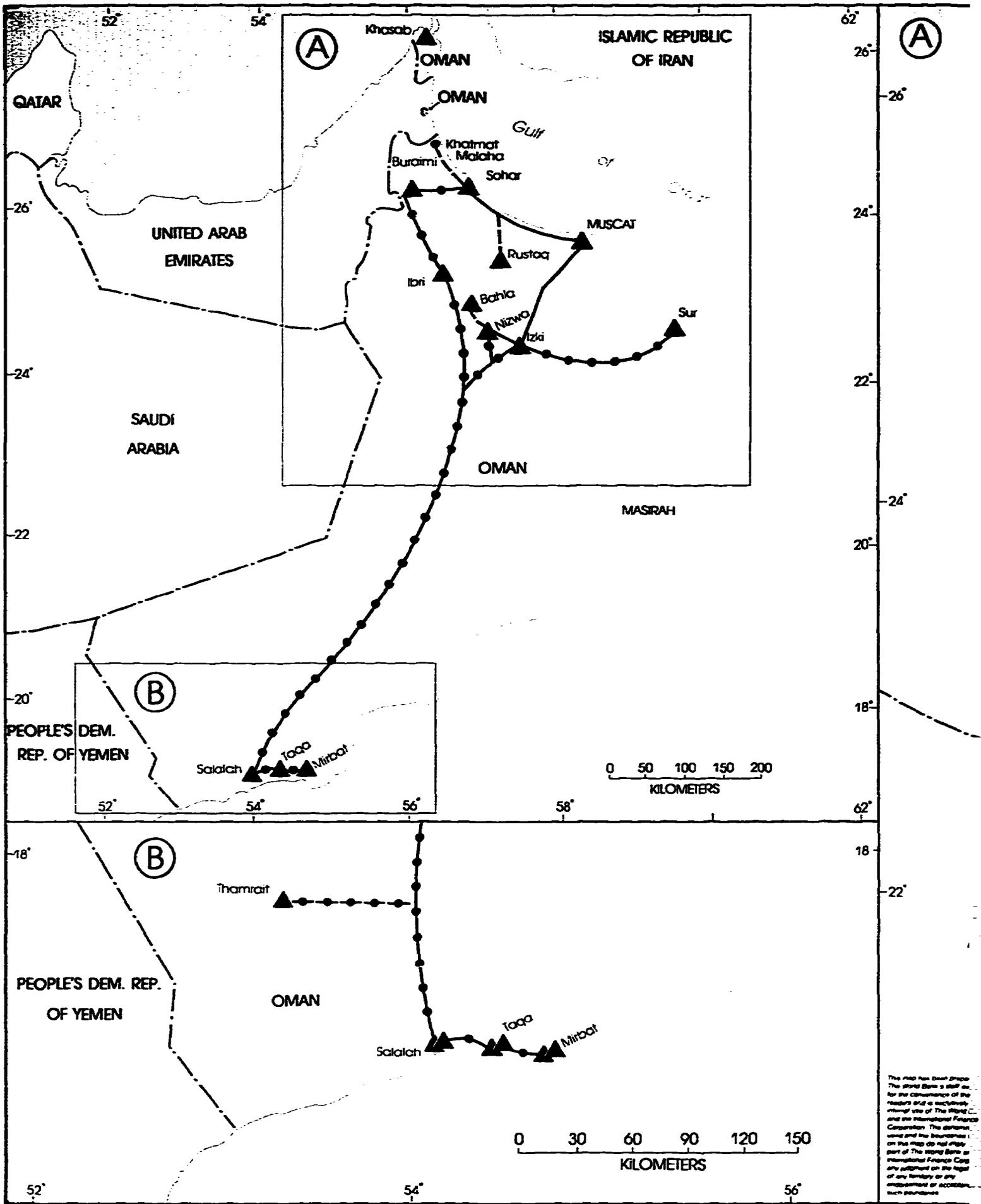
Section III - Special Conditions

1. Conditions of Effectiveness:

Issuance by GTO of invitations to bid for equipment to be financed under the Bank loan (para. 41).

2. Measures to be Undertaken by the Government and GTO include:

- (a) Government to make available to GTO a loan of \$47.9 million on terms and conditions satisfactory to the Bank (para. 39).
- (b) GTO will employ, no later than December 31, 1985, internationally recruited experts with qualifications and terms of reference satisfactory to the Bank to assist GTO in the areas of a tariff study, establishment of an economic studies unit, accounts computerization and the development of training courses (para. 44).
- (c) GTO will decrease the level of subscriber accounts receivable to not more than 60 days billing by December 31, 1987, and the Government will likewise cause its agencies to pay bills issued to them by GTO within 60 days of the billing dates by December 31, 1987 (para. 49).
- (d) GTO will maintain its tariff at levels that would assure an annual rate of return of at least 10 percent in 1985 and 1986, 11 percent in 1987, 12 percent in 1988 and 13 percent thereafter on average current net value of its fixed assets in operation (para. 50).

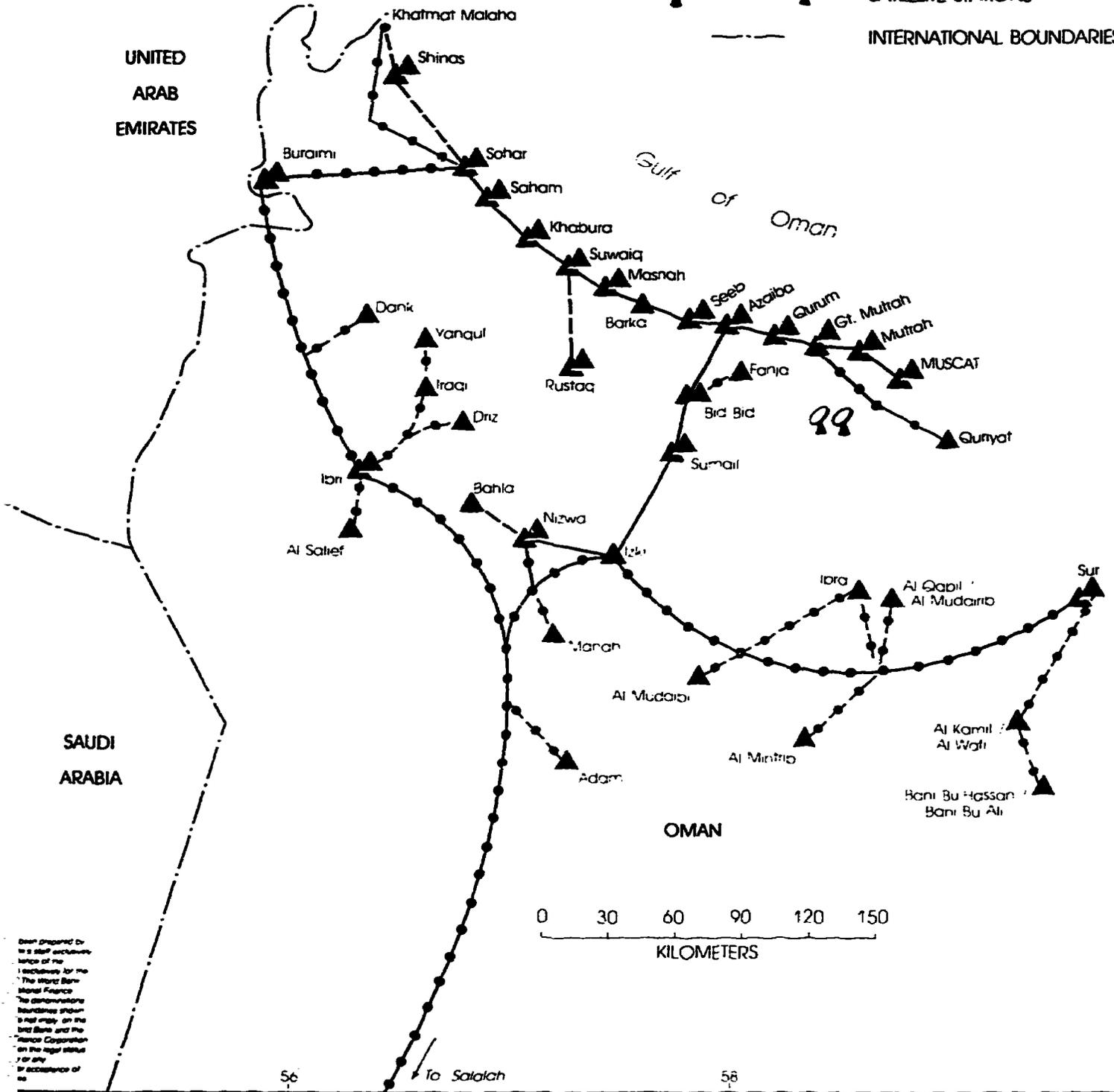


OMAN GENERAL TELECOMMUNICATIONS ORGANIZATION TELECOMMUNICATIONS NETWORK

- | | | |
|----------|----------|-------------------------------|
| EXISTING | PROPOSED | EXCHANGES |
| | | |
| | | CO-AXIAL CABLES (4 TUBE) |
| | | CO-AXIAL CABLES (SINGLE TUBE) |
| | | MICROWAVE |
| | | UHF / VHF |
| | | SATELLITE STATIONS |
| | | INTERNATIONAL BOUNDARIES |

UNITED ARAB EMIRATES

SAUDI ARABIA



Map prepared by
its staff exclusively
for the
The World Bank
International Finance
The geographical
boundaries shown
do not imply on the
part of the Bank and the
Telecom Corporation
any judgment on the
legal status
or existence of