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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

TO THE

HELLENIC STATE

FOR A

HIGHWAY PROJECT

March 24, 1976

Public Disclosure Authorized

Currency Unit	=	Drachma

The Greek Drachma is now defined in terms of a basket of currencies including the US dollar and those of its other major trading partners, and is floating. For this report the following currency equivalents were used:

Dr. 1	=	US$0.03
US$1	=	Dr. 35
Dr. 1,000	=	US$28.57
Dr. 1,000,000	=	US$28,571

Fiscal Year	January 1 to December 31

Abbreviations

MCP	Ministry of Coordination and Planning
MPW	Ministry of Public Works
TCC	Transport Coordination Committee

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

REPORT AND RECOMMENDATION OF THE PRESIDENT TO THE EXECUTIVE DIRECTORS ON A PROPOSED LOAN TO THE HELLENIC STATE FOR A HIGHWAY PROJECT

1. I submit the following report and recommendation on a proposed loan to the Hellenic State for the equivalent of US$30 million, to help finance the foreign exchange cost of a highway project. The loan would have a term of 15 years including 4 years of grace, with interest at 8-1/2 percent per annum.

PART I - THE ECONOMY

2. An economic report entitled "Current Economic Position and Prospects of Greece" (810a-GR), dated November 17, 1975, was distributed to the Executive Directors on December 3, 1975. Country data sheets are attached as Annex I.

Recent Developments

3. Following the Cyprus crisis in July 1974, the seven-year old military regime was replaced by an interim civilian Government. In November 1974, an elected Government, backed by a large parliamentary majority, was established. In December 1974, the Greeks voted to establish a republic. A new constitution, establishing a parliamentary system with a strong presidency, was approved in June 1975. The first President was elected shortly thereafter by the required two-thirds majority of Parliament. The Government, besides its concern with the re-establishment of democracy, has focused efforts on foreign policy issues, particularly relations with Turkey and Europe; and on economic issues, specifically the need to restore and broaden international economic relations especially with the EEC, which has accepted Greece's application for full membership, as well as inflation, a growing balance of payments deficit and stagnating economic activity.

4. Throughout the 1960's and up to 1972, the Greek economy enjoyed rapid GDP growth averaging 7.9 percent per year in real terms. The main stimulus came from rapidly rising domestic demand, stemming from large increases in private housing investment and public infrastructure investment. Private consumption rose at a rate of 8 percent per annum and gross fixed capital formation at 11 percent over this period. This growth was associated with relatively stable prices. However, by the end of 1972, as the economy reached full employment, supply constraints began to develop and domestic prices came under increasing pressure. The inflationary trend was reinforced by the termination of price controls in 1973 and by increases in import prices, particularly of petroleum (after October 1973), higher agriculture support prices and increased Government expenditures. Consumer prices, which had increased by less than 3 percent per annum (on an annual average basis) in the previous five years, rose 16 percent

in 1973 and 27 percent in 1974. Government measures, including reduced budgetary outlays and restrictive monetary policies, succeeded for a time in sharply reducing the price increases. The restrictive policies, together with the impact of the Cyprus crisis and resulting domestic political uncertainties, severely affected economic growth. GDP which had increased by nearly 9 percent in 1973, declined by about 2 percent in 1974. Based on trends in the first few months of 1975, the Government estimates that, at best, GDP grew slightly in 1975, over the depressed 1974 levels.

5. Agriculture and industry are the key economic sectors. Agriculture still accounts for about 17 percent of GDP, 40 percent of employment and 35 percent of all exports, besides providing raw materials for the food processing and textile industries. Agricultural production has increased by about 3 percent per annum since 1965, well below overall GDP growth and reflecting lower output in both 1968 and 1973, due mainly to unfavorable weather conditions and poor performance in the livestock subsector. However, following an increase in support prices in October 1973, and with favorable weather, output increased by a record 13 percent in 1974. Growth in agriculture continues to be hampered by insufficient development of irrigation, the small size and fragmented nature of farm holdings, and inadequate extension services.

6. Industry, including construction, has been the most dynamic sector, with an average annual growth of nearly 10 percent since 1960. Industrial value added increased by 13 percent in 1973, but dropped by almost 6 percent in 1974 due to the general recession in the country. Industry's share of GDP increased from nearly 29 percent in 1965 to 36 percent in 1974. The share of manufactured goods in total exports also increased sharply, from 25 percent in 1968 to 45 percent in 1974, largely as a result of increased capacity in the chemical and basic metal industries. Despite rising productivity, however, Greek industrial growth is still restricted by a small domestic market, limited export orientation, inappropriate plant size and heavy dependence on capital goods imports. The Government's emphasis on industrial development as a key to rapid growth is well justified. However, there is a clear need for Government guidance in determining priorities for future industrial growth, which can take advantage of a relatively inexpensive and moderately skilled labor force, through an emphasis on highly productive export oriented industries and consumer goods for the domestic market.

Balance of Payments

7. Recent economic difficulties have been compounded by a deterioration of the balance of payments in the last two years. The trade deficit stood at $1.6 billion in 1972. It increased sharply to $2.8 billion in 1973 as imports grew rapidly, reflecting domestic supply constraints. In 1974, the import bill increased only moderately, as non-oil imports reflected the decline in GDP. The increase in net petroleum imports was $360 million, equivalent to 11 percent of 1973 exports of goods and non-factor services and workers' remittances. Rapidly rising exports and the reduced demand for imported goods prevented a further rise in the trade deficit. While exports, particularly of

manufactured products, have grown by about 25 percent per annum between 1968 and 1974, they still finance only about one-third of commodity imports. Invisible earnings, mainly from shipping, workers' remittances and tourism, have usually been equivalent to nearly half of commodity imports. In 1974, however, this proportion declined to 35 percent, reflecting lower tourism receipts - largely because of the Cyprus crisis - and a decline in workers' remittances due to reduced demand for foreign workers in Europe. Preliminary results for 1975 show some recovery of workers' remittances and tourism receipts, but a decline in shipping earnings reflecting depressed world trade.

8. As a result of these developments, the current account deficit increased threefold from about $0.4 billion in 1972, to some $1.2 billion in both 1973 and 1974. Greece has had very limited access to long-term foreign capital, and inflows of concessional funds have been minimal. As a result, the Government had no alternative but to meet these shortfalls essentially through medium and short-term borrowing on rather expensive terms from whatever Eurocredit sources were willing to provide such financial and suppliers' credits. The terms of borrowing therefore deteriorated noticeably in 1973 and 1974, reflecting both higher interest rates and declining grace periods. The Government was able to borrow somewhat greater amounts in 1974 and 1975 on these terms than it managed to do in 1973. Foreign exchange reserves were about $1 billion in 1972 (4-1/2 months of imports); however, because of the increased current account deficit and rising amortization on external debt, they declined to about $930 million (less than 2-1/2 months of imports) at the end of 1974 and were at the same level at the end of 1975.

Prospects

9. In view of the changed economic circumstances, the Government is formulating a new medium-term development plan to articulate investment priorities, economic policies and strategies. The crucial elements of its strategy are already apparent: to control inflation but consistent with policies to stimulate growth, reduce dependence on agricultural and petroleum imports, promote industrial and agricultural exports and slow down housing investment.

10. Greece faces significant economic problems. In the short-term, the Government may experience difficulties in striking the right balance between measures to restore aggregate purchasing power and regenerate growth on the one hand, and those to ensure relative price stability and external balance on the other. The Government initially aimed at keeping price increases below 10 percent in 1975, but the actual rise was 15.5 percent despite the measures taken. Given the immediate priority the Government accords to stabilization, GDP growth in 1976 is likely to be modest, and might enable Greece only to reach again this year, the GNP per capita it enjoyed already in 1973. Heavy dependence on imports, especially for capital goods, and the vulnerability of

earnings from shipping, tourism and workers' remittances also pose serious short-term problems. Even after taking into consideration available undisbursed loan funds, access to IMF funds and other sources, Greece will have to borrow a significant amount on world capital markets and will need to obtain as great a proportion in long-term funding as possible.

11. Although Greece's economy is approaching a more advanced stage of development, like many developing countries it suffers from significant regional income disparities, and from the underdevelopment of certain key sectors like agriculture. Furthermore, the economy has to prepare itself to face increasing competition from imports as tariff barriers are gradually reduced under the Association Agreement with the EEC and later under the arrangements for full membership. However, given the level of economic development already achieved, the potential for a long term (1976-1985) GDP growth rate of around 5 percent per annum seems to exist. This rate is feasible, provided there is reasonable growth in agriculture, relative price stability, the predicted recovery from recession in the economies of Greece's major trading partners, and availability of capital from foreign markets of the magnitude needed on a sufficiently long-term basis. Continuing expansion of manufacturing industry at about 10 percent per annum will also be necessary to achieve the potential growth rate. Participation in the EEC should foster improved management and technological modernization. Greece has important assets in its flexible, market-oriented entrepreneurial capacity and a comparatively cheap labor force by European standards. However, full utilization of these assets will require increased investment in agriculture, in export-oriented industries, and the introduction of effective vocational, technical and managerial training.

12. Public external debt outstanding and disbursed at the end of 1974 amounted to $2.0 billion. Debt service payments in 1974 reached $330 million (of which $8.1 million was on Bank loans), and represented 8.2 percent of receipts from exports of goods and non-factor services and workers' remittances. Based on reasonable expectations regarding export growth and future borrowing, the debt service ratio would increase to about 13-14 percent by 1980. About 3 percent of total service payments would be due to the Bank. In view of the good prospects for future economic growth, even if at a lower rate than in the past, Greece remains creditworthy for Bank lending.

PART II - BANK GROUP OPERATIONS IN GREECE

13. Bank lending to Greece started in 1968, after disputes in connection with the country's pre-war external debt had been substantially settled. Greece has received eleven loans totaling $273.9 million (net of cancellations), of which $250.8 million was held by the Bank as of February 29, 1976. These include five loans totalling $96.6 million to the National Investment Bank for Industrial Development (NIBID), three loans for education ($82.3 million),

and three loans for irrigation ($95 million). The irrigation projects include a $40 million loan made earlier in this fiscal year for the East Vermion Irrigation Project. The execution of Bank-financed projects has generally been satisfactory, although slow and subject to significant cost overruns due to both domestic and international inflationary pressures. Annex II contains a summary statement of Bank loans and IFC investments as of February 29, 1976.

14. Bank assistance to Greece aims: at supporting institutional reform and essential infrastructure in key sub-sectors, including irrigation, sewerage/ wastewater disposal, and highways; at modernizing key sectors such as agriculture and education; and at reducing regional income and social disparities through support for selected regional or rural development programs. The Bank acted as executing agency for UNDP-financed highway reconnaissance and feasibility studies which led to the proposed highway project. A sewerage/ wastewater disposal project, emphasizing institution-building, which will also improve living conditions in towns outside the highly developed Athens area, has been appraised. It is likely to be ready for Board consideration in the first half of FY77. A fourth education project consolidating the important institutional base being gradually developed through earlier projects, is under preparation. Other projects - including one for regional development and another for rural development - in two of Greece's backward regions, are being prepared for lending in subsequent fiscal years.

15. Although Greece has a much higher average per capita income than that enjoyed by most other developing countries, continued Bank lending for a limited time is justified in view of the following two important considerations. First, given the magnitude of its external capital requirements, it will be difficult for Greece to meet its borrowing needs for development on reasonable terms entirely from market sources, particularly in view of the country's short and medium term economic difficulties and prospects noted above. Continued Bank lending will not only provide some modest direct assistance, but also have a catalytic effect in augmenting Greece's access to capital markets. Second, Greece still faces large pockets of poverty and serious regional imbalances in incomes and development, and needs assistance in modernizing some of its key sectors. The Government particularly wishes the Bank to play a role in helping reduce these regional and income disparities, and in assisting those sectors which are critical for strengthening the country's economic potential and for which the Bank is probably the only present source of external funds. It is, however, anticipated that Greece will be able to finance its development program without resort to Bank funds within a few years.

16. IFC has made investments totalling $16.1 million in six Greek companies. An equity and loan investment of $0.6 million was made in a fertilizer factory in 1962 (sold in 1970); an equity investment of $0.7 million in NIBID in 1965 (reduced to $0.1 million in 1974); loan and equity investments totalling $8.7 million in an aluminum company in 1970 and 1972. In early 1975, IFC invested $1.1 million in an agro-industry project in Larisa for processing of tomatoes, and at later stages, asparagus and peaches from the area of the Groundwater Development Project assisted by the Bank (Loan 754-GR).

PART III - TRANSPORTATION IN GREECE

General

17. The transport infrastructure of Greece comprises 40,200 km of roads, 2,600 km of railways, 18 main ports and 30 airports - of which 9 handle international traffic. The mountainous nature of the country, its 15,000 km long coastline with almost 20 percent of the land area dispersed among many small islands, and the large part of the population living in small villages, explain the natural predominance of road transport and shipping. Of the total freight ton-km currently transported inside the country, an estimated 55 percent is carried by road and 30 percent by sea. The north-south transport corridor connecting Athens and Thessaloniki and the east-west transport corridor connecting Athens and Patras in the Peloponnese, are the main arteries of the transport system. Both corridors are served by road, coastal shipping, railway and civil aviation. Shipping services meet the demand for transport between the islands and the mainland; besides this, more than 95 percent of imports and exports are transported by sea. The extent of the transport infrastructure is generally adequate in relation to Greece's present level of development.

Transport Planning and Coordination

18. Long-term transport policy aims at the creation of a system at minimum cost, which can meet the increased transport demand resulting from economic growth through the establishment of: (i) the necessary arteries connecting the large urban centers, industrial areas, and surrounding regions and principal agricultural areas ; (ii) a provincial road network connecting smaller communities with the urban centers, which provide them with markets and the necessary social services; and (iii) more effective connections between Greece and the rest of the world.

19. Planning in the transport sector is presently done by the agencies responsible for the various modes. Over the past decade, these agencies have studied a number of transport projects and increasingly use feasibility studies of large or complex projects as a basis for investment decisions. Minor projects, including highway improvements and maintenance works, however, are not subject to formalized planning. Although there is a need for coordination among the various agencies and modes in the transportation field, there is no central authority capable of setting inter-modal priorities and planning development. Coordination is presently the responsibility of the Ministry of Coordination and Planning (MCP), which has limited staff for this purpose. The Government considers that a re-evaluation of the present system and its development is needed.

20. The immediate priorities are therefore: (a) the establishment of a national transport coordinating mechanism; and (b) a review of the strategy for transport development. The MCP and the Ministry of Public Works (MPW) established an ad hoc interdepartmental working group in 1972 to monitor investment studies in the highway sub-sector. The Government now intends to expand the working group into a permanent transport coordination committee, extending its scope to cover all modes of transport. This committee would then review Greece's transport development strategy.

Transport Sub-Sectors other than Highways

21. The railway system is controlled by the publicly owned Hellenic Railway Organization and comprises about 2,500 km of railways lines. Sixty-two percent of these lines are standard gauge railway from Athens to Thessaloniki and on to the borders with Yugoslavia, Bulgaria and Turkey. The remaining 38 percent are meter gauge lines. Both domestic and international hauls are short (less than 250 km on average). Railway traffic has increased slowly in recent years, reflecting the low level of service offered by this mode.

22. The whole railway system needs substantial technical and institutional modernization and improvement, particularly if it is to play its role in offering an essential north-south rapid transit axis for goods, linking the Athens-Thessaloniki corridor to Europe. Studies carried out in 1971-73 by the French consultant Sofrerail, recommended major improvements of main lines and gradual closure of the meter gauge system which is uneconomic. Taking these recommendations into account, the Government recently approved a Dr. 10 billion ($300 million) 5-year plan for improving Greek railways. This plan envisages major improvements to the Athens-Thessaloniki and Athens-Corinth lines (electrification and straightening of the track to permit higher speeds) and purchase of rolling stock and equipment.

23. Greece has 10 general cargo ports each handling more than 100,000 tons annually. In addition, there are 8 specialized terminals for petroleum products, coal, bauxite and iron ore. Greek ports are controlled by the Ministry of Merchant Marine. In 1973, total freight handled amounted to 57.8 million tons. Annual growth since 1965 has averaged 13.6 percent for domestic traffic and 14.4 percent for international traffic. The most important ports are Piraeus and Thessaloniki, where large expansions and introduction of more cargo handling equipment are needed. These two ports together handled about 6 million passengers and 17 million tons of cargo in 1973. The Government is reviewing the possibility and economic advantages of developing other smaller ports. To further reduce the future pressures on the two major ports, ensure efficient national planning on an economic basis in this sub-sector, and put port operations on a financially efficient basis, the Government is also considering a national ports master planning study.

24. Greece has 30 civil airports, 9 of which accommodate international flights. The civil aviation system is controlled by the Civil Aviation Authority, under the Ministry of Transport and Communications. Traffic increased by 18 percent annually from 1966 to reach 9.3 million passengers in 1973. The Athens airport handled 65 percent of passenger traffic and 78 percent of freight traffic in that year. The Greek commercial carrier, Olympic Airways, was taken over by the Government, at the owner's request, in January 1975.

The Highway Sub-Sector

25. The highway network in Greece is used by over 600,000 vehicles (buses, trucks and cars). Of the classified highway network of about

40,200 km, only about 17,900 km are paved. Of the latter, about 8,500 km are classified as national roads, the rest being provincial roads. A part of the national road system has been built to very high multi-lane standards, while the provincial network is of considerably lower standard. To serve present and future traffic needs economically, improvements in a number of road sections are required to remove capacity restraints and to by-pass villages and towns causing serious bottlenecks. In addition, there is an urgent need for a properly planned and economically implemented maintenance program for the entire road network in Greece.

26. Until recently, there was no systematic long-term planning of new roads or road improvements based on traffic projections or economic priorities. Roads have often been built or improved to standards not justified by traffic. A UNDP-financed study carried out between 1972 and 1974 by the French consulting firm of Ingeroute, with the Bank as executing agency, was the first attempt at long-term planning and selection of roads for construction or improvement on the basis of adequate feasibility studies. The Ingeroute study provided a highway master plan for 1973-87, which included the proposed project road as the highest-priority project. Short-term planning only of maintenance and minor improvements has been carried out annually for budgeting purposes, and improvements in short-term, and the introduction of long-term, maintenance planning are needed. A Government-financed pilot maintenance study done between 1971 and 1973 by the Italian consulting firm Sauti constituted the first step towards long-term planning of maintenance; the experience gained from this pilot project forms the basis for the maintenance component of the proposed project.

27. Road works are financed from the Government's current and investment budgets. In 1974, road expenditures totaled about Dr. 5.1 billion, as compared with revenues from road user charges which totaled about Dr. 15.1 billion. The latter are about 11 percent of the total Government revenue, which is close to the European average.

28. MPW is responsible for construction and maintenance works on all national and provincial roads. Its Service of Transport Infrastructure Works plans and supervises design, construction, and maintenance through its central offices in Athens and seven regional offices. The present organization was established in 1970. About 400 MPW staff are engaged on road works, of which 340 are in the field. While the qualifications of MPW staff are adequate, training has been insufficient and has been confined to general seminars and mostly short-term fellowships abroad for professional staff. There are no programs specifically designed for training staff to fill particular positions, or in management or planning techniques.

29. Construction and most maintenance is done by contractors supervised departmentally by MPW. Construction contracting procedures and the general quality of construction and supervision are satisfactory. The Greek contracting industry is competitive and no foreign firms are presently employed, although there are no regulations preventing them from competing for contracts.

Maintenance however is unsatisfactory. Maintenance funds have fluctuated from year to year and have been allocated erratically. The MPW staff, equipment and workshops are insufficient for the limited volume of emergency maintenance work that they currently do. Most maintenance work is carried out under road maintenance contracts that have inadequate specifications and are poorly supervised. There is no system of cost control for either force account or contract works.

PART IV - THE PROJECT

Project History

30. Although the possibility of a Bank-financed highway project in Greece was discussed as early as December 1964, it was not until 1971 that Greece commenced the two studies, mentioned in paragraph 26 above, which form the basis for the present project. The two-year Sauti maintenance study, for which the Bank also provided advice, resulted in the establishment of a pilot maintenance program in the Epirus region. In turn, this operation highlighted the need for improved planning of road maintenance, as well as the advantages of doing routine maintenance by force account instead of by contract. The Government wishes to use the experience gained from the Epirus pilot program to develop a program and organization for road maintenance and improvement for all national and provincial roads.

31. The Ingeroute study complemented the Sauti study in developing Greece's capacity to plan for a rational allocation of funds in the highway sub-sector. The Ingeroute study identified four priority road investments, with the highest priority accorded to the improvement of the Patras-Pyrgos-Olympia road included in the proposed project. The Government had however been considering the construction of an expressway parallel to the alignment now proposed, and initially asked the Bank to consider financing construction of the other priority roads identified by Ingeroute. The study had examined the expressway, a costly solution, and found its construction at this time not justified. After considerable dialogue and consultation with the Bank, the Government decided to improve the existing road to the standards justified by anticipated traffic.

32. In general, the two studies confirmed the weaknesses in planning in the highway sub-sector noted in paragraph 26 above, which in the past had meant that the most economic solutions to road construction and maintenance had often been precluded. The Government thus requested that the Bank assist with a project which would not only include the construction of a better-planned road and the establishment and implementation of an improved maintenance program, but would also assist with institutional reforms in road and transport planning. The Government and the Bank reached agreement on the scope of a suitable project in August 1975, and this was followed by its preparation by the Government. The project was appraised in December 1975. Negotiations were held in Washington in March 1976 with a Greek delegation led by Mr. Petros Papadakis, Director General of MCP.

Project Concept and Description

33. The concept and details of the proposed project are amplified in the "Staff Project Report on Appraisal of a Highway Project - Greece" (No. 1014a-GR), dated March 24, 1976, and in the Loan and Project Summary provided as Annex III. The proposed project, in addition to assisting with the needed construction and improvement of a major road, has as a key objective, the initiation of institutional reforms in the transport sector in general, and in the highway sub-sector in particular, to maximize the benefits that Greece can derive from its highway system. To support these objectives, the proposed project includes the creation of a national transport coordination committee (TCC) to assist the Government in establishing overall transport sector investment priorities and policies; the construction and improvement of a high-priority road designed to economically justified standards; the establishment, training and equipping of an effective maintenance organization to develop and implement an adequate and economically sound highway maintenance program, and the carrying out of feasibility studies.

34. The proposed project thus includes:

(a) construction and improvement, and related supervision, of the Patras-Pyrgos-Olympia road;

(b) technical assistance to MPW for: (i) the development and implemention of an organization and program for improved maintenance and maintenance planning procedures; and (ii) coordination of feasibility studies;

(c) purchase of road maintenance and workshop equipment and spare parts for routine maintenance of paved national roads;

(d) feasibility studies of selected road sections (totaling 295 km);

(e) fellowships abroad for MPW senior and middle management; and

(f) technical assistance to MCP for the establishment of the modus operandi and initial activities of a secretariat for the Transport Coordination Committee.

Annex IV summarizes the key events leading to appraisal and Board presentation, special Bank actions required for implementing the proposed project, and the special conditions provided in the Loan Agreement.

35. Construction of the Patras-Pyrgos-Olympia road will provide a 100 km improved link in the main road connection of the Western Peloponnese (Map IBRD 12023). The proposed road generally follows an existing two-lane road, but diverges from its alignment in over 65 percent of its length. The existing road has a poor riding surface and carries both agricultural traffic and general traffic from villages and urban ribbon development through which it

passes. When the new road is opened, the existing one will continue to serve local traffic and provide access to the new facility. The Government has agreed to construct the new road to design standards justified by anticipated traffic, including a 80 km/h design speed. The road will be a two-lane carriageway, with surface dressed shoulders for slow-moving agricultural traffic on the Patras-Pyrgos section. Supervision of construction will be carried out by a regular MPW contract construction supervision team.

36. The most substantial institution-building effort under the project is directed towards improvement of road maintenance and minor betterment of existing roads in Greece. As noted in paragraph 29 above, the present system is unsatisfactory in many respects. The Government wishes to develop a program and organization for improved maintenance for all national and provincial roads in Greece. It will start, under the project, with the routine maintenance of the paved national road network (about 8,500 km). At present, MPW does not have an organization for planning or implementing force account road maintenance, nor does it have the required equipment. The Government has agreed that MPW will, as a condition of making the proposed loan effective, establish a maintenance organization comprising separate maintenance sections in each of its 52 district engineer's offices, backing these up with appropriate adjustments to its regional and central administrations, and appoint the staff initially needed (Loan Agreement Sections 4.03, 5.01 and Schedule 5). Subsequently, the Goverment intends to expand this new organization, in appropriate phases, to provide effective and economic maintenance for the entire national and provincial road network (40,200 km), on the basis of the recommendations of the consultants mentioned in paragraph 37 below.

37. The proposed project will provide equipment for the initial phase of routine maintenance of paved national roads. The Government and the Bank have agreed on the list of equipment, which was chosen to meet the requirements for 1977 derived on the basis of the Epirus pilot study results. The Government has agreed to maintain its paved roads adequately, and to maintain, repair and renew its maintenance equipment and workshops as necessary. The project would also provide technical assistance required to implement the initial phase of force account maintenance. Specifically, it provides about 170 man-months of consulting services to MPW to assist it in: (a) deploying and operating the equipment provided under the project; (b) organizing and implementing maintenance of paved national roads by force account; (c) providing proposals for an effective road maintenance organization within MPW; (d) developing planning procedures and providing a plan for the efficient maintenance of roads in Greece, as well as the first three annual progressive five-year programs of priority maintenance and rehabilitation works together covering the years 1977-83; and (e) drawing up a program for the effective development of the initial organization to enable it to execute this plan, including required training, operating procedures, and documentation. The consultants will also study the experience gained through the Epirus pilot maintenance program and advise on incorporation of its procedures, where applicable, into the nationwide program. The Government has agreed to consult the Bank with respect to the consultants' recommendations for adapting its road management and operations to serve the entire national and provincial networks, and thereafter to implement those recommendations on which both agree. These consultants will

also assist MPW in organizing and supervising the feasibility studies described below. The Government has agreed to hire the consultants to MPW by December 31, 1976, and has already reached an understanding with the Bank on their terms of reference.

38. The proposed project includes feasiblity studies of three road segments totaling 295 km. These have been chosen on the basis of both priority projects identified in the above noted Ingeroute study (paragraph 26) and the Government's regional development priorities. They also exhibit unusual complexity, and the Government needs to know the economic and technical consequences of various alternatives before financing construction from its own resources. It is expected that Greek consultants will participate in the studies, with assistance from foreign experts in specific disciplines to the extent these disciplines are not available locally. The project provides about 40 man-months for the latter. The consultants mentioned in paragraph 37 will assist MPW in: (a) preparing detailed terms of reference for the consultants to carry out the feasibility studies; (b) selecting and supervising these consultants; and (c) reviewing their recommendations.

39. The project also provides for about 240 man-months of fellowships abroad for training MPW senior and middle management in road management and planning techniques. The Government and the Bank have reached an understanding on the number of fellowships, the subjects to be studied, and that the fellowships will last from five to fifteen months each and be spread over three years so as not to disrupt MPW's operations. The Government has agreed to forward a list of candidates and their detailed proposed training programs to the Bank for approval before awarding the fellowships.

40. As mentioned earlier (paragraph 20), an ad hoc interdepartmental working group has been monitoring investment studies in the highway sub-sector since 1972. The Government has decided to transform this group into a permanent committee responsible for all modes of transport. The committee would consist of senior officials of each of the Ministries and agencies responsible for the transport sector; be chaired by one of its members appointed by the Minister of Coordination and Planning; meet at least once every three months; and advise the Minister of Coordination and Planning (who is responsible for the investment budget) on investment priorities in the transport sector and on transport policies which might require legislative action. A permanent secretariat under a senior official will be established in MCP to assist the committee; at least four full-time specialists in the technical, economic, financial and legal aspects of the various transport modes will be appointed initially to the secretariat. Under the instructions and supervision of the committee, the secretariat will initiate systematic planning in the transport sector, including the survey of transport conditions, needs and regulations and the analysis of transport investments and policies in order to ensure that they are responsive to the country's economic development requirements and priorities in the transport sector. The Government and the Bank have agreed on the above arrangements for the composition and staffing of the committee and the secretariat and on their objectives. Establishment of both the committee and the secretariat would be a condition of effectiveness of the proposed loan (Loan Agreement Sections 4.05, 5.01 and Schedule 5).

41. The project provides about 100 man-months of consulting services to assist the secretariat, and strengthen its capabilities, during its first two years of existence in: (a) the review of all recent studies, current policies and plans of Greece relating to the transport sector, including the relevant sections of the 1976-1981 five-year development plan; (b) the identification of the major areas of data insufficiency and preparation of detailed arrangements for the collection of all such data and other relevant information necessary for the secretariat to carry out its functions; (c) the identification and preliminary analysis of principal problem areas in the transport sector and submission of recommendations for the solution of these problems; (d) the preliminary technical and economic evaluation of priority programs and projects in the transport sector; and (e) the formulation of the elements and procedures of transport sector planning and the detailing of the measures and information required for initiating such planning. The secretariat will, as mentioned above, initiate such planning on the basis of this work and in accordance with its capabilities as strengthened during these first two years. To this end, the consultants will also provide on-the-job training of staff of the secretariat, as well as recommend training programs for them in disciplines within the secretariat's responsibility.

42. The Government has agreed that the secretariat will evaluate the capabilities it has developed, and prepare recommendations for such further action as is necessary for the committee to carry out its functions, by December 31, 1978; and that after consulting with the Bank, it will put into effect those recommendations on which both agree (Loan Agreement Section 4.05).

Project Cost and Financing

43. The total estimated cost of the project is US$64.7 million equivalent, with a foreign exchange component of $30 million.

	US$ Million		
	Local	Foreign	Total
Construction	15.8	8.2	24.0
Supervision of Construction	0.9	0	0.9
Right-of-Way and Land Acquisition	2.6	0	2.6
Procurement of Highway Maintenance Equipment	1.4	10.3	11.7
Technical Assistance to MPW	0.7	1.4	2.1
Feasibility Studies of 3 Selected Roads	0.5	0.3	0.8
Fellowships for MPW	0	0.4	0.4
Technical Assistance to MCP	0.4	0.8	1.2
Basic Project Cost	22.3	21.4	43.7
Physical Contingencies	2.3	2.1	4.4
Expected Price Increases	10.1	6.5	16.6
TOTAL	34.7	30.0	64.7

The cost estimates are based on the assumptions that for road construction work, local contractors will win the bids, as they have for many years in Greece; MPW

will supervise construction; the maintenance equipment will be imported; consultants providing technical assistance will be internationally selected and are expected to be foreign, but with Greek nationals on their teams; and consultants to do the feasibility studies will be Greek, supported by foreign experts in specific disciplines where expertise is not available locally. In estimating the costs of consulting services, man-month rates of $7,000 for foreign consultants and $1,500 for Greek consultants were used. Physical contingencies are estimated at 10 percent. Total price contingency allowances have been estimated at 34 percent (28 percent on foreign costs and 41 percent on local costs), based on the proposed implementation schedule. Annual price increases assumed for civil works are 20 percent in 1976, 16 percent in 1977 and 14 percent in each of the following years; 10 percent in 1976 and 8 percent in 1977 for equipment; and 14 percent in 1976, 12 percent in 1977 and 10 percent annually thereafter for consulting services and fellowships. For civil works, the price contingencies are based on a comprehensive analysis of trends in road construction costs between 1968 and 1973, prepared by the Government and the consultants designing the road. For equipment, consulting services and fellowships, the price contingencies are Bank estimates.

44. The proposed loan of US$30 million equivalent will finance the foreign costs of the project and cover 46 percent of total project costs. The Government will provide the local cost financing, as well as cover any unforeseen cost increases. The loan would be to the Hellenic State for 15 years, including a four-year grace period.

Project Implementation

45. Two Government Ministries will be responsible for project implementation: (a) MCP for transport coordination and planning; and (b) MPW for all other project items. The Government has agreed to appoint a project coordinator in MPW by September 30, 1976 to ensure coordination among the Government agencies concerned with the MPW parts of the project. About 310 man-months of consultant services are provided under the project to assist in the execution of the various components. Implementation will commence in 1976 and is scheduled for completion by June 1980. The schedule for the different components is as follows: the detailed engineering of the Patras-Pyrgos-Olympia road has already been completed by Greek consultants financed by the Government. The Government has agreed that MPW will acquire the land and right-of-way for the road as and when needed; this is expected to be done under adequate existing legislation during 1976 before construction contracts are let. Construction is expected to begin early 1977 and take three years. The Government has proposed, and undertaken to introduce before construction starts, satisfactory arrangements for MPW to supervise construction. Technical assistance to MPW is scheduled to begin late 1976 and end mid-1979. Technical assistance to MCP is expected to begin early 1977 and last two years. Maintenance equipment is expected to be procured during the first half of 1977. The feasibility studies are expected to be carried out from late 1977 to early 1979. Fellowships for MPW staff are expected to be spread over the three years starting late 1976.

Procurement

46. The construction of the Patras-Pyrgos-Olympia road will be carried out by contract awarded after international competitive bidding in accordance with the Bank's "Guidelines for Procurement". Prospective bidders will be prequalified. The MPW proposes to divide the work into four contracts, each of which will be for complete road works over consecutive design sections: Patras-Lappa, Lappa-Pinios, Pinios-Pyrgos and Pyrgos-Olympia. The contracts may be bid separately, or in any combination, and are expected to be between US$3 million and US$10 million equivalent each.

47. The road maintenance equipment will also be procured after international competitive bidding in accordance with the Bank's Guidelines. Bidders will not be prequalified, and will compete against minimum specifications on the basis of cost, delivery time and reliability of subsequent dealer service. Local manufacturers would be allowed a preferential margin of 15 percent of CIF costs of competing imports or the existing rate of customs duty, whichever is the lower. Equipment contracts amounting to less than US$25,000 up to an aggregate of US$400,000 will be let under prevailing Government procurement procedures, which involve advertisement and procurement locally after competitive bidding and are satisfactory. The consulting services will be provided by consultants whose qualifications, experience and terms of reference will be satisfactory to the Bank.

Disbursements

48. Disbursements will be made for: (a) 34 percent of construction costs, representing the estimated foreign exchange component; (b) the actual foreign exchange costs (CIF Greek port) of the road maintenance equipment and spares, or 100 percent of the ex-factory price of Greek manufacturers in the unlikely event that they win the bids; and (c) the actual foreign exchange costs of consulting services and fellowships. Disbursements are expected to commence in early 1977 and extend through December 1980. Should any funds remain in the loan account after project completion, they would be used, after agreement with the Bank, for the procurement of additional road maintenance equipment, in accordance with the recommendations of the consultants providing technical assistance to MPW.

Economic Analysis

49. The proposed road will meet the growing transport demand in one of the main agricultural areas in Greece, which includes the area served by a Government-financed irrigation project presently under implementation. The section between Patras and Pyrgos will serve as the main highway artery for traffic between the northern and southern parts of western Peloponnese. Its continuation from Pyrgos to Olympia will serve as a tourist access road to the archaeological sites at Olympia. At the same time, the road will bypass 22 villages and towns which are bottlenecks on the existing road.

50. The main direct benefits from road construction would be savings in transport costs for highway users. The inhabitants of villages and towns

to be bypassed would obtain indirect benefits from avoidance of traffic noise, exhaust pollution and accidents. Benefits from road construction have been quantified as savings in vehicle operating costs from: (i) improved surface condition of the road sections; (ii) avoided speed reductions through villages and towns; and (iii) length reduction of the road sections. Of these savings, 60 percent will accrue to goods transport vehicles, 30 percent to public passenger transport vehicles (buses and taxis), and 10 percent to private cars. Other benefits not included are time savings of vehicle occupants other than professional drivers, and the increased safety and comfort for both road users and the inhabitants of the villages and towns bypassed. Benefits are assumed to start immediately upon completion of road construction and to increase with traffic. Based on a construction period of 3 years, an economic life of 20 years and the estimated economic costs of project preparation, construction and supervision, the overall economic return (ER) of road construction (which will cost $44.2 million) is estimated at 20 percent, with a first-year return of 15 percent. The ERs of the Patras-Pyrgos and Pyrgos-Olympia sections are estimated at 21 and 19 percent respectively. A sensitivity analysis has also been carried out assuming an increase of 15 percent in construction costs, and a decrease of up to 25 percent in benefits if traffic growth is slower than presently projected. The results, presented in the Staff Project Report, show that even under these most pessimistic assumptions, the construction would yield an ER of 14 percent.

51. Paved national roads in Greece generally provide considerably less than their original levels of service. It is reasonable practice to maintain the surface and drainage of paved roads to within about 85 percent of original service levels, to prevent loss of benefits due to increasing vehicle operating costs and an increase in road maintenance costs due to progressive structural failures. Escalation of costs is considerable if maintenance is reduced below these levels, and soon justifies the marginal expenditure on maintenance. Routine maintenance of paved roads lends itself well to force account rather than contract execution. This is because of the difficulties inherent in effectively controlling and measuring this type of contract work and because of contractors' profit and the cost of Government supervision. Procurement of road maintenance and workshop equipment, including spare parts, under the proposed project will allow MPW to carry out all routine maintenance of paved national roads by force account instead of by contract by the end of 1977. MPW estimates the average annual savings from using force account at about Dr. 170 million annually for the entire paved national road network. Based on an average economic life of six years, which is appropriate for the types of equipment to be provided, the ER from the equipment purchased (which will cost $14.2 million) is estimated at 46 percent.

52. The average economic rate of return on these two components, which account for 90 percent of total project cost, is 26 percent. Benefits from the technical assistance and the feasibility studies are difficult to quantify. However, these project elements are clearly justified, since they will assist the Government in deriving substantial economic benefits from improving highway maintenance, designing roads and improvements to standards justified by projected traffic growth, making investments based on established economic priorities, and strengthening planning and operations in the transport sector as a whole.

Conclusions, Recommendations and Loan Conditions

53. Greece's transport system has suffered in the past from uncoordinated investment planning. In the highway sub-sector, roads have been often built to standards in excess of those justified by traffic, while maintenance has been neglected. The project represents an attempt on the part of the Goverment to change long-established uneconomic practices and is fully consistent with the Government's priorities and with Bank policies for the transport sector. However, achievement of the project objectives depends on the Government's implementing the agreed institutional changes in transport planning and highway maintenance. To ensure that the project road is built to appropriate standards, these have been agreed upon and incorporated in the loan documents. The broad features of the organizational arrangements and of the technical assistance to be provided have also been agreed, and establishment of the organizational arrangements constitutes the conditions of effectiveness of the proposed loan.

54. Nevertheless, as in all projects, there are risks. While the Bank has been given ample evidence during project preparation of the Government's serious intention of changing its approach to highway investments, the difficulties inherent in implementing any fundamental change of policy should not be underestimated. Besides the risk of not achieving all the objectives of the project, there is the risk of delay in project execution, a problem faced by other Greek projects. The project has, however, been designed to minimize these risks. It is suitable for Bank financing through a loan to the Hellenic State for 15 years including 4 years of grace.

PART V - LEGAL INSTRUMENTS AND AUTHORITY

55. The draft Loan Agreement between the Hellenic State and the Bank, the Report of the Committee provided for in Article III, Section 4 (iii) of the Articles of Agreement and the text of a draft resolution approving the proposed loan are being distributed to the Executive Directors separately. The draft agreement conforms generally to the normal pattern for loans for highway projects.

56. Special conditions of loan effectiveness are: (a) establishment and initial staffing of MPW's road maintenance organization (Loan Agreement Section 5.01(a)); and (b) establishment of the Transport Coordination Committee and its Secretariat (Loan Agreement Section 5.01(b)).

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

PART VI - RECOMMENDATION

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

Robert S. McNamara
President

Attachments
March 24, 1976

NOTES

Unless otherwise noted, data for 1960 refer to 1959-1961, for 1970 to 1968-1970, and for Most Recent Estimate to 1971-1973.

** The similarity of present French and Greek economic structures makes France an appropriate objective for the future of Greece.

GREECE 1960 /a 1960-62; /b Excluding persons in compulsory military services; /c Excluding unemployed seamen; /d 1957-58, households "urban"; /e 1962; /f Including midwives and nurses with midwifery qualifications; /g Including maternity hospitals; /h Teacher training not included in secondary school enrollment; /i Inside only.

1970 /a 1967.

MOST RECENT ESTIMATE: /a Excluding persons in compulsory military services and persons seeking jobs for the first time; /b Excluding unemployed seamen; /c Personnel in government services only.

SPAIN 1970 /a Registered unemployed; /b Registered, not all practicing in the country.

BELGIUM 1970 /a Registered unemployed only.

FRANCE 1970 /a Government hospital establishments only.

R6 January 30, 1976

DEFINITIONS OF SOCIAL INDICATORS

Land Area (thou km^2)
Total - Total surface area comprising land area and inland waters.
Arable - Most recent estimate of land area used temporarily or permanently for cultivation, pastures, market and kitchen gardens or to lie fallow.

GNP per capita (US$) - GNP per capita estimates at market prices, calculated by same conversion method as World Bank Atlas (1972-74 basis).

Population and vital statistics
Population (mid-yr. million) - As of July first; if not available, average of two end-year estimates.

Population density - per square km - Mid-year population per square kilometer (100 hectares) of total area.
Population density - per square km of arable land - Computed as above for arable land only.

Vital statistics
Crude birth rate per thousand - Annual live births per thousand of mid-year population; usually five-year averages ending in 1960, 1970 and 1975 for developing countries.
Crude death rate per thousand - Annual deaths per thousand of mid-year population; usually five-year averages ending in 1960, 1970 and 1975 for developing countries.
Infant mortality rate (/thou) - Annual deaths of infants under one year of age per thousand live births.
Life expectancy at birth (yrs) - Average number of years of life remaining at birth; usually five-year averages ending in 1960, 1970 and 1975 for developing countries.
Gross reproduction rate - Average number of live daughters a woman will bear in her normal reproductive period if she experiences present age-specific fertility rates; usually five-year averages ending in 1960, 1970 and 1975 for developing countries.
Population growth rate (%) - total - Compound annual growth rates of mid-year population for 1950-60, 1960-70, and 1960 to most recent year.
Population growth rate (%) - urban - Computed like growth rate of total population; different definitions of urban areas may affect comparability of data among countries.
Urban population (% of total) - Ratio of urban to total population; different definitions of urban areas may affect comparability of data among countries.
Age structure (percent) - Children (0-14 years), working-age (15-64 years), and retired (65 years and over) as percentages of mid-year population.
Age dependency ratio - Ratio of population under 15 and 65 and over to those of ages 15 through 64.
Economic dependency ratio - Ratio of population under 15 and 65 and over to the labor force in age group of 15-64 years.
Family planning - acceptors (cumulative, thou) - Cumulative number of acceptors of birth-control devices under auspices of national family planning program since inception.
Family planning - users (% of married women) - Percentages of married women of child-bearing age (15-44 years) who use birth-control devices to all married women in same age group.

Employment
Total labor force (thousand) - Economically active persons, including armed forces and unemployed but excluding housewives, students, etc.; definitions in various countries are not comparable.
Labor force in agriculture (%) - Agricultural labor force (in farming, forestry, hunting and fishing) as percentage of total labor force.
Unemployed (% of labor force) - Unemployed are usually defined as persons who are able and willing to take a job, out of a job on a given day, remained out of a job, and seeking work for a specified minimum period not exceeding one week; may not be comparable between countries due to different definitions of unemployed and source of data, e.g., employment office statistics, sample surveys, compulsory unemployment insurance.

Income distribution - Percentage of private income (both in cash and kind) received by richest 5%, richest 20%, poorest 20%, and poorest 40% of population.

Distribution of land ownership - Percentages of land owned by wealthiest 10% and poorest 10% of land owners.

Health and Nutrition
Population per physician - Population divided by number of practicing physicians qualified from a medical school at university level.
Population per nursing person - Population divided by number of practicing male and female graduate nurses, "trained" or "certified" nurses, and auxiliary personnel with training or experience.
Population per hospital bed - Population divided by number of hospital beds available in public and private general and specialized hospital and rehabilitation centers; excludes nursing homes and establishments for custodial and preventive care.
Per capita supply of calories (% 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 feed, seeds, quantities used in food processing and losses in distribution; requirements were estimated by FAO based on physiological needs for normal activity and health considering environmental temperature, body weights, age and sex distributions of population, and allowing 10% for waste at household level.
Per capita 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 Economic Research Services provide for a minimum allowance of 60 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 23 grams of animal protein as an average for the world, proposed by FAO in the Third World Food Survey.
Per capita protein supply from animal and pulse - Protein supply of food derived from animals and pulses in grams per day.
Death rate (/thou) ages 1-4 - Annual deaths per thousand in age group 1-4 years, to children in this age group; suggested as an indicator of malnutrition.

Education
Adjusted enrollment ratio - primary school - Enrollment of all ages as percentage of primary school-age population; includes children aged 6-11 years but adjusted for different lengths of primary education; for countries with universal education, enrollment may exceed 100% since some pupils are below or above the official school age.
Adjusted enrollment ratio - secondary school - Computed as above; secondary education requires at least four years of approved primary instruction; provides general, vocational or teacher training instructions for pupils of 12 to 17 years of age; correspondence courses are generally excluded.
Years of schooling provided (first and second levels) - Total years of schooling; at secondary level, vocational instruction may be partially or completely excluded.
Vocational enrollment (% of secondary) - Vocational institutions include technical, industrial or other programs which operate independently or as departments of secondary institutions.
Adult literacy rate (%) - Literate adults (able to read and write) as percentage of total adult population aged 15 years and over.

Housing
Persons per room (average) - Average number of persons per room in occupied conventional dwellings in urban areas; dwellings exclude non-permanent structures and unoccupied parts.
Occupied dwellings without piped water (%) - Occupied conventional dwellings in urban and rural areas without inside or outside piped water facilities as percentage of all occupied dwellings.
Access to electricity (% of all dwellings) - Conventional dwellings with electricity in living quarters as percent of total dwellings in urban and rural areas.
Rural dwellings connected to electricity (%) - Computed as above for rural dwellings only.

Consumption
Radio receivers (per thou pop) - All types of receivers for radio broadcasts 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 most countries abolished licensing.
Passenger cars (per thou pop) - Passenger cars comprise motor cars seating less than eight persons; excludes ambulances, hearses and military vehicles.
Electricity (kwh/yr per cap) - Annual consumption of industrial, commercial, public and private electricity in kilowatt hours per capita; generally based on production data, without allowance for losses in grids but allowing for imports and exports of electricity.
Newsprint (kg/yr per cap) - Per capita annual consumption in kilograms estimated from domestic production plus net imports of newsprint.

TABLE 3A
GREECE - SOCIAL INDICATORS DATA SHEET

LAND AREA (THOU KM2)
TOTAL 131.9
ARABLE ..

	GREECE			REFERENCE COUNTRIES (1970)		
	1960	1970	MOST RECENT ESTIMATE	SPAIN	BELGIUM	FRANCE ##
GNP PER CAPITA (US$)	490.0	1290.0	1873.0	1260.0	3510.0	3460.0
POPULATION AND VITAL STATISTICS						
POPULATION (MID-YR, MILLION)	8.3	8.8	9.0	33.6	9.7	50.8
POPULATION DENSITY						
PER SQUARE KM.	63.0	67.0	68.0	66.0	317.0	93.0
PER SQUARE KM. ARABLE LAND	..	..	..	..	..	..
VITAL STATISTICS						
CRUDE BIRTH RATE PER THOUSAND	18.9	16.5	15.5	19.6	14.7	16.7
CRUDE DEATH RATE PER THOUSAND	7.3	8.4	8.6	8.5	12.3	10.7
INFANT MORTALITY RATE (/THOU)	40.1	29.6	27.8	27.9	21.1	18.2
LIFE EXPECTANCY AT BIRTH (YRS)	67.0 /a	70.4	71.6	71.0	71.0	72.4
GROSS REPRODUCTION RATE	1.1	1.0	1.0	1.4	1.3	1.3
POPULATION GROWTH RATE (%)						
TOTAL	1.0	0.6	0.6	1.1	0.6	1.0
URBAN	2.0	2.6	..	2.0	4.6	2.0
URBAN POPULATION (% OF TOTAL)	43.0	53.0	53.2	49.0	87.0	70.0
AGE STRUCTURE (PERCENT)						
0 TO 14 YEARS	26.7	24.9	24.9	27.8	24.7	24.0
15 TO 64 YEARS	65.1	64.0	63.9	62.5	63.0	62.6
65 YEARS AND OVER	8.2	11.1	11.2	9.7	13.3	13.4
AGE DEPENDENCY RATIO	0.5	0.6	0.6	0.6	0.6	0.6
ECONOMIC DEPENDENCY RATIO	0.9	..	1.0	1.1	0.9	0.9
FAMILY PLANNING-						
ACCEPTORS (CUMULATIVE, THOU)	..	..	..	..	..	..
USERS (% OF MARRIED WOMEN)	..	..	..	..	..	..
EMPLOYMENT						
TOTAL LABOR FORCE (THOUSAND)	3600.0 /b	..	3300.0 /a	11900.0	3600.0	20600.0
LABOR FORCE IN AGRICULTURE (%)	54.0	..	40.0	24.8	5.0	15.1
UNEMPLOYED (% OF LABOR FORCE)	6.0 /c	..	3.0 /b	2.0 /a	3.0 /a	2.2
INCOME DISTRIBUTION						
% OF PRIVATE INCOME REC'D BY-						
HIGHEST 5% OF POPULATION	18.7 /d	..	..	..	..	..
HIGHEST 20% OF POPULATION	44.7 /d	..	..	..	..	..
LOWSET 20% OF POPULATION	6.3 /d	..	..	..	..	..
LOWEST 40% OF POPULATION	17.4 /d	..	..	..	..	..
DISTRIBUTION OF LAND OWNERSHIP						
% OWNED BY TOP 10% OF OWNERS	..	..	27.5	..	..	..
% OWNED BY SMALLEST 10% OWNERS	..	..	2.6	..	..	..
HEALTH AND NUTRITION						
POPULATION PER PHYSICIAN	790.0 /e	620.0	600.0	750.0 /b	650.0	750.0
POPULATION PER NURSING PERSON	1260.0 /e,f	1140.0	1530.0 /c	1430.0	410.0	370.0
POPULATION PER HOSPITAL BED	170.0 /e,g	160.0	160.0	220.0	120.0	140.0 /a
PER CAPITA SUPPLY OF -						
CALORIES (% OF REQUIREMENTS)	120.0	116.0	128.0	107.0	124.0	127.0
PROTEIN (GRAMS PER DAY)	99.0	99.0	113.0	81.0	94.0	104.0
-OF WHICH ANIMAL AND PULSE	39.0 /a	52.0 /a	..	40.0	56.0	66.0
DEATH RATE (/THOU) AGES 1-4	..	..	0.9	0.9	0.9	0.8
EDUCATION						
ADJUSTED ENROLLMENT RATIO						
PRIMARY SCHOOL	109.0	109.0	..	83.0	111.0	118.0
SECONDARY SCHOOL	39.0	60.0	..	49.0	64.0	73.0
YEARS OF SCHOOLING PROVIDED (FIRST AND SECOND LEVEL)	12.0	12.0	12.0	13.0	14.0	14.0
VOCATIONAL ENROLLMENT (% OF SECONDARY)	17.0 /h	20.0	22.0	20.0	61.0	33.0
ADULT LITERACY RATE (%)	80.0	82.0	..	94.0	99.0	99.0
HOUSING						
PERSONS PER ROOM (AVERAGE)	1.4	..	0.9	..	0.6	0.9
OCCUPIED DWELLINGS WITHOUT PIPED WATER (%)	71.0 /i	..	35.0	..	13.0	9.0
ACCESS TO ELECTRICITY (% OF ALL DWELLINGS)	53.0	..	97.0	..	99.0	99.0
RURAL DWELLINGS CONNECTED TO ELECTRICITY (%)	14.0	..	77.0	..	93.0	98.0
CONSUMPTION						
RADIO RECEIVERS (PER THOU POP)	85.0	111.0	..	214.0	390.0	314.0
PASSENGER CARS (PER THOU POP)	5.0	26.0	39.0	70.0	213.0	254.0
ELECTRICITY (KWH/YR PER CAP)	274.0	1072.0	1286.0	1627.0	3494.0	2759.0
NEWSPRINT (KG/YR PER CAP)	2.6	3.6	5.9	5.8	18.6	11.9

SEE NOTES AND DEFINITIONS ON REVERSE

1/ This is based on the revised Atlas methodology, and compares to the figure of $1670 calculated on the basis of the peevious methodology.

GREECE: ECONOMIC DEVELOPMENT DATA

	Actual				Estimated	Projected				Annual Growth Rates			
	1965	1972	1973	1974	1975	1976	1977	1980	1985	1965-1973	1973-1974	1974-1975	1975-1985
A. NATIONAL ACCOUNTS (Constant 1973 billion Drs.)													
GDP (m.p.)	256.0	436.1	471.1	452.1	452.1	463.4	481.9	568.1	753.3	7.9	-4.0	0.0	5.2
Gains from Terms of Trade	+1.8	+ 0.8	-	-2.2	-1.7	-2.4	-1.5	-2.4	-3.5	.	.	.	.
Gross Domestic Income	257.8	436.9	471.1	449.9	450.4	461.0	480.4	565.7	749.8	7.8	-4.5	1.0	5.2
Exports (g + nfs)	27.6	71.6	79.1	83.8	89.1	95.5	103.0	131.7	200.2	14.0	5.9	6.3	8.4
Imports (g + nfs)	-52.4	-107.5	-134.8	-124.2	-127.1	-128.3	-133.3	-161.2	220.8	12.5	-7.9	2.3	5.7
Resource Balance	-24.8	-35.9	-55.7	-40.4	-38.0	-32.8	-30.3	-29.5	-20.6	.	.	.	
Investment	70.2	128.7	153.4	103.0	103.0	105.7	109.9	129.7	172.0	10.2	-32.9	0.0	5.1
Consumption	212.4	344.1	374.4	387.3	385.4	398.1	400.8	465.5	598.4	7.3	3.4	-0.5	4.5
Domestic Savings	45.4	92.8	97.7	62.6	66.7	65.3	81.1	102.6	154.9	10.0	-35.9	6.6	8.8
National Savings	48.4	102.3	108.9	74.4	73.6	77.9	85.1	103.5	153.2	10.7	-31.7	-1.1	7.6
GDP (at current m.p.)	175.7	367.2	471.1	583.3	..	..	..	..	..	..	..	..	..
B. SECTOR OUTPUT	Share of GDP (fc) at 1958 prices (%)												
Agriculture	23.1	16.3	14.7	16.9	17.2	17.1	16.8	15.6	13.6	.	.	.	.
Industry (incl. construction)	28.9	36.5	37.8	35.6	36.1	36.0	36.3	37.7	39.9	.	.	.	.
Services	48.0	47.2	47.5	47.5	46.7	46.9	46.9	46.7	46.5	.	.	.	.
C. PRICES (1973 = 100)													
Export Price Index	70.5	76.8	100.0	121.6	132.1	142.2	151.4	184.6	251.2	4.5	21.6	8.6	6.6
Import Price Index	66.2	76.0	100.0	124.9	135.5	147.3	154.9	191.1	262.8	5.3	24.9	8.5	6.8
Terms of Trade Index	106.5	101.1	100.0	97.4	97.5	96.5	97.7	96.6	95.6	..	..	..	..
Domestic Price Index	83.4	87.0	100.0	127.0	146.7	..	..	..	..	4.3	27.0	15.5	..
D. PUBLIC FINANCE (As % of GDP)													
Current Revenue	23.6	26.1	25.0	26.0									
Tax Revenue	21.2	24.3	23.4	23.3									
Current Expenditures	21.3	22.6	20.9	24.0									
Defense Expenditures	3.7	4.6	3.9	5.6									
Government Savings	2.0	3.5	4.1	2.0									
Capital Expenditures	6.1	8.8	8.3	6.5									
E. SELECTED INDICATORS	1965-73	1975-85											
Incremental Capital/Output Ratio	3.0	3.3											
Import Elasticity	1.2	1.1											
Average National Savings Rate	16.7	16.9											
Marginal National Savings Rate	24.2	26.6											
Imports/GDP	24.0	28.2											
Resource Gap/GDP	9.9	6.4											

F. LABOR FORCE (million)	1961	1971
Labor Force	3.86	3.39
Unemployment	0.22	0.11
As percent of L.F.	5.7	3.2
Employment	3.64	3.28
Percent by Sector:		
Agriculture	53.9	40.5
Industry	19.1	25.6
Services	27.0	33.9

Output and Productivity of Labor Force (1971)

	Value Added		Value Added Per Worker	
	US$ Mln.	%	US$	As % of Avg
Agriculture	1,707	18.6	1,283	46.0
Industry	2,840	31.0	3,378	121.1
Services	4,616	50.4	4,148	148.7
Total	9,163	100.0	2,790	100.0

. Not applicable
.. Not available
- Nil or negligible

February 10, 1976

GREECE: IMPORT DETAIL

	Actual		Est.	Projected			
	1973	1974	1975	1976	1977	1980	1985
A. Constant 1973 Prices (Million $)							
Food	756.8	509.5	491.2	471.5	496.6	570.0	701.1
Intermediate goods	724.5	794.5	878.5	897.8	947.2	1184.0	1473.9
Petroleum and products	413.5	342.7	370.8	397.9	421.7	539.8	672.7
Capital goods	1087.2	1094.7	1149.4	1179.3	1227.7	1447.1	1924.6
Other goods	1048.8	926.4	836.5	798.1	802.9	927.7	1141.1
Total goods (c.i.f.)	4030.8	3667.8	3726.4	3744.6	3896.1	4668.6	5913.4
Non-factor services	466.0	473.7	473.7	487.9	511.3	621.7	870.4
Total goods NFS	4496.8	4141.5	4200.1	4232.5	4407.4	5290.3	6783.8
B. Price Indices (1973=100)							
Food	100.0	114.9	126.4	137.8	139.4	165.2	222.2
Intermediate goods	100.0	119.8	122.2	129.1	121.4	155.0	258.5
Petroleum and products	100.0	252.0	269.9	285.3	308.5	380.1	532.3
Capital goods	100.0	114.9	128.7	141.3	153.2	190.5	266.3
Other goods	100.0	105.4	115.9	127.5	137.1	166.4	270.9
Total goods (c.i.f.)	100.0	126.4	138.0	150.3	157.2	195.6	290.3
Non-factor services	100.0	113.9	132.5	144.2	155.9	192.9	270.7
Total goods and NFS	100.0	124.9	137.4	149.6	157.0	195.3	287.7
C. Current Values (Million $)							
Food	756.8	585.4	620.7	649.7	692.4	945.8	1557.8
Intermediate goods	724.5	951.8	1073.4	1159.4	1149.5	1835.7	3809.6
Petroleum and products	413.5	863.5	1001.1	1135.4	1300.9	2051.6	3580.8
Capital goods	1087.2	1257.8	1478.8	1666.5	1881.0	2756.2	5125.7
Other goods	1048.8	976.7	969.9	1017.5	1100.5	1543.3	3090.8
Total goods (c.i.f.)	4030.8	4635.2	5143.9	5628.5	6124.3	9133.6	17164.7
Non-factor services	466.0	539.6	627.6	703.7	796.9	1199.8	2356.0
Total goods and NFS	4496.8	5174.8	5771.6	6332.2	6921.2	10333.3	19520.7

February 10, 1976

GREECE: EXPORT DETAIL

	Actual		Est.	Projected			
	1973	1974	1975	1976	1977	1980	1985
A. Constant 1973 Prices (Millions $)							
Tobacco	88.3	113.7	118.2	123.0	127.8	143.8	175.0
Food and beverage	366.5	373.8	386.3	399.8	413.8	463.2	563.7
Textiles and yarns	155.5	146.5	157.0	167.2	178.1	217.2	311.8
Mineral and ores	73.1	84.9	90.4	95.0	100.7	121.6	166.6
Metals	35.2	85.0	91.6	98.5	105.8	133.9	201.4
Petroleum products	46.4	49.2	53.8	58.7	64.0	82.8	127.5
Other goods	465.5	515.9	575.2	621.2	677.2	936.1	1188.9
Total goods (f.o.b.)	1230.5	1369.0	1472.5	1563.4	1667.4	2098.6	2736.9
Non-factor services	1407.6	1432.0	1503.6	1623.9	1770.0	2292.2	3526.8
Total goods and NFS	2638.1	2801.0	2976.1	3187.3	3437.4	4390.8	6263.7
B. Price Indices (1973=100)							
Tobacco	100.0	139.0	146.4	158.8	171.2	216.3	289.4
Food and beverage	100.0	107.9	118.3	126.6	134.2	159.8	221.8
Textiles and yarns	100.0	137.9	153.6	168.5	182.9	227.1	318.6
Mineral and ores	100.0	121.4	124.4	131.5	123.5	158.0	208.4
Metals	100.0	167.1	170.0	179.6	168.9	215.9	284.8
Petroleum products	100.0	250.9	267.8	291.1	314.7	349.2	545.5
Other goods	100.0	124.4	130.6	137.2	144.0	166.7	284.9
Total goods (f.o.b.)	100.0	129.6	138.5	147.8	154.8	186.0	281.6
Non-factor services	100.0	113.9	126.0	137.2	148.7	183.9	257.9
Total goods and NFS	100.0	121.6	132.2	142.4	151.4	185.0	268.3
C. Current Values (Million $)							
Tobacco	88.3	158.4	173.1	195.3	218.8	311.1	506.4
Food and beverage	366.5	403.3	456.9	506.0	555.3	740.2	1205.2
Textiles and yarns	155.5	202.0	241.2	281.8	325.7	493.3	993.3
Mineral and ores	73.1	103.1	112.5	124.9	124.4	192.1	347.2
Metals	35.2	142.0	155.7	176.9	178.7	289.1	573.6
Petroleum products	46.4	123.5	144.1	170.9	201.4	322.3	695.5
Other goods	465.5	641.8	751.4	852.1	975.2	1560.7	3386.8
Total goods (f.o.b.)	1230.5	1774.1	2035.0	2308.0	2579.5	3908.7	7708.0
Non-factor services	1407.6	1631.0	1901.2	2234.7	2631.6	4215.6	9097.3
Total goods and NFS	2638.1	3405.0	3936.2	4542.7	5211.1	8124.3	16805.3

February 10, 1976

GREECE : BALANCE OF PAYMENTS AND EXTERNAL ASSISTANCE
(In US$ Millions)

	Actual			Est.	Projected				Growth Rate p.a. (%)
	1972	1973	1974	1975	1976	1977	1980	1985	1974-85
A. SUMMARY OF BALANCE OF PAYMENTS									
Exports (goods)	835.4	1230.5	1774.2	2035.0	2307.9	2579.5	3908.7	7708.0	14.3
Imports (goods)	-2407.0	-4030.8	-4635.2	-5144.0	-5628.5	-6124.3	-9133.6	-17164.7	12.6
Non-factor services, net	684.8	941.6	1092.2	1273.6	1531.1	1834.8	3015.9	6741.2	18.0
Resource balance	-886.8	-1858.7	-1768.8	-1835.4	-1789.5	-1710.0	-2209.0	-2715.5	-
Interest and profits, net	-56.3	-51.9	-98.1	-146.5	-226.6	-298.0	-442.7	-484.7	16.0
Workers remittance	575.3	735.4	648.3	630.0	620.0	682.0	907.7	1333.8	6.8
Other factor service income	-	-	-	-	-	-	-	-	-
Total net factor income	519.0	683.5	550.2	483.5	393.4	384.0	465.0	849.1	4.1
Balance on current account	-367.8	-1175.2	-1218.6	-1351.8	-1396.2	-1326.1	-1743.9	-1866.3	4.0
Direct foreign investment	280.4	415.7	432.5	498.0	572.6	658.5	1001.6	2014.5	15.0
Public M + LT loans	56.2	103.6	118.0	245.1	255.7	291.0	219.8	265.4	-
Commercial loans	457.9	453.5	494.0	745.4	731.6	632.9	1034.0	577.1	-
Deposit with commercial banks	204.1	211.6	177.3	214.0	256.8	308.1	532.4	857.4	15.4
Amortizations	-157.3	-172.2	-176.2	-255.3	-326.9	-466.0	-829.0	-1239.9	19.4
Errors and omissions	27.6	150.6	60.4	-	-	-	-	-	-
Change in reserves (-= increase)	-501.1	-12.4	112.6	-95.3	-93.6	-98.4	-215.0	-608.2	-
B. LOAN COMMITMENTS									
Total public M + LT loans	106.7	95.0	180.1	376.0					
a. IBRD	23.5	15.0	30.0	110.0					
b. EIB 1/	7.7	11.8	-	56.0					
c. IMF	-	-	123.0	150.0					
d. Governments	75.3	68.2	27.1	60.0					
Total commercial loans	432.9	512.1	487.6	623.6					
e. Suppliers	16.3	44.1	9.5	180.0					
f. Financial institutions	396.6	468.0	478.1	443.6					
g. Bonds	20.0	-	-	-					

C. EXTERNAL DEBT	Actual Debt Outstanding on December 31,1974 Disbursed Only	Percent
World Bank	60.5	3.0
Other Multilateral	94 5	4.6
Governments	270.9	13.3
Suppliers	186.3	9.2
Financial Institutions	1251.7	61.5
Publicly Issued Bonds	169.1	8.3
Privately Issued Bonds	2.5	0.1
Total Public M&LT Debt	2034.8	100.0
Short-term Debt (disb only)	..	..

DEBT AND DEBT SERVICE	Actual 1971	1972	1973	1974
Public Debt Out.& Disbursed (DO&D) 4/	1047 1	1357 3	1554.2	2034.8
Interest on Public Debt	52.0	61.6	89.6	143.1
Repayments on Public Debt	94.6	110.2	171 4	186.7
Total Public Debt Serv.	146.6	171.8	261 0	329.8
Burden on Exp.Earnings (%) 3/	10.2	9.3	9.9	9.6
Burden on Exp.Earnings plus workers remittances (%) 3/	7.7	7.1	7 6	8.2
Average Terms of Public Debt 2/				
Int.as % Prior Year DO&D	5.7	5.9	6.6	9.2
Amort.as % Prior Year DO&D	10.4	10.5	12.7	12.0
IBRD Debt Out.& Disbursed	23.5	32.7	48.7	60.5
" as % Public Debt O&D	2 2	2.4	3.1	3.0
" as % Public Debt. Serv.	1.3	2.3	2.2	2.5

1/ Including $7 7 million in 1972 and $11 8 million in 1973 from Council of Europe.
2/ Excluding IMF oil facility purchase
3/ Yearly information on private debt service is not available. As of December 31,1974 outstanding non-government guaranteed private debt totalled $914 9 million
4/ End of the period.

February 10,1976

THE STATUS OF BANK GROUP OPERATIONS IN GREECE

A. STATEMENT OF BANK LOANS (as of February 29, 1976)

Loan Number	Year	Borrower	Purpose	US$ Million Amount (Less cancellation)	Undisbursed
Three loans fully disbursed				56.6	-
711	1970	Hellenic State	Education	13.8	10.3
754	1971	Hellenic State	Irrigation	25.0	13.0
859	1972	Hellenic State	Education	23.5	23.2
945	1973	NIBID	Industrial finance	15.0	1.2
991	1974	Hellenic State	Irrigation	30.0	30.0
1134 1/	1975	Hellenic State	Education	45.0	45.0
1135	1975	NIBID	Industrial finance	25.0	25.0
1165 1/	1975	Hellenic State	Irrigation	40.0	40.0
		TOTAL		273.9	187.7
		of which has been repaid		17.0	
		Total now outstanding		256.9	
		Amount sold	7.4		
		of which has been repaid	1.3	6.1	
		Total now held by Bank 2/		250.8	
		Total undisbursed			187.7

1/ Not yet effective

2/ Prior to exchange adjustments

B. STATEMENT OF IFC INVESTMENTS (as of February 29, 1976)

Year	Obligor	Type of Business	Amount in US$ Million Loan	Equity	Total
1962	Aevol Industrial Company Organic Fertilizers, S.A.	Fertilizers	0.60	-	0.60
1965	"Titan" Cement Company, S.A. I	Cement	1.00	0.50	1.50
1966	National Investment Bank for Industrial Development,S.A.	Industrial finance	-	0.72	0.72
1966	General Cement Company, S.A.	Cement	3.50	-	3.50
1966	"Titan" Cement Company, S.A.II	Cement	-	0.03	0.03
1970	Aluminium de Grece, S.A. Industielle et Commerciale I	Aluminum	3.50	5.10	8.60
1972	Aluminium de Grece, S.A. Industielle et Commerciale II	Aluminium	-	0.05	0.05
1975	Hellenic Food Industries,S.A.	Food processing	1.00	0.13	1.13
	Total Gross Commitments		9.60	6.53	16.13
	less cancellations, terminations, repayments and sales		6.78	5.72	12.50
	Total commitments now held by IFC		2.82	0.81	3.63
	Total undisbursed		-	-	-

C. PROJECTS IN EXECUTION 1/

Loan No. 711 - First Education Project; $13.8 million Loan of November 5, 1970; Effectiveness Date: March 31, 1971; Closing Date: March 31, 1977.

Three of the five project schools are expected to be completed by December 1976 and the remaining two during 1977. Contracts for furniture and for about 40 percent of the educational equipment have been awarded. Procurement of the remaining equipment is expected to be completed during 1976. Delays in consruction have not affected the commencement of the higher technical education program which has been offered since 1974, both in temporary facilities and in the partially-finished project schools. At present, about 8,000 students are enrolled in the program.

Loan No. 754 - Groundwater Development Project (Irrigation); US$25 million Loan of June 21, 1971; Effectiveness Date: November 15, 1971; Closing Date: December 31, 1976.

Implementation of this project began slowly due to delays in contract awards, changes in design of the distribution network following consultants' recommendations, and a protracted search for a satisfactory solution, found in December 1973, to the question of farmers' contributions to the capital cost of the project. The Government is now reviewing the consultants' proposals for final design of the permanent irrigation network. Drilling of the wells is 85% completed and irrigation has started on about 5,000 ha. Possible ways of dealing with the problem of substantial cost overruns are being considered by the Government and the Bank.

Loan No. 859 - Second Education Project; $23.5 million Loan of October 2, 1972; Effectiveness Date: March 30, 1973; Closing Date: July 31, 1977.

Architectural designs for all project institutions are proceeding satisfactorily. Procurement of equipment for existing schools has started and some contracts have been awarded. The Education Project Unit in the Ministry of Coordination and Planning is performing satisfactorily. In response to a Government request, the Executive Directors approved on July 25, 1975, the deletion from the project of the extensions to the University of Patras (representing 43 percent of total costs) and the reallocation of the savings to other project components, the cost of which has experienced substantial escalation but which the Government proposes to cover.

1/ These notes are designed to inform the Executive Directors regarding the progress of projects in execution, and in particular to report any problems which are being encountered, and the action being taken to remedy them. They should be read in this sense, and with the understanding that they do not purport to present a balanced evaluation of strengths and weaknesses in project execution.

Loan No. 945 - Fourth NIBID Project: $15.0 million Loan of November 29, 1973; Effectiveness Date: March 28, 1974; Closing Date: December 31, 1977.

This loan has been fully committed, and almost fully disbursed. Project implementation has been satisfactory.

Loan No. 991 - Nestos and Yannitsa Irrigation Project: $30.0 million Loan of June 3, 1974; Effectiveness Date: July 29, 1975; Closing Date: December 31, 1980.

Because of political changes in Greece, there were delays in completing the conditions of effectiveness. Project implementation has however begun and the review of the tertiary canal design standards has been completed. Detailed designs and specifications are expected to be ready to call for tenders for the first contract in early 1976. Possible ways of dealing with the problem of substantial cost overruns are being considered by the Government and the Bank.

Loan No. 1134 - Third Education Project; $45 million Loan of June 27, 1975; Closing Date: December 31, 1980.

The terminal date for effectiveness was postponed to March 31, 1976 at the Government's request to allow time for Parliamentary ratification of the Loan Agreement, which took place on March 18. Meanwhile, a Steering Committee has been established to guide and monitor the three studies on post-secondary education, pedagogical training, and production of education equipment included in the project. The Ministries of Education and Labor are organizing technical services to carry out the day-to-day implementation

Loan No. 1135 - Fifth NIBID Project: $25 million Loan of June 27, 1975; Effectiveness Date: October 28, 1975; Closing Date: December 31, 1978.

Commitments under this loan as of February 1976 amounted to $7.9 million.

Loan No. 1165 - The East Vermion Irrigation Project: $40.0 million Loan of October 3, 1975; Closing Date: December 31, 1980.

The terminal date for effectiveness has been postponed to April 5, 1975 at the Government's request to allow time for Parliamentary ratification of the Loan Agreement. Meanwhile action has been initiated to appoint consultants for the final design and preparation of tender documents.

GREECE

HIGHWAY PROJECT

LOAN AND PROJECT SUMMARY

Borrower: Hellenic State.

Amount: US$30 million equivalent in various currencies.

Terms: Amortization in 15 years, including a 4-year grace period, with interest at 8-1/2% per annum.

Project Description: The project would comprise:

1. Construction and improvement, and related supervision, of the Patras-Pyrgos-Olympia road (100 km);

2. Technical assistance (about 170 man-months) to the Ministry of Public Works for the development and implementation of an organization for improved highway maintenance and maintenance planning procedures, and coordination of feasibility studies;

3. Feasibility studies of the (i) Cambos Despoti-Metsovon-Votonosi; and (ii) Corinth-Kalamata via Tripolis roads; and (iii) feeder roads linking villages in the Klidi agricultural area to the national road network (totaling 295 km), and technical assistance therefor (40 man-months);

4. Fellowships abroad (about 240 man-months) for Ministry of Public Works senior and middle management; and

5. Technical assistance (about 100 man-months) to the Ministry of Coordination and Planning for the establishment and strengthening of a secretariat to a national transport coordination committee.

GREECE

Project Cost Estimates:

	---- US$ Million ---		
	Local	Foreign	Total
Construction	15.8	8.2	24.0
Supervision of Construction	0.9	0	0.9
Right-of-Way and Land Acquisition	2.6	0	2.6
Procurement of Highway Maintenance Equipment	1.4	10.3	11.7
Technical Assistance to MPW	0.7	1.4	2.1
Feasibility Studies of 3 Selected Roads	0.5	0.3	0.8
Fellowships for MPW	0	0.4	0.4
Technical Assistance to MCP	0.4	0.8	1.2
Basic Project Cost	22.3	21.4	43.7
Physical Contingencies	2.3	2.1	4.4
Expected Price Increases	10.1	6.5	16.6
TOTAL	34.7	30.0	64.7

Financing Plan:

	---- US$ Million ----		
	Local	Foreign	Total
IBRD Loan	0	30.0	30.0
Government Contribution	34.7	0	34.7
TOTAL	34.7	30.0	64.7

Estimated Disbursements:

	---------- US$ Million ----------				
	FY 77	FY 78	FY 79	FY 80	FY 81
Annual	1.2	14.8	7.3	5.0	1.7
Cumulative	1.2	16.0	23.3	28.3	30.0

Procurement Arrangements: Construction services and maintenance equipment will be procured by international competitive bidding in accordance with the Bank's "Guidelines for Procurement". A preference of 15 percent will be granted to domestic manufacturers of equipment for purposes of bid comparison. Consulting services will be procured on the basis of competitive selection among suitable firms in accordance with the guidelines for the "Uses of Consultants by the World Bank and its Borrowers".

Consultants: About 210 man-months of technical assistance to the Ministry of Public Works and about 100 man-months to the Ministry of Coordination and Planning.

Estimated Completion Date: June 30, 1980.

GREECE

Economic Rate of Return:

On construction of Patras-Pyrgos-Olympia road: 20 percent with first-year return of 15 percent.

On road maintenance and workshop equipment and spare parts: 46 percent.

The average economic return on these two components, which account for 90 percent of total project cost, is 26 percent.

Staff Project Report:

"Staff Project Report on Appraisal of a Highway Project - Greece", No. 1014a-GR dated March 24, 1976.

SUPPLEMENTAL PROJECT DATA SHEET

Section I:

Timetable of Key Events

a.	Project Identification	
	i. Highway maintenance studies by consultants to MPW	Jan. 1971 - Jul. 1973
	ii. Highway reconnaissance survey and feasibility studies by consultants to MPW and MCP	Oct. 1972 - Aug. 1974
b.	Project Preparation	
	i. Detailed engineering of Patras-Pyrgos-Olympia road by consultants to MPW	Aug. 1975 - Feb. 1976
c.	Project Preparation Agencies	
	i. Ministry of Public Works	
	ii. Ministry of Coordination and Planning	
d.	Preappraisal	
	i. First Government presentation of project to Bank	Aug. 1975
	ii. First Bank mission to consider project	Aug. 1975
e.	Appraisal Mission Departure	Dec. 1, 1975
f.	Negotiations Completed	Mar. 5, 1976
g.	Loan Effectiveness Planned	Jul. 7, 1976

Section II:

Special Bank Implementation Actions

Special Bank activities in implementing the project are to assist the Government in:

(a) evaluation of consultants' proposals for technical assistance to MPW and MCP between July and September 1976;

(b) review of the recommendations of the technical assistance consultants during 1978 and 1979; and

(c) review of the recommendations of the feasibility studies during 1979.

Section III:

Special Conditions in the Loan Agreement

A summary of the special conditions included in the Loan Agreement are that the Government will:

1. (a) adequately maintain all Greece's paved national roads and make necessary repairs to them;

(b) maintain, repair and as necessary renew its road maintenance equipment;

(c) establish an organization within MPW to carry out routine maintenance of paved national roads;

(d) provide adequate resources for the routine maintenance organization to carry out its duties; and

(e) implement those recommendations of the consultants providing technical assistance to MPW on which the Government and the Bank agree;

(Loan Agreement Sections 4.03, 4.04, 5.01 and Schedule 5).

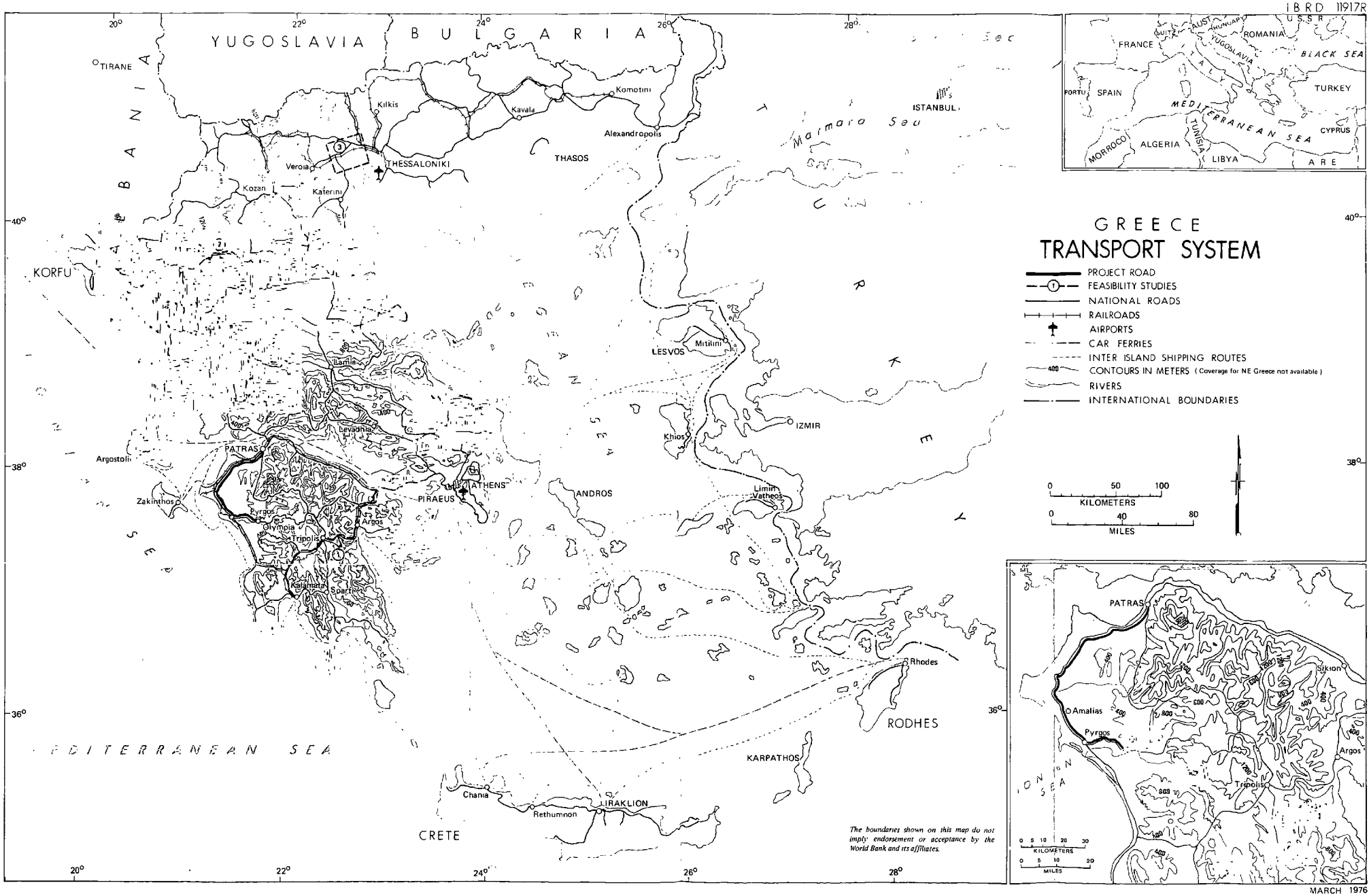
2. (a) establish the Transport Coordination Committee (TCC) within MCP, together with its Secretariat;

(b) provide adequate resources for the TCC and its Secretariat to carry out their duties; and

(c) implement those recommendations for further action which the Government and the Bank agree are necessary for the TCC to carry out its functions, on the basis of recommendations by the Secretariat to be prepared by December 31, 1978.

(Loan Agreement Sections 4.05, 5.01 and Schedule 5).

IBRD 11917R



GREECE
TRANSPORT SYSTEM

- PROJECT ROAD
- (1) FEASIBILITY STUDIES
- NATIONAL ROADS
- RAILROADS
- AIRPORTS
- CAR FERRIES
- INTER ISLAND SHIPPING ROUTES
- 400 CONTOURS IN METERS (Coverage for NE Greece not available)
- RIVERS
- INTERNATIONAL BOUNDARIES

0 50 100 KILOMETERS
0 40 80 MILES

The boundaries shown on this map do not imply endorsement or acceptance by the World Bank and its affiliates.

MARCH 1976