



PROPOSED REVISIONS TO THE MEDIUM-TERM  
PLAN FOR THE PERIOD 1980-1983

Addendum

CHAPTER 17

INDUSTRIAL DEVELOPMENT

The passages underlined are changes in chapter I, paragraphs 1.108 to 1.121, of A/33/6/Rev.1, volume I, and chapter 17, volume III, cited below.

## CHAPTER I

PROBLEMS AND STRATEGIES OF THE UNITED NATIONS  
IN THE MEDIUM-TERM FUTURE4. Industrial development

1.108 The broad shape of the strategy which the United Nations should follow in the area of industrial development was reviewed comprehensively at the Second General Conference of UNIDO, held at Lima in March 1975. It will be recalled that the General Assembly, at its seventh special session, endorsed the detailed recommendations of that conference, which are embodied in the Lima Declaration and Plan of Action to which reference has already been made. The Third General Conference of UNIDO, which took place in January and February 1980 in New Delhi, not only reviewed progress in the implementation of the Lima Declaration and Plan of Action, but also adopted the New Delhi Declaration and Plan of Action which reaffirmed the aspirations contained in the Lima Declaration and Plan of Action and provided additional guidance on the strategy to be followed in 1980 and subsequently.

1.110 Economic and technical co-operation among developing countries was the subject of section II of the Lima Plan of Action and is to be found throughout the New Delhi Declaration and Plan of Action. The United Nations may assist by organizing the exploration of promising areas for mutual co-operation in industrial affairs. It may advise on measures to harmonize and co-ordinate economic policies bearing on industrialization with a view to achieving a higher degree of complementarity in the national economies. As experience is showing, there is considerable scope for helping developing countries to identify opportunities for technical co-operation among themselves in industrial matters. The thrust of United Nations activities in the area of industrialization will be directed increasingly during the plan period towards assisting the least developed, land-locked, island and most seriously affected countries, where the problems to be faced tend to be particularly difficult.

1.111 The proposals in the medium-term plan for 1980-1983 with regard to the System of Consultations have been framed in the light of the growing recognition during the Third General Conference of UNIDO that the System of Consultations should be widened and expanded to cover all major industrial sectors including global, regional and interregional consultations, and that it should be placed on a permanent basis as a continuing and important activity of UNIDO for the redeployment of industry from developed to developing countries. In this connexion it is significant to note that the Board, at its thirteenth session, approved for the first time a programme of consultations for a two-year period which had facilitated considerably the organization of work for preparing and convening those consultations. Pending the decision of the Board at its fourteenth session concerning the expansion of sectoral consultations, proposals have been made to cover five additional sectors during 1980-1983 and two global level consultations on such common topics as industrial technology and insurance guarantees. Regional and interregional consultations are proposed to be held on all new sectors.

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1.112 In order to ensure the efficiency of the System as an effective instrument for industrial collaboration between developed and developing countries and to fully realize its potential for the redeployment of industry, it is necessary that UNIDO serves as a forum for the negotiation of agreements in the field of industry between developed and developing countries and among the developing countries themselves at the request of the countries concerned. It is not possible at this stage to make accurate forecasts concerning the scale of such requests being received by UNIDO during the period 1980-1983, and consequently no projections have been made as to the likely resources required by UNIDO to serve as a forum for the negotiation of agreements.

1.113 The Lima Declaration and Plan of Action recommended that UNIDO should intensify and expand its present action-oriented studies and research programmes, and the New Delhi Declaration and Plan of Action emphasized specific areas of interest for further study. While many studies, whether conducted at the global, regional, national or sectoral levels, will be keyed to the current or near-term requirements of other programmes in the area of industrial development, some studies and some research work will have a more extended time horizon and will form part of a longer-range strategy.

1.114 At the regional and country levels, surveys and studies will focus on aspects of regional and subregional industrial development and on the acceleration of industrialization in the African region. These studies and surveys will be designed to assist policy-making organs of the United Nations to undertake a continuing assessment of progress towards the achievement of the target share of world industrial production set at Lima. They will also serve to assist national planning and industrial development agencies in reviewing their policies and measures, in order to accelerate industrialization. The studies and surveys which will be carried out by UNIDO in close co-operation with the joint industry divisions operated by UNIDO and the regional commissions, as well as with other regional and subregional bodies, will be particularly related to the least developed, land-locked, island and most seriously affected developing countries. They will be so structured that they provide comprehensive data for the use in the conduct of operational activities in the field.

1.115 Many studies of sectors and subsectors or branches of industry will be linked with the operation of the System of Consultations, further to which they will serve to assist developing countries in the elaboration of sectoral industrial strategies. The organization of these studies, whether the information they provide is an element in the preparation of consultation meetings, contributes to follow-up action to previous consultation meetings or constitutes policy guidance for national planners, will be subject to continuous adaptation in the light of experience as the System of Consultations evolves over the plan period. The studies will also take into account such factors as energy, manpower and investment requirements by sector as well as the problem of environmental pollution.

1.116 At the global level, the development and application of new approaches to industrialization will be continued in close consultation with both developed and developing countries. In the main, such innovations are already embodied in the action programme suggested to the UNIDO secretariat by the Third General

Conference of UNIDO, particularly the tasks of creating an effective mechanism for the disaggregation of the Lima target, of ensuring continuous surveillance of the industrial restructuring process, conducting an analysis of the changing international division of labour, locating and identifying natural, sectoral endowments and examining prospects of and obstacles to redeployment, as well as of forging a stronger trading position among the developing countries themselves.

1.117 As regards the development and transfer of technology, the Lima Declaration and Plan of Action, the New Delhi Declaration and Plan of Action and the discussions of the Industrial Development Board have been particularly concerned with strengthening the technological capabilities of developing countries to promote accelerated industrial and technological development. In each country, the activities required for that purpose as well as the appropriate choice of technologies have to be related to the over-all industrial strategy and the development objectives in general. The focus is therefore on stimulating and supporting national actions. The programme will devote attention to technology plans and policies, institution-building or strengthening, upgrading of skills and services, a greater flow of information and the exchange of experience among developing countries.

1.118 The strategy involves a many-pronged attack on the problems addressed. In addition to undertaking studies, conducting meetings, preparing publications and organizing technical assistance in the field, a large-scale sensitization effort is called for, particularly in regard to plans and policies as also the provision of ad hoc advisory services for the solution of specific national problems, particularly by way of assistance to Governments and enterprises in the negotiation and acquisition of technologies. There will be a progressive expansion of the activities of the Industrial Technological Information Bank and the affiliated information services. At the regional and interregional levels, mechanisms will be introduced to improve the flow of technologies. The Consultative Group on Appropriate Industrial Technology and further international Fora on Appropriate Industrial Technology will assist in the sensitization effort, particularly of the emerging technological break-throughs and in the formulation of research and development projects for new technologies in areas of common concern to developing countries.

1.119 The Lima Declaration and Plan of Action and the New Delhi Declaration and Plan of Action affirmed that UNIDO should intensify and expand its present operational activities. International assistance in this form is expected, therefore, to increase substantially in volume and variety in the 1980s. Moreover, the modalities of technical co-operation would not remain frozen in today's mould. Increasingly emphasis will be placed on those priority areas identified in the New Delhi Declaration and Plan of Action including energy, industrial technology, environment, and assistance to the least developed of the developing countries.

1.121 The Investment Co-operative Programme of UNIDO has the task of promoting the flow of investment resources - technology, plant and equipment, management and marketing resources, as well as finance - from the developed and more advanced developing countries into industrial projects in developing countries. The methods and mechanisms for inducing such resource flows on the scale required to

meet the target set at Lima are subject to continuing evolution and, indeed, constitute an important element in the complex measures for international industrial co-operation necessary for the implementation of the Lima Declaration and Plan of Action. Work will be undertaken during the first half of the biennium on the introduction of one such mechanism recommended in the New Delhi Declaration and Plan of Action, namely, the North-South Global Fund as a means to increase substantially the flow of additional resources to developing countries.

## CHAPTER 17

## INDUSTRIAL DEVELOPMENT

## UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

A. Organization5. Other organizational matters

17.5 In conformity with General Assembly resolution 32/167, a United Nations Conference on the Establishment of the United Nations Industrial Development Organization as a Specialized Agency was convened in March/April 1979. This Conference adopted by consensus a constitution for the organization. The amendments to the medium-term plan for the period 1980-1983 have been made without regard to any possible change in the organizational status as part of the United Nations Secretariat. Any other course would, of necessity, involve assumptions, implicit or explicit, which are not within the competence of the Secretary-General to make.

17.7 (a) In the light of the importance placed on energy and industry at the Third General Conference of UNIDO, a Special Advisory Group on energy has been established in the Office of the Executive Director. This Group has the responsibility of developing a systematic and co-ordinated policy for UNIDO in the field of energy taking into account the recommendations of the New Delhi Declaration and Plan of Action and co-ordinating the activities of other United Nations organizations as they relate to industrial energy.

B. Co-ordination

17.9 Bearing in mind the stress laid by the Lima Declaration and Plan of Action on Industrial Development and Co-operation on the central co-ordinating role of UNIDO in the field of industrial development, a section for interagency programme co-ordination was included in the newly established Division of Policy Co-ordination when the Secretariat was reorganized at the beginning of 1976. This section provided secretariat services for the UNIDO Advisory Committee on Co-ordination in the field of industrial development (UNIDAC). This Advisory Committee held three sessions in July 1975, September 1976 and September 1977. UNIDAC, however, in accordance with the recommendations of the Ad Hoc Committee on the Restructuring of the Economic and Social Sectors of the United Nations System was merged into the over-all framework of the Administrative Committee on Co-ordination (ACC). There are formal arrangements under which bilateral interscretariat meetings are held with FAO, ILO, WHO, WIPO, UNESCO, UNCTAD and the UNCTAD/GATT International Trade Centre. The vehicle of programme co-ordination between UNIDO and the regional commissions is essentially the joint industry divisions located in the regional commissions, where outposted UNIDO staff, as well as regional advisers financed from the Regular Programme of Technical Assistance, are stationed.

PROGRAMME 1: UNIDO: POLICY CO-ORDINATION

SUBPROGRAMME 1: PROGRAMME DEVELOPMENT AND EVALUATION

(b) Problem addressed

17.26 In seeking to accelerate their industrialization the developing countries face a variety of problems at several levels. The macro-economic aspects have to be dealt with in preparing national plans and policies for industry. At the micro-level, the technical processes to be employed in manufacturing any specific product or product range have to be selected, production facilities acquired, people trained in new skills, factory operations managed day by day, goods sold on home markets and possibly exported. An infrastructure of industrial institutions and services has to be established to support industrial enterprises, financial resources have to be mobilized for investment in industries. Specific attention, both at the macro- and micro-levels, needs to be given to such areas as energy and environment where developing countries have indicated a particular concern in their industrialization processes.

SUBPROGRAMME 2: SPECIAL MEASURES FOR THE LEAST DEVELOPED COUNTRIES

(a) Objective

17.34 The objective of this subprogramme is to assist the least developed, land-locked, island and most seriously affected developing countries to accelerate their industrial development by designing, formulating and promoting the financing of special measures and innovative programmes to meet their particular requirements.

(b) Problem addressed

17.35 (a) The New Delhi Declaration and Plan of Action on Industrialization of Developing Countries and International Co-operation for their industrial development drew attention to a number of specific problems confronting these groups of countries. These problems include the lack of viable industrial projects, inadequate inventories of their resources, particularly alternative energy sources, and the need for technology adapted to their special needs, especially in food processing, processing of minerals, alternative sources of energy, water extraction, building and construction, and also small foundries. Programme development of an innovative nature is called for directed at overcoming these particular obstacles.

(ii) Biennium 1980-1981

17.40 (a) The Third General Conference of UNIDO served to create a greater awareness of the industrial problems confronting island and land-locked developing countries. During this biennium the difficulties of island countries will be studied in depth with a view to formulating a strategy of industrial assistance for this group of countries. Preparatory work on a similar strategy for land-locked countries will also be initiated.

(iii) Biennium 1982-1983

17.61 It is not envisaged that the basic strategy and output will differ markedly from those of the preceding biennium. The activities, however, in project design and formulation in the areas of particular concern to the least developed countries in the New Delhi Declaration and Plan of Action referred to earlier, will in this biennium enter into the operational phase. Additionally, a number of operational projects specifically tailored to the requirements of island and land-locked developing countries will be implemented.

SUBPROGRAMME 4: SYSTEM OF CONTINUING CONSULTATIONS ON THE EQUITABLE DISTRIBUTION OF WORLD INDUSTRY

(a) Objective

17.5<sup>b</sup> The System of Consultations is the instrument through which UNIDO serves as a forum for developed and developing countries in their contacts, consultations and at the request of countries concerned negotiations directed towards the industrialization of developing countries. The objectives of the System are to obtain a consensus on the required improvements in the present forms of international industrial co-operation and on the share of developing countries in world industrial production. Action-oriented measures are elaborated on the issues under consideration.

(d) Strategy and output

(ii) Biennium 1980-1981

17.62 At the opening of this biennium more than four years will have elapsed since the seventh special session of the General Assembly endorsed the recommendations of the Lima Declaration and Plan of Action, and decided that the System of Continuing Consultations should be established at the global, regional, interregional and sectoral levels. During the years 1980-1981, it is anticipated that the first consultation meetings will be held on three new sectors which were selected by the Board at its thirteenth session in 1979, pharmaceuticals, food processing and capital goods, in addition to one common topic, training of industrial manpower. Furthermore, a third consultation meeting is being held on fertilizers and second consultation meetings on leather and leather products and petrochemicals. During the years 1982-1983 it is anticipated that the first consultation meeting on industrial financing will be held, in addition to convening the third consultation meeting on iron and steel, and the second consultation meeting on agricultural machinery and vegetable oils and fats. In addition, follow-up and preparatory activities relating to at least 10 industrial sectors and subsectors are being carried out. Pending the decisions of the Board at its fourteenth session, the scope of the System of Consultations will be expanded at the sectoral level; consultations will be convened on textiles and wearing apparel, non-ferrous metals heavy transport equipment, inorganic chemicals and building materials. At the global level, the System will expand to include consultations on industrial technology and insurance guarantees. Regional and interregional consultations will be held on all sectors to provide practical

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follow up and to promote industrial co-operation at these levels. This mandate implies that the System of Consultations will cover five additional sectors and two common topics making a total of 14 sectors and five common topics.

(iii) Biennium 1982-1983

17.63 Activities along the lines described above will be expanded and intensified. The widening of the scope of the System of Consultations as recommended by the Third General Conference will be initiated in 1981 pending the decisions of the Board at its fourteenth session. In 1982-1983 preparations will be completed to hold consultations on textiles and wearing apparel, non-ferrous metals, industrial technology and insurance guarantees. Preparatory work will be undertaken for consultations on other additional sectors to be convened in 1984 and 1985. These are heavy transport equipment, inorganic chemicals and building materials.

(e) Expected impact

17.67 (a) The impact of the System of Consultations will be increased in correlation with its expansion to cover 14 industrial sectors, five common topics, and regional and interregional consultations on each of these. Action-oriented measures will be formulated to improve the terms and conditions of industrial co-operation and to increase the share of developing countries in world industrial production.

PROGRAMME 2: UNIDO: INDUSTRIAL STUDIES AND RESEARCH

Organization

4. Expected completions and consequent reorganizations

(b) Consequent reorganizations

17.71 As a result of the redeployment of staff in the light of the priorities emanating from the New Delhi Declaration and Plan of Action a number of programme elements were cancelled at the outset of the biennium. These were programme elements:

- 1.3 Planning and programming methodology
- 1.4 New international industrial structure
- 1.5 External financing of industrial development.

17.72 The following joint activities are expected to be undertaken:

- (a) Projects in the UNEP Regional Seas Programme;
- (b) Regional industrial surveys and other activities, through the joint industry divisions of UNIDO and the regional commissions.

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- (c) Studies related to the role of women in industrialization: the units involved would include ILO;
- (d) Joint econometric modelling activities related to increasing the share of the developing countries in the trade of manufactures: the units involved would include UNCTAD.

#### A. Legislative basis of the revision

As indicated in the proposed medium-term plan for the period 1980-1983 (A/33/6/Rev.1) the proposed agenda for the Third General Conference of UNIDO indicated that its outcome could substantially influence the activities of UNIDO. With the adoption of the New Delhi Declaration and Plan of Action and the resolution of the Third General Conference, this substantial change has come about necessitating a significant shift in emphasis and a revision of the medium-term plan originally prepared.

The most significant new features within the industrial studies and research programme emanating from the Third General Conference relate to: the disaggregation of the Lima target the continuous surveillance of the industrial restructuring process the integration and participation of women in the industrialization process the elaboration of a programme of action for the African Industrial Development Decade the preparation of comprehensive industrial resource inventories and other study activities related to the least developed, land-locked, island and most seriously affected developing countries research related to the utilization of natural resources, particularly energy resources and the development of alternative sources the study of new major industrial sectors, and the undertaking of preparatory work for, and subsequent servicing of, an intergovernmental conference on the North-South Global Fund and similar activities in relation to the intergovernmental committee, to consider ways and means of increasing the share of developing countries in world trade in industrial products.

These elements are reflected in the revised subprogramme narratives below. It should be noted that in respect of subprogramme 1, Global and Conceptual Studies and Research, three programme elements originally envisaged in the proposed programme budget for 1980-1981 have been cancelled in the light of new priorities set at the Third General Conference. In the proposed programme budget for 1980-1981 a subprogramme 6, Programme formulation and direction and related activities was introduced, the scope of which has been broadened still further subsequent to the Third General Conference of UNIDO.

In its resolution 33/76 the General Assembly requested that "suitable measures be carried out, in accordance with established practice, including consideration by the Industrial Development Board when required, to strengthen, within the secretariat of the United Nations Industrial Development Organization, its activities relating to the development of the technological capability of and the transfer of technology to the developing countries in the industrial field".

The New Delhi Declaration and Plan of Action (ID/CONF.4/22) in its chapter VI, section III, on industrial technology, has given several guidelines for further action by UNIDO. It has also called for providing high priority in UNIDO's activities to industrial technology development and transfer to developing countries, making suitable institutional arrangements within the UNIDO secretariat, and according more dynamism and resources to operational and promotional activities concerning industrial technology.

The Industrial Development Board at its thirteenth session, recommended that the Industrial and Technological Information Bank (INTIB) be continued as an on-going activity of UNIDO and its scope extended to the sectors and topics covered by the System of Consultations as well as the sectors chosen in the International Forum on Appropriate Industrial Technology.

The New Delhi Declaration and Plan of Action has reiterated the need for such extension and in addition called for the preparation of state-of-the-art reports, and dissemination of information, on energy-related technologies. The interrelationship between INTIB and the global network of technological information has been stressed in General Assembly resolution 32/178.

#### B. Subprogramme narratives

##### SUBPROGRAMME 1: GLOBAL AND CONCEPTUAL STUDIES AND RESEARCH

###### (a) Objective

17.80 The objective of this subprogramme is to study industrial development trends and structural changes, on a global basis, in the light of the Lima and New Delhi Declarations and Plans of Action, in order to develop industrialization strategies and policies which will further the establishment of a new international economic order.

###### (b) Problem addressed

17.81 In endeavouring to achieve industrial growth commensurate with the targets set and in conformity with the measures recommended in the Lima and New Delhi Declarations and Plans of Action, the developing countries are confronted with constraints, internal as well as external. These constraints and their implications need to be analysed when formulating and evaluating policies appropriate to diverse, but interconnected economies. Progress towards the restructuring of world industrial production in order to achieve development targets has to be monitored and guidance offered to the developing countries on possible strategies for overcoming the obstacles encountered. Policies and mechanisms of international co-operation for industrial development will need to be further elaborated in the light of the Declaration and Plan of Action for the Establishment of a New International Economic Order.

###### (c) Legislative authority

17.82 The legislative authority for this subprogramme derives from General

Assembly resolution 3362 (S-VII) on development and international economic co-operation, section IV: paragraph 1 thereof endorsed the Lima Declaration and Plan of Action. In its resolution 31/163 on industrial redeployment in favour of developing countries, the General Assembly requested the Executive Director of UNIDO to prepare studies in this connexion which would include policy recommendations and the identification of specific industries and sectors of industries amenable to accelerated redeployment.

17.83 This subprogramme is also based on the report of the Ad Hoc Committee on Long-Range Strategy for UNIDO (ID/B/142), in which it was recommended that the implementation of industrial strategies should be initiated and developed by studies at the global level as well as the country, regional and sectoral levels. The strategy and output of this subprogramme pay full regard to the recommendation of the Ad Hoc Committee concerning studies at the various levels.

Further legislative authority is derived from the Third General Conference of UNIDO, at which the status of implementation of the Lima Declaration and Plan of Action was reviewed and the UNIDO secretariat was requested, inter alia, to: (a) create a mechanism for disaggregating the Lima target into mid-term, industrial sectoral and regional targets (D/CONF.4/22, para.142); (b) render effective assistance to the intergovernmental committee in identifying the ways and means of securing a fair share of world trade in manufacturing goods for developing countries, ibid., paras. 288-289; and (c) undertake continuous surveillance of the industrial restructuring process, analysis of the changing international division of labour, locating and identifying natural, sectoral endowments and examination of prospects of and obstacles to redeployment, ibid., para. 143. Legislative authority is also derived from the resolution adopted at the Third General Conference of UNIDO pertaining to women in industrialization.

(d) Strategy

(i) Situation at the end of 1981

17.85 The mechanism for disaggregating the Lima target into its mid-term, industrial sectoral and regional perspectives will have been established, with enhancement of the sectoral detail in the current LIDO (Lima Industrial Development Objective) Model, and an increase in the number of countries individually treated in the UNIDO World Industry Co-operation Model. The joint UNIDO/UNCTAD Model will have been transmitted to the ACC Task Force on Long-Term Development Objectives to be used by the United Nations system in the field of harmonization of development objectives and perspectives. A formal computer-based analytical framework will have been constructed: to analyse the implications of the Lima target in terms of international trade in manufactures and semi-manufactures; to suggest measures to increase the share of the developing countries in the world trade in industrial products; and to explore interregional trade and co-operation schemes. The third round of the monitoring exercise on the progress and implementation of the Lima Declaration and Plan of Action will have been completed. The prospects and constraints relating to redeployment of industries to developing countries and of tendencies in the international restructuring process will have been analysed.

Regular surveillance reports will have been issued. Recommendations will have formulated on national policies and international actions conducive to industrial redeployment as an essential step towards achieving an equitable international division of labour. Studies will also have been conducted in respect of the role of women in the industrialization process.

(ii) The period starting with the biennium 1982-1983

17.86 In addition to continuing the activities undertaken in the previous biennium, with suitable changes of emphasis because the problems will alter significantly as the share of the developing countries in world industrial production rises, this subprogramme will be concerned with the elaboration of long-term development objectives for the International Development Strategy for the Third United Nations Development Decade. Work will continue, in co-operation with other United Nations bodies, on the development of long-term projections as required by the various programmes of the Organization. The monitoring function will continue to be exercised, the findings being made available to Governments, and studies and research will continue into both the opportunities and the obstacles to the deployment of industrial production capacity on a growing scale in the developing countries.

(e) Expected impact

17.88 The findings of the studies in the subprogramme will be transmitted to Governments for consideration when formulating industrial policies and plans. They are expected to assist Governments and the international community at large in taking more effective action to achieve the targets set in the Lima and New Delhi Declarations and Plans of Action through a greater awareness of the complex functioning of the process of industrial development and the mechanisms of co-operation between nations to their mutual benefit.

SUBPROGRAMME 2: REGIONAL AND COUNTRY STUDIES AND RESEARCH

(a) Objective

17.89 The objective of this subprogramme is to study the structure, pattern and trends of industrial development at the country, regional and subregional levels with a view to advising appropriate governmental and intergovernmental agencies on strategies and measures for achieving the Lima target, and to study existing schemes and possible models for economic co-operation between countries in order to assist Governments in developing industries to serve regional and subregional markets.

(b) Problem addressed

17.90 In view of the complex of socio-economic factors and of human, financial and natural resources, in particular energy resources, which have to be taken into account at the country, regional and subregional levels, Governments express the need for advice to deal with their difficulties in drawing up strategies,

development plans and policies for industrialization in the context of the Lima target and the New Delhi Declaration and Plan of Action, and within the framework of collective self-reliance in an interdependent world. Comparative analyses and in-depth studies, including alternative concepts, methodologies and models of industrial development, have been requested by legislative bodies to assist Governments, both nationally and regionally, in overcoming these difficulties. Further problems arise in connexion with project selection and design and, later on, in project implementation and evaluation and in determining what follow-up activities are advisable. Especial emphasis is placed on activities designed to accelerate the industrial development of the least developed, land-locked, island and most seriously affected developing countries, and on a programme for the accelerated development of Africa over the next decade. Governments and intergovernmental organizations can be assisted in this phase by comparative analyses of criteria, specific procedures and institutional arrangements in developing countries at different levels of development.

(c) Legislative authority

17.91 The legislative authority for this subprogramme derives from General Assembly resolution 3362 (S-VII), section IV. As noted under subprogramme 1, the report of the Ad Hoc Committee on Long-Range Strategy for UNIDO included studies at the regional and country level among the activities by which UNIDO might advise and assist developing countries and UNDP on policies and strategies concerning industrialization within the context of over-all development plans. This authority has been compounded by appropriate paragraphs and chapters in the New Delhi Declaration and Plan of Action (most significantly chapter VIII on Special Measures) as well as by the resolution on the Industrial Development Decade for Africa. Legislative authority for activities related to the public industrial sector stems from General Assembly resolution 32/179.

(d) Strategy

(i) Situation at the end of 1981

17.92 By the end of 1981, another issue of the Industrial Development Survey will have been completed. Furthermore, a programme of action for the African Industrial Development Decade at the national and regional levels will have been formulated and its implementation initiated with the conduct of a comparative study on industrial policies and strategies in the African region. Countries' experience of regional and subregional co-operation will have been assessed and studies undertaken with a view to instituting improved mechanisms for economic co-operation among developing countries. Given the priorities set in the New Delhi Declaration and Plan of Action, national resource studies will have been completed in respect of 10 least developed countries, as will a comprehensive study on the role of the public industrial sector.

17.94 The subprogramme is also responsible for organizing the storage and retrieval of statistical data to meet the requirements of the entire industrial studies and research programme and undertakes, as required, statistical research

and special analyses. This work will be matched by the preparation of a handbook containing country industrial development statistics and other pertinent data in the form of country briefs, the first edition of which is scheduled for the end of the biennium.

(ii) The period starting with the biennium 1982-1983

17.95 In addition to ensuring the logical and consistent development of the lines of inquiry pursued during the previous biennium, it is contemplated to examine the feasibility of issuing the Industrial Development Survey on an annual basis, while the handbook of country industrial development statistics will be updated on a continuous basis. The work on the programme of action for the African Industrial Development Decade as well as that directed towards the particular situation of the least developed, land-locked, island and most seriously affected developing countries shall continue on an intensified basis, drawing upon the experience of the previous biennium.

(e) Expected impact

17.97 No objective indicators can be provided for this subprogramme. The various studies are expected to assist national, regional and subregional authorities in improving the quality and efficiency of their industrial planning and in the implementation of their development plans. In so doing, they can contribute to improving the effectiveness of economic co-operation among developing countries, and ensuring the fulfilment not only of the objectives of the plan of action for the African Industrial Development Decade but also of those set in the Declarations and Plans of Action adopted at Lima and New Delhi.

SUBPROGRAMME 3: SECTORAL STUDIES AND RESEARCH

(a) Objective

17.98 The objective of this subprogramme is to determine, within each sector, the share of the developing countries in total world industrial production at specific dates in the future; to contribute to a restructuring of world industry through sectoral growth in the developing countries, reducing uncertainty as to long-term prospects and increasing international co-operation; to assist policy makers in planning sectoral development in the developing countries; and to identify areas of activity to be entered into by UNIDO within the context of its technical co-operation activities.

(b) Problem addressed

17.99 Relocating industry and changing the geographical distribution of industrial production facilities on the scale envisaged by the Lima Declaration and Plan of Action, when it set the target that the developing countries should achieve a share of world industrial production amounting to at least 25 per cent by the year 2000, has been widely recognized as a challenging task involving a broad range of problems, both socio-economic and techno-economic in nature, for both developing and developed countries. One of the many implications is that the decision-

making processes will need to be aided by the provision of data relevant to such factors as investment, manpower and energy requirements in specific branches of industry.

(c) Legislative authority

17.100 As for subprogrammes 1 and 2, the legislative authority for this subprogramme derives from the endorsement by the General Assembly of the Lima Declaration and Plan of Action in resolution 3362 (S-VII), which stated that the role and activities of UNIDO be based, among other things, on the report of the Ad Hoc Committee on Long-Range Strategy for UNIDO. The report deals with studies at the sectoral and other levels. It should also be noted that in the New Delhi Declaration and Plan of Action attention was drawn to major industrial sectors which had not as yet been included in the programme of sectoral studies and research. Consequently, it is intended to take steps to incorporate, to the maximum degree possible, certain sectors of particular significance to the industrial development of the developing countries, viz. textiles and clothing, building materials, non-ferrous metals, and other technologically advanced industrial sectors.

(d) Strategy

(i) Situation at the end of 1981

17.101 The sectors and subsectors studied between the inception of the subprogramme in 1976 and the end of 1981 are those which the System of Consultations is dealing or is preparing to deal, including those new sectors indicated in the New Delhi Declaration and Plan of Action.

17.102 In the past, the world-wide studies of selected industrial branches had been in the form of comprehensive state-of-the-art analyses of the past situation, present structure and trends in the respective sectors, encompassing assessments of possible strategies and sectoral projections, complemented by technical, economic and commercial data. However, by the end of the biennium a new approach comprising three discrete user-oriented stages, which was adopted at the outset of the biennium, will have been put into effect. In the initial stage, an analytical appraisal is made of current and future developments in the sectors in question and discussed at the first consultation meeting related to that sector, whereafter - and on the basis of the discussions - alternative sectoral strategies for groups of developing countries with common characteristics are elaborated in a second stage for presentation to policy makers in developing countries as well as serving as background material for the second round of consultations. In a third stage, a plan of action derived from the alternative strategies above and found best suited to the development of the sector studied is elaborated for subsequent negotiation and implementation. This modified approach ensures not only greater interaction between the subprogramme and the System of Consultations, but also a clearer distinction between the various users: the consultation system, policy makers in developing countries, and those persons within UNIDO concerned with the programming of technical co-operation activities. The information collected is periodically

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updated in the light of industrial development plans and decisions regarding industrial projects in both developing and developed countries. The methodology and forecasting techniques utilized in the studies are under continuous review, with the aim of improving the value of these documents in offering guidance to the Governments of developing countries in their industrial development. By the end of 1981 analytical appraisals will have been completed in respect of the food, pharmaceuticals, capital goods, energy, textiles and clothing, building materials and non-ferrous metals, with alternative sectoral strategies being elaborated in respect of iron and steel, fertilizers, petrochemicals, vegetable oils and fats, and leather.

(ii) The period starting with the biennium 1982-1983

17.103 It is envisaged that the selection of new sectors for in-depth study will continue in this biennium to be closely related to the requirements of the System of Consultations. Particular emphasis will be given to investigating the priority sectors identified in the New Delhi Declaration and Plan of Action, while action plans will be developed for the sectors studied in the previous biennium. The findings of these investigations will be disseminated to national decision makers in the sectors concerned. Emphasis will also be placed on intersectoral studies, and energy-related aspects will be given an increased measure of attention.

(e) Expected impact

17.105 Objective indicators of achievement cannot be provided for this subprogramme in view of the nature of the problem addressed. The studies are expected to assist Governments and, especially through their use in connexion with the System of Consultations on the distribution of world industry, other parties to the industrialization process in assessing the prospects for various sectors and in making decisions for their future development in keeping with the aims and objectives of the new international economic order. The studies will also provide additional orientation for the technical co-operation activities of UNIDO.

SUBPROGRAMME 4: DEVELOPMENT AND TRANSFER OF TECHNOLOGY

(a) Objective

17.106 The objective of this programme is to assist developing countries by means of studies, research and promotional action, in matters relating to the domestic technological development and the acquisition from external sources of technology for facilitating their accelerated industrial development.

(b) Problem addressed

17.107 All industrial production requires the use of technology, but there is generally some degree of choice among possible technologies. A particular developing country manufacturing a particular industrial product may sometimes be well advised to use, without modification, a technology in current use in developed countries, in which case the problem is one of selection, acquisition and

assimilation. Often, however, some adaptation or modification of the technology is desirable. There are also circumstances in which it would be even better if new technologies suited to the production structure and market of developing countries were developed. After deciding on the technology, production equipment has to be purchased and installed. Manufacture will, in many cases, be subject to the conclusion of agreements covering licensing and provision of technical know-how. The prices and other conditions governing the transfer of technology have an important influence on the establishment and expansion of industries in the developing countries. The efforts of the developing countries to develop themselves technologies suitable to their conditions needs strengthening, in particular as regards commercialization of such technologies. The basic problem is one of strengthening the technological capabilities of developing countries in a variety of interrelated areas relevant to their technological development, thus reducing progressively their reliance on external sources of expertise.

(c) Legislative authority

17.103 The legislative authority for this subprogramme derives from General Assembly resolution 2152 (XXI) on UNIDO, paragraph 2(b); its resolution 3202 (S-VI) on the programme of action on the establishment of a new international economic order, section IV; its resolution 3507 (XXX) on institutional arrangements in the field of the transfer of technology; its resolution 3362 (S-VII) on development and international economic co-operation, section III and, for its endorsement of the Lima Declaration and Plan of Action, section IV; its resolution 32/183 on the establishment of a network for the exchange of technological information; and its resolution 32/115 on the United Nations Conference on Science and Technology for Development, section I, paragraphs 3 and 6; General Assembly resolution 33/78, section IV; New Delhi Declaration and Plan of Action, chapter VI, section III; and from IDB resolution 47 (XI) on international co-operation in the transfer of technology and decision IV (XI).

(d) Strategy and output

(i) Situation at the end of 1981

17.111 Increased assistance will be given on the following lines: the formulation, adjustment and refinement of national technology plans and policies will be aided through surveys and advisory missions on the spot, joint discussions in meetings and workshops, and the dissemination of collected and processed material. Indigenous technological capabilities will be developed and strengthened by upgrading indigenous technologies identified in directories by specialists in and outside UNIDO. Training courses, workshops and seminars will contribute to the upgrading of these capabilities. Appropriate technologies will be increasingly identified, developed, promoted and with the assistance of specialized research and development institutions located as far as possible in developing countries. The use of these technologies, developed through UNIDO programmes or identified as such from available alternatives, will be promoted through information, published material, studies with recommendations and meetings of various types. Improved selection and acquisition methods will be elaborated as a result of the operation

and the proper functioning of national and regional centres for the transfer of technology, by then more numerous and with a settled modus operandi. Consultancy and information services specializing in individual industrial sectors will develop beyond the initial tentative stages in consequence of the training and related activities envisaged for the biennium 1978-1979. Co-operation among developing countries and between developing and developed countries will be systematized and brought to the first stages of institutionalization, by bringing together the interested parties and promoting co-operative programmes. Programmes will have been initiated for the identification and greater use of the technologies as well as the technological expertise and capabilities of the developing countries. "Centres of excellence" or specialized centres for technology co-operation will have been promoted as well as greater interlinkages among various industrial and technological institutions. A programme for the preparation of technology perspectives in important industrial sectors and an assessment of emerging technological breakthroughs and their implications for the developing countries will have been initiated. Several projects in industrial technology to support the African Development Decade will have been initiated.

(ii) The period starting with the biennium 1982-1983

17.112 An increased output will be required from this subprogramme in the biennium, since many developing countries will have reached a stage in their industrial development in which the technological content of their manufacturing operations will be more sophisticated than hitherto. No fundamental change in strategy is foreseen, but changes of emphasis may well be required. It appears probable that growing attention will need to be given to development of the capability of undertaking technological innovation, modification and adaptation within the developing countries themselves. Greater sensitization of the need for and ways and means of harnessing emerging technological breakthroughs for possible adoption in developing countries will be created. Countries will be increasingly supported in their efforts to adopt technology plans and policies as an integral part of their industrial development.

(c) Expected impact

17.114 As a result of the activities of this subprogramme, it is expected that the developing countries will be better able to deal with the technological aspects of their industrial development. When they have recourse to external sources of technology they are expected to be in a better position to select technologies and secure favourable terms; in addition, many developing countries are expected to strengthen significantly their capability for relying on domestic resources for the necessary industrial technology, in particular through improvement of institutional infrastructure and technological skills. Co-operation among developing countries in the development and transfer of industrial technology is expected to increase. In technology choice and development, developing countries are expected to have a greater awareness of the technological trends in industry sectors and the implications of emerging technological breakthroughs. With regard to most activities under this subprogramme, it is not possible to provide objective indicators of achievement.

SUBPROGRAMME 5 INDUSTRIAL INFORMATION AND ADVISORY SERVICES

(a) Objective

17.115 The objective of this subprogramme is to provide the developing countries with an independent source of information and advice on technological and other aspects of industrial production.

(b) Problems addressed

17.116 The problem addressed is largely that which has been described under subprogramme 4. Whereas that subprogramme focuses on the difficulties of substance in developing and transferring industrial technology and on institutions whose activities are intended to reduce those difficulties, there is an associated problem of how to organize efficiently the dissemination of industrial information to and in the developing countries. It is necessary to organize access to the available relevant information. In addition, however, many developing countries need advice, if not on how to formulate their requests for information, then on how to use and interpret the information to which they gain access. A variety of users have to be assisted including decision makers in Governments, enterprises and development finance institutions in regard to technology selection and acquisition; and research and development institutions in regard to technology development. It is in these areas that the subprogramme complements the activities of subprogramme 4.

(c) Legislative authority

17.117 The legislative authority for this subprogramme derives from General Assembly resolution 3362 (S-VII) on development and international economic co-operation, section IV, endorsing the Lima Declaration and Plan of Action, the report of the Ad Hoc Committee on Long-Range Strategy for UNIDO, which included recommendations on the industrial information clearing-house function of UNIDO, and General Assembly resolution 31/183 on the establishment of a network for the exchange of technological information, particularly paragraph 9, concerning the establishment of the Industrial and Technological Information Bank (INTIB); General Assembly resolution 32/178; recommendation of the Industrial Development Board at its thirteenth session; and the New Delhi Declaration and Plan of Action.

(d) Strategy

(i) Situation at the end of 1981

17.120 The Industrial and Technological Information Bank (INTIB) will have been operational for over two years as an ongoing activity of UNIDO with the mandate to enlarge its operations from the four sectors covered at the pilot stage to some 20 sectors. The actual extension of INTIB will depend on the resources provided. Techniques of communication of information are changing with unusual speed and the activities of the subprogramme must adapt themselves flexibly to changing requirements. The expectations of the developing countries in regard to information have also significantly increased. Subject to resources available it may be anticipated that the activities of INTIB will have been expanded with

on-line access to other relevant data banks on a world-wide basis and close integration with industrial information advisory services of the subprogramme. The linkages with institutions and users in developing countries will have been strengthened as also the capacity of the institutions to obtain and process information. Information on energy-related technologies for industrial development will also have been disseminated in line with the recommendations of the New Delhi Declaration and Plan of Action. Following the recommendations of the United Nations Conference on Science and Technology for Development, the activities of INTIB will have been developed to form an important component of the global network of technological information. It is anticipated that the developing countries may wish to rely increasingly on a central source of unbiased information and advice such as UNIDO will be able to provide under the subprogramme.

(ii) The period starting with the biennium 1982-1983

17.121 With the expectation that more developing countries will be establishing more of the industrial sectors that call for relatively sophisticated technology, it is a safe prediction that the need for industrial information and advisory services will continue to grow in volume. It will remain part of the strategy to be alert to the opportunities offered by technical advances in the information industry and to seek ever more cost-effective ways of providing these essential services to the developing countries. INTIB will be expected during this biennium not only to extend its sectoral coverage but also to intensify its activities, and to strengthen national and regional efforts in this regard.

(iii) Activities in the strategy that are considered to be of marginal usefulness and the legislation requiring them

17.122 The principle of avoiding duplication of effort would continue to be placed at the core of the strategy, but it is not possible to be specific about its application. The existing legislation is sufficiently elastic to allow adaptation of the activities.

(e) Expected impact

17.123 The industrial information and advisory services, operated in conjunction with a fully developed INTIB and in association with other activities relating to the development and transfer of technology, as described in various UNIDO programmes, are expected to strengthen significantly the capability of the developing countries to launch and operate their industrial ventures and the technological capabilities needed for accelerated industrial development. Objective indicators of achievement cannot be provided for this subprogramme, since information is a necessary but not sufficient condition for the establishment or expansion of industrial ventures.

SUBPROGRAMME 6: PROGRAMME FORMULATION AND DIRECTION AND RELATED ACTIVITIES  
(NEW SUBPROGRAMME)

(a) Objective

17.123A Further to providing over-all guidance and management of the industrial studies and research programme, this subprogramme aims at contributing to the establishment of a North-South Global Fund and to the mitigation of pollution by industry.

(b) Problem addressed

17.123B In the New Delhi Declaration and Plan of Action, particular emphasis is placed on the need to increase substantially the flow of additional resources to the developing countries, one such vehicle being a North-South Global Fund. The scope and operation of such a fund would constitute the major areas of investigation. In respect of the environment-related research, the main problems are those related to assessing and managing industrial pollution, be this within the context of UNEP Action Plans, contributions to the sectoral studies and research, or the formulation of operational activities.

(c) Legislative authority

17.123C The legislative authority for the industrial financing activity is derived from paragraphs 145-161 of the New Delhi Declaration and Plan of Action in which a specific time-frame is set, while that of the environmental studies is derived not only from the endorsement of the Lima Declaration and Plan of Action by the General Assembly in resolution 3362 (S-VII), but also from paragraphs 137, 140 (b), 187 and 245 of the New Delhi Declaration and Plan of Action.

(d) Strategy

(i) Situation at the end of 1981

17.123D It is expected that, following the estimation of financing requirements and an evaluation of the impact of financial flows on the economies of both industrialized and developing countries, an intergovernmental conference will have been held with the result that the study activities related thereto will have developed into, and been replaced by, financial promotion activities to be undertaken under a different subprogramme, pre-investment and investment activities. Contributions on environmental considerations will have been made to the sectoral studies, guidelines drafted on environmental impact procedures and other topics, and various joint UNIDO/UNEP projects completed.

(ii) The period starting with the biennium 1982-1983

17.123E As indicated above, the industrial financing activity in this biennium will have entered into an operational stage under a different subprogramme, whereas the environmental studies activity will continue to expand in relation to the scope of the UNEP Action Plans, sectoral studies and research and other activities.

(e) Expected impact

17.123F The activities under this subprogramme are expected to contribute (a) to the holding of an intergovernmental conference and thus to the establishment of a North-South Global Fund, as well as (b) to a better understanding of environmental problems. In connexion with the latter and in view of the nature of the problem addressed, an objective indicator of achievement cannot be cited, other than that the studies are designed to assist Governments in assessing the magnitude of the environmental problems associated with industry.

PROGRAMME 3: UNIDO: INDUSTRIAL OPERATIONS

SUBPROGRAMME 1: PLANNING AND PROGRAMMING OPERATIONS

Biennium 1980-1981

17.139 A key element in the efforts of developing countries to intensify the pace of their industrial development is expected to be the diversification of the structure of the industrial sector with a view to building an integrated and more self-reliant sector with greater linkages internally and with other sectors of the economy. UNIDO will assist in this task at levels of sophistication consonant with the complexity of the industrialization problems of the countries requesting assistance. In this endeavour particular attention will be paid to the requirements of the least developed, island, land-locked and most seriously affected developing countries. To assist industrial planners in these countries comprehensive inventories of their resources will be undertaken and industrial surveys prepared to support endogenous exploitation of their resources. In undertaking both these tasks particular emphasis will be laid on potential energy sources as well as to the environmental implications of industrial development in these countries.

SUBPROGRAMME 2: INSTITUTION BUILDING AND TRAINING OPERATIONS

(b) Problem addressed

17.148 In the developing countries the need for an effective integrated institutional infrastructure is particularly critical, since such infrastructure must in part compensate for the absence of a long tradition of industrial development and orientation. A clear example of the inadequate infrastructural arrangements is to be found in the field of quality control where, through insufficient quality control centres developing country manufacturers lack the knowledge of quality control standards applied in developed countries. Similar gaps are to be found in institutional coverage in a number of developing countries and in some countries there are overlapping areas in the scope and functions of institutions serving industry. Another problem stems from the fact that no general formula can be applied in infrastructural development: each country has its unique development characteristics which must be taken into account. The general lack of qualified personnel at the managerial and higher technical levels creates a particularly acute problem where institutional infrastructures are concerned, since training new staff to deal with the complex issues and operations involved is both time-consuming and

costly. Excessive delay and outlay in starting up new industries is a common problem, and the operation of existing units is often marked by under-utilized capacity. At the production level, the continuing expansion and diversification of industrial bases in the developing countries lead inevitably to a greater complexity in the new production units being established and to greater strains on the supply of managerial skills.

(ii) Biennium 1980-1981

17.152 During this biennium, the need for stable institutional infrastructures will increase with the pace of industrialization and the demand for UNIDO's assistance appears likely to outstrip resources. Priorities will therefore have to be set in consultation with Governments. Areas of greatest potential impact are expected to include the development of institutional abilities to select design and adapt appropriate technologies; the integration of complementary industries in industrial zones including export processing zones; the clustering of rural industries, the harmonization of industries with other sectors of the economy; institutional facilities to deal with subcontracting and redeployment, and institutes to promote standardization, metrology and quality control. Technical co-operation projects will aim to assist Governments to combine the development of national skills with the realization of specific industrialization targets, and to produce a high multiplier effect for example through industrial consultancy services. Manuals designed to facilitate the establishment or expansion of production facilities will be published. In co-operation with UNDP and Governments, factory establishment opportunities highlighted by pre-investment projects executed by other United Nations bodies will be examined.

17.153 Training activities will be continued along the lines described earlier, but with emphasis on training nationals of developing countries in their own countries or in other developing countries rather than in industrialized countries. Stress will be placed on developing national "Centres of excellence" and on promoting co-operation at the regional and interregional levels between training centres in developing countries. In undertaking this endeavour particular attention will be paid to the requirements of the least developed of the developing countries. Expenditures on field projects within the biennium are expected to amount to some \$US 52 million.

SUBPROGRAMME 3: OPERATIONS RELATING TO TECHNOLOGY DEVELOPMENT AND TRANSFER

(b) Problem addressed

17.159A The New Delhi Declaration and Plan of Action clearly identified the problem of the least developed, island and land-locked countries in acquiring technology adapted to their particular requirements. The Third General Conference of UNIDO also identified those industries where urgent action was required for this group of countries, namely, food processing, processing of minerals, alternative sources of energy, water extraction, building and construction, and also small foundries, and stressed the importance of assistance to cottage, small and medium-scale industry. A basic problem was the inadequate number of pilot and demonstration production units to assist these industries and industrial development in general.

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(ii) Biennium 1980-1981

17.165A During this biennium preparatory work will be carried out to further orient this subprogramme towards the priority areas identified at the Third General Conference of UNIDO. These priority areas include energy, industrial technology, the requirements of the least developed of the developing countries, and environment.

(iii) Biennium 1982-1983

17.166 Execution of the strategy described above would be continued with greater emphasis on the promotion of co-operation among developing countries. Expenditures on technical co-operation activities in the agro-based and related industries will be about \$43 million. In the metallurgical sector, some 90 projects will be implemented, at an expenditure of about \$30 million; in the engineering sector about some 80 projects will be implemented at a total expenditure of about \$32 million; and in the chemical and related industries, project expenditures are expected to be of the order of \$35 million. For the subprogramme as a whole, operational expenditures in the biennium will thus amount to about \$40 million. Within this target, there is anticipated to be a reorganization of the nature of projects implemented to reflect the priority areas identified at the Third General Conference of UNIDO, described above.

## SUBPROGRAMME 4: PRE-INVESTMENT ACTIVITIES

(ii) Biennium 1980-1981

17.173 Assistance along the lines described above will be intensified and expanded. In particular, attention will be focused on export industries based on national resources, on the promotion of regional industrial projects, and on examining the feasibility of projects involving new or adapted technologies, especially those which call for setting up pilot plants in the least developed countries and within integrated rural development schemes. During this biennium also preparatory work will be carried out on the establishment of an industrial project preparation facility to generate viable industrial projects for the least developed countries. This will be accompanied by an increased effort to improve the skill of developing countries in preparing and evaluating industrial feasibility studies, thereby wresting their dependence on consultancy firms in industrialized countries. Operational project expenditure in this biennium is expected to amount to about \$13 million.

(iii) Biennium 1982-1983

17.174 The assistance outlined above will be continued and expanded. It is expected that progress achieved through the System of Consultations (see programme 1, subprogramme 4), and the studies relating to redeployment (see programme 2, subprogramme 1) will increasingly influence the orientation of activities under this subprogramme. It is also envisaged that during this biennium the industrial project preparation facility will become fully operational. Operational project expenditures in this biennium are expected to amount to about \$19 million.