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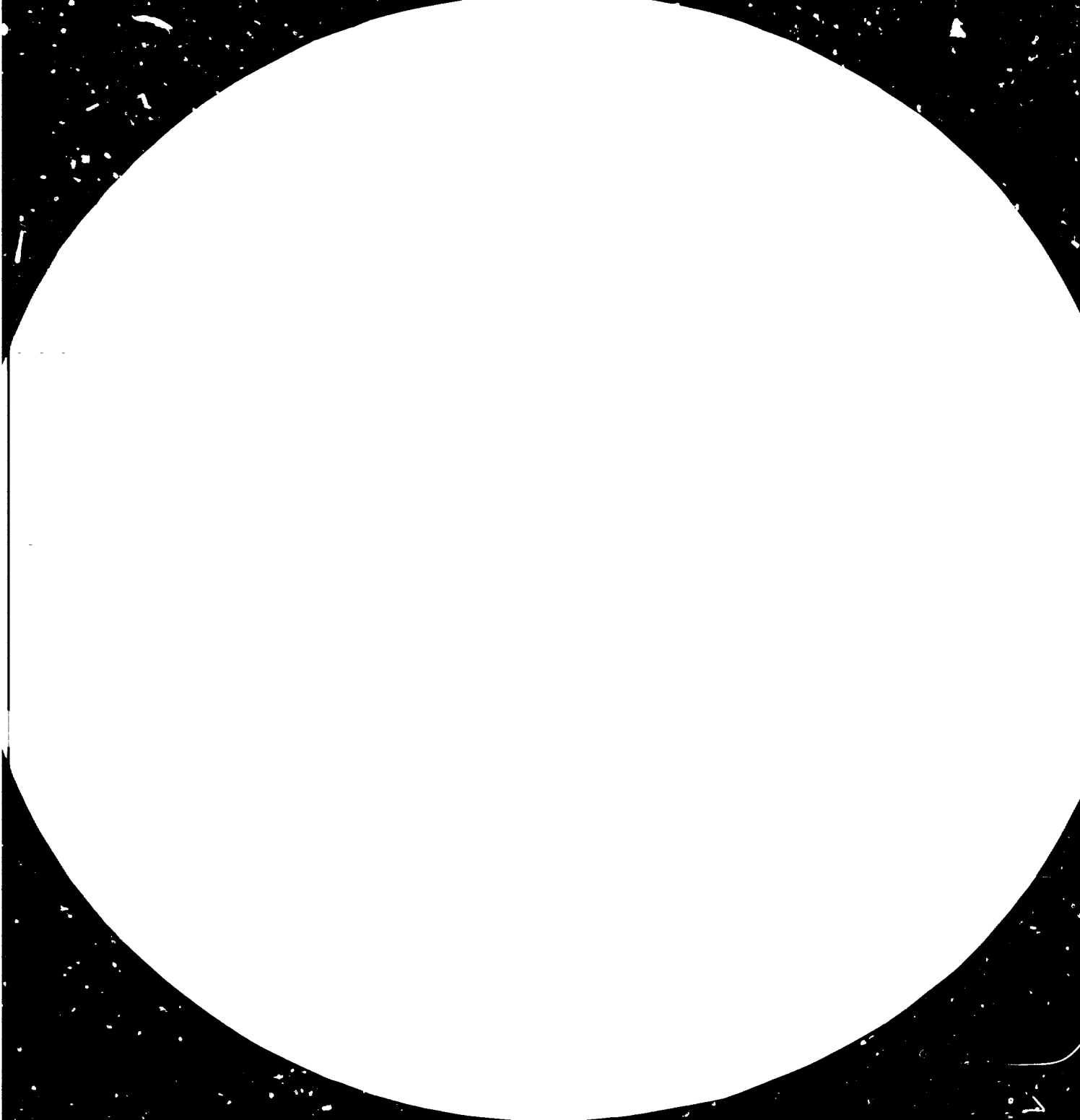
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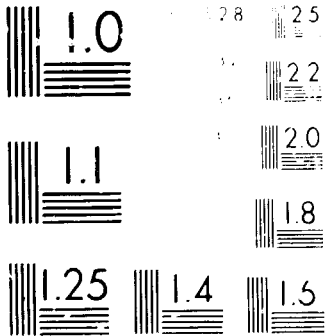
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Expert Group Meeting on the Changing Role and
Function of the Public Industrial Sector in
Development

Vienna, Austria, 5-9 October 1981

REPORT

V.81-33373

Explanatory notes

The following abbreviations have been used in this document:

APDC	Asian and Pacific Development Administration Centre
BHEL	Bharat Heavy Electricals Limited
CAFRAD	Centre africain de formation et de recherche administratives pour le développement (African Training and Research Centre in Administration and Development)
CLAD	Centro Latinoamericano de Administración para el Desarrollo (Latin American Center for Development Administration)
ECWA	Economic Commission for Western Asia
ESCAP	Economic and Social Commission for Asia and the Pacific
ICPE	International Center for Public Enterprises
OECD	Organisation for Economic Co-operation and Development

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INTRODUCTION

1. The significant role played by public industrial enterprises in the national developmental strategies of the developing countries and the need to ensure their effectiveness have been the subject of considerable concern to policy makers and planners. The United Nations has recognized the importance of public enterprises within the process of industrialization and as a factor of economic and social advancement of the developing world. In recognition of this, the General Assembly of the United Nations in resolution 32/179 of 19 December 1977, instructed the Secretary General "to continue studying the role of the public sector in promoting the economic development of developing countries" and in so doing to take into account "the role of the public sector in implementing the long-term strategy of industrialization". The Industrial Development Board requested the Executive Director of the United Nations Industrial Development Organization (UNIDO) in its resolution 48(XII) of 26 May 1978, to participate fully in this study.

2. In pursuing these directives, UNIDO, through its Division for Industrial Studies, has initiated a programme specifically focused on public industrial enterprises in industrial and economic development. An expert group meeting convened at Vienna in May 1979 considered various angles of the question including strategic aspects, special responsibilities of public industrial enterprises, organizational and institutional factors and management problems. The 1979 meeting made a broad perspective survey of the major issues confronting public industrial enterprises in developing countries. The meeting recommended that UNIDO should continue its studies, particularly with a view to further understanding the rationale and role of public industrial enterprises, their design and framework, their qualitative and quantitative impact upon growth and development of industry in varying environments, their dynamics of growth, their interlinkages, their corporate structures and legal forms, methodologies of control and supervision, corporate planning techniques and systems of performance evaluation.

3. Following these studies, UNIDO organized at Vienna from 5-9 October 1981, the Expert Group Meeting on the Changing Role and Function of the Public Industrial Sector in Development.

CONCLUSIONS AND RECOMMENDATIONS

4. During the intensive deliberations the Expert Group attempted to examine a series of important issues underlying the potential improvement of performance of public enterprises. This examination covered the conceptual basis of public enterprises, the question of objectives, the relationship between national development strategies and the policy and practice of public enterprises, the comparative roles of the public and private sectors, the legal forms and organizational structure, the relevance of planning in public enterprises, the comparative roles of the public and private sectors, the legal forms and organizational structure, the relevance of planning in public enterprises, the issue of interlinkages and finally the critical question of performance evaluation.

5. The Expert Group incorporated its observations, conclusions and recommendations within the body of its report under each specific section. In summarizing its conclusions the Group highlighted the following:

(a) It was essential for developing countries to conceptualize the basis of public enterprises and to clarify the motivations for their existence and the goals and objectives expected of them;

(b) Difficult as this might be, the Group felt that this was a prerequisite to the improvement of performance;

(c) The policies and managerial practices of public industrial enterprises must be integrated within the framework of the national economic, social and strategic approaches to development;

(d) It would be desirable to clarify the comparative roles of the public and private sectors in the strategies of development, and the areas where they can usefully co-operate;

(e) The use of various legal forms and organizational structures must be constantly reviewed with a view to employing them as instruments of better performance;

(f) The adoption of long-term corporate strategies and plans by public enterprises would be useful in improving performance;

(g) The adoption of corporate planning must be accompanied by the creation of the right environment, including the selection of competent leadership, delegation of authority to the enterprises, constructive relationship between the Government and enterprises, definition of autonomy and accountability, and the involvement of staff and their participation at all levels;

(h) This should be based upon the understanding of the interlinkages between public enterprises and other external factors;

(i) There was an urgent need to refine the system of performance evaluation and convert it into a practical management tool.

6. In making the above comments the Expert Group recorded the following recommendations:

(a) The report of the meeting, together with the resource papers, should be published by UNIDO for dissemination to government policy-makers, planners, administrators and managers of public enterprises in developing countries and to governmental and non-governmental institutions;

(b) UNIDO should continue its efforts to contribute to improved performance of public enterprises through its research and technical assistance, particularly in the fields of pre-feasibility studies, management training, information, technical and economic co-operation among developing countries, and other programmes;

(c) The Group suggested that UNIDO should co-operate with the International Center for Public Enterprises for Developing Countries (ICPE) and other international and regional organizations, and undertake an examination of some of the basic issues which had been considered, particularly the promotion of corporate planning of public enterprises, taking into account the experience of countries with different socio-economic and socio-political systems, studies on interlinkages and the development of more effective systems of performance evaluation;

(d) The UNIDO Division of Industrial Operations could play a most valuable part in helping public enterprises through consultancy and technical assistance;

(e) The Group emphasized the important role of training and suggested that the UNIDO Training Branch should intensify its training programmes for the public industrial sector;

(f) There was an important need for further intensification and enlargement of UNIDO assistance in the preparation of pre-feasibility studies and in developing national capabilities and self-reliance in the preparation and evaluation of feasibility studies;

(g) Equally important was the need for improving management systems and effective methods of training of managerial and other key personnel;

(h) In developing a programme of activities, the Group recommended that UNIDO should work in close co-operation with other international institutions devoted to the needs of public enterprises, particularly the ICPE at Ljubljana, and the regional and national institutions established for the improvement of public administration, development planning and public enterprise management such as the Asian and Pacific Development Administration Center (APDC), Centre africain de formation et de recherche administratives pour le developpement (CAFRAD) and Centro Latinoamericano de Administración para el Desarrollo (CLAD).

I. ORGANIZATION OF THE MEETING

7. The Expert Group Meeting, organized by UNIDO, 5-9 October 1981, at Vienna, was attended by 20 participants from various developing and industrialized countries, including policy-makers, enterprise managers and representatives of the academic world. A list of the participants is contained in annex I.
8. To make the deliberations of the meeting as substantive as possible UNIDO had commissioned a number of papers covering both conceptual as well as empirical aspects, and some case studies. An issues paper "Public industrial enterprises in developing countries", (ID/WG.343/1, see annex II) was prepared in collaboration with P. Fernandes of ICPE. A complete list of the documents presented at the meeting is contained in annex II.
9. The following officers were elected:
- | | |
|---------------|-----------------|
| Chairman | Praxy Fernandes |
| Vice Chairman | U. Udo Aka |
| Rapporteur | Leroy P. Jones |
10. The specific objectives of the meeting as elaborated in an aide-mémoire distributed in advance of the meeting were "to review relevant research as well as experience on the issues concerned and to provide guidelines for policy-makers, planners and administrators as well as top managers of public industries in developing countries". The issues paper as well as the aide-mémoire amplified these objectives by proposing the following topics for the consideration of the Expert Group:
- (a) The conceptual basis of the public industrial sector;
 - (b) Industrial goals and policies of developing countries and their impact on public industrial enterprises;
 - (c) The comparative roles of public and private industrial sectors in the strategy of industrialization and a review of their policies and practices;
 - (d) Organizational patterns and legal structures of public industrial enterprises;
 - (e) Planning in public industrial enterprises;
 - (f) Interlinkages;
 - (g) The evaluation of performance of public industrial enterprises.
11. The Expert Group Meeting was opened by the Deputy Executive Director of UNIDO. He stressed the importance of the meeting as a recognition of the crucial role which the public industrial sector was expected to play in implementing the long-term strategy of industrialization of developing countries. A significant portion of the UNIDO technical assistance programme was directed towards assisting public enterprises in developing countries. While noting that public industries have been created for a variety of motives, he felt that irrespective of their social, economic and political background it was essential for developing countries to have clear concepts regarding the rationale for creating public industries. He further stressed the importance of well-conceived industrial development policies and strategies, and a clear understanding of the specific role and function of public industry, co-operatives, joint ventures and private industries, taking into account effective interlinkages among these categories. Above all, it was necessary, he said, to ensure efficiency of operation and effective discharge of social responsibility.

12. The Head, UNIDO Regional and Country Studies Branch, explained to the meeting the objectives and methodology envisaged, and he highlighted some of the major issues which required the consideration of the experts. He suggested that the Expert Group Meeting should adopt an action-oriented approach and make specific recommendations for a programme of activity to be undertaken by UNIDO in co-operation with ICPE and other international and regional organizations, relevant to the needs of public industrial enterprises. Mr. P. Fernandes presented the issues paper, and identified the main questions for examination. He suggested that while disaggregating the issues it was necessary to take a synoptic view of the total problem.

13. A work programme was adopted, and is contained in annex III.

II. THE CONCEPTUAL BASIS OF THE PUBLIC INDUSTRIAL SECTOR

14. The Expert Group felt that an examination of the changing role and function of the public industrial sector, and a true understanding of its actual and potential impact on industrialization and economic development, necessitated an appreciation of the concept of public enterprise in general and the public industrial enterprise in particular. The articulation of goals, the designing of policies, managerial systems, organizational structures and performance evaluation were entirely dependent upon the approach which the developing countries adopted in respect of the character and personality of public industrial enterprises. The meeting recognized that the role of public industrial enterprises in national development was the result of a complex interrelationships among economic, social, political and historical factors. Economic considerations on the one hand and socio-political considerations on the other, represented two angles of the perception of the role and rationale of public industrial enterprises.

15. In analysing current research and experience of the organization and management of public industrial enterprises, the Group felt that it would be useful to distinguish between three levels of analysis: conceptual, normative and actual.

16. It was felt that the suggested classification into "neo-classical" and "neo-Kaleckian" approaches was both too narrow and over-emphasized. The meeting felt that a more rational grouping of approaches would be economic and socio-political. While recognizing the nuances of difference between these two approaches, it was noted that in actual practice it would be inappropriate to completely isolate them.

17. The Expert Group noted that studies on this subject initiated by UNIDO, and the subject of the meeting itself, were confined to the manufacturing sector. For a true understanding of the concept of public enterprises it was necessary to examine the range of direct public participation in the marketplace, including enterprises in the infrastructure, public utilities, the service sector and the extractive sector. The Expert Group noted that other government actions, such as the elimination of price distortions, could also foster the efficiency of both public and private enterprises and the industrialization process.

18. The Group took note of the findings of the Tangiers Expert Group Meeting on the Concept Definition and Classification of Public Enterprises, which was organized by the ICPE in December 1980. The concept of public enterprises as seen by the Tangiers Group was based on an interaction of two dimensions - the public dimension and the enterprise dimension - with a consequential finding that the examination of alternative approaches and the relative balance of the two dimensions in various environments could be a useful means of analysing different concepts of public enterprise. Such an analysis also needed to be supported by taxonomical studies.

19. The Expert Group took note of the framework proposed by the Tangiers Group, and on this basis examined the theoretical and practical interpretations of these two dimensions in different environments. It was agreed that the public dimension of public industrial enterprises implied not only public ownership but also public control and public purpose. On the other hand, the enterprise dimension implied concepts of the business firm. The existing diversity in the conceptual approaches to public enterprises in different socio-economic systems tended to reflect the balance between the two dimensions.

20. In considering this question of concept, the meeting noted that in certain developing countries the growth of the public industrial sector was based on ideological considerations. In others, however, public enterprises had tended to grow for practical considerations, such as the gap in the availability of private endeavour, strategic considerations and the control over natural monopolies. This development appeared to indicate an economic rationale for public enterprises. Supporting this view was the patent fact that public enterprises had grown substantially in some industrial branches, even in the economies of the industrialized world.

21. It was pointed out that new forms of public industrial enterprise had arisen in some countries on the basis of "social ownership". Further, in a few countries the co-operative sector was included in the domain of the public sector; however, it was most commonly classified either separately or under the sphere of private enterprises.

22. The meeting was of the view that an analysis of the origin of public industrial enterprises and an understanding of their conceptual basis was an essential starting point for further consideration of their policies, practices and performances. In particular, it was felt that the goals and objectives of public industrial enterprises which shaped the direction of their impact on economic development were crucial to the effective organization and management of the public industrial sector. While conceding this position, the Group was firmly of the view that irrespective of the conceptual origin of public industrial enterprises, the need to manage and operate them at a high level of efficiency was paramount.

23. As an example of the role which public industrial enterprises could play in promoting social transformation which reflected its public dimension, the Group examined the specific contribution which public industrial enterprises could make to the advancement of the status of women and their integration as factors in development. The Group took note of the case study of a specific enterprise in a developing country which had conscientiously attempted to fulfil this role. The Group felt that public industrial enterprises could incorporate suitable policies in their management practices to promote the advancement of women, including integrating women into plans at all levels, encouraging education and skill improvements, implementing international agreements, and creating a favourable climate of opinion.

III. INDUSTRIAL GOALS, POLICIES, AND PLANS OF DEVELOPING COUNTRIES AND THEIR IMPACT ON PUBLIC INDUSTRIAL ENTERPRISES

24. The meeting discussed the important question of establishing a nexus between the formulation of national policies and programmes of economic development and the specific impact which these policies had on the public industrial sector. It was clear that the goals of public industrial enterprises would have to be conditioned and determined by the direction of overall national goals and policies. In turn, these national goals and policies reflected by national ideological approaches, the socio-economic environments and the historical and cultural conditions of each developing country.

25. The Group viewed this question in the light of empirical studies which were presented on the growth of the public industrial sector in the centrally planned economies of Eastern Europe, the developed market economies of Western Europe and the varying patterns of mixed economies in the Economic Commission for Western Asia (ECWA) and Economic and Social Commission for Asia and the Pacific (ESCAP) regions. These studies tended to show that the direction of the public industrial enterprises in the centrally planned economies was determined at a central level by national planners. The main tasks of the public industrial enterprises were determined based on and derived from the national plans. This often gave rise to a high degree of centralization and control. However, it was noted that there were recent trends towards decentralization and greater autonomy of public industrial enterprises in the centrally planned economies. The situation in the developed market economies was qualitatively different. Since these economies were primarily based on the concept of free enterprise public enterprises were essentially of a supporting nature, acting mainly in the infrastructure and public utilities. Wherever public enterprises had been set up in the manufacturing sector there was a tendency to view them as business firms operating under marketing conditions. In the case of Austria, while no doubt the genesis of the public industrial enterprises was derived out of strategic considerations, their actual organizational management was of an entrepreneurial character.

26. The studies of the ECWA and ESCAP regions indicated a variety of patterns corresponding to the great diversity of socio-economic environments in these areas. Except for a few centrally planned economies such as China, Mongolia and Viet Nam, the bulk of the countries in these regions had developed various forms of mixed economy. The definition of the role of public industrial enterprises therefore tended to vary from country to country, depending upon local environmental factors and the relative balance between public and private endeavour.

27. The Expert Group noted that one of the problems arising both in the industrial as well as in the developing economies was that specific goals and objectives were not clear. While appreciating that public industrial enterprises were expected to be promoters of broader national objectives, the Group felt that the effective management of public industrial enterprises would depend to a large extent on a clearer definition of the specific obligations and responsibilities of individual enterprises, and furthermore, establishing their priorities. Taking into consideration the earlier examination of the public and enterprise dimension of public industrial enterprises, there was a further need to clarify, as far as practical, the financial and commercial aims of the enterprises vis-à-vis the socio-economic aims.

28. In this context the Group noted the possibility that there could be two approaches to the question. The first which could be termed "synoptic rationality" implied a clear specification and measurement of objectives defined by the Government and executed by the enterprises. The other process of "muddling through" which appeared to be in evidence more frequently, was based on the avoidance of any explicit declaration or quantification of objectives, as a more practical expedient towards achieving a consensus between different interest groups within the economy. It was noted that since public enterprises were expected to discharge a number of non-commercial goals which were difficult to measure, the process of synoptic rationality ran the danger of breaking down. Whether or not this could be remedied by devices for "commercializing" non-commercial objectives by quantifying them, was considered by the Group and it was felt that such a process might not be particularly feasible. It was also noted by the Group that in some countries the large public enterprises, whose impact on the national economy was of a critical nature, could influence the direction of national policy through their own managerial attitudes and behaviour. Evidently this process would have to be on the basis of harmony with the national goals and through an intensive process of iteration.

29. The Expert Group arrived at the conclusion that the problem of stimulating improved performance in public enterprises and raising the level of their efficiency was intimately connected with the question of specification of objectives. While recognizing the difficulties which arose in their identification and the realities of the political and environmental situations, the meeting nevertheless urged that this question was the key to the situation, and a conscientious effort should be made to promote the idea of management of public industrial enterprises by objectives. Furthermore, these should be pre-determined and should not arise as a rationalization of the actual results of working. The tendency for public enterprises to resort to explaining away deficiencies by saying that they were contributions to social goals was noted.

IV. THE COMPARATIVE IMPACT OF PUBLIC AND PRIVATE ENTERPRISES IN INDUSTRIAL DEVELOPMENT

30. The Expert Group recognized that most developing countries had created various patterns of mixed economies. Economic development was consequently promoted through the use of both instruments: public industrial enterprises and private enterprises. An understanding of the comparative roles of the two sectors and the relative impact which each of them made to industrial development was therefore important. In this context the Group took note of a comparative survey prepared by the UNIDO secretariat (ID/WG.343/13, see annex II) which provided a substantive body of data on the situation in a wide range of developing countries. The survey identified the main motivating factors for the growth of public industrial enterprises, which included private sector inadequacies, control over natural monopolies, price stabilization, mobilization of savings, foreign exchange earnings, exploitation of national resources, the urge towards self-reliance, employment generation and other socio-political aspirations. Some of the main findings of this survey were noted by the Group as follows:

- (a) The role of public industrial enterprises had been increasing, especially in some oil-producing countries; had decreased in some developing countries and had fluctuated in others. In some countries the role had changed with changes in Government;
- (b) The emphasis of public industrial investment was on capital goods and intermediate goods with a decrease at the higher stages of processing;
- (c) Resource-based industrialization and industrial restructuring tended to create an expanded role for the public sector;
- (d) Consumer goods were primarily in the domain of the private or co-operative sectors;
- (e) There were indications that public industries generally contributed more to manufacturing investment than to employment and value added, primarily due to their capital intensity;
- (f) In countries where public industries had come of age, policies were being more clearly enunciated, particularly in respect of their interlinkages with and role of the private sector;
- (g) The demarcation of boundaries between public and private enterprises raised some conceptual difficulties since ownership structures tended to be intertwined;
- (h) There was a significant growth of mixed enterprises and joint ventures between public and private enterprises and the emergence of a new breed of public industries reflecting the co-operative relationships between state, private domestic industry and foreign investment.

31. The wealth of data contained in the comparative survey and the implications for policy and strategy arising therefrom provided a basis for the Expert Group to examine the comparative impact of the public and private sectors. The Expert Group came to the following conclusions:

(a) The nature and limitation of national data on the public industrial sector warranted cautious interpretation and conclusions;

(b) The origin and motivations for the expansion of public industrial enterprises evidently varied from region to region and country to country. Furthermore, there had been significant changes and fluctuations over a period of time, within individual countries, reflecting a variety of political, social and economic factors;

(c) Despite differences in ideological approach, there was ample evidence to indicate a substantial rise in the activity of public industrial enterprises in some industrial branches, even in countries which had conscientiously adopted market economies. It was not entirely possible to disentangle the political, social and economic motivations;

(d) In some developing countries there were clear declarations of national industrial policy with a demarcation of the roles of the public and private sectors. On the other hand there were many developing countries where the intents and purposes were not entirely specific and sectors were not demarcated into water-tight compartments. It would certainly be desirable for developing countries to enunciate industrial development policy and, wherever possible, specify what was expected of the public and the private sectors. While recognizing the desirability of this approach, it was noted that such declarations might not always be practical or politically expedient;

(e) The growth of the public industrial sector had been either through the establishment of state entrepreneurship or through the nationalization and transfer of ownership from private to public hands. Both these processes were in evidence in the developing countries. The transfer of ownership, which might be necessitated by strategic and ideological considerations, did not by itself result in any expansion of national investment in industrial development. On the other hand, state entrepreneurship created new production capacities in the country. Furthermore, there was evidence to indicate that public enterprises which expanded on an entrepreneurial basis tended to develop dynamic and business-like attitudes and styles;

(f) It was noted that in several developing countries the expansion of the public sector arose from the take-over of sick private units. This situation was necessitated by the desire of Governments to protect employment and productive capacity. The Group felt that the take-over of sick industries should be viewed with considerable care. There must be strong evidence of social purpose and reasonable prospects of economic recovery;

(g) The comparison of the roles of public and private sectors was not merely a question of quantitative figures or percentages of investment; the more critical issue was whether the policies and practices of public industrial enterprises were in any way different from those of private enterprises. In assuming that state intervention into business arose because of the desire to discharge social goals, it was necessary to ensure that the management, marketing and pricing policies of public industrial enterprises were such as to promote these social purposes;

(h) Finally, the Group was of the view that the comparative roles of the public and private sectors should be reviewed in the light of the concept of "efficiency" which needed to be defined in broader national terms.

V. ORGANIZATIONAL FRAMEWORK, INSTITUTIONAL RELATIONSHIPS AND MANAGEMENT OF PUBLIC INDUSTRIAL ENTERPRISES

32. The Group felt that it was necessary to examine the impact of public industrial enterprises on economic development in the context of the legal structures, organizational framework and management attitudes and styles within the public enterprises, and to ascertain whether the choice of legal and institutional patterns had any relevance to the efficiency of public industrial enterprises.

33. The Expert Group considered a paper by M. Ahmad (ID/WG.343/2, see annex II) which provided a review of the state of organization theory, the various approaches to organization - structuralist, behavioural and systemic - and the differences in approach emerging out of the three normally adopted forms of public enterprises - departmental undertakings, statutory corporations and government companies.

34. Discussions on this issue gave rise to the following observations and conclusions:

(a) Prima facie, it would appear that different legal structures and organizational patterns had a conditioning influence on the policies and practices in public enterprises in such matters as decision-making, communications, hierarchy in leadership, delegation and co-ordination;

(b) It was, however, necessary to recognize that the de jure position might not be necessarily matched by the de facto position, and that formal systems needed to be viewed in the light of informal systems;

(c) It was noted that in some countries there was a trend to move from one form of organization to another, graduating from departmental undertakings to government companies;

(d) The choice of legal structure was also often dependent upon the nature of the industry, the degree of its strategic position and the direction of social purpose;

(e) It was natural that departmental undertakings, being closer to the Government itself, would tend to inherit bureaucratic procedures and practices. On the other hand, it would be reasonable to expect that enterprises operated in the form of a company would tend to develop a business orientation;

(f) It should be recognized that in the matter of organization it was not only a question of the legal structure but also a matter of structural form. In this context, institutions such as holding companies and subsidiaries, multi-unit and multi-product operations, mixed enterprises and joint ventures created either in the form of companies or corporations would tend to develop varying behavioural patterns;

(g) The important issue was not so much the external legal form: managerial efficiency was more significantly influenced by other factors such as:

- (i) The availability of competent top management and leadership;
- (ii) Clarity of the purposes of the enterprise;
- (iii) The existence of bureaucratic and hierarchical systems or participative systems;
- (iv) The degree of autonomy allowed to the enterprise;
- (v) The nature and sensitivity of the supervisory control systems;
- (vi) The relationships between Government and the enterprise;
- (vii) The extent to which entrepreneurial ability and initiative were fostered in the enterprise.

VI. PLANNING IN PUBLIC ENTERPRISES

35. The Expert Group was given a presentation of a specific case-study of Bharat Heavy Electricals Limited (BHEL), a large Indian public industrial enterprise, by V. Krishnamurthy (ID/WG.343/9, see annex II). This case-study was a fascinating account of the revival and rehabilitation of a sick public industrial enterprise and its conversion into an effective and entrepreneurially oriented company. The transformation process was carried out through the adoption of corporate planning. The approach to corporate planning was exemplified by the case of BHEL and included:

- (a) The search for the corporate identity of the enterprise;
- (b) The establishment of its objectives in a long-term perspective;
- (c) The assessment of its strengths, weaknesses and resources;
- (d) Forecasting future development;
- (e) The understanding of the sensitive interrelationships between the enterprise and the environment;
- (f) The optimized synthesis of the plans of individual departments to reconcile conflict;
- (g) The development of a built-in system of performance evaluation;
- (h) The development of a "contractual relationship" with the Government.

36. As a result of the case study of BHEL, the Expert Group made the following observations:

- (a) This was a success story which indicated that there was cause for optimism and clear possibilities of performance improvement in public enterprises through the adoption of appropriate measures and methodologies and the creation of the right attitudes;
- (b) For a better appreciation of these possibilities it would be equally necessary to study cases of failures in order to identify the reasons for inefficiency with a view towards finding appropriate remedies;
- (c) The BHEL case, while endorsing the validity of the corporate planning approach, would also have to be interpreted in the light of other considerations which were present, such as the availability of a competent and dedicated top management group, the sympathetic and co-operative attitude of the governmental authorities, the involvement and participation at all levels of management and workers, and the development of a positive atmosphere.

37. In the light of the BHEL case-study, the Expert Group was of the view that it would be useful to promote the concept of corporate planning for public enterprises. In doing so, it was necessary to modify the standard approaches to corporate planning adopted by private enterprises in industrialized societies to make them applicable to the environmental

conditions of public industrial enterprises in developing countries. Furthermore, the success or failure of corporate planning as an instrument of performance improvement would be determined by environmental conditions, in particular, the attitudes of policy-makers and the bureaucracy, and the ability to create an atmosphere of involvement, commitment and participation at all levels of management.

38. In advocating the corporate planning approach the Expert Group cautioned that public industrial enterprises should not seek to constitute themselves into business entities divorced from national realities. The corporate plans of enterprises would need to be sensitively dovetailed to national plans, regional plans and sectoral plans to ensure vertical and horizontal co-operation. Evidently, the mere adoption of corporate plans by themselves was no guarantee of improved performance and was no substitute for good management. There was clearly the need for concerted efforts to develop professional and managerial skills suitable to the parameters in which public industrial enterprises functioned. In this context the Expert Group recognized the significant role which programmes of training could play towards the upgrading of managerial and technical skills.

39. Finally, the Expert Group believed that the success of corporate plans in public enterprises would be determined by their sensitivity to interlinkages with national external variables.

VII. INTERLINKAGES

40. The Expert Group felt that it was vital to appreciate the inter-relationships, interconnections and interlinkages which public enterprises had with external factors. It was necessary to identify these interlinkages to analyse their true nature and to develop a harmonious network of co-operative relationships. In this context, the Group took note of an analysis of the interlinkage issue presented by P. Fernandes (Paper No. 10, see annex II). The framework of interrelationships included the following important components:

(a) The most vital interlinkage was that which existed between the enterprise and the Government. The Group felt that the definition of this interlinkage would facilitate the management of public industrial enterprises. It was noted that the state played a dual role, first, as investor and entrepreneur and, secondly, as the promoter and protector of national aims and aspirations. The nature of the relationship implied defining explicitly the role of the Government which principally included the formulation of objectives, the provision of investment funds, the approval of investment decisions, the appointment of top management, directives in matters of national policy, the right to information and the monitoring of performance. The Group noted that while recognizing the validity of these interventions of the state in the affairs of public enterprises, there was a tendency to "over-control" and to intervene in operational matters of management. It was felt that such an intrusion of the governmental authority would weaken the entrepreneurial capability of the enterprise. It was in this context that the question of autonomy and accountability needed to be examined;

(b) The second category of interlinkages arose because of the inter-relationships existing within the family of public enterprises. The Group noted that public enterprises tended to be interdependent; the outputs of one enterprise often became the inputs of another and there was a whole range of transactions between the public enterprises. The nature of this interlinkage clearly called for harmony in investments, production, marketing, pricing and organization. Moreover, the success of any individual enterprise would be dependent on the success of others. The profitability of a given enterprise would be conditioned by the marketing policy of the supplying enterprise. The nature of these interlinkages gave rise to the necessity for systems of co-ordination. The Group noted that in actual practice, co-ordination between public enterprises had become a centralized function exercised at government level. It would be desirable to initiate a process whereby the interrelationships were determined by mutual consent and co-operation between the enterprises themselves;

(c) In a sense the interrelationships between public enterprises was also reflected in the set of the relationships with the private sector. Here, again, there were commercial transactions, input-output relationships and other sensitive interlinkages. It was clear, therefore, that the two sectors were tending to be interdependent and the success of private enterprises would be influenced by the success or otherwise of public enterprises and vice versa. In defining the relationship between the public and private sectors, one could view them as complementary, supplementary or competitive. Of particular interest was the responsibility of public industrial enterprises towards

small-scale industries in the private sector. The Group noted with satisfaction that public industries in some countries were attempting to foster and promote ancillary industries and downstream activities in the private sector, which were helpful towards the creation of a multiplier effect;

(d) The fourth set of interrelationships was with non-commercial institutions, such as universities, institutes of management, training establishments and associations of commerce and industry. This was an important interlinkage. The question which needed further examination was whether the public enterprises supported and conditioned the programmes of research and training institutions to make them more pragmatic and whether in turn the institutions influenced the enterprises in the right direction. Here, again, the Group recognized the significance of the training effort and the important advantages which could accrue through a harmonious relationship between the academic world and the world of practical management;

(e) Finally, public enterprises were tending to develop a whole series of interlinkages abroad. These relationships were of great concern because they involved critical matters such as import of technology, capital equipment, training and consultancy, export of goods and services, joint ventures and collaborative arrangements with foreign partners. A potential area of international linkages was the possibility of regional industrial co-operation among public industrial enterprises and with private enterprises. An important area of external interlinkage was the utilization of foreign aid, either from multilateral or bilateral sources. The implications of aid and the conditions which might be attached to it could influence the direction public enterprises followed.

41. In noting this complex set of institutional interlinkages the Expert Group also recognized that public enterprises needed to develop a sensitive understanding of other interest groups, notably of consumers and clients, workers and trade unions, the environment, local communities and the interests of future generations. The policies and practices of public enterprises needed to be moderated by these legitimate interest groups, partly as a response to the discharge of social obligation, and partly as a measure of improving business efficiency. Ultimately, it would be these interest groups which would determine the credibility of public industrial enterprises. Thus, consumer satisfaction, on one hand, would reflect the quality of goods and services and the reasonableness of prices; workers' satisfaction, on the other, would reflect the progressiveness of the public enterprise as an employer. Local communities and the environment would be indicators of the public enterprise contribution to social development, and finally, the long-term perspectives of public enterprise planning would affect in one way or another the generations of the future.

42. An efficient system of planning at the national level helped to identify, to take into account and to harmonize interlinkages. The ex ante analysis of interlinkages of different types could be a basis for co-ordinated measures in due time which reduced the cases of interventions in day-to-day operations of the public enterprises.

VIII. PERFORMANCE EVALUATION

43. From time to time throughout the deliberations of the Expert Group the question of evaluating the performance of public industrial enterprises, the development of criteria of evaluation and the setting up of evaluation mechanisms occurred. This was only natural because of the central importance of the question of performance evaluation. The entire system of public industrial enterprises and the drive to stimulate improved performance was absolutely dependent upon the evolution of an appropriate system of evaluation. This was undoubtedly a complex question because of the complexity of the institutional arrangement of public industrial enterprises, involving as it did a combination of business objectives and social objectives within the same organization. For a better appreciation of this question the Expert Group considered the papers prepared by G.P. Jenkins and M.H. Lahouel and P. Fernandes (Paper Nos. 8 and 11, see annex II) which suggested approaches to the question of performance evaluation. To test these approaches in the world of reality the Group also took note of a case-study presented by T. Killick (ID/WG.343/7, see annex II) on the performance evaluation of public enterprises in four African countries.

44. The Expert Group made an intensive examination of the question of evaluation, and came to the following conclusions:

(a) It was recognized that any attempt to improve public enterprise performance needed to be supported by a set of evaluation criteria and an effective working mechanism of performance evaluation;

(b) Despite this recognition which appeared to be self evident, the Group noted the ambiguities which surrounded this question in the developing countries and the evident lack of clarity in the designing of performance indicators;

(c) Consequently, public enterprises were placed in the hapless situation of being judged by a variety of criteria and by a variety of interests with no organic connection to the management process;

(d) Clearly, the starting point of developing a set of evaluation criteria would depend upon the clarity of the definition of objectives, and on the principle that performance was the achievement of pre-determined goals;

(e) In designing evaluation criteria it was necessary to recognize that the simplistic yardsticks of performance in private enterprises, which largely concentrated on financial viability and profitability, were inadequate for public industrial enterprises because of their different nature.

45. With these background observations the Expert Group first examined the relevance of the criterion of financial success. This was the classical yardstick used for the success of a business firm and was reflected in returns on investment and share values in the stock market. There was a tendency to under-rate the importance of financial criteria because of the social direction of public enterprises. The Group felt that this was not desirable. The evidence of the financial weaknesses of public enterprises and the heavy losses which they were incurring gave cause for concern. The losses of public enterprises had ultimately to be paid for from state exchequers and the

pockets of the taxpayers. Since development required investment resources, the generation of surpluses through the operations of public enterprises could itself be viewed as a social purpose. The Group also noted that there was empirical evidence to suggest that financially viable public enterprises tended to develop the necessary strength, morale and resources to undertake wider social obligations. It would appear therefore that there was no intrinsic conflict between the search for socio-economic objectives and the attainment of financial objectives.

46. Having recognized this, the Group was strongly of the view that the financial indicators were by no means sufficient for the purpose of evaluation. Financial success could measure efficiency but it could also result from market distortions and exploitative pricing policies such as those which resulted from a monopolistic position. Furthermore, the financial criterion, important as it was, did not reflect the true economic costs and benefits or the social purposes.

47. The second series of indicators, therefore, and one of considerable importance was that of productive performance. Here, the underlying idea was to ascertain how effectively the enterprise had utilized its invested resources in terms of the efficiency of the use of capital equipment, labour and materials. The classical indicators of capacity utilization, consumption coefficients and labour productivity were available for this purpose. The evaluation of productive performance was of equal applicability to the private sector and could thus be the basis for meaningful inter-firm comparisons. In this context the Group felt that efforts were needed to develop productivity indicators involving all factors of production and not just one single factor. This was necessitated by the degree of capital or labour intensity in public industrial enterprises. When speaking of the effectiveness of public enterprises and their performance, the objective assessment of productive capability was a good starting point.

48. The Group noted that financial indicators as expressed in financial statements such as balance sheets and profit and loss accounts were inadequate because they did not express accurately the real economic flow of costs and benefits. The technique of economic analysis, which was now widely practised, involved the correction of distortions and the establishment of accounting or shadow prices for various costs and benefits. This was particularly applicable to the cost of capital, the employment of labour, the earning of foreign exchange, the payment of taxes and the computation of external benefits generated through the enterprise's activity.

49. The same consideration applied to the question of social cost-benefit analysis. There were well-documented manuals on social cost-benefit analysis, notably those prepared by UNIDO, the Organisation for Economic Co-operation and Development (OECD) and the World Bank. These techniques were being extensively utilized for purposes of project evaluation and investment decision. It was necessary to extend the techniques further down the line to the evaluation of the attainment of these social objectives as an integral part of the total scheme of performance evaluation.

50. While recognizing the relevance and validity of economic analysis and social cost-benefit analysis and the need to use these techniques more extensively in order to take appropriate decisions which reflected true costs and benefits, the Group was of the view that there were some inherent

difficulties in these techniques, particularly in respect of the availability of adequate data on which they were based and the assumptions which needed to be made in fixing accounting prices. Furthermore, it was desirable that systems of performance evaluation should be really understood by practising managers, administrators and policy-makers, and that they should form an integral part of the system of management. This pointed toward the review of the techniques to simplify them and to convert them into practical instruments capable of everyday use.

51. There was a need to recognize the danger that the possible misuse of economic analysis and social cost-benefit analysis could provide a cover for inefficient operation. This tendency needed to be guarded against. It was in this perspective that the Expert Group felt that an integrated system of performance evaluation would have to take into account all the relevant sets of indicators - financial, productive, and economic and social costs and benefits.

52. However, the Group recognized the limitations of exclusively economic or technical approaches in the face of objectives that included socio-political goals upon which substantial weight was often attached. It therefore placed importance on co-operation between technical experts and political decision-makers in evaluating performance, identifying weaknesses and recommending corrective action.

53. The Group also noted the paucity of reliable information on public enterprise performance. This not only hampered evaluation of economic performance but also drew attention to the danger that performance itself and the accountability of enterprises to the general public might be undermined by inadequate data flows. It therefore urged the importance of improving data flows as a positive tool of management, and for control and guidance in the public and the private sectors. The Group also held the view that for the sake of comparability, comparable information from private enterprises should also be available, particularly because much of the resource flow into the private sector was guided and guaranteed by the Government or a government entity.

54. The Expert Group noted that UNIDO had attempted to simplify its guidelines for project evaluation and was continuing a review of its work on the subject. The Economic Development Institute of the World Bank was also engaged in similar work. It was hoped that the techniques of economic and social cost-benefit analysis would not be diluted in this process but would be strengthened and made more pragmatic through such reviews.

55. The Expert Group drew the attention of the developing countries to the significance of the question of performance evaluation and the urgent need, therefore, to develop criteria relevant to the specific conditions in which individual public enterprises functioned, and to establish an objective and professional mechanism to undertake such an evaluation.

Annex I

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Annex II

LIST OF DOCUMENTS

- ID/WG.343/1 Public industrial enterprises in developing countries, an issues paper
Praxy Fernandes
- ID/WG.343/2 Organizational framework, institutional relationships and management of public industrial enterprises
Muzaffer Ahmad
- ID/WG.343/3 Conflicting paradigms: the evaluation of public industrial enterprises as agents of national development
Javed A. Ansari
- ID/WG.343/4 Macroeconomic role of public enterprises in the development process: the Mexican case
Rocío de Villarrea René Villarreal
- ID/WG.343/5 The role and function of the public sector in industrial development in the European centrally planned economies
Zoltán Román
- ID/WG.343/6 Structural changes in the Austrian public industrial sector
Friedrich Ullmann, Renate Meissl
- ID/WG.343/7 The role of the public sector in the industrialisation of African developing countries
Tony Killick
- ID/WG.343/8 A survey of the comparative roles of private and public industrial enterprises - a case study of Pakistan
Abid Husain
- ID/WG.343/9 Bharat Heavy Electricals Limited (BHEL) - a case study
V. Krishnamurthy
- ID/WG.343/10 Comparative study of impact of public and private manufacturing sectors in selected developing countries
Javed A. Ansari
- ID/WG.343/11 The public manufacturing enterprise in the developed market economies
Javed A. Ansari
- ID/WG.343/12 Public enterprise and industrialization in ESCAP countries
ESCAP secretariat

ID/WG.343/13

Changing role and function of the public industrial sector in developing countries - a comparative survey
UNIDO secretariat

Conference Room Papers

- No. 1 Report of Expert Group Meeting on Concept, Definition and Classification of Public Enterprises, Tangier, Morocco, 15-19 December 1980
- No. 2 The role assigned to public industrial enterprises in different development strategies
Pavle Sicherl, Professor at the University of Ljubljana, International Center for Public Enterprises in Developing Countries (ICPE), Yugoslavia
- No. 3 Woman as a factor of development
Zora Debenak, Head of Public Relations, Lek, Pharmaceutical and Chemical Works, Ljubljana, Yugoslavia
- No. 4 The linkage between objectives and control mechanisms in the public manufacturing sector
Leroy P. Jones, Associate Professor, Boston University, Boston, Mass., United States of America
- No. 5 Senegalese experience in the field of public industrial enterprises
Luong-The-Sieu, UNIDO Senior Industrial Development Field Adviser, based in Dakar, Senegal
- No. 6 Organizational framework; managerial efficiency; institutional control structure and operational systems, a case study of Pakistan
Reza H. Syed, Managing Director, Investment Advisory Center of Pakistan, Karachi, Pakistan
- No. 7 The role of public industrial sector in Nigeria's development
Udo Udo-Aka, Director General, Center for Management Development, Lagos, Nigeria
- No. 8 Evaluation of performance of industrial public enterprises: criteria and policies
Glenn P. Jenkins, Institute Fellow, and Mohamed H. Lahouel, Researcher, Harvard Institute for International Development, Harvard University, Cambridge, Mass., United States of America
- No. 9 The public industrial sector in the ECWA region
ECWA secretariat, Beirut, Lebanon

No. 10

Public enterprise - the interlinkage issue
Praxy Fernandes, Chief United Nations Adviser,
International Center for Public Enterprises
in Developing Countries (ICPE), Ljubljana,
Yugoslavia

No. 11

An approach to performance evaluation of public
industrial enterprise
Praxy Fernandes, Chief United Nations Adviser,
International Center for Public Enterprises in
Developing Countries (ICPE), Ljubljana, Yugoslavia

Annex III

WORK PROGRAMME

Inaugural session

Working session I

The conceptual basis of the public industrial sector

Working session II

Industrial goals, policies and plans of developing countries and their impact on public industrial enterprises

Working session III

A comparative review of roles and policies of public and private industrial sectors and their impact upon development

Working session IV

Organizational patterns and legal structures of public industrial enterprises

Working session V

Planning in public industrial enterprises

Working session VI

Interlinkages

Working session VII

The evaluation of performance of public industrial enterprises

Visit to a public industrial enterprise in Austria, arranged by the

Osterreichische Industrieverwaltungs A.G. (ÖIAG),
the Austrian holding corporation for public industrial enterprises

Concluding session

Adoption of report