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Expert Group Meeting on
the Offshore Oil and Gas Industries
in Developing Countries

Hamburg, Federal Republic of Germany
26-29 September 1988

REPORT*

48

* This document has not been edited.

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- II. PROGRAMME OF WORK
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INTRODUCTION

1. The Expert Group Meeting on the Offshore Oil and Gas Industries in Developing Countries was held in Hamburg, Federal Republic of Germany, from 26 to 29 September 1988.

2. The meeting was attended by 16 experts from 11 developing countries of Asia, Latin America and Africa. 10 experts from the industrialized countries also attended some sessions of the meeting (List of Participants appears under Annex I).

Background to the Meeting

3. This Expert Group Meeting was organized pursuant to the decision of the UNIDO Industrial Development Board at its second session held in October 1986 that UNIDO should organize an international conference on the offshore industries in 1988.

4. In preparation for the meeting, the UNIDO Secretariat carried out a study on the impact on energy and industrial development on exploration and exploitation of offshore oil and gas resources in developing countries. The study was designed to include the following aspects:

- i) Linkages of offshore and onshore activities;
- ii) Identification of potential activities that may be undertaken by developing countries;
- iii) Recommended strategies and policies to be adopted by developing countries so as to increase their participation in offshore industries;
- iv) Suitable training programmes; and
- v) Development of a marine technology information and documentation system.

In addition to the above aspects, the study also provided background information on the distribution of offshore oil/gas resources world-wide, the structure and modalities of operation of the industry and the implications of

recent technological trends on the prospects for technology transfer to developing countries.

5. On the basis of the study, the meeting was convened to deliberate on:
 - i) International co-operation in technology transfer in the offshore oil and gas industries; and
 - ii) Prospects for involving local manufacturing, engineering, and geophysical services in offshore projects.

6. Participants also had an opportunity to attend some sessions of the "Europe and The Sea" Conference organized by the German Committee for Marine Sciences and Technology (Deutsches Komitee für Meeresforschung und Meerestechnik e.V.) on the occasion of the International Trade Fair on the Shipping and Marine Technology Market, held in Hamburg from 27 September to 1 October 1988.

AGREED CONCLUSIONS AND RECOMMENDATIONS

Conclusions

7. Considering that the level of development of this industry varies considerably among developing countries, there is a need to determine the actual needs of these countries. This will require the carrying out of a detailed survey in the form of a questionnaire followed by compilation and analysis of the same.

8. The meeting recognizes that most developing countries rely heavily on imported technology and services for the development of their offshore oil and gas industry; that such technology and services are acquired at negotiated prices; that in the course of this acquisition the developing country enterprises are often in a weak negotiating position. The meeting further recognized that one way of lowering the acquisition costs of such technology and services is through South-South co-operation. The meeting therefore emphasized the need to compile, on a regional basis, an information data base with respect to technologies and services that are available for the

developing countries. Special attention should be paid to these countries where the capability resides in state enterprises. Such sharing of information and experiences will not only strengthen South-South co-operation but hasten the process of industrialization.

9. The need to develop suitable training programmes in project and operational management and repair and maintenance was emphasized. Such training programmes may be organized in industrialized countries as well as in the more advanced developing countries with appropriate support from the host Government.

10. The meeting took note of the policy of the Government of the Federal Republic of Germany to support development of this industry in developing countries. In this respect opportunities exist in establishing co-operation arrangements on a bilateral and multilateral basis between German industry and developing countries, covering areas such as research and development, feasibility studies, design and engineering. The UNIDO Investment Promotion Service appears well suited to facilitate co-operation between the private sector in the Federal Republic of Germany and national oil companies in developing countries.

Recommendations

UNIDO is requested to continue supporting promotional and technical assistance activities in this industry. Specifically, UNIDO, in conjunction with interested countries, is requested to:

11. Undertake a survey of the actual needs of the industry on a national, sub-regional and regional basis, and propose potential areas of international co-operation.

12. Compile information on services and technologies available within regions and sub-regions and to disseminate the same among interested parties.

13. Develop, with the co-operation of industrialized countries and/or Governments of the more advanced developing countries, training programmes in project and operational management of oil and gas offshore fields and repair and maintenance of platforms.

14. Disseminate information on offshore technological and market trends among developing countries.

15. Support the convening of international round table policy planning meetings with a view to harmonize regional development strategies and promote South-South co-operation in this industry.

16. Promote co-operation between the private sector in industrialized countries and developing countries, aimed at enhancing technology transfer to the latter.

17. Promote exchange of experiences among developing countries, especially between those that have reached a relatively higher level of development of their industry and those that are in the process of entering the sector.

I. ORGANIZATION OF THE MEETING

18. The opening ceremony of the meeting was addressed by Prof. Dr. Ingo von Munch, the Second Mayor of the Free and Hanseatic City of Hamburg. He extended a cordial welcome to all the participants and UNIDO officials and expressed confidence that the meeting will provide a further opportunity in enhancing international co-operation in the offshore oil and gas industries.

19. The UNIDO Deputy Director General for External Relations, Public Information, Language and Documentation Services welcomed the participants to the meeting. He thanked the Government of the Federal Republic of Germany and the City of Hamburg for the financial and logistic support granted to UNIDO in organizing the meeting. He stated that the meeting should be viewed in the context of promoting international co-operation between the countries of the North and those of the South, as well as among the countries of the South. He stressed the importance UNIDO attaches to energy supply in developing countries as an essential input for industrial development. Participation by developing countries in their offshore oil/gas projects would lead to increased energy supplies as well as technological development of the countries concerned. He drew attention to the study carried out by the Secretariat and other background documents that were available, and wished the participants a successful meeting.

20. The following officers of the bureau were elected:

Chairman: Mr. Ian Wenjin
State Planning Commission
China

Vice-Chairman: Mr. Zeferino Cassa Yombo
Sociedade Nacional de Combustiveis de Angola
Angola

Rapporteur: Mr. Juan Roger
Petroleros de Venezuela
Venezuela.

21. The meeting adopted the work programme as shown in Annex II.

22. Documents issued and presented at the meeting are listed in Annex III.

23. The report of the meeting was adopted at the final session on
29 September 1988.

II. SUMMARY OF DISCUSSIONS

24. It was generally agreed that in spite of the huge capital investment requirements for offshore oil and gas fields development, developing countries should strive to exploit their own resources wherever feasible so as to save foreign currency as well as generate their own technological and management know-how.

25. Several participants underlined the importance of strengthening national oil companies so as to increase their role in petroleum agreements.

26. The need to enhance international co-operation in legislative arrangements and technology transfer was recognized. However, legislative arrangements to procure industrial benefits should take due account of the basic economic context. Thus, the size of the market (determined by the size of reserves and the required investment) as well as the absorptive capacity of the host economy (determined by the availability of relevant infrastructure and skilled labour) should be considered.

27. References were made to contractual difficulties faced by some developing countries arising from:

- ambiguities in contract terms leading to different interpretation and expectations by the parties concerned;
- absence of clear strategies by national oil companies in guiding the foreign companies in the role they were expected to play;
- differences in management styles between national oil companies and the foreign firms.

It was therefore important that the responsibilities of all contracting parties to technology transfer and training agreements be clearly specified with clear provisions on how the obligations would be fulfilled. One participant related difficulties in negotiating for the risk factor and fulfilment of obligations when several parties are involved.

28. Several participants mentioned the major role of project management in offshore projects and the team effort that it entails. The systematic application of sound project management principles were crucial in planning

and execution of these projects. Project management personnel should be trained in one of a variety of fields including civil, electrical, mechanical or structural engineering and marine technology. Project management should include safety management.

29. Participants exchanged experiences by presenting national papers covering Angola, People's Republic of China, Gabon, Ghana, Mexico, Syria, Trinidad and Tobago, Qatar and the United Republic of Tanzania.

30. The different levels of development of the industry among developing countries was noted and this offered an opportunity for co-operation arrangements on a South-South basis.

31. Lack of information on available services and technologies from developing countries was mentioned by many participants as a factor hindering co-operation among developing countries. Likewise information on the actual needs of countries was essential in formulating sub-regional, regional and international co-operation strategies.

32. Several participants stressed the importance of training, especially in project and operational management as well as repair and maintenance of platforms. This aspect which was also discussed in the earlier UNIDO workshop on the industry held in 1986 was considered of topmost priority by some participants.

33. A representative of the Government of the Federal Republic of Germany reaffirmed his Government's willingness to continue supporting development of this industry in developing countries.

34. Representatives of German firms presented examples of co-operation arrangements between their firms and developing countries. The examples covered co-operation in research and development, feasibility studies, and design and engineering.

35. The UNIDO Secretariat presented an account of technical assistance and investment promotion activities of the Organization.

III. CLOSURE OF THE MEETING

36. The closing ceremony was addressed by the UNIDO Deputy Director-General for External Relations, Public Information, Languages and Documentation Services. He thanked all experts for the serious manner in which the deliberations had been conducted and reaffirmed UNIDO's determination to continue supporting developing countries in this industry to the extent that available resources permit. He called upon all experts to contribute towards realization of the recommendations that were adopted. He once again thanked the Government of the Federal Republic of Germany and the Free and Hanseatic City of Hamburg for their support in organizing the meeting.

37. A vote of thanks was delivered by one participant on behalf of the others. He called upon UNIDO to continue its support in developing this industry in developing countries.

38. The Chairman of the meeting thanked all experts for their co-operation and assistance in ensuring successful completion of the meeting.

List of Participants for the Expert Group Meeting on the Offshore Oil and Gas Industries in Developing Countries, Hamburg, FRG, 26 - 29 September 1988

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PROGRAMME OF WORK

26 September 1988

09.00 hours Registration of participants
10.00 hours Opening Ceremony:
- Speech by Prof. Dr. Ingo von Munch
Second Mayor of the Free and Hanseatic City of Hamburg
- Remarks by representative of UNIDO Director-General
11.00 hours Election of Chairman, Vice-Chairman and Rapporteur
11.15 hours Presentation of discussion paper
14.30 hours Presentation of national papers by participants
followed by plenary discussion

27 September 1988

09.30 hours Tour of the offshore exhibitors at the fair (VSM)
11.30 hours Participation in the opening ceremony of SMM '88 and
the Congress 'Europe and the Sea' (DKMM)
15.15 hours EUROMAR - A Eureka Programme for the Sea (DKMM)
16.45 hours Development and Prospect of European Offshore (DKMM)

28 September 1988

09.00 hours Energy/Hydrocarbons (DKMM)
09.30 hours The European Communities Technological Development
Programme in the Hydrocarbons Achievements and
Prospects (DKMM)
10.30 hours German Marine Technology (DKMM)
11.00 hours Underwater Technology (DKMM)
11.30 hours Ice Technology (DKMM)
14.00 hours In-Situ Measurements in the Sea (DKMM)
14.30 hours Technologies in Environmental Monitoring and Assessment
(DKMM)
15.00 hours EMT - An Institute for Industrial Research as Partner
in International Co-operation (DKMM)
16.00 hours Co-operation Models of German Industry with developing
countries in Offshore Technology (VSM)

29 September 1988

08.00 hours

Depart from hotel for trip to drilling platform in the
Baltic Sea (Schwedeneck/Mittelplate) or Underwater
Simulation Centre (GKSS)

16.00 hours

Closure of the meeting

LIST OF DOCUMENTS

1. Discussion paper
2. Exploration and Exploitation of Offshore Oil and Gas Resources in Developing Countries: Impact on Energy and Industrial Development.
3. Co-operation Model on Research and Development - Underwater Technology.
4. Production Platform for Small Oil Fields.
5. Angolan Experience in the Offshore Oil and Gas Industries.
6. The Progress, Policy and Prospects of Sino-Foreign Offshore Petroleum Co-operation.
7. An Introduction to the Exploration and Exploitation of China's Offshore Petroleum Resources.
8. Development and Operation of the Offshore Oil and Gas Industries in Ghana: Status and Issues of Technology Transfer for Effective Implementation.
9. Mexico: Offshore Oil Drilling.
10. Some Exploration Steps in the Syrian Offshore.
11. Offshore Oil and Gas Industry and the Transfer of Technology - The Case of Trinidad and Tobago.
12. Offshore Petroleum Exploration in Tanzania - A Review of Present Status and Future Prospects.
13. The Importance of Offshore for the Oil Industry in Gabon.
14. Offshore Oil/Gas Exploration and Exploitation Activities in the State of Qatar.