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ECONOMIC COMMISSION FOR EUROPE

COMMITTEE ON SUSTAINABLE ENERGY

WORKING PARTY ON GAS

Ad Hoc Group of Experts on Natural Gas Resources

Twenty-second session, 14-15 June 1999

REPORT

I. ATTENDANCE

1. The session was attended by representatives of Austria, Bulgaria, Germany, Hungary, Italy, Netherlands, Poland and the Russian Federation.

II. OFFICERS OF THE SESSION

2. The officers of the session were as follows:
Chairman: Mr. M. Kosinowski (Germany)
Vice-Chairman: Mr. V. Skorobogatov (Russian Federation)

III. AGENDA ADOPTED

(Agenda item 1)

**IV. DECISIONS OF THE WORKING PARTY ON GAS CONCERNING THE
ACTIVITIES OF THE AD HOC GROUP OF EXPERTS**

(Agenda item 2)

Documentation: ENERGY/WP.3/1999/2, para. 12.

3. Decision: To take note of the decisions of the Working Party on Gas at its ninth session of concern to the work of the Ad Hoc Group of Experts.

GE.99-31912

**V. RELATIONSHIP BETWEEN THE GEOLOGY, RESERVOIR BEHAVIOUR
AND THE ULTIMATE RECOVERY FACTOR OF GAS FIELDS**
(Agenda item 3)

Documentation: ENERGY/WP.3/GE.1/1998/5

4. Decisions:

(a) To request the secretariat to send the questionnaire to Governments;

(b) To invite Governments to send their replies to the questionnaire to Mr. M. Kosinowski, Head of Hydrocarbon Geology, NLfB, Stilleweg 2, D-30655 Hannover, tel.: (49 511) 643 3502, fax.: (49 511) 643 3665, with a copy to the secretariat, by 10 October 1999;

(c) To invite Mr. Kosinowski to prepare a draft consolidated report by 1 April 2000, for discussion at the next session.

**VI. APPLICATION OF ENHANCED SEISMIC TECHNIQUES, SUCH AS 3-D SEISMIC,
IN PROSPECTING AND EXPLORATION OF GAS RESOURCES**
(Agenda item 4)

5. Decisions:

(a) To approve a questionnaire prepared by the rapporteur from the Netherlands;

(b) To request the secretariat to send the questionnaire to Governments;

(c) To invite Governments to send their replies to the questionnaire to Mr. J. Breunese, Head of Section, NITG-TNO, Prins Hendriklaan 105 107, 3508 TA Utrecht, Netherlands, tel.: (31 30) 256 4507, fax.: (31 30) 256 4505, with a copy to the secretariat, by 30 October 1999;

(d) To invite Mr. Breunese to prepare a draft consolidated report by 1 April 2000 for discussion at the next session.

**VII. ASSESSMENT OF NATURAL GAS RESOURCES AND ANNUAL
COLLECTION OF DATA ON NATURAL GAS RESERVES**
(Agenda item 5)

6. Decisions:

(a) To collect information on natural gas reserves on an annual basis;

(b) To invite the delegation of Germany to review the existing questionnaire, in terms of units applied;

(c) To request the secretariat to make a compilation of replies to the questionnaire on gas reserves and resources for the last 10 years, if feasible;

(d) To invite the delegation of Netherlands to prepare spreadsheets on the reserves for the period 1985-2000, by 10 October 1999;

(e) To request the secretariat to send a reminder to Governments to complete the questionnaire;

(f) To invite Governments to submit replies to the questionnaire on their natural gas reserves by 1 May 2000, calculated as of 31 December 1999, for consideration at the next session.

VIII. INTERNATIONAL MAP OF NATURAL GAS FIELDS IN EUROPE

(Agenda item 6)

7. Decisions:

(a) To take note of the report on the meeting of the Editorial Committee (held in Geneva on 14 June 1999);

(b) To proceed with the implementation of the project in accordance with the plan elaborated by the Editorial Committee;

(c) To discuss progress in the implementation of the project at the next session.

IX. PROBLEMS RELATED TO THE ASSESSMENT AND DEVELOPMENT OF GAS CONDENSATE RESERVES AND RESOURCES, INCLUDING METHODS OF ENHANCED CONDENSATE RECOVERY

(Agenda item 7)

8. Decisions:

(a) To thank Mr. V. Skorobogatov for the interesting lecture he delivered on this subject;

(b) To invite Mr. Skorobogatov to consider publishing this lecture in one of the professional journals and/or to make a presentation on this topic in the course of the World Petroleum Congress in the year 2000.

(c) To invite Mr. Breunese, rapporteur from the Netherlands, to make at the next session a presentation of the project "The north-west European Gas Atlas", dealing with issues of gas composition prediction.

**X. ECONOMIC AND TECHNOLOGICAL PROBLEMS RELATED TO THE
DEVELOPMENT AND EXPLOITATION OF MARGINAL GAS FIELDS**

(Agenda item 8)

9. Decisions:

(a) To approve the draft questionnaire prepared by the rapporteur from Poland, as amended by the meeting;

(b) To request the secretariat to send the questionnaire to Governments;

(c) To invite Governments to send their replies to the questionnaire to Mr. Z. Krol, Technical Director, Naftagas, Polish Oil and Gas Company, 12, Sienkiewicza Str., 38 500 Sanok, Poland, tel.: (48 13) 46 52 125, fax.: (48 13) 46 35 55, with a copy to the secretariat, by 30 October 1999;

(d) To invite Mr. Krol to prepare a draft consolidated report by 1 April 2000.

XI. PROGRAMME OF WORK

(Agenda item 9)

10. Decisions:

(a) To approve the following priority ranking of the programme of work of the Ad Hoc Group of Experts on Natural Gas Resources, by programme element:

<u>PRIORITY</u>	<u>PROGRAMME ELEMENT</u>	<u>TITLE</u>
1	06.5.5.5	International map of natural gas fields in Europe
2	06.5.5.6	Assessment of natural gas resources and annual collection of data on natural gas reserves
3	06.5.5.1	Relationship between the geology, reservoir behaviour and the ultimate recovery factor of gas fields
4	06.5.5.8	Economic and technological problems related to the development and exploitation of marginal gas fields

- 5 06.5.5.2 Application of enhanced seismic techniques, such as 3-D seismic, in prospecting and exploration of gas resources
- 6 06.5.5.4 Developments and prospects of unconventional gas resources and problems encountered with their exploration and production
- 7 06.5.5.7 Problems related to the assessment and development of gas condensate reserves and resources
- 8 06.5.5.3 Problems arising from the exploration of natural gas resources located in abnormally high pressure and temperature conditions

(b) To note that according to the decision of the Commission (E/ECE/1347, Plan of Action, Chapter III, A, para.1 (b)) this programme should be completed in two years' time;

(c) To approve the programme of work as set out in the annex..

XII. OTHER BUSINESS

(Agenda item 10)

11. No other business was discussed under this agenda item

XIII. DATE OF NEXT MEETING

(Agenda item 11)

12. The twenty-third session of the Ad Hoc Group of Experts on Natural Gas Resources will be held on 15 and 16 June 2000, starting on Thursday, 15 June at 3 p.m.

XIV. ELECTION OF OFFICERS

(Agenda item 12)

13. Mr. M. Kosinowski (Germany) and Mr. V. Skorobogatov (Russian Federation) were re-elected Chairman and Vice-Chairman, respectively.

XV. ADOPTION OF THE REPORT

(Agenda item 13)

14. The Ad Hoc Group of Experts adopted its report on 15 June 1999.

ANNEX

PROGRAMME OF WORK FOR 1999-2000

06.5.5 Assessment of natural gas resources, including geological and geophysical methods of prospecting for natural gas (continuing)

Description: Assessment and evaluation of natural gas resources, reserves and production.

Work to be undertaken: Exchange of views, experience and other relevant information.

06.5.5.1 Relationship between the geology, reservoir behaviour and the ultimate recovery factor of gas fields (1997-2000)

Description: Exchange of information on recent technologies and related studies to increase gas recovery.

Work to be undertaken: To consider a draft consolidated report prepared by the rapporteur from Germany.

06.5.5.2 Application of enhanced seismic techniques, such as 3-D seismic, in prospecting and exploration of gas resources (1997-2000)

Description: Address issues related to new and emerging seismic techniques.

Work to be undertaken: To consider a draft consolidated report prepared by the rapporteur from the Netherlands.

06.5.5.3 Problems arising from the exploration of natural gas deposits located in abnormally high pressure and temperature conditions and extremely deep geological formations

Description: Exchange of information and experience on recent technical developments in methods of exploration of deep geological formations and problems encountered with their exploration.

Work to be undertaken: To suspend work on this topic until further consideration.

06.5.5.4 Developments and prospects of unconventional gas resources, such as tight formations, methane from coal seams, hydrates, etc. and problems encountered with their exploration and production

Description: Exchange of information and experience on production and utilization of gas from tight formations including economic, environmental, safety and other factors associated with this resource and other non-conventional gas resources.

Work to be undertaken: To suspend work on this topic until further consideration.

06.5.5.5 International Map of Natural Gas Fields in Europe (1995-2000)

Description: An update of the map prepared by the Meeting of Experts in 1984.

Work to be undertaken: Preparation of the map on the basis of a digital database, both in paper and CD-ROM versions.

06.5.5.6 Assessment of natural gas resources and annual collection of data on natural gas reserves (1992-2000)

Description: Annual survey of natural gas reserves.

Work to be undertaken: Consideration of replies to the annual questionnaire on natural gas reserves.

06.5.5.7 Problems related to the assessment and development of gas condensate reserves and resources, including methods of enhanced condensate recovery (1993-2000)

Description: Exchange of information on recent technologies related to the assessment and calculation of condensate reserves and resources and on problems encountered with the development of gas condensate fields.

Work to be undertaken: To suspend work on this topic until further consideration.

06.5.5.8 Economic and technical problems related to the development and exploitation of marginal gas fields (1997-2000)

Work to be undertaken: To consider a draft consolidated report prepared by the rapporteur from Poland.
