

2001 Activities Report

I. General Matters

- Dr L Gorospe of Gas Natural SDG was President of GERG during 2001.
- Dr Gianfranco Bella of Italgas was Vice-President of GERG during 2001.
- Den Norske Statoil became a member of GERG, effective 1 April, 2001; they will be represented in the Plenary by Mr Jan Morten Ertsaas.
- Gastec N.V. announced their decision to leave GERG at year-end 2001.
- Mr Jean-Francois Carrière replaced Mr George Bouchard as the Gaz de France representative on the GERG Board.
- Mr Roy Bilbé replaced Dr Klaas Beukema as the Gasunie representative on the GERG Board.
- Mr Pawel Stanczak replaced Dr Witold Warowny as the Polish Oil & Gas Company representative in the GERG Plenary.

II. Programme Committees

- The Programme Committees met twice in 2001; a list of their current and proposed projects is attached as an appendix to this report. They were chaired as follows:
 - PC General Studies Mr P van der Kam, Gasunie
 - PC Transmission & Storage Dr V Pistone, SNAM
 - PC Distribution Mr J-P Capdevielle, Gaz de France
 - PC Utilisation Dr B Jeken, Ruhrgas

III. GERG Secretariat

- During 2001,
 - Mr P G Claus Honorary Secretary
 - Mr D Pinchbeck Executive Secretary

represented the GERG Permanent Secretariat.

III.1 Highlights

- Mr P I Hinstrup has continued to serve as a member of the European Commission's Expert Advisory Group for the Energy Key Actions in the Fifth RTD Framework Programme.
- GERG members have continued their success with project proposals for the Fifth RTD Framework Programme:
 - MICROMAP - a review of mini and micro-CHP in Europe - *approved*;
 - GIGA - development of a ground-probing RADAR system - *approved*;
 - PRESENSE - development of a pipeline remote sensing tool - *approved*.
- GERG provided a formal written contribution to the debate on the Green Paper: "Towards a European Strategy for the Security of Energy Supply" to be sent to DG TREN. .
- The Secretariat, in conjunction with DG TREN's Gas Unit, completed a two year data gathering exercise comprising visits to GERG members and exchanges on R&D activities and future gas priorities.

III.2 Events

- GERG celebrated its 40th Anniversary during its autumn meeting, held in Madrid. The event was also marked by an article on GERG and its activities and a Press Release.
- GERG produced a stand for, and participated in, IGRC 2001, Amsterdam. GERG projects were well represented in papers presented during the conference.

III.3 Members – 2001

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|----------------------------------|-----------------|
| • Advantica Technologies | U.K. |
| • ARGB | Belgium |
| • BP | U.K. |
| • Danish Gas Technology Centre | Denmark |
| • Gas Natural | Spain |
| • Gastec | The Netherlands |
| • Gasunie Research | The Netherlands |
| • Gaz de France | France |
| • Italgas | Italy |
| • Polish Oil and Gas Corporation | Poland |
| • Ruhrgas | Germany |
| • Snam Rete Gas | Italy |
| • Statoil | Norway |

Appendix

GERG Activities Report - 2001

1. GERG PROGRAMME COMMITTEE TOPICS: 2001 - 2003

Programme Committee:- General Studies for the Gas Industry
Projects in execution:
1. Prediction of PHLC in natural gas (Phase 3)
2. Reference equation for calorific properties
3. Rapid gas chromatography
4. Determination of sulphur content in natural gas
5. Reference calorimeter
Projects in preparation:
1. Water content analysis

Programme Committee:- Transmission and Storage
Projects in execution:
1. Abandonment of pipelines
2. Pipe flow tables
3. Remote sensing "PRESENSE"
4. Influences of coating degradation on the corrosion protection of ageing pipelines
5. Multi-path ultrasonic meters : Phase III
6. Procedures for diagnosis of gas impurities
Projects in preparation:
1. Atmospheric emission control technologies of combustion transmission facilities
2. Inspection methods for short pipeline sections (non-piggable)
3. Guidance on dealing with vibration problems at compressors and above ground installations
4. Methane detection system

Programme Committee:- Distribution
Projects in execution:
1. Service life of hose-lined pipes
2. Wider use of PE X
3. Condition dependent maintenance of pipes
4. New installations in buildings "DIGBUILD"
5. Remote leak detection "VOGUE"
Projects in preparation:
1. Study of butt fusion technology
2. Prediction of noise level for the design of pressure regulating stations
3. Ground penetrating radar "GIGA"
4. Accelerated Lifetime Test for Synthetic Diaphragm Domestic Gas Meters
5. Rapid Crack Propagation

1. GERG PROGRAMME COMMITTEE TOPICS: 2001 – 2003 (Cont.)

Programme Committee:- Utilisation	
Projects in execution:	
1.	Mini & micro-CHP - Small-scale cogeneration and micro-cogeneration (<10kWe)
2.	Life test for premix burner materials
3.	Demonstration of optimum energy infrastructure in houses (DEO)
4.	CONRAD - Confined Radiant Burner
5.	Ultrafine particulates from gas cooking
6.	EnerBuild RTD
Projects in preparation:	
1.	Heat pumps
2.	Indoor Air Quality (IAQ)

2. APPROXIMATE VALUE OF GERG PROGRAMME - BY PC, OCTOBER 2001

PC	Value (k€)	EC funding (k€)	% of total
General Studies	1,290	0	0
Transmission & Storage	4,587	2,096	45.7
Distribution	9,900	3,692	37.3
Utilisation	10,922	5,942	54.4
Secretariat	105	105	100
Totals	26,804	11,835	44.1

3. GERG PROJECTS COMPLETED DURING 2001

3.1 PC General Studies

- Feasibility study on the development of a reference calorimeter:
 - an 18 month project with a budget of 70,000 Euro, showed that it is possible to build a reference calorimeter with an overall uncertainty of 0.05%. It should be a Rossini-type calorimeter with an improved temperature control and mass measurement system. The development and construction of the reference calorimeter will be part of a follow-up GERG project, starting early in 2002.

3.2 PC Transmission & Storage

- None.

3.3 PC Distribution

- PE materials bank
 - The 7th Joint Project on the GERG Materials Bank has led to a publication at the International Gas Research Conference in Amsterdam: "Significant improvements in PE pipe materials for European (GERG) gas distribution systems ." Scholten and Wolters (Gastec), on behalf of the GERG Materials Bank Group.
- Reliable stress crack agent
 - The project on "Detergent for PE testing" has led to a publication at the 11th Plastic pipes Conference in Munich: "A more reliable detergent for Cone and Full Notch Creep testing of PE pipe materials", Scholten (Gastec) and Gueugnaut and Berthier (Gaz de France). PC Utilisation Lifetime burners; NO₂ and CO₂ levels in kitchens.

3.4 PC Utilisation

- Lifetime Burners
 - This 4 MEuro EU-funded (BRITE-EURAM) project which began in 1998 is now complete and has achieved its objectives of developing guidelines, design criteria, test procedures and test equipment for premixed radiant burners and compact heating equipment for use in modulating heating systems. More detailed information can be found on: www.lifeburn.com
- NO₂ and CO-levels in kitchens
 - This project was incorporated in a large joint industry project run by Advantica and supported by the UK Health & Safety Executive (H.S.E.), Gasunie and the European Commission. Specific topics examined in the project have been the development of a common strategy in Europe for collating CO incident data, assessing Indoor Air Quality issues in Europe relating to gas utilisation and considering the medical issues associated with both acute and chronic CO poisoning. The final report is available on: www.hse.gov.uk