

## 2003 Activities Report

### **I. General Matters**

- Dr E Aceto of Italgas was President of GERG during 2003.
- Mr E van Ingelghem of Fluxys, representing ARGB, was Vice-President of GERG during 2003.
- Enagas, became a member of GERG effective 1 January, 2003. They are represented by Mr A Garcia Mateo.

### **II. Programme Committees**

- The Programme Committees each met twice in 2003; a list of their current and proposed projects is attached as an appendix to this report. They were chaired as follows:
  - PC General Studies Dr K Altfeld, Ruhrgas
  - PC Transmission & Storage Dr G Re, Snam Rete Gas
  - PC Distribution Mr J-P Capdevielle, Gaz de France
  - PC Utilisation Mr W J Th van Gemert, Gasunie.

### **III. GERG Secretariat**

- Mr D Pinchbeck was General Secretary of GERG during 2003.
- Mr J-M Devos was Honorary Secretary of GERG during 2003.

#### **III.1 Highlights**

- The Secretariat has continued its activities as part the Fifth RTD Framework project in:
  - GIGA - development of a ground-probing RADAR system- *recently completed*.
- The Secretariat, on behalf of the GERG Board, has provided support:
  - to Gasunie in setting up the NATURALHY integrated project in FP6 - *successful*;
  - to Gaz de France in setting up the FP6 projects:
    - INSITU - *submitted and successful*;
    - CECA - *submitted and waiting*.
- Papers presented on behalf of GERG were:
  - 'Opportunities for the natural gas industry on the road to sustainability', World Gas Conference, June 2003, Tokyo, Japan;
  - 'Research and technological innovation in the gas sector; the view of GERG - The European Gas Research Group', SINERGY International Energy Conference, Nov. 2003, Rimini, Italy.

### **III.2 Events**

- The GERG Board met twice during 2003:
- Spring : - Paris;
- Autumn : - Warsaw.

### **III.3 Members – 2003**

- |                                  |                 |
|----------------------------------|-----------------|
| • Advantica Technologies         | U.K.            |
| • ARGB                           | Belgium         |
| • BP                             | U.K.            |
| • Danish Gas Technology Centre   | Denmark         |
| • Enagas                         | Spain           |
| • Gas Natural                    | Spain           |
| • 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 - 2003

#### 1. GERG PROGRAMME COMMITTEE TOPICS: Current

<b>Programme Committee:- General Studies for the Gas Industry</b>
<b>Projects in execution:</b>
1. Prediction of potential hydrocarbon liquid content (PHLC) in natural gas
2. Rapid Gas Chromatography for Natural Gas Analysis
3. Determination of Sulphur Content of Natural Gas
4. Elemental Sulphur in Natural Gas
5. Development of a Reference Calorimeter and Proof of 0.05% Uncertainty
6. General calculation program for the GERG reference equation
7. Determine the state of the art in Coriolis gas meters
8. Biogas Characterization
<b>Projects in preparation:</b>
1. Test of a new metal analyser
2. Condensation behaviour/hydrocarbon dewpoint

<b>Programme Committee:- Transmission and Storage</b>
<b>Projects in execution:</b>
1. Remote sensing "PRESENSE"
2. Multipath Ultrasonic Meter. Phase III
3. Procedure for diagnose of gas impurities
4. Inspection methods for short pipeline sections (non-piggable)
5. Methodologies and techniques for buried pipeline corrosion diagnoses
6. SECURE PIPE™ evaluation
<b>Projects in preparation:</b>
1. CHARM: Detection of gas leaks by helicopter-borne infrared laser system
2. Gas camera
3. NIMROD - Network Infrastructure Monitoring using Remote Observation Data

<b>Programme Committee:- Distribution</b>
<b>Projects in execution:</b>
1. Wider use of PE-X
2. Condition dependant maintenance of pipes
3. Prediction of noise level for the design of pressure regulating stations
4. DIGBUILD - New installations in buildings
5. VOGUE - Remote leak detection
6. GIGA - Ground penetrating radar for pipe location
7. Introduction of active and passive measures to make tampering with gas installations more difficult
<b>Projects in preparation:</b>
1. Influence of non conventional pipe installation and its effect on the service life of polyethylene

2. Selecting a reliable detergent
3. Gas-balance model for distribution networks
4. Risk management
5. Plastic pipe system designed for a maximum operating pressure of 16 bar
6. ALTMETER: Accelerated Lifetime Test for Synthetic Diaphragm Domestic Gas Meters
7. LOGIN : Localisation of ground intelligent network
8. INSITU : Infrastructure Safety In The Underground

## **1. GERG PROGRAMME COMMITTEE TOPICS: Current (Cont.)**

<b>Programme Committee:- Utilisation</b>	
<b>Projects in execution:</b>	
1.	Mini & micro-CHP - Small-scale cogeneration and micro-cogeneration (<10kWe)
2.	DEO - Demonstration of optimum energy infrastructure in houses
3.	CONRAD - Confined Radiant Burner
4.	Ultrafine particulates from gas cooking
5.	EnerBuild RTD - Thematic Network on energy efficiency in buildings
7.	LABNET - Laboratory network for solving measurement problems on domestic appliances
8.	COMBO - Development of compact boiler modules based on radiant burners
<b>Projects in preparation:</b>	
1.	NATURALHY – to examine the problems & benefits associated with distributing H2 in the existing European natural gas network

	<b>Value (k€)</b>	<b>EC funding (k€)</b>	<b>% of total</b>
General Studies	1,854	0	0
Transmission & Storage	5,145	2,095	40.7
Distribution	8,468	3,692	43.6
Utilisation	7,262	3,626	50
<b>Totals</b>	<b>22,729</b>	<b>9,413</b>	<b>41.4</b>

## **2. APPROXIMATE VALUE OF GERG PROGRAMME - BY PC, OCTOBER 2003**