

2006 Activities Report

I. General Matters

- Mr E van Ingelghem of Fluxys, representing ARGB, stepped down as President of GERG on 31 December 2006.
- Mr M Florette, Gaz de France, becomes President of GERG on 1 January 2007.
- Dr Klaus Altfeld, Eon-Ruhrgas, becomes Vice-president of GERG on 1 January 2007.
- Naturgas Energia, Spain, became a member of GERG during 2006. They will be represented in the Plenary assembly by Mr E Palomino.
- SVGW/SSIGE, Switzerland Germany, became a member of GERG during 2006. They will be represented in the Plenary assembly by Dr J-C Weber.
- Mr P M G Bartholomeus replaced Mr W Faber as the Gasunie representative on the GERG Board.
- Eni S.p.A. has replaced Italgas as a member of GERG. Mr Aceto will continue as the representative for the time being.

II. Programme Committees

- The Programme Committees each met twice in 2006; 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 T Williams, Advantica Technologies

III. GERG Secretariat

- Mr D Pinchbeck was General Secretary of GERG during 2006.

III.1 Highlights

- GERG signed a ‘Cooperation Agreement concerning Infrastructure R&D issues with GIE (Gas Infrastructure Europe).
- GERG became a member of the European Energy Forum to enable closer liaison with Members of the European Parliament (MEPs).
- Shell’s membership of GERG, effective 1 January 2007, was approved.
- The European Commission approved funding for the GERG project “ORFEUS” from its Sixth R&D funding programme (FP6). “ORFEUS” follows on from the FP5 project “GIGA” to develop a new Ground Penetrating Radar for the detection of buried pipes and services.
- The Secretary has accepted invitations to be a member of the:
 - IGU R&D Task Force, chaired by M Florette, Gaz de France, and;
 - organising committee of the European Forum Gas (EFG 2007) conference in Paris.
- The Secretariat stepped up its formal lobbying activities with regard to preparations for the European Commission’s 7th RTD Framework programmes in consultation with appropriate European Commission Directorates-General and MEPs and, also via:
 - ESWRAC, the European Street Works Advisory Council;
 - ECTP, the European Construction Technology Platform, making the case for R&D funding for gas networks in FP7.
- The Secretary set up and chaired a session on ‘New and future technologies’ at the European Forum Gas, Berlin, April.

Papers were presented by Eon-Ruhrgas, Gasunie, DGC and Gaz de France on GERG projects:

 - “General calculation programme for GERG reference equation”, M Jaeschke;
 - “BONGO – Biogas in natural gas operations”, M van Burgel;
 - “LABNET – Network solving measurement problems on domestic appliances”, J Schweitzer;
 - “Multipath ultrasonic meter: Phase III”, B Delenne.
- The Secretary accepted invitations to present the following papers:
 - “Collaborative Gas Sector Research and Innovation in Greater Europe”, 21st International Scientific Meeting of Gas Experts, Opatija, Croatia, May 2006
 - “Pipeline research in Europe – key programmes and priorities”, 2nd Asian Pipeline Conference Kuala Lumpur, Nov. 2006.
- In addition, the following GERG papers were presented during 2006:
 - “GERG – The European Gas Research Group, a Model for Collaborative Gas Sector R&D”, E Van Ingelghem, & D Pinchbeck, 23rd World Gas Conference, Amsterdam, June 2006.
 - “Biogas and Others in Natural Gas Operations (BONGO) - a project under development”, M. van Burgel, O. Florisson, D. Pinchbeck, 23rd World Gas Conference, Amsterdam, June 2006.

III.2 Events

- The GERG Board met twice during 2006:
 - Spring : - Haarlem;
 - Autumn : - Seville.

III.3 Members – 2006

- Advantica Technologies U.K.
- ARGB Belgium
- BP U.K.
- Danish Gas Technology Centre Denmark
- DVGW Germany
- Enagas Spain
- E.ON Ruhrgas Germany
- Gas Natural Spain
- Gassco Norway
- Gasunie Engineering & Technology The Netherlands
- Gaz de France France
- Italgas Italy
- Kiwa Gastec The Netherlands
- Naturgas Energia Spain
- POGC Transmission/Gaz-System Poland
- Snam Rete Gas Italy
- Statoil Norway
- SVGW/SSIGE Switzerland

Appendix

GERG Activities Report - 2006

1. GERG PROGRAMME COMMITTEE TOPICS: Current

Programme Committee:- General Studies for the Gas Industry
Projects in execution:
1. Development of a Reference Calorimeter
2. General calculation program for the GERG reference equation
3. Hydrocarbon dew-point
4. Oxygen in natural gas
Projects in preparation:
1. Hydrate formation
2. Aqueous dewpoint
3. LNG ageing
4. Novel polymeric membranes for gas separation
5. Uncertainty determination of relative response factors

Programme Committee:- Transmission and Storage
Projects in execution:
1. Refining and extending the applicability of ECDA process
2. ILI Tool performance – Guidelines for pipeline operators
3. Gas camera
4. Secure-Pipe Ph 2 (non armoured cable, no conduit)
5. Feasibility of pipeline monitoring by acoustic emission system
6. Leak and shock detection system
7. Measurement of dust particles and aerosol mist in pipeline (Ph. II)
8. Cathodic protection under AC/DC interference conditions
Projects in preparation:
1. CP monitoring in the presence of AC
2. Validation of ECDA
3. Field joint coatings
4. Quantification of the performance of coating survey techniques
5. In-line tools to measure axial deformation
6. Techniques to reduce pipe-soil interactions
7. Test of existing in-situ material characterisation systems
8. ISOS
9. Secure-Pipe Ph 3 (Conduit)
10. Development of Standards for Running Transmissions pipelines at up to 200bar in Europe
11. Methane emissions measurement

Programme Committee:- Distribution	
Projects in execution:	
1.	Evaluation of the suitability of PA pipe systems for distribution at pressures between 10 & 20 bars
2.	NATURALHY (Part)
3.	ALTMETER
4.	Plastic pipe system designed for maximum operating pressure of 16 bar
5.	Shallow trenches with conventional material and depths
6.	Long-term quality of electro-fused connections for PE 100 and PE 80 pipes
7.	Permeation of methane and hydrogen through various plastic pipelines
8.	Gas Distribution Grid Safety Analysis Methodology
9.	Assessment of the suitability of modern NDT methods for inspection of joints in PE pipeline systems
10.	NDT of electro-fused joints of PE pipes
11.	Influence of non-conventional pipelaying on the service life of PE pipes (NIKO)
12.	ORFEUS
Projects in preparation:	
1.	Comparison of new mobile technologies to optimise operational activities
2.	Development of No Dig and trenchless techniques to connect service lines to mains
3.	Quantification of CH4 loss at higher pressures from PE distribution system (Hi-flow sampler)
4.	Gas-stop in the European distribution field
5.	Factors affecting the smell of natural gas from leaks in buried pipes
6.	Gas detection systems: Review of technology and current developments
7.	RTP Pipe
8.	Confirmation of the principle of testing at elevated temperatures for lifetime prediction of plastics pipes
9.	Long-term resistance of PE pipes in service and raising line pressures to increase capacities
10.	Comparison of operations of maintenance in different European Companies according to the legislation
11.	Residual lifetime of 1 st Generation of PE pipes

Programme Committee:- Utilisation	
Projects in execution:	
1.	LABNET
2.	NATURALHY (Part)
3.	BINGO
4.	ASUE
5.	Methane/octane number of NG
6.	CNG tanks
7.	Micro CHP
Projects in preparation:	
1.	Gas interchangeability
2.	BONGO
3.	LABNET quality mark
4.	BISON – Boiler information system
5.	Domestic water heater label testing

2. APPROXIMATE VALUE OF GERG PROGRAMME - BY PC, OCTOBER 2006

	Value (k€)	EC funding (k€)	% of total
General Studies	1,177	0	0
Transmission & Storage	1,513	0	0
Distribution	7,088	2,950	41.6
Utilisation	16,960	10,650	62.8
Totals	26,738	13,600	50.9