EXECUTIVE SUMMARY

The Scope of CEN/TC 237 is "Standardization of the requirements for the construction, performance and safety of gas meters, including diaphragm, rotary displacement, turbine, ultrasonic domestic gas meters, thermal-mass flow-meter based gas meters and all associated conversion devices".

It is estimated there are in excess of 100 million gas meters installed in domestic, commercial and industrial premises within the European Union. The majority of these are installed in domestic properties. The revenue generated within the gas market is billions of Euros (€) per annum.

All standards under the remit of CEN/TC 237 which are within the scope of the Measuring Instruments Directive (MID 2014/32/EU) have had to be revised to take account of the non-exploitation rule (2014/32/EU, Annex IV (MI-002) clause 2.1). The Commission mandate M/541 has now been published. In addition, there are parts of EN 12405 which are out of the scope of the mandate M/541 and therefore do not need to be aligned to the MID. A work programme is in place to maintain the suite of standards by amendment or 5-year reviews.

The greater awareness on the impact of greenhouse gases on climate change has led Member States to implement a programme to install smart meters and to investigate the use of non-conventional gases. CEN/TC 237 has responded by producing a standard on gas smart meters, i.e. EN 16314, Gas meters – Additional functionalities, which is not in the scope of the MID. Each of the Working Groups under CEN/TC 237 are investigating the consequences of measuring non-conventional gases, including hydrogen, and the effect these gases will have on meter accuracy and durability.

It has been identified that EN 12261:2002 (Turbine gas meters) and EN 12480:2002 (Rotary displacement gas meters) should be harmonized under the Pressure Equipment Directive (2014/68/EU) and work is in progress.

The emergence of "new players" purchasing gas meters has placed significantly more reliance on the use of European standards. These standards are allowing more EU countries to look at purchasing products from manufacturers in different Member States and worldwide, which is assisting in the liberalization and free flow of goods within the European gas market.
1 BUSINESS ENVIRONMENT OF THE CEN/TC

1.1 Description of the Business Environment

The political, economic, technical, regulatory, legal, societal and/or international dynamics describe the business environment of the industry sector, products, materials, disciplines or practices related to the scope of CEN/TC 237; the above may significantly influence how the relevant standards development processes are conducted and the content of the resulting standards.

Traditionally, there were single/few large meter purchasers in each Member State with long established relationships with manufacturers. This situation has changed due to energy liberalization throughout Europe, 2009/73/EC (concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC) which is impacting on the pattern of meter ownership and introducing new meter manufacturers. This is creating a vibrant and competitive market which has increased the level of cross border trade. The emergence of the "Meter Asset Manager" and the "Meter Asset Provider" in some Member States has led to new market entrants competing for work and changes to the title owner of the meter rather than traditional Utilities.

Interested parties in the standardization process include governments, manufacturers, notified bodies, gas suppliers, shippers and transporters, meter asset managers, meter asset providers and European trade associations. They see the main benefits of the standardization as follows:

- abolition of technical obstacles to trade which arise from mutually contradictory national guidelines;
- improvements in the quality and compatibility of products;
- further enhancement of the industry’s image;
- using harmonized standards to claim conformity/compliance to appropriate Directives;
- export and import of gas meters in, out and across the European territory.

Standards represent a balance between the cost of the instrument and its accuracy and durability.

The over-riding issue of the Measuring Instruments Directive (MID) is metrological accuracy, whereas the over-riding issue for the Pressure Equipment Directive (PED) is pressure containment and safety.

1.2 Quantitative Indicators of the Business Environment

The following list of quantitative indicators describes the business environment in order to provide adequate information to support actions of CEN /TC 237:

- it is estimated there are in excess of 100 million gas meters installed in domestic, commercial and industrial premises within the European Union. The majority of these are installed in domestic properties. The revenue generated within the gas market is billions of Euros (€) per annum;
- it is estimated there are approximately 10 manufacturers providing products into the European Economic Community;
• CEN/TC 237 European standards are cited by National regulators;
• gas Suppliers employing the services of meter asset managers and/or meter asset providers are requiring gas meters that meet the appropriate European standard.

2 BENEFITS EXPECTED FROM THE WORK OF THE CEN/TC

The expected benefits from the work of CEN/TC 237 are as follows:
• consumers benefit from accurate and equitable billing;
• contribute to climate change reduction by ensuring correct metering of non-conventional and renewable gases;
• assures safety of product;
• provides presumption of conformity to manufacturers against appropriate Directives;
• facilitates free-movement of products across Member States by restricting barriers to trade;
• reducing cost of product.

3 IN THE CEN/TC

All the CEN national members are entitled to nominate delegates to CEN Technical Committees and experts to Working Groups, ensuring a balance of all interested parties. Participation as observers of recognized European or international organizations is also possible under certain conditions. To participate in the activities of this CEN/TC, please contact the national standards organization in your country.

4 OBJECTIVES OF THE CEN/TC AND STRATEGIES FOR THEIR ACHIEVEMENT

4.1 Defined objectives of the CEN/TC

To develop and maintain European standards for gas meters, particularly for:

• EN 1359, Diaphragm gas meters;
• EN 12480, Rotary displacement gas meters;
• EN 12261, Turbine meters;
• EN 12405-1, Gas-volume electronic conversion devices;
• EN 12405-2, Conversion devices - energy conversion;
• prEN 12405-3, Conversion devices - flow computers;
• EN 14236, Ultrasonic domestic gas meters;
• EN 16314, Gas meters – Additional functionalities.

CEN/TC 237 is actively supporting the development of new gas meter technology. The TC is developing a new European standard for thermal-mass flow-meter based gas meters for domestic, commercial and light industry application.

Maintain harmonized standards that meet the relevant Essential Requirements of the adopted Measuring Instruments Directive (MID), and where applicable, draft harmonized standards that meet the Pressure Equipment Directive (PED).
4.2 Identified strategies to achieve CEN/TC.s defined objectives

CEN/TC 237 has approved a work programme for the standardization of gas meters.

In accordance with the work programme of CEN/TC 237, 6 Working Groups are proactive for the main areas of standardization of gas meters. Each Working Group has a scope of work, which is a logical sub-division of the scope of the Technical Committee. CEN/TC 237 WG 5, General requirements, is the Chair’s Advisory Group and also provides the role of co-ordinating horizontal issues harmonization against relevant Directives.

Working Group experts meet to develop appropriate European standards and discuss and resolve technical issues. All final drafts are submitted to the Technical Committee prior to formal vote. The Technical Committee is responsible for ensuring that the national standpoints communicated by delegations from different countries are taken into consideration. It endeavours to reach consensus where viewpoints differ. Wherever possible, national exceptions should be avoided.

CEN/TC 237’s active participants are delegates and experts from Austria, Belgium, Bulgaria, Croatia, Cyprus, Denmark, Estonia, France, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Norway, Poland, Portugal, Slovenia, Spain, Sweden, Switzerland and United Kingdom. In addition to the above CEN/TC 237 Bosnia and Herzegovina is an observer.

CEN/TC 237 plenary meetings are normally held twice a year. The meetings are conducted in English. The Technical Committee reviews priorities and its work programme at each plenary meeting to meet market conditions. CEN/TC 237 will encourage the use of the Internet and virtual meetings to enhance the effectiveness of the TC and its Working Groups.

The working groups are responsible for producing the draft standards for their defined product areas and presenting results to the TC for approval. The working groups organise their work and the necessary meetings themselves.

CEN/TC 237 has a Decisions Committee, which sits during the plenary sessions.

Liaisons

At present CEN/TC 237 maintains liaisons with CEN/CLC/JTC6 and MARCOGAZ. CEN/TC 237 is seeking liaison with CEN/TC 234, CEN/TC 294, WELMEC and FARACOGAZ.

4.3 Environmental aspects

The standards under CEN/TC 237 address the ‘use of energy’, ‘use of materials’ over the complete life cycle. These standards also promote ‘appropriate initial and continual measurement of gas’. These are identified in the appropriate field, i.e. 6, when completing the electronic work item tool.

The work of CEN/TC 237 will contribute to climate change reduction by ensuring correct metering of non-conventional and renewable gases.

5 FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE CEN/TC WORK PROGRAMME

There is still a lack of specific expertise on the PED, which is making the drafting of the appropriate harmonized standards slow. This is being addressed.