

# EASEE-gas



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*Gas Quality  
Workshop EU  
Brussels  
December 5, 2011*

## Gas Quality Workshop

EU

**Brussels – 5 December 2011**

**Robert van Rede**

Chairman EASEE-gas Gas Quality Harmonisation Working Group



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## **Purpose**

EASEE-gas was set up in 2002 in order to develop and promote business practices to simplify and streamline both physical gas transfer and trading across Europe. We aim to represent all segments of the gas industry and our full members are companies that appreciate the benefits that EASEE-gas brings to the gas industry.

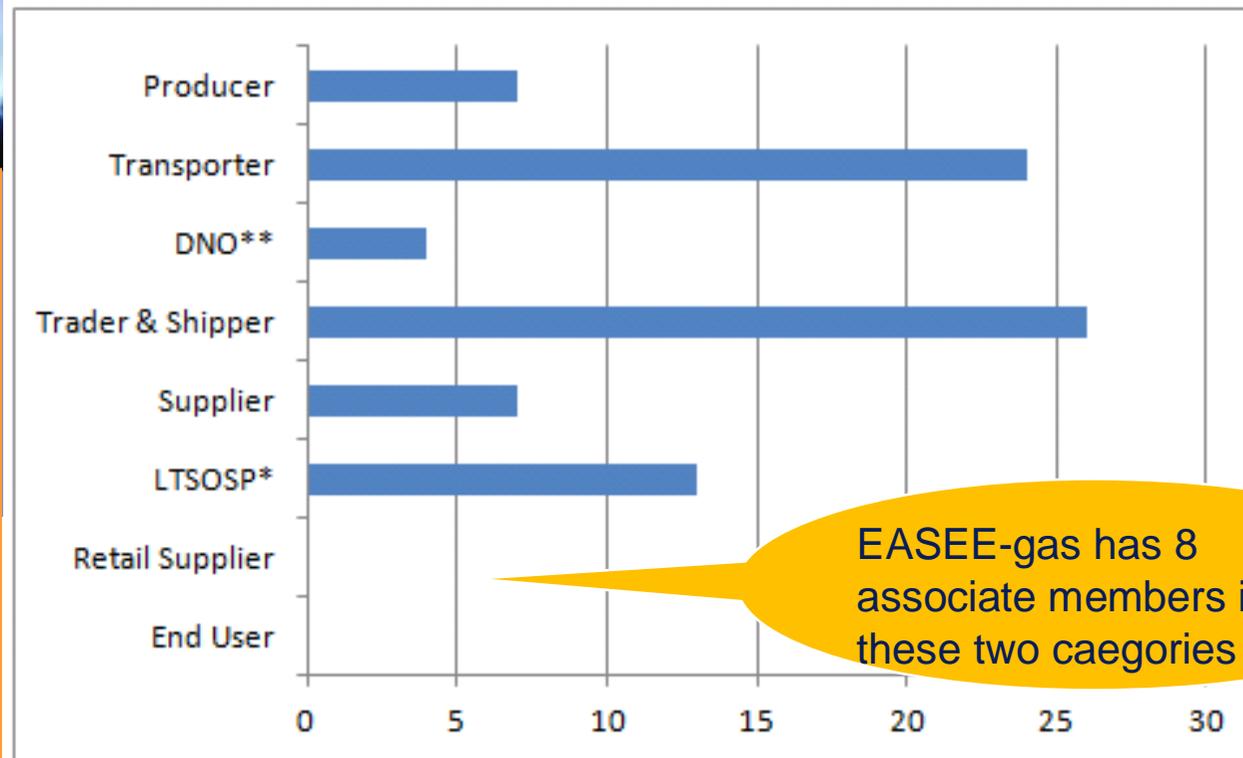
## **Basic Principles**

- Ø Open, independent, company based organisation
- Ø Members: Fee and Vote
- Ø Associate members: no fee, no vote
- Ø Driven by volunteers
- Ø Financed through membership fees

Currently: 82 Members and 27 Associate members



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EASEE-gas has 8 associate members in these two categories

\*LTSOSP=LNG Terminal and Storage Operator and Service Provider

\*\*DNO=Distribution Network Operator

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Madrid Forum VII (2002) identified the need for removing technical obstacles for interoperability of different natural gas qualities.

***Different requirements*** throughout Europe regarding natural gas quality are a ***potential and real barrier*** for the creation of an efficient European gas market.

Madrid Forum invited EASEE-gas to take the lead in discussions among stakeholders with the aim of streamlining interoperability for high calorific gases.



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CBP 2005-01 was approved by the EASEE-gas Executive Committee on 3 February 2005 and a revision on 6 December 2008.

- ∅ The CBP recommends natural gas quality specifications at cross border points in Europe and describes recommended gas quality parameters, parameter ranges and an implementation plan.
- ∅ Natural gas arriving at cross border points in line with these proposed quality specifications can not be refused for quality reasons.
- ∅ The CBP does not in any way restrict parties at a cross border point in agreeing wider specifications.



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### Application areas

High calorific gas without odorants

- Ø European Cross Border points
- Ø EU entry points
- Ø LNG import terminals

Excluding areas of production and isolated systems where production, transportation and utilisation are combined.

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**Approved parameters, values and ranges**

<b>Parameter</b>	<b>Unit</b>	<b>Min</b>	<b>Max</b>	<b>Recommended implementation date</b>
<b>WI</b>	<b>kWh/m<sup>3</sup></b>	<b>[13.60]</b>	<b>15.81</b>	<b>1/10/2010</b>
<b>d</b>	<b>m<sup>3</sup>/m<sup>3</sup></b>	<b>0.555</b>	<b>0.700</b>	<b>1/10/2010</b>
<b>Total S</b>	<b>mg/m<sup>3</sup></b>	<b>-</b>	<b>30</b>	<b>1/10/2006</b>
<b>H<sub>2</sub>S + COS (as S)</b>	<b>mg/m<sup>3</sup></b>	<b>-</b>	<b>5</b>	<b>1/10/2006</b>
<b>RSH (as S)</b>	<b>mg/m<sup>3</sup></b>	<b>-</b>	<b>6</b>	<b>1/10/2006</b>
<b>O<sub>2</sub></b>	<b>mol %</b>	<b>-</b>	<b>[0.001]*</b>	<b>1/10/2010</b>
<b>CO<sub>2</sub></b>	<b>mol %</b>	<b>-</b>	<b>2.5</b>	<b>1/10/2006</b>
<b>H<sub>2</sub>O DP</b>	<b>°C at 70 bar (a)</b>	<b>-</b>	<b>- 8</b>	<b>See note **</b>
<b>HC DP</b>	<b>°C at 1 – 70 bar (a)</b>	<b>-</b>	<b>- 2</b>	<b>1/10/2006</b>

\* EASEE-gas has organised an oxygen measurement survey and as a result is in the process of revising the CBP to a level of 0.001 mol%. An exception is made at cross border points if the levels increase due to use of already existing UGS's

\*\* At certain cross border points, less stringent values are used than defined in this CBP. For these cross border points, these values can be maintained and the relevant producers, shippers and transporters should examine together how the CBP value can be met in the long run. At all other cross border points, this value can be adopted by 1 October 2006.



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- Ø Member States have been asked to analyse the impact of adopting the EASEE-gas specification.
- Ø The methodology applied by each country to accommodate the EASEE-gas specification at cross border points will depend on the historic and future development of the national market.
- Ø Upon completion of the CBP the EU initiated a study with CEN to develop a gas quality standard to be used throughout Europe, within the Member States.  
As result the CBP timetable was not adopted.
- Ø CBP is widely referred to within the industry

# EASEE-gas Reflection on the Cost-Benefit Analysis



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- ∅ Cost – Benefit analysis demonstrates explicitly reasons for the limitations EASEE-gas put on its CBP:       Applicable to X-border points only.
  
- ∅ The objective of the EASEE gas approach:
  - ∅ the investments are done timely
  - ∅ the most cost effective measures are taken
  - ∅ free flow of gas is secured
  - ∅ national legislation does not necessarily have to be changed.

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- Ø Increased/renewed interest throughout the gas value chain
- Ø Increasing number of often conflicting requirements:
  - Ø Introduction of biogas
  - Ø Integrity of existing installations
  - Ø Increasing demand for “constant” gas quality
  - Ø Increasing variation in gas qualities
  - Ø Concerns regarding rate of change of gas quality
  - Ø Increasing number of quality parameters and associated values
  - Ø Security of supply
  - Ø Increased exchange of natural gas

These increasing requirements will most likely narrow the quality range and not enhance the flow of gas throughout the EU



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- Ø Clarity needs to be provided on the relationship between the work done by ENTSOG and CEN and the associated timing thereof.
- Ø When developing a gas standard any limitations should be based on operability and safety.  
Concerns of individual end user groups, not based on these two elements, should not be addressed during the CEN work.
- Ø Great concerns exist within the industry regarding variation of gas quality. However there are area's in Europe where different gas qualities exist and end users are capable of managing this. EASEE gas proposes that the experience how these area's deal with this issue are shared.
- Ø Technology with respect to information exchange of gas quality between TSO end users, allowing end users to control their appliances when confronted with changing gas quality could become part of the solution