



# **European standardisation for the European gas infrastructure – CEN/TC 234**

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## What is the political/ regulatory situation of the gas sector?

- Growing European regulation by EU COM DG ENER
- Effects of implementation of 3rd energy directive package:
  - Unbundling of gas infrastructure
  - Change of responsibilities of companies and experts in restructured companies
- More player and growing networks in Europe (ACER, ENTSOG, European organisations, ESOs, bilateral)
- Further European and international transsectoriel subjects (security, management systems)
- Additional national energy market regulation

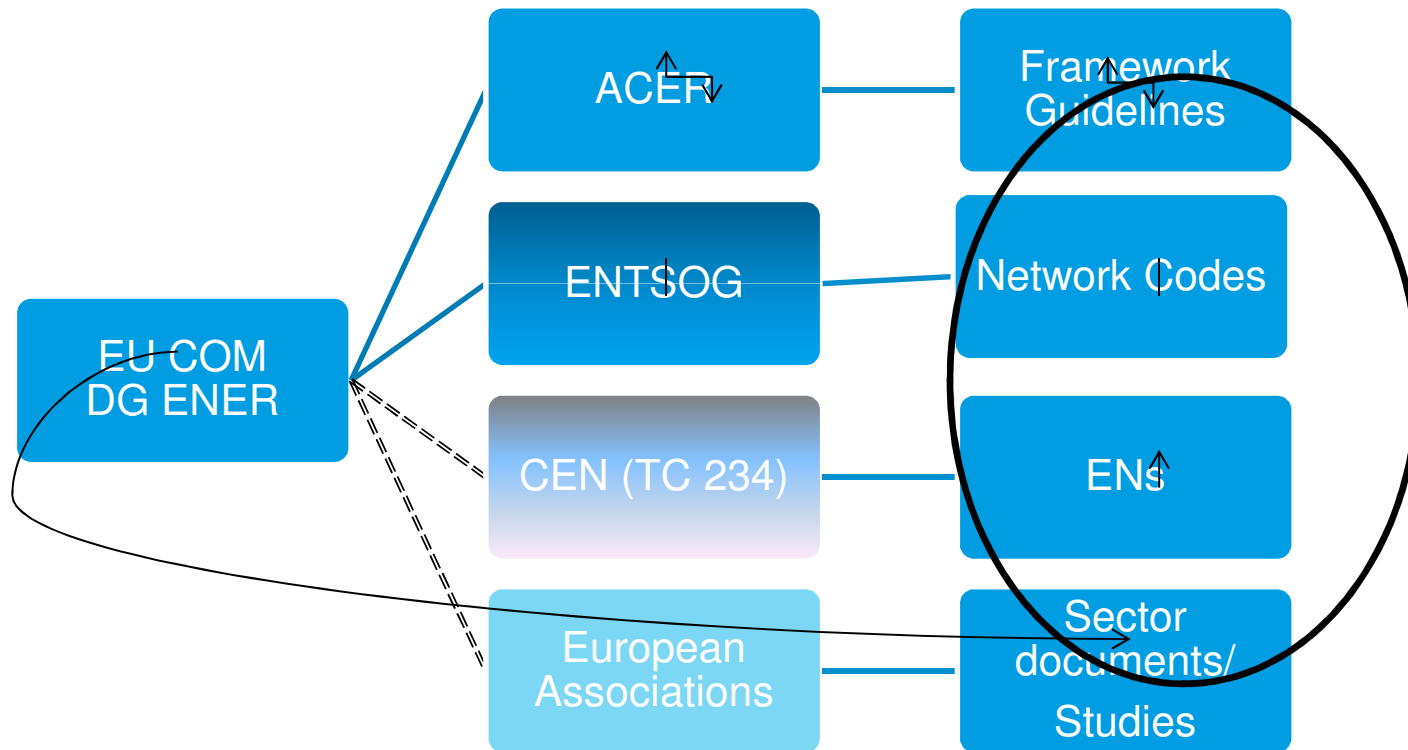


## Gas standardisation in CEN/TC 234 in this context

- Continous standardisation of all relevant technical issues of gas infrastructure
- self-motivated evaluation of 3rd energy package identifying and implementing resulting technical requirements in existing CEN/TC 234 standards
- EU requested M/400 on European harmonisation of Gas quality (Type H)
  - Representation of CEN at Madrid Forum
  - Continous exchange with EU COM DG ENER
  - Liaisons with relevant parties (ACER, ENTSOG, European organisations)



# EU COM DG ENER approach of regulation: Example Gas quality





## **CEN/TC 234 „Gas Infrastructure“**

### **Functional standards describe....**

- **Design**
- **Choice of materials by product standards**
- **Construction**
- **Testing and commissioning**
- **Operation and maintenance**

**...up from the input of gas in the transmission system up to the inlet connection of gas appliances.**



## **CEN/TC 234 Gas infrastructure**

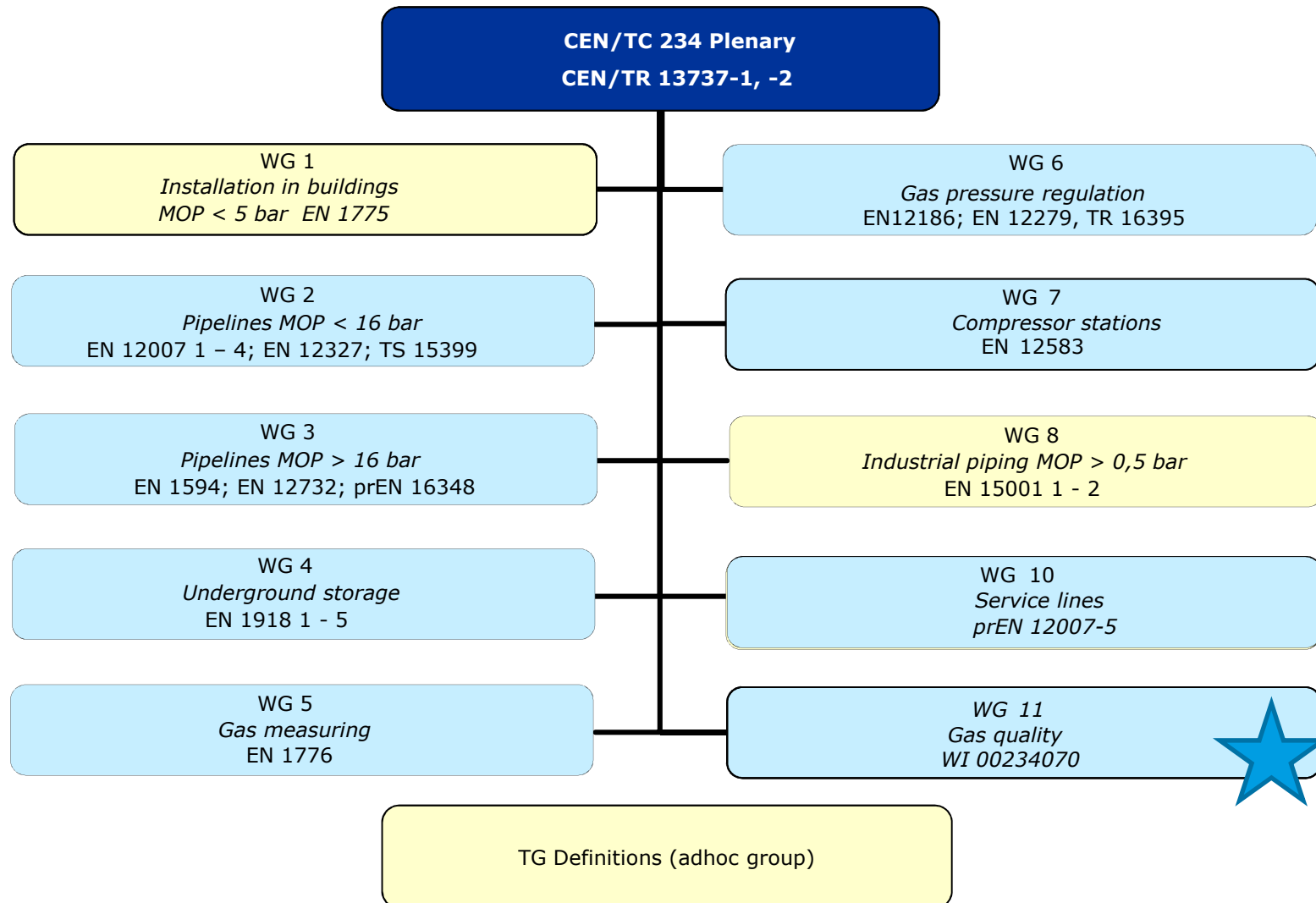
### **25 actively participating member states**

- **Austria**
- **Belgium**
- **Bulgaria**
- **Cyprus**
- **Czech Republic**
- **Denmark**
- **England**
- **Finland**
- **France**
- **Germany**
- **Greece**
- **Hungary**
- **Ireland**
- **Italy**
- **Latvia**
- **Lithuania**
- **Netherlands**
- **Norway**
- **Poland**
- **Portugal**
- **Slovakia**
- **Slovenia**
- **Spain**
- **Sweden**
- **Switzerland**



# CEN/TC234 Gasinfrastruktur

## - Structure (blue – active; yellow – no activity at present)





## CEN/TC 234 – Published documents and running projects

Subject (WG)	Standards
Plenary	<b>CR 13737 "Guideline for the implementation of CEN/TC 234 functional standards"</b> <b>Part 1:2012: General</b> <b>Part 2: National pages</b>
Gas installation (in house) (WG 1 - France)	EN 1775:2007 "Gas pipework for buildings"
Gas installation (others) (WG 8 - Netherlands)	EN 15001 "Gas installation pipework with OP greater than 0,5 bar for industrial and greater than 5 bar for industrial and non-industrial installations – almost ready for Formal Vote" Part 1:2009 "Detailed functional requirements for design, materials, construction, inspection and testing" Part 2:2009 "Detailed functional requirements for operation and maintenance"
Gas distribution (WG 2 - UK)	<b>EN 12007 "Pipelines for MOP up to and including 16 bar"</b> <b>Part 1:2012 "Gas distribution – general recommendations" (WI 00234037)</b> <b>Part 2:2012 "PE systems" (WI 00234038)</b> <b>Part 3:2013 (pr) "Steel systems" (WI 00234039)</b> <b>Part 4:2012 "Renovation" (WI 00234040)</b> EN 12327:2012 "Pressure testing" (WI 00234041) TS 15399:2006 "European Quality Assurance System for gas supply companies"
Service lines (WG 10 - Ireland)	<b>prEN 12007- 5:2012 " Service lines" (WI 00234048) (ENQ)</b>
Gas transmission (WG 3 - Netherlands)	<b>EN 1594:2013 "Pipelines for MOP over 16 bar" (UAP)</b> <b>EN 12732:2012"Welding" (WI 00234042)</b> <b>EN 16348:2012 "Safety Management System (SMS) for gas transmission infrastructure and Pipeline Integrity Management System (PIMS)( for transmission pipelines (WI 00234060)</b>
Underground storage (WG 4 - France)	<b>EN 1918-1:1998 "Aquifers"</b> <b>EN 1918-2:1998 "Oil and gas fields"</b> <b>EN 1918-3:1998 "Solution mined salt cavities"</b> <b>EN 1918-4:1998 "Rock caverns"</b> <b>EN 1918-5:1998 "Surface facilities"</b>
Gas metering (WG 5 - Germany)	<b>EN 1776:1998 "Gas measuring stations" (WI 00234046) + Enlargement for light industrial, commercial and residential use (WI 00234047)</b>
Pressure regulation (WG 6 - Germany)	<b>EN 12186:2000+A1 2005 "Pressure regulating stations for transmission and distribution"</b> <b>EN 12279:2000+A1 2005 " Pressure regulating installations for service lines"</b> <b>TR 16395:2012 "CEN/TC 234 pressure definitions – Guideline document"</b>
Compressor stations (WG 7 - Germany)	<b>EN 12583:2000 "Compressor stations" (WI 00234052)</b>
Gas Quality (WG 11 – Germany)	<b>prEN xx (WI 00234070) "Gas quality – H-gas"</b>

published  
in Formal Vote  
in revision

new in  
elaboration





# Functional standards for gas installations

Standards for European gas infrastructure				
	Transmission	Distribution		
		steel		PE
<b>Operational Pressure</b>	> 16 bar	5<>16	<5	< 10
<b>Pipeline</b>	EN 1594	12007-3		EN 12007-2
		EN 12007-1 general functional recommendations		
		EN 12007-4 renovation		
<b>Line pipe (ECISS/TC 110)</b>	EN ISO 3183	10208-1		EN 1555-2
<b>Welding</b>		EN 12732		ISO 12176
<b>Pressure testing and commissioning</b>		EN 12327		
<b>Integrity management</b>	prEN 16348	CEN/TS 15399		
<b>Gas quality, Type H</b>	WI 00234070	in preparation		



## Implementation of CEN/TC 234 Standards

- Implementation of **CEN product standards** obliges to withdrawal of the national standard with the same scope and conflicting standards
- Implementation of **functional CEN/TC 234 standards** obliges to withdrawal of contradicting standards, but **needs national more detailed standards/technical rules for the same scope.**



## Implementation of CEN/TC 234 Standards

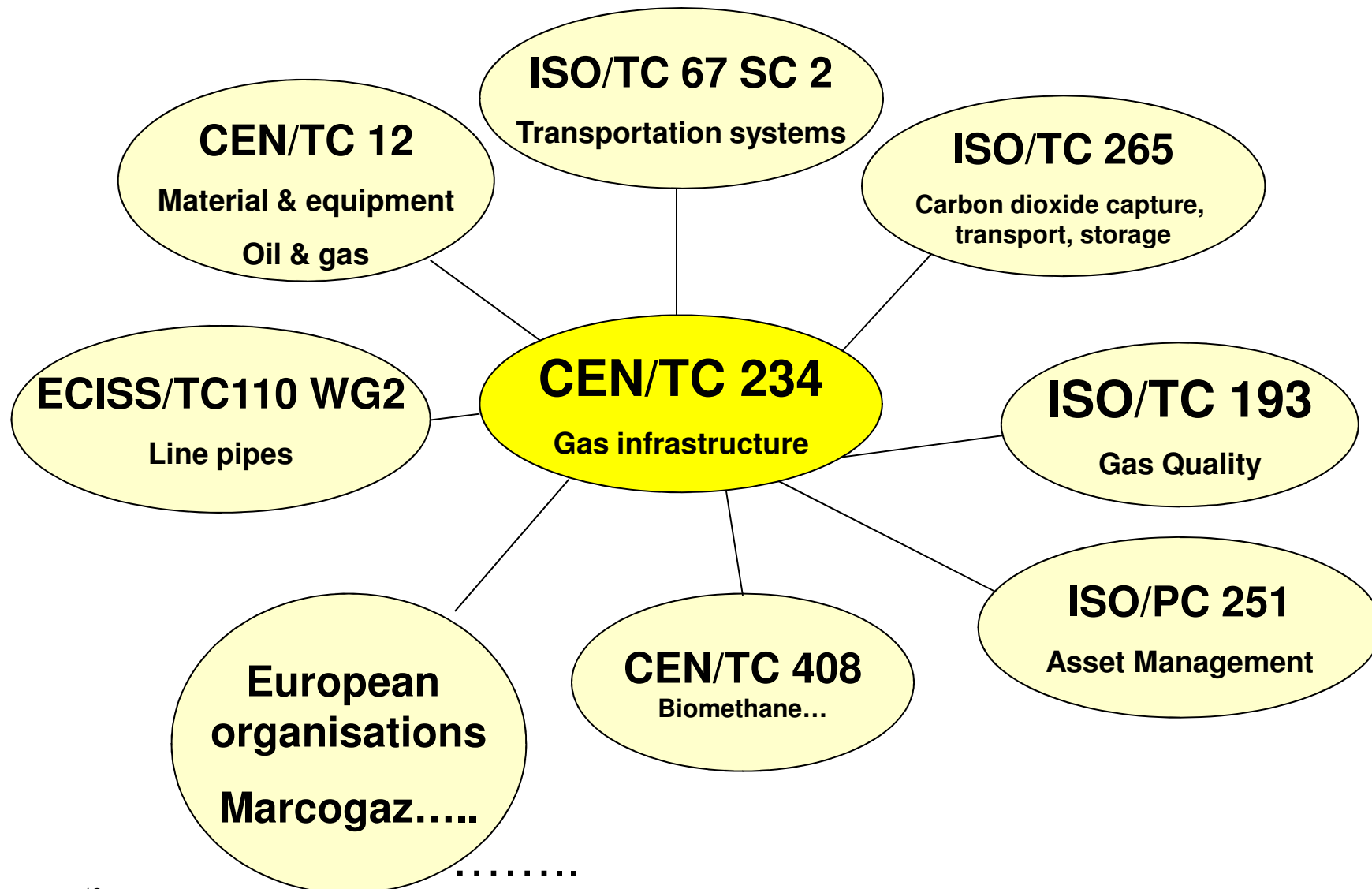
### CEN/TC 234 Standards

- are functional standards
- contain the consensus of the European gas industry at present;
- need national more detailed standards/technical rules (CEN/TR 13737-1/-2);
- will be developed to (more) detailed standards step by step



# ISO standardisation

## Use of CEN/ISO TC liaisons





## CEN/TC 234 Liaison Organisations

- **Marcogaz**
- AEGPL
- CEDEC
- EASEE-gas
- EHI
- ENTSOG (European network of TSOs)
- EUROMOT
- FARECOGAZ
- GIE
- OGP



## CEN/TC234 Gas infrastructure

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