

European Standardization for the Natural Gas Infrastructure

The benefits of participation

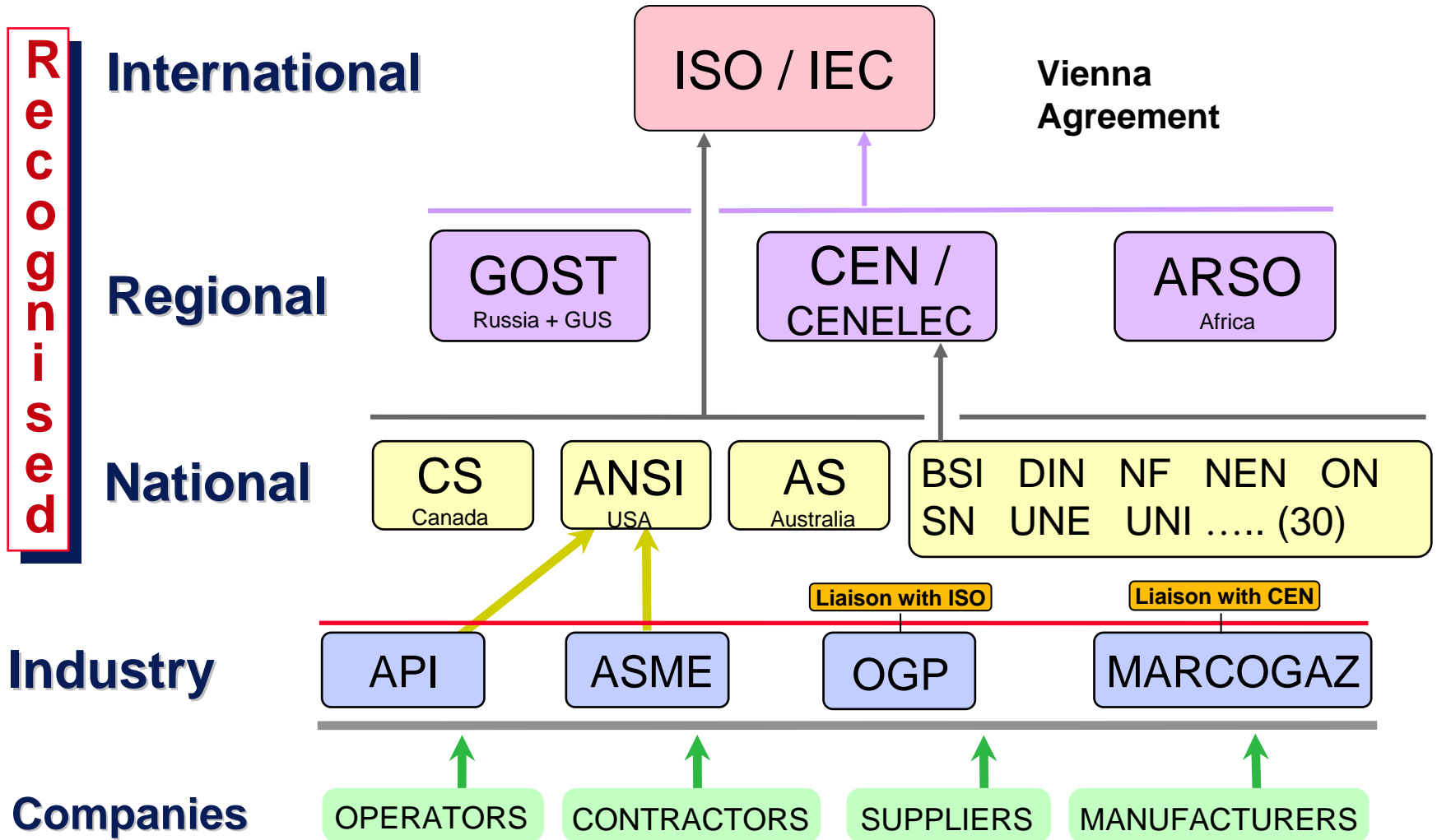
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Content

- The standards framework
- Benefits of Participation in standardization
- CEN/TC234:
Technical Committee on the
European Natural Gas Infrastructure



Standardizations Bodies - relationships



A functional standard in the „gas industry“ describes...

- Related to Safety Management:
 - Design
 - Choice of materials by product standards
 - Construction
 - Testing and commissioning
 - Integrity

- Related to Integrity Management:
 - Operation and maintenance
 - Safeguarding external interference

Aiming at the **Safety** and **Reliability** of the gas infrastructure

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External standards as a strategic tool

- To demonstrate the '**Self responsibility**' attitude of the European gas transmission companies
- Improving the **inter-operability** of the gas transmission networks
- To demonstrate the installation is designed and constructed based on widely accepted functional and **safety** requirements and "**best practices**"
- With respect to **Safety Management** the use of external standards as a basis for the internal standardization and technical specifications is evident

Benefits from participation in the development of standards

- Gaining recognition as a knowledge centre on gas infrastructure technology and standardization
- Strengthening the value and impact of self-responsibility
- Being first informed about new technologies and developments
- Increasing knowledge for your own experts by networking
- Influencing the quality and level of safety of the standard for the company's / national benefit
- Preventing damage caused by new or additional requirements

Standardization leads to:

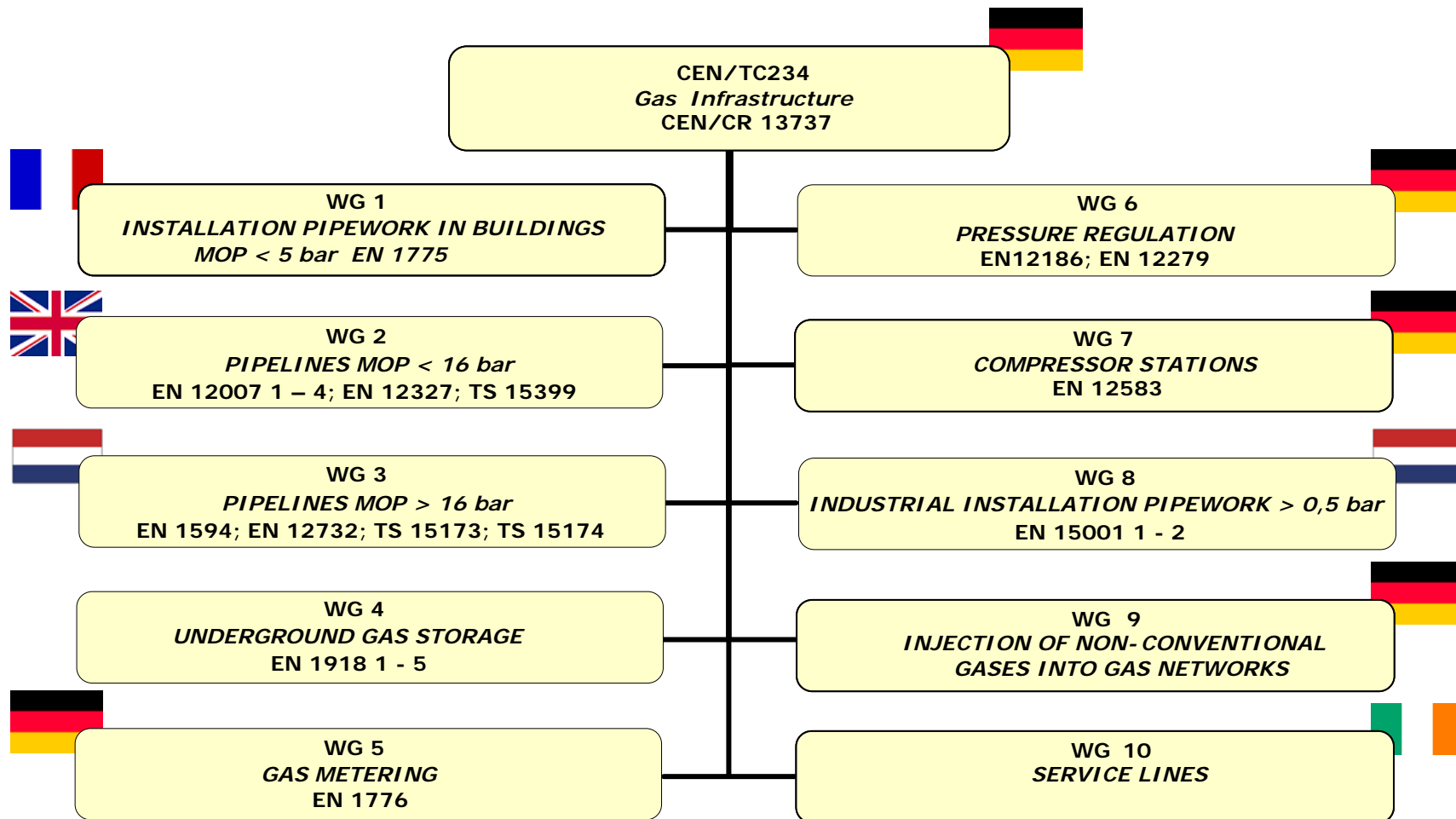
- Reduction of project costs
 - Less complexity
 - Less time needed for the design and construction
- Reduction of maintenance costs
 - Improved manageability
 - Less spare parts in stock
 - Familiar with techniques and components ->
 - less education and training
- Safety
 - Reducing HSE risks
- Efficiency
 - A shorter project turnaround
- Reliability
 - Proven technology
 - Predictable
 - Reproducible

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CEN/TC234 Infrastructure Organization chart



European gas infrastructure standards

CEN/TC234 Work programme

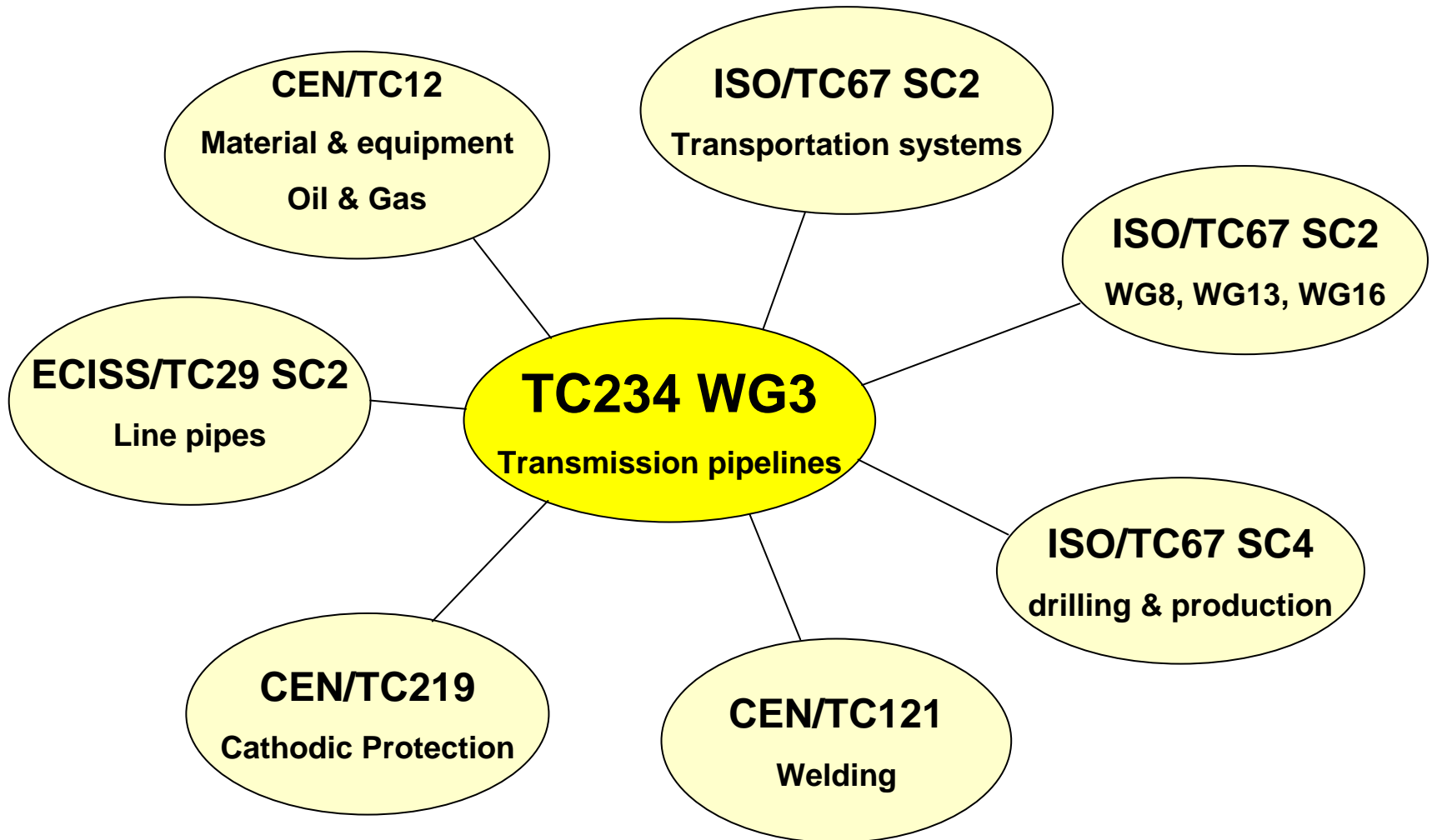
Subject	Working Group	Standards
Gas installation	Plenary	CR 13737:2001 "Guideline for the implementation of CEN/TC 234 functional standards"
Gas distribution	WG 1	EN 1775:2008
	WG 2/TG 1	EN 12007-1:2000 "Gas distribution – general recommendations"
	WG 2/TG 2	EN 12007-2:2000 "PE systems"
	WG 2/TG 3	EN 12007-3:2000 "Steel systems"
	WG 2/TG 4	EN 12007-4:2000 "Renovation"
	WG 2/TG 5	EN 12327:2000 "Pressure testing"
Gas transmission		TS 15399:2006 "European Quality Assurance System for gas supply companies"
	WG 3	EN 1594:2009 "Pipelines greater 16 bar MOP"
	WG3 TG4	EN 12732:2000 "Welding"
	MT TS 15173/4	CEN/TS 15173:2005 "Frame of references regarding PIMS"
		CEN/TS 15174:2005 "Guideline for Safety Management Systems for transmission pipelines"
Underground storage	WG 4/TG 1	EN 1918-1:1998 "Aquifers"
		EN 1918-2:1998 "Oil and gas fields"
		EN 1918-3:1998 "Solution mined salt cavities"
		EN 1918-4:1998 "Rock caverns"
		EN 1918-5:1998 "Surface facilities"
Gas metering	WG 5	EN 1776:1999 "Gas measuring stations"
Pressure regulation	WG 6/TG 3	EN 12186:2000 "Pressure regulating stations for transmission and distribution"
	WG 6/TG 4	EN 12279:2000 " Pressure regulating installations for service lines"
Compressor stations	WG 7	EN 12583:2000 "Compressor stations"
Industrial piping	WG 8	EN 15001:2009 "Gas installation pipework with OP greater than 0,5 bar for industrial and greater than 5 bar for industrial and non-industrial installations Part 1 "Design, materials, construction, inspection and testing" Part 2 "Operation and maintenance"
Injection of non-conventional gases	WG 9	In progress elaborating a technical report
Service lines	WG 10	In progress elaborating a standard

CEN/TC 234 Infrastructure - Goals

- Provide a **safe and reliable gas transmission and delivery**
- Establishment of the technical safety criteria needed to realise a safe interoperability of network respecting the requirements of **objectivity** and **non-discrimination**
- Focus on the technical **self-responsibility** of the gas sector in Europe by setting the necessary technical safety standards

in line with the EC goals in the Gas Directive 2003/55/EC

CEN/TC234 WG3 liaisons



I've tried to convince you that participation to standardization work is of real benefit for your company and for yourself

Thank you for your attention