

HET KENNISNETWERK VOOR NORMALISATIE



ENERGY HEALTHCARE
SMART CITIES WATER
SMART INDUSTRY
CIRCULAR ECONOMY





Metrology for Biomethane workshop
Benefits and Importance of the International Standardisation System
in the Natural Gas Industry
Delft
22 January 2019

by Françoise de Jong
Secretary ISO/TC 193





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'Een betere wereld', dat is waar NEN naar streeft.

Rik van Terwisga

Algemeen directeur NEN



About NEN

About Standardization

Standardization is a strategic instrument for arriving at widely supported agreements that make innovation, sustainability, safety, efficiency and international trade possible.

'The world in line'

About NEN

The Dutch Standardization Network NEN connects national and international interested parties, helps them to reach broadly supported agreements, and supervises their implementation.

'NEN helps and connects'

About NEN

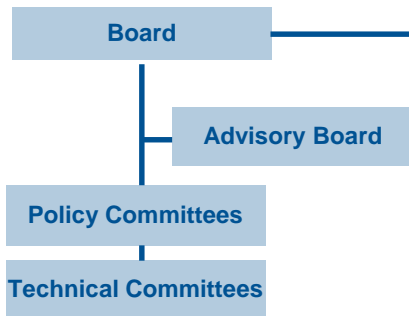
Our Mission

We enable our members, through standards development, to contribute to a safe and sustainable environment. We are continuously developing and investing in systems, knowledge and skills. The expertise of our people; the excellent cooperation with our members, and the efforts of our ambassadors make the success of NEN.

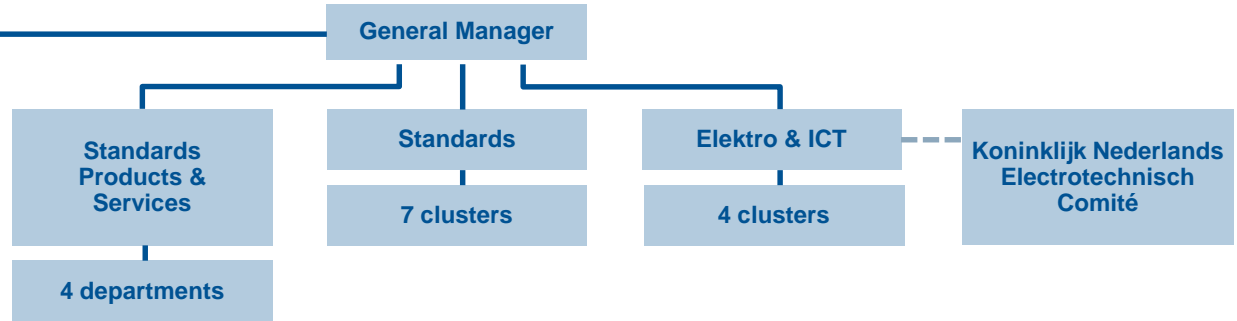
Our core values

Not bound & neutral, taking initiatives & facilitating

Foundation Structure



Office Structure



278
Employees

- 100** Men
- 178** Women
- 56** Staf
- 67** Standards Products & Services
- 126** Standards
- 29** Elektro & ICT

STANDARDS

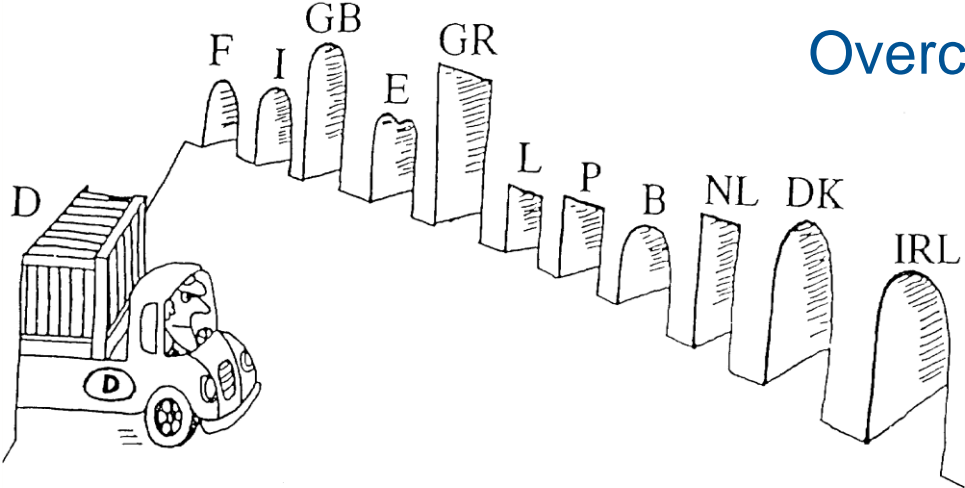
Status of Standards 2017

	2013	2014	2015	2016	2017
Nederlandse normen	1.383	1.342	1.294	1.284	1.197
Europese normen	14.391	14.787	15.113	15.504	15.533
Wereldwijde normen	16.568	17.075	17.411	17.875	17.586

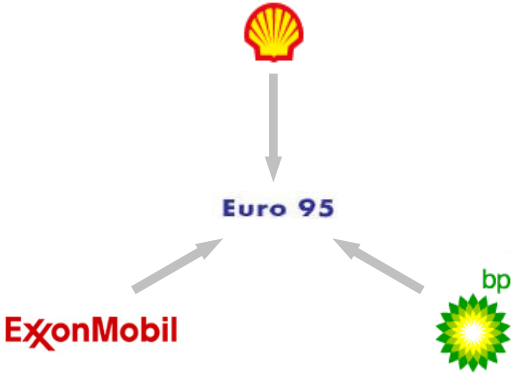
Introduction into standardization – What are standards?

- Standards...
- ... are documents with agreements on products, services and systems
- ... are designed for **voluntary use**
- ... give clarity for market parties
- ... standards are drawn up by experts
- ... contribute to:
 - (inter)national strength of competition
 - innovation
 - health, safety and environment
 - image
- ... are in accordance with WTO

Introduction into standardization – Why standardization?



Overcoming trade barriers



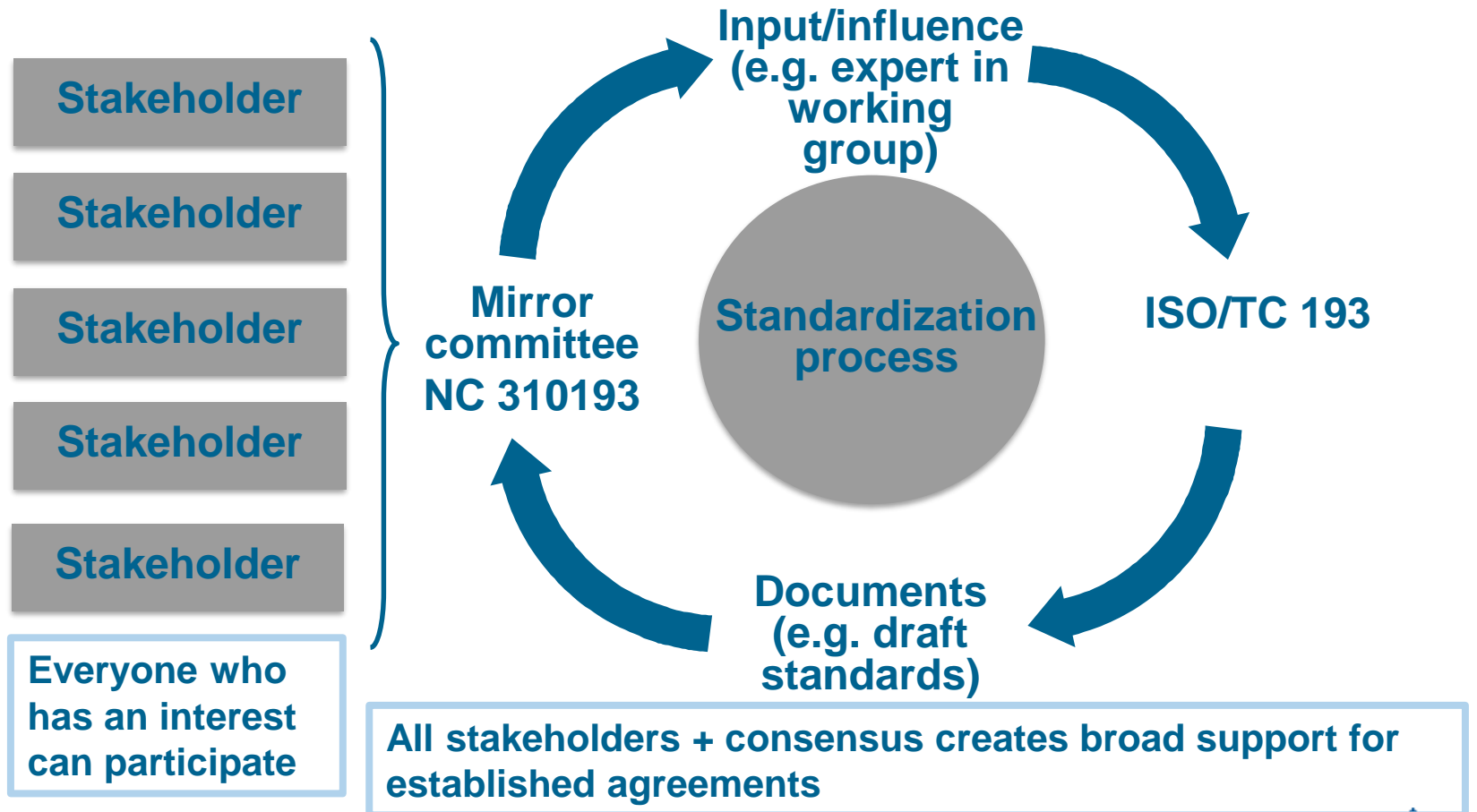
Introduction into standardization – What is standardization?

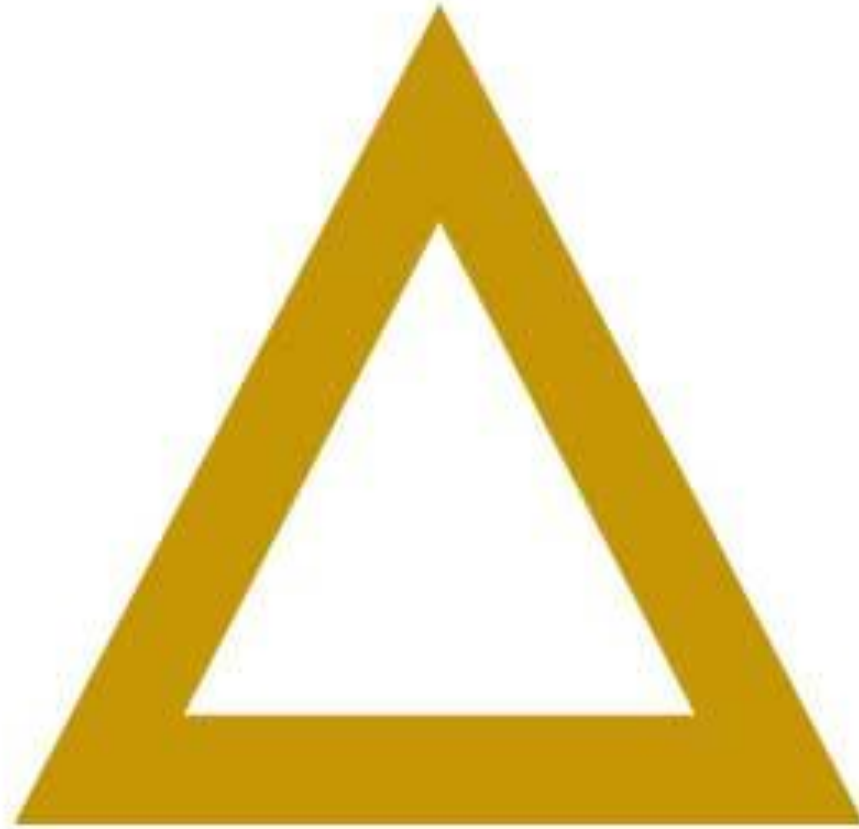
- Standardization ...
- ... is an **open** process => all parties concerned invited to participate for broad support
- ... is developing agreements based on **consensus** => no sustained opposition
- ... is **transparent** => agreements are publicly available for comments and use
- ... takes place on three levels:
 - national (e.g. NEN, DIN, BSI)
 - regional (e.g. CEN, ANSI)
 - international (e.g. ISO, IEC)

Benefits standards development

- Impact on market developments
- (Inter)national technology and commercial network
- Quick and easy access to national and international networks
- New insights for innovation and development
- Early positioning and alignment business strategy
- Knowledge development and exchange

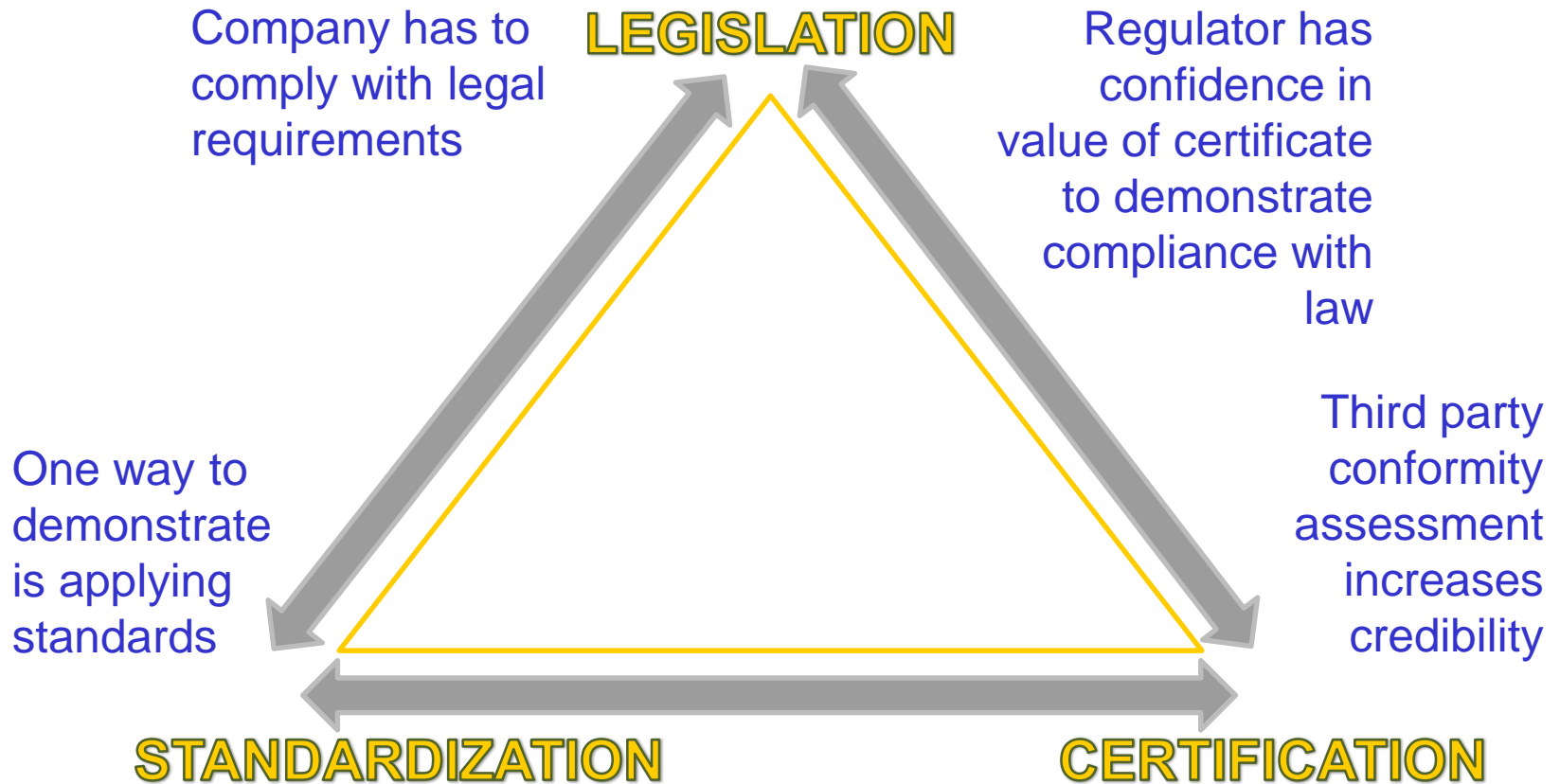
Introduction into standardization – How is participation organized? E.g. NL





GOLDEN TRIANGLE

Relationship between regulation, standardization and certification



Introduction into certification (1) – Specific requirements conformity assessment process

Standard xxx

Requirements concerning content:

- product / services
- system
- person

Certification scheme yyy

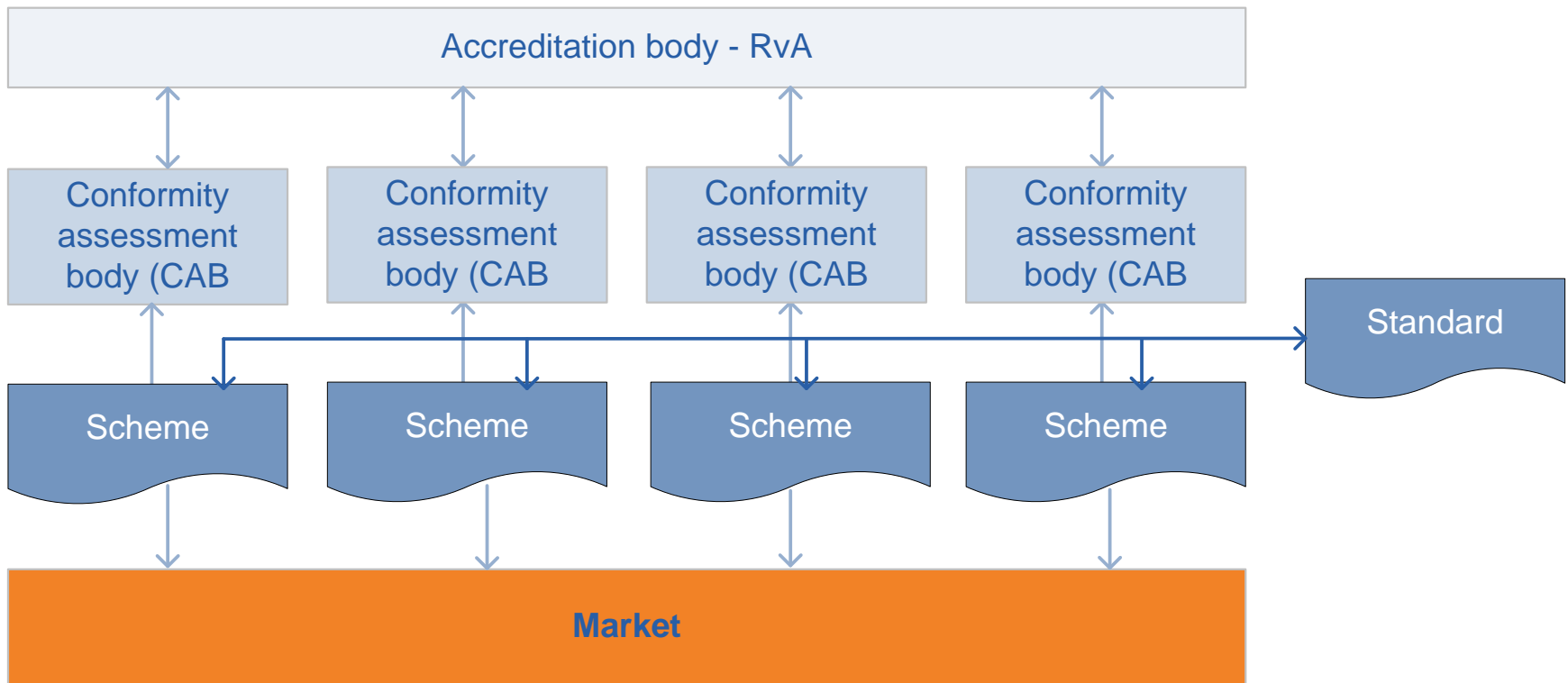
Requirements concerning:

- method to conduct determination activities
- review and attestation
- need for surveillance

Separated according to ISO 17007

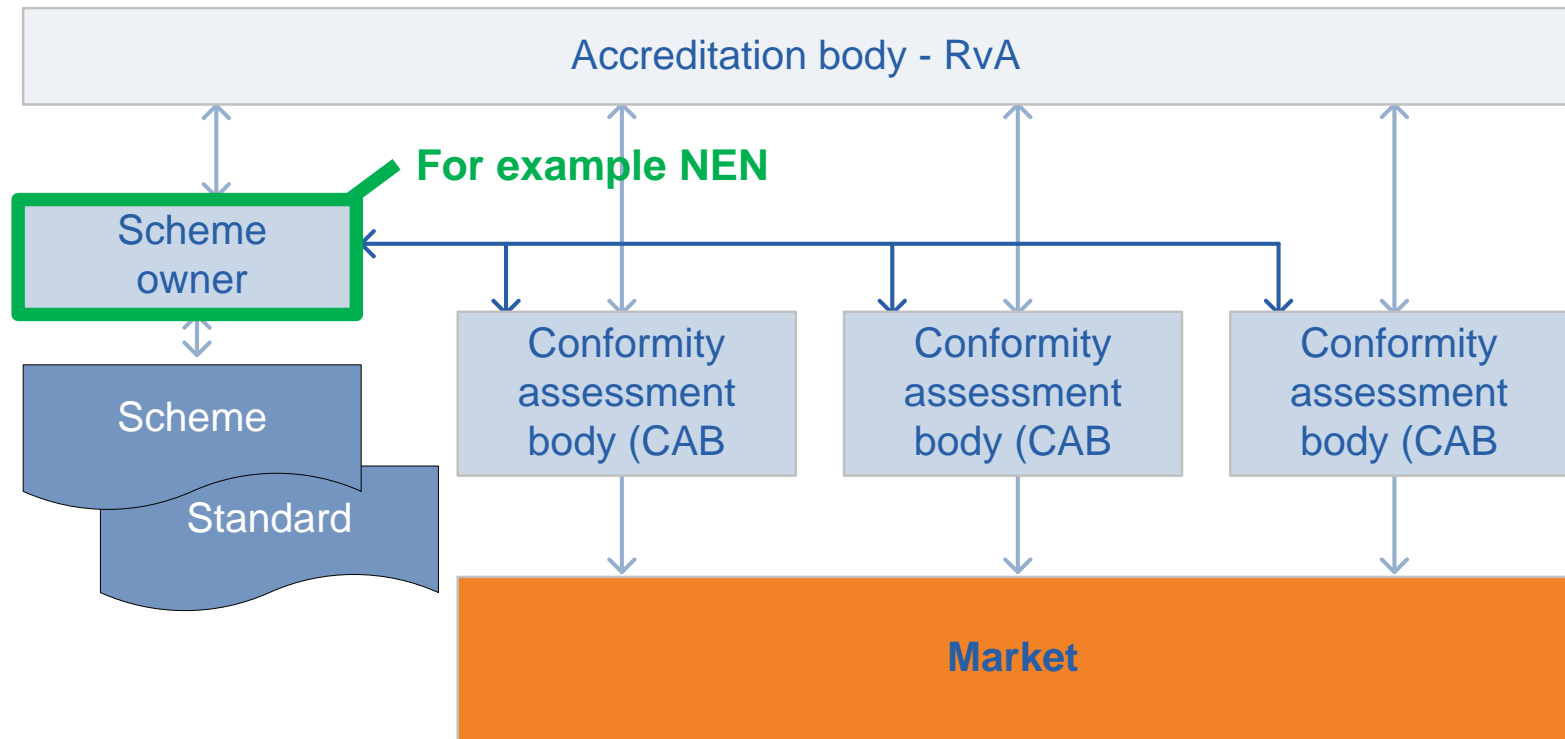
Introduction into certification (2)

Option 1: each CAB individually

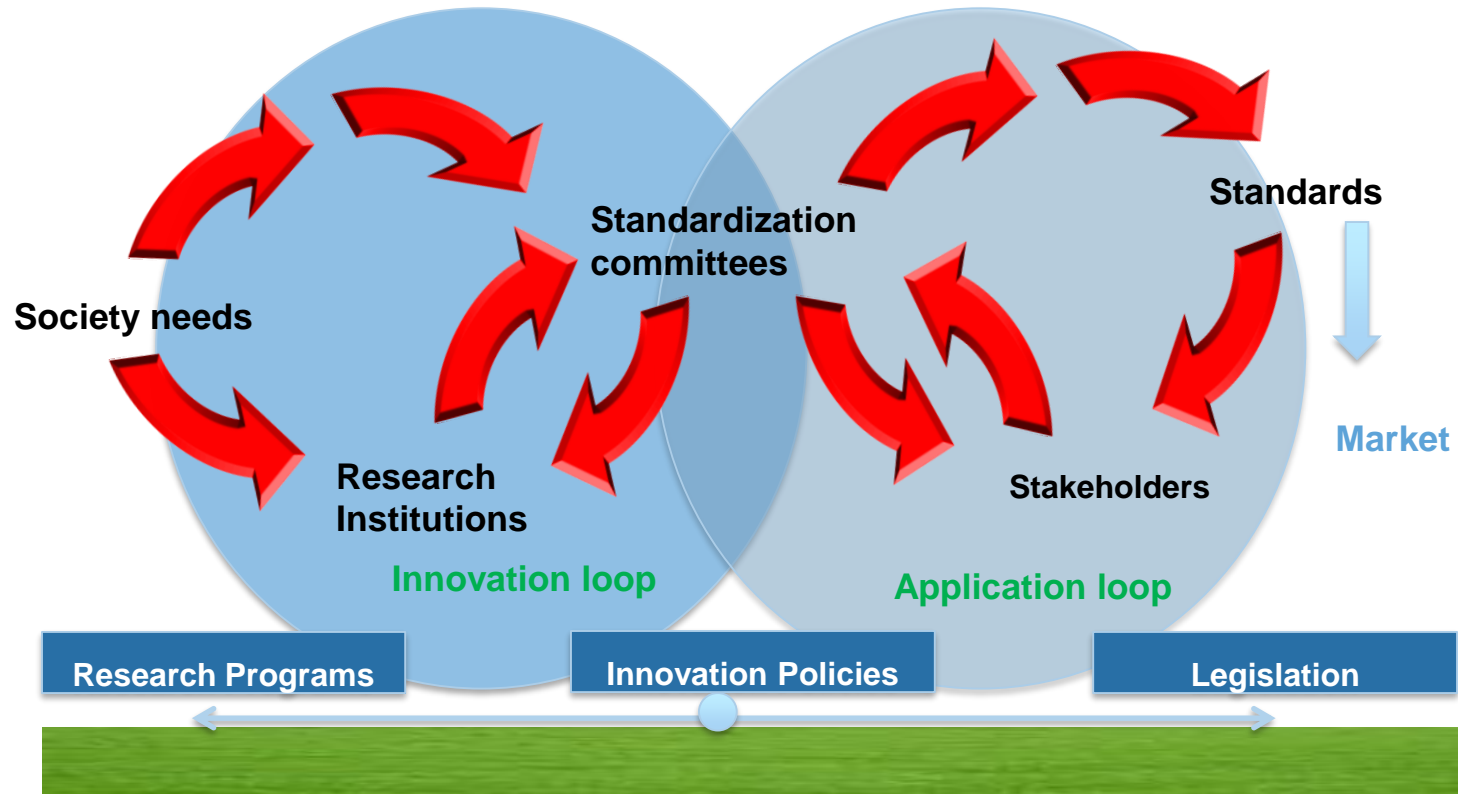


Introduction into certification (3)

Option 2: central certification scheme to be used by CABs



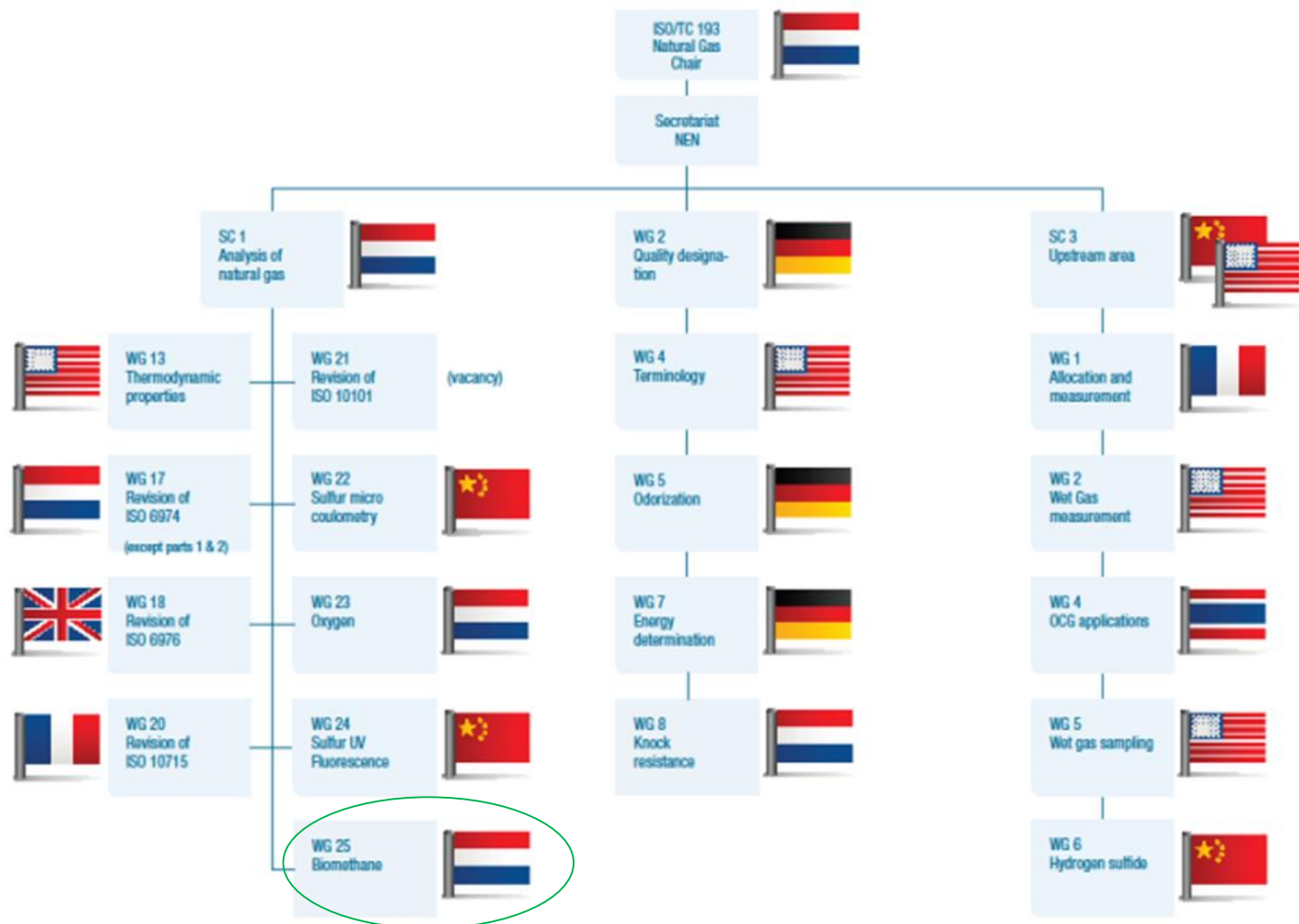
Standardization loop



ISO/TC 193 - Scope

Standardization of terminology, quality specifications, methods of measurement, sampling, analysis and test for natural gas and natural gas substitutes (gaseous fuel, including biogas, biomethane, coalbed methane, shale gas and wet gas), in all its facets from production to delivery to all possible end users across national boundaries. Recognition of work related to natural gas in other technical committees and in liaison with these technical committees.

ISO/TC 193 - Organizational Structure



ISO/TC/SC1/193 WG 25

Membership: The working group has 20 members (status: 12 June 2018) from 10 ISO member bodies

Terms of reference

Based on resolution 14, adopted during the 28th meeting of ISO/TC193/SC1,

RESOLUTION 14: Biomethane

ISO/TC 193 decides to create a new working group ISO/TC 193/SC 1/WG 25 "Biomethane" with the following scope:

'To consider the applicability of existing ISO/TC 193 standards on analysis of natural gas on their applicability for the analysis of biomethane, to adapt them or to prepare proposals for new standards such as on the determination of siloxanes'

ISO/TC 193/SC 1 appoints Mr Adriaan van der Veen (NL) as convenor of this new working group.

ISO/TC 193/SC1 WG 25

Terms of reference for the Working Group

To consider the existing ISO/TC 193 standards on analysis of natural gas on their applicability for the analysis of biomethane;

1. To identify groups of parameters for which standardised test methods are needed, and to prioritise these;
2. To set specifications for such test methods;
3. To develop standardised test methods for the parameters subject to conformity assessment for biomethane.

ISO/TC/SC1/193 WG 25

Work programme

The envisaged programme for the WG includes the development of ISO standard test methods for:

1. **Carbon monoxide content**
2. Particulate concentration
3. Halogenides content
4. **Silicon and siloxanes content**
5. Amines content
6. Ammonia content
7. **Terpenes content**
8. **Biogenic methane content**
9. Compressor oil content
10. Ketones content
11. General aspects of the analysis of biomethane

*First priorities in bold

ISO/TC 193 WG 25

The working group organises jointly with the project consortium of the EMPIR project “Metrology for Biomethane” 22-23 January 2019 a workshop to solicit input from experts in the field for the development of standardised test methods in seven areas: silicon content, halogens content, amines content, terpenes content, ammonia content, compressor oil content and biogenic methane content.



FOR A BETTER WORLD

