Sector Initiative for Equipment in Explosive Environments

The comprehensive approach of the UNECE Model L Regulation

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REGULATORY COOPERATION AND STANDARDIZATION POLICIES

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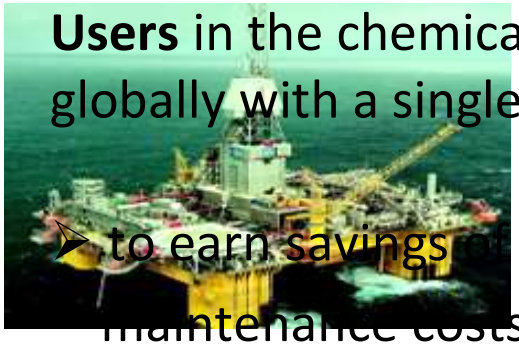
Agenda

- Introduction of the Sector Initiative
  - What is Explosion Protection?
  - What kind of Products?
  - Importance of the Quality Infrastructure
- Relationship between the actors
  - Examples of the CRO/CRA
- Actual activities
- Next steps
- Discussion about the relevance within UNECE WP.6

Interest of the Industry using Ex-Products



Users in the chemical and petroleum industry act more and more globally with a single engineering approach for their plants

- to earn savings on engineering, installation and maintenance costs
- to buy the equipment in a larger number and to get a better price per piece
- to have benefit from the global competition under manufacturers



Barriers against this tendency are domestic rules and regulations which require special engineering for the plants from country to country.

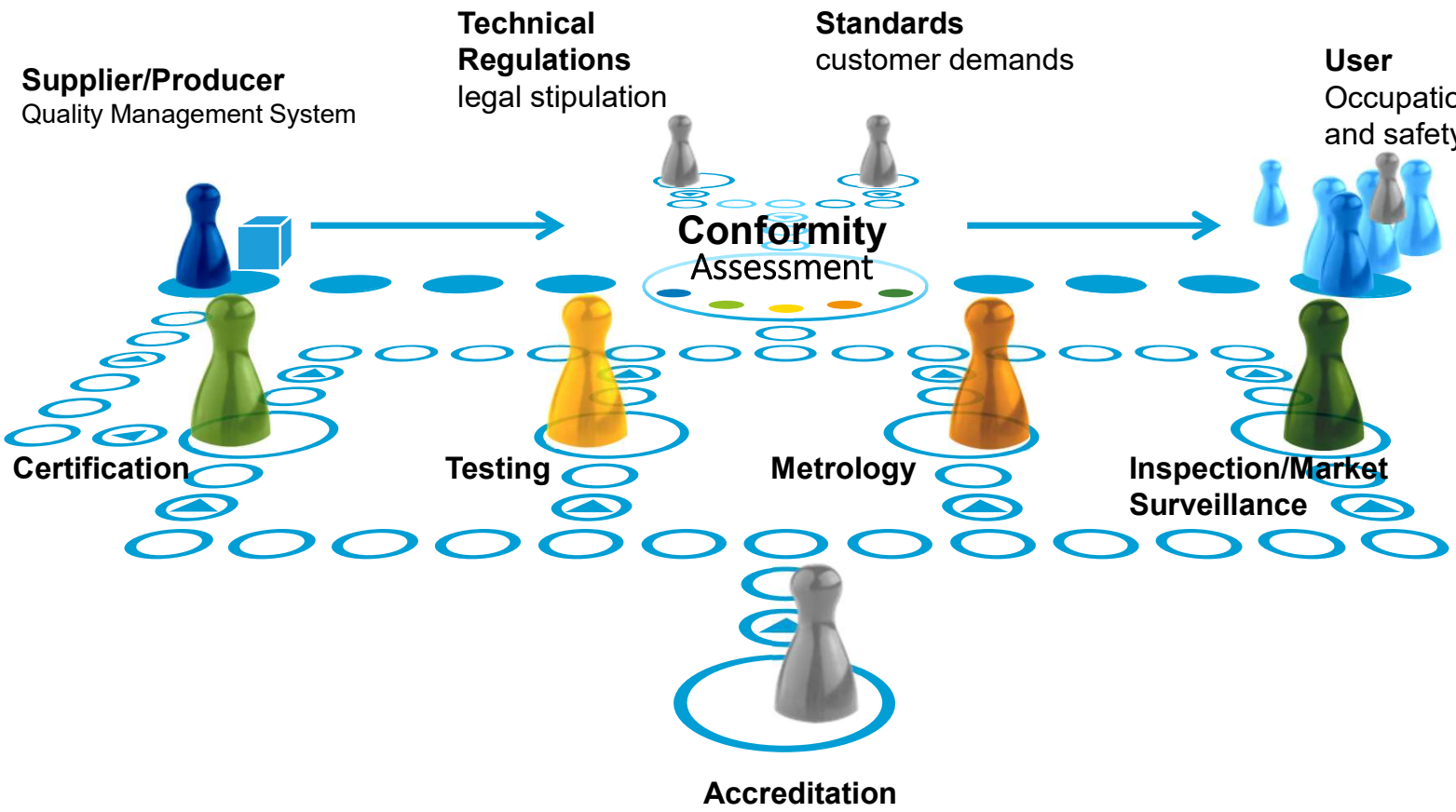
Interest of the Industry manufacturing Ex-Products

Manufacturers want to sell and manufacture their products

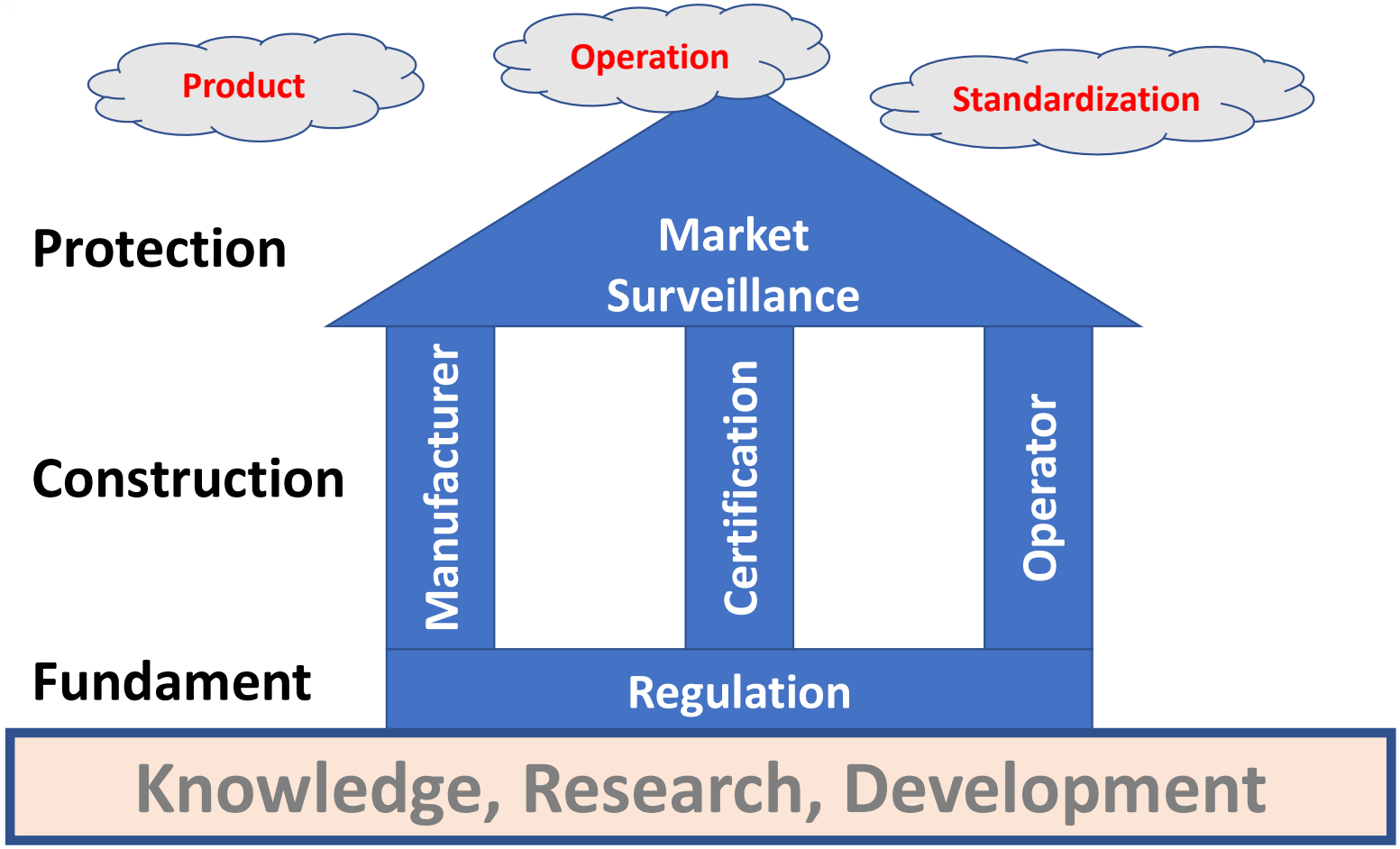
- without additional national differences for the product and delays to the market
- in accordance to one global standard (IEC / ISO)
- without double-testing of their product
- without formal restrictions to place it on the market

Barriers against this tendency are domestic rules and regulations which require special differences for the product from country to country.

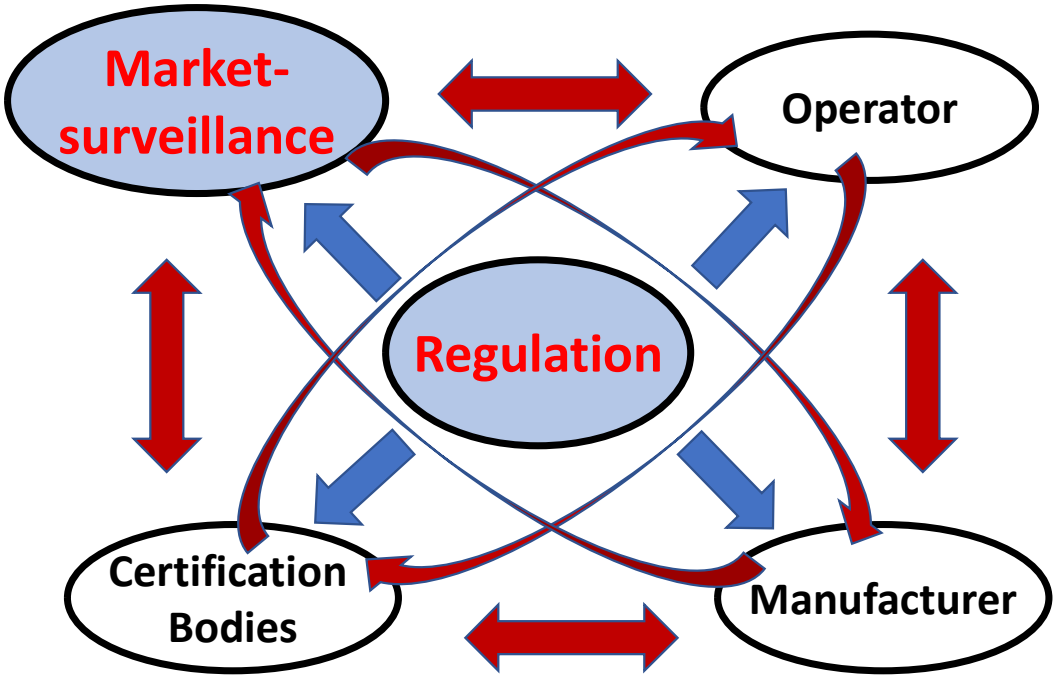
Quality Infrastructure: A Complex Network



Principles of the Ex-Business

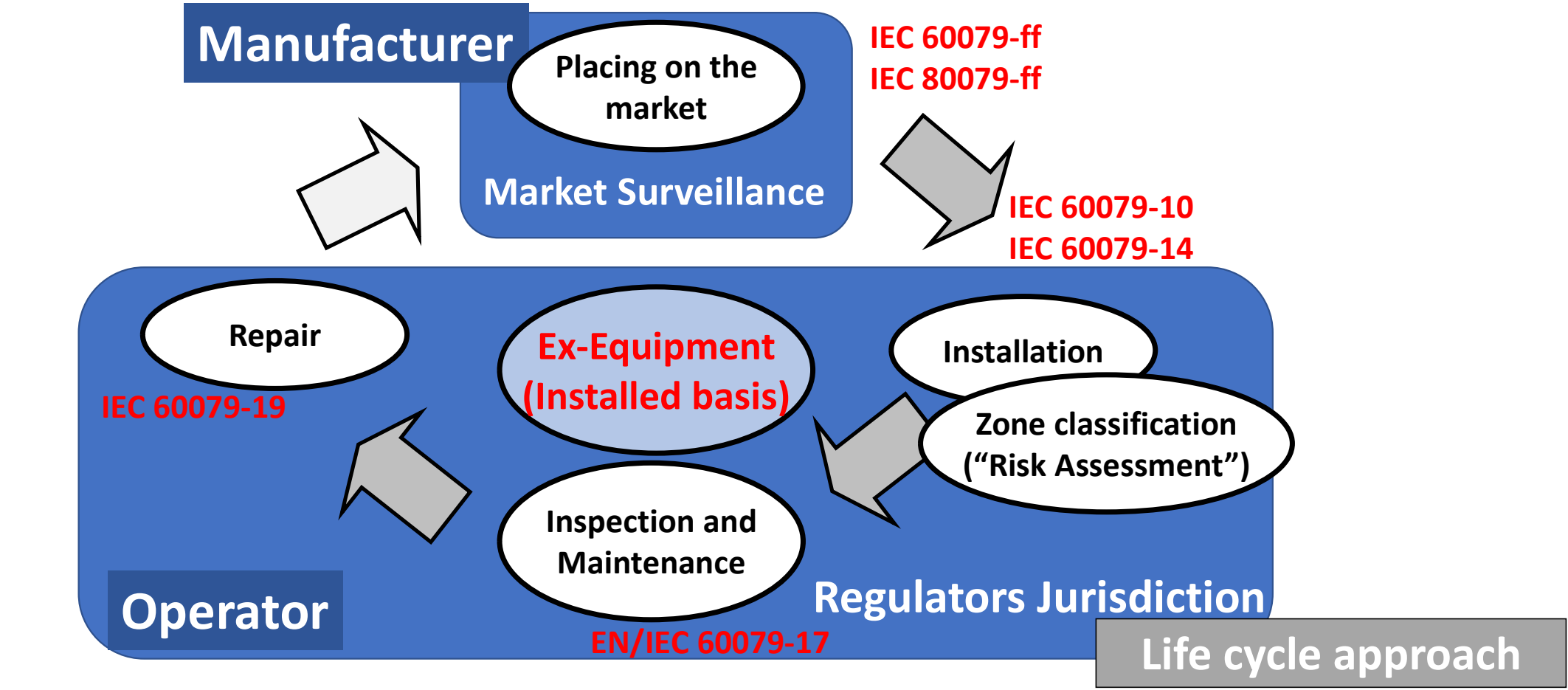


Interaction/Relationship within the SIEEE-System



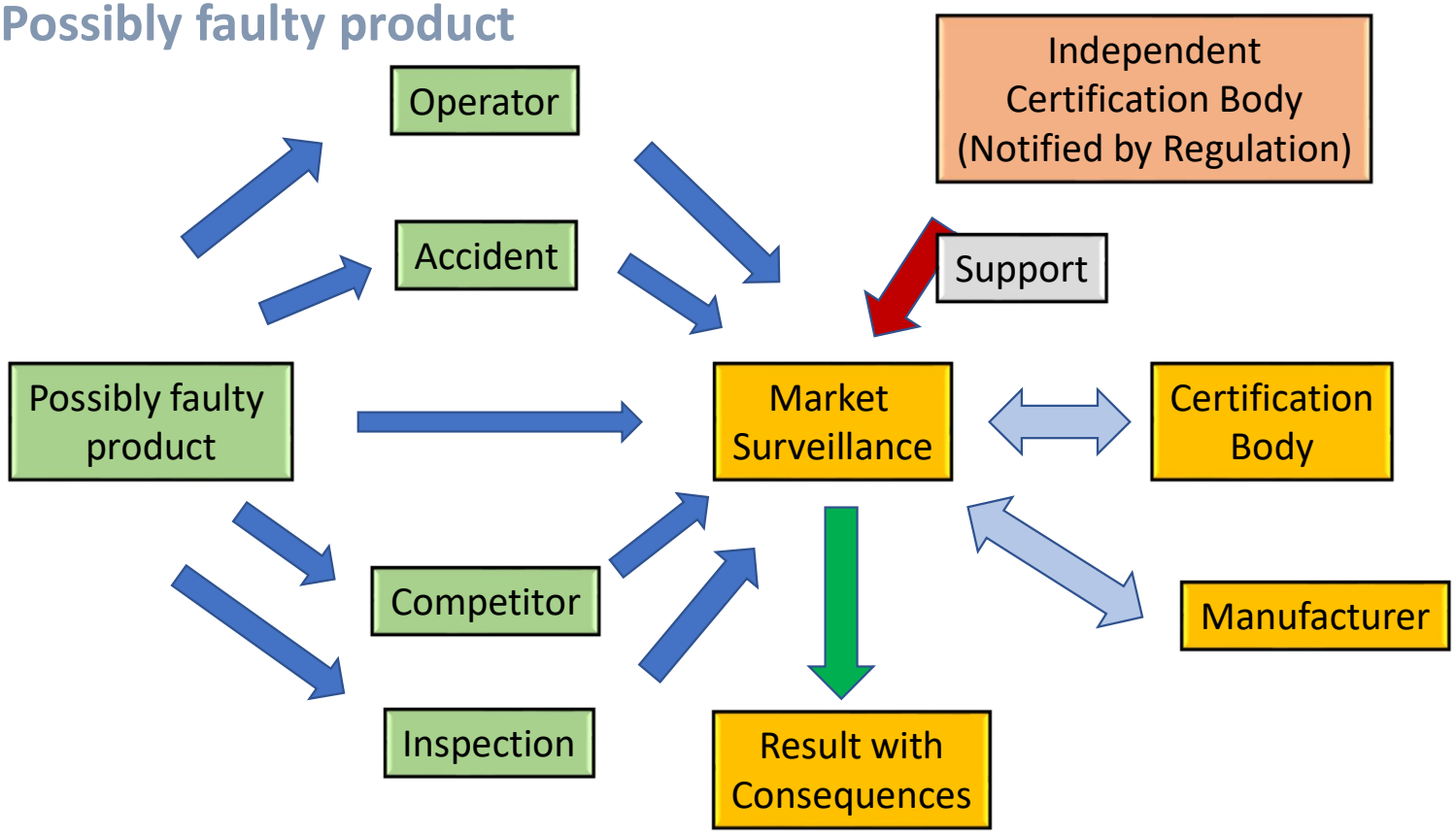
1. Definition/Jurisdiction
   a) Market Surveillance
   b) Certification Bodies
   c) Manufacturer
   d) Operator
2. Interaction
   a. Cert. B. ↔ Manu.
   b. Manu. ↔ Oper.
   c. MS ↔ Oper.
   d. MS ↔ Manu.
   e. MS ↔ Insp. B.
   f. Cert. B.↔ Insp. B.

Intention of the Common Regulatory Objectives (CRO)



Procedure for Ex-market surveillance

Example: Possibly faulty product



Procedure for Operators

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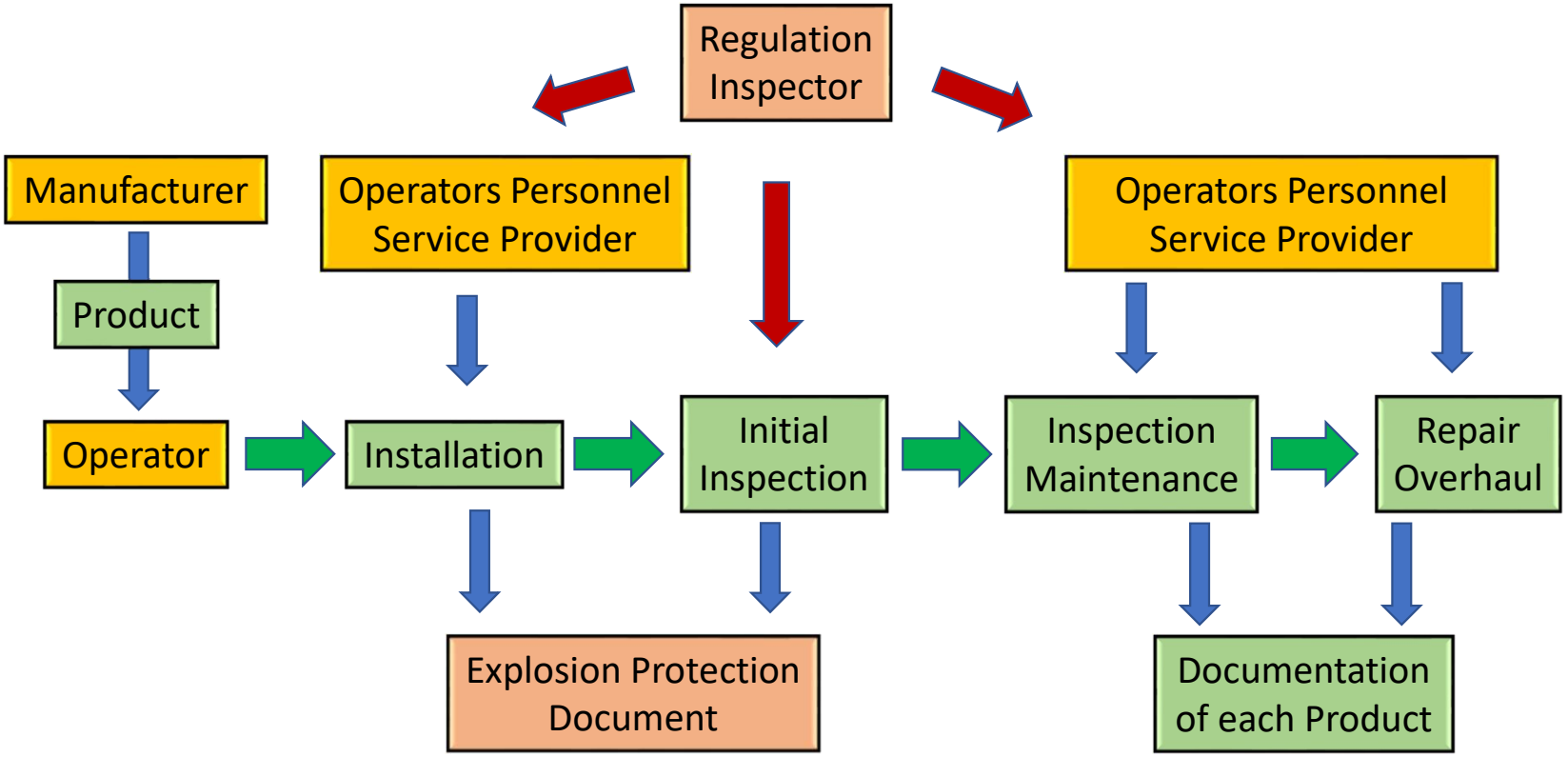
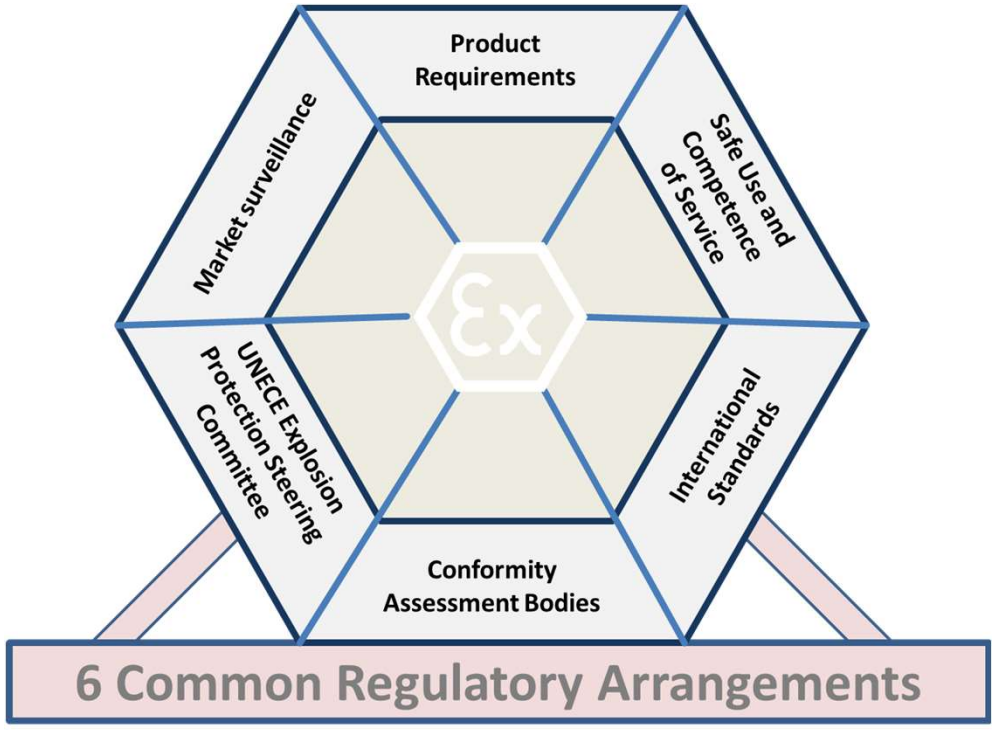
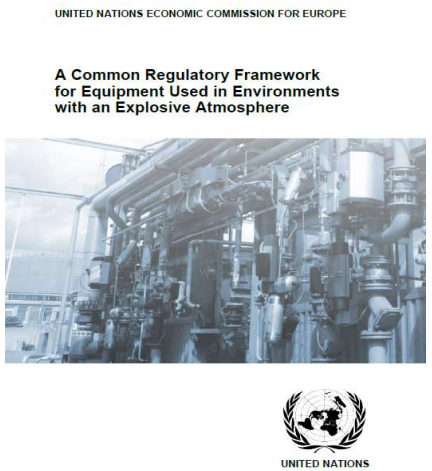
Examples: Operation of a plant, Maintenance, Repair, Training, …



The Regulatory Framework

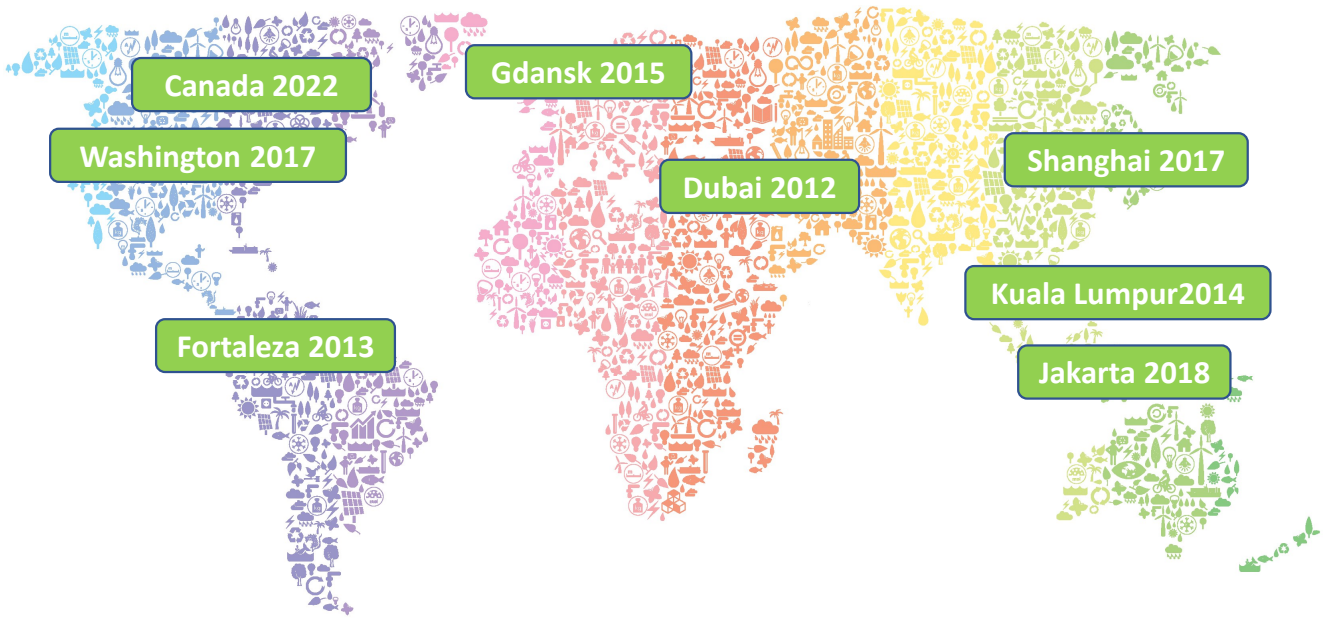




Significant Changes of the second edition:

- Participation in Proficiency Testing
- Independent CBs to support Market Surveillance
- Including certified services for the Ex-field for
  - Selection, Installation, Inspection, Maintenance, Repair,…
- Update of IEC standards

Workshops



Outputs:

- Comprehensive description of the methodology of the system
- Guidance documents for the various stakeholders (Regulators, Market Surveillance, Manufacturer, Operator, Inspection bodies)

SDG


1 NO POVERTY
2 ZERO HUNGER
3 GOOD HEALTH AND WELL-BEING
4 QUALITY EDUCATION
5 GENDER EQUALITY
6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY
8 DECENT WORK AND ECONOMIC GROWTH
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
10 REDUCED INEQUALITIES
11 SUSTAINABLE CITIES AND COMMUNITIES
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
14 LIFE BELOW WATER
15 LIFE ON LAND
16 PEACE AND JUSTICE STRONG INSTITUTIONS
17 PARTNERSHIPS FOR THE GOALS
THE GLOBAL GOALS
For Sustainable Development

Challenges

Climate change and development

Climate and development are inextricably linked. Climate change is already having severe consequences for humans and the environment, especially in developing countries. If we manage to limit global warming and adapt to climate change worldwide, then we will be able to prevent uncontrollable consequences for our planet and at the same time create new development opportunities.

Green hydrogen and Power-to-X products

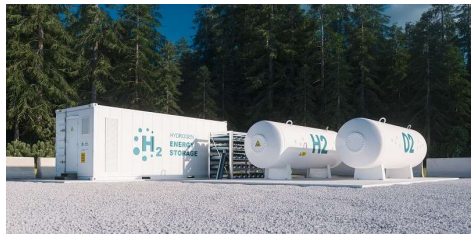
Global energy consumption is set to grow by 50 per cent by 2050; in developing countries and emerging economies it will increase by as much as 70 per cent. This means that green hydrogen is absolutely essential to a successful energy transition and to achieving international climate goals. It can be used, among other things, to produce climate-neutral fuels. They are called Power-to-X products (PtX). Green hydrogen can also be used to store energy. That makes green hydrogen a key commodity in a successful energy transition.

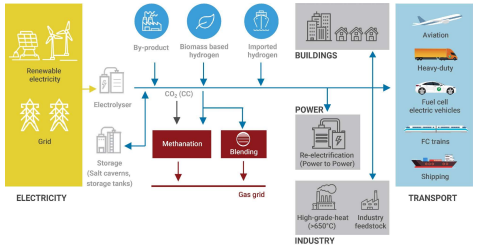
Federal Ministry
for Economic Cooperation
and Development

https://www.bmz.de/en/development-policy/green-hydrogen

Interest of the Industry using Ex-Products

Users in the hydrogen industry act globally with a single engineering approach for their plants





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WORK UNDER RECOMMENDATION L

A particularly problematic area is that of the sectoral initiatives that should follow Recommendation L, on common regulatory objectives.

The original idea was to use the Recommendation L to support regulatory frameworks where such don't exist by identifying non-binding CROs for ***goods/products*** *(following rec L) among members that are interested. It is important to clarify if CROs related to the International Model (Recommendation L) are still developed or used and how the work of other bodies can be promoted. (Are the existing sectoral initiatives still relevant and are there new areas where the International Model could be used?)*

WORK UNDER RECOMMENDATION L

Questions:

a) lack of regulations and effect on international trade and safety/security?

b) lack regulatory guidance (how will WP.6 work contribute to addressing the gap) and the effect on international trade and safety/security?

c) regulatory fragmentation (explanation) and lack of international harmonization (risking TBTs)?

d) promoting international best practices through WP.6 groups (and the rationale for WP.6 stepping in) and the effect on international trade and safety /security?

Summary

- The Sector Initiative started in 2006
  - Prepared the Terms of Reference
  - Country Surveys (2009, 2013, 2021)
  - Defined the Common Regulatory Objectives (update)
- Quality Infrastructure (Interaction of the actors)
  - Best Practise Examples
  - Workshop Idea
- SDG 7, 8, 9 (Hydrogen Technology)

Merci ありがとうございました Hvala Ačiū
شكرا جزيلا Mahalo Дякую Teşekkür ederim
Рахмат Dankon ඔබට ස්තුතියි Sagbol Ευχαριστώ
Tack Çox sağ ol Dziękuję Ci Obrigado
მადლობთ 감사합니다
תודה धन्यवाद Dankon
Баярлалаа Хвала вам
Hatur nuhun Tak skal du have Diolch
Спасибо Paldies
Go raibh maith agat Faleminderit Rahmat
Grazzi Dank je Рахмат cara Faafetai
Ačiū Благодаря ти
Mulțumesc Danke
Grazie 谢谢 សូមអរគុណ
Շնորհակալություն Takk skal du ha
Gracias Þakka þér fyrir
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Thank you

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