

HOW DOES INDUSTRY USE STANDARDS ?

the Oil & Gas Industry



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- This is a world where you use good standards



- This could be the future if you would use *no* or *wrong* or *multiple* standards

STANDARDS IN THE O&G INDUSTRY

- O&G uses mainly 2 types of technical standards :
 - For the equipment it buys (> 1 trillion \$-€/annum)
 - For the products it sells
- Through its experts the industry is obviously strongly involved in the standardisation work eg creating or updating the standards we need : in ISO, IEC, API (*the American Petroleum Institute*) and many other committees
- There are many more standards used by our industry, technical standards like for energy management, CCS (!) or less technical like management systems or social responsibility

STANDARDS IN THE O&G INDUSTRY

Why using standards and standardisation ?

- It saves money
- It boosts trade
- And very importantly it reduces the risk : for our employees, our partners and suppliers and eventually for the environment

This is true in the O&G industry but also in any business

ISO/TC67 vision



ISO TC67 (Technical Committee) is in charge of the standardisation of the Oil & Gas materials and equipments, including processes etc...

Why standardise?



- Standards help to manage complexity and thus to reduce risk:
 - Safety
 - Environmental
- Standards are a vehicle to capture learnings

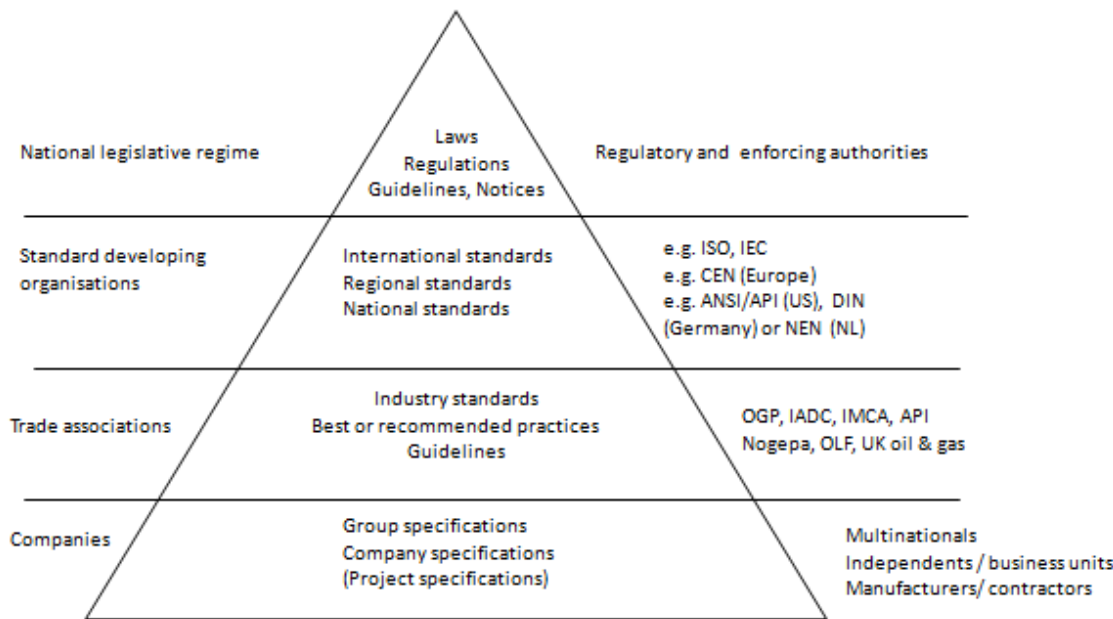
LINK TO REGULATION & REGULATORS

OFFSHORE SAFETY - THE INTERNATIONAL REGULATORS' FORUM

The IRF is a forum of 11 regulators for global offshore safety



Hierarchy of standards



mandatory

voluntary

Standards are like DNA. They are the basic building blocks for all technology and economic systems

(sic)



IRF SUMMIT CONFERENCE 2011

- Regulators involvement in standardisation activity

Why should regulators be involved?

Because consensus standards can:

- enhance technical integrity
- be alternative to prescriptive legislation
- reduce the need for regulatory document text
- provide a “level playing field” between countries
- enable cross border movement (especially mobile facilities)
- make easier for regulator to amend guidance than amend supporting legislation.

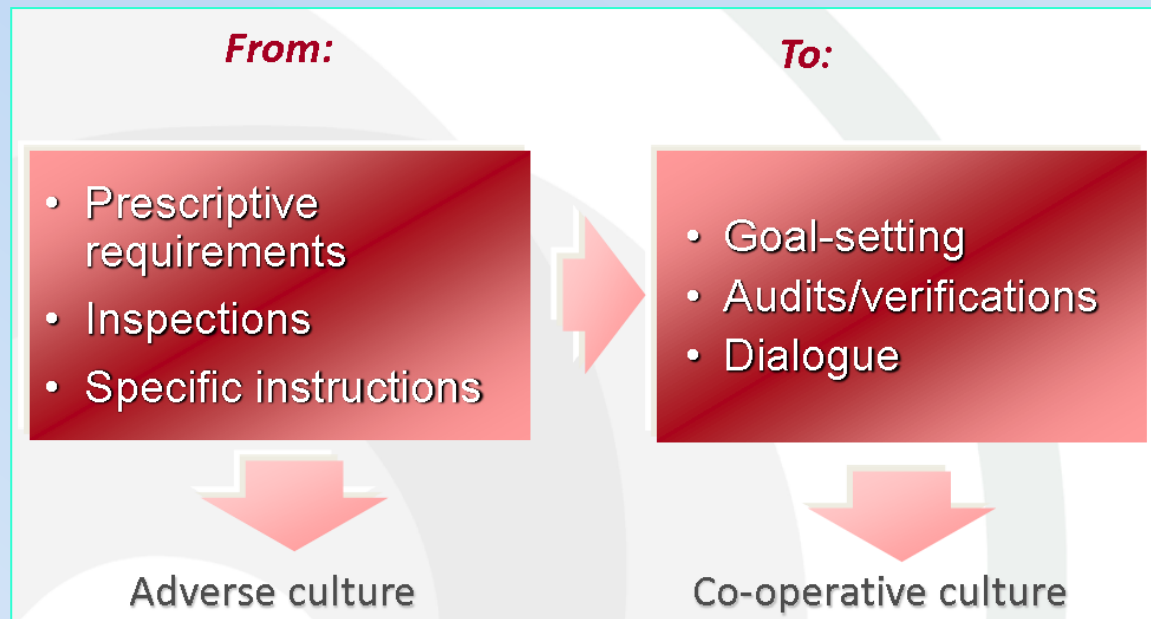


International Regulators' Forum

PRESCRIPTIVE → GOAL SETTING

- PSA's vision : The regulatory framework shall be flexible in terms of technological, operational and organizational development in the petroleum industry

- And :



- This is also true for standards : switch from prescriptive standards to performance oriented standards

CONCLUSION

- Standards are **common language** between stakeholders
- They facilitate trade and save costs
- They **help reducing risk** for stakeholders
 - Standards are there to preserve the environment and to save lives
- Therefore **it is important that regulators participate** in the standardisation work
- Regulation should be **goal setting** (≠ prescriptive)

also remember

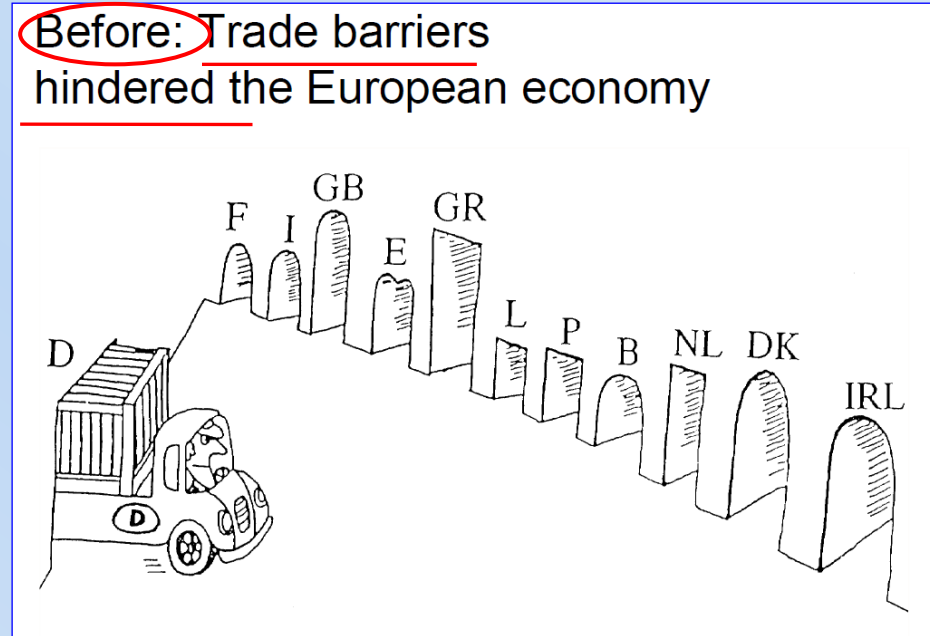
- standards are voluntary
- standards do not hinder innovation (if goal setting)

STANDARDS ~ SOFT LAW

ANNEXE

- IT BOOSTS TRADE (SLIDE 4)

- Let's have a look on European standardisation (CEN-CENELEC)



After

- CEN & CENELEC decided that just 1 standard can exist in Europe : NF – DIN – BSI – NEN **out** → **EN in** !

- IT SAVES MONEY (SLIDE 4)

- The basic model of a VW Golf (Golf 4 – year 2000) is made up of 4 786 different parts, with a total of 16 897 individual parts for one car.
- 4 219, almost a quarter of these, are *standardized* components.
- **Standardized components are 20% to 60% cheaper than customized components**
- This contributes greatly to reducing the cost of the product. Standard parts are systematically documented and maintained in the company's standards department. Standards ensure that complex technical systems function correctly and that legal requirements are fulfilled

Source: "Gut in Norm", VOLKSWAGEN magazin 1/2000, pp. 82–85



- IT REDUCES RISK (SLIDE 4)



1904 : the **Great Baltimore Fire** raged in Baltimore, on Febr. 7 & 8 ... 1,231 firefighters were required ... It destroyed a major part of central Baltimore ... **fire engines from nearby cities responded** (such as Philadelphia and Washington, D.C.

...

many could not help because their hose **couplings could not fit** Baltimore's hydrants

Perhaps the greatest legacy of the fire was the impetus it gave to efforts to **standardize firefighting equipment** in the United States