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Standardisation as a strategic tool:

What? Why? Why not?

Jacques Dubost

Corporate Standardisation Coordinator

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- Why is standardisation considered as complicated stuff?
- Different and conflicting meanings of the words “standards” and “norms”
- Legal framework
- What are the specifics that make it worthwhile?
- What are the difficulties which can be encountered?
- Conclusion

Example Cover page of EN ISO 50001

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 50001

Why, since the word STANDARD exists in both languages?

ICS : 27.010

Replaces EN 16001:2009

Because the english word STANDARD covers both DE FACTO and DE JURE standards

Systèmes de
Exigences et reco

Energy management systems — Requirements with guidance for use
(ISO 50001:2011)

Energiemanagementsysteme — Anforderungen mit Anleitung zur Anwendung
(ISO 50001:2011)

DE FACTO vs. DE JURE standards

de facto		de jure
Paper size	**A4** ⇐	Deutsche Industrie-Norm **DIN 476**:1922, now EN ISO 216:2007
Microsoft Word	⇒	**ISO 29500-1 to -4**:2008 OpenXML
Adobe Acrobat	⇒	**ISO 32000-1**:2008 Portable Document Format

?

- In short, the **english word "standard**" is akin to the anglo-saxon legal outlook, more based on common law and jurisprudence.

- Whereas the **german and french words "Norm, norme"** are akin to the continental one, rooted in **Roman law**.

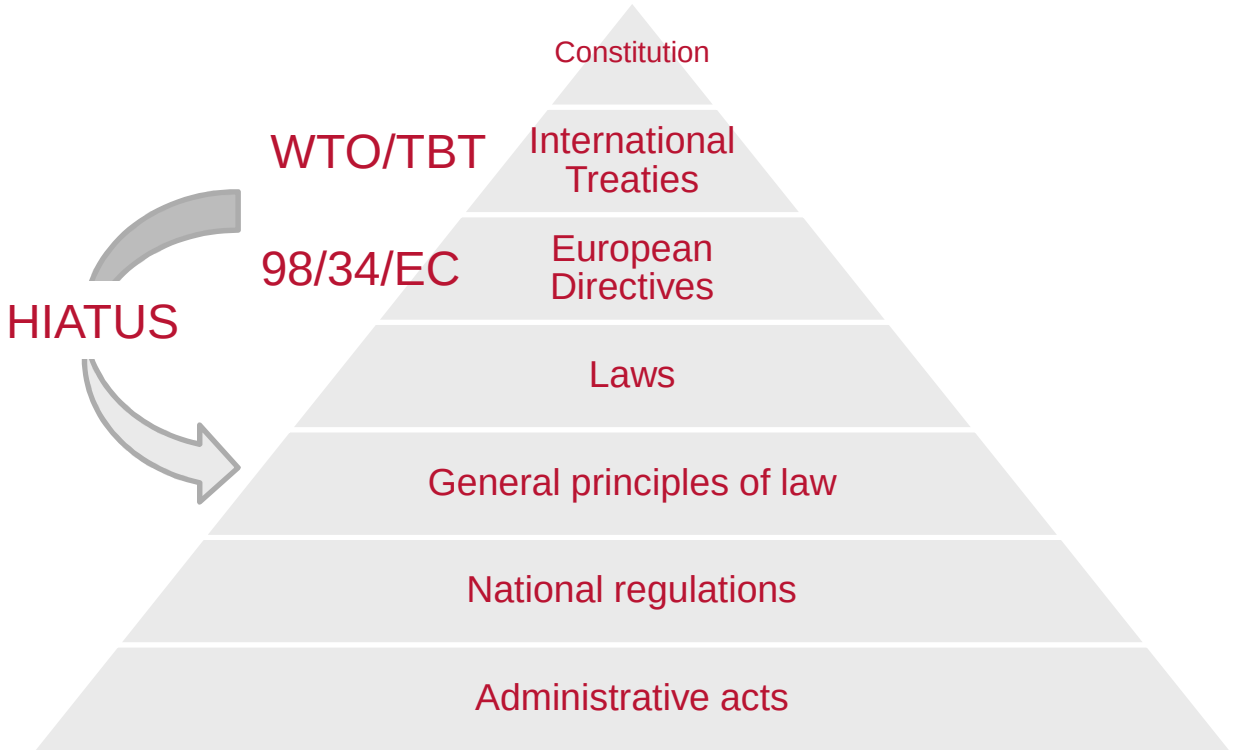
Let us now examine the **concept of 'norm'.**

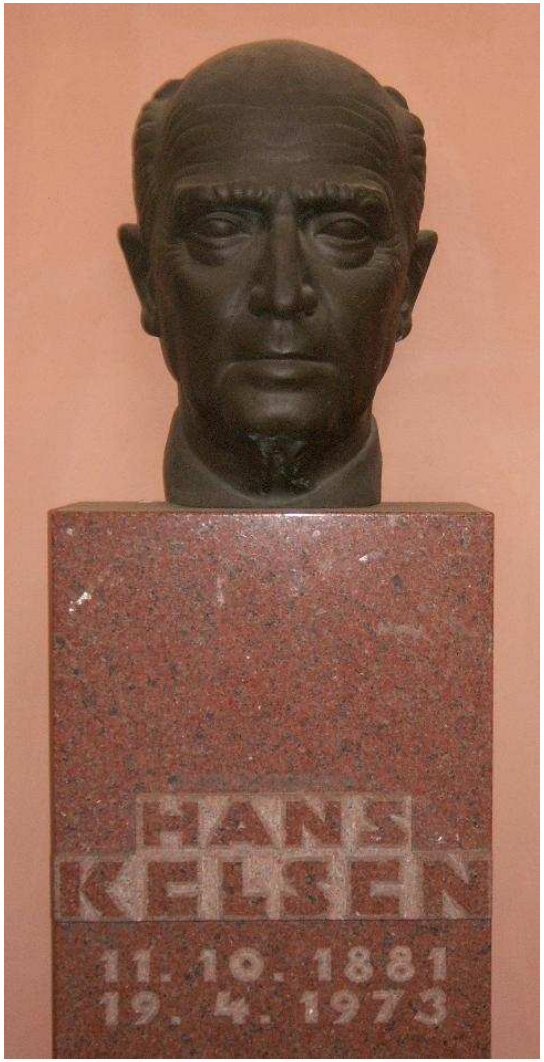
Is it appropriate?

Why do most people with an education in law view norms as legal rules?

Theory of law and norms

- The Pure Theory of Law (*German: Reine Rechtslehre*) published by Austrian jurist and legal philosopher **Hans Kelsen** presents a framework with the **pyramid of norms** (=**legal rules**).





WTO's Agreement on Technical Barriers to Trade (TBT)

The Agreement on Technical Barriers to Trade (TBT) deals with technical regulations, standards and conformity assessement systems.

It **defines** and **distinguishes** :

- **technical regulations** (adopted by authorities, whether legislative, regulatory and their related administrative provisions, with which compliance is mandatory.)
- **international standards** *(« normes » in the French version),* developed by regognized standardization bodies.

It states:

- Members (=States) shall ensure that technical regulations are not prepared, adopted or applied with a view to or with the effect of creating unnecessary obstacles to international trade.
- Where technical regulations are required and relevant international standards exist or their completion is imminent, Members shall use them, or the relevant parts of them, as a basis …

WTO's Agreement on Technical Barriers to Trade (TBT)

- Annex 3 of the TBT Agreement contains a "Code of Good Practice"", which provides disciplines for the preparation, adoption and application of standards by all central government, local government, non-governmental and regional standardization bodies.
- Those are detailed in one of the decisions taken by the Committee on Technical Barriers to Trade, on **principles for the development of international standards, guides and recommendations.**

- Standards should be elaborated while observing the following principles:
  1. Transparency
  2. Openness
  3. Impartiality and consensus
  4. Effectiveness and relev
  5. Coherence
  6. Development dim

general agreement, characterized by the **absence of sustained opposition to substantial issues** by any important part of the concerned interests.
NOTE Consensus need not imply unanimity.

ISO, IEC, CEN, Cenelec conform to them. IASB (accounting standards) do not.

European Directive 98/34/EC of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations

- Basically, its objectives and rules are close to the ones related to notification in the WTO/TBT Agreement. Procedures for notification and rules are slightly more prescriptive.

- This Directive is going **to be amended** by the upcoming **Regulation** of the European Parliament and of the Council **on European standardisation**, which will give a new European framework.

- This draft Regulation has passed the following stages:
  - proposal by the European Commission in June 2011
  - debates in the Council of the EU in September and December 2011
  - amendments from the European Parliament Committees (INTA, ITRE and IMCO) in January 2012
  - adoption by the EP of its first position in March 2012
  - a compromise between EP, EU Council and EC, beginning of June 2012
- Debate in plenary sitting of the EP planned for 10 September 2012.

Articulation Standardisation / Legislation/Regulation

Country level One example: France	European « **New Approach** » à la française In every ministery, a 'responsable ministériel aux normes' is in charge of promoting standardisation as a means of fulfilling the mandatory requirements set by legislation/regulations (*in* Décret n°2009-697 du 16 juin 2009 relatif à la normalisation)
European Union	In the framework of the **New Approach**, the European Commission gives **mandates** to CEN/Cenelec to develop **European standards** (called **harmonised standards**) which enables to fulfill the essential requirements of a Directive. After being cited in the OJEU, a harmonised standard gives presumption of conformity to the Directive. Directive.
World	The World Trade Organization **(WTO)** **Agreement on Technical Barriers to Trade (TBT)** - aims at ensuring that technical regulations, standards and conformity assessment procedures do not create unnecessary obstacles to international trade. - and encourages Members (=States) to use **international standards.**

Focus on the European New* Approach

*** actually, not so new (1985!)**

New Approach Directives are based on the following principles:

* Harmonisation is limited to **essential requirements.**
* Only products fulfilling the essential requirements may be placed on the market and put into service.
* **Harmonised standards**, the reference numbers of which have been published in the Official Journal and which have been transposed into national standards, **are presumed to conform to the corresponding essential requirements.**
* Application of **harmonised standards** or **other technical specifications** remains **voluntary,** and manufacturers are free to choose any technical solution that provides compliance with the essential requirements.
* Manufacturers may choose between different **conformity assessment procedures** provided for in the applicable directive**.**

Focus on the European New* Approach

* actually, not so new (1985!)

- **Standardization mandates are more and more frequently used by the European Commission:**

  M400 Gas quality,

  M441 Smart metering,

  M475 Biomethane,

  M478 Green house gas emissions,

  M479 Energy audits,

  M480 Energy performance of buildings,

  M487 Security,

  M495 Ecodesign of energy related products, …

Standardisation vs. Legislation/Regulation

- Direct relations with Authorities or Regulators are basically asymetric.
  (both at company or industry level).
- Standardisation work does not favor any interested party.

Application of the principle of impartiality in does not give authorities an overwhelming power in the discussions.

Moreover, an international or a European standard is more easily accepted by authorities because of the consensus ensured by their elaboration process: it is not a company's or an industry's view, and represents a recognized state of the art.

- One example: some years ago, pressed fittings for gas installations in buildings were not allowed in France. The consensus in the revision of EN 1775 allowing their use was key to their becoming accepted at national level.

Standardisation vs. Innovation

One may at first sight see standards as limiting innovation.

But…

Why did the **European Commission** state in a Communication to the Council of the EU, the EP and to the EESC ?

How standards contribute to innovation

*Standards facilitate the **dissemination** and the **uptake** of innovation by markets:*

*1. providing a level-playing field which is receptive to innovation: existing standards provide **interoperability, trust, comparability***

*2. accompanying the development of **complex systems** and new markets*

*3. use of standards contributes to the diffusion of **knowledge.***

Standardisation vs. Innovation

It must be recognized that **various types of standards** are useful and needed **at various stages in the product or market life cycle**

vocabulary standards, interoperability standards, requirement standards, test standards, management systems standards, variety reduction standards

The reduction of the **hypothetical market potential** of an innovation is **widely compensated by the increased acceptability (and therefore the real market)** enabled by having standards available (compatilbility with existing products and systems, interoperability, testing methods, ….).

- One example:

The first European standard related to microCHPs was developed long before any product was ready to be marketed. But the interoperability issues and determination of test required helped the development of such products and paved the way for their acceptance by the market.

Standardisation vs. Certification? Accreditation?

EN ISO/IEC 17000 Conformity assessment — Vocabulary and general principles , gives the following definitions:

- **conformity assessment**

demonstration that specified requirements relating to a product, process, system, person or body **are fulfilled**

- **attestation**

issue of a statement, based on a decision following review, that **fulfilment of specified requirements** has been **demonstrated**

- **certification**

third-party attestation related to products, processes, systems or persons

NOTE Certification of a mana

Certification can relate to the requirements laid down in **a standard**, **but may also relate to other references,** (e.g. industry, private, labels,…)

- **accreditation**

third-party attestation related to a **conformity assessment body** conveying **formal demonstration of its competence** to carry out specific conformity assessment tasks

Reasons for participating in standardisation

• To discover **opportunities** & **threats**, through the debates with your customers, suppliers, competitors, authorities, to monitor new technological developments, to benchmark

•To use **co-opetition** when appropriate

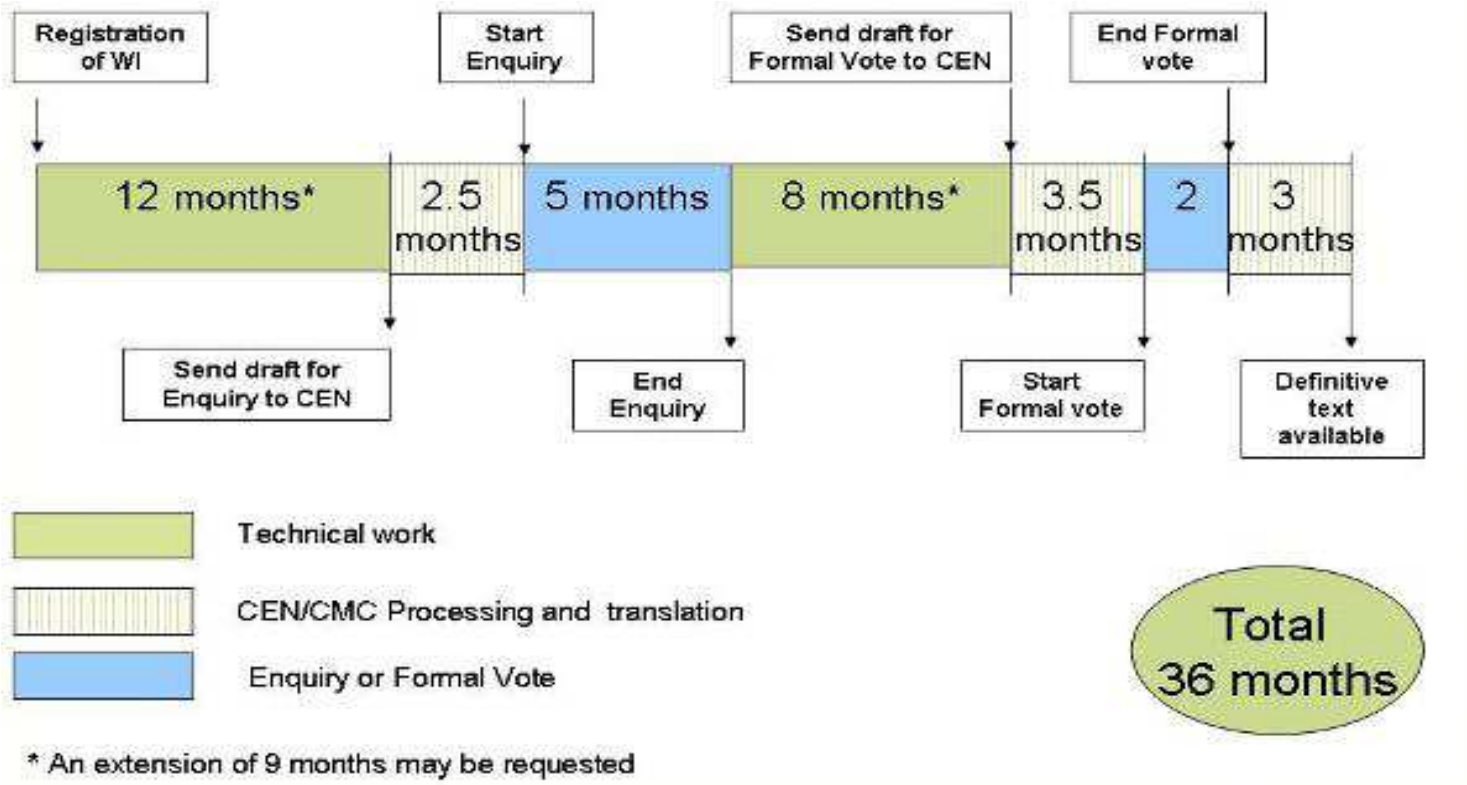
• To **promote** your view, your products/services, to increase performance

• To help **recognition** by the market and by authorities **of your business practices**, help **develop new markets** and **accompany innovation**.

• To **increase customer confidence** in your products/services, and therefore increase **market share**

Reasons which contribute to a non-involvement

On average 30 months!



This is the price to be paid for ensuring the consensus which makes standards valuable.
When more time is needed, it just reveals lack of scientific or technical knowledge, strong opposition between stakeholders, ….

Reasons which contribute to a non-involvement

- **Direct and indirect costs** (a few K€ for participating in a standardisation committe, expert time, travel costs).
  NB conflicting trends in travel costs:
  -decrease due to increased use of webmeetings and teleconferences,
  -increase to the development of international standardisation vs. European standardisation.

- At least **a medium term** investment (2/3 years minimum).

- **Availability of experts** is not easy to secure: although it usually covers only 5 – 10 % of their time, availability is necessary at given times (for meetings and during periods allowed for providing inputs or comments).

- **Although ROI is maximum** when involvement starts at an early stage, the scope being then vague (all the more for new topics) makes **management decision** more **difficult**.

Reasons which contribute to a non-involvement

- An involvment in working groups on regulations, often chaired by authorities, is much easier to justify than a voluntary involvement in standards development.

- **Costs** linked to elaborating and maintaining **company specifications** are often underestimated.

- Focussing only on the result (the content of the published standard) hides other strategic benefits: watch (customers, suppliers, competitors, technologies), benchmarking, development of competencies.

- For new topics, one is most of the time facing somebody else's initiative . Therefore:
  - Resources (expert time and financing) have not been earmarked,
  - Scope and work programme remain vague before a first level of consensus and votes lead to a decision.
  - When the objectives of such an initiative are not viewed favorably by the company, there is a risk of burying one's head in the sand.

And what about using standards once they are published?

- **What does the use of standards bring?**
  - Knowledge of the state of art
  - Increased professionnalism and development of competencies within the company
  - Reduction of risks:
    - Both technical ones
    - And also contractual and legal ones (vs. suppliers, customers, authorities,…)
  - Increase in economic performance
    - reduction of unit purchase costs and of needed levels of stocks
    - reduction of costs linked to developing/maintaining company specifications (often hidden in investment project costs)
- One – costly - example:
  In 2007, BP had to make provisions exceeding $ 2 billion for compensations linked to the accident in its Texas City refinery: The main argument for the judge in assessing the responsibilities was that the safety relief valves were not up to the state of the art given in the relevant standard.

Conclusion

- My purpose was to **clarify** what are the **specifics of standards**, and to **highlight why** these specifics **may be of interest**.

- **It is now up to you** to review et possibly further develop your standardisation strategy.

- **Depending on your business**, you will want to rather focus on:
  - ensuring the market development for your products,
  - helping to secure the regulatory and economic framework of your activity,
  - increasing your performance by purchase cost reductions,
  - ….

Last, if one does know the relevant standards, one may face unexpected mishaps …

jacques.dubost@gdfsuez.com

Thank you for your attention!