Joint ITU-IEICE-IEEE Workshop on Education about Standardization

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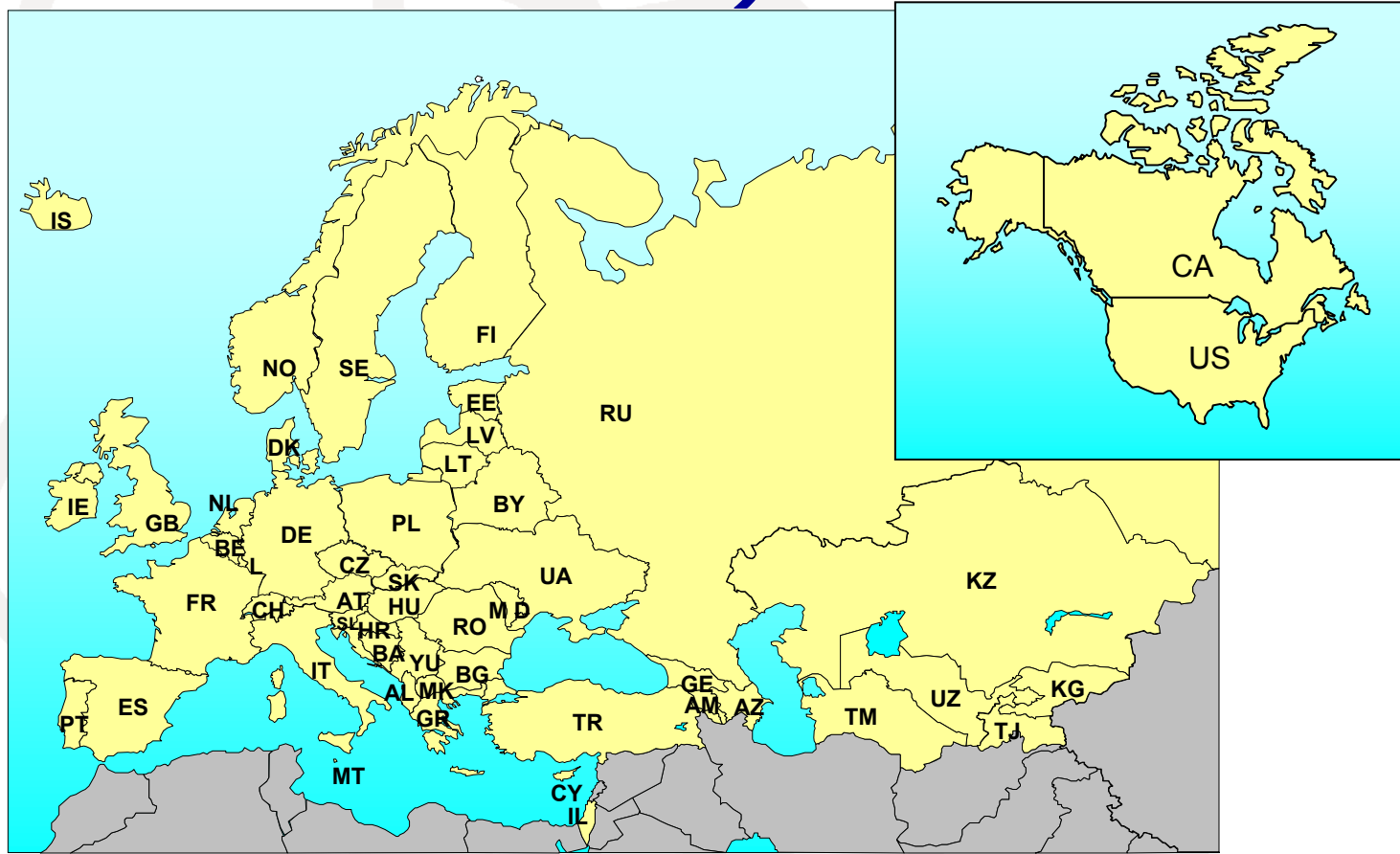# UNECE: education on standardization

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50 - 80 % of World Trade is between UNECE Member States (55 Member States, Europe, N. America, CIS)

United Nations Economic Commission for Europe

Standards at UNECE

Examples of standards:
- Regulations on the construction of vehicles (WP.29)
- Quality standards on agricultural produce (WP.7)
- Trade facilitation and e-business (UN/CEFACT)
- Transport of dangerous goods, of perishable foodstuffs, …

Standards at UNECE

Examples of groups of standards experts:

- *Working Party on Regulatory Cooperation and Standardization Policies (Working Party 6)*

- *World Forum for Harmonization of Vehicle Regulation (WP.29)*

UNECE WP. 6

What we are:
- Intergovernmental body
- Participation by: authorities, regional & int'l org, standards-setting bodies, business, certification bodies, test houses, civil society
- From all UN Member States
- 1970 – 2010: 40+ years

Our mandate:
- Forum for dialogue on: ☐ Standardization ☐ Technical regulations ☐ Conformity assessment ☐ Accreditation ☐ Metrology ☐ Market surveillance

Our activities

- Share info & best practice
- Capacity-building
- Develop and maintain a set of recommendations
- Implement a set of initiatives on specific industrial sectors

Education

1970:

- Adoption of Recommendation "I "
- Governments encouraged to include standardization in the curricula of educational institutions

2012:

- More than 40 years passed; revised Rec. "I" adopted
- Few institutions have standards in the curriculum
- Very different educational approaches

■ Several other institutions have launched initiatives

◆ CEN/CENELEC/ETSI Working Group
◆ ISO/IEC/ITU work with academia, repository of learning materials

Recommendation I

Governments should encourage:

(a) the introduction of the subject of standardization into the curricula of educational establishments and particularly of universities for students majoring in technical and scientific subjects, as well as in legal, economic and management studies;

(b) the enhancement of awareness-raising activities targeted to the business community and regulatory authorities ….

(c) the vocational education and training of specialists in standardization, including staff of authorities responsible for trade and customs, also using the expertise and training materials available in national, regional and international institutions (i.e. standards-setting bodies, conformity assessment and accreditation institutions, metrological institutions…)

(d) the further study of standardization issues in order to identify best practices in ensuring that standardization and regulatory regimes contribute to meeting the legitimate concerns of society (e.g. human safety, environment) without creating unnecessary technical barriers to trade."

Curriculum – 14 modules

1. Standardization basics
2. Benefits of standardization for society
3. Standardization and companies
4. National legal and institutional framework
5. Regulatory policies and related institutional mechanisms
6. Managing risks through standards, regulations and regulatory impact assessments (RIAs)
7. Metrology

Who needs standards in a company (source IFAN)

Knowledges / Functions	Standardization role	Standards identification process	Integration of the content for relevant standards	Take into account sustainable development	Integration of management systems	Product compliance		Standardization lobbying		Business Intelligence in standardization
						Issues	Methods	Issues	Methods	
CEO & Senior management	•••			••	•••	•••		•••	•	
Human resources	•		•••							
Marketing & sales	•••	•	•		•••	••		••	••	••
R&D and innovation		•	••	••	••	•••		••	••	•
Laboratories & internal certification			••		••	•••	•••	••	••	•
Purchasing		•• (Contractual issues)		••	••					•
Quality, safety and social responsability			••	••	••	•••				•
Standardization	•••	•••	••	••	••	••	••	••	••	••

Legend :

••• Good knowledges

•• Substantial knowledges

• Some understanding

How to teach standards at different company's levels (source IFAN)

Functions \ Methods	General information module	Information about existing requirements	Cases studies, benchmark	Pratical studies and exchanges	Specific courses with exchanges
CEO & Senior management	■		■		
Human resources		■			
Marketing & sales	■		■	■	
R&D and innovation	■				■
Laboratories & internal certification	■				■
Purchasing			■	■	■
Quality, safety and social responsability	■		■		■
Standardization	■		■		■

Further work on education issues

- – Promotion of the revised *Recommendation «I»*

- – Further work on the UNECE model programme (experiences of its use)

- – Repository of programmes and information materials

- – E-learning modules preparation

- – New areas for donors and education projects

for further information

- **"Education on standardization" webpage on UNECE website** :
- http://www.unece.org/trade/wp6/educationonstandardization.html
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