



**ANSI – ESO Conference**  
Transatlantic Standardization  
Partnerships on E-Mobility/Electric  
Vehicles, Energy, and Security

October 12, 2011



# US–EU Cooperation on Standards

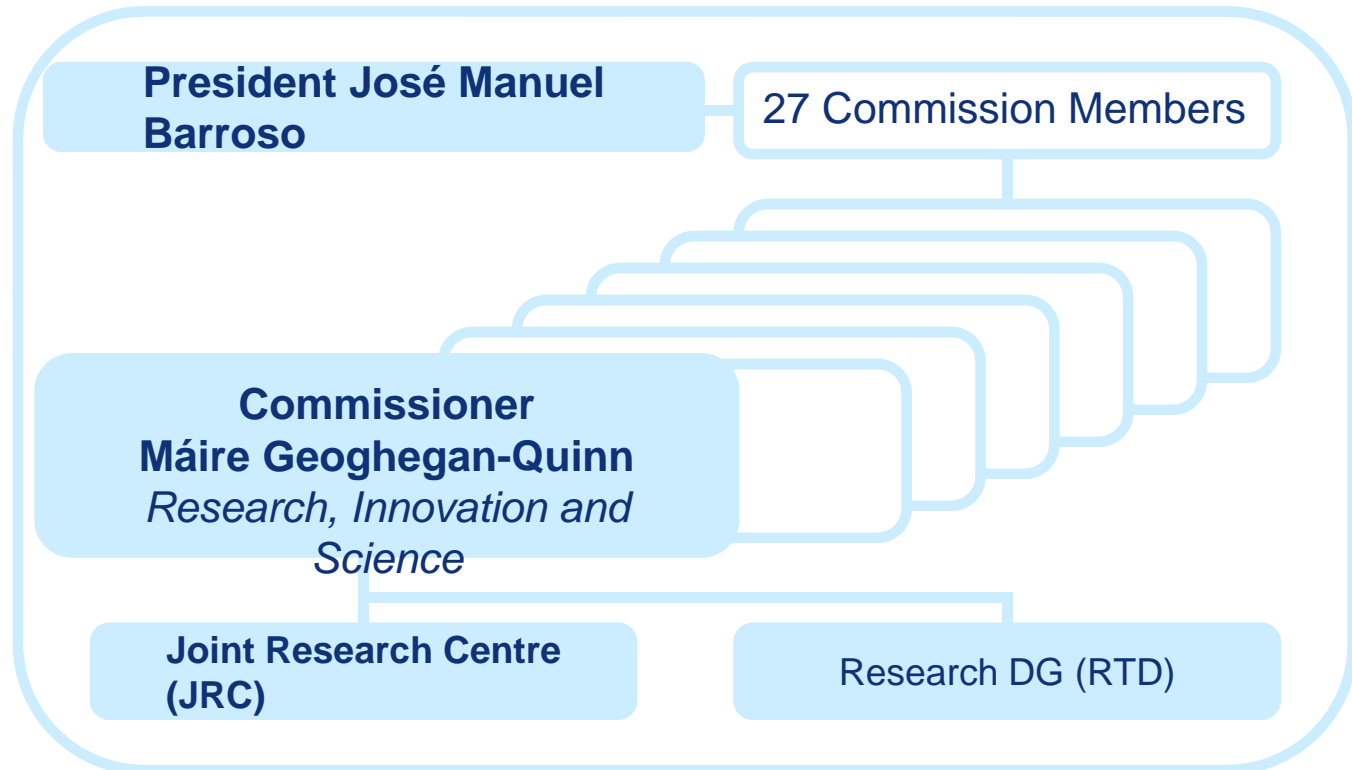
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on E-Mobility/Electric Vehicles, Energy, and Security

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# Where does the JRC fit in the European Commission?



# The Mission of the Joint Research Centre

... is to provide customer-driven scientific and technical support for the conception, development, implementation and monitoring of EU policies.

As a service of the European Commission, the JRC functions as a reference centre of science and technology for the Union.

Close to the policy-making process, it serves the common interest of the Member States, while being independent of special interests, whether private or national.



# Standardisation as a key component of economic recovery

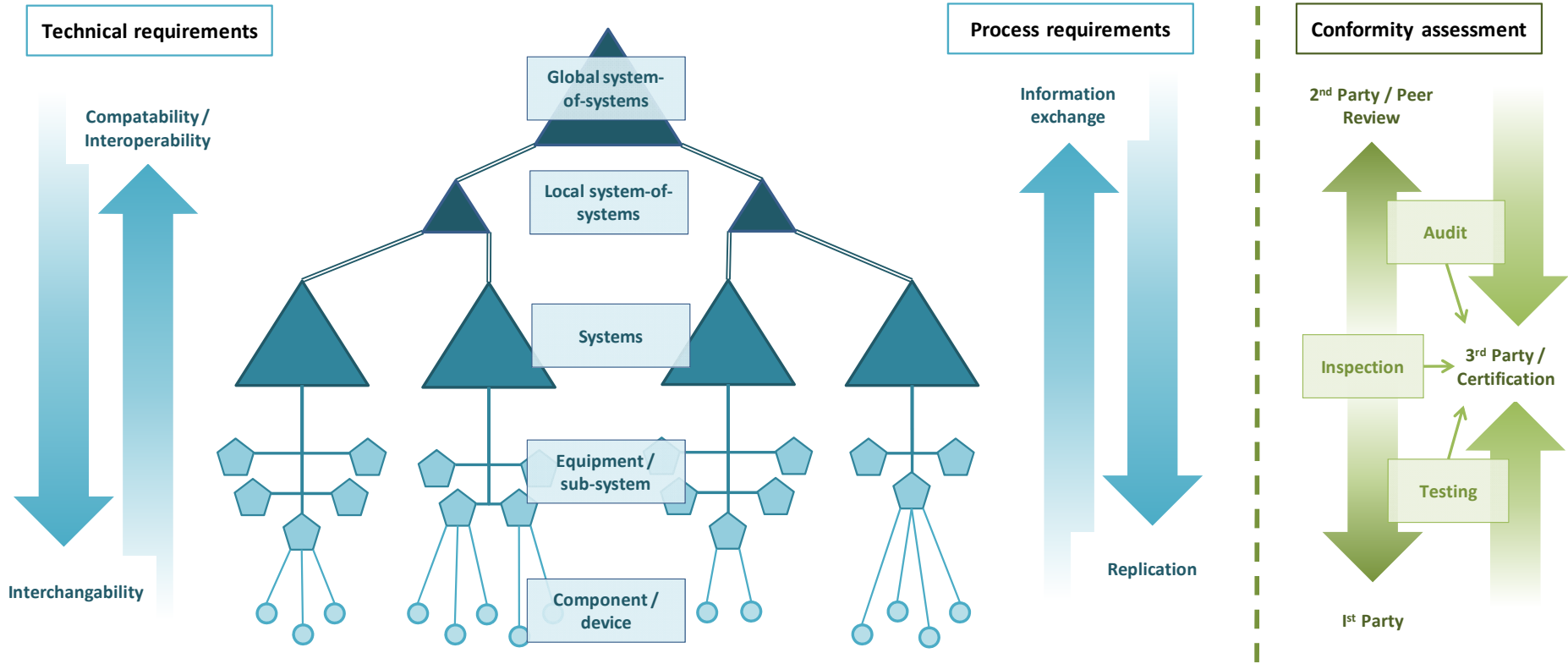
- European Council statements:
  - Council Conclusions on standardisation and innovation (Brussels, 25<sup>th</sup> September 2008):
    - *“the essential contribution which standardisation can make towards developing innovation and competitiveness by facilitating access to markets, enabling interoperability.....enhancing protection of users, giving users confidence in innovations, and disseminating research results”.*
  - Europe 2020 Innovation Union Flagship Initiative (2010):
    - *“standards play an important role for innovation by codifying information on the state of the art of a particular technology thereby enabling dissemination of knowledge, interoperability between new products and services and provide a platform for further innovation. The rapid shortening of innovation cycles and the convergence of technologies across the boundaries of the three European standardisation organisations are a particular challenge.”*

# Instruments within Security Research

- Programming mandate by European Commission (DG ENTR) to ESOs on “Development of a work programme for the definition of European Standards and other standardisation deliverables in the area of SECURITY”
- Study “Regulatory Framework, Certification and Conformity Assessment in the Security Sector”, ECORYS
- Public Consultation **on an Industrial Policy for the Security Industry, including:**
  - **the lack of EU wide standards** (*in security*)
  - Lack of **Certification/conformity assessment procedures**
- Introducing the request for identification of needs for standards in open Call for Proposal (in the context of security research)

# CAC: conceptual framework

- **Dimensions of security product requirements:**
  - **Scale:** from components/devices to systems of systems
  - **Scope:** from purely technical characteristics to broad processes and procedures
- **Technical requirements:**
  - **High:** compatibility / interoperability
  - **Low:** inter-changeability
- **Process requirements:**
  - **High:** information exchange / communication
  - **Low:** replication
- **CAC:**
  - **High:** Audit / 2<sup>nd</sup> Party – Peer Review
  - **Medium:** Inspection / 3<sup>rd</sup> Party – Certification
  - **Low:** Testing / 1<sup>st</sup> Party - Declaration



**ECORYS**

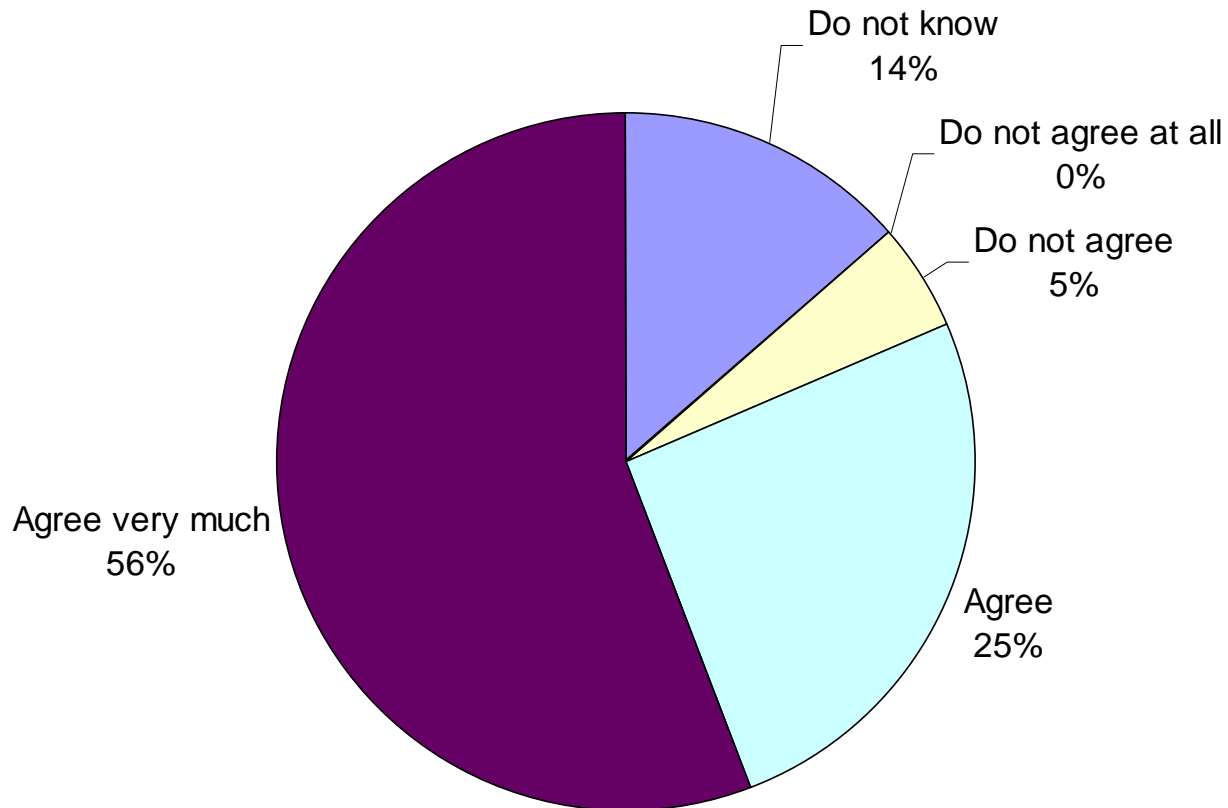
# CAC: overview of current situation

- Low-end / general security (Type 1)
  - Limited EU regulation defining requirements for security equipment (Construction Products Directive)
  - Non-regulatory specification of requirements/standards (e.g. insurers, police)
  - Some EU standards but mainly national standards dominate
  - Virtually no EU-wide systems for CAC; national systems with no/limited mutual recognition
- High-end / high security (Type 2)
  - Limited EU regulation defining specific requirements for security equipment (except aviation, e-passports)
  - Limited existing standards
  - Limited existing systems for conformity assessment and approval or certification; national systems with no mutual recognition



# Problem definition

Lack of harmonised certification procedures for security technologies in the EU?



## DG JUST: *Data Protection – Seals and Labels – a snap shot*



- ❑ The European Commission supports the **standardisation of 'privacy and security seals and labels'**
- ❑ **Comparing and harmonising established seals in the US and emerging seals in Europe**
- ❑ **Joint standardisation in this area will be very welcome**

## **DG TAXUD: *Roles and Responsibilities in Global Supply Chain – 1 –***

- ❑ Security is central policy priority for customs in the European Union**
- ❑ Customs are the primary national authorities that ensure the control of all goods entering and leaving the EU customs territory**
- ❑ DG TAXUD is competent for all customs areas that are exclusive EU competence ( former 1st pillar)**
- ❑ Customs is now a service provider with a global mission to protect society and its citizens while on the other hand facilitating legitimate trade to faster and more streamlined control of merchandise**

# Amendments to the Community Customs Code Regulation 648/2005 and its implementing provisions Regulation 1875/2006)

- **4 main elements :**
  - **1. requiring trade to provide customs authorities with information on goods prior to arrival and exit from the European Union (Full implementation as of 01 January 2011) .**
  - **2. uniform Community risk-selection criteria for Security and Safety Risk Analysis based controls, adopted in April 2009**
  - **3. Recognition of the AEO concept, providing reliable traders with trade facilitation measures (implemented 1 January 2008)**
  - **4. Community Customs Risk Management Framework (CRMF)**

## DG TAXUD: *Roles and Responsibilities in Global Supply Chain – 2 –*

### □ DG TAXUD:

advocates a **comprehensive and effective multi layered risk management approach** using a range of methods and technologies commensurate to the risks associated with specific high risk consignments



□ **WCO SAFE** and the strategic document "*Customs in the 21st Century*" makes clear that the **use of modern technology** is one of the cornerstones which enables Customs to adopt modern risk management working methods



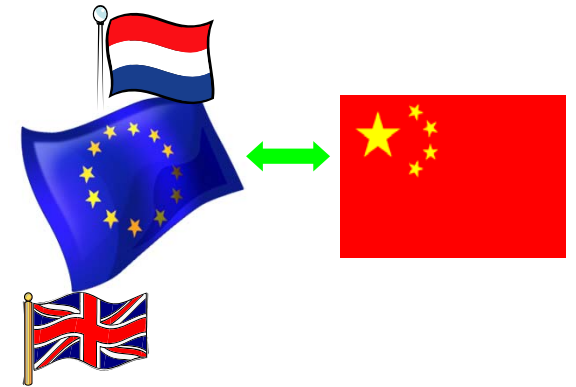
□ **Customs administrations** are encouraged to take advantage of emerging technologies to **enhance security in the supply chain**

□ **The Customs 2020 Programme** will in particular focus on enhancing the use of **non intrusive control techniques and technologies**

□ Currently, there is a **lack of harmonisation and standardization of security equipment and requirements** which constitute barriers to trade, law enforcement authorities (customs) and technology manufactures/ suppliers

## DG TAXUD: *Global Supply Chain – a practical Example*

- The **testing** of some **Container Security Devices** (Smart seals) under the EU - CHINA pilot on Smart and Secure Trade Lanes (SSTL) with the involvement of UK, NL and CN Customs has highlighted the **need for common (customs) requirements, procedures and standards** to be established globally to ensure interoperability of these security devices and equality of treatment
- faced with **interoperability problems** when seals and reader infrastructure didn't belong to the same "family" using **different communication protocols based on different international standards**



## DG TAXUD: *Global Supply Chain – a Conclusion*



- ❑ As modern customs administrations and the economic operators will be urged to make use of new emerging technologies to enhance the security in the global supply chain, **harmonization and standardization of security standards and equipment will be indispensable.**
- ❑ **EU- US Joint statement on supply chain security → both sides agree to strengthen cooperation on supply chain security**

## DG TAXUD: *Objectives in Conformity* *Assessment – 1 –*

□ **Mutual recognition of security standards and trade partnership programmes, like AEO and C-TPAT, with our main trading partners, as promoted by the WCO SAFE [1] Framework to secure and Facilitate Global Trade, is a key element of the EU efforts to strengthen the end-to-end security of international supply chains.**



[1]: WCO SAFE: World Customs Organization

□ **Aim: to enhance supply chain security and to facilitate trade through focusing on real risks and granting substantial, equal and reciprocal benefits to reliable international partners and economic operators**



## DG TAXUD: *Current Cooperation Activities with USA - I*



- ❑ **June 2010:** DG Deffaa and Commissioner Bersin **signed a document** entitled "*Final Steps Towards the Implementation of Mutual Recognition Between the United States and the European Union*"
- ❑ **Document:** sets a **timetable of activities** that must be completed successfully in order to **fully implement mutual recognition**

## DG TAXUD: *Current Cooperation Activities with USA - II*



- ❑ One of the **critical elements** of the final steps document:  
the creation of a "**Work Program**" which sets the procedures for a series of
  - ❑ up to 27 joint validation visits in the EU and
  - ❑ up to 5 joint validations in US split over 2 phases

## DG TAXUD: *Current Cooperation Activities with USA - III*



- ❑ **work program** foresees the joint validations split into 2 phases:
  - ❑ **first phase** of joint validation visits was completed earlier in 2011.
  - ❑ The second phase is expected to be finalised by the end of this year.
  - ❑ The validations carried out so far showed no big problems
  - ❑ US will attend EU AEO (authorised economic operator) Network meeting early October in Brussels
  
- ❑ An **ad-hoc working group of EU and US IT experts** is discussing solutions to exchange AEO details and expectations are that a solution will be in place in the middle of 2012.

## DG TAXUD: *Current Cooperation Activities with USA - IV*



### Current Status:

The Mutual Recognition Decision text is still under consideration

AEO and C-TPAT **benefits** will only be activated **after successful completion of the joint validations and IT solutions foreseen in the work program**

*Illicit Trafficking Radiation Assessment Program + 10*  
*(ITRAP+10)*

**International Partnership between  
the EC/JRC, US-DNDO, and US-DOE**

# *Illicit Trafficking Radiation Assessment Program + 10 (ITRAP+10)*

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**Testing and qualifying equipment serves the assessment of the significant gaps between the requirements and performance of the equipment and also supports:**

- Assessment of technology: what is affordable and what is wishful thinking of the users?
- Bring the equipment closer to the required performance
- Trigger the development of Procedures and Standards
- Launch new R&D projects that bring new equipment and new software and advanced technology in the field of the detection and the identification of nuclear materials.

**EU Initiated 3-year program, August 2009 – August 2012**

**International Partnership between the JRC, DNDO, and DOE/NA25**

**Testing to the radiological parts of Standards (IEC, ANSI, IEEE) and to IAEA guidelines. DNDO plans to test to the full standards.**

**Testing to be conducted by the JRC at Ispra, Italy in 2011.**

**Testing to also be conducted at GRaDER<sup>SM</sup> laboratories ORNL, PNNL, and SRNL in 2011.**

## *ITRAP+10: Test Design*

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### **Test methods:**

- Based on ANSI, IEC and IEEE standards, and IAEA guidelines
- Consensus between partners.
- Instrument family specific
- Uniform in structure
- 6 out of 9 complete. 3 in review.

### **Test Procedures:**

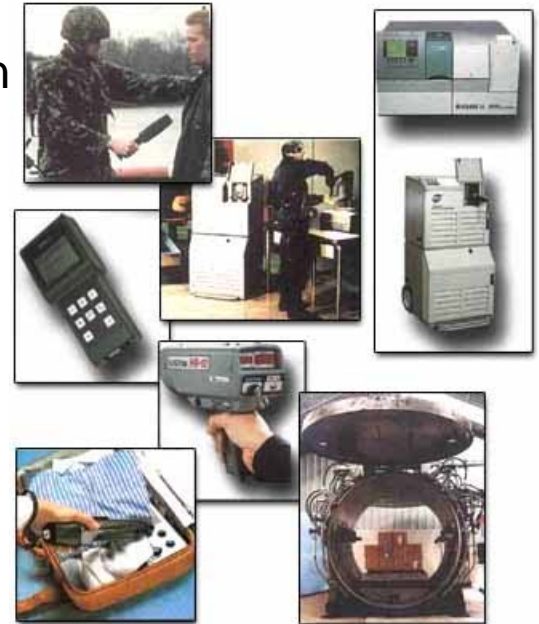
- Based on the methods.
- Completion by close of first quarter of 2011.

### **Supplementary Testing:**

Not required by standards. Designed to characterize the instruments fully and to explore the full range of capability of and category of instruments.

- **Detection Limits**
- **Identification Limits**
- **NORM rejection capability**

- **Masking scenarios**
- **Realistic cargo loadings**
- **Area network capability**



Standardisation:



**NO!! BUT:**

Standardisation:

- improve transparency of the procedures
- flexible (tailor made) and appropriate to the identified and prioritised stakeholder's needs (including pre-normative to co-normative research)
- improve visibility of results and benefits to stakeholders

**‘Make standardisation more sexy’**