

SUMMARY OF THE CSF STAKEHOLDER WORKSHOP: "RESEARCH AND INNOVATION FOR SECURE SOCIETIES"

**WORKSHOP WITH THE MEMBER STATES ON THE
COMMON STRATEGIC FRAMEWORK (CSF) FOR RESEARCH AND INNOVATION
TOWARDS MORE INCLUSIVE, INNOVATIVE AND SECURE SOCIETIES**

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LUIGI REBUFFI – EOS CEO



Buidling Secure Societies

- We do want to build more “**SECURE SOCIETIES**”: this will be done with the **main support of innovative technologies, services and procedures** that will guarantee also citizens’ privacy and fundamental rights.
- **Security Research should contribute to the development of more “secure societies” → its approach should be well balanced and provide trust and security to citizens.**
- **YET, “societal issues” are just an aspect of the challenges ahead.**
- **MOST IMPORTANT: innovation on security technologies did not find the possibility to be debated at this workshop, only focussed on “societal issues”.**
- This has been considered “very strange” by the security community, as if all future Security Research would concentrate only on “societal issues linked to security...”.
- **SECURITY:**
 - is leveraging on innovative technologies,
 - cannot be considered as a “social science”,
 - it is a key enabler of our societal life,
 - is a main driver for the creation of a European identity and common growth.

Research in SSH and Security are two different challenges!

European security

- **European Security:**
 - is a very complex topic,
 - with **interlaced political, societal and economic (and technology) challenges,**
 - in a quite **fragmented background** and legacy.
- The **Europe 2020** initiative, aiming at a smart, sustainable and inclusive growth implies **substantial changes in the way innovation and wellbeing is generated.**
- We have seen some **misuse of security innovations** (yet, often due to bad communication).
- Security Research should not be strangled “too zealous” societal requirements.

Need to Continue and Improve EU Security Research & Innovation Programmes

- **Enhance focus of present security research activities in FP7: ESRP - DG ENTR; IST / Trust & Security - DG INFSO):**
 - application oriented
 - strong link with EU policies (Internal Security Strategy; Digital Agenda ...)
 - reaching good technological results.
- **Consolidate present initiatives and competences to:**
 - allow market defragmentation,
 - increase competitiveness
 - answer to the growing demand for inclusion of societal aspects.
- **Increase success of these programmes:**
 - Better knowledge of users' needs (including societal issues),
 - Flexibility in the approaches (fast tracks)
 - Shorter time to market, less red tape
 - Link to effective procurement methods and implementation of R&I results.

Why EU Security?

Messages to EC President Barroso and MS Representatives

1) Security is a key enabler of Europe 2020.

- Security **guarantees the societal stability** needed for the implementation of other important measures for Europe 2020.
- The European security market is **important in size and related jobs**.
 - The security system market features more than **EUR 10 billion**.
 - more than **50,000 highly skilled experts** are employed in the EU security system market sector;
 - more than **1,7 million private guards** and
 - more than **4.2 million civil servants** across Europe's national public administrations are involved in security duties.
 - more than **450 million citizens** needing security & safety, only in the Union ...

Why EU Security?

Messages to EC President Barroso and MS Representatives

2) Competitiveness of the EU security industry should be supported by:

- Definition of an European Industrial Policy for the Security Industry
- A stronger Security Research and Innovation (R&I) Programme in the frame of the CSF - Horizon 2020:
 - concentrating or deepening the scope of current research in the area of internal security, while better considering societal issues,
 - widening it to external security,
 - bridging towards more dual-use technologies for civilian use to avoid duplications.

3) To ensure a coherent and a harmonised approach and a suitable use of resources we should:

- **develop end-to end approaches (from basic research, to innovation and deployment of capacities)**
- **by means of comprehensive European Security Programmes**
- **in public – private cooperation (e.g leveraging on the European Innovation Partnership – EIP - concept)**

- **Political**

- *Societal*

- *Economic / technological*

Security as a political issue

- **MS sovereignty and subsidiarity:** key elements in the **definition of EU and MS security policies and their support by technological solutions.**
- **Still fragmented needs and patchy** (and hence non competitive) **technology solutions at national level.**
- **Future innovations should provide harmonised, defragmented and politically agreed security solutions.**

A common political will is “sometimes” missing for a coordinated use of security innovations in building up comprehensive EU approaches

- *Political*

- ***Societal***

- *Economic / technological* **“privacy & security by design & operation”**

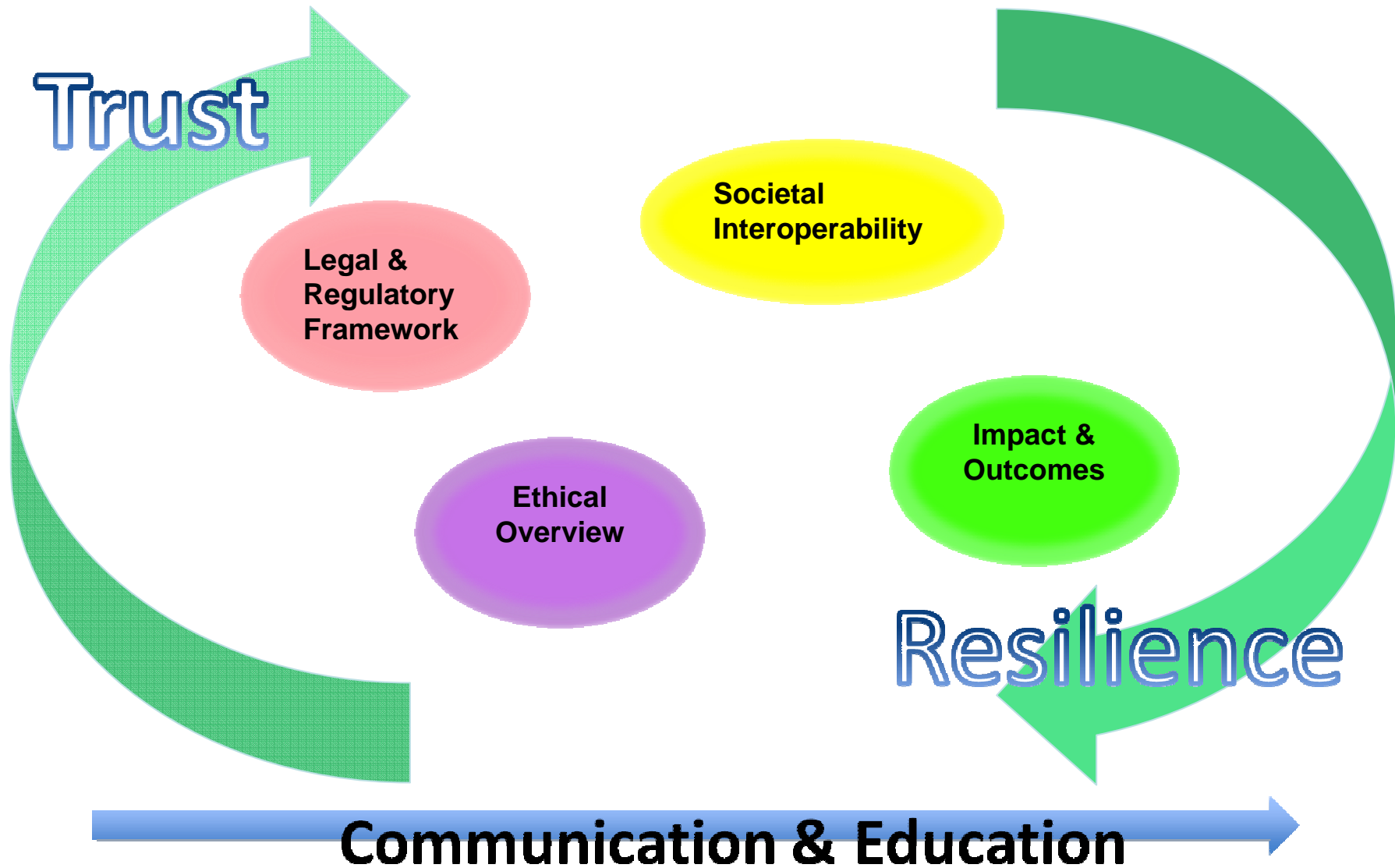
Security as a societal issue:

- Increasing sensitiveness and constraints to new security technologies to comply with specific (and sometimes still unclear) requirements for safeguarding human rights while assuring a good level of security and safety.
- Clear input should be provided for developments of security solutions and services for protection of citizens' privacy and data protection
- Societal aspects of security (ethics, privacy, respect for fundamental rights, etc) should not only be seen as "add on" to research activities, or dealt with in isolated topics, but be integrated already from the start of the process/design of new security solutions ("privacy & security by design & operation").
- Technologies should not be a concern to privacy but an enabler to citizens' security and protection of his sensitive data.

Societal Impact of Security Research

Societal Impact

Ms. Sadhbh McCarthy
Centre for Irish and European Security



How do we 'operationalise' this?

- Recognition of the threats & challenges by **ALL** stakeholders
- Understand the **context** of these (Threats and Challenges)
- Communication & Education actions for all stakeholders
- Build Trust & Resilience
- Stimulate and implement Inter-disciplinary teams

Innovation is the point where societal & technical meet

- *Political*
- **Societal**
- *Economic / technological*

Other security societal issues

- **Not only “privacy” as a societal issue**
- **Growing importance for providing enhanced security to citizens and the society as a whole:**
 - Building up “secure societies” means also considering taking care of security issues with **increased solidarity considering:**
 - **globalization,**
 - **mass urbanization,**
 - **management of new threats as climate change and growing natural disasters etc.**
 - **citizens’ threat awareness, training for response, better understanding that innovative secure solutions are not THE threat ...**

Security as an economic / technology challenge: increase investments to maintain competitiveness

- Political
- Societal

- Economic / technological

- **Europe has a positive balance in exporting high value security solutions, but this could not be true anymore by 2020 if innovation will not follow the pace of the market growth, with negative consequences on employment, maintaining competence on strategic technical solutions (also for sovereignty issues) and political / economic / societal stability of the EU region (EUROPE 2020).**
- **Better understanding of threats, operational market needs (including societal issues) is fundamental for the private sector to invest in R&I in a competitive business model.**
- **Need to increase investments in R&I and deployment of solutions in Europe: or *EU security providers will lag behind Asian (China, India) and American suppliers by 2020* which, thanks to their huge (critical mass) internal market, are rapidly increasing their competitiveness in the globalized security market.**

Tentative estimation of an overall cost of development and implementation of security R&I in the EU for a “proportional response”

- **EU response should be proportional to:**
 - impact of evolving threats (direct cost of crime, terrorism, illegal activities, violence and disasters in EU: EUR 650b/y ~ 5% of the EU 27 GDP, in 2010)
 - EU security market growth (2010 – 2020: ~EUR 10b/y → EUR 16b/y)
 - international competitiveness (US, China, India, Etc..)
- **2020 target for EU security R&I = ~EUR 830 million/y (6% EU security market)**
 - **EC budgets for R&I (CSF) of ~EUR 500 million/y → EUR 3,5 billion over 7 years (growth factor 2,5 wrt FP7)**
 - MS R&I budgets: ~ EUR 130 million/y
 - Private R&I budget: ~EUR 200 million/y (~25% private contribution)

These budgets are fundamental to maintain EU industries competitive and provide reliable security solutions to MS administrations implementing them according to MS sovereignty.

Security R&I supporting the new EU Industrial Security Policy

- **Security R&I should support the new EU Industrial Security Policy of DG ENTR in its different components:**
 - **Standardisation**
 - **Validation / Certification**
 - **Pre Commercial Procurement** (should be a fast process, according to rapidly evolving needs)
 - **Legal issues** (e.g. Third Party Liability Limitation, persecution of crimes – cyber crimes, etc.)
 - **Societal (e.g. privacy) issues**
- ... but also allowing **better use of resources, incentives, budgets, improved support to SMEs etc.**

Security R&I as part of an End to End approach: closing gaps

Future R&I instruments should close important gaps in the security sector:

- European security wrt MS security policies.
- Public wrt private sectors: Dialogue and cooperation.
- Good balance new technologies wrt societal issues
- Research wrt innovation (between low TRLs and high TRLs) →
 - development of security solutions in an **end-to-end approach from low TRL research to delivery of final products**:
 - from the use of existing or innovative solutions, integrating them in a security by design approach, up to the validation, deployment and use of these solutions in public-private cooperation.
- Innovation wrt effective market deployment and citizens' friendly use of innovation

Security Threats and Challenges for the European Union

- **Security threats and challenges at European level** are defined by the 2003 European Security Strategy, 2005 EU Counter Terrorism Strategy, 2010 Internal Security Strategy
 - **Terrorism**
 - **Serious and organised crime (including cross-border crime and illicit trafficking)**
 - **Cybercrime and cyber security**
 - **Natural and man-made disasters**

Research & Innovation is needed in the following areas

Main Missions:

- **Border Control: Border Surveillance (maritime + land) & Checks (entry/ exit points)**
- **Crisis / disaster management - Urban security & safety**
- **Protection of critical infrastructure and utilities**
 - aviation security
 - mass transportation
 - logistic and supply chain (including food and water),
 - cyber space and ICT infrastructure
 - energy infrastructures
 - other systems and services (e.g. financial).

Transversal issues:

- **Serious and organised crime and terrorism:** delivering technologies and capabilities for combating serious and organised crime and terrorism, combating cyber-crime and cyber-terrorism, and supporting health, food and environmental security, etc.
- **Prevention and Response to CBRNE threats**
- **Security systems integration, interconnectivity, interoperability and “bridging” (dual-use) technologies;**
- **Security and society**

Conclusion

- **Without technology innovation on security** there will be no smart, sustainable and inclusive growth, no increase in jobs, no healthy and secure society
→ **the objectives of Europe 2020 will not be reached.**

Security R&I

is a key enabler of Europe 2020 objectives and should be driven by clear operational needs and supported by a sufficient budget for technology innovation and EU competitiveness!