

Standards for Border Security Enhancement

(Standards for Border Security Enhancement)

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Recommendations to close gaps

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Presentation based on **STABORSEC** project results

Introduction into the project

- Objectives
- Work plan

Main results

- Determination of the interoperability requirements and needs
- inventory of the relevant corresponding standards
- identification of the assessment mechanisms / guidelines to achieve interoperability
- identification of missing standards, assessment, description of its scope and business justification

Conclusions

- ❑ Start: Feb. 2007, End: Summer 2008
- ❑ Assessment of standardisation situation and needs for equipment and services associated with border security



Border security requires:

- ❑ Harmonisation of process related to common security
 - ❑ Interoperable interfaces and mutual services qualification between equipments, communications mechanisms, access rights and data protection mechanisms
 - ❑ Semantic consistency of information exchange
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- ❑ Interoperability for border security equipment requires technical standards

- ❑ To **consolidate** the prioritised **list of technologies** for border security,
- ❑ To **determine the interoperability needs** associated,
- ❑ To **inventory the corresponding standards**,
- ❑ To **identify the assessment mechanisms**,
- ❑ To **identify the missing standards**, and their **assessment**, and **provide associated description of its scope** and its **business justification**,
- ❑ To **propose priorities** and a **time frame** for the implementation of **new standards**

Main results

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Regulated border green – land checkpoints (roads, train)

Regulated border air – airports (landside, airside)

Regulated border blue – seaports (blue areas, landside port facilities)

Unregulated border green – surveillance of land (open areas, roads, ferries, bridges)

Unregulated border air – outside ATC (MAV, UAV)

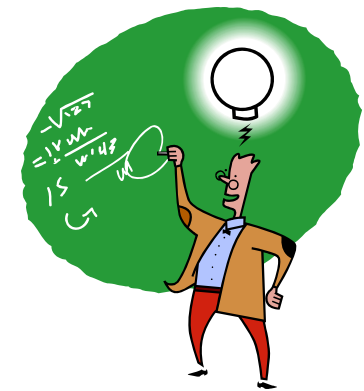
Unregulated border blue – sea surveillance (maritime seas, coast line, internal waters)



Methodology: capabilities were evaluated by border authorities

Objective criteria (hard facts)

- Performance** of existing or near-future technologies
- Impact** on border security if capability is not available
- Probability** of the occurrence of an event if not available
- Transnational effect** (number of member states affected)
- Frequency** of application



Subjective criteria (soft values)

- Urgency** of setting up the capability

Prioritisation on 5 levels from “very high priority” to “not required”

□ Top 10 (all rated “Very high priority”)

- 10. Air 3D – localisation and tracking of manned and unmanned aircrafts
- 9. Localisation and tracking of potential threats in controlled areas (e.g. registration of people, equipment and vehicles passing checkpoints, exchange of this information)
- 8. Education and training for people
- 7. Automated data relationship extraction
- 6. Goods integrity control

❑ Top 10 (cont'd)

- ❑ 5. **Locate and track people** (immigrants) inside the country
- ❑ 4. **Building databases**
- ❑ 3. **Detection of people** attempting to enter illegally, including transport means (regulated and unregulated borders), in wide and restricted areas
- ❑ 2. **Interoperability** of data, systems, tools and equipment
- ❑ 1. **Stand-off scanning and detection** of hidden dangerous material and/or store-away-ways

Main results

- Determination of the interoperability requirements and needs


inventory of the relevant corresponding standards

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❑ Standards found:

❑ Specification: 274

❑ Conformity: 257

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- ❑ Different types of standards identified, e.g. standards specific to **border security** (e.g. travel documents, X-ray systems for contraband detection in homeland security), **generic standards** (e.g. Health & safety, EMC, Environmental protection, Quality assurance), **supporting standards** (e.g. Database Language), **family standards** (e.g. alarm Systems)

Remark:

- ❑ standards found **not necessarily related to border security interoperability** but their use and implementation could be relevant if extended to this domain (e.g. at present mainly employed by defence, standards not available for public access)
- ❑ some standards cover both **specification** and **conformity** (example: Alarm sensors - Acoustic and Hyper-Frequency Detectors)

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 **identification of the assessment mechanisms / guidelines to achieve interoperability**

- identification of missing standards, assessment, description of its scope and business justification

□ Certification and accreditation

- **Certification**: demonstration of assessment
- **Accreditation**: entitlement to perform certification
- **Auto certification**: when product family standards are available and manufacturer possesses certified quality assurance system
- **Trade marks and professional associations**: e.g. France: NFA2P, USA: NFPA
- Use of **manufacturer laboratories** or **accredited laboratories**
- **Public sector customers** possess **own** technical centres or departments

□ Main results

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☞ **identification of missing standards, assessment, description of its scope and business justification**

Tender establishment:

- 'Existing specification standards for border security'
- 'Recommended Specification Standards for Border Security'



Qualification of equipment:

- 'Existing conformity standards for Border Security'
- 'Recommended Assessments for Border Security Standards'





Support provided to stakeholders by the following documents:

- General introduction to each technology
- Inventory of existing specification and assessment standards
- Inventory of existing certification and accreditation institutions

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-  partners
-  objectives

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Conclusions

- ❑ Standards play an **important role in tender and supply**

- ❑ A straightforward way for **identification of existing and missing standards was used**

- ❑ **Full lists** of existing specification and conformity standards have been established

- ❑ **Additional information** concerning technologies, certification, accreditation is provided

- ❑ Interoperability doesn't mean necessarily standards

- ❑ Standards and their assessment provide technical interoperability if:
 - ❑ a distributed border application is concerned
 - ❑ it covers identified interoperable technical (minimum) needs
 - ❑ standard covers properly the technical needs
 - ❑ standard assessment covers interoperability

- ❑ Organisational & semantic interoperability are parts of interoperability approach

Towards more **effective interoperable infrastructures**

- Some interoperability issues are yet effective
- Some interoperability is questioning

Solutions are either **centralised or distributed**

- Centralisation → homogeneous system
- Distributed solution → interoperability at the design stage

Thank you for your attention !



Questions?