

PSCE WHITE PAPER 5

Public Protection and Disaster Relief (PPDR) Information Space – Status quo of commercial, research and governmental projects and applications

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This document is based on EPISECC deliverable D2.1, which investigates commercial, research and governmental projects and application (so called tools) used to manage and exchange information for Public Protection and Disaster Relief (PPDR) missions. Based on a predefined analysis and categorization scheme, various aspects such as stakeholders, area of application and level of interoperability were examined.

In total 41 tools were analyzed. Special focus was put on interoperability between PPDR management systems on different abstraction levels ((Bacchelli et al., 2010), Tolk, 2003)). Physical interoperability (i.e. data can be exchanged via a network), syntactical interoperability (i.e. data exchange standards such as EDXL are used to allow automatic processing by another system) as well as semantic interoperability of the tools were investigated in detail. Semantic interoperability indicates identical interpretation of information exchanged between tools.

More than 70% of analyzed tools implement structures or standards to provide physical and syntactical interoperability. What's more, the analysis reveals a clear gap in semantic interoperability between existing PPDR management tools. Only 12 out of 41 tools include structures to provide physical, syntactical as well as semantic interoperability. Interestingly only one out of these 12 tools is operationally used at governmental level. These results indicate a clear gap of semantic interoperability of PPDR management tools, which is addressed by EPISECC.

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REFERENCES:

Bacchelli F, et al. "RTO TR-IST-075 Semantic Interoperability Final Report of Task Group IST-075", 2010.

Tolk A. "Beyond Technical Interoperability - Introducing a Reference Model for Measures of Merit for Coalition Interoperability". 8th International Command and Control Research and Technology Symposium, 2003.