INMOTOS-INterdependency MOdelin Tools and Simulation based risk assessment of ICT critical infrastructures continency plans

Program/Call Reference, Strategic Priority, Grant Agreement Number, Project Type

FP7/JLS-2009-CFP-CIPS: Prevention, preparedness and consequence management of terrorism and other security related risks, STREP

Project Objectives

Interdependencies among Critical Infrastructures, both inside the ICT domain and between ICT and other sectors (e.g. Oil&Gas and Transport), are complex to be understood. Critical Infrastructures risks always change due to new threats, interdependencies and possible usage scenarios. The aim of INMOTOS is to define and develop a Methodology and Tools for a simulation based Risk Assessment of Critical Infrastructures interdependencies and contingency plans. Two kinds of tools are of direct concern: a/ the Framework modeling and b/ the Simulation & Risk Assessment environment. The Framework provides instruments to model interdependencies among Critical Infrastructures, services and contingency plans using a common taxonomy. The Simulation & Risk Assessment environment allows the user to simulate disasters and threats, to evaluate the risk using objective metrics and to analyze the impact of an ICT contingency plan to other interdependent Critical Infrastructures. Moreover the Methodology and the tools will support the user to evaluate the efficiency of the ICT emergency process, such as restoration and reconfiguration procedures, and to optimize interdependent contingency plans in order to enhance the availability and robustness of ICT networks.

A set of contingency plans will be analyzed and evaluated in two complex scenarios: The first scenario will consider ICT intra-domain interdependencies. The second scenario will take into account cross-sector interdependencies (e.g. between ICT and Oil &Gas sector, or between ICT and Transport sector).

Project Starting Date and Duration / Total Cost – Total EU Contribution

1/12/2010, 24 months / 1.526.586,79 € - 1.068.610,75 €

AIT's Role / Principal Investigator

Methodology and Tool Requirements and Simulation Trials/ Prof. Sofoklis Efremidis (sefr@ait.gr)

AIT's Main Work Item

- Requirements specification for interdomain ICT use cases
- Modeling and validation of the specified interdomain ICT use cases.

Main Partners

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<thead>
<tr>
<th>Partner Name</th>
<th>Role</th>
<th>Funding</th>
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<tbody>
<tr>
<td>1 D’Appolonia S.p.A.</td>
<td>Coordinator</td>
<td>390,200 €</td>
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<tr>
<td>2 AIT</td>
<td>Research, Technology</td>
<td>178,250 €</td>
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<tr>
<td>6 partners in total</td>
<td></td>
<td>2,642,895 €</td>
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