IST FP6 Co-ordination Action Project: CI$^2$RCO

http://www.ci2rco.org

Critical Information Infrastructure Research Co-ordination

Conference on Network and Information Security
Roma - November 04, 2005
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ENEA
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CI²RCO is a “Co-ordination action”

IST Call 3, Co-ordination Action, Objective 2.3.6.3:

“To progress towards the achievement of the objectives of a ERA in a given IST field”

where support is provided for the improved networking and co-ordination of national, regional and European research policies, programmes and funding schemes related to one or several IST Strategic Objectives, aiming at improved integration of European IST research.
Three Layers Model for the Critical Infrastructure

- Physical Layer
- Cyber Layer
- Organisational Layer

Intra-dependency
Inter-dependency
<table>
<thead>
<tr>
<th>Related</th>
<th>IST</th>
<th>PASR</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AMSD, SAFEGUARD, SEINIT</td>
<td>VITA, SENTRE, ESSRT</td>
<td>National Research &amp; Technologies</td>
</tr>
</tbody>
</table>

CIIP Research in the EU

- Problem: DDSI
- Analysis: ACIP
- Network: CI²RCO
- Demonstration: IRRIIS

Related to:

- IST
- PASR
- National

ENEA
The main objective of the Critical Information Infrastructure Research Coordination (CI²RCO) project is to create and co-ordinate a European Taskforce:

- to encourage a co-ordinated Europe-wide approach for research and development on Critical Information Infrastructure Protection (CIIP), and

- to establish a European Research Area (ERA) on CIIP as part of the larger IST Strategic Objective to integrate and strengthen the ERA on Dependability and Security

- to support CIIP awareness and actions in the EU-25 and AC countries
CI²RCO Work-Packages and their relations

- **WP1**: Creating a network of research organisations, agencies promoting initiatives and policy makers within the subject research field (CIIP)
- **WP2**: Identification of national and EU R&D programmes and projects with relevance to CIIP
- **WP3**: Analysis of the European CIIP research area
- **WP4**: Feedback from CII stakeholders
- **WP5**: Towards a European CIIP Research Agenda
- **WP6**: CI²RCO Common Information Platform
- **WP7**: Project Management
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WP1 - Creating a Network within CIIP
Channels used for establishing Point of Contacts (PoC)

<table>
<thead>
<tr>
<th>Organisation/Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISTAG (IST Advisory Group)</td>
</tr>
<tr>
<td>ISTC (IST Committee)</td>
</tr>
<tr>
<td>ENISA (European Network Information Security Agency)</td>
</tr>
<tr>
<td>ESRAB (European Security Research Advisory Board)</td>
</tr>
<tr>
<td>SecurlST (European ICT Security &amp; Dependability Taskforce)</td>
</tr>
<tr>
<td>CISTRANA (Coordination of IST Research and National Activities)</td>
</tr>
</tbody>
</table>
### Establishing PoC (ctd.)

<table>
<thead>
<tr>
<th>Organisation/Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>PASR (Preparatory Action for Security Research) Committee</td>
</tr>
<tr>
<td>PASR Projects (VITA, SENTRE, ESSRT)</td>
</tr>
<tr>
<td>DELOITTE Report “A survey throughout Europe of governmental initiatives to promote a culture of security”</td>
</tr>
<tr>
<td>ETH CIIP Handbook 2004</td>
</tr>
<tr>
<td>OTHERS</td>
</tr>
</tbody>
</table>
First Round
Number of Contacts: 732
Apart from BG and TR all EU-25 and ACC covered
WP1 - Profile of Contacts

CIP Sectors: 24%
Ministries: 24%
Researcher: 26%
Agencies: 14%
Public Authorities: 5%
Technology Providers: 4%
EC: 2%
Associations: 1%
Total: 732 100%
WP1 - Positive Answers

First round
Positive Answers: 41

Second round just started
### WP1 - Profile of Answers

<table>
<thead>
<tr>
<th>Sector</th>
<th>Count</th>
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<tbody>
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<td>Sectors</td>
<td>5</td>
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<tr>
<td>Ministries</td>
<td>6</td>
</tr>
<tr>
<td>Researcher</td>
<td>25</td>
</tr>
<tr>
<td>Agencies</td>
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<tr>
<td>Public Authorities</td>
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<td>Technology Providers</td>
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<tr>
<td>EC</td>
<td>0</td>
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<tr>
<td>Associations</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>41</strong></td>
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</tbody>
</table>
WP1 - Success Rates

Success Rate general 6%

Success Rate per Category

- Sector 4%
- Ministry 4%
- Researcher 14%
- Agency 2%
- Public Authority 0%
- Technology Provider 5%
- EU 0%
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WP2 - National and EU CIIP R&D Programmes, Projects and Actions Preliminary findings
Questionnaire

Objective

to identify relevant CIIP R&D programmes, projects and actions as well as CIIP R&D organisations addressing CIIP issues on at the regional, national and EU levels

Structure

Current / future activities, programmes and Initiatives
Short assessment of CIIP-related R&D situation
Guidance material (definitions, sectors, branches)
## Understanding the ‘Landscape’ of CIIP R&D

<table>
<thead>
<tr>
<th>Programs per sector</th>
<th>Energy sector</th>
<th>ICT services</th>
<th>Financial services</th>
<th>Transportation</th>
<th>Health care</th>
<th>Water management</th>
<th>Food management</th>
<th>Emergency/security services</th>
<th>Governmental services</th>
<th>Potential high risk industries</th>
<th>Overall</th>
<th>Total programs/category</th>
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<td>Holistic system security</td>
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<td>7</td>
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<td>7</td>
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<td>Survivability of systems</td>
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<td>4</td>
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<td>4</td>
<td>1</td>
<td>14</td>
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<td>20</td>
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<td>Policies &amp; legal environment</td>
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<td>3</td>
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<td>9</td>
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<td>Fundamental R&amp;D on CIIP</td>
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<td>Non-technology issues</td>
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WP5 - TOWARDS A EUROPEAN CIIP RESEARCH AGENDA

Network and Info Security – Roma 04.11.2005
MAIN OBJECTIVE OF THE AGENDA

Determination of R&D priorities based on relative importance of different needs, likelihood of R&D success and the timeframe in which R&D occurs
AGENDA TABLE OF CONTENTS

The Agenda will include:

• State-of-art of R&D needs with a multi-disciplinary and a multi-sectorial view
• Survey of R&D Agendas at regional, national and EU level
• Survey of funding schemes for the different Agendas
• Gap analysis that compares needs to existing R&D programmes
• Topics to be covered during the next FP7
EXPECTED FALL OUT OF THE AGENDA

• Avoid duplication of work in the EU-25
• Co-ordinate regional, national and EU research programs
• Exploit synergies
• Merge program funds toward to achieve “critical mass” of programs
• Prioritise regional, national and European research programs
• Create prerequisites for establishment of networks in the EU-25 and Associated Candidate Countries
Preliminary Conclusions

RESEARCH AND DEVELOPMENT IN SUPPORT OF CRITICAL INFORMATION INFRASTRUCTURE PROTECTION IN EU 25 AND AC COUNTRIES

• TOO MANY FRAGMENTED INITIATIVES

• TOO FEW NATIONAL PROGRAMMES AND COORDINATED PROJECTS
ECN

Building a secure EU Information Infrastructure

Focus on Critical Information Infrastructure Research Coordination

Success and Risk Factors for Multinational CIIP Co-operation

International Cooperation for Critical Infrastructure Protection

Secure Electronic Communication Infrastructure
International Workshop on
Complex Network and Infrastructure Protection
CNI P 2006
March 28-29, 2006 - Rome, Italy
http://ciip.casaccia.enea.it/cnip/
Contact in ITALY

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