COMMISSION DECISION

of 16 December 2010

adopting the annual work programme for 2011 for the specific programme on the "Prevention, Preparedness and Consequence Management of Terrorism and other-Security related risks" as part of the General Programme "Security and Safeguarding Liberties"
COMMISSION DECISION

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THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Council Decision 2007/124/EC, Euratom of 12 February 2007 establishing for the period 2007 to 2013, as part of General Programme on Security and Safeguarding Liberties, the Specific Programme 'Prevention, Preparedness and Consequence Management of Terrorism and Other Security Related Risks',¹ and in particular Article 8(2) thereof,

Whereas:

(1) In accordance with Article 7 of Decision 2007/124/EC, Euratom, Community support may take the form of grants or public procurement contracts. Community grants shall be awarded further to calls for proposals, save in duly substantiated exceptional cases of urgency or where the characteristics of the beneficiary leave no other choice for a given action, and shall be provided through operating grants and grants for actions.

(2) In accordance with Article 8(2) of Decision 2007/124/EC, Euratom, the Commission shall adopt an annual work programme specifying its specific objectives, thematic priorities, a description of accompanying measures envisaged and if necessary a list of other actions.

(3) The 2011 annual work programme should determine the arrangements for granting financial support to the eligible actions listed in Article 5 of Decision 2007/124/CE, Euratom.

(4) Article 75 of Council Regulation (EC, Euratom) No 1605/2002 of 25 June 2002 on the Financial Regulation applicable to the general budget of the European Communities, hereafter referred to as the Financial Regulation,² requires that every item of expenditure shall be committed and that the commitment of the expenditure shall be preceded by a financing decision adopted by the institution or the authorities to which powers have been delegated by the institution.

(5) In accordance with Article 110(1) of the Financial Regulation, grants are subject to an annual work programme, published at the start of the financial year.

In accordance with Article 90(2) of Commission Regulation (EC, Euratom) No 2342/2002 of 23 December 2002 laying down detailed rules for the implementation of the Financial Regulation, hereafter referred to as the Implementing Rules, the decision adopting an annual work programme within the meaning of Article 110 of the Financial Regulation is considered as the financing decision within the meaning of Article 75 of the Financial Regulation, provided that it constitutes a sufficiently detailed framework.

In accordance with Article 166 of the Implementing Rules, the annual work programme specifies the basic act, the objectives and the schedule of calls for proposals with the indicative amount and the results expected.

The measures provided for in this Decision are in accordance with the opinion of the Committee established by Article 9 of Decision 2007/124/EC, Euratom.

HAS ADOPTED THIS DECISION:

Article 1

The 2011 annual work programme for the specific programme 'Prevention, Preparedness and Consequence Management of Terrorism and Other Security Related Risks', described in the Annex to this decision, is hereby adopted. This decision serves as a financing decision for 2011 for the budget article 18.05.08 subject to the condition that the budget for 2011 is adopted by the budgetary authority. The total amount covered by this decision is 24.100.000 € subject to the necessary funds being available under the 2011 general budget of the European Union.

Any change of the amounts allocated to the specific programme will not require an amendment of this decision, provided that the change is approved first by the budgetary authority via an amending budget or a transfer.

Article 2

Modifications not exceeding 20% of the total amount covered by this decision shall not be considered a substantial modification as referred to in Article 90(4) of the Implementing Rules. The Authorising Officer by delegation may adopt such changes in accordance with the principle of sound financial management.

Article [...]

This Decision is addressed to DG Home Affairs.

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Done at Brussels, [...]

For the Commission
[...]
Member of the Commission
ANNEX

ANNUAL WORK PROGRAMME 2011

PREVENTION, PREPAREDNESS AND CONSEQUENCE MANAGEMENT OF TERRORISM AND OTHER SECURITY RELATED RISKS

INTRODUCTION

This is the fifth Annual Work Programme adopted under the Council Decision No 2007/124/EC, Euratom, establishing the Specific Programme "Prevention, Preparedness and Consequence Management of Terrorism and other Security related Risks for the Period 2007-2013" (hereafter: the Programme)\(^4\) as part of the General Programme on "Security and Safeguarding Liberties".

This Programme offers a comprehensive framework and contributes to the development of the European Programme for Critical Infrastructure Protection (EPCIP)\(^5\), as well as policy measures aiming at upholding, and/or guaranteeing security and public order during a crisis situation.

The Commission will ensure complementarity with other European Union initiatives and internal consistency e.g. with the Research and Development Framework Programme 7 security and risk governance themes, as well as other related actions, as in the area of security of energy supply, which includes the protection of energy infrastructures. This will be achieved by reinforced inter-service consultation during the implementation phases of the work programme.

This annual work programme covers the priorities in 2011 and consists of the following parts and types of actions:

<table>
<thead>
<tr>
<th>Part</th>
<th>Types of actions</th>
<th>The budget envisaged</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Grants</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>Action grants</td>
<td>17 000 000 €</td>
</tr>
</tbody>
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\(^4\) OJ L 58, 24.02.2007, p.1
(a) ‘critical infrastructure’ means an asset, system or part thereof located in Member States which is essential for the maintenance of vital societal functions, health, safety, security, economic or social well-being of people, and the disruption or destruction of which would have a significant impact in a Member State as a result of the failure to maintain those functions;
b) ‘European critical infrastructure’ or ‘ECI’ means critical infrastructure located in Member States the disruption or destruction of which would have a significant impact on at least two Member States. The significance of the impact shall be assessed in terms of cross-cutting criteria. This includes effects resulting from cross-sector dependencies on other types of infrastructure;
<table>
<thead>
<tr>
<th></th>
<th>Grants to standardisation bodies</th>
<th>N/A</th>
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<tbody>
<tr>
<td>C</td>
<td>Grants to bodies in monopoly situations</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>II. Public procurement contracts and administrative arrangements</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Public procurement</td>
<td>2 600 000€</td>
</tr>
<tr>
<td>E</td>
<td>Actions to be carried out with the JRC</td>
<td>4 500 000€</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td><strong>€ 24 100 000</strong></td>
</tr>
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</table>

The financial support should achieve general and specific objectives aimed at two main areas:

1. Prevention and Preparedness refers to measures aimed at preventing and/or reducing risks linked to terrorism and other security related risks.

2. Consequence Management refers to the coordination of measures taken in order to react to and to reduce the impact of the effects of a security related incident, in particular resulting from terrorist attacks in order to ensure a smooth coordination of crisis management and security actions.

Actions funded under this Programme have to be based on an all-hazards approach, while countering threats from terrorism as a priority.

The specific objectives of the Programme are the following:

1. Within the general objectives, and unless covered by other financial instruments, the Programme shall stimulate, promote and develop measures on prevention, preparedness and consequence management based, inter alia, on comprehensive threat and risk assessments, subject to the supervision by the Member States and with due regard to existing European Union competence in that matter, and aiming to preventing or reducing risks linked with terrorism and other security related risks.

2. With regard to prevention and preparedness of risks linked with terrorism and other security related risks the Programme aims at protecting people and critical infrastructure, in particular by:
   
   (a) stimulating, promoting, and supporting risk assessments on critical infrastructure, in order to upgrade security;

   (b) stimulating, promoting, and supporting the development of methodologies for the protection of critical infrastructure, in particular risk assessment methodologies;

   (c) promoting and supporting shared operational measures to improve security in cross-border supply chains, provided that the rules of competition within the internal market are not distorted;
(d) promoting and supporting the development of security standards, and an exchange of know-how and experience, on protection of people and critical infrastructure;

(e) promoting and supporting European Union wide coordination and cooperation on protection of critical infrastructure.

(3) With regard to consequence management the Programme aims at:

(a) stimulating, promoting and supporting the exchange of know-how and experience, in order to establish best practices with a view to coordinate response measures and to achieve cooperation between various actors involved in crisis management and security actions;

(b) promoting joint exercises and practical scenarios including security and safety components, in order to enhance coordination and cooperation between relevant actors at the European level.

Establishing risk and threat assessments of specific critical infrastructures is an area of activity for the Member States or the Commission, having due regard to existing Union competences, and may only be undertaken under the leadership of a public authority. However, the development of common methodologies and approaches to risk and threat assessments, which could be shared with others across the European Union, can be proposed by various stakeholders having experience in this field. Such methodologies would be of a generic nature and would not address any specific security issues, but could be used by the interested parties (Member States, infrastructure owners/operators) for such purposes.

This Programme does not apply to matters covered by other financial instruments, in particular the Rapid Response and Preparedness Instrument for Major Emergencies (now renamed Civil Protection Financial Instrument) and the research activities in the areas of Security and Space in the 7th RTD Framework Programme.

It is envisaged that calls for proposals will be published on the European Commission's website around December 2010 and June 2011.

**EXPECTED OUTCOME**

The projects and other actions are expected to contribute to the achievement of the general as well of the specific objectives of the programme. The projects are moreover intended to contribute:

- To the development of instruments (at EU level), strategies and activities/measures in the field of the effective protection of critical infrastructure (at both EU and MS levels) and/or;
- To the development of a common framework for the effective protection of critical infrastructure at EU level.

In addition, the projects should achieve the following results:

- development of methods, techniques and instruments for operational or training use in this particular field;
- exchange and dissemination of information, experience and best practices between Member States and between the different organisations or bodies responsible for the protection of critical infrastructures;
- development and improvement of the relationship between public authorities and private sector in the field covered by the Programme;
- improvement of mutual knowledge of the Member States' protection systems;
- enhancement of the capacity to share good practices;
- creation of informal contact networks between authorities;
- development of a culture of trust and cooperation.

A. **Action Grants**

Following two calls for proposals, action grants may be awarded to transnational and/or national projects. The budget dedicated to the first call is estimated at 8.000.000 € and, for the second call, is estimated at 9.000.000 plus, possibly, the outstanding amount from the first call.

All areas identified in the Programme are open for proposals. For 2011, a particular priority will be the preparation of the review of Council Directive 2008/114/EC, which is foreseen to start at the beginning of 2012. For 2011, the following priorities have been identified: (proposals submitted outside these priorities will also be considered, subject to quality and budget availability after funding projects matching priorities):

- Facilitating the implementation of Council Directive 2008/114/EC on the identification and designation of European critical infrastructures and the assessment of the need to improve their protection (energy and transport sector);
- Preparing/contributing to the review of Council Directive 2008/114/EC on the identification and designation of European critical infrastructures, with a particular emphasis on the sectors covered and the criteria used to identify European Critical Infrastructures;
- Supporting the policy initiative and the action plan on Critical Information Infrastructure Protection (CIIP) - COM(2009) 1496 - in particular through developing pan-European exercises on network security incidents with a view to support the European participation in global exercises, strengthening the cooperation between National/Governmental Computer Emergency Response Teams and advancing the development and deployment of a European Information Sharing and Alert System reaching out to citizens and SMEs providing to them tailored information on threats, risks and alerts affecting electronic networks;

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• Robustness of (global) ICT networks, including implications of a failure of these networks on critical infrastructures, as well as dependencies of critical processes in critical infrastructures on such (global) networks;

• Emergency communication in crisis situations, including with the general public and when standard ICT networks are not available;

• Supporting Member States by enhancing communication in order to strengthen cooperation between the public and the private sector (regular meetings to discuss issues of common interest) as well as by improving international cooperation and a cross-border exchange of information between these stakeholders and the relevant institutions at European level;

• Interdependency analysis;

• Compilation of a comprehensive all-hazards catalogue for critical infrastructures;

• Monitoring and assessment of evolving threats with a view to securing critical infrastructures, as well as a common understanding in relation to sectoral, intersectoral and cross-border risk management;

• Increasing the security awareness of critical infrastructure operators;

• Improving information management with regard to critical infrastructures;

• Increasing critical infrastructure protection capability in the transport, energy, ICT, chemical, financial, water, food, health, space, research and nuclear sectors.

B. **GRANTS TO STANDARDISATION BODIES**

None in 2011.

C. **GRANTS TO BODIES IN MONOPOLY SITUATIONS**

None in 2011.

**CONDITION AND MODALITIES (FOR ALL GRANTS)**

In line with the Financial Regulation and the basic act, the following conditions and modalities will apply.

1. **Financial provisions**

   (1) The maximum rate of co-financing by the Commission is 90% of the total eligible costs of the project.

   (2) Projects must be strictly non-profit making following Art. 109 (2) of the Financial Regulation.
(3) Grants awarded by this Programme shall be covered by a written agreement, including the modalities for the reimbursement of a specified proportion of the eligible costs actually incurred;

(4) As a general rule, the co-funding is provided in two instalments: a pre-financing payment corresponding to 80% of the Commission subvention on signature of the grant agreement, and the balance on receipt and approval by the Commission of the final report and final financial statement.
2. **Eligibility**

To be eligible, grant applications must meet the following criteria:

(1) Proposals must be submitted by bodies and organisations established in the Member States with legal personality. Applications from natural persons are not eligible. Bodies and organisations which are profit oriented may submit projects only in conjunction with non-profit oriented or state organisations.

(2) Proposals must match one or more objectives of the programme;

(3) Transnational projects must involve co-beneficiaries (‘partners’ that will receive funding from the Commission) in at least two Member States, or at least one Member State and a candidate country. Organisations in third countries, EU Agencies and international organisations may participate as associate partners on a non-cost basis (‘partners’ not receiving funding from the Commission), but are not permitted to submit projects;

(4) National projects are eligible as starter and/or complementary measures to transnational projects, or as a contribution to developing innovative methods and/or technologies with a potential for transferability at Union level, or as a development of such methods and technologies with the view to transfer them to other Member States;

(5) Proposals seeking EU co-funding of less than € 100,000 will not be eligible to receive a grant.

(6) Subcontracting of a limited part of the action may be eligible up to 30% of the total eligible costs of the project.

(7) Projects cannot be already completed and should be scheduled to start not before the signature of the grant agreement. An earlier start of the project may be accepted only where the applicant can demonstrate the need to start the action before the grant agreement is signed. In such cases, expenditure eligible for financing may not have been incurred prior to the date of the award of the grant application.

(8) Projects cannot last more than two years.

3. **Exclusion**

Candidates shall be excluded from participating in the call for proposals if they are in one or more of the situations listed in Articles 93(1) and 94 of the Financial Regulation.

4. **Selection criteria**

In accordance with Article 116(1) of the Financial Regulation and Article 176 of the Implementing Rules, proposals for projects shall be evaluated on the basis of the following selection criteria:
(1) the applicant's operational and professional competencies and qualifications in the specified area required to complete the proposed action or work programme including evidence of relevant professional training and/or experience for the personnel concerned. In the case of government or law enforcement organisations, evidence that the project falls within their statutory area of responsibility may be submitted to establish their operational and technical competence. Proposals should also show evidence of ability to access information or participants in the way proposed.

(2) the applicant's financial capability, i.e. stable and sufficient sources of funding to maintain its activity throughout the period during which the action is being carried out and to participate in its funding, based on the submitted documents (such as the balance sheets showing the annual incomes and expenditures, cash flow, debts and the amount of cash available).

Only proposals which meet the above selection criteria will be examined in detail.

5. **Award criteria**

Proposals that are eligible and meet the selection criteria will be assessed by the evaluation committee and they will be ranked on the basis of the following award criteria:

**Conformity.** Projects will be assessed on the extent to which they match priority areas identified in Section A above and in the relevant EU strategic documents and/or action plans. Projects should demonstrate that their objectives reflect a clearly identified need for action according to the EU’s policy priorities in the field of Prevention, Preparedness and Consequence management of Terrorism and other Security related Risks.

**Quality** of the proposed action regarding its conception, organisation, presentation, methodology, expertise, expected results and strategy for their dissemination. In particular, the ability of the project to attain the desired objective(s), quality of budgeting and project management will be assessed.

**Impact** of the expected results on the general objectives of the Programme and on measures taken in the different domains as specified in Articles 4 and 5 of the Council Decision.

**European added value.** European added-value includes geographical coverage of a project but, most of all, analysis and experimentation that lead to recommendations for common models, protocols, guidelines, structures, mechanisms, policies and processes. In practice, it implies that, over and above the attempt to run the project in a number of Member States and build multinational partnerships, applicants must look beyond the confines of the project to find the broader European relevance of the issues, the actions and the output of the project. Every project should include a plan for the implementation of results with a clear indication of how the project can be further developed at EU level, the means to make available project relevant information and conclusions to general public and/or interested third parties, and with a statement of its potential for European debate and action;

**Value for money.** Amount requested for financial support and its appropriateness as to expected results. Larger projects, in terms of, for example, ambition and participants, will be favoured.
6. **Timetable**

The following schedule is envisaged:

<table>
<thead>
<tr>
<th><strong>Inter-services consultation</strong></th>
<th>July 2010</th>
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<tbody>
<tr>
<td><strong>Opinion of the Programme Committee</strong></td>
<td>August 2010</td>
</tr>
<tr>
<td><strong>Decision by the Commission</strong></td>
<td>September 2010</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Round I</strong></th>
<th><strong>Round II</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Publication of Call for proposals</strong></td>
<td>December 2010</td>
</tr>
<tr>
<td><strong>Deadline for submission of proposals</strong></td>
<td>March 2011</td>
</tr>
<tr>
<td><strong>Opinion of the Programme Committee on the award of grants</strong></td>
<td>July 2011</td>
</tr>
<tr>
<td><strong>Commitments and grant agreements</strong></td>
<td>From July 2011 onwards</td>
</tr>
</tbody>
</table>

**D. PUBLIC PROCUREMENTS**

1. **Actions envisaged**

The Commission intends to undertake the following actions in 2011 through appropriate procurement procedures:

*a) Study to prepare the review of Council Directive 2008/114/EC and the implementation of the action plan*

The objective of this action is to support the preparation of the review of the Directive, by way of assembling the views of the most relevant stakeholders on issues which are critical for the review of the Directive, starting in 2012. This will include looking at the sectors to which the Directive is applicable, determine the effects of the Directive on protection of Energy and Transport infrastructures, an assessment of the value of the Directive to the EU, the criteria used to identify European Critical Infrastructure, and other issues relevant to the review process.

**Envisaged budget for this action: € 0.5 m**

*b) Completion of the development and deployment of CIWIN (Critical Infrastructure Warning and Information Network).*

This action provides for the establishment of a secure and robust technical infrastructure, including hardware and software and support for CIWIN, and also the necessary technical support to security accreditation, maintenance, the provision of a helpdesk and training. The implementation of this action is conditional on the results of the evaluation of the CIWIN pilot foreseen to finish by November 2010.
**Envisaged budget for this action: € 1.5 m**

c) **Support for CIP expert groups**

This action provides for the organisation and support of CIP expert meetings as required, including an EU-US expert meeting.

**Envisaged budget for this action: € 0.3 m**

d) **Studies in support of the European Programme for Critical Infrastructure Protection**

Study on the costs associated with the closure of major transport hubs such as airports or railway stations.

**Envisaged budget for this action: € 0.3 m**

The total budget envisaged for contracts is € 2.6 m.

E. **Actions to be carried out with the JRC**

The budget of € 4,500,000 for these actions will be the subject of a crossed sub-delegation following the modalities set out in Article 7 of the Internal Rules on the implementation of the budget.

a) **Support to HOME and the MS to the preparation of the review of Directive 2008/114/EC starting in 2012**

According to Article 11 of Directive 2008/114/EC, its review will start in 2012. For an efficient review process at Council level, relevant experience from implementing the directive and from the identification and designation process must be available at that time. Therefore a preparation phase will take place that starts during 2010 and continues during 2011.

This task covers the contribution of the JRC to the preparation of the review process of the Directive to the review process itself.

The JRC will engage in the following activities:

- Organisation of workshops and meetings with the MS. This is a continuation of the workshop series that started during the negotiations for the Directive in 2008. In 2009 and 2010 the focus of was on the implementation and application of the directive. In 2011 the focus will change to prepare the review, though the application and exchange of best practices will remain on the agenda. The workshops will continue in 2012 to assist the review process. For 2011 and 2012 four workshops are foreseen. The workshops will be the main vehicle of collecting information from the MS.

- Assist HOME and the MS in drafting discussion documents on technical issues regarding the review and its preparation, including making syntheses and assessments based on the collected information. This may include delivering input to legislative proposals during the review process.
Deliverables: at least four workshops, technical documents as required and possible within the budget, summary at end of this action for evaluation

**Duration: 24 months**

**Envisaged budget: € 0.5 m**

* b) Continuation of the establishment of a voluntary EU reference network for critical infrastructure protection (ERN-CIP), including support to the Member States*

This task is the continuation of the implementation phase of the establishment of a voluntary EU reference network for critical infrastructure protection (ERN-CIP) that has started within the CIPS AWP 2009. This execution of this task is conditional upon the approval of continuation of this project by the Member States and the Commission.

The task covers the constitution of the ERN-CIP Technical Secretariat, the implementation of the Inventory phase, and the Operational phase. The task will carry out the activities foreseen in the ERN-CIP Roadmap for the period mid-2011 to mid-2014, comprising the so-called Inventory and Operational phases.

The Inventory phase will last 12 months and its objective will be to develop an inventory of European experimental facilities, searchable according to the criteria agreed among all CIP stakeholders and develop rules for using it. Its main expected outcome will be a well tested, reviewed and remotely accessible inventory of testing facilities (database) with a clear set of rules for using it. This will be accompanied with thematic studies on selected CIP issues, studies on certification requirements in specific fields, and a first investigation of potential experiments.

The Operational phase will last 24 months, coming after the Inventory phase. Its aim is to develop a demand driven operational network with inbuilt stakeholder satisfaction mechanisms in order to foster the emergence of innovative, qualified, effective and competitive security solutions, through networking of European experimental capacities. This network will be active in a selected number of prioritized Thematic Areas. The two-year Operational phase will also provide an evaluation of its performance and recommendations for the continuation of its operation.

Member States will be closely associated to the establishment of the Network. Progress in the execution of the work will be presented on a yearly basis to Member States to allow feedback and possible alignment.

Deliverables:

- Report on results of the Inventory phase, including the database of testing facilities
- Report on the results of the Operational phase after one year of activity
- Report on the results of the Operation phase after two years of activity

**Duration: 36 months**

**Envisaged budget: € 2.25 m**
c) Support to the operation and analysis of the CIWIN system

The pilot CIWIN system - implemented by Unisys - is presently operational and its servers are housed by the JRC/IPSC in her premises in Ispra. This task covers the technical backing that the JRC will continue to provide, to support the operation of CIWIN.

Deliverables:

- Report on the housing and technical support to the CIWIN system
- Report on guidelines for the management of the CIWIN information
- Report on the management of the CIWIN contents

The implementation of this action is conditional on the results of the evaluation of the CIWIN pilot foreseen to finish by November 2010.

Duration: 24 months

Envisaged budget: € 0.25 m

d) Identity management frameworks for critical infrastructure including people, objects and processes identification

Identity management is essential for critical infrastructure protection both for prevention and access control and for forensics. Identify management is becoming more critical especially for open mobile networks. Efficient identity management facilitates incident response, management of priority access during emergencies and restoration of services after emergencies.

This task will analyse how identity management is currently handled in the protection of critical infrastructures, in different domain areas (sectors), taking into account identification of people, objects and processes, in contexts that involve both public and private settings. Sector areas will be defined and developed through a dialogue with stakeholders.

The study will contribute to the definition of a prototype test-bed, of standards, taxonomy and standard terminology related to the definition and qualifying attributes for an "identity", and to the development of a common framework for identity management aimed at the effective protection of critical infrastructures at the EU level in selected sector areas.

The provision of identity management requires among the others:

- Interoperable protocols (for end-user entities requesting an "identity" which include people but also organisations, and objects, for relying parties, and for identity providers enabling federation of heterogeneous identity management systems)

- Assurance/confidence metrics

- Management of an identity life-cycle

- Identity, attributes, reputation assertions and capabilities discovery assigned through identity providers.
• Security measures aimed at reduction of identity theft and protection of personally identifiable information

Standards already identified in some areas of the whole identity management picture by relevant standard bodies (ITU-T and ISO) will be taken into account as a starting reference point and analysed against the requirements of the critical infrastructure protection sector areas identified.

This task is a follow-up and extension of a previous work of the JRC carried out in the CIPS AWP 2007 under the title “Biometry-based access to critical infrastructures”.

**Estimated duration: 24 months**

**Envisaged budget: € 0.25 m**

**e) Communication and Navigation Infrastructure Protection (CONIP)**

Among ICT infrastructures, communication and navigation (C&N) systems are increasingly getting interconnected through space-based infrastructures consisting of communication satellites and Global navigation satellite systems (GNSS).

From the end-users' point of view, C&N play complementary roles in the civic infrastructure where secure communication, precise positioning, navigation and timing (PNT) information are key operational support requirements for a range of critical services such as energy systems, transport networks, public safety services, banking, aviation etc.

In a previous project under the CIPS 2009 program, JRC has studied vulnerabilities of global navigation systems to radio frequency (RF) interference. Performance of mass market receivers under spoofing and jamming threats is currently being assessed. Under the CIPS 2010 programme, a project on interoperable communication for crisis management will be undertaken.

This task will move to the next stage: to examine the protection of navigation and communication infrastructures. All three system segments of the GNSS will be considered (space, ground and user segments). In the absence of a specific risk assessment methodology for GNSS systems, risk analysis will follow the ISO 27000 framework as a general guiding principle. The results will be: methodology, field-based experiments, dissemination of know-how and best practices to MSs.

Deliverables:

• A number of threat scenarios will be identified and state of the art in mitigation and countermeasures against attacks on C&N systems will be documented. Results will be shared with MSs and other stakeholders through focused events. A consensus policy support document will be developed towards an EU-wide coordinated action.

• A technical framework will be developed for rapid detection and precise geolocation of GNSS jammers and spoofers, currently a major challenge. Member States will be invited for field tests and validation.

• A methodology will be developed for GNSS security management. This could take the form of impact assessment of “GNSS outage on communication infrastructure” and related
preparedness and mitigation guidelines. Initially to be developed as best practice, result could be proposed as a candidate for relevant national or international standard.

Estimated duration: 24 months

Envisaged budget: € 0.75 m

f) Scientific and methodological support to Member States on the Identification of European Critical Infrastructures and the protection of their services

This task will continue the current scientific work on critical infrastructure identification. However, it will be focused at method development, i.e. at the delivery of a method that can be used by the MS to identify CI. Additionally it will focus at the protection of the services these infrastructures provide. To facilitate this, the actual scientific work on building infrastructure models will continue. This will be more general than what would strictly be required by the Directive; it may take more sectors into account, or function at local or national levels rather than at EU level. Specifically the project will:

- Build a method that allows the identification of CI Information on best practices in MS may need to be integrated in this method and will therefore be collected if appropriate.

- Continue the development of methods for the identification of foreign critical infrastructures and liaise with foreign partners to exchange and benchmark best practices in foreign critical infrastructure identification.

- Build models that facilitate the identification of critical infrastructure as required by the method. These models will take into account (inter-) dependencies, the availability of alternatives, systemic risks to entire sectors rather than to single assets, resilience, and will facilitate the evaluation of impact by means of the criteria defined in the guidelines to the Directive.

- Develop methods to protect of services at system level, i.e. to increase resilience. This may for instance use the information on dependencies. The protection of services will not be aimed at hardening assets against certain treats, but will be aimed at maintaining service continuity during a crisis. This work will be closely connected to the identification of CI, since it will facilitate the reduction of the criticality of infrastructures.

- When required for, the project may establish data sources to inform the methods and the models, and provide this data to participating MS or operators.

- The results will be informed, benchmarked and validated by interaction and participation to similar efforts within the EU and internationally.

Deliverables: an implemented version of the methods, report documenting the scientific and technical basis of the methods and underlying models.

Duration: 24 months

Envisaged budget: € 0.5 m

The total budget envisaged for administrative arrangements with the JRC is € 3.75 m.
ACCOMPANYING MEASURES

According to Article 7(3) of the basic act, the Commission may finance administrative and technical assistance activities regarding the management of this Programme through public procurement.

In particular, this may include the payment of external experts, activities regarding the exploitation and dissemination of project results, production of information material and the organisation of meetings. The execution of these activities is subject to the available resources on budget line 18 01 04 16.