

OPEN CALL FOR TENDERS

Tender Specifications

"Security and resilience of electronic communication networks and services"

ENISA P/27/12/TCD

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			roaming

LOT 2 - Power supply dependencies

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PART 1 INTRODUCTION TO ENISA

1. CONTEXT

1.1 Introduction

ENISA, the European Network and Information Security Agency, is an Agency of the European Union (EU). It was set up to strengthen the capacity of the European Union, its Member States and the business community to prevent, address and respond to network and information security threats.

Computers and other information technology devices, such as smart phones, are now central to how Europe's citizens live their lives. Therefore, protecting digital information and networks is crucial, for society and the European economy.

In order to achieve this goal, ENISA acts as a centre of expertise in network and information security and facilitates cooperation between the public and private sectors. The Agency's mission is to support a high and effective level of Network and Information Security within the EU. Together with the EU-institutions and the Member States, ENISA seeks to develop a culture of Network and Information Security for the benefit of citizens, consumers, business and public sector organizations in the European Union.

1.2 Scope

The Agency assists the Commission and the EU Member States, and cooperates with the business community in order to help them to meet the requirements of network and information security. This work supports the smooth functioning of the EU's internal market.

1.3 Objectives

The Agency's objectives are as follows:

- Advising and assisting the European Commission and the Member States on information security and in their dialogue with industry to address security in hardware and software products.
- Collecting and analysing data on security incidents in Europe and emerging risks.
- Promoting risk assessment and risk management methods to enhance the Agency's capability to deal with information security threats.
- Awareness-raising and co-operation between different actors in the information security field, notably developing public and private sector partnerships with industry.

2. ADDITIONAL INFORMATION

Further information about ENISA can be obtained on its website: www.enisa.europa.eu

PART 2 TECHNICAL DESCRIPTION

A. SCOPE OF THIS TENDER

Within the framework of this Open tender procedure, ENISA would like to find suitably qualified contractors to provide the services as stipulated in the technical specifications outlined below. The tender has been split into 3 standalone projects defined as LOTS.

A tenderer may bid for **one**, **two**, **or all three LOTs**. The three CIIP related projects are outlined below:

LOT No	Subject of the tender	Maximum budget
LOT 1	National roaming	€ 40,000.00
LOT 2	Power supply dependencies	€ 40,000.00
LOT 3	Resilience of European Network Interconnections	€ 55,000.00

If bidding for more than one LOT, the tenderer is required to provide <u>completely separate technical</u> <u>bids for each LOT</u>.

If a tenderer decides to bid for more than one LOT, then the *administrative documentation* required to be provided (as outlined in PART 3 - Section 3: SELECTION CRITERIA and Annexes) only needs to be provided once.

B. THE OVERALL PROGRAMME

This tender comprises 3 LOTS for separate projects related to the security and resilience of electronic communication networks and services. The three lots involve studies about national roaming, power grid dependencies and resilience of network interconnections. These projects are related to activities in the ENISA Work Program 2013 and coordinated by the CIIP unit of ENISA.

CIIP unit

The CIIP unit is responsible for assisting competent national EU agencies, private sector and EU Commission to develop sound and implementable preparedness, response and recovery strategies, policies and measures that fully meet the emerging threats critical information infrastructures face today.

The CIIP unit fulfils its mission by:

- assisting EU States and Commission to better understand the emerging CIIP landscape and issuing important recommendations to influence the policy process in areas like Smart Grids, ICS-SCADA, interconnected networks, cloud computing, botnets, mutual aid agreement
- developing good practices in areas like national contingency plans, cyber security strategies, minimum security measures for ISPs, national cyber exercises, trusted information sharing, and others
- assisting National Telecom Regulatory Authorities in implementing a harmonised scheme for mandatory incident reporting
- co-managing with the Commission the Pan European Public Private Partnership for Resilience (EP3R) and facilitating the dialogue among the public and private stakeholders on emerging CIIP issues
- contributing to Commission's policy and strategic initiatives (e.g. Cyber Security Strategy) and verifying that our recommendations are properly addressed by all concerned stakeholders

Article 13a

The reform of the EU legal framework for electronic communications, which was adopted in 2009 and came into effect in May 2011, adds Article 13a to the Framework directive. Article 13a addresses security and integrity of public electronic communication networks and services. The legislation concerns national regulatory authorities (NRAs) and providers of public electronic communication networks and services (providers).

Article 13a states:

- Providers of public electronic communication networks and services should take measures to guarantee security and integrity of their networks.
- Providers must report to competent national authorities about significant breaches of security or integrity.
- National regulatory authorities should notify ENISA and national authorities abroad when necessary, for example in case of incidents with cross-border impact.
- Annually, national regulatory authorities should submit a summary report to ENISA and the European Commission (EC) about the incidents.

ENISA started a working group with regulators from all the Member States, to implement Article 13a and to address security and resilience of e-communications in general:

- In 2009, this work resulted in the publication of a good practice guide on national incident reporting and good practices on security measures.
- In 2011, a working group of regulators reached consensus on two non-binding technical documents providing guidance to NRAs in the member states: Technical guidelines for incident reporting and Technical guidelines for minimum security measures. The technical guidelines will help Member States to take the "appropriate technical and organisational measures" that would ensure that providers' networks and services are secure and resilient.
- In 2012 ENISA continued supporting Member States in their efforts to implement article 13a in a harmonized way. The Agency followed up the transposition process in the MSs, provided expertise and knowledge to competent authorities in the MSs, and facilitated the information sharing among them on implementation issues. At this purpose ENISA organized workshops on topics of common interest for MSs, and engaged them also in online forums and discussions. During this year the MSs also sent their first annual incident reports to ENISA and the EC. Based on the incident reports ENISA published an analysis report.

In 2013 ENISA will publish the second analysis report based on incidents that occurred in 2012.

1 LOT 1: National roaming.

1.1 GENERAL DESCRIPTION OF THE REQUIRED SERVICES

In the EU the mobile telephony market is liberalized and deregulated. In most EU countries the national territory is covered by mobile networks of several mobile network providers who compete for customers and market share. The telecom regulator requires mobile operators to deliver a minimum level of service on the national territory – depending on the country this involves requirements to offer connections to emergency services, to cover certain geographic areas, and so on. To allow optimal access to emergency services, operators across the EU are obliged to accept connections from mobile phones for the purpose of making calls to emergency numbers (like 112).

Recently there have been a number of big outages involving mobile network operators in the EU, where just the mobile network of one provider was affected. The dependency on mobile communications (telephony and internet) in society is now so great that during these outages consumers and politicians have asked the question why it is not possible to temporarily (for the duration of the outage) switch to another provider.

In this project, in this lot (Article 13a: National roaming) we analyse national roaming frameworks which allow customers to use the network of other mobile operators covering that area. The main goal of this work is to investigate how and if national roaming could be used to address the impact of outages. We are interested in technical, legal, financial and administrative issues that have to be addressed to set-up national roaming.

1.2 TASKS

1.2.1 TASK 1: Stock taking

The tenderer should provide an overview of existing national roaming schemes by doing desktop research and where needed follow-up. Per setting the tenderer should investigate key aspects of the roaming scheme, including:

- drivers (business case, regulatory, customers)
- goal (temporary outages, geographic coverage)
- pricing and costs (surcharges, refunds in case of outages),
- structure (bilateral, multilateral, geographic)
- legal issues (disputes about roaming charges)
- competition issues (risks and benefits)
- technological issues

As an example of a framework to take into account, consider the situation in Australia where one operator allows roaming to mitigate lack of coverage in certain areas:

http://www.vodafone.com.au/personal/services/coverage/nationalroaming

The tenderer should also conduct 15 telephonic interviews with 5 EU regulators (who are considering roaming), 5 non-EU regulators (who have a type of national roaming) and 5 operators

who operate national roaming schemes. The tenderer should agree with ENISA on which regulators to contact.

This task results in a deliverable (D1).

1.2.2 TASK 2: Analysis

The tenderer should analyse the collected information, the existing schemes and the identified issues.

The tenderer should provide an overview of approaches with links to material and a brief summary of the key aspects.

The tenderer should model 2-3 typical approaches that have been taken in existing countries and describe them in a generic way.

The tenderer should (for each one of the typical approaches) describe the full range of steps that need to be taken for deploying the scheme – and for each scheme analyse costs, benefits and challenges.

This task results in a deliverable (D2).

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1.2.3 TASK 3: Recommendations

The tenderer should draft conclusions about the main costs and benefits of national roaming schemes and draft recommendations about whether or not it is cost-effective to implement a national roaming scheme to mitigate outages, in the context of implementation of Article 13a.

The tenderer should prepare the final draft of a report containing the output of task 2 and task 3.

The tenderer should take into account the input and comments from a working group of NRAs. ENISA will distribute the draft report, for review and initiate a discussion on the report. The tenderer should collect the comments and implement them.

This task should results in a deliverable (D3)

1.2.4 TASK (on-going) Project management

The contractor should implement an appropriate and efficient project management method.

The contractor is expected to submit to the agency, prior to the Kick Off meeting, detailed planning (e.g. a Gantt chart). These will be reviewed by ENISA.

The planning should address:

- Scheduling of tasks and activities within tasks.
- Milestones and critical activities,
- Assignment of experts and person days to tasks and activities
- Identification of possible risks and suggestions to mitigate them

Quality assurance and peer review measures to ensure high quality results

The contractor is expected to send two-weekly progress reports (of maximum 1 page) to the ENISA staff about the project and to schedule two-weekly telephone meetings about the progress. The progress reports should include (in bullets) what has been done the previous two weeks, the status, what is planned for the next two weeks, the risks and suggested solutions and finally, points to take decisions upon.

After every meeting (progress meetings, or project meetings), the contractor should take minutes and send them to the ENISA project manager.

1.3 EXPECTED SKILLS

The performance of the above mentioned activities requires professionals that have broad experience with related tasks, and at least:

- Experience in the area of electronic communications
- Experience in network security and resilience
- Excellent understanding of policy and regulatory issues related to public communications networks and services
- Excellent analytical skills
- Excellent project management skills including quality assurance
- Excellent communication skills in English, both oral and in writing
- Excellent project management skills including quality assurance and risk management and experience in realising international projects
- Excellent oral and written language skills in English

1.4 DURATION AND DEADLINES

The duration of this work is foreseen from March 2013 until September 2013.

- Kick of meeting no later than 22nd March 2013
- The contractor is expected to propose deadlines for the deliveries D1-D3.
- Final delivery (D3) no later than 18th of September 2013.

The Tenderer is required to make a proposal in their tender for the time schedule of the activities in order to carry out the project (e.g. including a Gantt chart). In its offer the Tenderer should indicate the <u>estimated amount of person days required</u> to accomplish all tasks associated with this procurement.

1.5 LIST OF DELIVERABLES

The contractor is expected to deliver three deliverables.

- Deliverable 1 (D1) the output of task 1
- Deliverable 2 (D2) the output of task 2
- Deliverable 3 (D3) the output of task 3.

The tenderer should, together with the final deliverable (D3), also provide a slide show with summary and key points of the overall analysis.

English is the language to be used for all the documents produced. The layout of the final report should be based on the templates provided by ENISA. The final report is expected to be proofread by a native English speaker. ENISA may edit the full report and publish it.

1.6 PLACE OF EXECUTION OF THE ACTIVITIES AND COMMUNICATIONS

The execution of the activities will take place at the Contractor's premises. The contractor is required to be present at ENISA premises for all necessary meetings and for collecting all relevant information to conduct the analysis. For this purpose network based collaborative tools (i.e. videoconferencing) could also be used.

ENISA expects that the contractor will perform, in the context of this study, the following business trips:

- Kick-off meeting: either at the contractor premises, at ENISA premises in Athens or at a place jointly decided by ENISA and the contractor;
- A delivery meeting (at ENISA premises) or a meeting for validation of results in a EU capital.

It should be mentioned that the costs of these business trips should be included in the total offer. ENISA will not additionally reimburse the contractor for taking part in these meetings.

1.7 TENDER RESULT AND ESTIMATED CONTRACT VALUE

The result of the evaluation of tenders will be the awarding of a Service Contract. The total estimated budget cannot exceed **40,000.00 Euros** (forty thousand Euros)¹ covering all tasks executed and including all costs (e.g. travelling expenses of the contractor).

1.8 CONTENT AND PRESENTATION OF THE TECHNICAL OFFER

The Tenderer shall enclose with the **Technical Offer** all documents and information that will enable its offers to be assessed in terms of quality and of compliance with the Specifications. An Offer shall include a description of the operational means and procedures to be implemented to perform the Contract, supported where appropriate by related documents.

¹ Please note that following implementation of the contract with the successful contractor and depending on the further needs of the contracting authority specifically in the field of endeavour the subject of this contract, the maximum amount contracted may be increased by up to 50% - subject to budget availability.

An offer must address each of the following elements as A MINIMUM in order to be considered to be a valid and conforming offer:

- Description of the skills of the prospective contactor
 - The Tenderer will have to present its compliance with the expected skills as described in the relevant article.
- Description of the deliverables
 - o The deliverables must be presented as requested in the article entitled "Deliverables"
- The prospective contractor is expected to provide insights in the methodology (approach) chosen in order to reach the objectives of the project described above in article "Objectives and tasks". In particular:
 - Details need to be provided how the experts and stakeholder opinions and needs would be collected (what stakeholder groups involved, means by which the input will be gathered) both for both reports.
 - If the expert group will be part of the approach chosen, details need to be provided on what stakeholder groups would be involved, how the work of the expert group would be organised (e.g., physical meetings, e-mail mailing lists, video conferences etc.), in what stages of the project the expert group would be involved
- Management of provision of services
 - Project Management: a close description of the project management method used including quality assurance is required. Breakdown of tasks; milestones definition; assignment of experts to tasks and person days to tasks should be presented in a Gantt chart, included in the offer
 - At the kick off meeting, the project plans will be confirmed as final
 - The prospective contactor must also identify possible risks to the project and propose mitigation measures
- In addition the tenderer is expected to highlight / explain
 - Availability and ability of the tenderer to respond: prompt availability of resources is required within the specified delivery timeframes. Additionally, any ancillary or support resources, such as a network of associates to support the scope of this Call for Tenders must be clearly stated
- Short CV's of the experts that will be allocated in the project focussing on their experience and expertise on the areas covered by the study.

2. LOT 2 - Power supply dependencies

2.1 GENERAL DESCRIPTION OF THE REQUIRED SERVICES

For the first time in the EU, in spring 2012, national reports about security incidents were provided to ENISA and the European Commission, under Article 13a of the Framework Directive (2009/140/EC).

ENISA analysed the incidents on an aggregated level and published a report, "<u>Annual Incident</u> <u>Reports 2011</u>". In this report, ENISA provides an analysis of the 51 received incident reports, dealing with severe disruptions in electronic communication networks or services.

The diagram below shows the percentage of incidents per service by a particular cause:

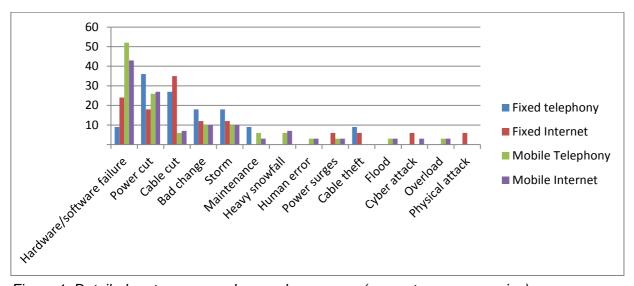


Figure 1: Detailed root causes and secondary causes (percentages per service)

From the analysis we could among other things draw the following conclusions:

- Incidents with root causes in the category Natural phenomena (storms, floods, etc.) lasted 45 hours on average.²
- Natural phenomena like storms, floods and heavy snow have a big impact on the power supply of providers. Often these power cuts last several hours.
- Dependency on power supply from both mobile and fixed communication services is clear.
 It is well known that battery capacity of 3G base stations is limited to a few hours, and this means, inevitably that lasting power cuts cause communication outages.
- Power cuts were the second most common singular cause of failures from the reported incidents.

In this study ENISA aims at investigating the dependency of the electronic communications sector on power supply and issue recommendations on what can be done to mitigate incidents that are caused by the failure of power supply.

² IPCC (the International panel on climate change) expects extreme weather to have more impact and to be more frequent in the coming years.

The study should provide:

- a stock taking,
- a problem description, an analysis with alternative solutions and case studies from different Member States.
- recommendations for targeted stakeholders and good practice from different Member States,
- a final report.

2.2 TASKS

2.2.1 TASK 1: Stock taking

In the first task the tenderer shall:

- study relevant documentation/reports on the subject,
- interview a number of electronic communications providers of different sizes and services (around 10, fixed/mobile/internet) and get the picture of the problems they experience and how they deal with them,
- interview a number of power supply providers that have electronic communications providers as customers and get their view of issues,
- interview relevant NRAs, e.g. PTS (SE), Ficora (FI) and BNetzA (DE, who supervise both the electronic communications and the energy sector).

Examples of topics to cover when interviewing electronic communications providers:

- Dependencies on the power grid
- Common and problematic power related incidents
- Roles and responsibilities
- Cooperation mechanisms
- Measures to decrease dependency from external power supply

Examples of topics to cover when interviewing power supply companies:

- Agreed service levels
- A mapping of common and problematic power related incidents that are relevant for the electronic communications sector
- Roles and responsibilities
- Cooperation mechanisms before and during failures
- Measures taken to decrease impact from electronic communications customers when the power grid is under pressure
- Incident reporting mechanisms

Examples of topics to cover when interviewing NRAs:

Identified problems in the area of power supply dependency and what can be done

- Activities in place in the area of power supply dependency
- A description of requirements for providers regarding the provision of power supply
- Experiences from dealing with significant incidents in the supply of electronic communications due to failure of power supply

This task results in a deliverable (D1).

2.2.2 TASK 2: Analysis

In this task the tenderer shall:

- provide a description of the problems associated with the dependency on power supply by the electronic communications sector – analysing problems, threats, risks, impact and probability of ecommunications incidents related to power supply?
- gather and describe different alternative solutions to the problems and analyse them, including technical, organisational, cooperative and legal solutions.
- describe two real cases of incidents involving power cuts, from start to end.

This task results in a deliverable (D2).

2.2.3 TASK 3: Recommendations

Based on the stock taking and analysis the tenderer shall provide concrete recommendations with motivations on how to reduce the risks associated with power supply for electronic communications.

The recommendations should be divided in recommendations to providers, to National Regulatory Authorities and to other stakeholders.

The recommendations should also include good practice from three different countries.

This task results in a deliverable (D3).

2.2.4 TASK 4: Final Report

In this task the tenderer shall use the output from task 1, 2 and 3 and produce one final report. The report should include:

- Problem description
- Analysis with alternative solutions including case studies
- Recommendations with motives and good practice

This task results in the final deliverable (FD)

2.2.5 TASK (on-going): Project management

The contractor should implement an appropriate and efficient project management method.

The contractor is expected to submit to the agency, prior to the Kick Off meeting, detailed planning (e.g. a Gantt chart). These will be reviewed by ENISA.

The planning should address:

- Scheduling of tasks and activities within tasks,
- Milestones and critical activities,
- Assignment of experts and person days to tasks and activities
- Identification of possible risks and suggestions to mitigate them
- Quality assurance and peer review measures to ensure high quality results

The contractor is expected to send two-weekly progress reports (of maximum 1 page) to the ENISA project manager about the project and to schedule bi-weekly telephone meetings about the progress. The progress reports should include (in bullets) what has been done the previous two weeks, the status, what is planned for the next two weeks, the risks and suggested solutions and finally, points to take decisions upon.

After every meeting (progress meetings, or project meetings), the contractor should take minutes and send them to the ENISA project manager.

2.3 EXPECTED SKILLS

The performance of the above mentioned activities requires professionals that have broad experience with related tasks, and at least:

- Professional experience in the area of electronic communications
- Professional experience from the electric power sector
- Professional experience in network security and resilience
- Professional experience from working with risk and vulnerability assessments
- Excellent understanding of policy and regulatory issues related to the resilience of public communications networks and services and of public power grids and services at national and/or pan European level including activities related to Critical Information Infrastructure Protection (CIIP)
- Excellent analytical skills
- Excellent project management skills including quality assurance
- Excellent communication skills in English, both oral and written.

2.4 DURATION AND DEADLINES

The duration of this work is foreseen from March 2013 until end of September 2013.

- Kick of meeting no later than 22nd March 2013
- The tenderer is expected to propose deadlines for the deliveries of D1-D3.
- The tenderer should propose a deadline between the delivery of D3 and the delivery of FD for presenting the structure of the full report
- Delivery of FD no later than 18th of September 2013. The deliverable shall include the final report and a slide deck.
- The tenderer should be available to visit ENISA at the ENISA premises to present the final results

The Tenderer is required to make a proposal in their tender for the time schedule of the activities in order to carry out the project (e.g. including a Gantt chart). In its offer the Tenderer should indicate the estimated amount of person days required to accomplish all tasks associated with this procurement.

2.5 DELIVERABLES

The tenderer is expected to deliver three part deliverables and one final deliverable.

- Deliverable 1 (D1):
 - A report with results from the study of the relevant documentation/reports on the subject
 - Minutes from interviews
- Deliverable 2 (D2): A report with the problem description, the analysis with alternative solutions and case studies
- Deliverable 3 (D3): A report with the recommendations and their motives and good practice.
- **FINAL DELIVERABLE (FD)**: A final independent report of max 50 pages covering the output of tasks 1, 2 and 3. In addition, this deliverable includes a slide deck.

English is the language to be used for all the documents produced. The layout of the final report should be based on the templates provided by ENISA. The final report is expected to be proofread by a native English speaker. ENISA may edit the full report and publish it.

2.6 PLACE OF EXECUTION OF THE ACTIVITIES AND COMMUNICATIONS

The execution of the activities will take place at the Contractor's premises.

At least the following communication with the contractor is expected:

- Three face-to-face meetings. One of these three meetings might be a meeting with the Informal Expert Group (as mentioned before) that should be established during this project. These meetings should take place in ENISA's premises in Heraklion or Athens, in Brussels or at another location agreed upon by both ENISA and the contractor. If deemed necessary by ENISA some of these face-to-face meetings could potentially also be executed as a teleconference.
- Regular video or teleconferences (bi-monthly or at more frequent intervals to be agreed upon) on the progress achieved.
- At regular intervals or on an ad-hoc basis, as required, video or teleconference with the members of the informal Expert Group that should be established (see Section 1.2.6).

ENISA expects that the tenderer will perform, in the context of this study, the following business trips:

- Kick-off meeting: either at the tenderer premises, at ENISA's in Athens or in a place jointly decided by ENISA and the tenderer;
- A delivery meeting at the ENISA premises in Athens.

It should be mentioned that the costs of these business trips should be included in the total offer. ENISA will not additionally reimburse the tenderer for taking part in these meetings.

2.7 TENDER RESULT AND ESTIMATED CONTRACT VALUE

The result of the evaluation of tenders will be the awarding of a Service Contract. The total estimated budget cannot exceed **40,000.00 Euros** (forty thousand Euros)³ covering all tasks executed and including all costs (e.g. travelling expenses of the contractor).

2.8 CONTENT AND PRESENTATION OF THE TECHNICAL OFFER

The Tenderer shall enclose with the **Technical Offer** all documents and information that will enable its offers to be assessed in terms of quality and of compliance with the Specifications. An Offer shall include a description of the operational means and procedures to be implemented to perform the Contract, supported where appropriate by related documents.

An offer must address each of the following elements as A MINIMUM in order to be considered to be a valid and conforming offer:

- Description of the skills of the prospective contactor
 - The Tenderer will have to present its compliance with the expected skills as described in the relevant article.
- Description of the deliverables
 - The deliverables must be presented as requested in the article entitled "Deliverables"
- The prospective contractor is expected to provide insights in the methodology (approach) chosen in order to reach the objectives of the project described above in article "Objectives and tasks". In particular:
 - Details need to be provided how the stakeholder opinions and needs would be collected (what stakeholder groups involved, means by which the input will be gathered) both for both reports.
 - If the expert group will be part of the approach chosen, details need to be provided on what stakeholder groups would be involved, how the work of the expert group would be organised (e.g., physical meetings, e-mail mailing lists, video conferences etc.), in what stages of the project the expert group would be involved
- Management of provision of services
 - Project Management: a close description of the project management method used including quality assurance is required. Breakdown of tasks; milestones definition; assignment of experts to tasks and person days to tasks should be presented in a Gantt chart, included in the offer
 - o At the kick off meeting, the project plans will be confirmed as final

³ Please note that following implementation of the contract with the successful contractor and depending on the further needs of the contracting authority specifically in the field of endeavour the subject of this contract, the maximum amount contracted may be increased by up to 50% - subject to budget availability.

- The prospective contactor must also identify possible risks to the project and propose mitigation measures
- In addition the tenderer is expected to highlight / explain
 - Availability and ability of the tenderer to respond: prompt availability of resources is required within the specified delivery timeframes. Additionally, any ancillary or support resources, such as a network of associates to support the scope of this Call for Tenders must be clearly stated
- Short CV's of the experts that will be allocated in the project focussing on their experience and expertise on the areas covered by the study.

3. LOT 3 - Resilience of European Network Interconnections

3.1 GENERAL DESCRIPTION OF THE REQUIRED SERVICES

Many critical services are increasingly dependent on network connectivity. This dependency is going to grow even more with the increasing use of services like cloud computing, especially if these are used for critical services. Apart from "known critical" services, there are others, such as social networks that may become critical in the event of a large-scale incident affecting other means of communication. An example for this is the 2011 earthquake and tsunami in Japan, where voice communication broke down, but data communication was still possible and people were using Twitter or Facebook to communicate where they were and what they needed.

Now the internet was conceived with the explicit goal of being able to survive large-scale disruptions. The past has shown that in general, the internet as a whole is quite resilient, although there have been a number of notable incidents where the connectivity of certain networks was severely impacted, or where whole parts of the internet became effectively separated. Although there is a lot of published and on-going research on the topic of the stability or resilience aspects of the routing infrastructure in general, this is still not fully understood on many levels.

Governments in several EU member states have asked the question how the internet in their country would be affected by large-scale events or attacks (e.g. a large-scale disturbance in the global BGP routing infrastructure, or a DDoS attack affecting a big part of the infrastructure in a particular country, such as the 2007 attacks on Estonia), or what should be done to ensure that certain critical services still remain functional in the case of such events.

These questions cannot be answered without a good knowledge about how the different networks within a country (or any other suitably defined geographical region) are interconnected.

ENISA studied the resilience of network infrastructures and the mechanisms for Emergency Communications that are in place in EU member states:

- In 2010, the "Inter-X: Resilience of the Internet Interconnection Ecosystem" study was the first step ENISA took towards studying this area. The study focussed on the resilience of the system of interconnections between Internet networks. The project looked not only at the actual interconnections, but also in the arrangements, agreements, contracts and incentives that underpin them.
- In 2011, ENISA followed up on a few of the recommendations of the Inter-X study with a study on Internet Interconnections. This study was focused to assess technical issues (e.g. logical, physical, application layers, replication and diversity of services and data, data centres), peering and transit issues (e.g. SLAs), market, policy and regulatory issues.
- The 2012 Emergency Communications Stocktaking report gives an overview over how emergency services both in EU member states and selected other countries communicate within their own organisations and with each other in times of emergency or crisis, when responding to a serious incident. The aim was to identify how processes and technology might be improved, and to provide guidance to policy makers in member states and the European Union.

The aims of this study are two:

- The study aims at providing some insight into the "structure or the Internet" (or, more precisely, of the interconnections between services provider and "eyeball" networks) at the network layer within a country, which could be used by governments or policy makers to develop a strategy to ensure that critical services still remain functional even if network performance or connectivity in general is broken.
- The second goal is to enable competent authorities in EU member states to enhance their knowledge of the structure of the electronic communications infrastructure within their country, to identify gaps and if necessary find ways to work together with the relevant stakeholders, e.g. Internet Service Providers (ISPs) and/or their associations in order to improve the resilience of certain critical services.

The information and insights from the study could be used by regulators, policy makers, ISP associations or communities to develop appropriate measures to improve the resilience of the internet-based communications infrastructure within their respective areas of responsibility.

In some cases, additional non-public information may be available to stakeholders. As an example, a regulator might have a mandate to request some information (e.g. about private peerings, locations of private peering points, or maps of the physical cable infrastructure) from ISPs or network operators. This information could be used to complement the information obtained from public sources.

3.2 TASKS

3.2.1 TASK 1: Stock taking of legal and regulatory frameworks across the EU

The aim of the first task is to take stock of the legal frameworks concerning the relationship between telecommunications regulators and ISPs across the EU.

The contractor shall:

- study relevant documentation/reports on the subject,
- interview at least 10 different ISPs from at least three different EU member states to find out the regulatory framework in which they are operating
- interview relevant NRAs, e.g. Ofcom (UK), PTS (SE), Ficora (FI), BNetzA (DE), or RRT (LT) to find out whether they have the authority to request any non-public information from ISPs in their area of responsibility,
- interview relevant cyber security agencies such as ANSSI (FR) or BSI (DE) to find out whether they have the authority to request any non-public information from ISPs in their area of responsibility, and which internet-based services are considered "critical" by them.

This task results in a deliverable (D1).

3.2.2 TASK 2: Stock taking of existing initiatives and previous work

The goal of the second task is to get an overview over existing initiatives in various EU member states aiming at improving the resilience of telecommunications networks, and of previous

academic and/or commercial publications dealing with the resilience of the Internet as a whole, or within a pre-defined geographic area.

The contractor shall:

- Identify existing initiatives aiming at improving the resilience of the internet communications infrastructure within a country or geographic region.
- Take stock of previous published academic or other publicly available work dealing with mapping the internet communications infrastructure within a country or geographic region, such as the works of CAIDA.

This task results in a deliverable (D2)

3.2.3 TASK 3: Toolset specifications and step-by-step guides for surveys in EU member states

The aim of this task is to create specifications for a toolset that can be used to create maps of the relationships between service providers hosting critical services and "eyeball" networks at the level of Autonomous Systems (AS's), using the global BGP routing table as a primary source of information. The toolset should describe the required information resources and provide a step-by-step guide to obtain a defined set of results that can be compared between different EU member states.

Taking the results from Task 1 and 2 above into account, the contractor shall develop specifications for a toolset to examine and visualize the relationships between service provider and "eyeball" networks at the network level, using the global BGP routing table as a primary source of information.

For the purpose of this part of the study, the initial set of "critical services" to be considered shall cover the networks of electronic banking, e-government services and selected public information services within a country, as well as health, transport, energy including services that were identified as critical during Task 1. The "eyeball" networks to be considered shall consist of all internet access providers with min 5 per cent market share in the respective country. The contractor may suggest additional categories of services that should be considered in addition to the ones mentioned above.

The resulting document should:

- Describe the required raw information to identify both the network providers hosting critical services and the "eyeball" networks within a given country or region, and suggest information sources.
- Provide a step-by-step guide for NRAs, cyber security agencies or other stakeholders how to use this information
 - To obtain as much information as possible (e.g. from a full BGP routing table or from other suitable sources) about the interconnections between these networks at the Autonomous System (AS) level.
 - To create a "path matrix" between the service provider and the eyeball network AS's, and

- Use suitable algorithms or visualization techniques
- to identify possible "single points of failure", "critical paths" or other properties of the BGP routing graph that could have a negative effect on the resilience of internet-based critical services.
- Describe an initial set of "basic" analyses that NRAs or cyber security agencies can perform within their area of responsibility, using only publicly available information.
- Provide a set of functional specifications that allow NRAs, cyber security agencies or other stakeholders to develop the electronic tools needed to implement these analyses.

This task results in a deliverable (D3).

3.2.4 TASK 4: Recommendations and policy objectives

The first goal of this task is to provide suggestions for additional information that telecommunications regulators or cyber security agencies might use to enhance their picture of the situation regarding the resilience of the internet-based communications infrastructure within their respective areas of responsibility.

As a second result, recommendations should be developed for policy makers, telecommunications regulators, and cyber security agencies on how to address possible weaknesses in cooperation with the ISP communities.

The contractor should

- Identify additional information that could be used by regulators or cyber security agencies in EU member states to improve the quality of their picture of the resilience of internetbased critical services in their area of responsibility.
- For each source of information it should be assessed whether the information is likely to be considered business-sensitive or business-confidential by ISPs, or if the information might have to be classified because it should be considered relevant for national security.
- Develop a set of recommendations and policy objectives for policy makers, telecommunications regulators or cyber security agencies that could be used to improve the resilience of internet-based critical services within their area of responsibility.
- Develop a set of recommendations for ISPs and the ISP community to organise mutual-aid assistance schemes in order to improve the resilience of their interconnections e.g. to better deal with Distributed Denial of Service (DDoS) attacks.

This task results in a deliverable (D4).

3.2.5 TASK (on-going): Project management

The contractor should implement an appropriate and efficient project management method.

The contractor is expected to submit to the agency, prior to the Kick Off meeting, detailed planning (e.g. a Gantt chart). These will be reviewed by ENISA.

The planning should address

- Scheduling of tasks and activities within tasks,
- Milestones and critical activities,
- Assignment of experts and person days to tasks and activities
- Identification of possible risks and suggestions to mitigate them
- Quality assurance and peer review measures to ensure high quality results

The contractor is expected to send two-weekly progress reports (of maximum 1 page) to the ENISA project manager about the project and to schedule bi-weekly telephone meetings about the progress. The progress reports should include (in bullets) what has been done the previous two weeks, the status, what is planned for the next two weeks, the risks and suggested solutions and finally, points to take decisions upon.

After every meeting (progress meetings, or project meetings), the contractor should take minutes and send them to the ENISA project manager.

3.3 EXPECTED SKILLS

The performance of the above mentioned activities requires professionals that have broad experience with related tasks, and at least:

- Experience in the area of electronic communications, specifically the area of network operations of internet service providers.
- Good knowledge of the business relationships between IP network operators (peering, transit) and the ISP community.
- Good knowledge of the BGP protocol and of tools and algorithms to analyse and visualise the AS topology of IP networks.
- Experience in network security and resilience.
- Excellent understanding of policy and regulatory issues related to the resilience of public communications networks and services at national and/or pan European level including activities related to Critical Information Infrastructure Protection (CIIP)
- Excellent analytical skills
- Excellent project management skills including quality assurance
- Excellent communication skills in English, both oral and in writing

3.4 DURATION AND DEADLINES

The duration of this work is foreseen from March 2013 until October 2013.

- Kick of meeting no later than 22nd March 2013
- The contractor is expected to propose deadlines for the deliveries of D1-D4.
- The contractor should propose a deadline between the delivery of D4 and the final delivery for presenting the structure of the full report
- Final delivery no later than 15th of October 2013. The contractor should be available to present the final result at the ENISA premises

The Tenderer is required to make a proposal in their tender for the time schedule of the activities in order to carry out the project (e.g. including a Gantt chart). In its offer the Tenderer should indicate the estimated amount of person days required to accomplish all tasks associated with this procurement.

3.5 LIST OF DELIVERABLES

The contractor is expected to deliver four part deliverables and one final deliverable.

- Deliverable 1 (D1): A report on the results of the desktop research and interviews from Task 1, including interview summaries
- Deliverable 2 (D2): A report on the results of the desktop research from Task 2.
- Deliverable 3 (D3): The description of the information sources, step-by-step guide, analyses and functional specifications from Task 3
- Deliverable 4 (D4): The recommendations and policy objectives from Task 4.
- **FINAL DELIVERABLE (FD):** The full report including integrated versions of deliverable 1 to 4. In addition, this deliverable includes a slide show.

English is the language to be used for all the documents produced. The layout of the final report should be based on the templates provided by ENISA. The final report is expected to be proofread by a native English speaker. ENISA may edit the full report and publish it.

3.6 PLACE OF EXECUTION OF THE ACTIVITIES AND COMMUNICATIONS

The execution of the activities will take place at the Contractor's premises. The Contractor is required to be present at ENISA premises for all necessary meetings and for collecting all relevant information to conduct the analysis. For this purpose network based collaborative tools (i.e. videoconferencing) could also be used.

ENISA expects that the contractor will perform, in the context of this study, the following business trips:

 Kick-off meeting: either at the contractor premises, at ENISA's premises or in a place jointly decided by ENISA and the contractor;

It should be mentioned that the costs of these business trips should be included in the total offer. ENISA will not additionally reimburse the contractor for taking part in these meetings.

3.7 TENDER RESULT AND ESTIMATED CONTRACT VALUE

The result of the evaluation of tenders will be the awarding of a Service Contract. The total estimated budget cannot exceed **55,000.00 Euros** (fifty five thousand Euros)⁴ covering all tasks executed and including all costs (e.g. travelling expenses of the contractor).

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⁴ Please note that following implementation of the contract with the successful contractor and depending on the further needs of the contracting authority specifically in the field of endeavour the subject of this contract, the maximum amount contracted may be increased by up to 50% - subject to budget availability.

3.8 CONTENT AND PRESENTATION OF THE TECHNICAL OFFER

The Tenderer shall enclose with the **Technical Offer** all documents and information that will enable its offer to be assessed in terms of quality and of compliance with the Specifications. An Offer shall include a description of the operational means and procedures to be implemented to perform the Contract, supported where appropriate by related documents.

An Offer shall cover the following aspects:

- Skills and experience of the expected contactor
 - The Tenderer will have to present its compliance with the expected skills as described in the relevant section.
 - The Tenderer will have to present its understanding of the topic.
 - Examples of previous related works, a list of all related projects and activities that the contractor has undertaken in the past.
- Description of the deliverables
 - The proposed initial structure and initial titles and contents of the deliverables listed in the section "List of deliverables/milestones".
 - The approach and methodology used to perform the tasks and ensure the quality of the deliverables.
- The prospective contractor is expected to provide insights in the methodology (approach) chosen in order to reach the objectives of the project described above in article "Objectives and tasks". In particular:
 - Details need to be provided how the stakeholder opinions and needs would be collected (what stakeholder groups involved, means by which the input will be gathered)
- Management of provision of services
 - Project Management: a close description of the project management method used including quality assurance is required. Breakdown of tasks; milestones definition; assignment of experts to tasks and person days to tasks should be presented in a Gantt chart, included in the offer
 - At the kick off meeting, the project plans will be confirmed as final
 - The prospective contactor must also identify possible risks to the project and propose mitigation measures
- In addition the tenderer is expected to highlight / explain
 - Availability and ability of the tenderer to respond: prompt availability of resources is required within the specified delivery timeframes. Additionally, any ancillary or support resources, such as a network of associates to support the scope of this Call for Tenders must be clearly stated
- Short CV's of the experts that will be allocated in the project <u>focussing on their experience</u> and expertise on the areas covered by the study.
- If applicable, the contractor should also provide justification for subcontracting.

The following specifications are common to ALL 3 LOTS:

4. CONTENT AND PRESENTATION OF THE PRICE OFFER

The Price offer(s) must be drawn up using the Financial Offer template provided (see Annex IV).

5. PRICE

Prices submitted in response to this Tender must be inclusive of all costs involved in the performance of the contract. Prices shall be submitted only in Euro and VAT excluded.

6. PRICE REVISION

Prices submitted in response to this Tender shall be fixed and not subject to revision.

7. COSTS INVOLVED IN PREPARING AND SUBMITTING A TENDER

ENISA will not reimburse any costs incurred in the preparation and submission of a Tender. Any such costs must be paid by the Tenderer.

8. PERIOD OF VALIDITY OF THE TENDER

Tenderers must enclose a confirmation that the prices given are valid for (90) ninety days from the date of submission of the tender.

9. PROTOCOL ON PRIVILEGES AND IMMUNITIES OF THE EUROPEAN COMMUNITIES

ENISA is exempt from all taxes and duties, including value added tax (VAT), pursuant to the provisions of Articles 3 and 4 of the Protocol on the Privileges and Immunities of the European Communities. Tenderers must therefore give prices which are exclusive of any taxes and duties and must indicate the amount of VAT separately.

10.PAYMENT ARRANGEMENTS

Payments under the Contract shall be carried out subject to prior approval of the Services by ENISA within 30 days after an invoice is submitted to ENISA. One single payment will be made after receipt and approval of the deliverables by ENISA. An invoice must specify the specific deliverables covered. A note that accompanies the final deliverables must present the resources used for each of the deliverables presented. Time sheets should be submitted as appropriate.

11.CONTRACTUAL DETAILS

A model of the Service Contract is proposed to the successful candidate(s) - see Annex V.

Please note that the general conditions of our standard service contract <u>cannot be modified</u>. Submission of a tender by a potential contractor implies acceptance of this contract and all of the terms and conditions contained therein. It is strongly recommended that you have this draft contract checked and passed by your legal section before committing to submitting an offer.

PART 3 ADMINISTRATIVE DETAILS

1. FORMAL REQUIREMENTS

1.1 Address and deadline for submission of the Tender:

You are invited to tender for this project and requested to submit your tender no later than **4**th **February 2013** either by:

a) <u>Registered post or express courier</u>. The postal service's dated stamp or the courier company's printed delivery slip and stamp will constitute proof of compliance with the deadline given above:

or

b) <u>Hand-delivery</u> (direct or through any authorised representative of the Tenderer) by 17.00 hours on **4**th **February 2013** at the latest to the address shown below (please, be informed that only delivery during working hours 09:00-17:00 hrs. is accepted). In the case of hand-delivery, in order to establish proof of the date of deposit, the depositor will receive from an official at the below-mentioned address, a receipt which will be signed by both parties, dated and time stamped.

Please note that in this case it is the date and time actually received at the ENISA premises that will count.

<u>Please Note</u>: Due to frequent delays encountered with the postal services in Europe, we would **strongly suggest that you use a courier service**. It is important to avoid delays to the programmed Opening and Evaluation dates as this will in turn delay the contract award, thereby affecting project completion dates.

The offer must be sent to one of the following addresses:

Postal Address		Express Courier & Hand Delivery
European Network and Information Security Agency (ENISA) For the attention of: The Procurement Officer PO Box 1309 71001 Heraklion Greece	or	European Network and Information Security Agency (ENISA) For the attention of The Procurement Officer Science and Technology Park of Crete (ITE) Vassilika Vouton 700 13 Heraklion Greece

<u>Please note that late despatch will lead to exclusion from the award procedure for this Contract.</u>

1.2 Presentation of the Offer and Packaging

The offer (consisting of one original and two copies) should be enclosed in two envelopes, both of which should be sealed. If self-adhesive envelopes are used, they should be further sealed with adhesive tape, upon which the Tenderer's signature must appear.

The **outer envelope**, in addition to the above-mentioned ENISA address, should be addressed as follows:

OPEN CALL FOR TENDER NO. ENISA P/27/12/TCD

"Security and resilience of electronic communication networks and services" (LOT 1 and/or LOT 2 and/or LOT 3)

NOT TO BE OPENED BY THE MESSENGER/COURIER SERVICE

NOT TO BE OPENED BY THE OPENING COMMITTEE BEFORE 14th FEB 2013 TENDERED BY THE FIRM: <*PLEASE INSERT NAME OF THE TENDERER/COMPANY>*

The **inner envelope** should be addressed as follows:

OPEN CALL FOR TENDER NO. ENISA P/27/12/TCD

"Security and resilience of electronic communication networks and services" (LOT 1 and/or LOT 2 and/or LOT 3)

NOT TO BE OPENED BY THE OPENING COMMITTEE BEFORE **14th FEB 2013** TENDERED BY THE FIRM: *<PLEASE INSERT NAME OF THE TENDERER/COMPANY>*

1.3 Identification of the Tenderer

Tenderers are required to complete the **Legal Entity Form (Annex I)** which must be signed by a representative of the Tenderer authorised to sign contracts with third parties. There is one form for 'individuals', one for 'private entities' and one for 'public entities'. A standard form is provided for each category - please choose whichever is applicable. In addition to the above, a **Financial Identification Form** must be filled in and signed by an authorised representative of the Tenderer and his/her bank (or a copy of the bank account statement instead of bank's signature). A specimen form is provided in **Annex II**. Finally a **Declaration by Authorised Representative (Annex VI)** must also be completed for internal administrative purposes.

The **Legal Entity Form** must be supported by the following documents relating to each Tenderer in order to show its name, address and official registration number:

a) For private entities:

- A legible copy of the instrument of incorporation or constitution, and a copy of the statutes, if they are contained in a separate instrument, or a copy of the notices of such constitution or incorporation published in the national or other official journal, if the legislation which applies to the Tenderer requires such publication.
- If the instruments mentioned in the above paragraph have been amended, a legible copy of the most recent amendment to the instruments mentioned in the previous indent, including that involving any transfer of the registered office of the legal entity, or a copy of the notice published in the relevant national or other official journal of such amendment, if the legislation which applies to the Tenderer requires such publication.
- If the instruments mentioned in the first paragraph have not been amended since incorporation and the Tenderer's registered office has not been transferred since then, a written confirmation, signed by an authorised representative of the Tenderer, that there has been no such amendment or transfer.
- A legible copy of the notice of appointment of the persons authorised to represent the Tenderer in dealings with third parties and in legal proceedings, or a copy of the publication of such appointment if the legislation which applies to the legal entity concerned requires such publication.
- If the above documents do not show the registration number, a proof of registration, as prescribed in their country of establishment, on one of the professional or trade registers or any other official document showing the registration number.
- If the above documents do not show the VAT number, a copy of the VAT registration document, where applicable.

b) For Individuals:

- A legible copy of their identity card or passport.
- Where applicable, a proof of registration, as prescribed in their country of establishment, on one of the professional or trade registers or any other official document showing the registration number.
- If the above documents do not show the VAT number, a copy of the VAT registration document, where applicable.

c) For Public Entities:

 A copy of the resolution decree, law, or decision establishing the entity in question or failing that, any other official document attesting to the establishment of the entity.

All tenderers must provide their Legal Entity Form (Annex I) as well as the evidence mentioned above.

In case of a joint bid, only the co-ordinator must return the Financial Identification form (Annex II).

The Tenderer must be clearly identified, and where the Tender is submitted by an organisation or a company, the following administrative information and documents must be provided:

Full name of organisation/company, copy of legal status, registration number, address, person to contact, person authorised to sign on behalf of the organisation (copy of the official mandate must be produced), telephone number, facsimile number, VAT number, banking details: bank name, account name and number, branch address, sort code, IBAN and SWIFT address of bank: a bank identification form must be filled in and signed by an authorised representative of each Tenderer and his banker.

Tenders must be submitted individually. If two or more applicants submit a joint bid, one must be designated as the lead Contractor and agent responsible.

1.4 Participation of consortia

Consortia, may submit a tender on condition that it complies with the rules of competition. The 'Consortium Form' (Annex VII) must be completed and submitted with your offer.

A consortium may be a permanent, legally-established grouping or a grouping which has been constituted informally for a specific tender procedure. Such a grouping (or consortia) must specify the company or person heading the project (the leader) and must also submit a copy of the document authorising this company or person to submit a tender. All members of a consortium (i.e., the leader and all other members) are jointly and severally liable to the Contracting Authority.

In addition, each member of the consortium must provide the required evidence for the exclusion and selection criteria (*Articles 2 and 3 below*). Concerning the selection criteria "technical and professional capacity", the evidence provided by each member of the consortium will be checked to ensure that the consortium as a whole fulfils the criteria.

The participation of an ineligible person will result in the automatic exclusion of that person. In particular, if that ineligible person belongs to a consortium, the whole consortium will be excluded.

1.5 Subcontracting

In well justified cases and subject to approval by ENISA, a contractor may subcontract parts of the services. The 'Sub-contractors Form' (Annex VIII) must be completed and submitted with your offer.

Contractors must state in their offers what parts of the work, if any, they intend to subcontract, and to what extent (% of the total contract value), specifying the names, addresses and legal status of the subcontractors.

The sub-contractor must not sub-contract further.

Sub-contractors must satisfy the eligibility criteria applicable to the award of the contract. If the identity of the intended sub-contractor(s) is already known at the time of submitting the tender, all sub-contractors must provide the required evidence for the exclusion and selection criteria.

If the identity of the sub-contractor is not known at the time of submitting the tender, the tenderer who is awarded the contract will have to seek ENISA's prior written authorisation before entering into a sub-contract.

Where no sub-contractor is given, the work will be assumed to be carried out directly by the bidder.

1.4 Signatures of the Tender

Both the technical and the financial offer must be signed by the Tenderer's authorised representative or representatives (preferably in blue ink).

1.5 Total fixed price

A total fixed price expressed in Euro must be included for each LOT in the Tender. The contract prices shall be firm and not subject to revision.

1.6 Language

Offers shall be submitted in one of the official languages of the European Union (preferably in English).

1.7 Opening of the Tenders

The public opening of received tenders will take place on **14**th **February 2013 at 11:00am** at ENISA Building, Science and Technology Park of Crete, GR - 70013 Heraklion, Greece.

A maximum of one legal representative per participating tenderer may attend the opening session. Tenderers shall inform the Agency in writing of their intention to attend, at least 48 hours prior to the opening session.

2. GROUNDS FOR EXCLUSION OF TENDERERS

2.1 Reasons for Exclusion

Pursuant to Article 29 of Council Directive 92/50/EC relating to Public Service Contracts and to Article 93 of the Financial Regulation, ENISA will exclude Tenderers from participation in the procurement procedure if:

- They are bankrupt or being wound up, are having their affairs administered by the courts, have entered into an arrangement with creditors, have suspended business activities, are the subject of proceedings concerning those matters, or
- Are in any analogous situation arising from a similar procedure provided for in national legislation or regulations;
- They have been convicted of an offence concerning their professional conduct by a judgement which has the force of res judicata;
- They have been guilty of grave professional misconduct proven by any means which the contracting authority can justify;

- They have not fulfilled obligations relating to the payment of social security contributions or the payment of taxes in accordance with the legal provisions of the country in which they are established or with those of the country of the contracting authority or those of the country where the contract is to be performed;
- They have been the subject of a judgement which has the force of res judicata for fraud, corruption, involvement in a criminal organisation or any other illegal activity detrimental to the Communities' financial interests;
- Following another procurement procedure or grant award procedure financed by the Community budget, they have been declared to be in serious breach of contract for failure to comply with their contractual obligations.

Tenderers must certify that they are not in one of the situations listed in sub-article 2.1 (see Annex III: Exclusion criteria and non-conflict of interest form). If the tender is proposed by a consortium this form must be submitted by each partner.

2.2 Other reasons for not awarding the Contract

Contracts may not be awarded to Candidates or Tenderers who, during the procurement procedure:

- a. Are subject to a conflict of interest;
- b. Are guilty of misrepresentation in supplying the information required by the contracting authority as a condition of participation in the contract procedure or fail to supply this information;
- c. Any attempt by a Tenderer to obtain confidential information, enter into unlawful agreements with competitors or influence the evaluation committee or ENISA during the process of examining, clarifying, evaluating and comparing tenders will lead to the rejection of his offer and may result in administrative penalties.

See last paragraph point 2.1.

2.3 Confidentiality and Public Access to Documents

In the general implementation of its activities and for the processing of tendering procedures in particular, ENISA observes the following EU regulations:

- Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data;
- Regulation (EC) No. 45/2001 of the European Parliament and of the Council of 18 December 2000 on the protection of individuals with regard to the processing of personal data by the Community institutions and bodies and on the free movement of such data;
- Regulation (EC) No. 1049/2001 of the European Parliament and of the Council of 30 May 2001 regarding public access to European Parliament, Council and Commission documents.

3. SELECTION CRITERIA

The following criteria will be used to select the Tenderers. If the Tender is proposed by a consortium these criteria must be fulfilled by each partner.

Documentary evidence of the Tenderers' claims in respect of the below-mentioned criteria is required.

3.1 Professional Information

The Tenderer must provide evidence of enrolment (declaration or certificates) in one of the professional or trade registers, in country of establishment.

3.2 Financial and Economic Capacity

Proof of financial and economic standing may be furnished by one or more of the following references:

a) Annual accounts, balance sheet or extracts from balance sheets for at least the last 2 years for which accounts have been closed, shall be presented where publication of the balance sheet is required under company law of the country in which the economic operator is established;

It is necessary that the extracts from balance sheets be dated, signed and stamped by the authorised representatives of the tenderer.

- b) Statement of the undertaking's overall turnover and its turnover in respect of the services to which the contract relates for the previous two financial years.
- c) If tenderers will call on the competences of another entity (for example, a parent company), a written undertaking by the said entity certifying that it will make available to the tenderers the resources required to implement the contract.

If, for any valid reason, the service provider is unable to provide the references requested by the contracting authority, he may prove his economic and financial standing by any other document which the contracting authority considers appropriate, following a request for clarification before the tender expiry date.

3.3 Technical and professional capacity

The following applies to LOTS 1, 2 and 3 identically:

Evidence of the technical and professional capacity of the tenderers shall be furnished on the basis of the following documents:

- A curriculum vita of the Tenderer, as well as of all members of the Tenderer's team, has to be included, in which the Tenderer has to make statements about (in line with Part 2 – Art 1.3 for LOT 1, Art 2.3 for LOT 2, Art 3.3 for LOT 3 - Expected Skills):
- His technical knowledge and experience in the relevant technical areas (including references to projects similar to the one proposed by this tender);
- His management capability (including, but not limited to, project management in a European context and quality assurance).

4. AWARD CRITERIA

The following award criteria apply to LOTS 1, 2 and 3 identically:

4.1 Quality of the Offer

Once the Tenderer has demonstrated the appropriate capacity to perform the Contract on the grounds of the selection criteria, the offer will be assessed on the basis of the award criteria.

No	Qualitative award criteria		Weighting (max. points)
1.	Technical compliance	Compliance with the technical descriptions (part 2 of this document)	30/100
2.	Quality and accuracy of content and structure	Quality of the proposal and accuracy of the description to provide the requested services	25/100
3.	Project Team	Composition of project team, direct involvement of senior staff, and distributions of tasks amongst experts; proposed workflows and quality review cycles	20/100
4.	Methodology	Selected methodology and project management	25/100
Total Qualitative Points (QP)			100

Minimum attainment per criterion

Offers scoring less than 50% for any criterion will be deemed to be of insufficient quality and eliminated from further consideration.

Minimum attainment overall

Offers scoring less than 60% after the evaluation process will be considered to be of insufficient quality and eliminated from the following phase.

The sum of all criteria gives a total of 100 points. The respective weighting between the different awards criteria depends on the nature of the services required and is consequently closely related to the terms of reference. The award criteria are thus quantified parameters that the offer should comply with. The **qualitative award criteria** points will be weighted at **70%** in relation to the price.

4.2 Price of the Offer

Tenders must state a total fixed price in Euro. Prices quoted should be exclusive of all charges, taxes, dues including value added tax in accordance with Article 3 and 4 of the Protocol on the Privileges and Immunities of the European Communities. Such charges may not therefore be included in the calculation of the price quoted.

ENISA, in conformity with the Protocol on the Privileges and Immunities of the European Community annexed to the Treaty of April 8th, 1965, is exempt from all VAT.

Offers exceeding the maximum price set in Part 2; Article 1.7 for LOT 1; Article 2.7 for LOT 2 and Article 3.7 for LOT 3 will be excluded. The cheapest offer will receive the maximum points and the rest of the candidate's offers will be awarded points in relation to the best offer as follows

$$PP = (PC / PB) \times 100$$

where;

PP = Weighted price points

PC = Cheapest bid price received PB = Bid price being evaluated

5. AWARD OF THE CONTRACT

The contract for each Lot will be awarded to the offer which is the most cost effective (offers the best value for money) which obtains the highest number of points after the final evaluation on the basis of the ratio between the **quality criteria (70%) and the price (30%).** The following formula will be used:

TWP =
$$(QP \times 0.7) + (PP \times 0.3)$$

where;

QP = Qualitative points

PP = Weighted price points

TWP = Total weighted points score

In case the successful tenderer is unable to sign the contract for any reasons, the Contracting Authority reserves the right to award the contract to other tenderers as per the ranking order established following the evaluation procedure.

6. PAYMENT AND STANDARD CONTRACT

Payments under the Service Contract shall be made in accordance with article I.5 of the Special Conditions and article II.4.3 of the General Conditions (see Annex V)

In drawing up their bid, the Tenderer should take into account the provisions of the standard contract which include the "General terms and conditions applicable to contracts"

7. VALIDITY

Period of validity of the Tender: 90 days from the closing date given above. The successful Tenderer must maintain its Offer for a further 220 days from the notification of the award.

8. LOTS

This Tender is divided into three Lots.

- LOT 1 National roaming
- LOT 2 Power supply dependencies
- LOT 3 Resilience of European Network Interconnections

9. ADDITIONAL PROVISIONS

- Changes to tenders will be accepted only if they are received on or before the final date set for the receipt of tenders.
- Expenses incurred in respect of the preparation and presentation of tenders cannot be refunded.
- No information of any kind will be given on the state of progress with regard to the evaluation of tenders.
- All documents submitted by Tenderers will become property of ENISA and will be regarded as confidential.

10. NO OBLIGATION TO AWARD THE CONTRACT

Initiation of a tendering procedure imposes no obligation on ENISA to award the contract. Should the invitation to tender cover several items or lots, ENISA reserves the right to award a contract for only some of them. ENISA shall not be liable for any compensation with respect to Tenderers who's Tenders have not been accepted. Nor shall it be so liable if it decides not to award the contract.

11. DRAFT CONTRACT

A Service Contract will be proposed to the selected candidate for each LOT. A draft copy of which is included as Annex V to this tender.

Please note that the general conditions of our standard service contract <u>cannot be modified</u>. Submission of a tender by a potential contractor implies acceptance of this contract and all of the terms and conditions contained therein. It is strongly recommended that you have this draft contract checked and passed by your legal section before committing to submitting an offer.

12. SPECIFIC INFORMATION

12.1 Timetable

The timetable for this tender and the resulting contract(s) is as follows:

Title: "Security and resilience of electronic communication networks and services"

ENISA P/27/12/TCD

Summary timetable comments

Launch of tender - Contract notice to the Official Journal of the European Union (OJEU)	18 December 2012	
Deadline for request of information from ENISA	29 January 2013	
Last date on which clarifications are issued by ENISA	31 January 2013	
Deadline for submission of offers	4 February 2013	in case of hand-delivery (17:00 local time. This deadline is fixed for the receipt of the tender in ENISA's premises)
Opening of offers	14 February 2013	At 11:00 Greek time
Date for evaluation of offers	14 February 2013	At 12:00 Greek time
Notification of award to the selected candidate	late February 2013	Estimated
14 day standstill period commences	late February 2013	Estimated
Contract signature	Mid-March 2013	Estimated
Commencement date of activities	As per tender	Estimated
Completion date of activities	As per tender	Estimated

ANNEX I

Legal Entity Form

The specific form, for either a;

- c) public entity,
- d) private entity or
- e) individual entity,

is available for download in each of the 22 official languages at the following address: http://ec.europa.eu/budget/execution/legal_entities_en.htm

Please download the appropriate from, complete the details requested and include in your tender offer documentation.

ANNEX II

FINANCIAL IDENTIFICATION FORM

- SPECIMEN FOR THE TENDERER -

(to be completed by the Tenderer and his financial institution)

The Tenderer's attention is drawn to the fact that this document is a sample only, and a specific form in each of the 22 official languages is available for download at the following address:

http://ec.europa.eu/budget/execution/ftiers_en.htm

FIX	IVACY STATEMENT http://ec.europa.eu/budget/execution/ftiers_fr.htm
	ACCOUNT NAME
ACCOUNT NAME(1)	
ADDRESS	
TOWN/CITY	POSTCODE
COUNTRY	
CONTACT TELEPHONE	FAX
E - MAIL	FAA
	BANK
BANK NAME	
DDANGU ADDDESS	
BRANCH ADDRESS	
TOWN/CITY	POSTCODE
COUNTRY	
ACCOUNT NUMBER IBAN(2)	
IBAN ¹² /	
REMARKS:	
RANK STAMP + SIGNATI	URE OF BANK REPRESENTATIVE DATE + SIGNATURE ACCOUNT HOLDER:
(Both Obligatory)(3)	(Obligatory)

ANNEX III

DECLARATION OF HONOUR

WITH RESPECT TO THE

EXCLUSION CRITERIA AND ABSENCE OF CONFLICT OF INTEREST

The u	nder	signed: (Please print name)
or		in his/her own name (if the economic operator is a natural person)
Oi		representing (if the economic operator is a legal entity)
		me of the company/organisation:
		al form:
Officia	al add	dress in full:
VAT (Tax)	registration number:

Declares that the company or organisation that he/she represents:

- is not bankrupt or being wound up, is not having its affairs administered by the courts, has not entered into an arrangement with creditors, has not suspended business activities, is not the subject of proceedings concerning those matters, and is not in any analogous situation arising from a similar procedure provided for in national legislation or regulations;
- has not been convicted of an offence concerning professional conduct by a judgment which has the force of res judicata;
- has not been guilty of grave professional misconduct proven by any means which the contracting authorities can justify;
- has fulfilled obligations relating to the payment of social security contributions or the
 payment of taxes in accordance with the legal provisions of the country in which it
 is established or with those of the country of the contracting authority or those of
 the country where the contract is to be performed;
- has not been the subject of a judgement which has the force of res judicata for fraud, corruption, involvement in a criminal organisation or any other illegal activity detrimental to the Communities' financial interests;

 has not been declared to be in serious breach of contract for failure to comply with his contractual obligations subsequent to another procurement procedure or grant award procedure financed by the Community budget.

In addition, the undersigned declares on his honour:

- that on the date of submission of the tender, the company or organisation he
 represents and the staff proposed for this tender are not subject to a conflict of
 interests in the context of this invitation to tender; he undertakes to inform the ENISA
 Agency without delay of any change in this situation which might occur after the date of
 submission of the tender;
- that the information provided to the ENISA Agency within the context of this invitation to tender is accurate, truthful and complete.

By signing this form, the undersigned acknowledges that they have been acquainted with the administrative and financial penalties described under art 133 and 134 b of the Implementing Rules (Commission Regulation 2342/2002 of 23/12/02), which may be applied if any of the declarations or information provided prove to be false

Full name	Signature	Date

ANNEX IV

FINANCIAL OFFER:

"Security and resilience of electronic communication networks and services"

ENISA P/27/12/TCD

Please provide your financial lump sum offer for LOT 1 and/or LOT 2 and/or LOT 3

LOT Description:	Number of 'Person days' required for completion of project.	Your OFFER
LOT 1 - National roaming. Please provide your lump sum price for the total deliverables.	P/Days	€
LOT 2 – Power supply dependencies Please provide your lump sum price for the total deliverables.	P/Days	€
LOT 3 - Resilience of European Network Interconnections Please provide your lump sum price for the total deliverables	P/Days	€

Print name: (of the Tenderer or authorised representative)	Signature:	Date:

ANNEX V

Model Service Contract template

(See attached file)

ANNEX VI DECLARATION BY THE AUTHORISED REPRESENTATIVE(S):

NAME OF LEGAL REPRESENTATIVE			
I, the undersigned, certify that the intender is valid.	nformation given in this tender is correct and that the		
First name			
Last name			
Title (e.g. Dr, Mr, Mrs)			
Position (e.g. Manager, Director)			
Telephone number			
Fax number			
e-mail address			
Website			
NAME OF 2 nd LEGAL	REPRESENTATIVE (if applicable)		
I, the undersigned, certify that the intender is valid.	I, the undersigned, certify that the information given in this tender is correct and that the tender is valid.		
First name			
Last name			
Title (e.g. Dr, Mr, Mrs)			
Position (e.g. Manager, Director)			
Telephone number			
Fax number			
e-mail address			
Website			
SIGNATURE:	DATE:		

ANNEX VII Consortium form

Name of tenderer:				
Form of the Consorti	um: (Pleas	se cross the rele	vant box) x	
Permanent: Lega	ally establi	shed: S	pecifically for thi	s tender:
	N	ame(s)		Address
Leader of the Consortium (person authorised to conclude contract)				
Partner 1*				
Partner 2*				
performance of the contract behalf of, each partner, that	ct, that the I at the perforr ners in the co	eader is authorise mance of the contr	d to bind, and receact, including paym	everally liable by law for the eive instructions for and on ents, is the responsibility of onsortia for the entire period
Signature: Leader of consortium	า			
Date:				
Signature: Partner 1				
Date:				
Signature: Partner 2etc				
Date:				

ANNEX VIII Sub-contractors form

	Name(s)	Address
Tenderer (person authorised to sign contract)		
Sub-contractor 1*		
Sub-contractor 2*		

As subcontractors for this tender, we confirm that we are willing to perform the tasks as specified in the tender documentation.

Signature: Tenderer	
Date:	
Signature: Subcontractor 1	
Date:	
Signature: Subcontractor 2	
Date:	

^{*} add additional lines for subcontractors if required.

ANNEX IX Document CHECKLIST

	WHAT MUST BE INCLUDED IN THE TENDER SUBMISSION:	
	PLEASE TICK EACH BOX AND RETURN THIS CHECKLIST	
	TOGETHER WITH YOUR OFFER	
1	Technical Offer (for each LOT you bid for)	
2	Professional information (see Part 3 – Article 3.1)	
3	Proof of financial and economic capacity (see Part 3 – Article 3.2)	
4	Proof of technical and professional capacity (see Part 3 – Article 3.3)	
5	Legal Entity Form ⁵ (Annex I) signed and dated	
6	Financial Identification Form ⁶ (Annex II) signed and dated	
7	Declaration on Honour on exclusion criteria (Annex III) signed and dated	
8	Financial Offer (Annex IV) signed and dated	
9	Declaration by Authorised Representative (Annex VI) signed and dated	
10	Consortium form (Annex VII) signed and dated - if applicable	
11	Sub-Contractors form (Annex VIII) signed and dated - if applicable	
docu	tenderers' attention is drawn to the fact that any total or partial omission mentation requested may lead the Contracting Authority to exclude the ten the rest of the procedure.	
Print n		
(of the Tei	nderer or authorised representative)	

⁵ If you have provided a Legal Entity form to ENISA within the previous <u>12 months</u> maximum and no details have changed in the meantime, then you may provide a photocopy of this previous form.

⁶ If you have provided a Financial Identification form to ENISA within the previous <u>12 months</u> maximum and no details have changed in

the meantime, then you may provide a photocopy of this previous form.