The role of ENISA in contributing to a coherent and enhanced structure of network and information security in the EU and internationally

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The opinions expressed are solely those of the authors.
Overview

- Introduction
- ENISA today
- ENISA tomorrow?
- An abbreviated impact assessment of options going forward
- Recommendations
Introduction

• The ENISA Regulation of 2004 established the agency to deal with Network and Information Security (NIS), which encompasses both:
  - cyber security
  - Critical Information Infrastructure Protection (CIIP)
• The period of establishment has been extended à l'identique to September 2013.
• The Commission put forward a legislative proposal in September 2010 to modernise and streamline ENISA, and has accompanied the proposal as required with an impact assessment.
ENISA Today: ENISA’s structure

- The agency itself, led by its Executive Director (ED)
- The Management Board (MB)
- The Permanent Stakeholder’s Group (PSG)
• Under the flexible mandate of the 2004 ENISA Regulation, ENISA‘s role has steadily grown.
• ENISA is continually called on to take on new challenges that were not visible when it was formed, such as:
  - conducting cyber security exercises at European level and also in cooperation with the US;
  - coordinating the reporting of security breach notifications (and receiving notifications) under Articles 13a and 13b of the Framework Directive as amended in 2009; and
  - interactions with cybercrime, electronic privacy, and other stakeholders in neighbouring policy domains.
Many of the challenges that ENISA faces today were already visible in the 2007 evaluation.

ENISA faces two major challenges in regard to efficiency: (1) a small staff size, which inherently implies a relatively high ratio of administrative staff to total staff; and (2) a relatively inaccessible location that implies high travel costs as well as challenges to recruiting and retention.

When one considers that ENISA suffers both from small size and a remote location, the agency faces among the greatest combined challenges to efficiency of any European decentralised agency.
ENISA Tomorrow

- Extension of ENISA’s charter
- Expression of ENISA’s mission in the Regulation
- Operational or non-operational?
- Staff size, staff mix, and budget
- Location and staff efficiency
- Synergies with FORTH in Heraklion
- Management Board (MB) size and structure
- Missing functions and linkages
• The duration of establishment for ENISA
  - A consensus has emerged that ENISA‘s function is needed.
  - A consensus has emerged that an independent agency is the right way to address these needs.
  - The period of establishment should either be indefinite, or else aligned to the MFF cycle (2014-2020).

• ENISA‘s mission
  - The 2004 Regulation provides a flexible mandate that has enabled ENISA‘s mission to grow and evolve appropriately.
  - Reducing ambiguity may be appropriate.
  - Restrictions in the Regulation regarding cybercrime and data protection in the current Regulation go beyond what is needed.
ENISA Tomorrow: Operational or non-operational?

- There has been a view historically that ENISA should never take on any operational role. We think that this view is simplistic. There are different kinds of operational tasks with quite different implications.
- The non-real-time handling of data that is sensitive either for security or for privacy reasons is an operational task, but ENISA has already been assigned such a task in regard to security breach notifications, and we consider it appropriate (but work will be needed!).
- Taking on operational duties that the Member States are already equipped to do is probably never appropriate.
- Taking on 24 x 7 responsibilities that have no overlap with Member State activities could be appropriate, depending on the balance of benefits to costs.
ENISA Tomorrow: Staff size and mix

- Authorised staff size today is 57.
- Staff quality appears to be high, measured by:
  - Academic qualifications
  - Years of relevant experience
  - Apparent respect on the part of stakeholders
- In the 2007 evaluation, it was recognised that staff size was below the level that is efficient for a European decentralised agency (implies relatively high administrative overhead), and too small to enable ENISA to do all of the things that it ideally should do.
- We agree with the Commission’s present proposal that an increase is called for.
ENISA Tomorrow: Location and staff efficiency: The problem

- Travel is essential to ENISA’s core mission of coordination, dialogue, and exchange of best practice.
- The remote Heraklion location results in inherent travel inefficiencies.
  - ENISA has found that 18 heavy travellers conduct about two-thirds of all missions. Analysis of their records shows that roughly 46% of mission time is spent travelling.
  - For 134 out of 420 missions during 2010, an overnight in an Athens hotel was required.
  - Of 287 missions that ENISA heavy travelers conducted from June 2010 – May 2011, 123 were to Brussels and 57 to Athens.
ENISA Tomorrow: Location and staff efficiency: The solution

• Liaison office in Brussels
  - Common practice among the decentralised agencies.
  - We assume two-three senior “heavy traveller” professionals.

• Branch office in Athens
  - ENISA already has (limited) facilities in Athens.
  - We assume six-ten senior “heavy traveller” professionals.

• Rationale:
  - Enables more missions per staff year.
  - Enhances liaison with the European institutions.
  - Provides recruiting/retention flexibility.
  - Creates a more accessible location for visits to ENISA.
ENISA Tomorrow: Missing functions and linkages

- ENISA’s mission has grown steadily under its charter, but some elements get less attention than they might due to competing priorities.
  - International: sustained interaction with the EU-US Working Group on Cyber Security and Cybercrime and the ITU, but only episodic with OECD, G8, OSCE, Council of Europe.
  - Businesses and consumers: presentations and reports are available, but no sustained programmatic outreach.
- Risk that this becomes worse if ENISA’s mission expands faster than its staffing.
- Lack of clarity relative to the military.
- Some ambiguity relative to cybercrime and privacy.
## An abbreviated impact assessment

<table>
<thead>
<tr>
<th>Policy option</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>OPTION 1:</strong> No policy</td>
<td>The ENISA mandate expires; however, other activities at European and Member State level continue without change.</td>
</tr>
</tbody>
</table>
| **OPTION 2:** Business as usual | The mandate of ENISA is further extended.  
Mission:  
- To the extent that ENISA's mission has already expanded, those changes carry forward.  
- To the extent that ENISA's mission would likely expand within the scope of the current Regulation, those changes are also reflected.  
Only small increases in staff are assumed.  
Only small increases in efficiency are assumed. |
| **OPTION 3a:** Same mission, enhanced resources | Same mission as in OPTION 2.  
Increase in staff size begins in 2012. |
| **OPTION 3b:** Same mission, enhanced resources and efficiency | Same mission as in OPTION 2.  
Increase in staff size begins in 2012, but more slowly than in OPTION 3a.  
Emphasis on increased staff efficiency, especially as regards travel and recruitment. A Brussels liaison office and a small branch office in Athens are assumed. |
| **OPTION 4:** Add a CERT for EU institutions to ENISA’s mission. | Same mission as in OPTION 2, plus a CERT for the EU institutions.  
Staff needs to expand to enable an operational 7x24 role, and an expanded Brussels liaison office.  
This Option assumes the same efficiency gains as in Option 3b, and staff growth for functions other than the CERT that is also in line with Option 3b. |
An abbreviated impact assessment

- Common criteria for comparison of the options include effectiveness, efficiency, coherence, and cost.

<table>
<thead>
<tr>
<th></th>
<th>1 No programme</th>
<th>2 Baseline</th>
<th>3a Increase resources</th>
<th>3b Increase resources and efficiency</th>
<th>4 Implement a CERT for the European institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>——</td>
<td>0</td>
<td>+</td>
<td>+ / ++</td>
<td>?</td>
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<tr>
<td>Direct costs</td>
<td>++</td>
<td>0</td>
<td>——</td>
<td>—</td>
<td>?</td>
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<tr>
<td>Efficiency</td>
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<td>0</td>
<td>+</td>
<td>+</td>
<td>?</td>
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<tr>
<td>Coherence</td>
<td>—</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Overall assessment</td>
<td>——</td>
<td>0</td>
<td>0</td>
<td>+</td>
<td>?</td>
</tr>
</tbody>
</table>

0 = no change; + = better; ++ = much better; —— = worse; —— —— = much worse
Recommendations

• Recommendation 1. ENISA should be subject to regular, fully independent evaluations.
• Recommendation 2. Clarify the overall mission of the MB.
• Recommendation 3. Clarify the MB’s role in staff planning.
• Recommendation 4. Ensure that the MB has access to independent legal advice.
• Recommendation 5. Provide ENISA with a longer period of establishment.
• Recommendation 6. A revised Regulation should reduce ambiguity, but not at the expense of being overly rigid.
• Recommendation 7. Explore ways to exchange best practice as regard administration.
Recommendations

- Recommendation 8. ENISA should open a Brussels liaison office.
- Recommendation 9. Consider assigning staff to a branch office in Athens.
- Recommendation 10. Explore possible further synergies with FORTH.
- Recommendation 11. Clarify ENISA’s ability to engage with privacy / data protection issues and cybercrime issues, and clarify its relationship to the military.
- Recommendation 12. Seriously consider increasing ENISA's budget.
• The proportion of ENISA staff allocated to administration has been a perennial concern.
• ENISA is now on a par with its peer group.
• Further improvements may be possible.
ENISA Tomorrow:
Staff size and mix

Source: WIK-Consult GmbH, based on data from Ramboll (2009) (based on data from European Court of Auditors)
ENISA Tomorrow: Location and staff efficiency: Brussels liaison

- The case for a Brussels liaison office is compelling.
- Common practice among the decentralised agencies.

Source: WIK-Consult GmbH, based on data provided by ENISA staff,
ENISA Tomorrow:
Location and staff efficiency: Athens branch

• For analogous reasons, it would make sense to station some of the heavy travellers at a location other than Heraklion.
• Many solutions are possible. We consider the stationing of from six to ten senior professionals in Athens, where ENISA already has (limited) facilities, to be a feasible and reasonable approach, and not irreconcilable with current understandings.
• MB and PSG meetings are often held in Athens.
• This would also provide ENISA with valuable recruitment and retention flexibility.
ENISA Tomorrow

- **Synergies with FORTH in Heraklion**
  - ENISA and FORTH cooperate in many ways today.
  - We nonetheless think that there are probably more synergies than have been exploited to date.
- **Management Board (MB) size and structure**
  - The MB is unquestionably too large (36 members).
  - Nonetheless, it seems to get done the things that need to get done.
  - After many interviews, and careful review of the MB minutes, we do not feel that an alternative structure would necessarily be any better relative to the MB’s current mission.
An abbreviated impact assessment

- We attempted to construct a set of options that relate to the real issues facing the agency.
- ENISA’s effective mission has grown steadily, and can be expected to continue to grow.
- Resources should be kept in balance with demands.
- It makes sense to consider options that reflect a blended strategy of efficiency gains and headcount increases.
- Efficiency gains may be particularly crucial to deal with the period 2011-2013, since the mission will predictably continue to grow during the current MFF period.
- We include an impact assessment Option where a CERT for the European institutions is organised as part of ENISA.
An abbreviated impact assessment

- We developed proposed staffing plans and estimated budget using roughly the same methodology as the Commission.
- We agree with the Commission’s target headcount of 99.
- For the CERT for the European institutions, we assumed a basic CERT with notification and early warning capabilities, but not detailed investigation.