(U) COMPUTER NETWORK OPERATIONS
(U) SIGINT ENABLING

<table>
<thead>
<tr>
<th>This Exhibit is SECRET//NOFORN</th>
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</thead>
<tbody>
<tr>
<td>FY 2011&lt;sup&gt;1&lt;/sup&gt; Actual</td>
</tr>
<tr>
<td>-------------------------------</td>
</tr>
<tr>
<td>Funding ($M)</td>
</tr>
<tr>
<td>298.6</td>
</tr>
<tr>
<td>144</td>
</tr>
<tr>
<td>144</td>
</tr>
<tr>
<td>Military Positions</td>
</tr>
</tbody>
</table>

<sup>1</sup>Includes enacted OCO funding.

(U) Project Description

(TS//SI//INF) The SIGINT Enabling Project actively engages the US and foreign IT industries to covertly influence and/or overtly leverage their commercial products' designs. These design changes make the systems in question exploitable through SIGINT collection (e.g., Endpoint, MidPoint, etc.) with foreknowledge of the modification. To the consumer and other adversaries, however, the systems' security remains intact. In this way, the SIGINT Enabling approach uses commercial technology and insight to manage the increasing cost and technical challenges of discovering and successfully exploiting systems of interest within the ever-more integrated and security-focused global communications environment.

(TS//SI//REL TO USA, FVEY) This Project supports the Comprehensive National Cybersecurity Initiative (CNCI) by investing in corporate partnerships and providing new access to intelligence sources, reducing collection and exploitation costs of existing sources', and enabling expanded network operation and intelligence exploitation to support network defense and cyber situational awareness. This Project contains the SIGINT Enabling Sub-Project.

(U) Base resources in this project are used to:

- (TS//SI//REL TO USA, FVEY) Insert vulnerabilities into commercial encryption systems, IT systems, networks, and endpoint communications devices used by targets.
- (TS//SI//REL TO USA, FVEY) Collect target network data and metadata via cooperative network carriers and/or increased control over core networks.
- (TS//SI//REL TO USA, FVEY) Leverage commercial capabilities to remotely deliver or receive information to and from target endpoints.
- (TS//SI//REL TO USA, FVEY) Exploit foreign trusted computing platforms and technologies.
- (TS//SI//REL TO USA, FVEY) Influence policies, standards and specification for commercial public key technologies.
- (TS//SI//REL TO USA, FVEY) Make specific and aggressive investments to facilitate the development of a robust exploitation capability against Next-Generation Wireless (NGW) communications.
- (U//FOUO) Maintain understanding of commercial business and technology trends.
- (U//FOUO) Procure products for internal evaluation.
- (U//FOUO) Partner with industry and/or government agencies in developing technologies of strategic interest to NSA/CSS.
• (TS//SI//REL TO USA, FVEY) Support the SIGINT exploitation of NGW, a MIP/NIP collective investment. This request reflects only the NIP portion of the program. Refer to MIP NSA volume for details on MIP related activities.

• (TS//SI//REL TO USA, FVEY) Provide for continued partnerships with major telecommunications carriers to shape the global network to benefit other collection accesses and allow the continuation of partnering with commercial Managed Security Service Providers and threat researchers, doing threat/vulnerability analysis.

• (TS//SI//REL TO USA, FVEY) Continue relationships with commercial IT partners and capitalize on new opportunities, including the enabling of cryptography used by the governments; enable the encryption being used in a high interest satellite signal, which allows access to the communications being carried on a commercial satellite provider.

(U) There are no new activities in this Project for FY 2013.

(U) The CCP expects this Project to accomplish the following in FY 2013:

• (TS//SI//NF) Reach an initial operating capability for SIGINT access to data flowing through a commercial Arabic language/Middle East-oriented anonymous internet service. [CCP_00009]

• (TS//SI//REL TO USA, FVEY) Reach full operating capability for SIGINT access to data flowing through a hub for a major commercial communications provider and assess its long term benefits.

• (TS//SI//REL TO USA, FVEY) Reach full operating capability for SIGINT access to a major Internet Peer-to-Peer voice and text communications system.

• (TS//SI//REL TO USA, FVEY) Complete enabling for encryption chips used in Virtual Private Network and Web encryption devices. [CCP_00009]

• (TS//SI//REL TO USA, FVEY) Make gains in enabling decryption and Computer Network Exploitation (CNE) access to fourth generation/Long Term Evolution (4G/LTE) networks via enabling. [CCP_00009]

• (TS//SI//REL TO USA, FVEY) Assess existing wireless calling metadata accesses and balance flow of this data into NSA/CSS with the ability to ingest and utilize this information. [CO_00047]

• (TS//SI//REL TO USA, FVEY) Assess existing commercial cyber information flows and balance the flow of this data into NSA/CSS with the ability to ingest and analyze this information to support cyber situational awareness. [CO_00047]

• (TS//SI//NF) Shape the worldwide commercial cryptography marketplace to make it more tractable to advanced cryptanalytic capabilities being developed by NSA/CSS. [CCP_000090]

(U) Changes From FY 2012 to FY 2013:

(S//NF) SIGINT Enabling: -$20.4 million (-$20.4 Base), -2 civilian positions. The aggregate decrease is the result of:

• (U) Increases:
  
  — (TS/SF//NF) $5.6 million reflects additional level of investment in enabling exploitation capabilities against NGW mobile and data networks.
  
  — (TS/SF//NF) $4.1 million enables additional support to Endpoint operations. Support to this mission area requires SIGINT Enabling to invest in new infrastructure and capabilities with commercial partners.
  
  — (S//NF) $0.4 million in civilian pay and benefits.
— (S//NF) $0.3 million due to revised economic assumptions.

- (U) Decreases:
  - (TS//SI//NF) $20.8 million of contractor reductions to fund priority Community investments, which impacts the ability to sustain and expand activities directly supporting cyber informational needs.
  - (TS//SI//NF) Decrease of $10.0 million in support of deficit reduction efforts, which reduces effectiveness of accesses supporting intelligence collection and Endpoint operations.
  - (TS//SI//NF) Two civilian positions reduces development of strategic capabilities enabling cryptographic exploitation of target communications to advance NSA/CSS’ missions.

<table>
<thead>
<tr>
<th>Subproject</th>
<th>Description</th>
<th>FY 2011</th>
<th>FY 2012</th>
<th>FY 2013</th>
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<tbody>
<tr>
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<td><strong>Funds</strong></td>
<td><strong>Positions</strong></td>
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<tr>
<td></td>
<td><strong>Positions</strong></td>
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Totals may not add due to rounding.