



(U) SIGINT Strategy

2012-2016
23 February 2012



(U) Vision

(U) Ensure Signals Intelligence provides THE decisive edge in advancing the full spectrum of U.S. national security interests.

(U) Mission

(U) Defend the nation through SIGINT-derived advantage with a skilled work force trained, equipped and empowered to access and unlock the secrets of our adversaries.

(U) Values

(U) We will constantly strive to improve our knowledge, our people, our technology, and our products. Through innovation and personalization, we will advance the SIGINT system. Our customers and stakeholders can rely on us to provide timely, high quality products and services, because we never stop innovating and improving, and we never give up!

(U) The Environment

(U//FOUO) For decades, Signals Intelligence has sustained deep and persistent access to all manner of adversaries to inform and guide the actions and decisions of Presidents, military commanders, policy makers and clandestine service officers. As the world has changed, and global interdependence and the advent of the information age have transformed the nature of our target space, we have adapted in innovative and creative ways that have led some to describe the current day as “the golden age of SIGINT.”

(U//FOUO) That reputation was hard-won, but will only endure if we keep sight of the dynamic and increasingly market driven forces that continue to shape the SIGINT battle space. We must proactively position ourselves to dominate that environment across discovery, access, exploitation, analysis, collaboration and in the products and services we provide. The SIGINT system and our interaction therein must be as agile and dynamic as the information space we confront.

(U//FOUO) The mission space for SIGINT in the years ahead will continue to grow at a rapid pace amidst a dramatically new set of challenges:

(U//FOUO) The interpretation and guidelines for applying our authorities, and in some cases the authorities themselves, have not kept pace with the complexity of the technology and target environments, or the operational expectations levied on NSA’s mission.

- (U) Digital information created since 2006 grew tenfold, reaching 1.8 exabytes in 2011, a trend projected to continue; ubiquitous computing is fundamentally changing how people interact as individuals become untethered from information sources and their communications tools; and the traces individuals leave when they interact with the global network will define the capacity to locate, characterize and understand entities¹.

¹ (U) Center for the Study of Intelligence (2010) Where Tomorrow Will Take Us: The New Environment for Intelligence. August 2010

- (U) Cyberattacks offer a means for potential adversaries to overcome overwhelming U.S. advantages in conventional military power and to do so in ways that are instantaneously and exceedingly hard to trace. Such attacks may not cause the mass casualties of a nuclear strike, but they could paralyze U.S. society all the same².
- (U) The international system – as constructed following the Second World War – will be almost unrecognizable by 2025 owing to the rise of emerging powers, a globalizing economy, an historic transfer of relative wealth and economic power from West to East, and the growing influence of non-state actors³.

(U) Expectations

(U//FOUO) The power of information, its short shelf life in the information age and the speed at which it moves will set the conditions for how NSA interacts with customers. Transactional, passive or linear relationships will be replaced by embedded, deeply interactive engagements. Existing investments in cyber security will by necessity expand across the enterprise to meet the demand and speed of action required to thwart our adversaries. To remain a value for the warfighter our information must be immediately available at the lowest classification level. The nation will continue to depend upon NSA to be the lead for the application of the science of cryptography, sustaining access and understanding of data even as encryption becomes automatic, transparent and prolific. Products and services from NSA will evolve into forms and across boundaries that mirror the networked and agile manner in which people interact in the information age, and we will share information, responsibly and securely, with external partners and customers.

(U//FOUO) For SIGINT to be optimally effective, legal, policy, and process authorities must be as adaptive and dynamic as the technological and operational advances we seek to exploit. Nevertheless, the culture of compliance, which has allowed the American people to entrust NSA with extraordinary authorities, will not be compromised in the face of so many demands, even as we aggressively pursue legal authorities and a policy framework mapped more fully to the information age.

(U//FOUO) To sustain current mission relevance and to meet the challenges, the Signals Intelligence Directorate must undertake a profound and revolutionary shift from the mission approach which has served us so well in the decades preceding the onset of the information age to a SIGINT system that is as agile and dynamic as the information space we confront. The environment demands it, the capability of the SIGINT system can achieve it and the work force has the creativity and the skill base to make it possible.

(U//FOUO) What follow are the five challenge goals the SIGINT leadership has established to close gaps between the environment and expectations over the next five years.

²(U) Lynn, William J. III (2010). Defending a New Domain: The Pentagon's Cyberstrategy. Foreign Affairs. September/October 2010. Vol 89, No 5, pp 97-108

³(U) National Intelligence Council (2010) Global Trends 2020: A Transformed World. United States Government. November 2008

SIGINT Goals for 2012-2016

1. (U//FOUO) Revolutionize analysis – fundamentally shift our analytic approach from a production to a discovery bias, enriched by innovative customer/partner engagement, radically increasing operational impact across all mission domains.
 - 1.1. (U//FOUO) Through advanced tradecraft and automation, dramatically increase mastery of the global network
 - 1.2. (U//FOUO) Conduct original analysis in a collaborative information space that mirrors how people interact in the information age
 - 1.3. (U//FOUO) Disseminate data at its first point of relevance, share bulk data, and enable customers to address niche requirements
 - 1.4. (U//FOUO) Drive an agile technology base mapped to the cognitive processes that underpin large scale analysis, discovery, compliance and collaboration

2. (U//FOUO) Fully leverage internal and external NSA partnerships to collaboratively discover targets, find their vulnerabilities, and overcome their network/communication defenses.
 - 2.1. (U//FOUO) Bolster our arsenal of capabilities against the most critical cryptanalytic challenges
 - 2.1.1. (S//SI//REL) Employ multidisciplinary approaches to cryptanalytic problems, leveraging and integrating mid-point and end-point capabilities to enable cryptanalysis
 - 2.1.2. (S//REL) Counter the challenge of ubiquitous, strong, commercial network encryption
 - 2.1.3. (TS//SI//REL) Counter indigenous cryptographic programs by targeting their industrial bases with all available SIGINT and HUMINT capabilities
 - 2.1.4. (TS//SI//REL) Influence the global commercial encryption market through commercial relationships, HUMINT, and second and third party partners
 - 2.1.5. (S//SI//REL) Continue to invest in the industrial base and drive the state of the art for High Performance Computing to maintain pre-eminent cryptanalytic capability for the nation
 - 2.2. (TS//SI//REL) Defeat adversary cybersecurity practices in order to acquire the SIGINT data we need from anyone, anytime, anywhere
 - 2.3. (S//SI) Enable discovery capabilities and advanced tradecraft in the collection architecture to enable the discovery of mission-critical persona, networks, accesses, signals and technologies
 - 2.4. (S//SI) Integrate capabilities into the mission architecture, deepen workforce skill base in advanced network and signals analysis, and optimize processes and policies for the benefit of discovery

3. (S//SI//REL) Dynamically integrate endpoint, midpoint, industrial-enabled, and cryptanalytic capabilities to reach previously inaccessible targets in support of exploitation, cyber defense, and cyber operations
 - 3.1. (C//REL) Drive the SIGINT mission architecture to underpin synchronized, integrated, multi-capability operations, extending it to mission partners
 - 3.2. (TS//SI//REL) Integrate the SIGINT system into a national network of sensors which interactively sense, respond, and alert one another at machine speed
 - 3.3. (U//FOUO) Continuously rebalance our portfolio of accesses and access capabilities based on current and projected contributions to key SIGINT missions
 - 3.4. (S//SI//REL) Identify new access, collection, and exploitation methods by leveraging global business trends in data and communications services

(U) In order to achieve these three mission goals, we must collectively liberate the innovation and creativity of our workforce through technology, policies, and business processes – hence, the following two goals have been set:

4. (U) Collectively foster an environment that encourages and rewards diversity, empowerment, innovation, risk-taking and agility

4.1. (U) Empower employees to make decisions and drive change; invest in and reward innovation, risk-taking, and teaming

4.2. (U//FOUO) Build compliance into systems and tools to ensure the workforce operates within the law and without worry

4.3. (U) Work together to detail, implement, and evolve the strategy

4.4. (U) Provide everyone with the training and experiences necessary to lead the world's most capable SIGINT service and be competitive for Intelligence Community leadership positions

5. (U) Enable better, more efficient management of the mission and business by establishing new, modifying current, and eliminating inefficient, business processes; by strengthening customer relationships; and by building necessary internal and external partnerships.

5.1. (U//FOUO) Pursue, develop, and implement policy consistent with the pace and scope of operations

5.2. (U//FOUO) Build into systems and tools, features that enable and automate end-to-end value-based assessment of SIGINT products and services

5.3. (U//FOUO) Create and sustain a mission management environment that is autonomic and agile

5.4. (U//FOUO) Synchronize mission, budget and acquisition, and technology and research activities to deliver the capabilities required to keep SIGINT relevant

5.5. (U) Align and standardize administrative business processes throughout the SIGINT enterprise to reduce the bureaucratic burden on the enterprise

5.6. (U//FOUO) Champion the development of a unified NSA/CSS U.S. customer engagement strategy that streamlines processes, increases resource efficiencies, eliminates redundancies, and strengthens NSA relationships