



2022 Public-Private Analytic Exchange Program Topics

Evolving Landscape of U.S. Bioeconomy and Biotechnology: This topic will explore the scope and applications of new U.S. bioeconomy and biotechnology developments. This topic could explore the emerging threats to bioeconomy, identify potential vulnerabilities to this sector to develop a risk assessment, and research developments in biotechnology to identify convergence with other evolving technologies.

Combatting Illicit Activity Utilizing Financial Technologies and Cryptocurrencies: This topic will investigate ways to detect, deter, and disrupt violent extremist organizations' use of financial technology and cryptocurrencies to facilitate illicit activity. This topic could focus on improving the intelligence sharing processes and best practices needed to address the threat by public and private sectors. Additionally, this topic could review the change in tactics, techniques, and procedures utilized by bad actors engaging traditional financial institutions and technology companies.

Ransomware Attacks on Critical Infrastructure Sectors: This topic will explore the rise of ransomware attacks against critical infrastructure sectors. This topic could develop a strategy to tackle ransomware attacks while defining key boundaries of public and private sector involvement.

Countering Foreign Malign Social Network Manipulation in the Homeland: This topic will explore evolving tactics, techniques, and procedures utilized by foreign malign influence actors to conduct multifaceted influence campaigns. This topic could focus on the co-optation of digital technology like social media algorithms and automated scripts to distribute disinformation narratives. Additionally, this topic could explore the psychological tactics that could be employed to counter disinformation narratives.

Threats to U.S. Physical Trade & Supply Chain Integrity: This topic will explore opportunities to enhance security and resilience of U.S. physical trade, critical supply chains, and or aviation. This topic could identify the illicit trade activity facilitators that enable state-sponsored entities to circumvent U.S. trade regulations and disrupt supply chains. Additionally, this topic could enhance familiarity with the U.S. aviation critical infrastructure perspectives on threats to air cargo and industry threat mitigation.

Addressing Risks from Non-State Actors' Use of Commercially Available Technologies: This topic will explore how non-state actors may seek out, adopt, and modify advanced or emerging commercial off-the-shelf (COTS) technologies for illicit purposes. Additionally, this topic could map patterns of COTS technology transfer among non-state actors and define opportunities for public-private cooperation to manage the technical, legal, and regulatory challenges stemming from this type of non-state innovation. As part of this effort, researchers could develop a system for classifying COTS technologies.

Increasing Resilience in Overlooked Critical Infrastructure Sectors: This topic will explore threats and vulnerabilities in critical infrastructure sectors not typically monitored and explored. This topic could explore overlooked sectors' mitigation strategies against threats and their resilience in recovering from threats, such as cyber attacks and global pandemics.

Ethical Frameworks for Open Source Intelligence: This topic will examine the important role of ethics in open source intelligence (OSINT) programs. This topic could explore ethical frameworks for protecting civil liberties in an increasingly dynamic threat environment, establishing guidelines that enable successful OSINT operations via the least intrusive means, and developing an ethical framework that balances the need for intelligence information against ethical principles and organizational risk tolerance.