National Infrastructure Protection Plan

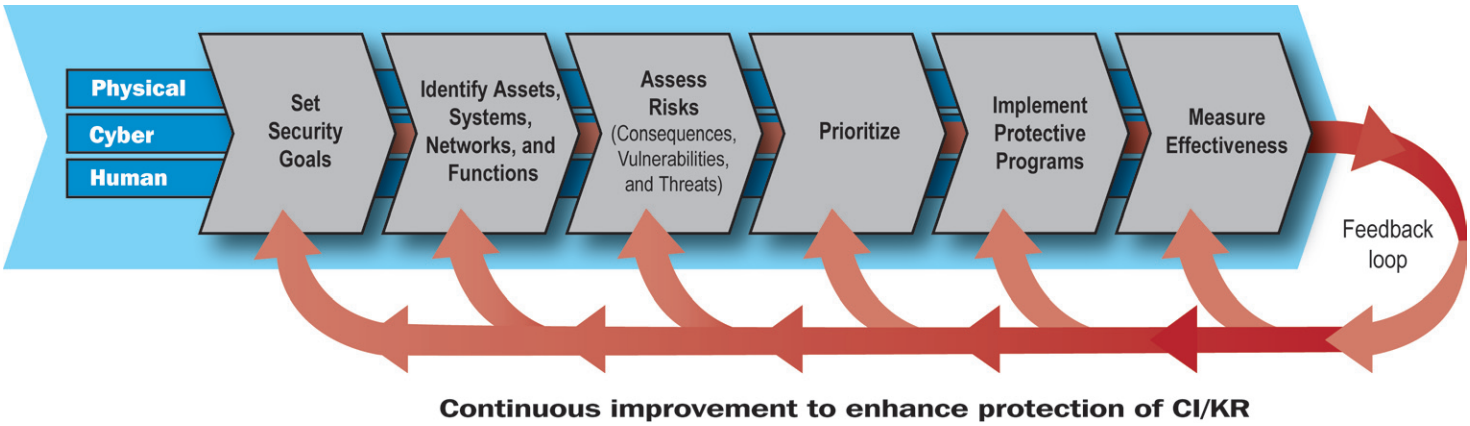
Risk Management Framework

The National Infrastructure Protection Plan (NIPP) provides the coordinated approach that will be used to establish national priorities, goals, and requirements for critical infrastructure and key resources (CI/KR) protection so that Federal funding and resources are applied in the most effective manner to reduce vulnerability, deter threats, and minimize the consequences of attacks and other incidents. It establishes the overarching concepts relevant to all CI/KR sectors identified in Homeland Security Presidential Directive-7 (HSPD-7), and addresses the physical, cyber, and human considerations required for effective implementation of comprehensive programs. The plan specifies the key initiatives, milestones, and metrics required to achieve the Nation's CI/KR protection mission. It sets forth a comprehensive risk management framework and clearly defined roles and responsibilities for the Department of Homeland Security (DHS), Federal Sector-Specific Agencies (SSAs), and other Federal, State, local, tribal, and private sector security partners.

The cornerstone of the NIPP is its risk management framework that establishes the processes for combining consequence, vulnerability, and threat information to produce a comprehensive, systematic, and rational assessment of national or sector risk. The risk management framework is structured to promote continuous improvement to enhance CI/KR protection by focusing activities on efforts to:

- **Set security goals:** Define specific outcomes, conditions, end points, or performance targets that collectively constitute an effective protective posture.
- **Identify assets, systems, networks, and functions:** Develop an inventory of the assets, systems, and networks, including those located outside the United States, that comprise the Nation's CI/KR and the critical functionality therein.
- **Assess risks:** Determine risk by combining potential direct and indirect consequences of a terrorist attack or other hazards, known vulnerabilities to various potential attack vectors, and general or specific threat information.
- **Prioritize:** Aggregate and analyze risk assessment results to develop a comprehensive picture of asset, system, and network risk, establish priorities based on risk, and determine protection and business continuity initiatives that provide the greatest mitigation of risk.

NIPP Risk Management Framework



- **Implement protective programs:** Select sector-appropriate protective actions or programs to reduce or manage the risk identified and secure the resources needed to address priorities.
- **Measure effectiveness:** Use metrics and other evaluation procedures at the national and sector levels to measure progress and assess the effectiveness of the national CI/KR protection program in improving protection, managing risk, and increasing resiliency.

The results of these processes drive CI/KR risk-reduction and risk management activities. DHS, SSAs, and other security partners share responsibilities for implementing the risk management framework.

The risk management framework is tailored and applied on an asset, system, network, or function basis, depending on the fundamental characteristics of the individual CI/KR sectors. Sectors that are primarily dependent on fixed assets and physical facilities may use a bottom-up asset-by-asset approach, while sectors with diverse and logical assets may use a top-down business- or mission-continuity approach.

Information gathered in support of the risk management framework process helps determine adjustments to specific CI/KR protection activities.

DHS works with security partners to identify and share lessons learned and best practices for all aspects of the risk management process. DHS also works with SSAs to share relevant input from security partners and other sources that can be used as part of the national effort to continuously improve CI/KR protection.

Homeland Security

For questions or more information, please contact NIPP@dhs.gov or visit www.dhs.gov/nipp.