MIMOSA Open Meeting
Standards-based Critical Infrastructure Risk Management

Alan Johnston
Critical Infrastructure Sectors – From US PPD 21-2013

- Chemical
  - Commercial facilities
- Communications
- Critical manufacturing
- Dams
- Defense industrial base
  - Emergency services
- Energy

- Financial services (including insurance)
- Food and agriculture
  - Government facilities
- Healthcare and public health
- Information technology
- Nuclear reactors, materials, and waste
- Transportation systems
- Water and wastewater systems
Critical Infrastructure Interdependencies-2

NIST Special Publication 1190
Community Resilience Planning Guide
For Buildings and Infrastructure Systems
Volume II
October 2015
Critical Infrastructure Interdependencies

State Energy Resilience Framework
Global Security Sciences Division
December 2016

J. Philips, M. Finster, J. Pillon, F. Petit and J. Trail
Incorporating Prioritization in Critical Infrastructure Security and Resilience Programs

Homeland Security Affairs 13, Article 7 (https://www.hsaj.org/articles/14091)
October 2017
Duane Verner, Frederic Petit, and Kibaek Kim
Critical Infrastructure Interdependencies

NSW Critical Infrastructure Resilience Strategy
Partner, Prepare, Provide
NSW Department of Justice | Office of Emergency Management
2018
The Critical 5

- The Critical Five was established in 2012 to enhance information sharing and work on issues of mutual interest between Australia, Canada, New Zealand, the United Kingdom and the United States.
- One of the first efforts was to understand how each country addresses critical infrastructure as a basis for clearly articulating and communicating a common message on the value, meaning, and importance of critical infrastructure.
- “The Role of Critical Infrastructure in National Prosperity” published October 2015
Australia, Japan and United States Trilateral Partnership

• Announced July 31, 2018
  • Australia: Minister for Foreign Affairs-The Hon Julie Bishop MP
  • Japan: Japanese Bank for International Cooperation
  • United States: United States Overseas Private Investment Corporation (OPIC)

• Indo-Pacific region

• Cooperation on Investment to:
  1. Build infrastructure
  2. Address development challenges
  3. Increase connectivity
  4. Promote economic growth
Critical Infrastructure Management

Critical Infrastructure Management Process

- Risk Models
- Business Process Models
- Components Models
- Systems Models
- Industrial Process Models

Cross Sector Collaboration with NIST

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