

Old Dominion University

Political Implications of Protecting Critical Infrastructure with Cyber Security Insurance.

Clarence V. Kimbrell Jr.

CYSE 425W Cyber Strategy and Policy

Professor Lora Pitman

20 March 2022

Protecting critical infrastructure with cyber security insurance allows us to live our lives comfortably without having to worry about a devastating event occurring. For example, the people in the area of Sambalpur, India are protected by a government built and regulated dam that is the longest in all of India. The local residents, Sambalpuri Saree, are located southeastern India and on the entrance between the Mahanadi River and the Hikrakud Reservoir. This dam provides life to a population of one million one hundred sixty-eight thousand Sambalpuri Saree. Protecting this dam with cyber security insurance from a hacker inside or outside of India's borders is essential to allow life to thrive in this river banked city. Such an attack would misplace over a million people and would harm the Sambalpur economy and cause catastrophic damage to infrastructure.

The strongest political implications for protecting critical infrastructure with cyber security insurance is foreign policy or homeland security. These two implications give the population of a nation such as the United States the feeling of security and privacy that is a right to all citizens. In an area such as the United States protecting critical infrastructure with cyber security insurance will always be bound by law because an attack on them would be an attack on its government and big businesses associated. This is why politicians are pushing for protecting areas critical infrastructure lies. With the growing use of hybrid warfare¹ protecting such assets is an absolute necessity. Over the past decade many of the most powerful nations around the world have been paying close attention to strategic importance of the submarine cable network.² (Bueger & Liebetrau, 2021) These cable networks allow countries that are continents apart speak with one another instantaneously so protecting this critical infrastructure is crucial to foreign

¹ Combination of multiple conventional and unconventional tools of warfare.

² Is a cable laid on the sea bed between land-based stations to carry telecommunication signals across stretches of ocean and sea.

policy. If an allied nation were to be attack these network cables could be blocked or severed to block out communication leaving a country. This is an example of hybrid warfare and how it plays a crucial part in politics internationally.

International politicians in Israel, were some of the pioneers to have a critical infrastructure protection policy. The Ministerial Committee on National Security³ released a document named *Special Resolution B/84* which stated “the responsibility for protecting computerized systems in the State of Israel. (Tabansky, 2013) This took place on December 11, 2002 for example the United States just established it own critical infrastructure protection policy called the *USA PATRIOT Act of 2001* fourteen months prior. (Parfomak, 2007) These two protection plans have different definitions and interpretations but serve the same purpose. Both of these nations have used these protection plans to regulate a safer environment for its habitant’s oceans apart. In Israel the politicians and policy makers came to those conclusions and ramifications of those decisions for eight main reasons. The most important of the eight is number one “to assess the threat landscape” (Tabansky, 2013). Having the potential to understand what certain systems are susceptible too will allow for more resources put against it. Then number seven “to develop technological expertise and cooperation with partners in Israel and abroad.” (Tabansky, 2013) These relations from Israel and aboard coincide with the United States critical infrastructure protection policy. This is why comparing these two domestics and international policies is a good representation of the stand that government and big business have to take. Then finally “to initiate and support research for developing defensive capabilities, in cooperation with the defense community.” (Tabansky, 2013) Technology is rapidly growing and the techniques of

³ The ministerial committee is a committee consisting of ministers of government portfolio.

hacking are on the same rise. So, understanding the newest methods of attacking will allow defenses to not be comprised.

In conclusion those are the political implications that arise from protecting critical infrastructure with cyber security insurance. After comparing and contrasting Israel's and the United States' critical infrastructure protection plan it shows how domestic and international politicians together with policy are preparing themselves from a future of uncertainty. Looking at the nations individual motives allowed for a clearer picture as to why they came to those conclusions and ramifications. The future of having protection plans for critical infrastructure with cyber security insurance is going to be an absolute necessity with ongoing instability of the technology and the environment. The development of this policy, domestic and internationally, will change to incorporate newer technology and be will be essential to governments and big businesses to operate.

References

Aim, Jens, et al. "Capacity in Municipalities: Infrastructures, Maintenance Debts and Ways of Overcoming a Run-to-Failure Mentality." *Sage Journals*, 6 July 2021, <https://journals.sagepub.com/doi/full/10.1177/02690942211030475>.

Araral, E., Wang, Y. Water Governance 2.0: A Review and Second Generation Research Agenda. *Water Resour Manage* 27, 3945–3957 (2013). <https://doi.org/10.1007/s11269-013-0389-x>

Britannica, T. Editors of Encyclopaedia (2014, September 11). Sambalpur. Encyclopedia Britannica. <https://www.britannica.com/place/Sambalpur>

Christian Bueger & Tobias Liebetrau (2021) Protecting hidden infrastructure: The security politics of the global submarine data cable network, *Contemporary Security Policy*, 42:3, 391-413, DOI: 10.1080/13523260.2021.1907129

Parfomak, Paul W., and Library of Congress Washington Dc Congressional Research Service. "Vulnerability of Concentrated Critical Infrastructure: Background and Policy Options." *DTIC*, 26 Jan. 2007, <https://apps.dtic.mil/sti/citations/ADA466835>.

Mustafiz, Taiya. “Importance of Dam, Types and Most Important Dams of India.”

GeeksforGeeks, 22 Sept. 2021, <https://www.geeksforgeeks.org/importance-of-dam-types-and-most-important-dams-of-india/>.

Satola, D., & Luddy, W. J. (2007). THE POTENTIAL FOR AN INTERNATIONAL LEGAL APPROACH TO CRITICAL INFORMATION INFRASTRUCTURE PROTECTION.

Jurimetrics, 47(3), 315–333. <http://www.jstor.org/stable/29762976>

Schneider, T. (2014). Responsibility for private sector adaptation to climate change. *Ecology and*

Society, 19(2). <http://www.jstor.org/stable/26269584>

Tabansky, L. (2013). Critical Infrastructure Protection Policy: The Israeli Experience. *Journal of*

Information Warfare, 12(3), 78–86. <https://www.jstor.org/stable/26486844>

The Census Bureau. “Sambalpur Population 2022.” *Indian Census*, 2022,

<https://www.indiacensus.net/district/sambalpur>.