Cyber attacks on energy and financial sector - thesis proposal example



CYBER ATTACKS ON ENERGY AND FINANCIAL SECTOR

US Financial and Energy Sector are vulnerable say a group of former US officials indicating the weaknesses of the system due to lack of proper legislations and inability of US to handle such cyber attacks in appropriate manner1. This lack of preparedness and vulnerability of the communication networks therefore can create significant security risks. One such aspect of security risk is the cyber attacks on the energy and financial sector of the United States as both these sectors play very crucial role in the development and sustainability of the economic performance.

US Financial sector is largest in the world and billions of dollars are transacted through this system not only within US but also across the border. The relative penetration of the financial system into the very fabric of American society therefore gives financial sector a more critical place within the modern American society. With the advances in technology, most of the transactions in the financial sector take place online with the help of the internet and other information technology tools. Such high dependence on the information technology therefore makes the system highly vulnerable to the external threats including the cyber attacks.

Similarly, the energy sector is critical for the survival of the country because most of the manufacturing and our daily activity is supported by this sector. A complete collapse of this system therefore will put the country as stand still and probably no economic activity can be conceived without the support of the energy sector. Another important dimension of the cyber spying on the energy sector is basically to extract important information regarding the

potential energy deposits which US companies explore all over the world and a systematic attack on this information therefore can cost Billions to US economy if it goes into wrong hands. It is believed that Chinese hackers are trying to intrude into the systems of the energy companies with specific target of extracting the important data on the oil and gas exploration. (Yemma, 2010)

These arguments therefore indicate that any type of cyber attacks on these two sectors can be significant from the point of view of the homeland security. Easy access to technology and significant improvement in the knowledge base of the cyber criminals and terrorists, it is really easy to conceive a cyber attack of any magnitude on both these sectors. It is therefore, really critical a pro-active approach to be adapted by the security agencies of US including homeland security.

The intended thesis therefore will attempt to explore certain important questions such as

- I. Assessing the vulnerabilities in the energy and financial sector
- II. What can be the financial impact of cyber attacks on both these sectors specifically and for the US economy as a whole?
- III. What options can be exercised to negotiate with such risks? What policy stance shall be taken on such issues and who can be the stakeholders? This research will therefore prove beneficial from the point of view of understanding the threats that US may face due to cyber attacks on its energy and financial sector and how homeland security can perceive such risks and take actions that may help prevent such attacks. Above all, this research study will aim to understand such risks, what can be the modus operandi of the attackers, what can be the losses and above all how US shall https://assignbuster.com/cyber-attacks-on-energy-and-financial-sector-

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prepare itself to prevent such risks and minimize the losses that may be incurring owing to the threats on its energy as well as financial sector.

Bibliography

1. Yemma, J. (2010, Jan 26). When Cyber-Attacks Hit U. S. Energy Companies, We All Pay. Retrieved March 3, 2010, from Huffington Post: http://www. huffingtonpost. com/john-yemma/when-cyber-attacks-hit-us b 437056. html