

CYBER ATTACK AS A NATIONAL SECURITY THREAT: SOUTH ASIAN PERSPECTIVE

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Abstract

National security generally means the protection of the interests of a country. Military, economic, environmental and political issues were being considered as the main threat of a country's national security. But recently 'cyber attack' is importantly being talking as an important factor of national security. From the military to government departments, politics to economic development strategies; all sector of a country use websites, internal software and networks. So, the growing reliance on cyber infrastructure opens the way to new national security threats against a country. Cyber criminals are using the cyber networks as his avenue of attack against a country; because it is extremely inexpensive and easy to conduct. In the case of South Asia, cyber attacks are continuously happening between India, Pakistan and Bangladesh because of killing in the border, terrorist attacks and even for the game. Recently, Bangladeshi hackers hacked more than 20.000 important websites of India as a revenge of border killing. On 26 November 2010, Indian hackers hacked 870 Pakistani websites; and Pakistani hackers hacked 270 Indian websites as revenge. In this paper we will discuss the nature of cyber attacks between India, Pakistan and Bangladesh. And we will show how cyber attacks affect national security.

Keywords: Cyber Space, Cyber Attack, Hacker, National Security, South Asia.

1. Introduction

Modern countries have genially been created on the basis of 'Nationalism'. All the nation states are trying to gain and ensure their interest and security. They form strong military force to protect their territorial security and make economic and political relations with other countries for their own interests. With time, the world became a global village for the rapid growth of technologies and especially for the internet. Now every country and its every department uses internet and internal software for its policy and as well as routine works. Modern countries can't think a single day without technology and the cyber networks. This increasing reliance on cyber networks may create various problems for a country. So, countries are now considering cyber network as one of the important security issues and taking various steps for the security of their cyber networks. Like other countries and regions; South Asian countries are using cyber networks and facing problems about its security. Most of the time, the sources of cyber threat for a South Asian country come from another South Asian country because of the competitive tendencies among them. South Asia considered as politically strategic area for its location, population as well as for the military race among the regional countries. The major countries of South Asian region – namely India, Pakistan and Bangladesh, de-colonised from the British rule in 1947. From the beginning of British rule to its demise in 1947, the Muslims suffered as a minority community. In education, employment, wealth and business they were underprivileged compared to the Hindu majority community.¹ British authority ruled Indian subcontinent applying 'divided and rule' policy.

¹Moudud Ahmed, Aouth Asia: Crisis of Development, The Case of Bangladesh, The University Press Limited, Dhaka, 2005, pp. 1-9.

They created communal identity among the Muslims and Hindus and divided Indian subcontinent as two countries India and Pakistan in 1947, on the basis of religion. They divided Bengal land as West and East Bengal on the basis of religious majority. East Bengal included with Pakistan as a province, with thousands mile distance. East Bengal Muslims felt discrimination under Pakistan and gained independence on 16th December in 1971. Thus these three countries have got ‘disputed border issues’ and ‘tendency of enmity’ as inheritance of the British rule. This is a region where one witnesses build up of conventional arms race, nuclearisation, spread of small arms and drugs trade, frequent border skirmishes, insurgencies, ethnic, religious and sectarian conflicts, extra-parliamentary political violence and instability.² In this paper we will discuss how cyber issue is considering a vital issue among these three countries and how cyber attacks affecting their national security.

2. NATIONAL SECURITY AND CYBER ISSUE

Realism theory of international relations is generally mentioned that, international system is the combination of nation states and every nation state is trying to ensure and gain their interest. So competitions arise among the states and that’s why they always try to ensure their security from the traditional as well as non-traditional sources. “National Security can be most fruitfully defined as the ability of a nation to protect its internal values from external threats.”³ It can be defined as the ability of a country to protect its population from external as well as internal threats. Then new “concept of security came to the fore in 1970s. In this widened version, what is called comprehensive security encompasses military, political, diplomatic, economic, environmental and technological all in one whole.”⁴ Massive development of the technology and the widespread popularity of the internet made the world more dependable on technology. From the military to government departments, politics to economic development strategies; all sector of a country now use websites, internal software and networks. So, the growing reliance on cyber infrastructure opens the way to new national security threats against a country. A cyber war usually consists of the attacks on sensitive government or commercial websites and internal networks; making unusable or leaving millions or even billions of dollars at stake. Richard Clarke described that cyber war has emerged as the foremost security challenge of the 21st century. Clarke defines cyber war as, “actions by a nation-state to penetrate another nation’s computers or networks for the purpose of causing damage or disruption”.⁵ Not only a nation state but also non-state actors such as terrorist groups, hacker groups, social and political counterparts, ideological groups, criminals or economic competitor groups or persons may also take some actions against another nation’s, group’s or person’s cyberspaces. Almost all the countries of the world faced this challenge in their respective cyber space on a regular basis and it was more often experienced in the networks of rival states.⁶ And now cyber attack has become a vital weapon for expressing hatred against rival groups, persons or nations. In 2011, the United States government

² Shaheen Afroze, “Small States in Global Perspective: In Search of a Role Model in Regional Stability”, Mohammad Humayun Kabir (ed.), Small States and Regional Stability in South Asia, A H Development Publishing House, Dhaka, 2005, pp. 23-24.

³ Morton Berkowitz and P. G. Bock, (ed.), American National Security, Free Press, New York, 1965, p. x.

⁴ Dilara Choudhury, “Concept of National Security and its Management in Bangladesh”, Al Masud Hasanuzzaman and Shamsul Alam. (ed.), Political Management in Bangladesh, A H Development Publishing House, Dhaka, 2010, pp. 89-90.

⁵ Richard Clarke and Robert Knake, Cyber War: The Next Threat to National Security And What To Do About It, HarperCollins, New York, 2010, p.6. [http://indianstrategicknowledgeonline.com/web/Cyber%20War%20-%20The%20Next%20Threat%20to%20National%20Security%20and%20What%20to%20Do%20About%20It%20\(Richard%20A%20Clarke\)%20\(2010\).pdf](http://indianstrategicknowledgeonline.com/web/Cyber%20War%20-%20The%20Next%20Threat%20to%20National%20Security%20and%20What%20to%20Do%20About%20It%20(Richard%20A%20Clarke)%20(2010).pdf) (Downloaded Date: 10 October 2016).

⁶ E. Dilipraj, “Cyber Warfare and National Security”, AIR POWER Journal, Vol. 8, No. 3, 2013, p. 174.

declared a cyber attack similar to an act of war, punishable with conventional military means. Cyber attacks and cyber crime directed by one state against another are now considered part of the normal relations range of combat and conflict.⁷ Cyber attack would be very dangerous and destructive if the attacker succeeds. Attacker or hackers may hack the servers or internal networks of a countries nuclear power plants; chemical industries; bomb stocks or such kind of sensitive sectors and create a big crisis more than a military attack. Even a country's nuclear project might be affected by the cyber attackers and the most important documents might be stolen. There are four types of cyber-attacks that we generally see. The first type of cyber-attack is known as website defacements, or vandalism. The second type is distributed denial of service (or DDoS). "Trapdoors," "Trojans," or "Backdoors," more commonly known as intrusions, are the third option for cyber attackers. The fourth is "Malware," or malicious software, that is the most potent form of cyber attack.⁸

3. THE CASE OF SOUTH ASIA

South Asia is one of the populated regions of the world that consisted with 8 nation states. Among the 8 nation states; Bangladesh, Pakistan and India was the same country till 1947 and it was known as Indian Subcontinent or British India. People of that region were communally divided under the British colonial rule and separated in August 1947 as Pakistan for the Muslims and India for the Hindus. On the other hand, the east part of Pakistan, today's Bangladesh fought with Pakistan and separated on 16 December 1971. Although Pakistan and India has achieved their independence in 1947; the communal identity is still influence the bilateral relations. Unsolved Kashmir issue, conflicting border, arm race, nuclear competition and terrorism are playing vital role in the relations of these two countries. On the other hand, Bangladesh considers Pakistan as an enemy because of the past history from 1947 to 1971 and for the war of 1971. Relations between Bangladesh and India are also influencing by border issues and political ideologies. So, the causes of cyber attacks are much more related to these conflicting relations between these three nations.

3.1 India-Pakistan Cyber War

The two rival countries of South Asia, India and Pakistan have created on the basis of communal identity. British colonial rule tactically created that communal identity among Hindus and Muslim in Indian Subcontinent and these two countries gained their independence in 1947 on the basis of religion what was called the "partition". During this partition the "hastily drawn" border by the British, which has been the cause of several wars between the two nations and tensions continue to this day. The continuing rivalry between India and Pakistan has spilled over into cyberspace.⁹ One of the first cyber-attack between India and Pakistan was reported in on 16 October 1998. Suspected Pakistani hackers hijacked the Indian Army's website that was about Kashmir. They had posted information on alleged torture of Kashmiris by Indian forces.¹⁰ In 1999 Pakistani hackers hacked four Indian websites and at the same year seven Pakistani websites were hacked by Indian hackers. In March 2000, a group of Pakistani hackers defaced 600 Indian websites and temporarily took over

⁷ Brandon Valeriano and Ryan Maness, "Cyberwar and Rivalry: The Dynamics of Cyber Conflict between Antagonists, 2001-2011", p. 2. <https://wpsa.research.pdx.edu/meet/2012/manessvaleriano.pdf> (Downloaded Date: 07 October 2016).

⁸ Ibid, p. 4.

⁹ Rfsid, Hactivism: India vs. Pakistan, 11 February 2016, <https://www.recordedfuture.com/india-pakistan-cyber-rivalry/> (Last Viewed: 12 November 2016).

¹⁰ Athina Karatzogianni, *The Politics of Cyberconflict*, Routledge: London, 2006, pp. 157-158.

government and private computer systems.¹¹ Indian hackers hacked 18 Pakistani websites in 2000 and the numbers of cyber attacks targeting government and non-government websites of both countries were increased from 2001 to 2009. The first Indo-Pak cyber war between Indian Cyber Army (ICA) and Pakistan Cyber Army (PCA) erupted on 26 November 2010, at the second anniversary of the Mumbai Attack. ICA attacked 870 Pakistani websites along with 34 government websites including the sites of the navy, maritime security agency, foreign ministry and economic affairs ministry. Indian hackers posted “Our objective of launching cyber attacks was to pay our homage to the martyrs of 26/11,” and some other sentences in the home pages of the websites that they hacked.¹² As revenge, PCA hacked 270 Indian websites on 3 December 2010. They hacked The Central Bureau of Investigation (CBI)’s website and it took the CBI nearly a month to restore its website. The hacker posted a message that was “Let us see what you investigating agency so called CBI can do”.¹³ On 26 January 2012, on the Republic day of India; ‘Jaguar Hacker’ an Indian based hacker group defaced 21 Pakistani websites. They posted a picture of the Indian national and wrote “Nothing Personal But Its Just That Today Is Our Republic Day.”¹⁴ And the retaliation to this attack, Pakistani Z Company Hacking Crew hacked 400 Indian websites. They posed that “you claim to be the largest democracy in the world but when it comes to Kashmir and Kashmiri people, you tend to forget all your democratic principles. You kill our fathers, our brothers, shoot down teenagers point blank and detain them under draconian laws.....After years of atrocities and oppression we say that we will Rise and Rise Again ... Until Lambs become Lions !!!.”¹⁵ Hackers of these two rival countries were also hacked websites on cricket games. When Pakistan cricket team defeated India in the Asia Cup on 2 March 2014; the next day, 67 Kashmiri students of Swami Vivekanand Subharti University were suspended by the authority for having cheered and distributing sweets for Pakistan. In response, Pakistan Cyber Army hacked that university’s website on 5 March 2014.¹⁶ On 27 September 2015, the official website of the Government of Kerala, India has been hacked by a hacker from Pakistan. The hacker posted a picture of the National flag of India being burned and the messages “Pakistan Zindabad” on the home page of the hacked website.¹⁷ After a few hours, ‘Mallu Cyber Soldiers’ and ‘Hell Shield Hackers’ the hacker groups of India hacked 120 Pakistani website including Pakistani government’s; Pakistani President’s and Cabinet’s websites. Mallu Cyber Soldiers posted image of burning Pakistan flag with messages “Better stay away from Indian Cyber Space” in the defaced website’s home page.¹⁸ Another cyber war between India and Pakistan has been taken place in October 2016 after a military operation by Indian forces crossing to Pakistani border last 29 September 2016. Indian security forces crossed Pakistan occupied Kashmir border and operated ‘Surgical Strike’ in response of the killing of 19 Indian soldiers by unknown group in India occupied Kashmir last 18 September 2016. After that operation, Pakistani hackers launched a cyber war against India.

¹¹ Ibid, p. 158.

¹² Sandeep Unnithan, “Inside the Indo Pak Cyber Wars”, India Today, 18 March 2011.

¹³ Aljazeera, India and Pakistan in cyber war, 4 December 2010, <http://www.aljazeera.com/news/asia/2010/12/20101241373583977.html> (Last Viewed: 10 November 2016).

¹⁴ Mid Day, Indo-Pak cyber war on Jan 26, 28 January 2012, <http://www.mid-day.com/articles/indo-pak-cyber-war-on-jan-26/152187> (Last Viewed: November 2016).

¹⁵ Ibid.

¹⁶ Rfsid, Ibid.

¹⁷ The Hindu, Kerala Government website hacked, 27 September 2015, <http://www.thehindu.com/news/national/kerala/government-website-hacked/article7694665.ece> (Last Viewed: 17 November 2016)

¹⁸ Jisha Surya, More than 120 Pak websites hacked in response to defacing of Kerala govt website, 27 September 2015, <http://timesofindia.indiatimes.com/city/thiruvananthapuram/articleshow/49127010.cms?> (Last Viewed: 10 November 2016)

Pakistani hacker groups – the Pakistan Haxors Crew and Pakistani Rookie Hackers have claimed that they hacked more 7000 Indian websites as revenge.¹⁹ On the other hand, Indian hacker groups launched ‘cyber surgical strikes’ as reply of the attacks by the Pakistani hacker groups. They signed the Pakistan government network and locked computers and data kept the Pakistani sites under their control.²⁰ Cyber attackers from Pakistan and India are also hacking the rival country’s websites when they get any controversial issues.

3.2 Bangladesh-India Cyber War

‘Cyber war’ between the hacker groups of Bangladesh and India has been mostly started in 2012. On 7 January 2011, Indian Border Security Force killed a 15 years old Bangladeshi girl named ‘Felani Khatun’ in Bangladesh-India border. And in the first anniversary of that killing; Bangladeshi hacker groups - Bangladesh Black Hat Hackers (BBHH) and Bangladesh Cyber Army (BCA) started a massive attack on Indian websites. BCA defaced more than 1100 Indian websites in January 2012.²¹ And after a week, Indian Hacker groups announced a ‘cyber war’ against Bangladesh. Indian hacker group Silent Hacker defaced 30 Bangladeshi government websites. In response, Bangladeshi hacker groups hacked the websites of the largest telecommunication service, television as well as stock market. In February 2012, Bangladesh Black Hat Hackers defaced India’s No. 1 Telecommunications Services Provider, BSNL (Bharat Sanchar Nigam Ltd) website with Distributed denial of service attack (DDOS).²² Bangladesh Cyber Army (BCA) hacked more than 30 Indian government sites on the same month. On 15 February 2012, BCA defaced three important stock market sites of Indian: desindian, nseindian, and paisacontrol, these websites were apparently down for hours during its peak time.²³ BCA posted a video on the page of hacked websites as a statement; they demand to stop hacking initiatives of Indian hackers, to stop border killing by BSF, to stop Tipaimukh Dam, to stop broadcasting of Indian media in Bangladesh and some other demand.²⁴ In 2012, Bangladeshi hacker groups – Bangladesh Black Hat Hackers, Expire Cyber Army, Bangladesh Cyber Army and Indian hacker groups – Indian Cyber Army, Indishel hacked thousands of government and non-government websites of their rival countries. Indian cyber hacker groups claimed that the Bangladeshi hackers hacked over 6,000 of Indian websites while Bangladeshi hackers claimed that the Indian hackers hacked more than 3,000 Bangladeshi websites.²⁵ In January 2013, 2 years after the killing of ‘Felani Khatun’, Bangladesh Grey Hat Hackers hacked more than 1,000 Indian websites and another hacker group – Bangladesh Cyber Army hacked around 3,000 Indian websites as protest

¹⁹ Vijay Prabhu, ‘Cyber Surgical Strikes’ Pakistani websites hacked by Indian hackers, 7 October 2016, <http://www.techworm.net/2016/10/cyber-surgical-strikes-pakistani-websites-hacked-indian-hackers.html> (Last Viewed: 17 November 2016).

²⁰ Shashank Shekhar, ‘Patriotic’ Indian hackers lock Pakistani websites and refuse to give back the key, 7 October 2016, <http://www.dailymail.co.uk/indiahome/indianews/article-3825751/> (Last Viewed: 17 October 2016).

²¹ Paolo Passeri, ‘Timeline Of Cyber War Between Bangladesh and India’, 24 March 2012, <http://www.hackmageddon.com/2012/03/24/timeline-of-cyber-war-between-bangladesh-and-india/> (Last Viewed: 21 November 2016).

²² E Hacking News, BSNL.co.in taken down by Bangladesh Black Hat Hackers(BBHH), 16 February 2012, <http://www.ehackingnews.com/2012/02/bsnlcoin-taken-down-by-bangladesh-black.html> (Last Viewed: 25 October 2016).

²³ Voice of Grey Hat, Bangladesh Cyber Army (BCA) Hit Indian Stock Market, 15 February 2012, <http://www.voiceofgreyhat.com/2012/02/bangladesh-cyber-army-bca-hit-indian.html> (Last Viewed: 11 November 2016).

²⁴ Bangladesh Cyber Army, BSF Killed an Innocent Civilian. So We Gonna Attack in Their Stock Market, 14 February 2012, https://www.youtube.com/watch?v=M_SKc3ay8_c (Last Watched: 18 October 2016).

²⁵ Bangladesh Defense, ‘Bangladesh-India Cyber War’, February 2012, <http://www.defencebd.com/2012/02/bangladesh-india-cyber-war.html> (Last Viewed: 12 November 2016).

against the border killing by BSF. The hacker posed a video, which had some statements including that text - "After exactly one year, Bangladesh Cyber Army is back once again with their attacks on Indian Cyber Space."²⁶ Bangladeshi hackers group – Black Hat Hackers hacked a website of Congress MP and former Union Minister Shashi Tharoor in March 2015; at the time of World Cup cricket. They claim that, Indian cricket team underestimating Bangladesh team.²⁷ And in March 2016, Indian hackers hacked more than 20 Bangladesh-based websites, including three government domains. It was retaliation to a Bangladeshi fan's photoshopped image of Bangladesh bowler carrying the severed head of Indian skipper which went viral on social media.²⁸ Bangladeshi hackers hacks Indian websites when any border killing occurred by Indian forces BSF in Bangladesh-India border.

3.3 Bangladesh-Pakistan Cyber War

Cyber war between Bangladesh and Pakistan has started in 2012. In December 2012, Pakistan Cyber Army hacked 26 Bangladesh government websites. And as a reply, Bangladesh Grey Hat Hackers hacked several government websites of Pakistan. They obtained some important information from the databases of the Lahore High Court and of the Pakistan Army. Hackers warned by a message wrote on the deface sites that, "It's a last warning to the government of Pakistan. We can see hackers from your country continuously attacking our government's sites. We have already warned them. Now it is your duty to choose the path of war or peace."²⁹ In January 2015, a Bangladeshi hackers group hacked the official website of Jamaat-e-Islami Pakistan. They warned the party to stop interfering in Bangladesh's internal affairs and posted the following message, "Hello Pakistan Jammata.. !! Got hacked again? One more time take wish from CyBER 71. don't be scared.. You must have heard about us on server administrator, News paper , Tv channel headlines , blogs , online news media, blah blah."³⁰ On 15 July 2015, Pakistani hackers hacked some Bangladeshi websites. And on 19 July Bangladeshi hackers group Blacksmith Hacker's Team hacked Pakistani President Mamnoon Hussain's website and another 72 Pakistani government websites as revenge.³¹ On later days of that month, young Pakistani startup DeliveriT was hacked by Cyber71 on 23 July and another startup Quick & Easy Grocery (QNE) was hacked on 27th July by oRionShunter. These two hacking incidents were done by Bangladeshi hackers.³² The numbers of hacking incidents are increasing day by between hackers of the two rival countries.

²⁶ E Hacking News, Around 3000 Indian sites hacked by Bangladesh Cyber Army in Memory of 15-Year-Old Girl, 9 January 2013, <http://www.ehackingnews.com/2013/01/3k-indian-sites-defaced-by-bangladesh-hackers.html> (Last Viewed: 01 November 2016).

²⁷ Daily News and Analysis, Bangladeshi hackers take over Shashi Tharoor's official website, target Team India, 15 March 2015, <http://www.dnaindia.com/india/comment-india-2069538> (Last Viewed: 14 November 2016).

²⁸ Shashank Shekhar, Indian hackers target 20 Bangladesh-based websites 'in revenge' after morphed picture of cricketer Dhoni goes viral, 8 March 2016, <http://www.dailymail.co.uk/indiahome/article-3481184/> (Last Viewed: 16 November 2016).

²⁹ Eduard Kovacs, Bangladeshi Hackers Fight Back, Hack Pakistani Government Sites, 10 December 2012, <http://news.softpedia.com/news/Sites-313309.shtml> (Last Viewed: 20 November 2016).

³⁰ The Express Tribune, Bangladeshi hackers take down JI's website, 20 January 2015, <http://tribune.com.pk/story/824698/bangladeshi/> (Last Viewed: October 2016).

³¹ Waqas, "Cyberwar: Pakistani President's Website Hacked by Bangladeshi Hackers", 19 July 2015, <https://www.hackread.com/pakistani-president-website-hacked/> (Last Viewed: 27 October 2016).

³² Sarwat Fatima, "Bangladeshi Hackers seem to have taken a liking for Pakistani Startups", 28 July 2015, <https://www.techjuice.pk/bangladeshi-hackers-seem-to-have-taken-a-liking-for-pakistani-startups/> (Last Viewed: 12 October 2016).

3.4 Bangladesh Bank Heist 2016

On February 2016, hackers succeeded to hack an official's computer of Bangladesh Central Bank and used SWIFT credentials for issuing transactions from Federal Reserve Bank of New York. Hackers send more than three dozen fraudulent money transfer requests asking the bank to transfer millions of the Bangladesh Bank's funds;³³ and the Reserve Bank of New York cleared five transactions on 4 February and it sent \$20 million to Sri Lanka and \$81 million to four individual account with Rizal Commercial Banking Corp (RCBC) in the Philippines - for \$6 million, \$30 million, \$20 million and \$25 million. The Sri Lankan transaction contained a crucial error, that's why Bangladesh Bank has got \$20 million back.³⁴ On 12 November 2016, Bangladesh has succeeded to receive \$15 million from the Philippines among the amount of \$81 million transferred by the hackers. Philippines casino boss Kim Wong had surrendered to Philippines anti-money laundering council and returned \$4.63 million and 488.28 million pesos (\$10.05 million) from the millions of dollars he took from two Chinese high-rollers.³⁵ It has taken a long legal process to get return \$15 million from the Philippines authority. And rest of the heist money still missing and has disappeared into casinos in the Philippines. Bangladesh and the Philippines authority are jointly working for recovering the missing money.

4. CONCLUSION

In the case of South Asia, cyber attacks are continuously happening between India, Pakistan and Bangladesh. Different hacker groups are conducting cyber attacks in the rival nation's public and private websites. These attacks are being conducting as a revenge of terrorist attacks, killing in the borders and even about the game. And sometimes it's happening on the Independence Day. Some groups such as Indian Cyber Army (ICA), Bangladesh Cyber Army (BCA), Pakistan Cyber Army (PCA), Z Company Hackers Crew (ZHC), Pakistani Hackers Club (PHC), Hindustan Hackers Organisation (H2O), Bangladesh Black Hat Hackers and other groups are mostly popular in conducting the attacks to the other countries websites. These groups are describing their hacking activities against rival countries as a 'cyber war' and it is mostly popular among the hacker groups in South Asia. Most of the attacks were conducted aiming some conflicting national issues among the countries. Hackers sometimes hacked the websites of stock exchanges, courts, security forces, economic institutions those were created big problems for the victim counters. Although, the incidents are now limited at the hackers level, it would be turned into a real technological weapon of war between these counters in future. Bangladesh can be the most important example in this aspect. It is the most recent victim of cyber heist. Cyber hackers tried to illegally transfer US\$951 million to several bank accounts around the world. And they succeeded to get \$81 million to the Philippines and \$20 million to Sri Lanka. This heist can be described as the biggest attack on Bangladesh's national security. Such kinds of attack may happen against other countries. The dangers are enormous. "The worst attacks would be ones that physically destroy

³³ Raju Gopalakrishnan and Manuel Mogato, Bangladesh Bank official's computer was hacked to carry out \$81 million heist: diplomat, 19 May 2016, <http://www.reuters.com/article/us-cyber-heist-philippines-idUSKCN0YA0CH> (Last Viewed: 25 October 2016).

³⁴ The Daily Star, How millions from the Bangladesh Bank heist disappeared, 22 July 2016, <http://www.thedailystar.net/business/how-millions-the-bangladesh-bank-heist-disappeared-1257367> (Last Viewed: 21 November 2016).

³⁵ The Daily Observer, Philippines returns \$15m of stolen money to BD, 13 November 2016, <http://www.observerbdt.com/details.php?id=43291> (Last Viewed: 23 November 2016).

infrastructure— wrecking big electric generators, blowing up oil refineries, disrupting pipelines, crashing trains in tunnels, causing toxic chemicals to leak from chemical plants, and so forth.”³⁶ If the governments do not take proper steps to control these illegal initiatives; ‘cyber war’ could be more destructive among the three irreconcilable south Asian nations India, Pakistan and Bangladesh. Strong IT policy, intelligent technical management, strong IT department and mutual cyber security law should be taken to minimize the national security threat in this region.

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³⁶ Robert S. Dudney, “Rise of the Cyber Militias”, AIR FORCE Magazine, February 2011, p. 89. <http://www.airforcemag.com/MagazineArchive/Documents/2011/February%202011/0211cyber.pdf> (Downloaded Date: 15 October 2016).

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