Subject:- Advisory - Prevention Against Cyber Espionage (Advisory No 14 July 2016)

1. <u>Introduction.</u> A malicious email titled as "Unable to deliver your item,#00507979"is being sent to officers and staff of Government departments. The email is a **zip file** that contains a **JavaScript malware.** Downloading and extracting the file, executes malware in the background that results in hacking of the computer.

2. <u>Summary of Malicious Email</u>

- **a. Subject.** Unable to deliver your item,#00507979.
- **b.** File Name. Label_005079797.zip.
- c. <u>File Type.</u> Archive File Format (.zip)
- d. Malware Type. JavaScript Based exploit

3. <u>C&C (Command & Control) Servers.</u>

Ser	URL	IP	Country
a.	webcluster233.one.com	46.30.212.233	Denmark
b.	turabiruggallery.com	67.231.240.143	USA
c.	originsweden.com	46.30.212.233	Denmark
d.	hoppersindoorsportz.net.au	43.229.63.14	Australia
e.	xnb1amg7e.xnp1ai		
	lovimoment77.ru		

- 4. <u>Indicators of compromise.</u> In case if following files and folders are found in the computer, it means that computer is compromised:
 - a. C:\Users\admin\AppData\Local\Temp**7581012.exe**
 - **b.** C:\Users\admin\AppData\LOcal\Temp**7581011.exe**
 - c. C:\Users\admin\AppData\Local\<rand.no>\<rand.no .bat>
 - d. C:\Users\admin\AppData\LocaR<rand.no>\<rand.no .exe>

5. Capabilities of Malware.

- **a.** Upon opening the **.js** file, malware launches a script in the background.
- **b.** The malware downloads numerous executables from its C&C servers and tampers with windows registry to make itself non-deleteable.

- **c.** The malware uploads .IP address, Computer name, Network Settings and operating system details to its C&C servers.
- **d.** The malware steals passwords from victim's browsers and uploads victim's files to its C&C server.
- **e.** The malware communicates with a huge pool of random C&C servers but has a high detection ratio.
- f. The malware has ability to make itself dormant to avoid detection and , registers itself via Microsoft Reg. Server. (regsvr32.exe)
- g. The malware also sometimes acts like a fake ransomware to lure the victim into downloading more malicious executables from its C&C server.

6. Recommendations

- a. In case if indicators of compromise (para 4) are found in the system, please disconnect the computer from Internet and reinstall Windows.
- **b.** Block C&C Servers at para 3 in firewalls of own networks.
- c. Install and update well reputed antiviruses such as Kaspersky, Bitdefender, Nod 32, Avast etc.
- **d. Update all softwares** including Windows OS, Microsoft Office and all other softwares.
- **e.** Install and regularly update software firewall such as Comodo Firewall or Zonealarm.
- **f.** Don't download attachments from emails unless you are sure about the source.