Draft Rules under section 70B(5) of Information Technology (Amendment) Act, 2008

THE GAZETTE OF INDIA

EXTRAORDINARY

Part II – Section 3, Sub-Section (i) MINISTRY OF COMMUNICATIONS AND INFORMATION TECHNOLOGY

(Department of Information Technology)

NOTIFICATION

New Delhi , _____, 2009

G.S.R ---- In exercise of the powers conferred by Section 87 of the Information Technology (Amendment) Act, 2008, the Central Government hereby makes the following rules, namely:

1. (1) These rules may be called the Information Technology (The Indian Computer Emergency Response Team and manner of performing functions and duties) Rules, 2009

(2) They shall come into force on the date of their publication in the Official Gazette.

2. Definitions. - In these Rules, unless the context otherwise requires,--

- a) "Act" means the Information Technology (Amendment) Act, 2008;
- b) "Computer contaminant" means computer contaminant as defined in section 43 (i) of the Information Technology Act, 2000;
- c) "Computer emergency response" means to coordinate communication during cyber security emergencies, provide incident response services to users, publish alerts concerning vulnerabilities and threats, and offer information to help improve cyber security
- d) "Computer resource" means computer resource as defined in section 2(1)(k) of the Information Technology Act, 2000;
- e) "Computer security incident" means cyber security incident

- f) "Cyber security" means cyber security as defined in section 2(1)(nb) of the Information Technology (Amendment) Act, 2008;
- g) "Cyber security incident" means any real or suspected adverse event in relation to cyber security that violates an explicit or implied security policy resulting in unauthorized access, denial of service/ disruption, unauthorized use of a computer resource for processing or storage of information or changes to data, information without authorization;
- h) "Cyber security breaches" means unauthorized acquisition by a person of data or information that compromises the confidentiality, integrity or availability of information maintained in a computer resource;
- i) "Director General" means the Director General of the Indian Computer Emergency Response Team
- j) "Indian Computer Emergency Response Team" means the Indian Computer Emergency Response Team set up under sub section (1) of section 70(B) of the Act
- k) "Information" means information as defined in section 2(1)(v) of the Information Technology Act, 2000;
- I) "Information security practices" means implementation of security policies and standards in order to minimize the cyber security incidents and breaches;
- m) "Vulnerability" means the existence of a flaw or weakness in hardware or software of a computer resource that can be exploited resulting in their adverse or different functioning other than the intended functions.

3. The Indian Computer Emergency Response Team (herein after called CERT-In) functions at Department of Information Technology, Ministry of Communications and Information Technology and is located at "Electronics Niketan", 6, CGO Complex, Lodhi Road, New Delhi – 110003.

4. Authority

CERT-In shall be a part and under the administrative control of the Department of Information Technology, Ministry of Communications and Information Technology. It shall operate under the authority delegated under the section 70(B) of the Act. 5. CERT-In is headed by a Director General. It functions on 24 hours basis on all days of the year including government and other holidays. CERT-In is located at the following address:

Indian Computer Emergency Response Team (CERT-In) Department of Information Technology Ministry of Communications & Information Technology Government of India Electronics Niketan 6, CGO Complex, Lodhi Road New Delhi - 110 003 India

The contact details of CERT-In are published on its website **www.cert-in.org.in** and are updated from time to time.

6. Advisory Committee

An Advisory Committee shall advise CERT-In on policy matters and services related to cyber security to enable it to fulfill its mandated roles and functions. The Advisory Committee shall have the following composition:

i.Secretary/Special Secretary, Department of Information TechnologyChairman

ii.Representative of Ministry of Home Affairs	Member
iii.Representative of Ministry of Law	Member
iv.Representative of Department of Telecommunications	Member
v.Representative of National Security Council Secretariat	Member
vi.Representative of National Technical Research Organisatio	n Member
vii.Representative of IISc, Bengaluru	Member
viii.Representative of NASSCOM	Member
ix.Director General, CERT-In	. Member Convener

7. Constituency

CERT-In constituency shall be the Indian cyber community.

8. Functions and responsibilities of CERT-In

CERT-In shall have functions as prescribed in section 70B of Information Technology (Amendment) Act, 2008. It shall function as the trusted referral agency for cyber users in India for responding to cyber security incidents and will assist cyber users in the country in implementing measures to reduce the risk of cyber security incidents.

9. Services

CERT-In shall broadly provide following services:

- (a) Response to cyber security incidents
- (b) Prediction and prevention of cyber security incidents
- (c) Analysis and Forensics of cyber security incidents
- (d) Information Security Assurance
- (e) Awareness and technology exposition in the area of cyber security

10. Stakeholders

CERT-In shall interact with and seek assistance from following stakeholders to collect, share and disseminate information and also to respond and prevent cyber security incidents.

- i. Sectoral CERTs
- ii. Intermediaries
- iii. Internet Registry and Domain Registrars
- iv. Industry
- v. Vendors Information Technology products including security products and services
- vi. Academics, Research & Development organizations
- vii. Security and Law Enforcement agencies
- viii. Individuals or group of individuals
- ix. International CERTs, Forums and expert groups

11. Policies and procedures

11 (1) Types of Incidents and Level of Support

(a) CERT-In shall address all types of cyber security incidents which occur or expected to occur in the country. The level of support given by CERT-In will vary depending on the type and severity of the incident, affected entity, be it individual or group of individuals, organizations in the Government, public and private domain, and the resources available with CERT-In at that time, though in all cases some response will be made in a shortest possible time. Resources will be assigned according to the following priorities listed in decreasing order:

- i. Threats to the physical safety of human beings due to cyber security incidents
- ii. Cyber security incidents of severe nature (such as Denial of Service, Distributed Denial of Service, intrusion, spread of computer contaminant,) on any part of the public information infrastructure including backbone network infrastructure
- iii. Large-scale and/or most frequent incidents such as identity theft, intrusion into computer resource, defacement of websites etc.
- iv. Compromise of individual user accounts on multi-user systems
- v. Types of incidents other than those mentioned above will be prioritized according to their apparent severity and extent.
- (b) CERT-In shall endeavour to respond and present information and assistance to the affected entities to deal with cyber security incidents as appropriate. The ultimate responsibility of the security of the computer resource shall rest with owner of the computer resource.

11 (2) Cooperation and collaboration

CERT-In shall collaborate with:

- I. organizations within and outside the country engaged in the specialized areas in protecting and responding to cyber security incidents.
- II. organizations engaged in collection of intelligence in general, Law Enforcement, Investigation and forensics

- III. Academia, Industry, Service providers and Research & Development institutions
- IV. Individuals or group of individuals

11 (3) Communication and authentication with CERT-In

The stakeholders and public at large can communicate with the CERT-In through communication systems ranging from Telephone, Fax, email and postal letters. The appropriate procedures will be disseminated through its website from time to time.

12. CERT-In Operations

12 (1) Incident Reporting and Response

CERT-In shall operate an Incident Response Help Desk on 24 hours basis on all days including Government and other public holidays to facilitate reporting of cyber security incidents.

- (a) Who can report: Any individual, organization or corporate affected by cyber security incidents may report the incident to CERT-In. Service providers, intermediaries, data centers and body corporate shall report the cyber security incidents of following nature to CERT-In within a reasonable time of occurrence or noticing the incident:
 - Repeated scanning or probing of critical computer networks and systems
 - Compromise of or unauthorised access to critical computer networks, systems or information
 - Defacement of or intrusion into website
 - Detection of large scale propagation of computer contaminant
 - Identity Theft, and phishing incidents
 - Denial of Service (DoS) and Distributed Denial of Service (DDoS) incidents

(b) Method of reporting:

Cyber security incidents and vulnerabilities may be reported to CERT-In through the following methods:

(i) Incident Reporting

Email: incident@cert-in.org.in

The contact details of CERT-In Incident Response Helpdesk are published on its website **www.cert-in.org.in.**

(ii) Vulnerability Reporting

The vulnerabilities are to be reported to the CERT-In Information Desk.

Email: info@cert-in.org.in

The contact details of CERT-In Information Desk are published on its website www.cert-in.org.in.

(c) Formats of Incident Report and Vulnerability Report

The detailed information regarding cyber security incident and details of affected entity are to be furnished to CERT-In in the format given in Annexure I. The vulnerability is to be reported in the format prescribed in Annexure II.

(d) Verification

CERT-In shall verify the authenticity of the report prior to determination of suitable response actions and related priorities.

(e) Acknowledgement of Incident report

After verification of incident report CERT-In will analyse the information provided by the reporting authority and confirm the existence of an incident. In case it is found that an incident has occurred, a tracking number will be assigned to the incident. Accordingly, the report will be acknowledged and the reporting authority will be informed of the assigned tracking number. This tracking number is to be used in all related correspondence with CERT-In.

CERT-In may not respond to queries or comments received by the Incident Response Help Desk which are not related to its functions.

(f) Incident Response

Following the acknowledgement of the incident reported, CERT-In will analyse the information provided therein and may ask for additional information related to

the reported security incident. Thereafter CERT-In shall initiate incident response process as may be necessary.

CERT-In shall provide technical advice to the reporting entity through email, telephone, fax or postal mail for resolving the cyber security incident.

CERT-In may not physically deploy or send any member of its staff for attending the incident response activity at the site of occurrence. The priority of assisting in responding to the incidents will be decided by CERT-In keeping in view the severity of incident and availability of resources as described in sub rule (1) (a) of rule 11.

CERT-In shall assist the reporting entity in following broad aspects of incident handling:

- Identification: to determine whether an incident has occurred, if so in analyzing the nature of such incident, identification and protection of evidence and reporting of the same.
- Containment: to limit the scope of the incident quickly and minimise the damage
- Eradication: to remove the cause of the incident
- Recovery: taking steps to restore normal operation

(g) Incident response coordination

While handling the cyber security incidents, CERT-In shall coordinate the response activities with all agencies concerned including service providers and other Incident Response teams as appropriate.

(h) Closing of incident

After successful mitigation and recovery from incident, the incident is classified as "closed" and communication to this effect shall be sent to the reporting entity and other entities as required.

12 (2) Vulnerability Reporting and Remediation

CERT-In shall collect and analyze information on vulnerabilities in various IT systems and devise suitable countermeasures. CERT-In shall disseminate information regarding vulnerabilities and solutions in the form of vulnerability notes and advisories through its website and to those in the mailing list maintained by CERT-In.

A vulnerability discovered or observed in a Information Technology product, Operating System or an Application Software may be reported to CERT-In in the manner and format mentioned in rule (12) (1) (b) and (12) (1) (c).

CERT-In shall analyse the information and suggest appropriate measures to mitigate the associated risk in coordination with vendors concerned.

12 (3) Information Dissemination

CERT-In shall make efforts to collect and analyse information on threats and vulnerabilities in various computer platforms, operating systems, applications, network devices etc and devise countermeasures to mitigate the risk.

CERT-In shall disseminate information on cyber security issues in the form of advisories, vulnerability notes, virus alerts, whitepapers and monthly security bulletins. In addition CERT-In may also publish appropriate guidelines for securing the information infrastructure from time to time.

Information on specific cyber security incidents affecting particular organization shall be shared only with Point of Contact of said organization through secure communication channel.

(a) Methods for information dissemination

The information is disseminated by CERT-In in following methods:

- I. Website: www.cert-in.org.in
- II. Email: Mailing list (advisory@cert-in.org.in)
- III. Telephone
- IV. Postal mail

12. (4) Sharing and reporting of information on cyber security

Any person may share and report information on cyber security to CERT-In Information Desk through following methods:

Email: info@cert-in.org.in

The contact details of CERT-In Information Desk are published on its website **www.cert-in.org.in** from time to time.

The person reporting or sharing information with CERT-In may choose to reveal his/her identity or remain anonymous. The disclosure of the information reported or shared by the person shall be governed by the provisions under rule (13).

13. Disclosure of information

13 (1) During the course of interaction with user community and discharging its functions CERT-In may collect and analyse information relating to cyber security incidents from individuals, organizations and computer resource. CERT-In shall follow applicable legal restrictions, orders of Indian competent courts and ethical practices with regard to disclosure of information.

13 (2) CERT-In shall not disclose any information which may lead to identification of individual, group of individuals or organizations affected by cyber security incidents without the explicit written consent or orders of Indian competent courts. CERT-In shall take appropriate measures to protect such information and shall also not disclose the identity of individuals, group of individuals and organizations sharing the information and reporting cyber security incidents to it, without their explicit written consent or orders of Indian competent courts.

13 (3) CERT-In may share or disclose the general trends of cyber security incidents, cyber security breaches freely to assist general public for the purpose of resolving and preventing cyber security incidents and promoting awareness.

13 (4) Save as provided in sub rule (1),(2),(3) of rule 13, it may be necessary or expedient to so to do, for CERT-In to disclose all relevant information to the stakeholders, in the interest of sovereignty or integrity of India, defence of India, security of the State, friendly relations with foreign States or public order or for preventing incitement to the commission of an offence relating to cognizable offence or enhancing cyber security in the country.

14. Seeking information and giving directions for compliance in terms of sub section (6) of section 70 (B) of the Act

14 (1) Purpose

For carrying out its functions prescribed in section 70 (B) of the Act, CERT-In may seek information and give directions for compliance to the service providers, intermediaries, data centres, body corporate and any other person, as may be necessary.

14 (2) Authority and delegation

Any officer of CERT-In, not below the rank of Deputy Secretary to the Government of India may seek information from service providers, intermediaries, data centres, body corporate and any other person for carrying out the functions provided in sub-section (4) of section 70(B) the Act.

14 (3) Format for submission of information

The information sought by CERT-In shall be submitted within the duration and in the format prescribed alongwith the communication sent for seeking the information.

14 (4) Manner of seeking and submission of information

CERT-In may seek the information through digitally signed email, fax or registered postal mail. The information shall be submitted to CERT-In through any suitable communication channel such as digitally signed email, fax, registered postal letters, Read only Compact Disc or Read only Digital Versatile Disc, depending upon the volume of information and as prescribed by CERT-In.

15. Directions for compliance

In pursuance of its mandated roles and functions as provided in sub-section (4) of section 70(B) the Act and with a view to enhancing cyber security of the information infrastructure in the country, CERT-In may issue directions to service providers, intermediaries, data centres, body corporate and any other person. Such directions for compliance shall be issued by an officer not below the rank of Director to the Government of India through digitally signed email, fax or registered postal mail. The service providers, intermediaries, data centres, body corporate and any other person shall comply with such directions and also report to CERT-In, within the time period and the manner as provided in the direction.

16. Point of Contact

The service providers, intermediaries, data centres and body corporate shall designate a Point of Contact to interface with CERT-In. The information relating to a point of contact shall be sent to CERT-In in the prescribed format and shall be updated from time to time. All communications from CERT-In seeking

information and providing directions for compliance shall be sent to the said point of contact.

17. Dealing with non compliance

All cases of non compliance with respect to the communications seeking information under rule 14 and directions issued for compliance under rule 15 shall be submitted to the Review Committee constituted under rule 18. Based on the direction of the Review Committee, appropriate action may be initiated by the Director General or by an officer authorized in this behalf by the Director General.

18. Review Committee

18 (1) A Review Committee shall be constituted by the Central Government to review the;

- i. non compliance of the communication issued to the service providers, intermediaries, data centres, body corporate and any other person seeking information under rule 14;
- ii. non compliance of the directions issued to the service providers, intermediaries, data centres, body corporate and any other person under rule 15;

18 (2) The Review Committee shall consist of the following:

i.	Secretary, Department of Information Technology	Chairman
ii.	Joint Secretary of Ministry of Law	Member
iii.	Joint Secretary, Department of Telecommunications	Member
iv.	Joint Secretary, Ministry of Home Affairs	Member

The Review Committee shall meet as often as necessary.

19. Protection for actions taken in good faith

All actions of CERT-In and its staff acting on behalf of CERT-In are taken in good faith in fulfillment of its mandated roles and functions, in pursuance of the provisions of the Act or any rule, regulations or orders made thereunder. CERT-In and its staff acting on behalf of CERT-In shall not be held responsible for any unintended fallout of their actions.

Annexure I

Incident Reporting Form

Form to report Incidents to CERT-In							
For official use only: Incident Tracking Number : CERTIN-XXXXX							
1. Contact Information	for this Incident:						
Name:	Organisation:		Title:				
Phone / Fax No:	Mobile:		Email:				
Address: 2. Sector : (Please tick the appropriate choices)							
Government Financial Power	Transportation Manufacturing Health	Telecommunication Academia Petroleum	าร	InfoTech Other			
 Physical Location of 4. Date and Time Incic 	Affected Computer/ Net Affected Computer/ Net	twork and name of ISP.					

5. Is the affected system/network critical to the organisation's mission? (Yes / No). Details. 6. Information of Affected System: IP Address: Computer/ Host Name: Operating System (including Version/ release No.) Last Patched/ Updated 7. Type of Incident: Phishing Network scanning /Probing Break-in/Root Compromise Spam Bot/Botnet Email Spoofing Denial of Service(DOS) Virus/Malicious Code Website Defacement System Misuse Spart (Service(DOS)) User Account Compromise 8. Description of Incident:	Date:			Time:			
IP Address: Computer/ Host Name: Operating System (including Version/ release No.) Last Patched/ Updated Hardware Vendor/ Model 7. Type of Incident: Spam Website Intrusion Social Engineering Phishing Network scanning /Probing Break-in/Root Compromise Spam Website Intrusion Social Engineering Virus/Malicious Code Website Defacement Denial of Service(DoS) Technical Vulnerability IP Spoofing System Misuse User Account Compromise Other	5. Is the affected system/network critical to the organisation's mission? (Yes / No). Details.						
release No.) release No.) 7. Type of Incident: Spam Phishing Spam Network scanning /Probing Bot/Botnet Break-in/Root Email Spoofing Compromise Denial of Service(DoS) Virus/Malicious Code Distributed Denial of Service(DDOS) System Misuse User Account Compromise	IP Address: Com	puter/	Operating	•			
PhishingSpamWebsite Intrusion Social EngineeringNetwork scanning /ProbingBot/BotnetTechnical Vulnerability IP SpoofingBreak-in/Root CompromiseEmail Spoofing Denial of Service(DoS)OtherVirus/Malicious Code Website DefacementDistributed Denial of Service(DDoS)OtherSystem MisuseUser Account CompromiseImage: Account Compromise	Host	Name:	ι σ			3	Vendor/ Model
Network scanning /ProbingBot/BotnetSocial EngineeringBreak-in/RootEmail SpoofingTechnical VulnerabilityCompromiseDenial of Service(DoS)OtherVirus/Malicious CodeDistributed Denial ofService(DDoS)Website DefacementService(DDoS)User Account Compromise	7. Type of Incident:						
8. Description of Incident:	Network scanning /ProbingBot/BotnetBreak-in/RootEmail SpoofirCompromiseDenial of SerVirus/Malicious CodeDistributed DoWebsite DefacementService(DDoS)			vice(DoS) enial of		Social Techn IP Spo	Engineering ical Vulnerability pofing
	8. Description of Incident	t:					
14							

9. Unusual behavior/symptoms (Tick the symptoms)					
	Anomalies				
System crashes	Suspicious probes				
New user accounts/ Accounting discrepancies	Suspicious browsing				
Failed or successful social engineering attempts	New files				
Unexplained, poor system performance	Changes in file lengths or dates				
Unaccounted for changes in the DNS tables, router rules, or firewall rules	Attempts to write to system				
Unexplained elevation or use of privileges	Data modification or deletion				
Operation of a program or sniffer device to	Denial of service				
capture network traffic;	Door knob rattling				
An indicated last time of usage of a user account that	Unusual time of usage				
does not correspond to the actual last time of usage	Unusual usage patterns				
for that user	Unusual log file entries				
A system alarm or similar indication from an	Presence of new setuid or setgid files				
intrusion detection tool	Changes in system directories and files				
Altered home pages, which are usually the	Presence of cracking utilities				
intentional target for visibility, or other pages on	Activity during non-working hours or holidays				
the Web server					
	Other (Please specify)				
10. Has this problem been experienced earlier? If yes, details.					
11. Agencies notified?					
Law Private Agency Affected Product Vendor Other					
12. When and How was the incident detected:					
13. Additional Information: (Include any other details not	ticed, relevant to the Security Incident.)				

Whether log being submitted		Mode of submission:				
	OPT	ΓΙΟΝΑ	LINFO	RMATION		
14. IP Address of Apparent or	Suspected	d Sourc	ce:			
Source IP address:			Other	information a	vailable:	
15. Security Infrastructure in p	place:		<u> </u>			
	Name	0	DS	Version/R	elease	Last Patched/Updated
Name OS Version/Release Last Patched / Updated						
Anti-Virus						
Intrusion Detection/Prevention Systems						
Security Auditing Tools						
Secure Remote Access/Authorization Tools						
Access Control List						
Packet Filtering/Firewall						
Others						
16. How Many Host(s) are Aff	ected			I		L
1 to 10	10 to 1	100			Mor	e than 100
17. Actions taken to mitigate the intrusion/attack:						
No action taken	Log File	es exar	nined		Resto	ored with a good backup
System Binaries checked	System(s) disconnected form network		Other	·		
Please fill all mandatory fields and try to provide optional details for early resolution of the Security Incident						
Mail/Fax this Form to: CERT-In, Electronics Niketan, CGO Complex, New Delhi 110003 Fax:+91-11- 24368546 or email at: <u>incident@cert-in.org.in</u>						

Annexure II

CERT- IN VULNERABILITY REPORT FORM					
	For official use only: Vulnerability number CERT-In#				
1. Contact Information of the	person reporting	j :			
Name:	Organization:		Title:		
Office Phone:					
	Email:		Fax Number:		
Cell Phone:					
Address:	1				
2. Date and Time of Identificat	ion:				
Date:		Time:			
3. Type of Vulnerability (check	k all that apply):				
Input Validation error		Environmen	t Error		
Boundary Condition error		Configuration Error			
Buffer Over Flow		Race Condition			
Access Validation Error		Others			
Exceptional Condition Error					
4. Common Weakness Enume	eration (CWE) : (if any)			

5. Information of Affected System:					
Application	Operating System	Hardware			
Name	Name				
Version	Version				
Release	Release				
6. Vulnerability Description (A	ttach additional sheets if requir	red):			
7. Vulnerability Consequences	S:				
8. Suggested Solution:					
9. Other Agencies notified:					
10. Additional Information:					