

Co-operation against Cyber Crime

India

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Cyber Crime



"International estimates indicate that cyber crime costs approximately **\$1trillion annually**. This loss includes lost data worth a total of \$4.6 billion and about \$600 million cleaning up after breaches..." *

* Source: http://news.cnet.com/8301-1009_3-10152246-83.html



Only about 10% of all cyber crimes committed are actually reported and fewer than 2% result in a conviction.

Reasons:

- Businesses and financial institutions fear loss of confidence in their company
- Majority of cyber crime victims do not report cyber crimes against them, assuming that law enforcement will provide little or no assistance...."



Information Technology Act 2000



- IT Act, 2000 to facilitate e-commerce and e-governance.
- Addressed the problems of crimes of intrusion, pornography and source code theft.
- Tampering with computer source code -Sec 65.
- Hacking -Sec 66
- Publishing obscene information-Sec 67
- Breach of Confidentiality- Sec 72



Indian Computer Emergency Response Team (CERT-In)



- CERT-in is the national nodal agency for responding to computer security incidents.
- NISAP (National Information Security Assurance Programme) is implemented by CERT-In.



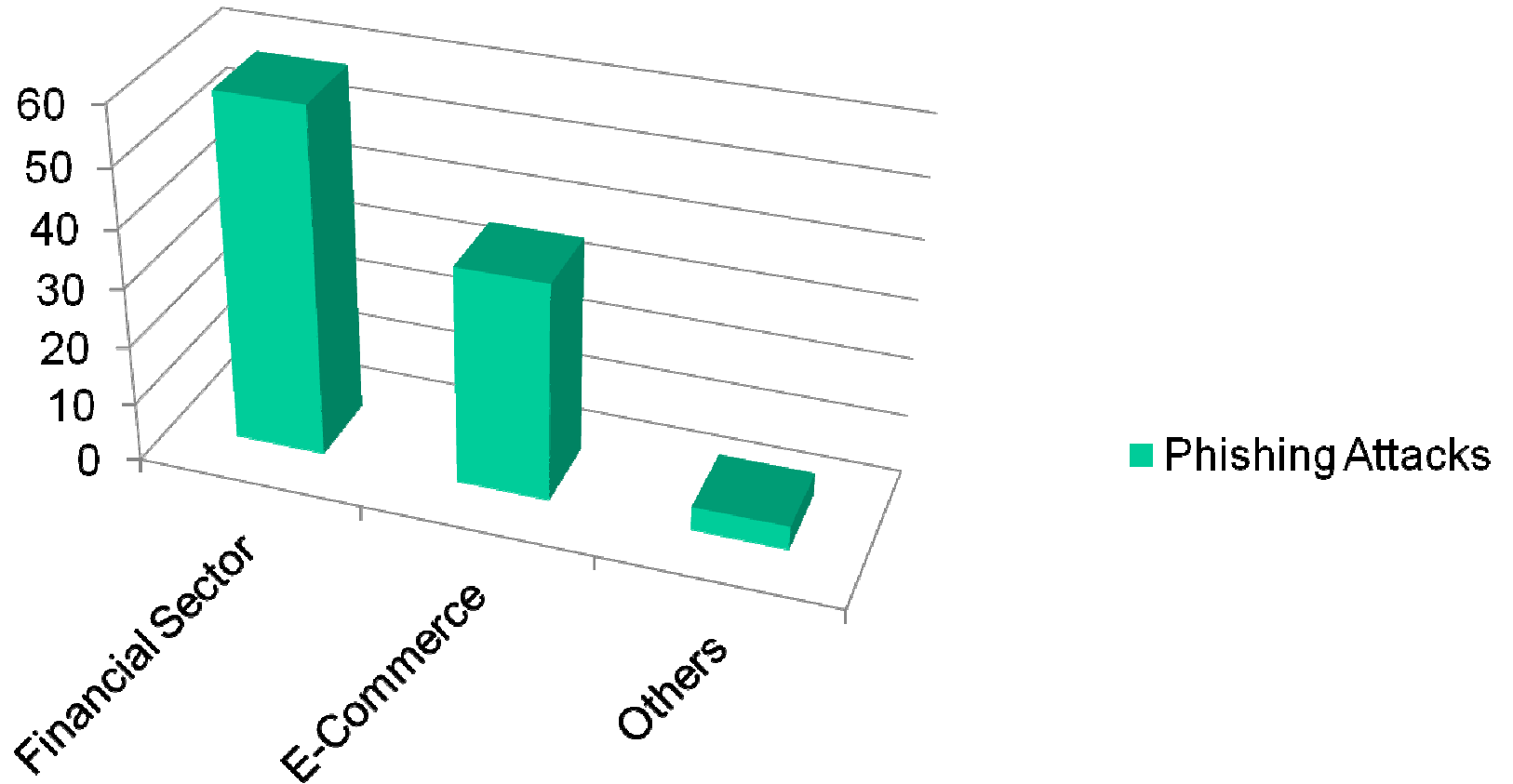
Security Incidents handled by CERT-In during 2004 - 2008



Security Incidents	2004	2005	2006	2007	2008
Phishing	3	101	339	392	604
Network Scanning / Probing	11	40	177	223	265
Virus / Malicious Code	5	95	19	358	408
Spam	-	-	-	-	305
Website Compromise & Malware Propagation	-	-	-	-	835
Denial of Service	-	-	-	-	54
Others	4	18	17	264	94
Total	23	254	552	1237	2565



Trends in Phishing Attacks during 2008 in India





Existing Mechanisms of International Cooperation



Evidence: MLATs, LRs

Police to Police Cooperation: 24X7 channels

Regional Cooperation Blocs: CTINS, G8, EU, ENISA, etc.

Cyber Security: CERTs

Transnational industry bodies: FIRST, Internet Alliance

PPP: www.antiphishing.org , INHOPE



Deficiencies of Existing Mechanisms



- **Legal Disparities**
- **Digital-Divide**
- **Insufficient and inadequate MLATs; LR too time consuming**
- **Regionalization of cooperation, DUPLICITY**
- **Vulnerability of existing technology and systems: unrealistic demands of anonymity, non-regulation, market forces, etc.**
- **‘Cultural’ Vulnerability of private sector**
- **Inadequate public-private sector partnership**



Fashioning a Solution



- Legal Harmonization
- Procedural Commitment and Clarity
- Capacity Building
- Partnerships with private, non-governmental and
- incident response agencies



Improving international cooperation requires:



- harmonization of national laws
- common set of investigative powers
- application of investigative powers to MLA arrangements
- adequate and flexible MLA and extradition arrangements



THANK YOU