the governance of internet security

a starting research project

andreas schmidt

vienna, tf-cert, 25.9.08
me

researcher at TU Delft since 1.9.08

experience: sw dev; consulting ICT service industry; service mgt, project mgt; org. aspects of security in IT operations

education: M.A. polsci/hist, focus on role of ICT in IR
me.residingAt

Delft: between The Hague (8 km) and Rotterdam (15 km) and the Sea (15 km); 120.000 inhabitants

TU Delft: 16.000 students, staff of some 4.400 fte (2600 scientific, roughly 1000 PhDs)

TPM: Faculty of Technology, Policy and Management, some 1000 students
me.supervisor

- Milton Mueller
- prof @ school of info studies, syracuse, US
- xs4all prof @ tudelft
- internet governance project, ICANN, WSIS
- communication technologies and global governance institutions
me.workingWith

- Michel van Eeten
- assoc. prof @ TU Delft, Faculty of TPM
- focus on reliability and security of crit infra, studies on the “economics of malware”, “the governance of cybersecurity”
- ties to ISPs via production of study on Internet security for OECD
Which international institutions and organizational forms are developing in response to security problems on the Internet?
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UN, Nato, EU, OECD
ENISA, ITU
CERTs, NANOG, LAG, APWG
Law enforcement norms & standards

status quo
current developments
generalizations / options

hierarchies
markets
networks

spam
botnet
phishing
viruses
DoS
state-sponsored attacks
a network of experts

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„network form of organisation“ (Powell 1990)

operational execution of internet security by a network of experts

rationale for networks: knowledge, speed, trust

spam, botnet, phishing, viruses, DoS, state-sponsored, attacks
forms of organizing security

Which institutions and organizational forms are developing in response to security problems?

UN, DoD, DHS, Nato, EU, Law enforcement, norms & standards

Is the network of internet security experts a transnational institutional innovation?

Do loose security networks function as substitutes or supplementaries to formal institutions?

territorial threats, street riots, food security issues, etc.

hierarchies
market
networks

status quo
current developments
generalizations / options
analyzing a network of experts

Which international institutions and organizational forms are developing in response to security problems on the Internet?

operations, processes, communications
products
internal rules
external relations
community.processes

- mutual requests
- intra/inter-organizational incident management
- relationship between community and corporates' internal business processes
- communications
- activites
community.products

- fixingPhishing
- fixingSpambots
- fixingBotnets
- LESupportAntiterror
- LESupportAntichildporn
- LESupportAntiporn

- InformationExchange
- Training
- …
community.internals

- norms, principles, values
- members / participants
community.externalrelations

- to CIP community
- to regulators
- to law enforcements
research.methods

- qualitative interviews
- participatory observations
research.goals

• understanding factors that support the role of networks-of-experts within an institutional setting that includes stake-claiming hierarchical organisations

• understanding links, collaboration and communication between networks of experts and more hierarchically organized institutions

• check some social scientific theories/models with networks of experts as case studies