

# DIRECTION TO SUCCESS. PUBLIC AND PRIVATE SECTORS PARTNERSHIP

WSIS Action Line Facilitation Meeting:
Building confidence and security in the use of ICTs (C5)
"Partnerships for Global Cybersecurity
ITU Geneva, 15-16 May 2006

### Outline of the presentation



- @ Challenges in network and information security
- @ NRA actions area
- @ Direction to success: public and private sectors partnerships
- @ Conclusions

#### Trends in social life



#### Majority of social relations is moving to the virtual space

People use electronic communications ever more actively not only for finding important information on the Internet, but also for ordering and purchasing goods, paying for utility services and transferring money electronically.

Developments in electronic devices and data transfer technologies allows connectivity to services anywhere, anytime.

Unfortunately, together with social relations criminal activities are also

moving to the virtual space.



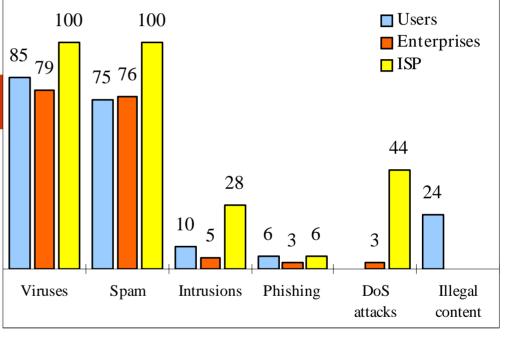
#### Survey aiming to identify main problems...



The study demonstrated that the major part of users face

computer viruses and spam.

#### ...Lithuanian case



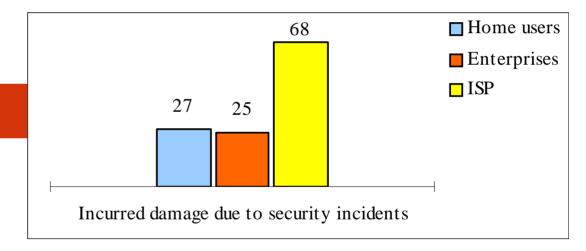
Taking into consideration that during the 20 years of existence of computer viruses approximately 150.000 viruses have been created and the fact that at present spam reaches 80% of the global e-mail volume, the results are not surprising.

### RRT

### Survey aiming to identify main problems...

Despite the fact, that majority of users employ different security tools, the quarter of home users and enterprises and most of ISPs suffer from threats to security.

#### ...Lithuanian case



Since all the Internet stream goes over ISPs networks, they naturally incur the biggest damage of security incidents.

# Current challenges in network and information security



- @ Increasing complexity of networks and software;
- @ Internet has been created without security in mind;
- @ Lack of cross-jurisdictional regulatory measures;
- @ Critical infrastructures linkage to relatively insecure networks;
- @ Security underestimation in building of new technical platforms;
- @ Users themselves are responsible for vulnerability of the system;
- @ IT security balance with issues such as interoperability, privacy and ease of use.

### NRA response to challenges



- @ Objective secure information society:
  - Execution of CERT functions;
  - Rising of consumer awareness;
  - Reduction of security incidents negative impact;
  - Enhancement of legal and standardization measures;
  - Drafting law on electronic communication networks and information security in Lithuania;
  - Inter-institutional and international cooperation;
  - Staff training;
  - Monitoring of network and information security situation.

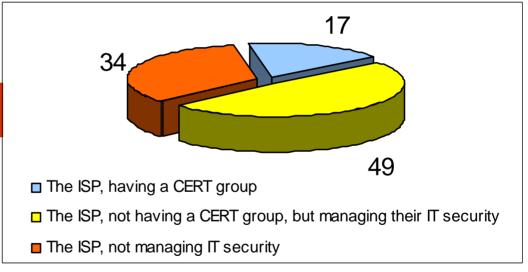
## Survey aiming to identify Lithuanian CERT BRT map



The survey, executed in 2005 showed that only 17% of ISP have introduced CERT units, 49% handle incidents only when they occur and the remaining part (34%) is in essence not ready to

handle security incidents.

#### ...Lithuanian case



Different Lithuania's Internet networks have different security level, which brings negative effect to the general security situation

### **Specific actions: CERT functions**



- @ ISP Sector is a critical spot. If efficient management of security incidents in the networks of ISP is ensured, there will be no need to resolve the security problems at the users' level.
- @ Government resolution of 24 March 2005 projects creation of CERT within RRT till the end of 2006:
  - coordination of incidents' investigation and response to them;
  - security alerts & warnings (EWS);
  - prevention and exchange of information with other CERTs and similar organisations on national and international levels;
  - promotion and advise of local CERTs establishment.
- @ Separate CERT teams need a coordination centre and country in/out contact point.

### **CERT** international partnership



- @ RRT actively participates and collaborates within international CERT community:
  - FIRST (Forum for Incident Response and Security Teams);
  - TERENA (Trans-European Research and Education Networking Association);
  - NATO CERT group on information and best practice exchange.
- @ TRANSITS training workshop for CERT on 29-30 March 2006 in Vilnius was a goog example of international cooperation:
  - co-organized and sponsored by ENISA, TERENA and FIRST;
  - CERT staff trained from numerous Europe and Asia countries;
  - concentrated on operational, organizational and legal aspects of response to incidents.



# In broader terms: public and private sectors partnership



- @ Broad policy for trust and security requires Public and Private Sectors Partnership:
  - Industry, science and public authorities may ensure the right balance between technology development, regulations and policy measures;
  - Risk assessment, management and mainly allocation require close cooperation between technological and regulatory levels;
  - The right balance between governance, policy and market dynamics should be assessed in terms of economics;
  - There is a need for understanding conflicts and synergies between consumer interests (including privacy) and economics;
  - Demand for technology and regulation that lead to the desired economic growth whilst providing the desired level of consumer protection.

# Lithuanian public and private sectors partnership: Rising of awareness



In close cooperation with commerce banks 200.000 flyers with basic information about phishing threats have been distributed to users at time when growing phishing activities in Lithuania has been observed.



# Lithuanian and private sectors partnership: Rising of awareness



Interactive website <u>www.esaugumas.lt</u> has been created by NRA and now is being developed by numerous partners and is going to became the Internet portal of Lithuania for all interested parties which strive to provide the Internet consumers, organizations or institutions with relevant information on network and information

security issues.



Tomas Lamanauskas, RRT, Lithuania



# Lithuanian and private sectors partnership: Inter-institutional cooperation



@ RRT has signed The Memorandum of Understanding on the Progress in the Area of Security of Information and Networks with the Association of Lithuanian Banks and the Association "Infobalt".

#### Memorandum PRIORITIES:

- I. Investigation of information and network security incidents;
- II. Usage of information and network security tools;
- III. Public education and training in the area of security;
- IV. Drafting of laws with the view to proper regulation of security of information and networks in the Republic of Lithuania.

Memorandum Implementation Committee, formed of the representatives of the parties, is established to take care of implementation of the Memorandum and working projects.

# Lithuanian actions: Reduction of negative impact



- @ RRT in cooperation with well-known security vendors work together on project "Safeguard your computer!" to produce particular tool for home users which will help to improve security on their personal computers.
  - It will be realized through special CD with collection of necessary safeguard programs (antivirus, antispam, antispyware and other) and relevant information about secure use of Internet;
  - About 100.000 CDs are planned to be issued and distributed for free;
  - CD distribution action will go through Lithuanian regions in July 2006.



### International partnership



@ RRT actively participates and collaborates on international level:

Pictures and Video

- ENISA (European Network and Information Security Agency);
- IRG (Independent Regulators Group) IT security working group;
- ISACA association:
- London action plan combating spam;
- "Spam zombies" initiative.

RRT in cooperation with ENISA and Ministry of Transport and Communications in November 2005 organized the European Network and Information Security Conference "Readiness for advanced solutions on handling network and information security incidents".

Tomas Lamanauskas, RRT, Lithuania



# Initiatives areas for international partnership



- @Promotion of timely information exchange between CERT teams is extremely important for security incidents prevention.
  - FIRST (Forum for Incident Response and Security Teams);
  - **TERENA** (Trans-European Research and Education Networking Association).
- @ Botnet networks are a major reason of biggest part of incidents.
  - Latest surveys show that botnets can connect up to hundreds thousands of compromised computers; so usually it's an international problem.
  - FTC initiative "Spam zombie" is a good example and should be resumed and developed.
- It's necessary to promote security policy standards and security
   audit implementation for reaching more common worldwide
   security level of IT systems and products.
  - ISACA (Forum for Incident Response and Security Teams).

### International gaps



- @ There's a lack of general plan and precise work program for reaching global secure information technology.
  - Internet network is not adapted to high-level security requirements and needs to be replaced by new generation protocols and standards that have more security options and should be promoted their worldwide implementation:
    - IPv6 (internet protocol);
    - DNSsec (Domain Name System Security Extension);
    - SPF (Sender Policy Framework, extension for secure e-mail system).
- @There are no contact points in some countries to deal with security issues and those white spots should be eliminated.

#### Conclusions



@ An increasing usage of information technologies results in bigger threats.

It is necessary to draw attention to the increasing number of incidents in virtual space and the growing professionalisms of perpetrators.

- Wide co-operation among various public and private sectors is needed in order to create coherent network that will effect security inside the region.
- @ ITU can be a body that will facilitate global actions based on the broad cooperation of various stakeholders in the IT security field.

### Thank you for your attention



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