



ITU and WSIS Activities Related to Spam and Cybersecurity

Network and Information Security: Political and Technical Challenges

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International Telecommunication Union

- International organization where governments and private sector coordinate global telecom networks and services
- Founded in 1865, it is the oldest specialized agency of the UN system
- 189 Member States, 650 Sector Members, 75 Sector Associates
- To extend the benefits of telecoms to all the world's inhabitants





ITU Mandate & Cybersecurity

- UN Resolution 57/239 (2002): "Creation of a global culture of cybersecurity"
- UN Resolution 58/199 (2004): "Creation of a global culture of cybersecurity and the protection of critical information infrastructure"
- ITU Plentipotentiary Resolution 130 (2002): "Strengthening the role of ITU in information and communication network security"





ITU-T World Telecommunications Standardization Assembly (WTSA)

- Resolution 50: Cybersecurity
 - Evaluate existing and evolving new Recommendations with respect to their robustness of design and potential for exploitation by malicious parties
 - Raise awareness of the need to defend against the threat of cyber attack
- Resolution 51: Combating spam
 - Report on international initiatives for countering spam
 - Member States to take steps within national legal frameworks to ensure measures are taken to combat spam
- Resolution 52: Countering spam by technical means
 - > ITU-T Study Groups, in cooperation with other relevant groups, to develop as a matter of urgency technical Recommendations on countering spam





Cybersecurity and Critical Information Infrastructures

 In the 21st century, most critical infrastructures are dependent on information and communications systems that span the globe



 Dependencies vary from nation to nation; however, nearly all nations already depend on critical network infrastructures or will in the future.





ITU Security Related Activities

- One of the most important security standards used today is X.509, an ITU recommendation for electronic authentication over public networks. X.509 is the definitive reference for designing secure applications for the Public Key Infrastructure (PKI) and is widely used for securing the connection between a user's web browser and the servers providing information content or e-commerce services.
- Ongoing work in security management, telebiometrics, mobile security http://www.itu.int/ITU-T/studygroups/com17/tel-security.html
- ITU Manual on Security in Telecommunications and Information Technology http://www.itu.int/itudoc/itu-t/86435.pdf
- Over 70 ITU recommendations/standards focusing on security have been published. These include security from network attacks, theft or denial of service, security for emergency telecommunication, etc.
- Several ITU workshops and meetings on protecting critical network infrastructures, spam and cybersecurity have been conducted.





WSIS Thematic Meeting on Cybersecurity 28 June - 1 July 2005

- In framework of its activities to implement the Plan of Action, ITU recently hosted a WSIS Thematic Meeting on Cybersecurity
- Event website at <u>www.itu.int/cybersecurity/</u> provides links to final agenda, background papers, presentations, electronic contributions, Chairman's Report and complete audio archives of meeting
- June 28: <u>Countering Spam Day</u>
 - Considered developments since June 2004 Thematic Meeting on Countering Spam
- CD-ROM provides materials from both 2004 Countering Spam and 2005 Cybersecurity/Spam Thematic Meetings as well as a related materials from ITU's daily work programme on these topics





ITU Activities on Countering Spam

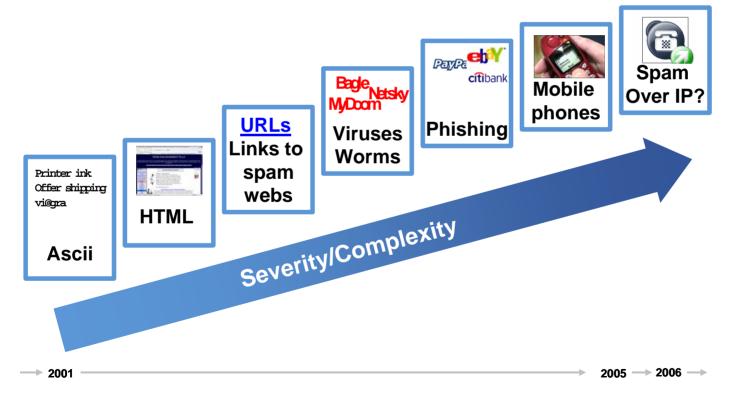
http://www.itu.int/spam







Spam is not only growing, but is evolving to become broader threat to Internet security

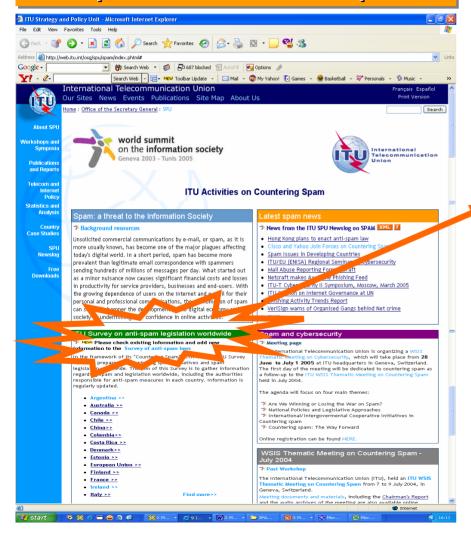




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http://www.itu.int/spam



ITU Survey on anti-spam legislation worldwide

NEW! Please check existing information and add new information to the Survey of anti-spam laws

In the framework of its "Countering Spam" activities, an ITU Survey has been prepared on countering spam initiatives and spam legislation worldwide. The aim of this Survey is to gather information regarding spam and legislation worldwide, including the authorities responsible for anti-spam measures in each country. Information is regularly updated.

- Argentina >>
- Australia >>
- Canada >>
- Chile >>
- · China>>
- Colombia>>
- Costa Rica >>
- Denmark>>
- Estonia >>
- European Union >>

Please help us in updating the ITU anti-spam survey!





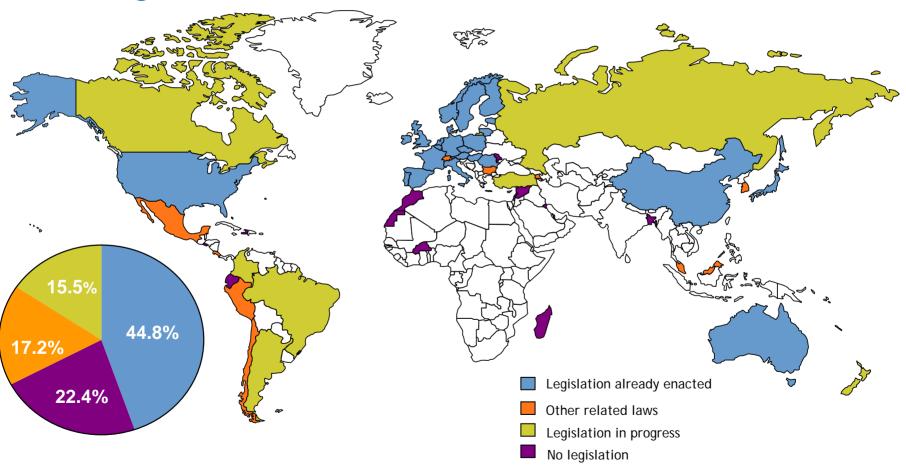
Survey Results - 58 Countries

- Several countries (44,8%) have <u>already enacted</u> antispam legislations such as Australia, US, EU, Japan
- Others (15,5%) are <u>in the progress</u> of creating anti-spam laws, these are e.g. New Zealand, Singapore
- ➤ Although some (17,2%) countries do not have <u>any</u> <u>specific</u> anti-spam legislation, they are using alternative laws to cope with spam issues, such as Data Protection Laws, Consumer Protection Laws, Telecommunications Act, etc. These are e.g. Malaysia, Mexico, Peru
- Others (22,4%) don't have <u>any anti-spam legislation</u>, or any laws applicable to spam, e.g. Burkina Faso, Lebanon

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Survey results







Related ITU-T Study Group 17 Activities

- Q.6/17: Cybersecurity
 - > X.sds, spyware/deceptive software
- Proposed Q.17/17: Countering SPAM
 - > X.gcs, Guideline on countering email SPAM
 - X.fcs, Technical framework for countering email SPAM
 - X.tcs, Technical means for countering SPAM
 - X.ocsIP, Overview of countering SPAM for IP multimedia applications



world summit on the **information society**

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Geneva 2003 - Tunis 2005

Telecom Systems Users

Celebiometrics

0.8/17

*Multimodal Model Framework

0.9/17

- *System Mechanism
- *Protection Procedure
- *X 1081

Q.7/17

Security = **Management**

- *ISMS-T
- *Incident Management
- *Risk

Assessment

Methodology

- *etc...
- *X.1051

Systems

Telecom

Secure Communication Services

- *Mobile Secure Communications
- *Home Network Security
- *Security Web Services
- *X.1121, X.1122

Cyber Security

- *Vulnerability Information Sharing...
- *Incident Handling Operations
- *Security Strategy
- *Countering SPAM (proposed Q.1717)

Q.5/17

Security Architecture & Frameworks

*Architecture, Model, Concepts, Frameworks,

- *etc...
- *X.800 series
- *X.805

Q.4/17

Communications System Security Project *Vision, Project Roadmap, ...







General Points from Chairman's Report

- No clear consensus as to whether we are winning or losing war on spam.
- Spam under constant mutation from annoyance to general cybersecurity threat
- Threat vector shifting to new platforms such as mobile and Voice over Internet Protocol (VoIP) networks.
- Spam should be seen in broader context of "unwanted or unsolicited communications".
- Suggests a generic policy and regulatory approach will eventually emerge





Cyberspace makes all countries border each other

- International cooperation, on both technical (standardization) and policy (legislation and enforcement) sides, has been recognized as a key element to solving the problem.
- Developing countries are also forced to deal with the problem of spam, which has even more dramatic consequences on Internet access than in developed economies.

Developing countries often lack the technical, knowledge and financial resources to face it.





ITU, World Summit on the Information Society (WSIS) & Cybersecurity





WSIS & ITU

- In 2001, the ITU Council decided to hold the World Summit on the Information Society (WSIS) and in Resolution 56/183, the United Nations' General Assembly endorsed the framework for the Summit adopted by the ITU Council:
- inviting ITU to assume the leading managerial role in the executive secretariat of the Summit and its preparatory process, a well as;
- inviting the governments to participate actively in the preparatory process of the Summit and to be represented in the Summit at the highest possible level.

Geneva 2003 - Tunis 2005

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WSIS Declaration of Principles

Build confidence and security in the use of ICTs (Section 5, page 5, paragraphs 35, 36, 37)

- Strengthening the trust framework
- Promoting a global culture of cybersecurity
- Preventing cybercrime/misuse of ICTs
- Fighting spam (unsolicited electronic messages)

WSIS Plan of Action

Need to take appropriate action at national and international levels (WSIS Plan of Action, paragraph C5 and its subgroups)





Status of Cybersecurity & Spam Discussions towards WSIS Phase II...

On the road to Tunis



- See Sub-Committee A Chair's Paper on Chapter
 3 after Prepcom-3 4th Reading at:
 - http://www.itu.int/wsis/docs2/pc3/working/dt10rev4.pdf





WSIS Prepcom 3: 19-30 Sept 2005: Cybersecurity

- Chapter Three: Internet Governance, 3b) Public Policy Issues Related to the Use of the Internet
 - we seek to build confidence and security in the use of ICTs by strengthening the trust framework. We reaffirm the necessity to further promote, develop and implement in cooperation with all stakeholders a global culture of cyber-security, as outlined in UNGA Resolution 57/239 and other relevant regional frameworks. This culture requires national action and increased international cooperation to strengthen security while enhancing the protection of personal information, privacy and data. Continued development of the culture of cyber-security should enhance access and trade and must take into account the level of social and economic development of each country and respect the development-oriented aspects of the Information Society. (Agreed)





WSIS Prepcom 3: 19-30 Sept 2005: Spam

- Chapter Three: Internet Governance, 3b) Public Policy Issues Related to the Use of the Internet
 - We resolve to deal effectively with the significant and growing problem posed by spam. We take note of current multilateral, multistakeholder frameworks for regional and international cooperation on spam, for example, the APEC Anti-Spam Strategy, the London Action Plan, the Seoul Melbourne Anti-Spam Memorandum of Understanding and the relevant activities of the OECD and ITU. We call upon all stakeholders, to adopt a mult-pronged approach to counter spam that includes, inter alia, consumer and business education; appropriate legislation, law enforcement authorities and tools; the continued development of technical and self regulatory measures; best practices; and international cooperation. (Agreed)
- Note there is nothing in this multi-pronged approach that cannot be argued to apply more generally to promoting global cybersecurity





What steps should be taken to build confidence and increase security?

- Building confidence and security in the use of ICTs are crucial elements in further developing the Information Society.
- Provide forum for regulators to discuss issues, challenges and threats.
- Help developing countries formulate legislation for combating spam and building cybersecurity.
- Need for greater coordination of national Internet security initiatives and for enhanced international cooperation in combating viruses, and fighting cybercrime.
- Promote the development of a multilateral agreement on cooperation against spam and towards global cybersecurity.





Closing Remarks

- Each May 17th, ITU celebrates World Telecommunication Day, which celebrates ITU's founding in 1865 and its history of "helping the world communicate"
- Promoting Global Cybersecurity is 2006 theme:
 - > ITU plans related awareness-raising campaign
 - Formulating our ideas and welcome your input on how we can tie ITU's policy and technical agenda on cybersecurity together...





Links and References

- ITU Activities on Countering Spam and Thematic Meeting
 - www.itu.int/spam
- ITU Activities related to Cybersecurity and Thematic Meeting
 - www.itu.int/cybersecurity
- ITU-T Activities on Spam (Study Group 17)
 - www.itu.int/ITU-T/studygroups/com17
- ITU-D Activities on Cybersecurity and Spam
 - www.itu.int/ITU-D/treg/
 - www.itu.int/ITU-D/e-strategies
- Anti-spam laws and authorities worldwide
 - http://www.itu.int/osg/spu/spam/law.html
- World Summit on the Information Society
 - www.itu.int/wsis







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Thank you