Challenges of Internet Security & Privacy Regulation

From Trusted Co-operation to a Legal Regime?

Erich Schweighofer

http://www.univie.ac.at/RI/ES/
https://rechtsinformatik.univie.ac.at/en/home/
https://deicl.univie.ac.at/en/

Welcome to IPEN2017 in Vienna!

- University of Vienna
- Centre for Computers & Law / Arbeitsgruppe Rechtsinformatik
- EURALO European Regional At Large Organisation

- Security and privacy: in internet governance not handled equally

universität wien

Free, secure and stable internet

- Multi-stakeholder governance of the ICANN Community and ICANN
- One global internet
- Security and integrity of Internet's naming and address allocation system is a very strong topic in ICANN
- Security and Stability Advisory Committee (SSAC)
- Public DNS space managed by the ICANN Community
- Fully qualified domain name (FQDN): globally unique
- Network neutrality: only technical regulation
- DNS abuse as a problem of cybersecurity
  - Talk of Dave Piscitello, VP Security ICANN, Sep. 2017

DNS = global identity

- Identity and representation on the identity
- Good people: business, government, civil society
- Bad people: misuse, exploitation or disruption public or business services, fraud, terrorism, notoriety
  - Compromised hosts ("bots")
  - Spam, malware, DDoS, steal data, web proxies, host DNS infrastructure
  - Maliciously Registered Domain Names
- Same treatment as required by network neutrality?

International information sharing and co-operation (1)

- Information exchange on Maliciously Registered Domain Names
  - Trusted network using secure communications channels: private- and public sector investigators cooperate 24x7 using trusted communications channels
  - Malware, phishing, spam samples
  - Host names, URLs, addresses, geo-location
  - Activities of persons of interest
  - Contact points (targets, victims, operators, investigators, registrars)
- Co-ordinated activities
  - Mitigating DDoS by squelching sources
  - Providing evidence of acceptable use policy violation to operator for action
  - Providing evidence to law enforcement

universität wien

International information sharing and co-operation (2)

- Helps but scales poorly
  - Information for unilateral but co-ordinated actions
    - Blocklisting, malware, suspected criminals, treats, insights

- Legally problematic
  - Exchange of protected data without legal basis
  - Possible violation of duties to inform law enforcement agencies
  - Similar discussion: transposition of NIS Directive in Member States

Next steps: a international legal regime

- Cyber attackers need DNS
- After identification use is no longer possible
- Cutting the information advantage by blacklisting bad domain names and malicious content
- Legal authorisation + compliance regime
- More AI: automated legal assistance to cut information advantage and makes enforcement more effective
- International treaty
  - First talks at UN but no strong development
  - Extension of Cybercrime Convention maybe the best solution

Privacy in internet governance (1)

- WHOIS registry has to be publicly available
  - Strong use of privacy and proxy exception makes WHOIS data insufficiently reliable
- ICANN Procedure For Handling WHOIS Conflicts with Privacy Law
  - Ongoing public consultation
  - European registries and registrars must violate either EU law or ICANN law (or ask and get a "waiver" after a long procedure); EURALO asks for a block exemption
- Next-Generation gTLD Registration Directory Service (RDS) to replace WHOIS
  - Ongoing Policy Development Process

universität
wien

Privacy in internet governance (2)

- More and more privacy discussions at ICANN meetings
  - Council of Europe: Kopenhagen58 Public Meeting
  - Session on GDPR at Johannesburg59 Public Meeting
- Privacy is a topic at ICANN but not at all at the same level as security
- No global legal regime developing
- More a GDPR-standard applied as extraterritorial jurisdiction and a model worldwide

universität
wien

Thanks for your attention!
Erich Schweighofer

Universität Wien
Arbeitsgruppe Rechtsinformatik

Wiener Zentrum für Rechtsinformatik

erich.schweighofer@univie.ac.at
http://www.univie.ac.at/RI/ES/
https://rechtsinformatik.univie.ac.at

Jusletter IT
http://www.jusletter-it.eu

Questions are very welcome!

- ICAIL2017 International Conference on Artificial Intelligence & Law, 12-16 June 2017, London, UK – Multilingual Workshop on AI & Law
- XXVIIIth World Congress of the International Association for the Philosophy of Law and Social Philosophy, 16-21 July 2017, Lisabon, PT
- LDA2017 Legal Data Analysis 2017 of CEILI at JURIX2017, 13-15 December 2017 (planned)
- IRIS2018 International Legal Informatics Conference, end of February 2018

universität wien