Challenges of Internet Security & Privacy Regulation
From Trusted Co-operation to a Legal Regime?

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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
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
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
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
Thanks for your attention!

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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