'To deploy or not to deploy, that is the question'

How to convince your boss to deploy DNSSEC and RPKI

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What is at stake?

- Problem statement

  - The Domain Name System and the global system for Internet routing are both fundamental for the functioning of the Internet

  - Which emphasises the importance of deployment of standards to increase associated security: in this case DNSEC and RPKI

  - Deployment is lacking though… Why and what needs to change?:

  - 'We need a change in narrative to target decision makers'

- An IS3C effort but what is IS3C?

IS3C

- U.N. IGF DC Internet Standards, Security and Safety Coalition

- Advocates deployment of internet standards and ICT best practices. Why?

- Nine working groups, 5 active. Four reports and two toolkits

• **Where lies the cybersecurity focus?**
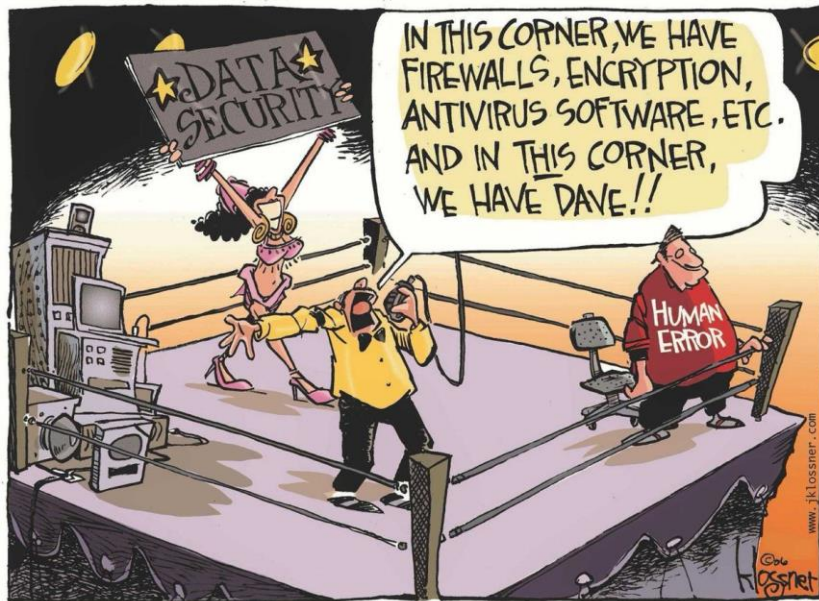
Why is deployment lacking?

- No level playing field

- No demand, no offer

- Time to market prevails

- Cutting cost

- Lack of government (and any other) pressure

- This has to change

- https://is3coalition.org/docs/setting-the-standard-for-a-more-secure-and-trustworthy-internet/

What needs changing?

- Pressure on the industry to deploy but how?

- Regulation? The E.C. is starting it

- Economic pressure

- Procurement

- Testing

- Raising demand for security

- Coordinated testing for vulnerabilities

- Creation of level playing field

- Raise awareness of decision makers

Problem statement

- The Domain Name System (DNS), responsible for the resolution of domain names to IP addresses, and the Border Gateway Protocol (BGP), which makes the routing of Internet traffic possible from any source to any desired destination, are both fundamental to the functioning of the Internet

- Deployment of standards to improve the security of the DNS and routing of Internet traffic is therefore important, to maintain trust in online provided services for organisations, businesses, as well as individuals

- Deployment of the standards Domain Name Security Extensions (DNSSEC) and Resource Public Key Infrastructure (RPKI) should therefore at least be considered, when online services are provided or online presence is required

Why is deployment lacking?

Points raised by the Working Group

- Cost and Resource Constraints

- Complexity and Technical Challenges

- Perceived Low Risk

- Lack of Awareness and Education

- Organisational Priorities and Decision-making Processes

A new narrative is proposed

- The deployment of DNSSEC and RPKI represents part of a crucial foundation for national cybersecurity resilience

- The consideration of implementation of DNSSEC and RPKI is part of a strategic approach to regulatory compliance and cybersecurity best practices

- For commercial organisations, the deployment of DNSSEC and RPKI offers compelling security and business advantages

- Each user/organisation holds a moral obligation to uphold these standards for the benefit of society as a whole

Concluding

- It's about safeguarding an organisation's reputation, protecting its critical services, vital information and related infrastructure

- It's a strategic investment in a future that enhances brand reputation and helps ensure the integrity and authenticity of online services

- With the ongoing digitisation of our societies, online presence should be considered part of an organisation's core business

- As such it is imperative that considerations regarding DNSSEC and RPKI are included in its strategic plans to promote trust in online presence and the provision of online services

Experts who participated and provided input

- David Conrad, Co-Founder/Partner/CTO, Layer 9 Technologies

- Dick Brandt, CISO Masterclass (NL) / MKB Cyber Advies Nederland

- Eric Osterweil, Assistant professor, George Mason University

- Fredrik Hansen, Senior information and security expert

- Jad el Cham, Senior Technical Training and Development Officer, RIPE NCC

- Neil Dundas, Co-founder Domain Name Services and DNS Africa

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  David Huberman, Expert ICANN office of the CTO, chair

- Bastiaan Goslings, Manager public affairs SIDN (former RIPE NCC), vice-chair

- Wout de Natris, De Natris Consult, IS3C coordinator

Questions?

- To learn more:
  https://is3coalition.org/

  The toolkit:
  https://is3coalition.org/docs/how-to-convince-your-boss-to-deploy-dnssec-and-rpki/

  To join: http://intgovforum.org/mailman/listinfo/dc-isss_intgovforum.org