Incentives and barriers for the cyber insurance market in Europe

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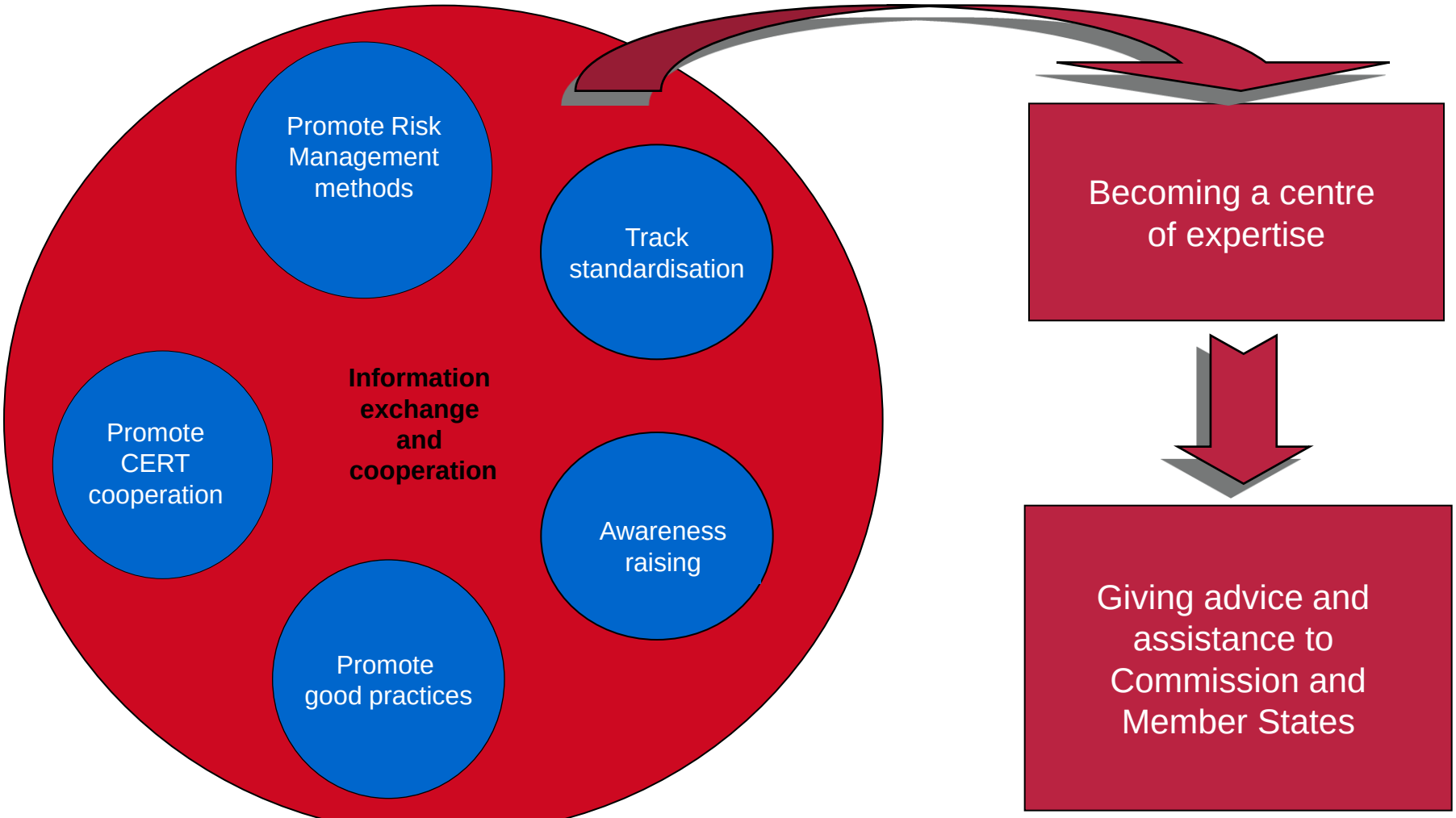
Agenda

- A few words about ENISA
- State of play - Why cyber insurance is needed?
- Barriers - challenges?
  - Factual data
  - Liabilities
  - …..
- Incentives - benefits
- ENISA recommendations
- Conclusions

ENISA: a few words on its tasks

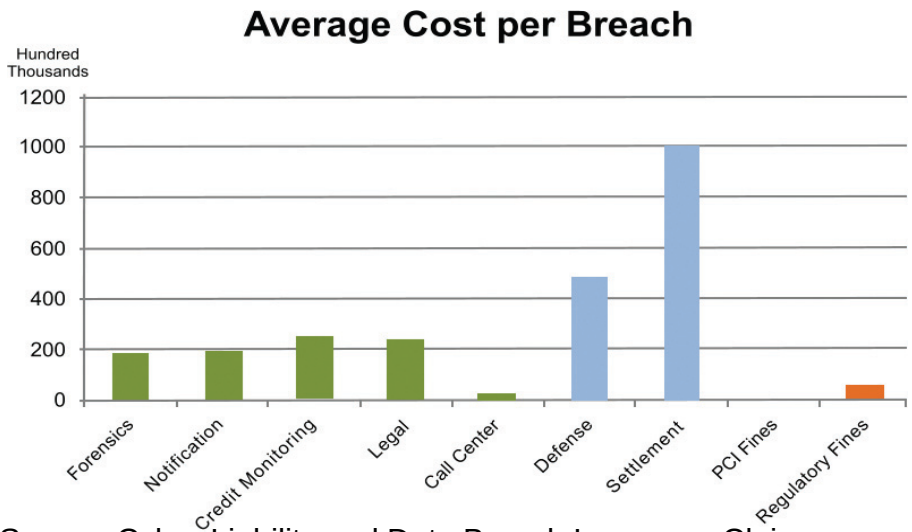


Cyber insurance: State of play

- Cyber insurance refers to insurance contracts having the purpose of covering a broad range of issues relating to risks in cyberspace.
- First and third party exposures
  - Increase in third party liability insurance
  - Limited first party risks coverage
- Not a new idea: the first contract late ‘70s
- Over 50 carriers (mostly US based)

From real to cyber world

Some statistics



Source: Cyber Liability and Data Breach Insurance Claims: a Study of Actual Pay-outs for Covered Data Breaches (2011)

- Average cost per record €1.09
- Typical number of records exposed was 100,000

$2.5 MM
of outage risk per month
Alinean

87 hours
of downtime per year
Gartner

200min
MTTR per medium outage
IT Process Institute

Common things (not) covered

- ☑ Liability arising from negligence relating to personal data
- ☑ Data loss and theft
- ☑ Liability issues
- ☑ Data damage
- ☑ Loss of income from network outage and computer failures or web-site defacement
- ☑ Cyber-extortion

- ☒ Catastrophic risks (e.g. war, terrorism)
- ☒ Operational mistakes
- ☒ Reputational damage
- ☒ Industrial espionage
- ☒ Intellectual property
- ☒ Trade secrets

Market drivers

- A means of risk transfer
- Law obligations
  - Privacy – data breach
  - Telecom Package Article 13a security incident notification requirement
- Alleviation of post breach costs (remediation)
- Reputational risk (e.g. fines, penalties, damages)

What does it cost?

- Indemnity purchased depends on
  - Risk assessments
  - Cost of possible events
- Average premiums
  - $100,000 for a limit of indemnity of $10 million (USA)
  - £30,000 for a limit of indemnity (with no US exposure) of £1 million
- Primary limits of between £5 million and £10 million are purchased (UK)
- Total premium spend $500 million

Airmic Review of recent developments in the cyber insurance market, 2012

Barriers – Challenges

- Lack of actual data
  - Information asymmetries
  - Adverse selection
- Uncertainty about cyber security risks and impacts
  - Location, severity, impact calculation etc
  - Interdependent security
  - Correlated risk
  - Technological evolution
- Lack of information sharing: bad for the reputation
- Lack of adequate reinsurance (last resort)

Barriers-Challenges (cont'd)

- Perception that existing insurance already covers cyber-risks
- Lack of technical background from the underwriters
- Liability challenges
  - Cloud computing: aggregation risk, spider web of liability
  - Cyber war/terrorism: definition vagueness
  - Is end user/individual covered?
  - How is implemented in different legal regimes?
- Moral hazard

Positive impacts

- Increased IT security might lead to premium savings
- Market for testing and certification of IT products/services
- Promulgation of best practices – self protection
- Limit the level of losses
- Foster the development of security metrics

ENISA recommendations

- Expand incident reporting – data breach notifications to other than the Telco sectors
- Promote the concept of Network and Information Security Sharing Exchanges (NSIEs)
- Collect empirical data to help cyber underwriting
  - types of risk insured, types of loss insured, premiums, pay-outs, risk metrics etc
- Consider frameworks to appraise the value of information (e.g. data breach calculator)
- Explore the role of government as insurer of last resort

Conclusions

A market with many prospects but….

- Immature
- Lack of actual data
- Not clear what is covered and what is not
- Who is responsible and for what?
- Lack of information sharing

http://www.enisa.europa.eu/activities/Resilience-and-CIIP/national-cyber-security-strategies-ncsss/incentives-and-barriers-of-the-cyber-insurance-market-in-europe