



BANCA D'ITALIA
EUROSISTEMA

Cyber resilience for FMIs

learn, evolve, cooperate



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Proactive, dynamic, adaptive approach.

FMI's may lack the capabilities to predict attack strategies or react in timely manner. FMI's need to work at the speed of attackers.

Learn, evolve, cooperate are highly correlated concepts, all essential for adapting FMI's to cyber space turbulence.

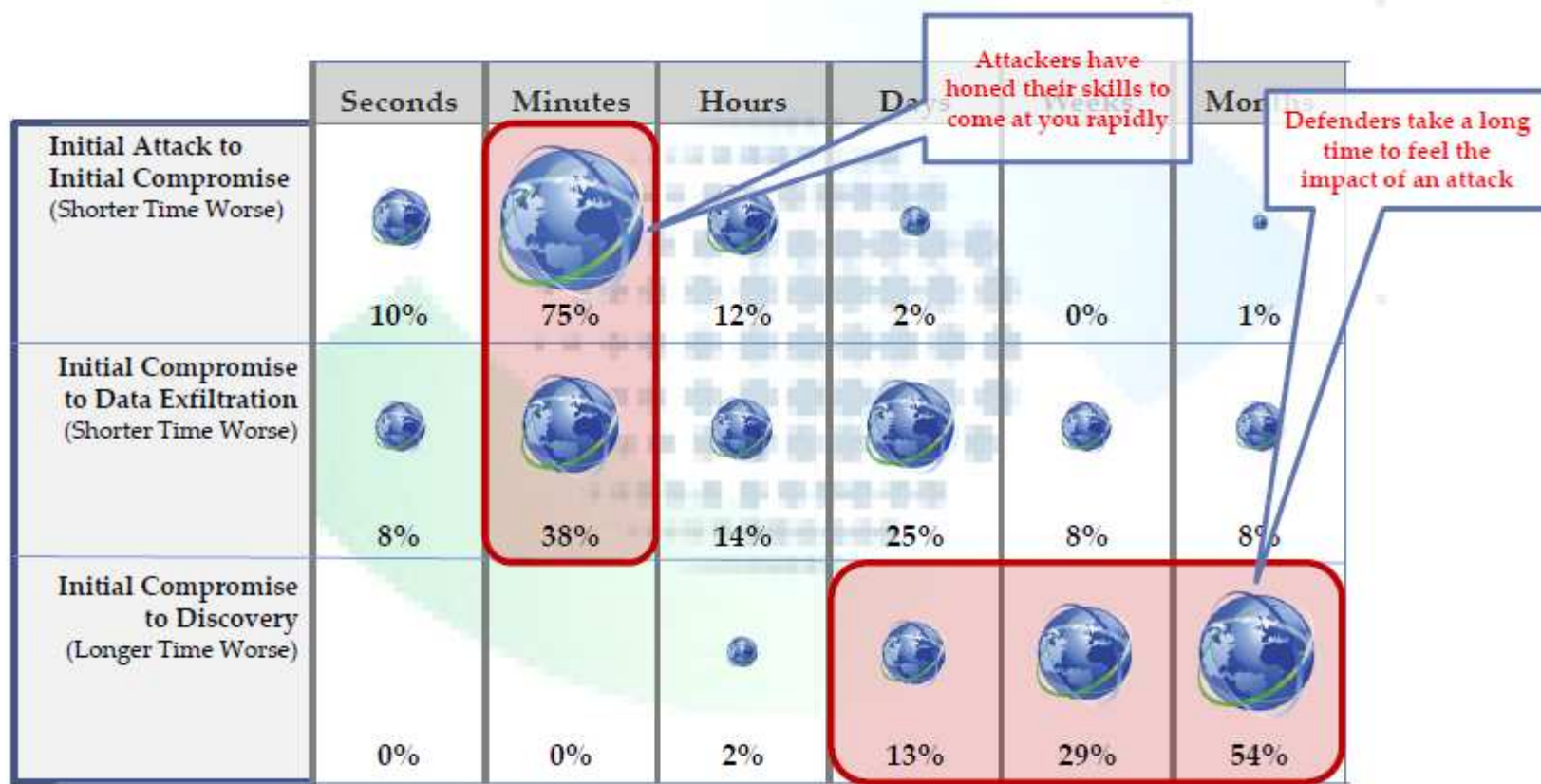
Cyber security evolves beyond ICT management and moves to the board of the FMI. It becomes an enterprise risk management issue.

Learn

Assume that the attackers have invaded the systems of an FMI and that the FMI may not necessarily be able to detect them



Learn



Source:
FS-ISAC

Learn

Capacity building



If our peers in the FMI's ecosystem are having more difficulty with cyber resilience than we are, let's try to use our knowledge to help them to improve. The improvements they implement will also help us.

Evolve

Cyber adaptability:

- FMIs continuing to function under non-ideal conditions
- trusted states may be a thing of the past



Evolve

Cyber fragility:

- FMI's complexity;
- cyber as a mere technology issue;
- poor awareness.



Evolve, in Italy

Government level:

- Strategic framework and plan for cyberspace security;

Financial sector level:

- Systemic approach: banks, FMIs, service providers.
- Business continuity regulation includes cyber scenarios;
- Six market wide simulation exercises.

Cooperate

How can international cooperation in the financial sector be practically improved?

- there is no "best" practice, nor is there a need of one
- mission statement;
- services/products to deliver;
- gaining trust can be time consuming.

Cooperate

What could be the role of financial sector regulators?

- remove barriers for intelligence sharing;
- stimulate a direct engagement with governments and privacy regulators;
- cost of cooperation for developing countries.

Cooperate

What are the main challenges and limits for effective and efficient cooperation?

- limited support for efficient collaboration;
- ad hoc solutions;
- adaptability to FMIs of different sizes, types, facing different constraints and seeking different objectives;
- confidentiality.

Italian cyber initiatives @...

Italian national strategic framework for cyberspace security and national cyber security plan:

<http://www.sicurezzanazionale.gov.it/sisr.nsf/wp-content/uploads/2014/02/italian-national-strategic-framework-for-cyberspace-security.pdf>

<http://www.sicurezzanazionale.gov.it/sisr.nsf/wp-content/uploads/2014/02/italian-national-cyber-security-plan.pdf>

Business continuity regulation for banks, FMIs, service providers (including cyber scenarios):

http://www.bancaditalia.it/compiti/sispaga-mercati/codise/Guidelines_business_continuity_market_infrastructures.pdf?language_id=1

http://www.bancaditalia.it/compiti/vigilanza/normativa/archivio-norme/circolari/c263/263CIRC_15AGG.pdf (In Italian)

Cyber poison 2014 - market wide exercise:

http://www.bancaditalia.it/compiti/sispaga-mercati/codise/Cyber-Poison-2014-en.pdf?language_id=1