From data to decision-making under conditions of uncertainty

RISK Summer School 2025

August 26th to 28th, 2025

UGA Université Grenoble Alpes

GS @UGA Université Grenoble Alpes

FRANCE 2030

GRENOBLE INP UGA

POLYTECH GRENOBLE

GRENOBLE INP UGA Ense3

Risk Institute
Université Grenoble Alpes

DECODE Project

Decode stands for : DEvelop COmptences DEvoted to the management of uncertainty with creativity and drama tools

BRITISH COUNCIL

Swansea University
Prifysgol Abertawe

RISK Summer School 2025

Emerging risks and decision-making

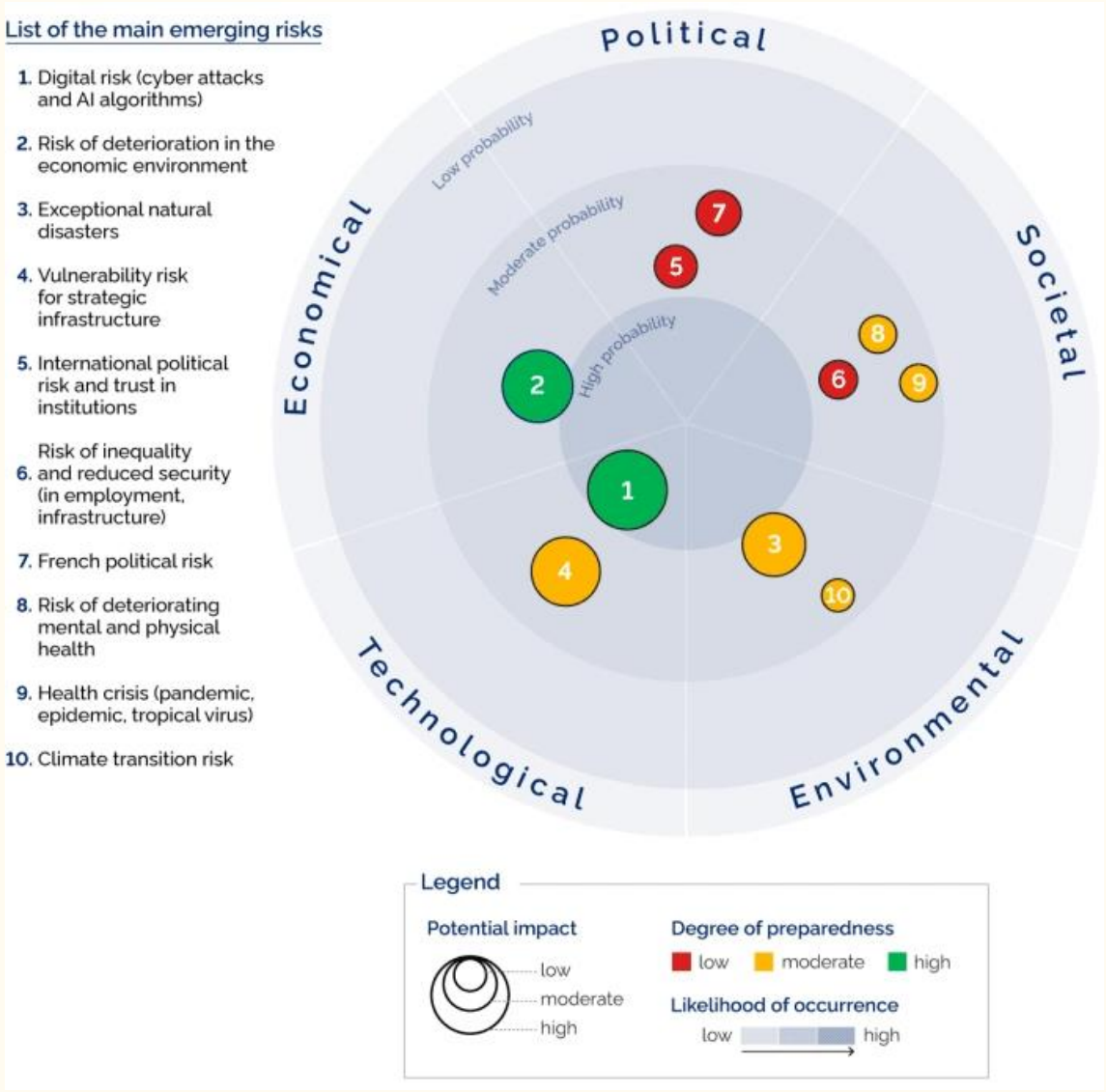
Cyrille JACOB, chief resilience officer at Grenoble-Alpes Metropolis

RISK Summer School 2025

Digital risk management: the case of Grenoble-Alpes Metropolis

GRENOBLE ALPES MÉTROPOLE

A constantly changing world



EMERGING RISKS: DIGITAL TECHNOLOGY AND THE ENVIRONMENT - THE FOCUS OF OUR CONCERNS – FEBRUARY 4, 2025 - CNP ASSURANCES

Backgroud : an uncertain environment in constant change(1)

- Increasing digitization of tools and processes in public service production.
- Rapid evolution of digital risk and low level of control.
- Professionalisation of attacks.
- Massive use of the cloud.
- Confusion between private and professional uses : shadow IT, applications.
- Need for permanent connection.
- Security not always a priority.

RISK Summer School 2025

Backgroud : an uncertain environment in constant change(2)

- Data essential for improving service quality and gaining a better understanding of operational constraints and needs.
- Strong interconnection between all systems.
- Increased dependence on energy.
- Citizen demand for continuity.
- Particularly exposed local authorities (Marseille, Lille, Angers, Saint-Nazaire).

RISK Summer School 2025

Significant challenges for public authorities

- Assessment of the impact of an attack, data theft or technical incident.
- Compliance issues : NIS2 (network and information security), RGS (general security framework), RGPD (general data protection regulation).
- Image and trust issues.
- Financial and strategic issues.
- Performance vs. security.

RISK Summer School 2025

Numerous sources of risk to manage

- Cyber attacks: ransomware, DDos, phishing
- Technical failures: weather hazards, network outages, software updates
- Human error: information overload, confusion between private and professional use, lack of training
- Heavy reliance on third parties: software publishers, data hosts

RISK Summer School 2025

Multiple impacts on public services and organisation

- Interruption of essential services to the public.
- Theft, deletion and modification of data.
- Damaging consequences for users : fraud, identity theft, invasion of privacy.
- Significant financial cost.
- Loss of trust.

RISK Summer School 2025

Reducing the likelihood of incidents

- Implementation of a cyber security strategy.
- Strong authentication in access management.
- Regular updating of systems and applications.
- Securing critical infrastructure (networks, industrial systems, urban IoT).
- Awareness-raising among staff.

RISK Summer School 2025

Quickly identify threats

- Continuous monitoring of networks and information systems.
- Alert systems (detection of anomalies, intrusions, suspicious behaviour).
- Cyber security monitoring of new threats (CERT-FR, ANSSI).

RISK Summer School 2025

Limiting the impact of an incident

- Business continuity plan (BCP) : maintain essential services in the event of a failure/attack.
- Disaster recovery plan (DRP): restore systems quickly.
- Crisis management (communication, legal, technical).
- Transparent communication with citizens and partners in the event of an incident.

RISK Summer School 2025

Strengthening resilience

- Regular training and crisis exercises (full-scale attack simulations).
- Data security (backups, redundancy, encryption).
- Regular risk assessment (security audits, intrusion tests).

RISK Summer School 2025