

Module 4 European Studies through Digital Management

Practical workshop No. 5

Topic 5: Cybersecurity Challenges in EU Governance

Part 1: Key Cybersecurity Risks and Threats in EU Governance

1. **The Growing Importance of Cybersecurity in EU Public Administration**
 - How digital transformation increases **cyber risks in governance and public services**.
 - The role of **cybersecurity in protecting citizen data, government systems, and critical infrastructure**.
2. **Major Cyber Threats Facing EU Institutions**
 - **Cyberattacks on EU government agencies** (e.g., ransomware, phishing, denial-of-service attacks).
 - **State-sponsored cyber espionage** and its impact on EU geopolitics.
 - **Threats to election security and misinformation campaigns**.
3. **Regulatory Frameworks for Cybersecurity in EU Governance**
 - **The Network and Information Security (NIS2) Directive**: Strengthening EU-wide cyber resilience.
 - **The General Data Protection Regulation (GDPR)**: Data protection requirements for public institutions.
 - **The EU Cybersecurity Act (2019)**: Establishing a framework for cybersecurity certification.
4. **Challenges in Securing EU Digital Infrastructure**
 - **Coordination between national and EU-level cybersecurity agencies**.
 - **Shortage of cybersecurity professionals in public administration**.
 - **Balancing cybersecurity with transparency and public access to information**.

Part 2: Case Studies and Future Trends in EU Cybersecurity Governance

1. **Notable Cyber Incidents Affecting EU Institutions**
 - **The 2021 European Medicines Agency (EMA) cyberattack** and its implications for digital security.
 - **Cyberattacks on EU Parliament and Commission systems**.
 - **Election interference and cybersecurity threats in national elections**.
2. **Cybersecurity Cooperation Between EU Member States**
 - The role of **ENISA (European Union Agency for Cybersecurity)** in coordinating cybersecurity efforts.
 - **Cross-border cybersecurity initiatives** (e.g., EU Cybersecurity Strategy 2020).
 - The **EU Cyber Diplomacy Toolbox**: Responding to cyber threats at an international level.
3. **Emerging Technologies and Cybersecurity Solutions in EU Governance**
 - **AI-driven threat detection and real-time cyber monitoring**.
 - **Blockchain for secure digital identity verification and public records management**.



- **Cloud security strategies** for protecting government data.
- 4. **The Future of Cybersecurity in EU Public Administration**
 - Strengthening **public-private partnerships** for cyber defense.
 - Enhancing **cyber resilience** in critical infrastructure (energy, finance, healthcare).
 - The role of **quantum computing** in future cybersecurity threats and solutions.

