Harnessing AI for Smarter Regulation

ITU-EKIP Regional Regulatory Forum for Europe 2025

MALTA COMMUNICATIONS AUTHORITY

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about the Malta Communications Authority

Portfolio and competences

- Electronic Communications NRA
- Competent authority – Spectrum, EMF
- Postal services
- eCommerce, Web accessibility and P2B
- EUDI supervision; eiDAS
- Digital Services Coordinator (DSA)

In the pipeline

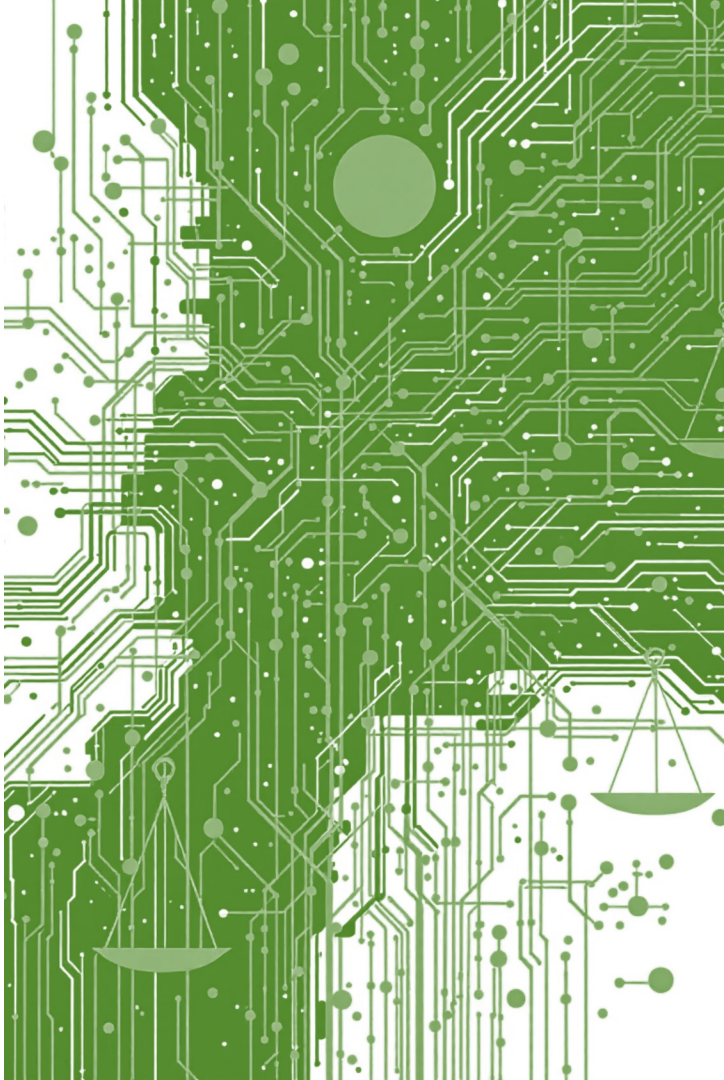
- Cybersecurity of Digital Infrastructures for NIS2 and CER
- National Cybersecurity Certification Authority (EUDI wallet)

What this presentation is about

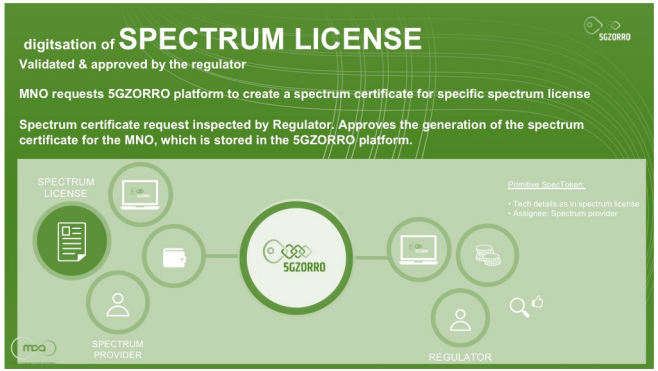
Regulators are usually seen as *rule-setters and enforcers*.

But what happens when the *regulator itself* adopts AI?

This presentation explores MCA's journey into AI and how, in becoming AI-enabled, regulators also become *the regulated.*



In the beginning… there was 5GZORRO
Exploring AI-enabled spectrum assignment



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 871533

Then some LLM-based experiments

On-Demand AI Advisor (Custom GPT)

Advisor on foresight-driven, sustainable digital transformation

Meet proMTeus (prototype no-code GPT)
Your Custom AI Advisor for Public Sector Innovation

Who I Am:
An AI-powered advisor designed to support public sector transformation by providing strategic insights, guidance, and answers to policy and operational questions.

What I Do:

• **Empower Decision-Making**: Instant access to data analysis, policy guidance, and strategic foresight.

• **Enhance Efficiency**: Quickly answer complex questions, reducing research time and supporting informed choices.

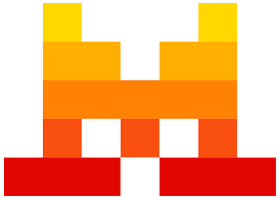
• **Drive Innovation**: Suggest innovative approaches and best practices drawn from global digital transformation efforts.

Why I'm Here:
To help accelerate Malta's digital transformation journey by empowering public servants with cutting-edge knowledge, strategic foresight, and operational support.

Purpose: Promote awareness and engagement within public administration.

Description: A custom GPT-based assistant that provides instant insights, policy guidance, and data analysis support, empowering public servants with quick, reliable information on demand.

Superseded by (everyone using…)



+ many more…

MCA is not alone (obviously!)

Other Regulators are Exploring AI too

Ofcom insights (UK – Smith Institute)

- AI in **licensing reviews**
- ML predicting **interference**
- Proactive **spectrum monitoring**
- **Digital Twin** for policy

Caption: *From reactive* → proactive oversight

BEREC insights (EU NRAs)

- AI in **complaint handling**
- **Radio channel modelling**
- SAFE AI for **market compliance**
- Still in **early adoption**

+ many more insights from OECD, G7, etc...

MCA’s first steps in experimenting with AI

And why they mattered

- Shifted perspective: data-driven and agile regulation
- Demonstrated how *technology itself* can enforce transparency and traceability.
- Opened the big question:
  - *If AI helps regulators regulate, how should regulators ensure their own compliance?*

The Shift: From Tools to Transformation

AI is Now a Systemic Force Reshaping Legitimacy and Trust

Predictive Policymaking

AI enables data-driven policy decisions and outcome forecasting

Intelligent Monitoring

Real-time compliance tracking and automated oversight systems

Dynamic Enforcement

Adaptive regulation embedded within AI systems themselves

This systemic integration challenges core principles of legitimacy, transparency, and contestability. Regulation can no longer be static—it must be adaptive, iterative, and embedded within AI systems.

But the AI promise comes with pitfalls

Benefits

- **Efficiency & cost savings**
- Optimised **spectrum use**
- **Real-time monitoring**
- Policy **simulations & twins**
- **Greener networks**

Risks

- **Poor data quality**
- **Black-box opacity**
- **Unclear liability**
- High **costs & skills gap**
- **Synthetic data limits**

The Regulator in the Mirror

Trust Begins with Internal Discipline

Map Internal AI Systems

Comprehensive inventory of all AI applications under AI Act classification requirements.

Conduct Impact Assessments

Perform mandatory Fundamental Rights and Transparency Impact Assessments for high-risk systems.

Ensure Auditability

Establish transparent, explainable, and fair AI systems that can withstand public scrutiny.

Are we ready to hold ourselves to the same standards we demand from others?

Public authorities that fail internal AI governance risk not only legal non-compliance but the erosion of public trust essential for effective regulation.

Structural Barriers to Responsible AI

Legacy Systems, Low AI Literacy, and Data Silos Inhibit Compliance

Data Quality Crisis

Outdated, siloed datasets undermine AI effectiveness. Many agencies lack integrated data sharing capabilities essential for AI success.

AI Skills Gap

Limited internal AI expertise increases dangerous vendor dependency and reduces oversight capacity.

Legacy Infrastructure

Outdated systems cannot support scalable, secure AI deployment or integration requirements.

Risk Aversion Culture

Fear of public failure blocks necessary experimentation and iterative improvement approaches.

Building an AI-ready MCA

Hallmarks before taking the plunge

Hybrid approach – AI + human oversight

Strong datasets – quality & standardisation

Accountability – explainability, audit trails

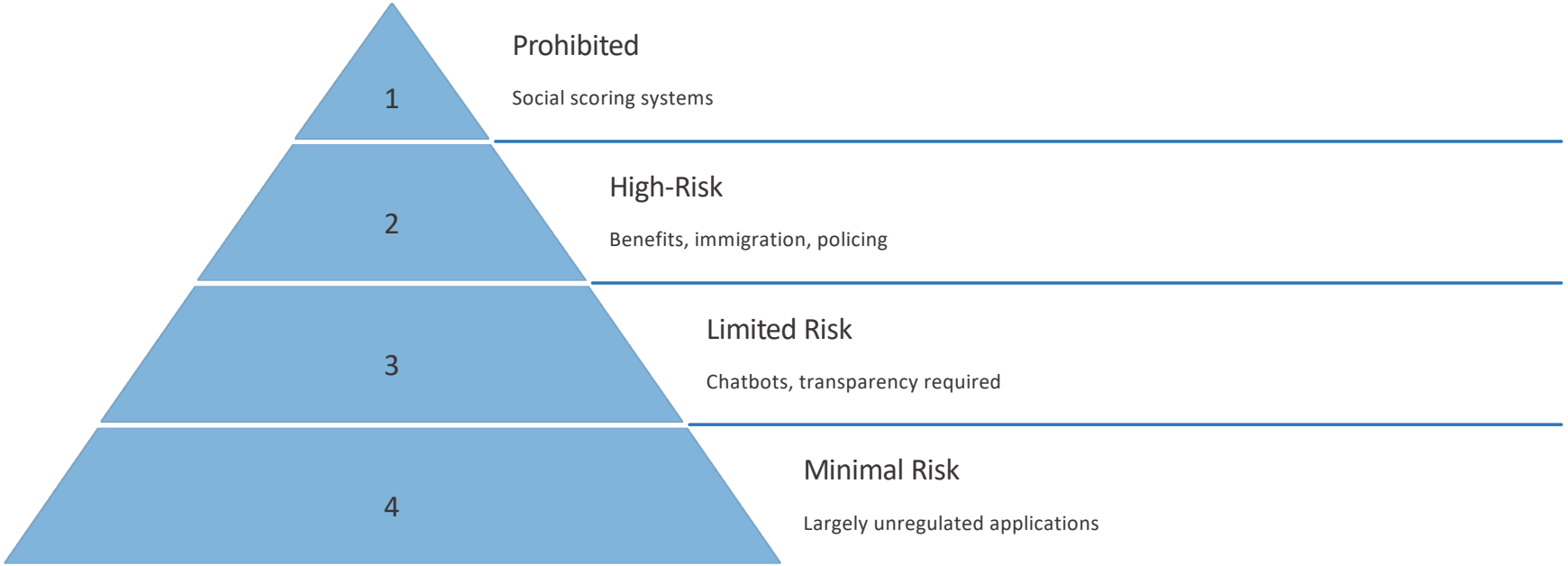
CBA first – weigh costs & impacts

AI Act readiness – align internal use

Fair competition – monitor market outcomes

Understanding the EU AI Act

A Risk-Based Legal Framework That Encompasses Public Authorities



High-risk deployers must perform Fundamental Rights Impact Assessments, establish risk management systems, ensure human oversight, and guarantee explainability.

The Strategic Role of AI Literacy

A Legal Mandate and a Safeguard Against Mindless Use

Legal Requirement

Recital 20 of the AI Act mandates sufficient AI literacy among regulatory staff

Prevents Automation Bias

Critical thinking skills counter over-reliance on algorithmic recommendations

Enables Human Oversight

Informed staff can meaningfully review and intervene in AI decision-making

> Without internal AI fluency, public agencies risk becoming blind users of complex systems they neither understand nor control.

AI literacy ensures meaningful contestability and maintains democratic accountability in automated governance systems.

Harmonised Standards and the EU AI Act

Presumption of Conformity Through Standards Is the Compliance Shortcut

The Critical Role of Harmonised Standards

Harmonised standards are critical instruments that give operational meaning to the legal requirements of the AI Act. Once published in the Official Journal of the EU, they grant a **presumption of conformity**, simplifying compliance for deployers and providers of high-risk AI systems.

Their purpose extends beyond legal compliance: they **translate abstract obligations into verifiable technical criteria** that organizations can implement.

Why Harmonised Standards Matter

Legal Function

Compliance with published standards confers automatic presumption of conformity

Policy Implementation

Define how to implement risk management, transparency, data quality, and human oversight in practice

Rights Protection

Ensure high levels of safety and fundamental rights protection

Economic Function

Level the playing field, especially for SMEs navigating complex legal frameworks

Hallmarks of Harmonised AI Standards

01

Focus on Individual Rights

Standards must address risks to health, safety, and fundamental rights

02

System and Product-Centric

Must address lifecycle stages from design to post-market monitoring

03

Prescriptive and Precise

Must include verifiable, non-abstract requirements

04

Horizontally Applicable

Must be usable across AI systems and sectors with clear guidance

05

State-of-the-Art Aligned

Standards must evolve with modern AI techniques including GenAI

Risk Management & Data Governance

Data Governance

Ensuring statistical representativeness and completeness throughout the AI lifecycle

- Dataset quality metrics
- Bias monitoring systems
- Data lineage tracking

Risk Management

Testing and mitigation of rights-related risks through systematic evaluation processes

- Rights impact assessments
- Bias detection protocols
- Harm mitigation strategies

Transparency & Human Oversight

Record Keeping

Event logging systems for comprehensive post-market traceability and audit capabilities

Transparency

Clear explanations of system functions, decision-making processes, and potential risks to users

Human Oversight

Enabling meaningful human control with override capabilities and intervention mechanisms

Performance & Resilience Standards

Accuracy Thresholds

Defining performance metrics and acceptable accuracy levels for AI system outputs

Robustness Testing

Ensuring operational resilience under fault conditions and adversarial scenarios

Cybersecurity Protection

Safeguarding against AI-specific threats and vulnerabilities in deployed systems

Quality Management & Assessment

Quality Management Systems

Comprehensive lifecycle-wide QMS obligations ensuring consistent compliance from development through deployment and monitoring.

- Process documentation requirements
- Change management protocols
- Continuous improvement frameworks

Conformity Assessment

Competency-based assurance mechanisms that validate compliance with AI Act requirements through systematic evaluation.

Harmonised standards are still in the making…

But meanwhile, some lessons from ISO/IEC 42001

From Legal Obligations to Operational Accountability

AI Policy & Objectives

Establish risk appetite anchored in legal obligations and organizational values

Risk Assessment

Tailored evaluation of bias, security vulnerabilities, and opacity risks

Lifecycle Controls

Data quality management, human oversight protocols, model transparency

Audits & Review

Continuous improvement through systematic evaluation and adaptation

AIMS enables regulators to embed trustworthy AI principles into daily operations, making compliance demonstrable and auditable.

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THANK YOU

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