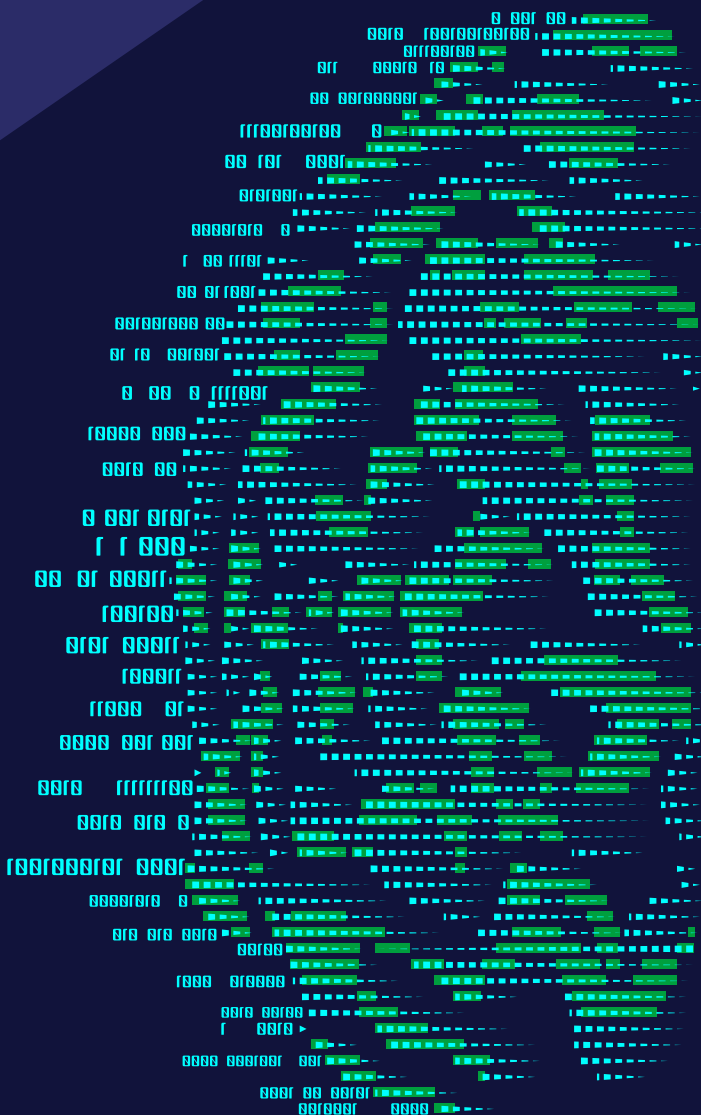


EVENT REPORT

eu-LISA Industry Roundtable

# ARTIFICIAL INTELLIGENCE



EU JUSTICE  
AND HOME  
AFFAIRS  
IN THE  
AGE OF AI:

FOSTERING  
INNOVATIONS  
AND  
MITIGATING  
RISKS

12-13 November 2024,  
Budapest, Hungary



eu-LISA  JHANN  
Justice and Home Affairs Agencies Network *Presidency*



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FOSTERING INNOVATIONS AND MITIGATING RISKS

eu-LISA Industry Roundtable,  
12-13 November 2024, Budapest, Hungary





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# 10 Years Anniversary

## Testimonials



### **Krum Garkov, former Executive Director of eu-LISA**

Since the very start of operations of eu-LISA I had no doubt that one of the important roles that Agency had to play was to bring together the industry players and the Member States, providing a platform for exchange and discussions about specific needs in the areas of borders, internal security and migration. In this sense to introduce the concept of the Industry Roundtables was a logical approach. At the time, it was a unique and innovative concept, many predicted it would be short-lived. Today, 10 years later, the event still plays a prominent role that went even beyond its original intent.

In an open and transparent format, the Roundtables allow sharing and cross-breeding of expectations and experiences, to showcase practical solutions and tools that public institutions and EU Agencies across Europe need. I am already looking forward to the 20th anniversary!



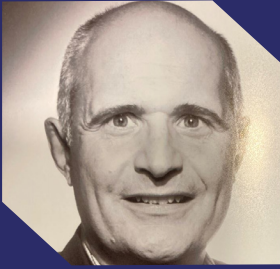
### **Agnès Diallo, CEO of IN Groupe and former Executive Director of eu-LISA**

Over the years, eu-LISA Industry Roundtable event has become a cherished tradition of the Agency. And it is more than that: the Industry Roundtable has become a unique platform for exchange of views on technologies of relevance for the Justice and Home Affairs community gathering valuable perspectives across public and private sectors as well as academia. I am proud to say that I very much enjoyed being part of the event and supporting its development in my former role as the Executive Director of eu-LISA.



### **Andy Smith, Director, Industry & Innovation at SITA**

Without exception these have been well-run, informative, and fun events that attract industry and government leaders and foster an atmosphere of open discussion. They have helped me establish working relationships that last today and deepened my knowledge of the JHA environment in Europe. [...] I hope that eu-LISA continues to use the Industry Roundtable as a source of practical knowledge of how nations beyond the EU have utilised technology to enhance their own JHA environments.



## Pascal Janer – VP Sales & business development – IN Groupe

They have had a significant impact on the ecosystem, fostering in-depth discussions and shaping the future of border management, Entry Exit Systems (EES), biometrics, both at the regulatory level and operational processes. Through high-quality exchanges and networking, these events have brought together leading experts and decision-makers, strengthening dialogue and collaboration among strategic stakeholders.



## Theofanis Syrigos – Head of Business Relationship Management Sector, eu-LISA

The Industry Roundtable has proven its significance since its early days and paved the way for an even brighter future. [...] eu-LISA Industry Roundtable served as a forum for the Agency's stakeholder community to discuss pressing challenges and capability gaps and the possible solutions, both at technological and organisational levels and how to address them.



## Ciaran Carolan – Program Manager ICAO Public Key Directory, ICAO

As the Agency was still in its early days of operation, it was clear that a technology-oriented organisation like eu-LISA required a formal mechanism for engaging industry in developments and innovation. [...] Quickly, it became apparent that the Industry Roundtable was not just a forum for learning but a strategic support for the Agency. [...] It is no exaggeration to suggest that the Industry roundtable was foundational in the growth of the Agency into the large and trusted organisation that it is today.



## Sandrine Trochu – Sales Director European Institutions, IDEMIA

I am proud to say that I have attended each and every one of the eu-LISA Industry Roundtables since the inception of the Agency. [...] We have created a community between stakeholders, and we all call each other some time ahead to ask "*Will you be there?*" and we have learned a lot about technologies, solutions, innovation.



## Luca Tagliaretti – Executive Director, European Cybersecurity Competence Centre and Network

It provides a unique platform for marketing-free exchange of information between industry and government. This enriches the two communities and it provides also the possibility for smaller players to showcase their ideas to a wider public and to potential commercial partners. This boost innovation. I have also always appreciated how the eu LISA team selected topics of relevance in a holistic way and covering a broad range of subjects.

The IR are a great networking opportunity to engage and bring together the different communities (borders/biometric/cyber/operators) that would normally not meet in other conference.



## Michael Schwaiger – Director Product Management, Secunet Networks AG

Over the past decade, this conference has been essential for networking and fostering collaborations between industry leaders, policy makers, public authorities and technology experts. The connections made here have led to numerous partnerships. Reflecting on its history, the Industry Roundtable has grown significantly in scope, attendance and reputation. We look forward to future events that will continue to drive innovation and collaboration within our industry.



## Dr María Mora - Head of Fraud and Risk Solutions at the Global CoE of Data Intelligence, Fujitsu

Deeply impressed by the sustained quality of the eu-LISA event and its vibrant community. This edition provided valuable insights into the current status and challenges of AI Act implementation, fostering collaboration for future innovation.





FROM LEFT TO RIGHT:  
Philipper Harant, Head of Strategy, Capabilities and Coordination Unit, eu-LISA  
Krum Garkov, former Executive Director of eu-LISA (2012-2022)

# Executive Summary

The Industry Roundtable, hosted by eu-LISA in Budapest, marked a decade of fostering collaboration between EU institutions, Member States, and the private sector. This year's hybrid event spotlighted the transformative potential of Artificial Intelligence (AI) in justice and home affairs, attracting over 400 participants. The discussions centered on AI's role in enhancing governance, operational efficiency, and security while addressing the ethical and regulatory challenges associated with its adoption. This edition was also an opportunity to celebrate the 10th anniversary of the Industry Roundtable.

## Key themes and insights

### 1. AI governance and the role of the EU AI Act

The EU AI Act emerged as a cornerstone for fostering responsible innovation, offering a robust framework to balance technological advancements with societal safeguards. Presenters emphasized the AI Act's focus on transparency, safety, and accountability, particularly for high-risk applications of AI in law enforcement and border management. The implementation of independent testing capabilities and oversight mechanisms was identified as crucial to build trust in AI systems.

### 2. Operational challenges and opportunities

AI's current and potential applications were demonstrated through practical examples. Europol showcased tools for analysing large volumes of data gathered from the encrypted communication tools used by criminal organisations, while platforms like CANCOM's "Plain" enhanced inter-ministry collaboration. In law enforcement, AI has enabled breakthroughs in predictive analytics, biometric identification, and video analysis. However, barriers such as data quality, infrastructure, and ethical concerns remain significant.

### 3. Generative AI and emerging technologies

Generative AI was highlighted as both a transformative and challenging force. Tools like GPT@EC and QAnswer demonstrated AI's ability to streamline workflows, automate multilingual communications, and enhance policy-making processes. Yet, concerns around hallucinations, bias, and regulatory compliance underscored the need for safeguards to ensure ethical usage.

#### 4. Sector-specific innovations

Several presentations showcased tailored AI solutions:

- **Biometric technologies:** Innovations in facial recognition and AI-driven seamless travel corridors were highlighted as transformative for border management.
- **Fraud and risk detection:** Contextual AI frameworks demonstrated effectiveness in detecting financial irregularities and ensuring compliance with complex legal standards.
- **Human oversight:** Norway's training programs for biometric officers and efforts to counter morphing attacks exemplified the need for human involvement alongside AI systems.

#### 5. Collaborative approaches and knowledge sharing

Cross-sector collaboration emerged as a recurring theme, with initiatives like the EU Innovation Hub and Horizon Europe-funded projects playing pivotal roles in aligning technological capabilities with policy goals. Multidisciplinary cooperation was deemed essential for addressing shared challenges and fostering innovation.

#### Recommendations and future directions

- **Ethical and transparent AI:** Frameworks such as the AI Act must be complemented by practical measures to ensure fairness, explainability, and societal trust.
- **Capacity building:** Strengthening internal expertise and infrastructure is essential for effective AI integration across sectors.
- **Data governance:** Developing secure and interoperable data-sharing systems is critical for scaling AI applications.
- **Adaptive development:** Continuous feedback loops and iterative designs are vital for addressing the dynamic regulatory and technological landscape.
- **Strategic partnerships:** Encouraging collaboration between public institutions, private industry, and academia will accelerate innovation and knowledge exchange.

#### Concluding remarks

The roundtable underscored AI's dual potential to revolutionize governance and security while posing ethical and operational challenges. Speakers emphasized the need for human-centric, transparent, and accountable AI systems. Reflecting on a decade of progress, eu-LISA reaffirmed its commitment to advancing innovation and governance through AI. The next Industry Roundtable, scheduled for June in Poland, will build on these discussions, fostering continued collaboration and innovation.



# Day 1

Opening remarks

**Session 1** | Setting the scene:  
Legal framework and European context

**Session 2A** | Adoption of AI solutions:  
Challenges and solutions from the perspective  
of MS authorities and EU institutions

**Session 2B** | Solutions for compliance  
with the regulatory framework for AI

# DAY 1

## 01

### Opening remarks

#### Marili Männik

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**Marili Männik**  
Executive Director ad Interim,  
eu-LISA

Marili Männik, Executive Director Ad Interim at eu-LISA, opened the session by underlining the significance of AI for public institutions, particularly in the justice and home affairs sector. She highlighted the need for integrity, transparency, and accountability in AI adoption and stressed the long-term societal implications of its use in critical decision-making processes.

Key points from her address:

- **AI Act as a foundation:** Ms Männik emphasised the importance of the EU AI Act in providing guidelines for the ethical and effective use of AI. She praised the legislation for balancing innovation and the respect for fundamental rights, serving as a cornerstone for responsible AI deployment.
- **Building internal capabilities:** eu-LISA is actively working to enhance its internal AI expertise. This includes understanding AI's operational mechanics, deploying responsible systems, and ensuring robust governance aligned with technology-specific requirements. Current exploratory efforts include chatbots for some of the Core Business Systems managed by the Agency, generative AI to increase the effectiveness of business processes, as well as its use in the processing of biometric data to improve accuracy and efficiency.
- **Testing and transparency:** A critical gap identified by Ms Männik is the EU's limited capacity to independently evaluate AI system performance. She called for collaborative efforts to build testing and evaluation frameworks, enabling public institutions to trust deployed systems and enhance societal trust overall.
- **Collaboration:** Ms Männik emphasised the importance of partnerships between public institutions, industry, and research organisations. Initiatives like the AI cluster of the EU Innovation Hub for Internal Security exemplify efforts to foster collaboration and shared learning. Ms. Männik concluded by expressing hope that discussions during the Roundtable would lead to practical solutions, contributing to both eu-LISA's internal strategy and broader industry advancements.

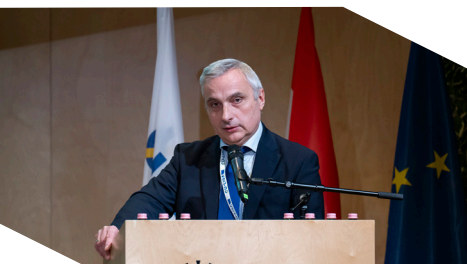


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*AI is now integral to daily life, and the question for public institutions is no longer if but how to use it. In Justice and Home Affairs, ethical deployment is essential to ensure transparency, accountability, and integrity, as the stakes of missteps are profound.*

## Zsolt Szolnoki

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**Zsolt Szolnoki**  
Senior High Counsellor,  
Permanent Representation  
of Hungary to the EU

Zsolt Szolnoki, Senior High Counsellor, Permanent Representation of Hungary to the EU, addressed the session with insights into the role of the Hungarian EU Presidency in advancing AI discussions, particularly in the context of law enforcement and home affairs. He framed AI as a critical component of the strategy of the EU Innovation Hub for Internal Security and other collaborative efforts within the EU.

Key themes from his intervention:

- **Collaboration:** Mr Szolnoki highlighted the work of the EU Innovation Hub for Internal Security, which brings together Member States and EU agencies to address shared technological challenges. He emphasised the Hub's clusters, including clusters focusing on biometrics and AI, as avenues for promoting innovation in law enforcement.
- **AI in law enforcement:** : While AI adoption in law enforcement remains limited, Mr Szolnoki identified areas where it has begun to make an impact, such as video analytics, biometric identification, and predictive analysis. He acknowledged challenges like legal frameworks, infrastructure, and public trust that still need resolution.
- **Quantum technology:** Mr Szolnoki introduced quantum technology as an emerging area of exploration within law enforcement, pointing to ongoing efforts to understand its potential applications and implications for security.
- **Regulatory and ethical concerns:** He underscored the importance of balancing innovation with ethical considerations, including privacy, fairness, and accountability. The AI Act provides a framework for addressing these concerns, but he stressed the need for further dialogue to ensure effective implementation.

Mr Szolnoki concluded by urging participants to focus on end-user needs and foster cross-disciplinary discussions to develop practical, usable AI tools for law enforcement and other critical sectors.

## Kata Bencze

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**Kata Bencze**  
Head of Unit,  
Judicial Digitalization and  
Artificial Intelligence,  
Ministry of Justice of Hungary

Kata Bencze, Head of Unit, Judicial Digitalisation and Artificial Intelligence, Ministry of Justice of Hungary, focused on AI's transformative potential within the justice sector, highlighting the Hungarian Presidency's priorities in digitalisation and the development of cross-border justice systems. She underscored the need for collaboration and practical solutions to harness AI effectively.

Key takeaways from her address:

- **Judicial cooperation and e-justice:** Ms Bencze detailed the priorities of the Hungarian Presidency in promoting digital transformation in justice. The e-Justice Strategy for 2024–2028 provides a stable foundation for innovation, focusing on efficiency, access, and the integration of AI into judicial processes.
- **High-risk AI systems:** She discussed the challenges of defining and safeguarding high-risk AI systems in the justice sector. Examples include AI tools for evaluating evidence reliability and supporting judicial decision-making. While these systems hold potential, they also require robust safeguards to ensure fairness and transparency.



- **Practical applications:** Ms Bencze highlighted existing applications of AI in justice, such as tools for transcription, anonymisation, and translation. These systems are helping courts manage large caseloads and process mass litigation more effectively, demonstrating AI's practical value.
- **Training and digital courtrooms:** Building digitally skilled professionals is a key focus of the Hungarian Presidency. Initiatives include training programs for judicial staff and the development of digital courtrooms equipped for remote hearings and video conferencing.
- **AI governance:** The Presidency has emphasised the importance of financing AI projects and sharing best practices across Member States. Ms Bencze stressed the need for EU-level responses to challenges like predictive analytics, resource allocation, and ethical concerns.

Ms Bencze concluded by calling for sustained cooperation among Member States, EU agencies, and practitioners to build a justice system that effectively leverages AI while upholding the principles of democracy and the rule of law.



## Key insights and recommendations from opening remarks

The session highlighted several critical insights and areas for action:

- 1. Ethical AI deployment:** The speakers unanimously emphasised the importance of ethical frameworks like the AI Act to guide responsible AI adoption across sectors.
- 2. Capacity building:** Developing internal expertise and independent testing capabilities is essential for public institutions to deploy and manage AI systems confidently.
- 3. Collaboration and innovation:** Cross-sector partnerships and innovation hubs play a crucial role in addressing shared challenges and advancing AI research and applications.
- 4. Practical use cases:** AI is already proving its value in areas like biometric data processing, judicial transcription, and fraud detection. Scaling these applications requires infrastructure investment and alignment with regulatory frameworks.
- 5. Future challenges:** Addressing resource constraints, building trust among stakeholders, and ensuring data quality remain key hurdles for the widespread adoption of AI.

# 02

## Session 1

# Setting the scene: Legal framework and European context

## Yordanka Ivanova

### Relevance of the AI Act for the security and border management



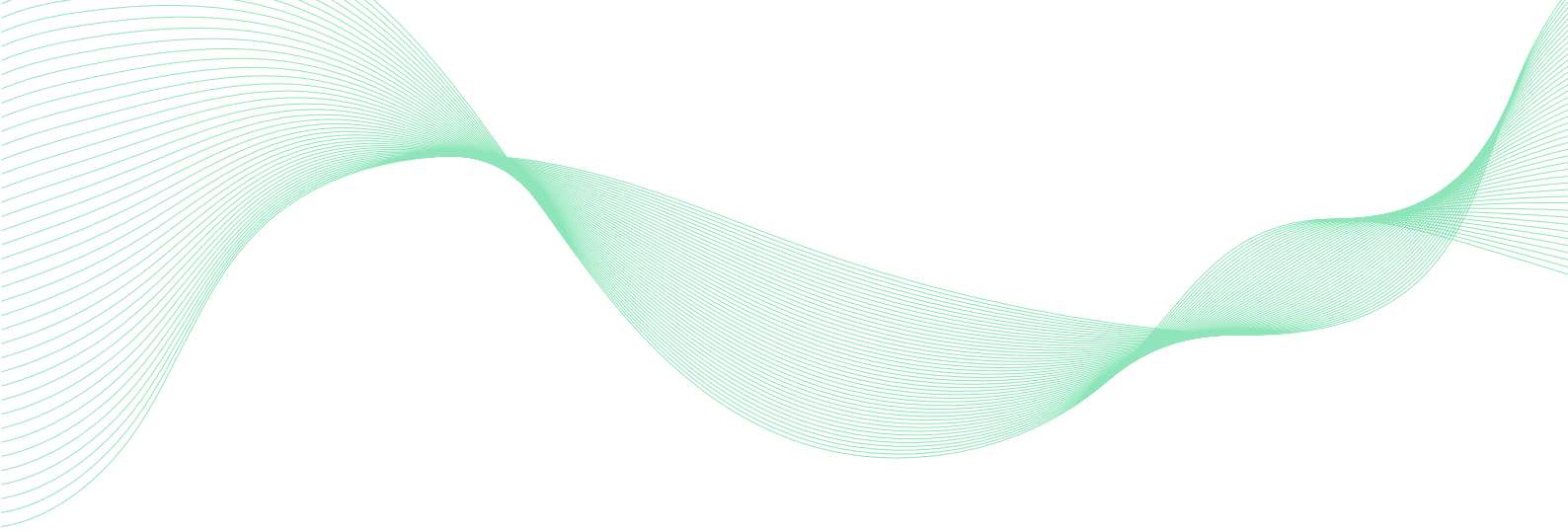
**Yordanka Ivanova**  
Head of the Legal Oversight  
of AI Act Implementation  
at the European AI Office

Yordanka Ivanova, Head of the Legal Oversight of AI Act Implementation at the European AI Office, detailed the objectives, structure, and implementation plan of the AI Act, a landmark legislation that came into force on 1 August 2024. The AI Act aims to balance innovation and risk management, ensuring that AI systems are safe, trustworthy, and aligned with fundamental rights.

Key themes:

- **Horizontal and market-based approach:** The AI Act applies to providers and deployers of AI systems across the EU, including public institutions like eu-LISA and Europol, as well as private sector actors. The legislation categorises AI applications into risk levels, from minimal risk to high-risk systems and outright prohibited practices.
- **Prohibited AI practices:** Ms Ivanova outlined prohibited AI applications, including manipulation of behaviour, social scoring, untargeted internet scraping for facial recognition databases, and certain uses of biometric categorisation. These prohibitions align with European values and safeguard fundamental rights.
- **High-risk AI systems:** High-risk applications, such as those used in law enforcement, migration, and border control, require ex-ante assessments to ensure compliance with strict safety, transparency, and oversight standards. Examples include systems for biometric identification, risk assessment of asylum applicants, and polygraphs in criminal investigations.
- **Implementation timeline:** While high-risk AI systems must comply with the regulation by August 2026, transitional measures allow existing systems to align with these requirements by December 2030.
- **Responsibilities and oversight:** Providers must ensure system accuracy, data quality, and cybersecurity, along with lifecycle monitoring and conformity assessments. Deployers are tasked with implementing human oversight and conducting impact assessments for high-impact use cases.

Ms Ivanova emphasised that trust and transparency are foundational to AI's integration into public services, with mechanisms like EU databases for system registration and public notification ensuring accountability.



## Annette Cassar and Aleksandra Oczko-Dolny

### Research and innovation in AI for Home Affairs

The second presentation, delivered by Annette Cassar and Aleksandra Oczko-Dolny, Policy Officers within the Innovation and Security Research unit of DG HOME, explored the role of AI in supporting justice and home affairs (JHA), emphasising both policy initiatives and EU-funded research.

**Ms Cassar** discussed the growing relevance of AI in addressing challenges within security and migration management. She highlighted practical applications and risks associated with emerging AI technologies.

#### Applications in Security and Migration:

- **Operational efficiency:** AI is being used to streamline administrative tasks, enabling law enforcement officers to focus on core duties. Applications include report drafting, chatbot-based citizen information services, and translation tools.
- **Crime prevention and training:** AI supports predictive crime analytics, facilitates real-time decision-making, and enhances cross-border cooperation through tools like video and image analysis.
- **Emerging threats:** Ms Cassar highlighted the misuse of AI by criminals, such as synthetic voice scams, deepfakes, and disinformation. Traditional methods fall short in addressing these threats, necessitating advanced tools tailored to law enforcement needs.

#### Policy support and stakeholder collaboration:

- DG HOME collaborates with stakeholders to implement the AI Act in home affairs. Key initiatives include the establishment of an expert group for knowledge sharing and guidance development tailored to sector-specific challenges.
- The Unit also represents the European Commission in the EU Innovation Hub for Internal Security, facilitating strategic discussions and fostering innovation across justice and home affairs agencies.

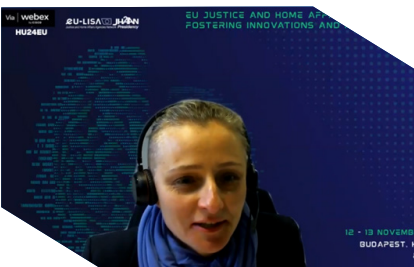
**Ms Oczko-Dolny** focused on the research dimension, emphasising EU-funded programs aimed at equipping home affairs authorities with cutting-edge tools.

#### Research Priorities:

- **Horizon Europe:** Projects under Cluster 3 (civil security for Society) support the development of AI applications that align with policy priorities. These include Starlight, Aligner, and PopAI, which address ethical frameworks, societal challenges, and the development of trustworthy AI tools.



**Annette Cassar**  
Policy Officer,  
Unit for Innovation  
and Security Research,  
DG HOME,  
European Commission



**Aleksandra Oczko-Dolny**  
Policy Officer,  
Unit for Innovation  
and Security Research,  
DG HOME,  
European Commission

• **Applied research and end-user Orientation:** EU-funded research emphasises practical applications, fostering synergies between projects and ensuring market uptake of AI technologies.

• **Follow-on funding:** Mechanisms like the Internal Security Fund support the deployment of research outcomes, focusing on training opportunities and integration into operational settings.

#### **Challenges and Data Strategy:**

• Ms Oczko-Dolny identified data availability and quality as significant barriers to AI adoption in the justice and home affairs domain. Sensitive and legal data often cannot be shared, complicating AI system training and validation.

• The European Security Data Space initiative aims to address these challenges by creating an architecture for secure data sharing. Projects like Lago and Tessera explore the development of datasets for AI training while adhering to data protection laws.



## **Key insights and recommendations from session 1**

The presentations underscored several critical insights and areas for action:

**1. Balancing innovation and regulation:** The AI Act provides a robust framework to foster innovation while addressing risks, particularly in high-stakes sectors like law enforcement and migration.

**2. Building trust through transparency:** Mechanisms like system registration, public notifications, and clear guidelines for high-risk applications ensure transparency and societal trust.

**3. Collaboration and knowledge sharing:** Initiatives like the EU Innovation Hub and Horizon-funded projects foster collaboration between stakeholders, driving innovation and addressing shared challenges.

**4. Addressing data challenges:** Secure and ethical data sharing frameworks are essential for AI system development and deployment in sensitive domains.

**5. Emerging threats and preparedness:** Policymakers and researchers must address the dual use of AI by criminals and law enforcement, ensuring robust tools to combat misuse while upholding ethical standards.

## 03

## Session 2A

## Adoption of AI solutions: Challenges and opportunities from the perspective of MS authorities and EU institutions

### Colin van Noordt

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**Colin van Noordt**  
Researcher on Algorithms  
and Cloud,  
Netherlands Court of Audit

### Findings from the focus investigation on the use of AI in the Dutch central government

Colin van Noordt, a researcher on Algorithms and Cloud at the Netherlands Court of Audit, discussed the application of AI within Dutch public administration and the findings from a recent investigation into AI use across government agencies. His presentation highlighted AI's potential, the challenges it poses, and the steps needed to ensure responsible implementation.

Key Themes:

#### Scope of the Audit:

The investigation involved 70 central government organisations and focused on AI systems affecting citizens and businesses. It excluded AI used in military and social security contexts. The audit's primary aim was to map AI use comprehensively, classify risk levels, and assess compliance with the EU AI Act.

#### AI Adoption in Government:

- Of the 70 agencies audited, 40 reported using AI, with 433 systems identified. However, only 120 systems are currently operational, while others remain experimental or have been terminated.
- The police leads AI adoption, particularly for tasks such as internet scam reporting, cell inspections, fingerprint identification, and interview transcription in migration cases.

#### Preliminary Findings:

- AI systems are primarily used internally for knowledge processing and organisational efficiency. Direct citizen-facing applications are rare and focus on justice and security domains, such as enforcement and inspection.
- Generative AI tools remain experimental, with only eight systems in active use.

### Mr Van Noordt emphasised several barriers to effective AI adoption:

- Data challenges: Poor data quality and insufficient datasets hinder AI development.
- Infrastructure Gaps: Many agencies lack computational power or compatible systems.
- Legal and organisational barriers: GDPR uncertainties and outdated regulations often delay or block AI projects.
- Risk assessment: More than half of AI systems have not undergone formal risk assessments, complicating compliance with the AI Act.

### Risk Classification:

- Most AI systems were self-reported as minimal or limited risk, but Mr Van Noordt raised concerns about potential underreporting due to the perceived burden of high-risk classification.
- Risk assessments often rely on ad hoc or incomplete tools, ranging from quick scans to ethical and privacy frameworks.

### Key Takeaways:

Mr Van Noordt concluded that while AI offers significant potential for public administration, its deployment remains in early stages, with numerous obstacles limiting its impact. Ensuring compliance with the AI Act and improving organisational capacity will be critical for maximising AI's benefits.



*In the Netherlands' public sector, the use of AI remains in its early stages, with only a few systems in operation. Most of these are employed for internal organisational purposes and do not directly affect citizens or businesses. Government organisations anticipate that AI will enhance the efficiency and effectiveness of work processes.*

## Spyros Sarigiannidis

### AI strategy and tools in the European Commission



**Spyros Sarigiannidis**  
**Head of Unit for Data, Artificial Intelligence, and Web at DG DIGIT, European Commission**

Spyros Sarigiannidis, Head of Unit for Data, Artificial Intelligence and Web at DG DIGIT, outlined the European Commission’s strategic framework for AI adoption. His presentation focused on the governance, processes, and tools enabling the Commission to harness AI’s potential while ensuring ethical and secure implementation.

#### Strategic Vision:

##### AI as a general-purpose technology:

Mr Sarigiannidis likened AI to transformative innovations like electricity and fire, emphasising its potential to revolutionise public administration. However, he stressed the importance of balancing innovation with safeguards against risks.

##### Governance framework:

The Commission has established a robust governance structure, including:

- An inter-service steering group on AI.
- An AI community with over 3,500 members to share knowledge and drive collaboration.
- Interfaces with the European Data Protection Supervisor (EDPS) and the AI Office for compliance with the AI Act.

##### Operational actions:

The Commission’s AI strategy includes 11 high-level actions including:

- **AI register:** A corporate register tracks AI systems, their risk assessments, and compliance attributes.
- **Guidelines:** Detailed instructions address topics like software procurement, intellectual property, and third-party generative AI tools.
- **Training and development:** AI-focused courses and upskilling initiatives ensure staff readiness to adopt and manage AI tools effectively.
- **Open source:** The Commission prioritises open-source solutions to ensure transparency and adaptability.

##### AI tools in use:

Mr Sarigiannidis provided examples of AI tools currently operational or in development:

- **GPT@JRC and GPT@EC:** General-purpose large language models designed for research and administrative tasks. These tools integrate security and compliance features, offering functionalities like metadata retrieval, knowledge base connectivity, and task automation.
- **Task-specific tools:** AI-enabled systems streamline translation, summarisation, and document preparation tasks, enhancing efficiency across departments.
- **Virtual assistants:** Tools like Publio assist with content exploration and interaction on the EU’s official platforms.

### Risk mitigation measures:

The Commission has implemented guardrails for ethical AI use, such as confidentiality tagging for interactions with AI systems and compliance with cybersecurity and data protection regulations.

### Data strategy:

Mr Sarigiannidis emphasised the importance of high-quality data for AI systems, highlighting ongoing efforts to improve data governance and establish robust datasets for training and testing AI applications.

### Challenges and future outlook:

Mr Sarigiannidis acknowledged the complexity of embedding AI into public administration but highlighted the Commission's progress in implementing its strategy. He noted that most operational actions are on track for completion by the end of the year, ensuring that the Commission remains a leader in AI adoption within the EU.



## Key insights and recommendations from session 2A

The session provided a comprehensive overview of AI adoption in governance, highlighting both opportunities and challenges:

- 1. AI governance and compliance:** Both speakers emphasised the importance of robust governance frameworks to ensure ethical, secure, and compliant AI use.
- 2. Operational readiness:** Organisational capacity, including data quality, infrastructure, and skilled personnel, remains a significant barrier to effective AI implementation.
- 3. Strategic vision:** The European Commission's structured approach serves as a model for integrating AI into public administration, balancing innovation with safeguards against risks.
- 4. Focus on high-risk applications:** Both presentations stressed the need for accurate risk classification and thorough assessments to comply with the AI Act and maximise the value of AI in sensitive domains.
- 5. Collaboration and knowledge sharing:** Networks like the Commission's AI community and the Netherlands' Court of Audit initiatives underscore the value of collaboration in overcoming implementation barriers and fostering innovation.



## 04

## Session 2B

## Solutions for compliance with the regulatory framework for AI

### Jochen Friedrich

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**Jochen Friedrich**  
Technical Relations Executive  
at IBM

### High-quality standards and good governance tools for compliance with the AI Act

Jochen Friedrich, Technical Relations Executive at IBM, outlined the critical role of harmonised standards in ensuring compliance with the AI Act. His presentation emphasised the intersection of technical innovation and regulatory frameworks, showcasing how these elements can coexist to foster trustworthy AI ecosystems.

Key Highlights:

- **The EU AI Act:** Mr Friedrich explained the dual objective of the AI Act: promoting innovation while ensuring safety and compliance. The legislation balances these goals by setting essential requirements for high-risk AI systems and relying on harmonised standards to provide the technical specifics.
- **Standardisation efforts:** IBM is at the forefront of AI standardisation efforts, actively contributing to organisations such as CEN-CENELEC and the International Standardisation Organisation (ISO). These efforts focus on risk management, data quality, transparency, and cybersecurity. Mr Friedrich detailed how these standards translate regulatory principles into actionable guidelines, ensuring consistent application across industries.
- **IBM's governance tools:** The WatsonX AI Governance Suite was presented as a robust solution for managing risk and maintaining transparency. This tool supports lifecycle monitoring, documentation, and accountability, helping organisations align with dynamic regulatory requirements while fostering ethical AI use.
- **Open-source initiatives:** IBM's Granite large-language model exemplifies their commitment to open-source innovation, offering adaptable and reliable AI tools. Mr Friedrich argued that open-source models are vital for promoting transparency and collaboration in the AI community.

Mr Friedrich concluded by emphasising the importance of proactive collaboration between regulators, standardisation bodies, and industry players to ensure AI remains a force for good.

## María Mora Rodriguez

### Fujitsu Sentinel AI

María Mora Rodriguez, Head of Fraud and Risk Solutions at Fujitsu's Global Centre of Excellence of Data Intelligence, provided a pragmatic perspective on implementing responsible AI in real-world applications. Her presentation focused on bridging the gap between compliance and user-centric design, highlighting the need to make AI systems both ethical and actionable.

Key insights:

- **Explainable AI:** Fujitsu's work in explainable AI demystifies black-box models, enabling users to understand the factors influencing decisions. By visualising decision-making processes, explainable AI builds trust and enhances user confidence in the technology.
- **Interpretable AI:** Fujitsu goes beyond explainability by creating interpretable systems that directly convey actionable insights. For instance, in visa application processing, AI systems not only provide approval or rejection outcomes but also supports applicants in preparing their applications.
- **Bias detection:** Automated bias detection tools are integral to Fujitsu's development process. These tools assess algorithms for fairness, fidelity, and compliance with ethical standards, ensuring that AI systems avoid perpetuating societal biases.
- **Iterative validation:** Ms Mora stressed the importance of engaging end-users throughout the AI development process. By incorporating stakeholder feedback in iterative cycles, Fujitsu ensures that its systems address real-world needs and align with ethical principles.

Ms Mora underscored that responsible AI is not merely about meeting compliance standards but about creating systems that provide tangible value to users while safeguarding ethical norms.

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*Fujitsu provides solutions for compliance with the regulatory requirements. We are committed to helping Europe by simplifying compliance and building AI that is explainable, interpretable, and action-driven.*

## Lotte van den Berg and Hanna Verdickt

### A pragmatic approach to Trustworthy AI

Lotte van den Berg, Senior Manager Trustworthy AI and Hanna Verdickt, Senior Consultant Trustworthy AI and AI Governance at Deloitte Belgium, shared the comprehensive framework for implementing trustworthy AI in organisations developed by Deloitte. Their presentation explored the integration of ethical principles, regulatory requirements, and organisational strategies to create sustainable and reliable AI systems.



**Lotte van den Berg**  
Senior Manager Thrustworthy AI  
at Deloitte Belgium

#### Framework overview:

**Seven dimensions of trustworthy AI:** DDeloitte's framework covers safety, accountability, data privacy, transparency, fairness, robustness, and sustainability. These dimensions guide the design, deployment, and monitoring of AI systems, ensuring alignment with both organisational goals and regulatory standards.

**AI governance model:** the governance model includes:

- **System elements:** This involves defining specific use cases, understanding stakeholder needs, identifying data requirements, and assessing technology risks.
- **Sustainability measures:** The framework incorporates training programs, stakeholder communication, and adaptability to evolving regulations to ensure long-term success.
- **Trustworthiness metrics:** Deloitte uses a comprehensive set of metrics to evaluate systems for bias, fairness, and transparency throughout their lifecycle.

#### Case studies:

- In Denmark, Deloitte developed a risk assessment methodology tailored to government AI projects. This approach enabled authorities to balance innovation with the safeguards needed for sensitive applications.
- For a Belgian public employment agency, Deloitte integrated AI governance into Jira-based workflows, ensuring seamless compliance tracking and risk mitigation.

Ms van den Berg and Ms Verdickt highlighted that organisations must tailor governance models to their maturity and operational context, combining structured methodologies with flexibility to adapt to unique challenges.



**Hanna Verdickt**  
Senior Consultant  
Thrustworthy AI and  
AI Governance  
at Deloitte Belgium

## Pierre-Adrien Hanania

### Building ethics, innovating by compliance

Pierre-Adrien Hanania, EU Institutions Security & Justice Client Partner at Capgemini, shared a strategic vision for scaling AI in justice and security. His presentation delved into the challenges of operationalising AI governance, emphasising the importance of cultural, organisational, and technological readiness.

Key Insights:

#### Barriers to scaling AI:

- Mr Hanania identified non-technical barriers, such as cultural resistance and lack of stakeholder trust, as significant obstacles to AI adoption. These challenges often outweigh purely technical difficulties.
- Data quality and interoperability issues further complicate AI deployment, particularly in public sector ecosystems where privacy and security concerns are paramount.

#### AI applications in justice and security:

- Capgemini has developed tools to automate anomaly detection, fraud prevention, and resource allocation. These applications enhance operational efficiency while maintaining compliance with ethical guidelines.
- Generative AI is being explored for citizen interactions, where it acts as a neutral interface to mitigate human biases. This approach ensures equitable treatment in sensitive processes like legal advice or asylum applications.

**Programmatic approach:** Capgemini's Compliance Navigator Platform operationalises AI governance through:

- Rigorous system audits to ensure adherence to AI Act and GDPR requirements.
- Developer toolkits that embed ethical guidelines into the development process.
- Comprehensive risk assessments that provide actionable insights and mitigation strategies.

**Data governance:** Mr Hanania emphasised the need for robust data governance frameworks to address interoperability and quality challenges. He cited Capgemini's work on building interoperable datasets as a foundational step for effective AI deployment.

Mr Hanania concluded by advocating for a culture of compliance that integrates ethical considerations into every stage of AI development and deployment. This approach ensures that AI not only enhances efficiency but also upholds societal values.



**Pierre-Adrien Hanania**  
EU Institutions Security  
& Justice Client Partner,  
Capgemini



## Key insights and recommendations from session 2B

The session highlighted several critical themes for leveraging AI effectively in governance and security:

- 1. Trustworthy AI is essential:** Ethical principles, compliance frameworks, and transparency are vital for fostering trust and unlocking AI's full potential.
- 2. Standardisation and collaboration:** Harmonised standards and cross-sector collaboration are key to addressing compliance challenges and advancing innovation.
- 3. Pragmatic AI governance:** A tailored, lifecycle-based approach ensures that AI systems align with organisational goals and regulatory requirements.
- 4. Scalability requires cultural change:** Overcoming non-technical barriers, such as resistance to change, is as important as addressing technical challenges.
- 5. Data is foundational:** Robust data governance and interoperability are prerequisites for effective AI deployment, particularly in high-risk sectors like justice and security.

**CLOSURE  
OF THE DAY**



# Day 2

**Session 3A** | AI solutions tackling operational challenges: A collaborative approach

**Session 3B** | AI solutions tackling operational challenges: Infrastructures and cybersecurity

**Session 4** | Generative AI solutions

Closing remarks

## DAY 2

# 05

### Session 3A

## AI solutions tackling operational challenges: A collaborative approach

**Grégory Mounier**



**Grégory Mounier**  
Head of Innovation Lab,  
Europol

### AI solutions to tackle operational challenges

Grégory Mounier, Head of the Innovation Lab at Europol, provided an in-depth look at Europol's Innovation Lab and its efforts to integrate AI into policing operations. With a multidisciplinary team of 22 professionals, the lab has built tools to address law enforcement challenges, particularly those involving vast data volumes from encrypted communication platforms such as EncroChat and SkyECC.

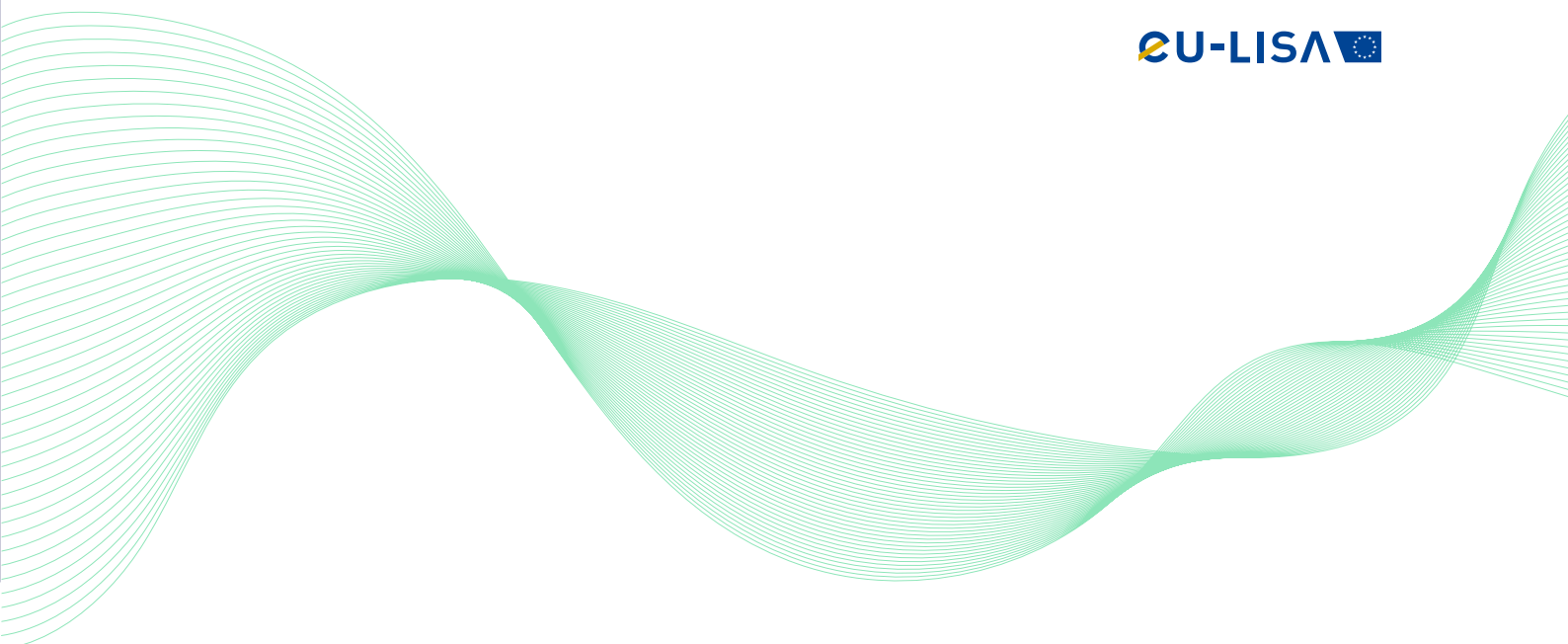
These platforms, used by criminal networks, generated billions of data points, including text messages, images, and voice recordings. Mr Mounier detailed the lab's innovative use of AI in key areas:

- **Natural Language Processing (NLP):** Tools for language detection, translation, and classification of sensitive information allowed investigators to focus on high-risk communications, such as those indicating imminent threats.
- **Visual Analysis:** AI-powered systems automatically analysed images and videos, extracting critical information like geolocations, facial features, and object identifications, which previously required extensive manual review.
- **Audio Processing:** Europol developed pipelines to transcribe audio files, detect languages, and identify speakers, reducing the time spent on manual transcription.
- **Geolocation Tools:** AI-driven systems helped pinpoint locations in images and videos, significantly aiding investigations, particularly in cases involving child exploitation and trafficking.

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*AI has truly transformed the lives of investigators. It's invaluable for sifting through vast amounts of data, especially in time-sensitive situations. Whether it's summarising countless documents or analysing thousands of images, videos, AI has become indispensable.*





## Emmanuel Finance and Peter Rosemann

### Facilitate risk management through generative AI on Edge environment at scale



**RIGHT :**  
**Emmanuel Finance**  
**Public Sector Strategy Officer**  
**and International Sales Director**  
**at CANCOM**

**LEFT:**  
**Peter Rosemann**  
**Managing Director**  
**at Alpin Insight AI**

Emmanuel Finance, Public Sector Strategy Officer and International Sales Director at CANCOM, and Peter Rosemann, Managing Director at Alpin Insight AI, delved into the development and implementation of 'Plain', a digital platform enabling AI-driven collaboration across German federal ministries. The platform, actively used by three ministries and accessible to 16, exemplifies the integration of technology into government operations.

Key features and benefits of Plain included:

- **Data standardisation:** Uniform processes for data collection, AI deployment, and application integration allowed seamless data sharing across ministries. This was critical for ensuring consistency and transparency in governmental decision-making.
- **Robust security and compliance:** Open-source software and thorough security audits ensured adherence to EU data privacy regulations, while air-gapped environments safeguarded sensitive information.
- **Crisis and non-crisis utility:** Initially designed as a crisis forecasting tool, Plain evolved into a comprehensive platform supporting real-time decision-making and long-term data analysis.
- **Enhanced inter-ministry collaboration:** Through its modular design, the platform enabled ministries to share applications and data insights, fostering innovation while reducing duplication of efforts.

The speakers emphasised the challenges of integrating new AI models and maintaining platform adaptability in a dynamic technological and regulatory environment. Agility in development, community-driven improvements, and continuous feedback loops were critical to Plain's success.

## Brecht Seifi

### Operationalization of AI @ EU Commission



**Brecht Seifi**  
Lead Advisor European  
Institutions at SAS

Brecht Seifi, Lead Advisor European Institutions at SAS, provided a comprehensive overview of the AI lifecycle, which encompasses data management, model development, deployment, and continuous improvement. He emphasised that robust data governance is the foundation for successful AI applications, particularly when dealing with sensitive public sector data.

Two case studies illustrated the lifecycle's practical applications:

**1. Customs data analysis:** SAS collaborated with the European Commission to deploy an AI model analysing decades of customs data. This model detected anomalies such as fraudulent declarations, tariff evasion, and circumvention of trade sanctions. Following the 2022 Russian-Ukraine conflict, the model was adapted to identify import/export violations involving Russian and Belarusian goods, including tracking intermediaries.

**2. Maritime vessel monitoring:** Real-time AI models analysed streaming data from vessel transponders to detect deviations, illicit activities, and compliance breaches. The system flagged high-risk behaviours such as ship-to-ship transfers in sanctioned zones and vessels going dark by switching off their tracking systems.

Mr Seifi stressed the importance of:

- **Data quality checks:** Ensuring clean and reliable data through validation frameworks.
- **Model maintenance:** Continuously monitoring and retraining models to prevent performance degradation.
- **Auditability and transparency:** Establishing mechanisms to trace AI-driven decisions, particularly in sensitive contexts where fairness and interpretability are paramount.

The discussion underscored the critical role of collaboration between AI developers, policymakers, and domain experts in aligning technological capabilities with ethical and regulatory standards.

## Angus Hodson

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**Angus Hodson**  
**Director of the European**  
**Civil Sector**  
**at Dataminr**

### Mitigating risks using public data and AI

Angus Hodson, Director of the European Civil Sector at Dataminr, presented Dataminr’s approach to using AI for real-time risk detection, focusing on its ability to process vast amounts of publicly available data. The system extracts actionable insights from diverse sources, including social media and traditional media, addressing the challenges of scale, speed, and unstructured data. Key AI capabilities included:

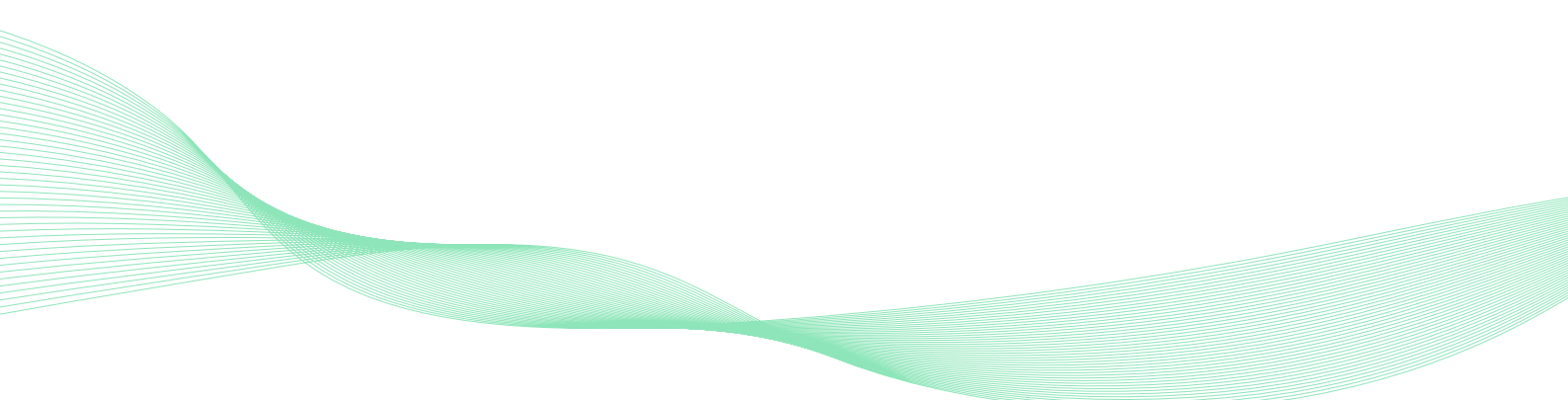
- **Predictive AI:** Identifying emerging risks through anomaly detection across millions of data points.
- **Generative AI:** Synthesising information from various sources to provide context-rich alerts, such as combining text descriptions, images, and geolocations into a cohesive report.
- **Regenerative AI:** Producing continuously updated summaries of unfolding events, eliminating the need to sift through multiple alerts.

Dataminr’s real-world applications were exemplified by its role in supporting security efforts during the Paris Olympics:

- **Threat detection:** The system identified cyberattacks targeting Israeli athletes, providing actionable intelligence to authorities.
- **Event monitoring:** Dataminr tracked risks along the torch relay route, processing vast amounts of data in real time to ensure the safety of participants and spectators.

The platform enabled authorities to respond swiftly to cyber-physical convergence threats, such as disruptions to critical infrastructure caused by cyberattacks.

Mr Hodson highlighted that Dataminr’s strength lies in augmenting human expertise. By filtering irrelevant data and delivering precise, timely insights, the platform empowers decision-makers to act efficiently in high-stakes scenarios.





## Key insights and recommendations from session 3A

The session underscored the transformative role of AI in diverse sectors. From aiding criminal investigations to optimising governance and managing real-time risks, AI is a powerful tool that enhances human capabilities. Key takeaways included:

- 1. AI as a collaborative tool:** Successful implementations rely on the synergy between AI systems and human expertise.
- 2. Focus on ethical AI:** Transparency, fairness, and auditability are critical to maintaining public trust, particularly in sensitive applications.
- 3. Adaptive development:** AI solutions must evolve to address changing data, regulatory landscapes, and technological advancements.
- 4. Cross-sector collaboration:** Partnerships among technologists, policymakers, and operational teams are essential for aligning AI innovations with practical needs.

## 06

## Session 3B

## AI solutions tackling operational challenges: Infrastructures and cybersecurity

### Frøy Løvåsdal

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#### Human in the loop



**Frøy Løvåsdal**  
Senior Adviser  
at the National Police Directorate  
in Norway

Frøy Løvåsdal, Senior Adviser at the National Police Directorate in Norway, shared a detailed perspective on the evolution and applications of biometric technologies, particularly face recognition, in law enforcement. Highlighting Norway's participation in the EU-funded i-MARS project, Ms Løvåsdal emphasised the significance of continuous innovation and training to address challenges associated with facial comparison and biometric analysis.

Key insights included:

- **Technological progress:** The development of face recognition technology has seen an exponential growth, especially with advancements in AI and Convolutional Neural Networks (CNNs). Between 2014 and 2018, the technology entered a revolutionary phase. While its capabilities have expanded, regulatory frameworks have struggled to keep pace, underscoring the importance of initiatives like i-MARS to ensure responsible use and best practices.
- **Training programs:** Norway has implemented e-learning modules and structured training for first- and second-line officers. These programs are designed not only to enhance operational competence but also to instil an understanding of the complexities and potential biases inherent in facial recognition tasks. By ensuring officers know when to escalate cases to experts, the program creates a robust multilayered response system.
- **Challenges and opportunities:** Morphing attacks—where images are digitally blended to create deceptive identities—pose a growing risk. The i-MARS project addresses these vulnerabilities by developing detection methods and contributing to the creation of ISO standards, ensuring a consistent and secure framework for global applications.

Ms Løvåsdal concluded by stressing the dual importance of maintaining public trust in biometric technologies and investing in continuous research to counter emerging threats.

## Koen Eckhoudt

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### Securing AI by design



**Koen Eckhoudt**  
Solution Consultant  
at Palo Alto Networks

Koen Eckhoudt, Solution Consultant at Palo Alto Networks, delivered an in-depth analysis of the cybersecurity landscape in the age of AI, focusing on the vulnerabilities introduced by generative AI and the strategies required to secure its usage effectively. His presentation underscored the necessity of proactive measures to address the evolving nature of cyber threats.

Key themes included:

- **AI as a double-edged sword:** Generative AI, while transformative for productivity and efficiency, has also lowered barriers for cybercriminals. Techniques like ransomware creation have become faster and more sophisticated. Mr Eckhoudt warned that, by 2026, such attacks could be executed within 15 minutes, necessitating automated and AI-driven defences.
- **Cybersecurity frameworks:** To counter these risks, Palo Alto Networks advocates a 'security by design' approach. This includes integrating AI into threat detection systems, ensuring real-time monitoring, and applying lifecycle management to protect both AI applications and the environments in which they operate.
- **User and application security:** Mr Eckhoudt stressed the importance of controlling and monitoring employee AI usage, particularly with generative AI tools, which can inadvertently expose sensitive data. He also highlighted the need for robust security in application development pipelines, ensuring that models behave as intended and remain free of vulnerabilities.

Through its focus on simplifying cybersecurity and leveraging AI for defence, Palo Alto Networks aims to empower organisations to stay ahead of rapidly evolving threats.

## Dean Clark

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**Dean Clark**  
EMEA Platform Catalyst  
at RedHat

### Overview of Red Hat OpenShift AI: MLOps platform for Artificial Intelligence/ Machine Learning (AI/ML) use cases

Dean Clark, EMEA Platform Catalyst at RedHat, focused on Red Hat's OpenShift AI platform, a comprehensive solution designed to simplify the deployment and management of AI/ML applications. His discussion highlighted the interplay of technology, skills, and organisational strategy required to scale AI effectively.

Key highlights included:

- **End-to-end ecosystem:** OpenShift AI offers an integrated environment for managing data pipelines, automating lifecycle processes, and deploying AI workloads. By providing consistency across on-premises, cloud, and hybrid environments, the platform ensures that organisations can operate efficiently regardless of infrastructure constraints.
- **Skills and talent:** Mr Clark identified a significant barrier to AI adoption: the scarcity of specialised talent. He proposed fostering a collaborative culture that democratises AI development, enabling broader participation through open-source tools and frameworks. This approach reduces reliance on niche expertise while building sustainable internal capabilities.
- **Infrastructure optimisation:** The modular and scalable design of OpenShift AI allows organisations to balance resource demands with operational requirements. By supporting distributed computing models, the platform enables data to remain close to its source, optimising performance without requiring costly infrastructure upgrades.

Mr Clark emphasised the importance of adopting open-source principles to ensure long-term adaptability, fostering a community-driven approach to innovation.

## Spyros Evangelatos



**Spyros Evangelatos**  
**Senior R&D Manager**  
**at Netcompany-Intrasoft**  
**SA**

### OrbIntel: An on-premise, domain-specific LLM solution for enhanced investigative processes

Spyros Evangelatos, Senior R&D Manager at Netcompany-Intrasoft SA, introduced OrbIntel, an on-premise Large Language Model (LLM) solution designed for law enforcement and forensic investigations. By integrating AI capabilities with domain-specific requirements, OrbIntel addresses critical challenges in data privacy, operational efficiency, and explainability.

Key features of OrbIntel:

- **Multi-modal analysis:** OrbIntel combines a wide range of data to deliver comprehensive decision support. This approach enhances investigative accuracy while streamlining workflows.
- **Explainability:** Recognising the importance of user-centric design, OrbIntel incorporates stakeholder-focused explainability. This ensures that non-technical users, such as police officers, can understand the reasoning behind AI-generated recommendations, increasing trust and adoption.
- **On-premise deployment:** Designed to operate in secure environments, OrbIntel adheres to strict privacy regulations. This makes it particularly suited for sensitive applications where data cannot be transferred to external systems.

Currently deployed in Finland and the Czech Republic, OrbIntel has received positive feedback for its practical applications in investigative contexts. Mr Evangelatos highlighted the system's potential for broader use cases, including border management.



## Thomas Schirferner



**Thomas Schirferner**  
Lead Sales of Team TEC4  
at Mühlbauer ID Services

### MB seamless travel solutions including a ‘Smart Corridor’

Thomas Schirferner, Lead Sales of Team TEC4 at Mühlbauer ID Services, shared a forward-looking vision for using AI-powered seamless travel corridors to revolutionise border crossing experiences. By replacing traditional e-Gates with facial recognition technology on the move, the solution aims to address growing demands for efficiency and security in passenger processing.

Key elements of the solution:

- **Digital transformation:** The system digitises travel credentials, enabling passengers to use their smartphones as secure tokens. These tokens eliminate the need for physical documents, streamlining pre-registration and check-in processes.
- **Scalability and flexibility:** Designed for diverse settings, including airports, seaports, and land borders, the solution supports high passenger throughput with minimal infrastructure changes. Its scalability makes it suitable for managing peak travel periods, such as cruise ship arrivals.
- **Privacy compliance:** Mr. Schirferner emphasised that the system adheres to GDPR standards by storing only anonymised data during operations. After processing, data is either archived securely or deleted, ensuring privacy protections remain intact.

The seamless travel solution has potential to significantly reduce bottlenecks and increase throughput, making it a compelling option for modernising global border management practices. Mr Schirferner noted its potential for integration into existing systems, highlighting its flexibility and cost-effectiveness.



### Key insights and recommendations from session 3B

**Human-AI collaboration and training:** Invest in training programs that integrate AI tools with human expertise to enhance accuracy, accountability, and operational efficiency, especially in high-stakes areas like facial recognition and forensic investigations.

**Privacy-first and explainable AI solutions:** Deploy on-premise or hybrid AI systems to ensure compliance with data protection regulations and provide stakeholder-friendly interfaces that promote trust and transparency.

**AI for cybersecurity:** Strengthen AI-driven cybersecurity measures by embedding tools for real-time threat detection, lifecycle monitoring, and mitigation of advanced attacks like ransomware and deepfakes.

**Operational and infrastructure optimization:** Utilize open-source platforms and scalable infrastructure solutions to streamline AI deployment and align computational resources with specific organizational and security needs.

**Scalable biometric and travel solutions:** Expand AI-enabled biometric corridors and seamless travel systems to handle high passenger volumes efficiently while maintaining security, privacy, and interoperability with existing infrastructure.

# 06

## Session 4

# Generative AI solutions

## Ignacio Sánchez



**Ignacio Sánchez**  
Scientific Portfolio  
and Project Leader  
DG Joint Research Centre (JRC),  
European Commission

## GenAI: Opportunities, challenges, and emerging trends

Ignacio Sánchez, Scientific Portfolio and Project Leader at the Joint Research Centre (JRC), provided an in-depth overview of the JRC and its evolving role in supporting AI and data-driven policies for the European Commission. JRC's new AI and Data Portfolio is designed to address the multidisciplinary challenges of AI adoption by combining research and practical applications.

Key elements of the portfolio include:

- **Policy Support:** JRC provides expertise for AI-related legislation, such as the AI Act and the Digital Services Act. This includes developing enforcement mechanisms and ensuring algorithmic transparency.
- **GENESIS Initiative:** This project explores generative AI technologies, their benefits, and associated risks. Mr Sánchez emphasised the paradigm shift introduced by general-purpose neural networks, which mimic human-like reasoning and enable a broad range of tasks without extensive retraining.
- **GPT@JRC:** This secure, generative AI tool is accessible to over 12,000 EU staff members, enabling research and practical exploration of AI's capabilities. Use cases span from streamlining workflows to enhancing data analysis through interconnected AI systems.

Mr Sánchez highlighted challenges such as managing hallucinations and ensuring data interoperability while calling for robust infrastructure to maximise AI's potential.



*AI brings notable productivity gains, though not all are easily quantified. In fields like software programming, it not only boosts productivity but also reduce cognitive load. Adopting Gen AI requires a holistic approach, as its impact extends beyond technology to human behaviour.*

## Dennis Diefenbach

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### Enterprise AI assistants



**Dennis Diefenbach**  
CEO of The QA Company

Dennis Diefenbach, CEO of The QA Company, introduced QAnswer, an enterprise AI assistant designed to empower organisations with scalable, secure generative AI solutions. This tool integrates seamlessly with enterprise data while addressing privacy concerns by operating on-premises.

Highlights included:

- **Enterprise AI assistants:** QAnswer enables quick deployment of customised AI assistants that integrate with enterprise systems like SharePoint and Q&A repositories. These assistants perform tasks such as report generation, semantic search, and document summarisation.

- **Use-cases at the European Commission:**

- A system named "PACIOLI" was deployed to support in transition from one financial management system to another, offering step-by-step guidance and fallback mechanisms for unanswered queries.

- DG COMM integrated QAnswer for automating citizen query responses in multiple languages, significantly reducing operational costs.

- **Report generation:** Using uploaded documents, the tool generates comprehensive, citation-backed reports, providing a solid starting point for human review.

Mr Diefenbach emphasised the democratisation of AI, enabling employees to create and deploy AI agents without requiring technical expertise. This accessibility allows organisations to fully leverage AI's transformative potential.

## Daan Voets

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**Daan Voets**  
**Global Solution Lead**  
**at Quantexa**

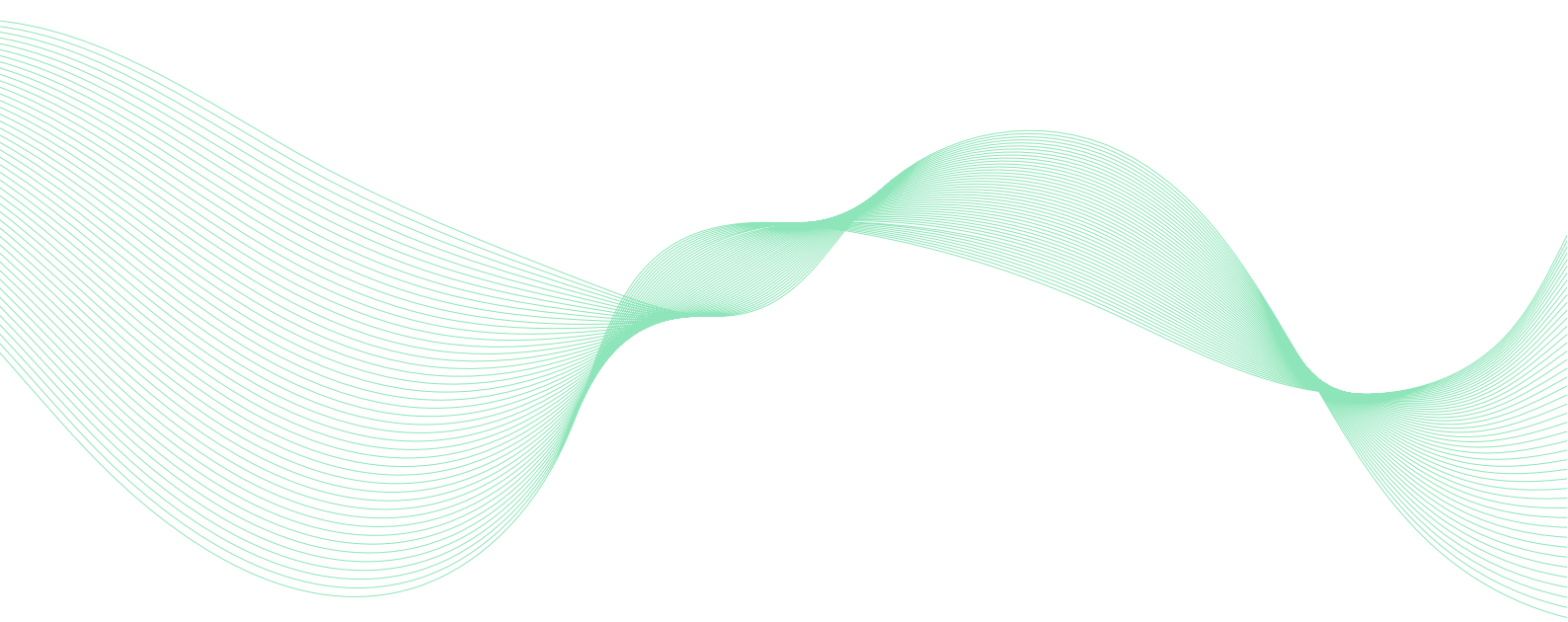
### Connecting the dots by leveraging generative AI

Daan Voets, Global Solution Lead at Quantexa, presented Quantexa's contextual AI framework, which addresses challenges such as hallucinations, scalability, and data security. This framework uses entity resolution and knowledge graphs to connect disparate data points, creating a comprehensive view of individuals and networks.

Key takeaways included:

- **Entity resolution and knowledge graphs:** These tools consolidate information from varied sources, such as names, addresses, and financial data, to build structured networks. This process reduces false positives and ensures high-quality insights for decision-making.
- **Fraud and risk detection:** The Q-Assist tool supports investigations by generating reports, proposing interview questions, and identifying similar cases. Its transparency and adherence to AI regulations ensure reliability and ethical compliance.
- **Generative AI integration:** The Q-Assist tool supports investigations by generating reports, proposing interview questions, and identifying similar cases. Its transparency and adherence to AI regulations ensure reliability and ethical compliance.

Mr. Voets emphasised the importance of tailoring AI to specific use cases, from detecting terrorism risks to combating tax evasion, by adapting the data and network analysis to the context.



## Jason Langone

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### Slow in, fast out (with AI)



**Jason Langone**  
**Senior Director Global AI**  
**Business Development**  
**at Nutanix**

Jason Langone, Senior Director Global AI Business Development at Nutanix, focused on the infrastructure required to deploy and scale AI applications effectively. He emphasised the need for organisations to address operational readiness, governance, and scalability.

Highlights included:

- **Infrastructure for AI:** Nutanix's Enterprise AI platform simplifies the deployment of AI models across hybrid and on-premises environments. Kubernetes forms the foundation, providing flexibility and scalability for running AI workloads.
- **Model governance and security:** Mr Langone stressed the importance of centralised model repositories with robust access controls to ensure compliance and minimise risks. Nutanix's platform also offers tools for monitoring model performance and troubleshooting issues.
- **Incremental deployment:** Organisations are encouraged to start small, validate use cases, and gradually scale AI initiatives. This approach reduces risk while maximising return on investment.

Mr Langone positioned AI as a transformative force, urging organisations to connect AI initiatives to specific mission objectives for measurable impact.

## Jonas Ingelström

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**Jonas Ingelström**  
Head of Identity  
at iProov

### Enhance border control with AI-resistant NFC-reading of fingerprints

Jonas Ingelström, Head of Identity at iProov, introduced iProov's solutions for integrating AI-resistant biometric verification into border control systems. The focus was on addressing operational and regulatory challenges associated with biometric data.

Key features included:

- **Remote pre-onboarding:** Systems like those used by Eurostar enable passengers to complete biometric checks from home, streamlining travel processes. These systems combine facial and fingerprint recognition for robust identity verification.
- **AI-resistant fingerprint reading:** iProov's backend-driven NFC reading technology ensures privacy and security by processing sensitive data in government-controlled environments rather than on individual devices or in cloud.
- **Integration with border systems:** The technology allows seamless connectivity with existing workflows, ensuring scalability and compliance with global standards.

Mr Ingelström called for partnerships with regulatory bodies to overcome challenges related to data access and interoperability, ensuring the widespread adoption of secure biometric technologies.



### Key insights and recommendations from session 4

The session demonstrated the diverse applications of AI across policy support, enterprise solutions, and operational environments. Key insights included:

- 1. AI's transformative potential:** From streamlining workflows to enhancing security, AI enables significant efficiency gains across sectors.
- 2. Ethical and transparent AI:** Ensuring transparency, fairness, and compliance with regulations like the AI Act is critical for fostering trust.
- 3. Robust infrastructure:** Scalable and secure infrastructure is essential for operationalising AI solutions, particularly in high-stakes environments.
- 4. Collaboration across disciplines:** The integration of AI requires multidisciplinary approaches involving technologists, policymakers, and end-users.

These insights underscore the need for continued innovation and collaboration to harness AI's full potential while addressing its challenges.

# CLOSURE OF THE EVENT

## 07

### Closing remarks

#### Philippe Harant

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**Philippe Harant**  
Head of the Strategy, Capabilities  
and Coordination Unit,  
eu-LISA

Philippe Harant, Head of Strategy, Capabilities and Coordination Unit at eu-LISA, emphasised the significance of the event, marking the 10th anniversary of the Industry Roundtable. Reflecting on the conference's success, he highlighted its impact in fostering collaboration, innovation, and strategic discussions between EU agencies, Member States, and industry representatives.

#### Key highlights:

##### Celebrating achievements:

- The roundtable, held in Budapest and online, attracted over 400 participants and saw a record number of 50 submissions from the industry.
- Mr Harant highlighted the roundtable's role as a platform for exchange, emphasising its enduring relevance and capacity to adapt to emerging topics like AI.

##### Insights on AI adoption:

- Mr Harant underscored the transformative power of AI while noting the rapid pace of technological advancements and the necessity for creative, impactful solutions.
- The conference provided practical examples of AI applications, including Europol's use of AI solutions and a promising proof-of-concept such as the one showcased for AI in visa monitoring.

##### Establishing safeguards:

- The need for proper safeguards, such as the AI Act and internal guidelines, was a recurring theme. Mr Harant stressed the importance of explainability, interpretability, and human oversight to ensure trust in AI systems.
- He acknowledged the dual-edged nature of AI, with bad actors also leveraging its capabilities, necessitating AI-driven protections and rigorous testing frameworks.

#### **Organizational preparedness:**

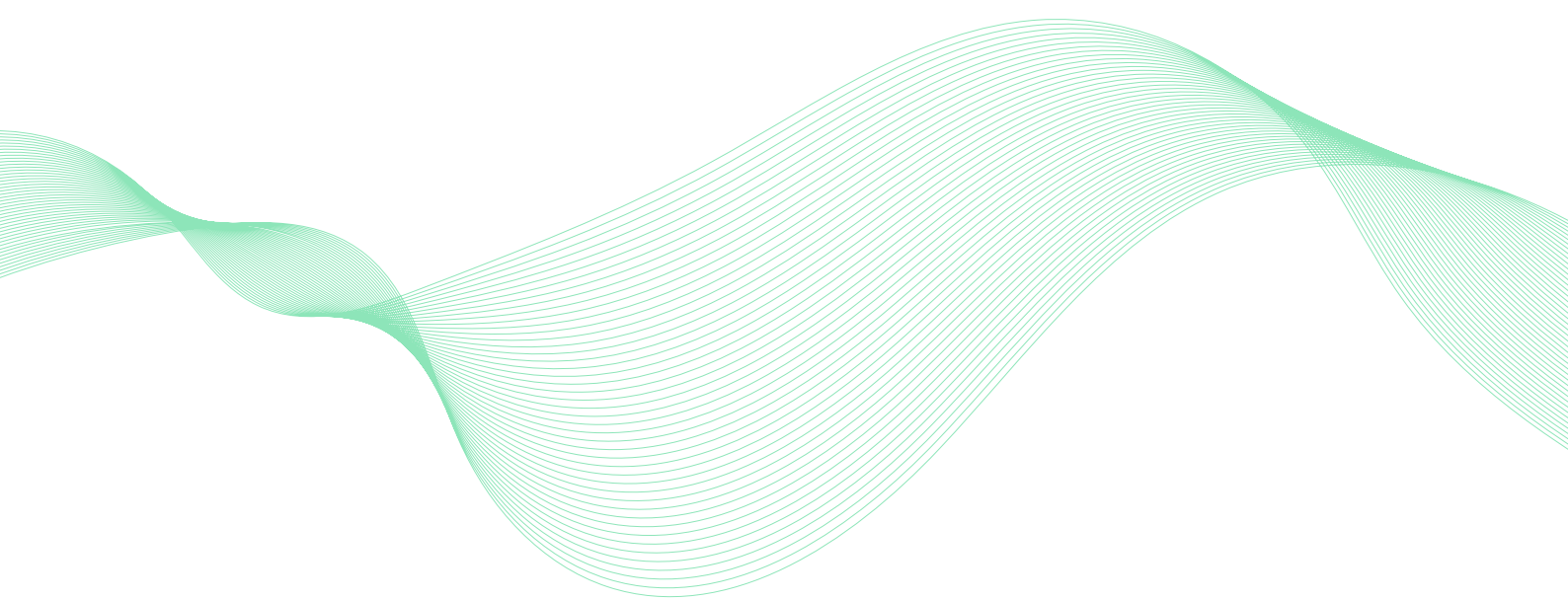
- Mr Harant highlighted the importance of setting the internal governance and skill-building to integrate AI effectively. He noted the rise of user-friendly AI solutions but emphasized the need for professionals to understand AI's inner workings.
- He announced the recruitment of a Chief Technology Officer at eu-LISA, emphasizing the agency's commitment to advancing its technical capabilities.

#### **Looking ahead:**

- Mr Harant expressed gratitude to the Hungarian presidency, the organizing team, and the speakers for their contributions.
- He announced the next Industry Roundtable, scheduled for June 2025 in Poland.



*We have entered the age of AI and are only at the beginning. Things are moving fast, and we need to stay ahead of the technology while designing creative solutions that truly impact our work.*





## Kata Bencze

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**Kata Bencze**  
**Head of Unit,**  
**Judicial Digitalization and**  
**Artificial Intelligence,**  
**Ministry of Justice of Hungary**

Kata Bencze, Head of Unit, Judicial Digitalisation and Artificial Intelligence Unit at the Ministry of Justice of Hungary, offered a reflective and forward-looking perspective on the event, underscoring the importance of integrating AI into justice and home affairs in ways that respect fundamental rights and societal values.

### Key messages:

#### AI's transformative potential:

- Ms Bencze described AI as not just a tool but a transformative force reshaping justice, security, and governance. With 250 million current users projected to grow to 5 billion in a decade, the potential for AI to revolutionize these fields is immense.
- She emphasised the importance of leveraging AI for complex data processing and reasoning, enabling improved decision-making and efficiency.

#### Shared responsibility:

- The discussions highlighted the shared responsibility of policymakers, technologists, and citizens to develop AI that aligns with societal values. Ms Bencze called for a collective focus on advancing best practices and maintaining trust.
- She stressed the importance of safeguarding human dignity and protecting citizen rights, ensuring AI development remains ethical and inclusive.

#### Challenges and opportunities:

- Ms Bencze acknowledged the complexities of integrating AI into governance systems, describing the AI Act as a foundational but initial step in this journey.
- She urged participants to move beyond theoretical discussions and work towards real-world applications that have tangible impacts on policy and society.

#### The role of innovation and collaboration:

- Ms Bencze introduced the concept of 'innovative provocation', encouraging critical thinking and collaborative efforts to harness AI for societal good.
- She highlighted the Hungarian presidency's commitment to judicial and home affairs cooperation, with a focus on digital transformation and AI-driven synergies.

#### Closing thoughts:

- Ms Bencze expressed gratitude to all participants and eu-LISA for organising the event, emphasising the importance of continued dialogue and action in shaping the future of AI.
- She urged attendees to embrace critical thinking and collaboration, fostering a just and inclusive future in the age of AI.





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