CIPL Webinar: Latest Trends in AI Regulation and Organizational Approaches to Accountable AI

26 March 2020
ABOUT US

- The Centre for Information Policy Leadership (CIPL) is a global privacy and security think tank
- Based in Washington, DC, Brussels and London
- Founded in 2001 by leading companies and Hunton Andrews Kurth LLP
- CIPL works with industry leaders, regulatory authorities and policy makers to develop global solutions and best practices for data privacy and responsible use of data to enable the modern information age
Welcome and Introductions

Bojana Bellamy
President, CIPL

Ali Shah
Head of Technology, UK Information Commissioner's Office

Caroline Louveaux
Chief Privacy Officer, Mastercard

William Malcolm
Privacy Legal Director, Google
## Regulatory State of Play for AI

### EU Commission Considering AI Legislation
- CIPL planning to respond

### Key Regulatory AI Initiatives
- UK ICO AI Auditing Framework
- Commission HLEG on AI Assessment List Pilot
- Canada OPC Consultation: Proposals for Ensuring Appropriate Regulation of AI (recently concluded 13 March 2020)

### Regulatory Sandbox
- UK ICO Beta Phase
- Endorsed in AI strategies
  - South Korea
  - Finland
- Endorsed in legislation
  - Malta
  - India

### Plethora of Regulatory Guidance
- **European Union**
  - UK ICO
  - CNIL
  - Norway Datatilsynet
  - Commission HLEG on AI
  - Council of Europe
- **Elsewhere**
  - Singapore PDPC
  - OECD
  - US Office of Management and Budget
Delivering Sustainable AI Accountability in Practice

To learn more about the project, see [https://www.informationpolicycentre.com/ai-project.html](https://www.informationpolicycentre.com/ai-project.html)

First Report
Artificial Intelligence and Data Protection in Tension
10 October 2018

- Details the widespread use, capabilities and potential of AI applications
- Examines tensions between AI technologies and some data privacy legal requirements

Second Report
Hard Issues and Practical Solutions
28 February 2020

- Dives deeper into some of the hardest challenges of AI and data protection and puts forward concrete approaches to mitigating the tensions
- Outlines best practices and tools that organizations are currently developing to enable accountable and human-centric AI

New Initiative
EU AI Project
2020 Onwards

- CIPL layered approach to regulating AI
- Responding to EU Commission AI white paper on “A European approach to excellence and trust”
UK ICO’s AI Auditing Framework
Developing an Artificial Intelligence Framework

Background, objectives and timeline

<table>
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<th>Framework objectives</th>
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<td>1. Develop a solid methodology for the ICO to assess the data protection compliance of AI systems.</td>
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<td>2. Support the development of internal knowledge, capabilities, and toolkits to support the work of the ICO, and in particular the assurance and investigations teams.</td>
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<td>3. Inform additional external guidance for organisations on how to manage data protection risks in AI systems</td>
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Why is it a priority for the ICO?

Many AI applications involve personal data and automated decisions

The complexity, speed and scale of the processing of personal data in AI systems may make risks more difficult to identify and/or manage, while increasing the potential detriment to data subjects.

- Accountability & Governance
  - DPIAs,
  - Controller / processor status,
  - Trade-offs
- Lawfulness, Fairness and Transparency
  - Lawful basis, statistical accuracy,
  - Bias and discrimination
- Security and Data Minimisation
- Enabling individual rights in AI

Just like organisations need to assess whether they have the right risk management and governance capabilities to deal with AI, so does the ICO.
Some of the topics we have looked at

- Automated decision making and the role of meaningful human reviews;
- Accuracy of AI systems outputs
- Security risks exacerbated by AI
- Explaining AI decisions
- Human bias and discrimination in AI systems
- Trade-offs
- The right to human intervention
- Data minimisation and privacy-preserving techniques in AI systems
- Privacy attacks on AI models
- Individual rights in AI systems
- DPIAs and AI
Who is the guidance for?

- The draft guidance is taking a risk-based approach, which means:
  - assessing the risks to the rights and freedoms of individuals that may arise when you use AI
  - and implementing appropriate and proportionate technical and organisational measures to mitigate these risks.

- Therefore we have targeted the draft guidance at roles who we think should be more aware of the risks.
How is the guidance structured?

- Part one: governance and accountability
- Part two: Lawfulness, fairness and transparency
- Part three: security and data minimisation
- Part four: individual rights
How is the guidance structured?

- Preventative controls
  - Designed to stop errors or risks from happening

- Detective controls
  - Designed to find errors after they have occurred.

- Corrective controls
  - Designed to correct any errors found by the detective controls and mitigate the impact of the error.
Understanding what to do during the AI lifecycle

- **Business and use-case development**: Problem/improvements are defined and use of AI is proposed.
- **Design phase**: The business case is turned into design requirements for engineers.
- **Training and test data procurement**: Initial data sets are obtained to train and test model.
- **Building**: AI application is built.
- **Testing**: The system is tested.
- **Deployment**: When the AI system goes live.
- **Monitoring**: Performance of the system is assessed.
Some insights and open questions

- When is personal data personal data?
- Controller vs Processor
- Bias and discrimination
- Rights across the AI development lifecycle

- How to support those who are vulnerable, may have a disability, may require use of SCD to support?
What Next?

- Guidance consultation window is open
- We are *extending* the deadline for responses to *1st May 2020*
- Final guidance to be released in *Summer 2020*
Update on the State of Play of AI Regulation in Europe
Responsible AI Deployment and Organizational Best Practices
An organization’s data practices must be guided by the rights of individuals.
Accountable AI | Mastercard’s AI Governance Framework

AI Governance Framework

1. Purpose Evaluation
2. Data Evaluation
3. Use Case Evaluation & Data Model Design
4. Model Risk Scoring
5. Model Build & Impact Assessment
6. AI for AI

AI for AI
Organizations must be able to demonstrate accountability – internally and externally

Accountability requires comprehensive privacy programs that translate legal requirements into risk-based, verifiable and enforceable corporate practices and controls

Accountability is not static, but dynamic, reiterative and a constant journey

Company values and business ethics shape accountability
### Examples of Best Practices in AI Governance

#### Mapped to Accountability

#### Leadership and Oversight
- Tone from the top to respect ethics, values and specific AI principles
- AI/ethics/oversight boards/committees
- Appointing responsible AI lead/officer
- Privacy/AI engineers and champions

#### Risk Assessment
- Algorithmic Impact Assessment
- Fairness assessment tools
- Risks and benefits assessment
- Document tradeoffs
- Anonymization techniques

#### Policies and Procedures
- Accountability measures for two stages – training and decision-making
- Pilot test AI models before release
- Assessment questions/procedures
- Due diligence checklists for business partners using AI tech and tools
- White, black, and gray lists of AI use
- Verification of data input and output

#### Transparency
- Differentiated transparency for different audiences/contexts
- Provide counterfactual information
- Factsheets and model cards
- Tiered transparency - Understand customers’ expectations and deploy based on their readiness to embrace AI
- Transparency to individuals, DPAs, business partners and internally

#### Training and Awareness
- Data scientist training, including how to avoid and address bias
- Cross-functional training – privacy professionals and engineers
- Ad hoc and functional training
- Fairness training
- Ethics training

#### Monitoring and Verification
- Human in the loop—in design, in oversight, in redress
- Human understanding of the business and processes using AI
- Human audit of input and output
- Human review of individual decisions
- Ongoing monitoring, validation and checks

#### Response and Enforcement
- Complaints-handling
- Redress mechanisms for individuals to remedy AI decision
- Feedback channel
- Internal supervision of AI deployment
Hard Issues and Practical Solutions

CIPL Second Report on AI – February 2020

• Follows CIPL’s first report on “Artificial Intelligence and Data Protection in Tension”

• Dives deeper into some of the hardest challenges of AI and data protection (e.g. fairness, transparency, purpose specification and use limitation, data minimization)

• Puts forward concrete approaches to mitigating some of the tensions explored in first report

• Outlines emerging best practices and tools that organizations are currently developing to enable accountable and human-centric AI

• Maps best practices in AI governance to the CIPL Accountability Wheel
Response to EU Commission AI Policy Paper

Leveraging GDPR, Accountability and Industry Best Practices

In this Paper, CIPL proposes a layered regulatory approach to AI that would leverage:

1. The GDPR framework and tools - help resolve the tensions between AI and GDPR

2. Demonstrable and verifiable accountable AI-related practices of organizations

3. Innovative approaches to regulatory oversight
INNOVATIVE REGULATORY OVERSIGHT
Sandbox - Constructive Engagement
Collaboration with other regulators through regulatory hubs

ORGANISATIONAL ACCOUNTABILITY
Demonstrable and verifiable accountable AI-related practices of organisations

STANDARDS ON AI
1. GDPR / GDPR as AI enabler
2. HLEG Guidelines on Trustworthy AI
3. Sector specific frameworks
The paper examines:

• **The applicability of the GDPR generally to AI** (e.g. through data protection principles, obligations on organizations and oversight of DPAs)

• **GDPR provisions that are of particular relevance in the context of AI** (e.g. requirement to carry out a DPIA where new technologies are used)

• **GDPR provisions that specifically regulate the use of AI** (e.g. right not to be subject to automated decision-making)
How GDPR Applies Generally in AI Contexts

GDPR aims to be technology neutral and applies fully to the use of personal data in AI:

<table>
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<tr>
<th>Article 3(2) Extraterritorial Effect</th>
<th>Article 6(1) Legal Basis</th>
<th>Article 24(1) Accountability</th>
<th>Article 28 C to P Contracts</th>
<th>Article 30 Records of Processing</th>
<th>Articles 33 &amp; 34 Data Breaches</th>
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<tr>
<td>Articles 15-21 Individual Rights</td>
<td>Article 25 Privacy-by-Design and by-Default</td>
<td>Article 46 International Data Transfers</td>
<td>Article 37 DPO</td>
<td>Chapters VII/VIII DPAs, Enforcement and Sanctions</td>
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Several GDPR provisions are specifically relevant for AI:

- **Article 5(1)(a)**
  Fair Processing

- **Article 5(1)(c)**
  Data Minimization

- **Article 35**
  Conduct a DPIA for high-risk processing, in particular when using new technology
## GDPR Provisions that Specifically Regulate AI

Several GDPR provisions specifically regulate AI:

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<th>Article 13(2)(f)</th>
<th>Article 14(2)(g)</th>
<th>Article 15(1)(h)</th>
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<td>Inform individuals of the existence of ADM and provide meaningful information about the logic involved (data collected directly)</td>
<td>Inform individuals of the existence of ADM and provide meaningful information about the logic involved (data collected indirectly)</td>
<td>Right to access information about the existence of ADM and meaningful information about the logic involved</td>
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<th>Article 22</th>
<th>Article 22(3)</th>
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<td>Right not to be subject to a decision based on solely ADM producing legal/similarly significant effects</td>
<td>Right to obtain human intervention and contest decision</td>
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<td>Key requirements of Trustworthy AI</td>
<td>Overlap with GDPR provisions</td>
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<td><strong>Human Agency and Oversight</strong></td>
<td>Legitimate interest balancing test (art. 6(1)(f)) / Transparency (art. 13 &amp; 14) / ADM (art. 22) and Right to obtain human intervention (art. 22(3)) / Risk assessment and DPIA (art. 35)</td>
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<tr>
<td><strong>Technical Robustness and Safety</strong></td>
<td>Security (art. 32) / Risk assessment and DPIA (art. 35) / Data accuracy (art. 5(1)(d))</td>
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<tr>
<td><strong>Privacy and Data Governance</strong></td>
<td>Data protection principles (art. 5) / Legal grounds for processing (art. 6) / Legal grounds for sensitive data (art. 9) / Rights of the data subject (Chapter III) and in particular Transparency (art. 13 &amp; 14) and Right to information on ADM and logic involved (art. 15(1)(h)) and Right not to be subject to an ADM decision (art. 22) and right to human intervention (art. 22(3)) / Accountability (art. 24(3)) / Data protection by design (art. 25) / Processor due diligence (art. 28(1)) / Security (art. 32) / DPO (art. 37 &amp; 38)</td>
</tr>
<tr>
<td><strong>Transparency</strong></td>
<td>Transparency (art. 13 &amp; 14) / ADM (art. 22)</td>
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<tr>
<td><strong>Diversity, Non-Discrimination and Fairness</strong></td>
<td>Fairness data protection principle (art. 5(1)(a)) / Risk assessment and DPIA (art. 35) / Right to information on ADM and logic involved (art. 15(1)(h))</td>
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<td><strong>Societal and environmental wellbeing</strong></td>
<td>Risk assessment and DPIA (art. 35) / Transparency (art. 13 &amp; 14)</td>
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<tr>
<td><strong>Accountability</strong></td>
<td>Accountability (art. 5(2) &amp; 24(3)) / Risk assessment and DPIA (art. 35) / Processor due diligence (art. 28(1)) / DPO (art. 37 &amp; 38)</td>
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Open Discussion

All participants are encouraged to submit questions and comments through the Q&A box in the Zoom Application.
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