



AI Regulatory Sandbox

31 March 2022

AI Innovation Center

Eindhoven (Netherlands)

Program

- 13.00 : open for visitors to the AI Innovation Center in Eindhoven
- 13.30 : welcome and opening by Jos van der Wijst
- 13.45 : introduction by Rob van den Hoven van Genderen; Vrije Universiteit Amsterdam, chairman NVAIR
- 14.00 : Martijn van Grieken; Gimix, Developer of AI systems
- 14.30 : Sofia Ranchordas; University of Groningen (online)
- 15.00 : Florina Pop; European Institute of Public Administration (EIPA)
- 15.30 : break
- 15.45 : Eirik Gulbrandsen; Norwegian Data Protection Authority (online)
- 16.15 : Huub Janssen; Planner Supervision on Artificial Intelligence, Dutch Telecom Supervisory Authority
- 16.45 : question and discussion
- 17.15 : end of event: drinks

- Microphone on mute



- Ask a question:
 - Raise hand and wait for your turn
 - Type question in the chat
-
- The event will be recorded and can be viewed later.

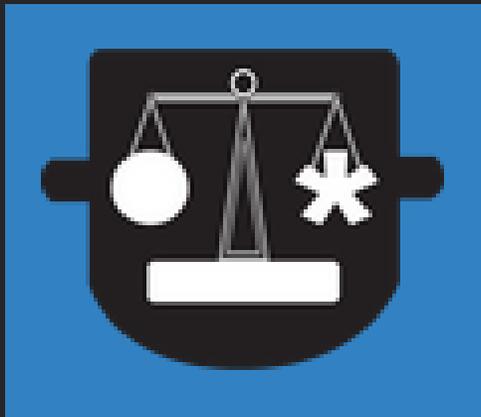
Why this event?

- Proposal EU AI Act introduces the instrument AI regulatory sandbox
- Is this a solution for a real problem?
- What will be the legal framework for an AI regulatory sandbox
- How will competent authorities work with participants on a 'sandbox plan'
- How will this work for SME's (startup/scaleups).

After this event

- suggestions for legal framework for AI regulatory sandbox are welcome
- Suggestions for pilot projects for AI regulatory sandbox are welcome
- Call to participate in developing AI regulatory sandbox

Who organises this event



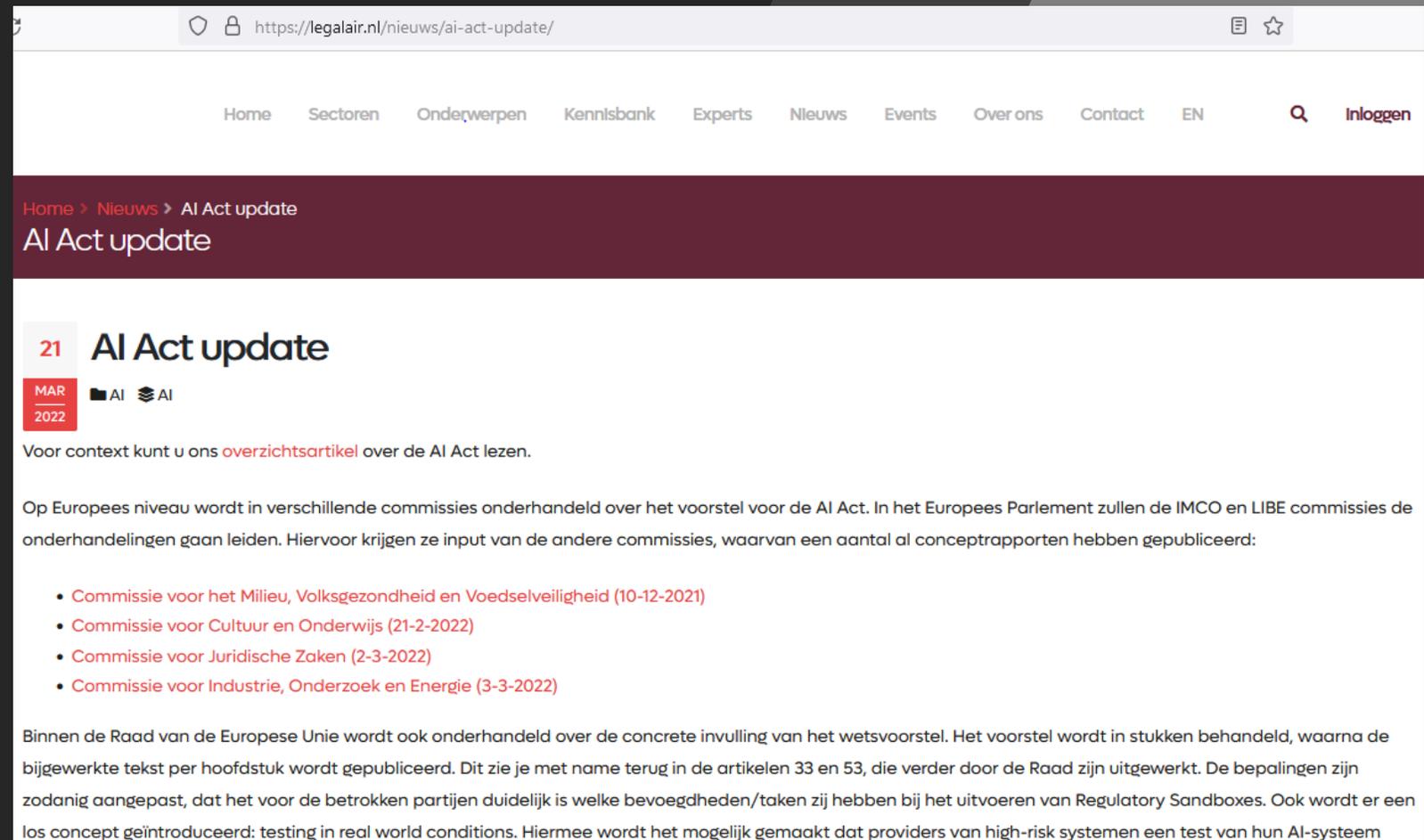
<https://nvair.nl/>

NL AI Coalition

<https://nlaic.com/en/>

NL AI coalition

- Follow development of AI act
- Use the LegalAIR platform:



The screenshot shows a web browser window with the URL <https://legalair.nl/nieuws/ai-act-update/>. The website has a navigation menu with links for Home, Sectoren, Onderwerpen, Kennisbank, Experts, Nieuws, Events, Over ons, Contact, and EN. There is also a search icon and an 'Inloggen' button. The main content area features a breadcrumb trail: Home > Nieuws > AI Act update. The article title is 'AI Act update' with a date badge for '21 MAR 2022' and tags for 'AI' and 'AI'. The text of the article discusses the development of the AI Act at the European level, mentioning the IMCO and LIBE committees and their reports. A list of reports is provided, including those from the Commission for the Environment, Public Health and Food Safety (10-12-2021), Culture and Education (21-2-2022), Legal Affairs (2-3-2022), and Industry, Research and Energy (3-3-2022). The article concludes by mentioning the Council of the European Union's role in the process and the introduction of a testing concept in real world conditions.

Home > Nieuws > AI Act update

AI Act update

21 MAR 2022 AI AI

Voor context kunt u ons [overzichtsartikel](#) over de AI Act lezen.

Op Europees niveau wordt in verschillende commissies onderhandeld over het voorstel voor de AI Act. In het Europees Parlement zullen de IMCO en LIBE commissies de onderhandelingen gaan leiden. Hiervoor krijgen ze input van de andere commissies, waarvan een aantal al conceptrapporten hebben gepubliceerd:

- [Commissie voor het Milieu, Volksgezondheid en Voedselveiligheid \(10-12-2021\)](#)
- [Commissie voor Cultuur en Onderwijs \(21-2-2022\)](#)
- [Commissie voor Juridische Zaken \(2-3-2022\)](#)
- [Commissie voor Industrie, Onderzoek en Energie \(3-3-2022\)](#)

Binnen de Raad van de Europese Unie wordt ook onderhandeld over de concrete invulling van het wetsvoorstel. Het voorstel wordt in stukken behandeld, waarna de bijgewerkte tekst per hoofdstuk wordt gepubliceerd. Dit zie je met name terug in de artikelen 33 en 53, die verder door de Raad zijn uitgewerkt. De bepalingen zijn zodanig aangepast, dat het voor de betrokken partijen duidelijk is welke bevoegdheden/taken zij hebben bij het uitvoeren van Regulatory Sandboxes. Ook wordt er een los concept geïntroduceerd: testing in real world conditions. Hiermee wordt het mogelijk gemaakt dat providers van high-risk systemen een test van hun AI-systeem

AI Innovation Center

- Incubator and accelerator AI application



<https://nvair.nl/>

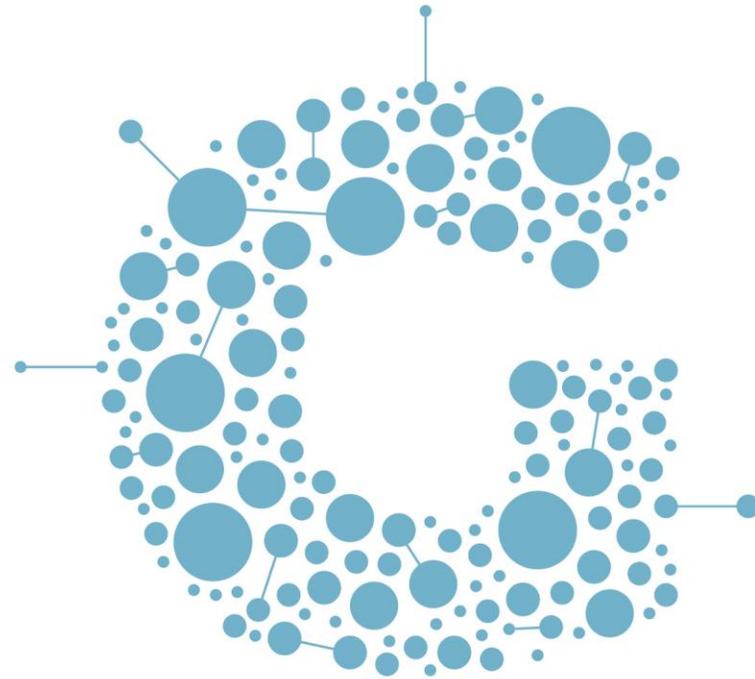
Netherlands
Association for
AI & Robotlaw



Regulatory sandboxes art.53/55, good idea?

- Safeguarding public interest (GDPR not applicable?)
 - (i) the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, including the safeguarding against and the prevention of threats to public security, under the control and responsibility of the competent authorities. The processing shall be based on Member State or Union law;
 - (ii) public safety and public health, including disease prevention, control and treatment;
 - (iii) a high level of protection and improvement of the quality of the environment;
- Tasks EAIB, health and Environmental Authorities, Justice and national security Authorities, DPA's?
- Entrance sme's?





gimix
your trusted a.i. partner

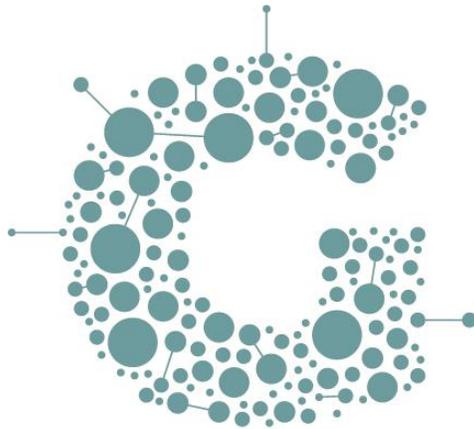
Developing trustworthy A.I.

Ethical and lawful dilemma's

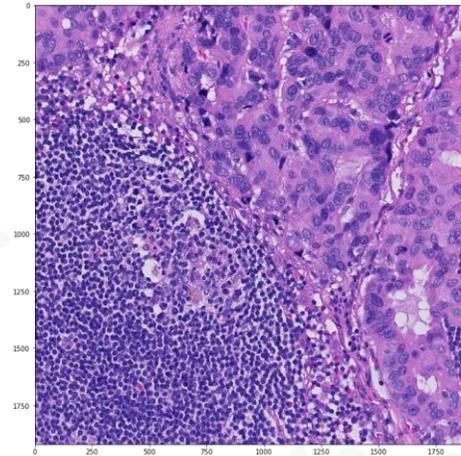
Martijn van Grieken

Agenda

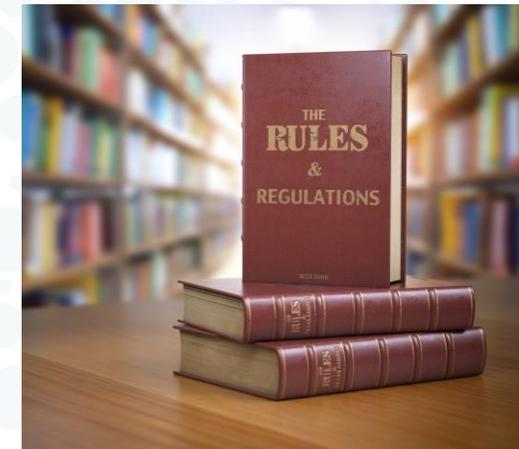
Introduction
Gimix



Introduction
AI / deep learning



AI Regulatory Sandbox:
“A developers view”





- Founded in 2014
- Data Science expertise
 - ✓ Mathematical optimisation
 - ✓ Statistical analyses
 - ✓ Machine learning
 - ✓ Deep Learning
 - ✓ Genetic algorithms
- Vast experience in the Health care domain:
 - ✓ Medical diagnostics
 - ✓ Predicting treatment & adherence
 - ✓ Personalised care
- Offices at the
 - ✓ Kennedytoren (Central Station Eindhoven)
 - ✓ AI Innovations Center (High Tech Campus Eindhoven)





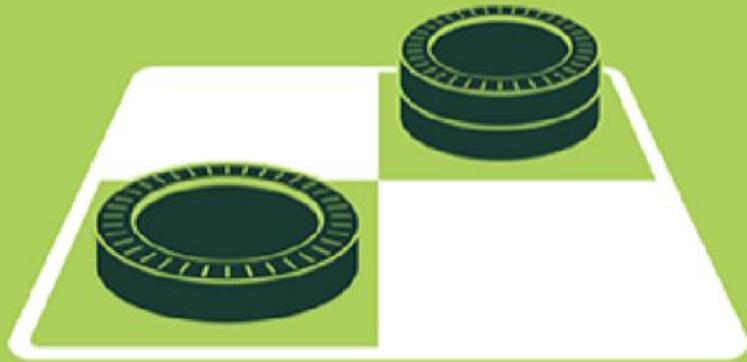
Artificial intelligence is the intelligence with which machine independently solve problems. They imitate the human mind.



Almost all current applications fall under the so-called narrow AI: Intelligent computer systems that perform one specific task very well.

Artificial Intelligence

Rule based intelligence



Machine Learning

Statistics based intelligence



Deep Learning

Neural network based intelligence



1950

1960
2010

1970

1980

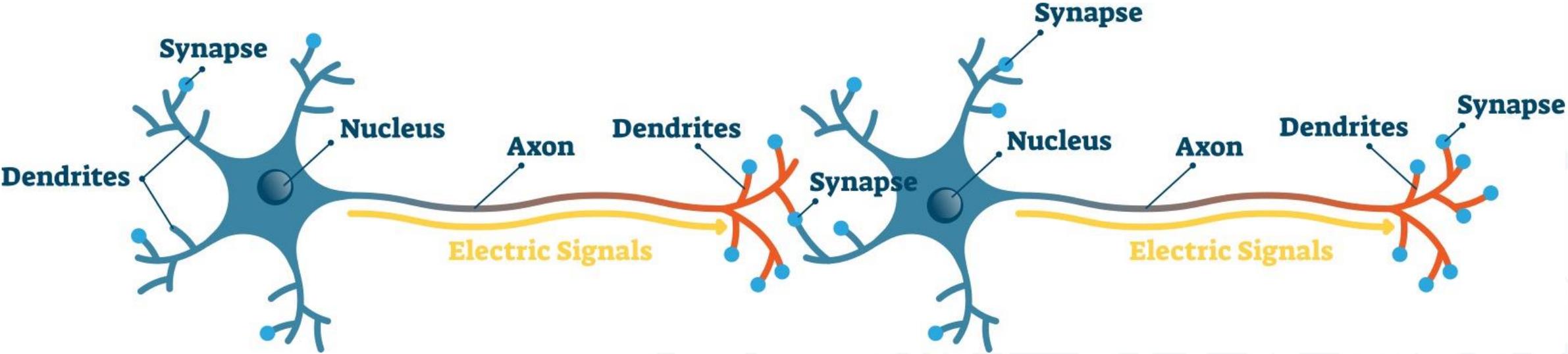
1990

2000

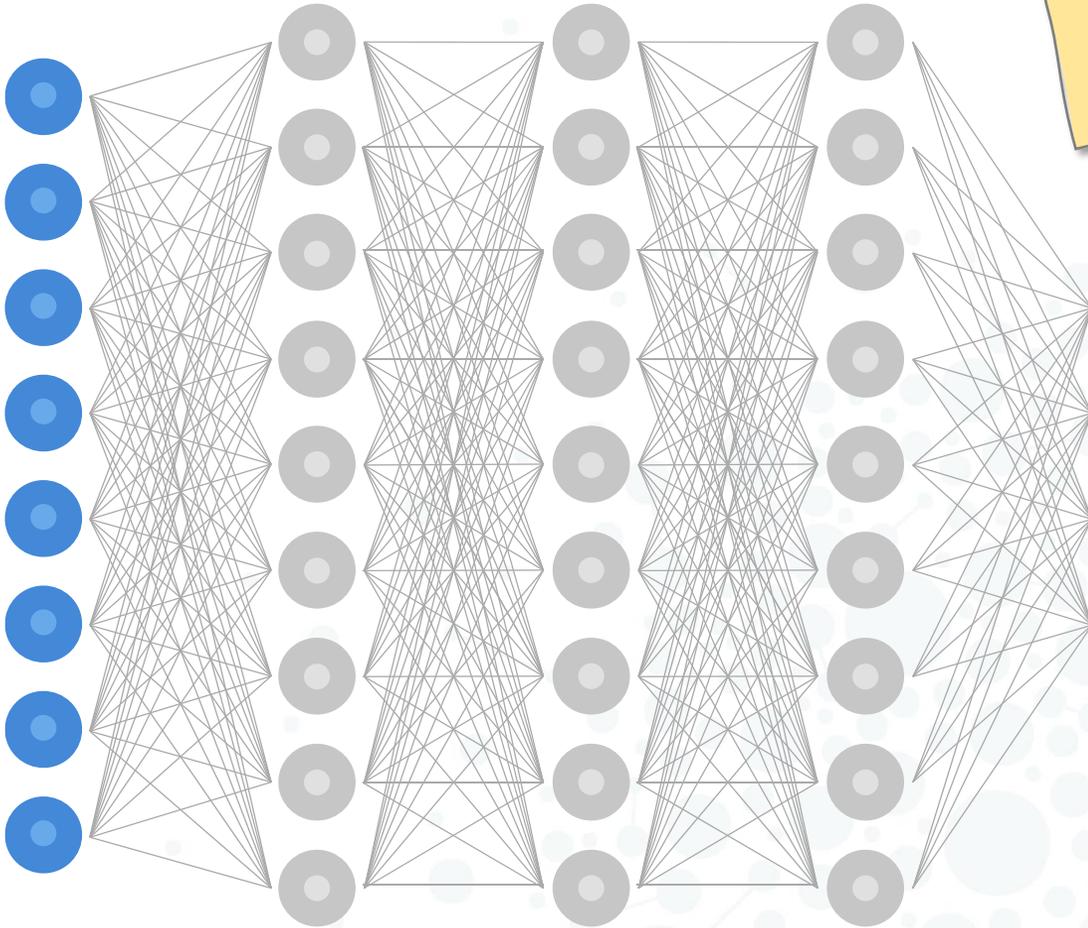
Bron: NVIDIA



Neuron



Training a Neural Network



This methodology is very data intensive in the development phase.

- Healthy
- ✓ AMD
- DRE
- Drusen



Data diversity
Structured and unstructured



Imaging: Recognizing diseases / diagnostics

A woman with her hair in a ponytail, wearing a dark business suit, is seen from the side, pointing her right index finger at a large, curved wall of video screens. The screens display a variety of images related to technology, science, and business. Some screens show futuristic cityscapes, others show people in professional settings, and many show abstract digital graphics like glowing lines, circles, and data points. The overall atmosphere is high-tech and futuristic.

Video

Video: Recognizing behavior



Sound: Recognizing emotion



Text and speech: Recognizing sentiment

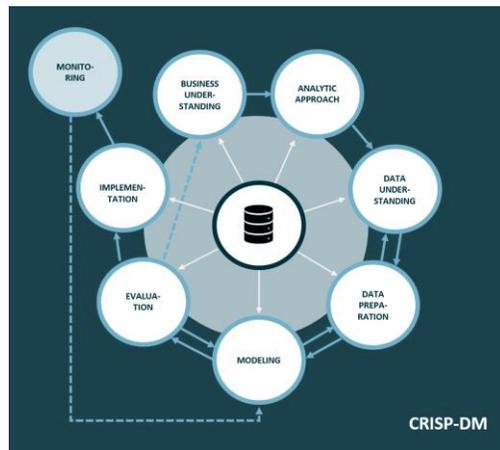


Time series: Recognizing abnormalities

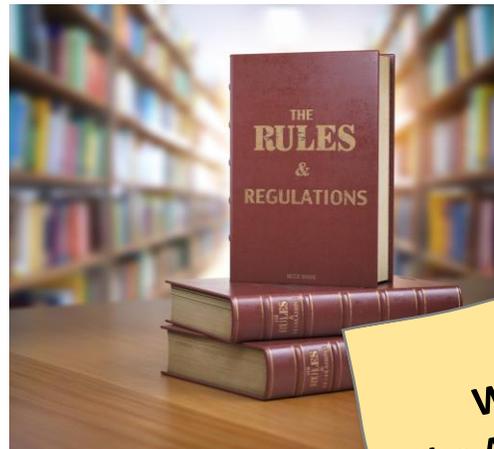
AI regulatory sandbox

Agenda continued (AI Regulatory Sandbox)

CRISP-DM
data science process

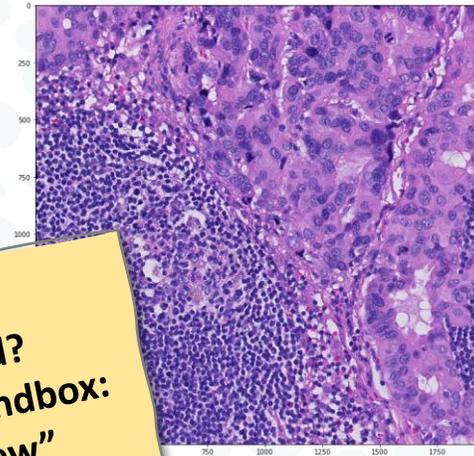


Risks from a legal and
ethical point of view



What do we need?
The AI Regulatory sandbox:
“A developers view”

Examples of hindered
AI innovation due to
current regulations



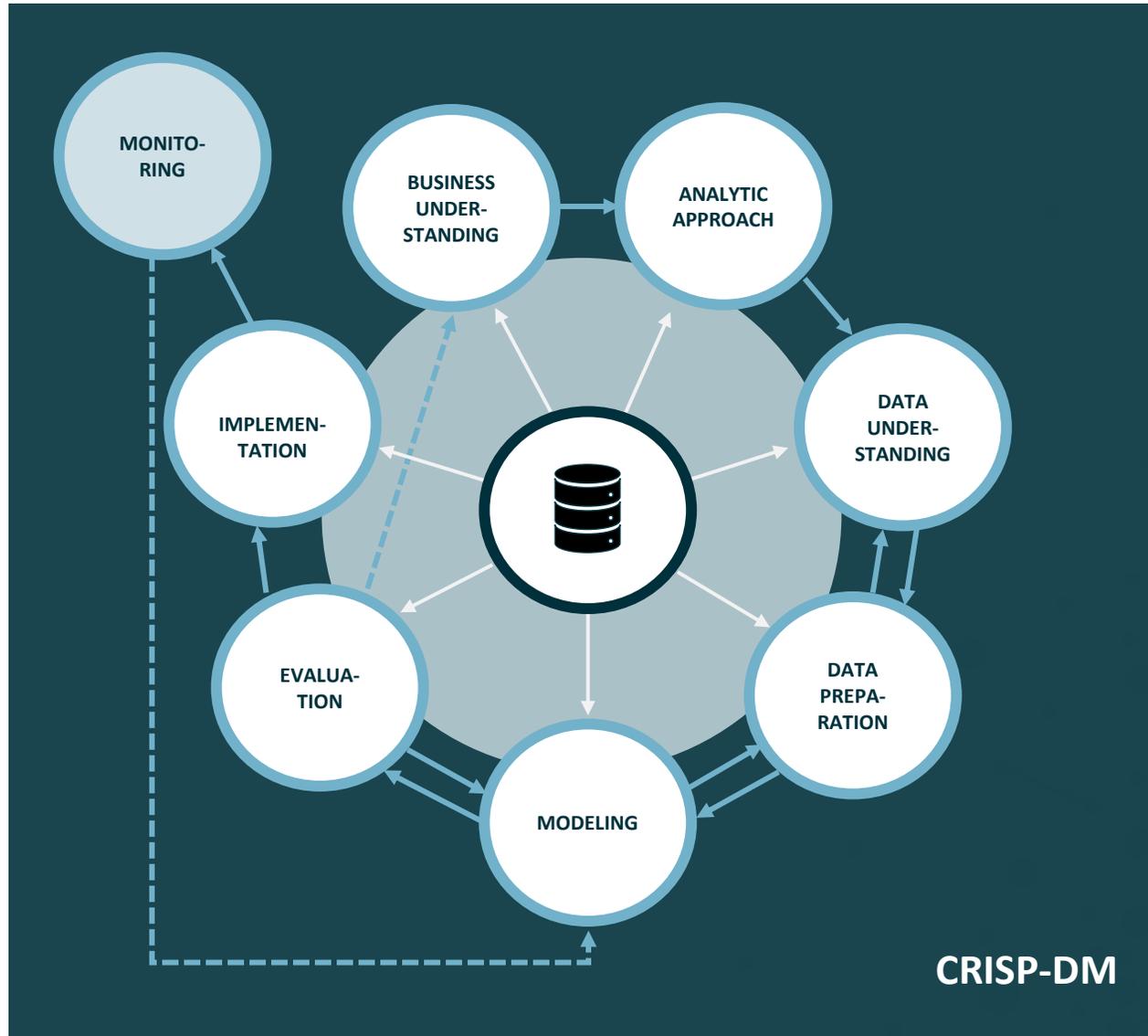
CRISP-DM

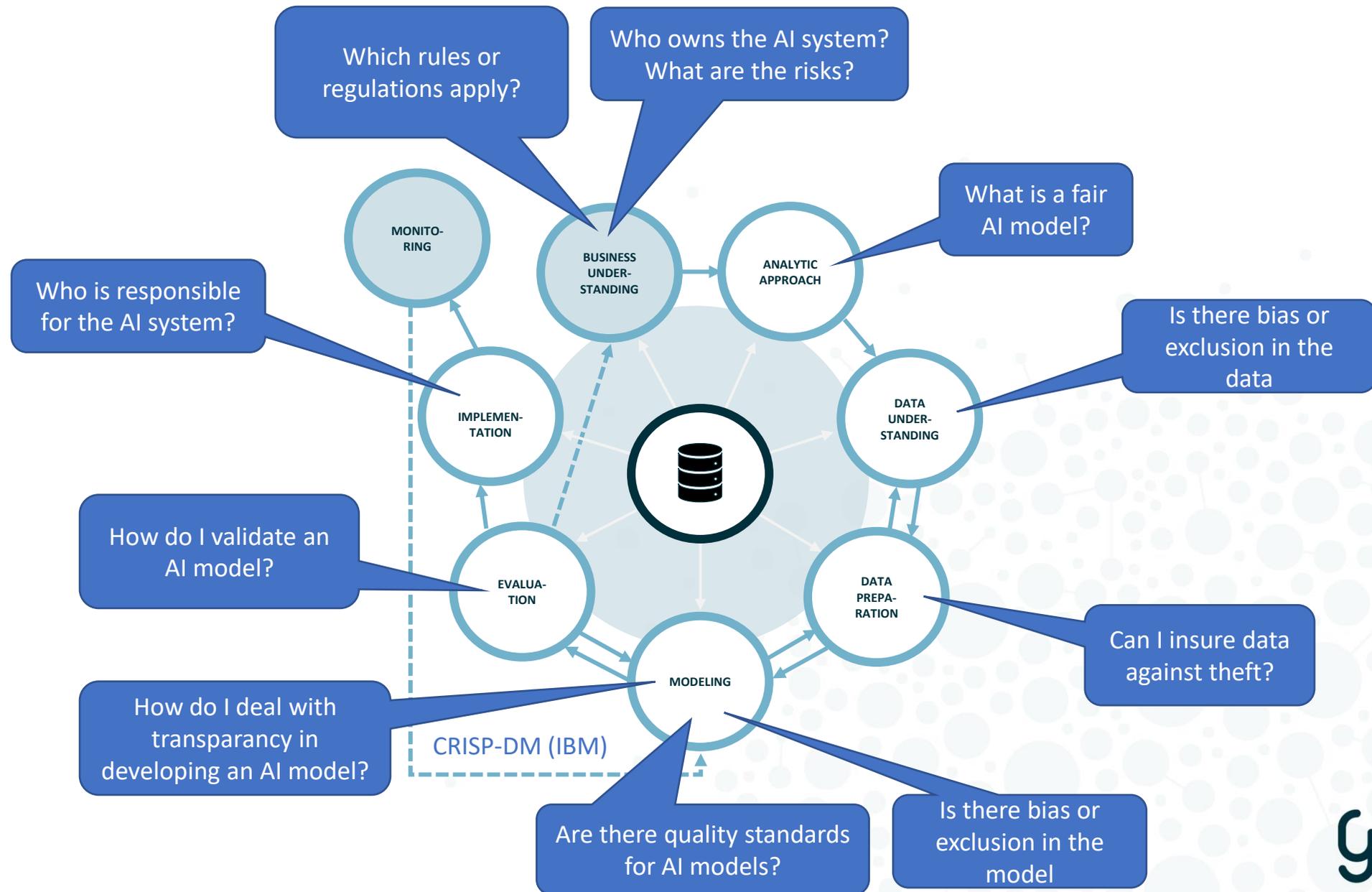
The Data Science process

CRISP-DM

Cross Industry Standard Process for Data Mining

- Iterative
- Multiple phases
- Most used data science method





legal ai



So what more can we do?

Or what is currently out of our reach?

AI regulatory sandbox opportunity for innovation

Some field examples

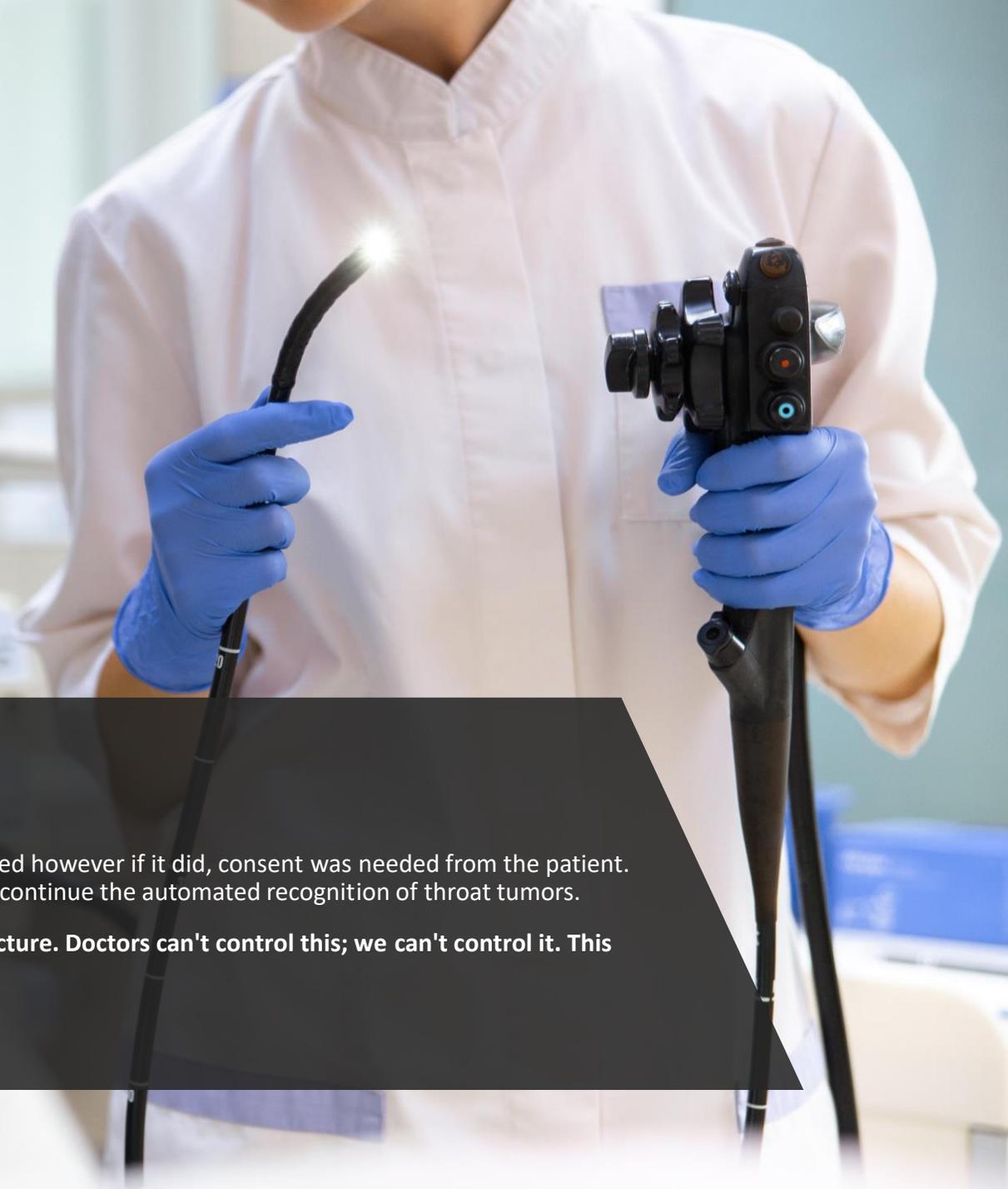


Monitoring fetal health

With a low quantity, low quality dataset, there were two options to make this innovation move forward: Increase the amount of data (both quality and quantity) or use a different algorithm to recognize the desired patterns.

The issue at hand was that data between hospitals could not be shared given they had no consent to use the data for this project. Even sharing of the 'anonymized' data was not allowed, since the hospital could in theory relate the data back to the patient. Getting consent was very cumbersome for the Hospital staff.

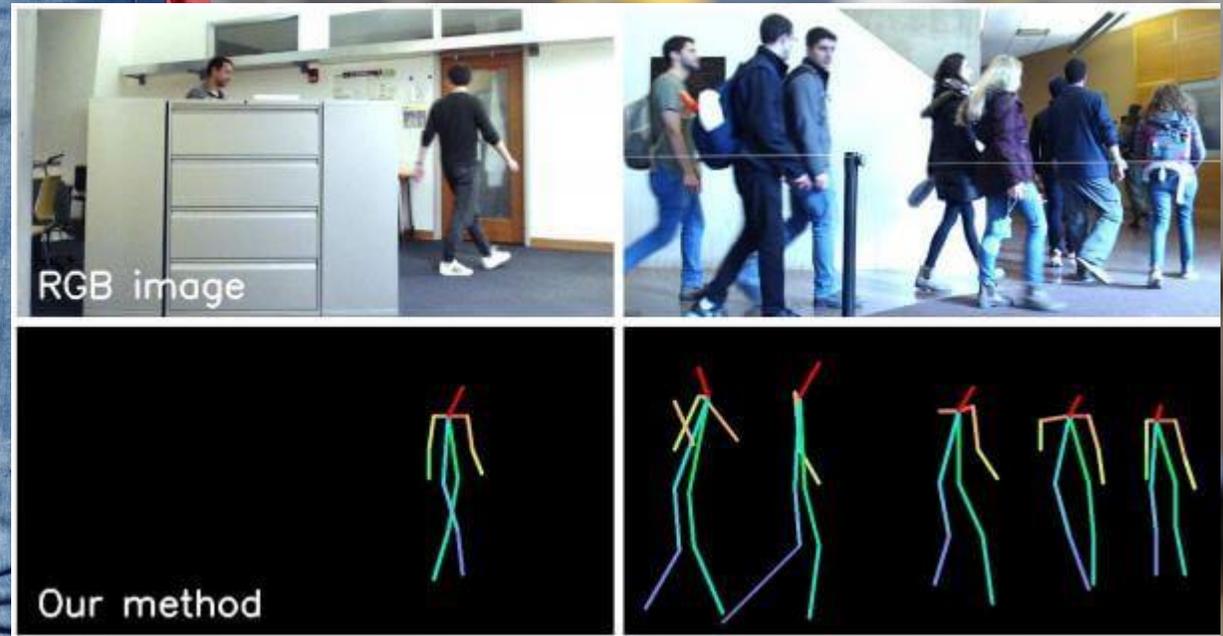
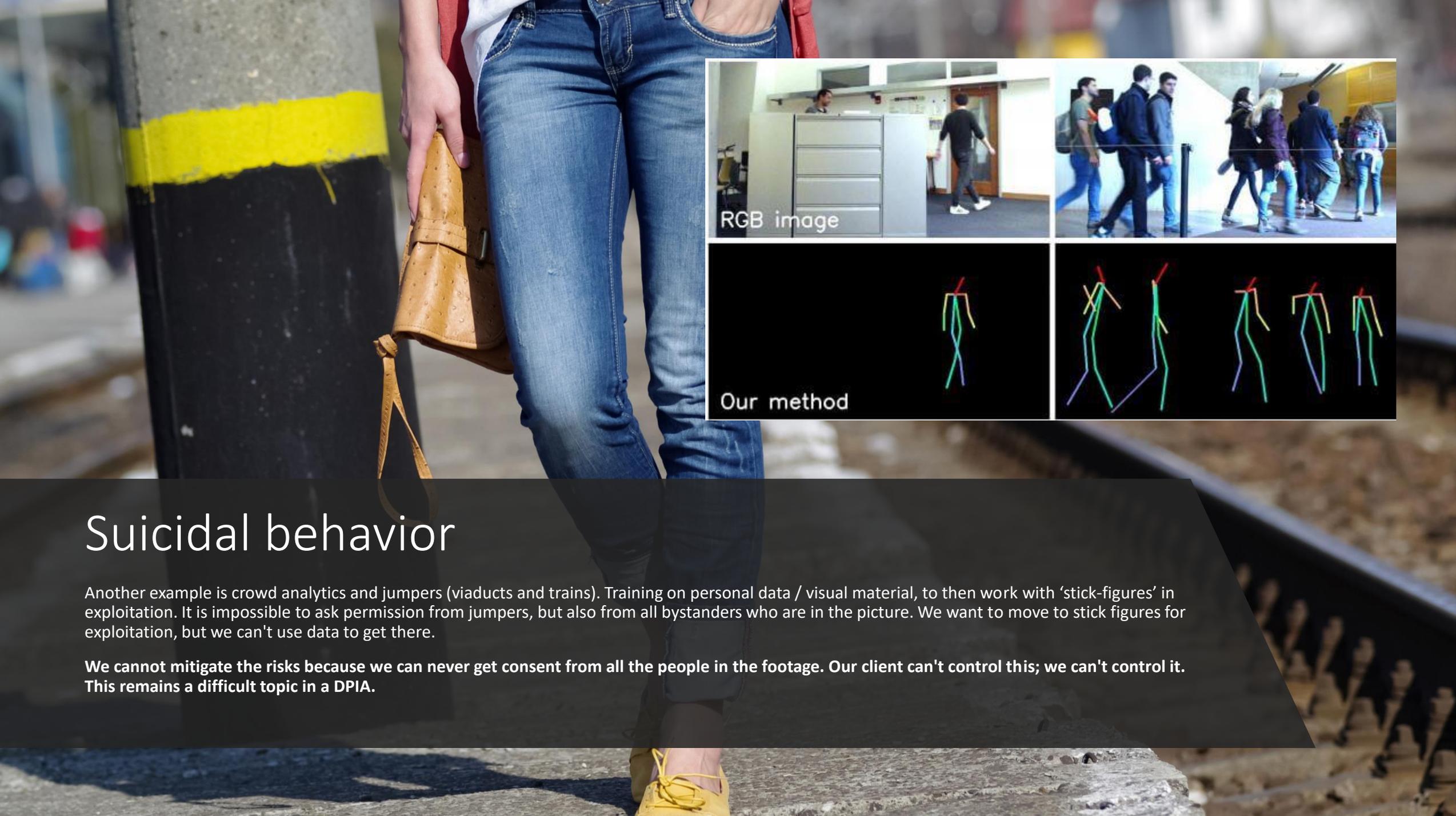
By only selecting the patients that give their consent, the data could be biased and not as effective.



Endoscopy

If the endoscope is started too early, the patients face may be in the data. This hardly occurred however if it did, consent was needed from the patient. Given the risk of personal information in the data, the medical specialist was not allowed to continue the automated recognition of throat tumors.

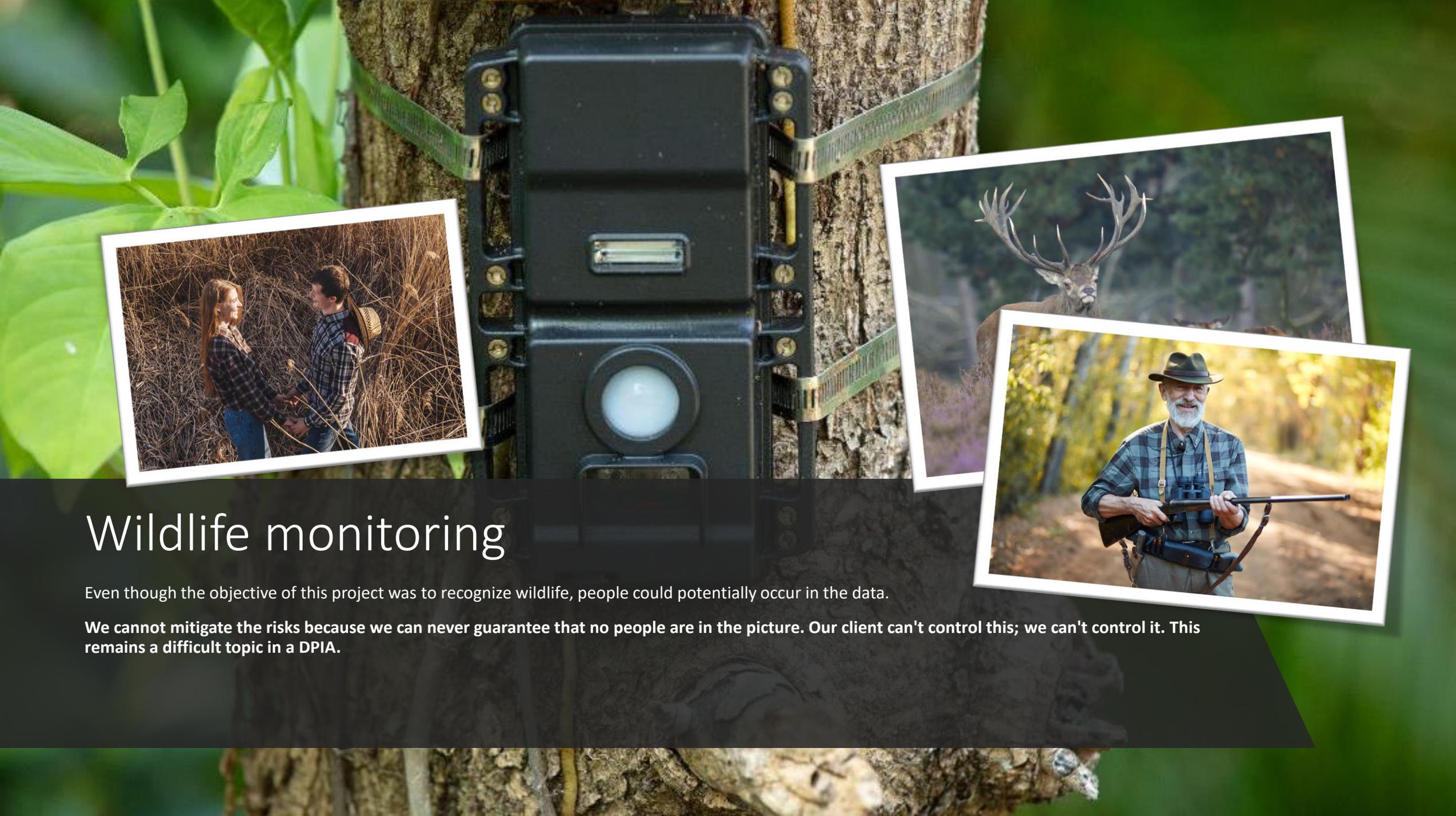
We cannot mitigate the risks because we can never guarantee that no people are in the picture. Doctors can't control this; we can't control it. This remains a difficult topic in a DPIA.



Suicidal behavior

Another example is crowd analytics and jumpers (viaducts and trains). Training on personal data / visual material, to then work with 'stick-figures' in exploitation. It is impossible to ask permission from jumpers, but also from all bystanders who are in the picture. We want to move to stick figures for exploitation, but we can't use data to get there.

We cannot mitigate the risks because we can never get consent from all the people in the footage. Our client can't control this; we can't control it. This remains a difficult topic in a DPIA.



Wildlife monitoring

Even though the objective of this project was to recognize wildlife, people could potentially occur in the data.

We cannot mitigate the risks because we can never guarantee that no people are in the picture. Our client can't control this; we can't control it. This remains a difficult topic in a DPIA.

AI regulatory sandbox

- We cannot mitigate the risks (e.g., no ground for using the data within the GDPR) because we can never guarantee that no personal data are in the trainingset. Our clients (e.g., doctors) can't control this; we can't control it. This remains a difficulty in a DPIA.
- Proportionality: The goal justifies the means. In a sandbox, accept the risk, however small, (e.g., by the Authority on Personal Data or AP) by addressing them in advance. If this risk can be accepted in a sandbox (i.e., no prosecution) it would stimulate innovation.

This concerns purely and solely the development phase, not the exploitation phase.

Why do we need the AI regulatory sandbox?

By creating more possibilities in the analysis and development phase, profiling, discrimination and exclusion during exploitation can be prevented.

Limiting possibilities in the development phase actually encourages negative profiling, discrimination and exclusion.



Why do we need the AI regulatory sandbox?

Because the AI Regulatory Sandbox offers more room for testing with representative data, the applications can be validated much more extensively, and risks can be prevented.

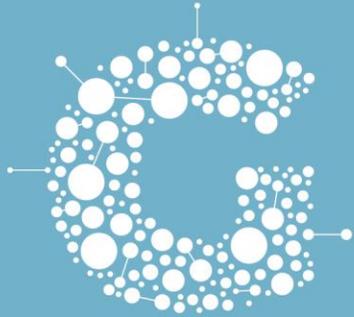


Why do we need the AI regulatory sandbox?

The AI Regulatory Sandbox drives more innovation in the Netherlands and the EU. Due to the strict laws and regulations, the EU is in danger of falling behind in the field of AI. As a result, innovative companies and the best students may go abroad.

The EU may miss commercial opportunities and may also become increasingly dependent on foreign countries.





gimix
your trusted a.i. partner

Thank you!
Martijn van Grieken

VOOR MEER INFORMATIE OF VRAGEN
NEEM CONTACT MET ONS OP:

Bezoekadres
High Tech Campus 9
5656 AE Eindhoven

Postadres
Postbus 775
5600 AT Eindhoven
t. +31 (0)40 - 30 41 555

info@gimix.nl
www.gimix.ai

Regulatory Sandboxes for AI



Prof. dr. Sofia Ranchordas
University of Groningen & LUISS Guido Carli
March 31st, 2022

Today

1. The Challenge of Regulating Innovation;

2. Experimental Regulations & Sandboxing: The Promise of Flexibility;

3. Design and Methodological Challenges

4. Paradigm Changes

Technology & Regulation: Complex decisions



Whether to intervene

laissez-faire, public-interests, private special interest groups, 'bootleggers & baptists'



How?

public vs private regulation; command-and-control vs. alternatives; self-regulation; co-regulation; hard vs. soft regulation;



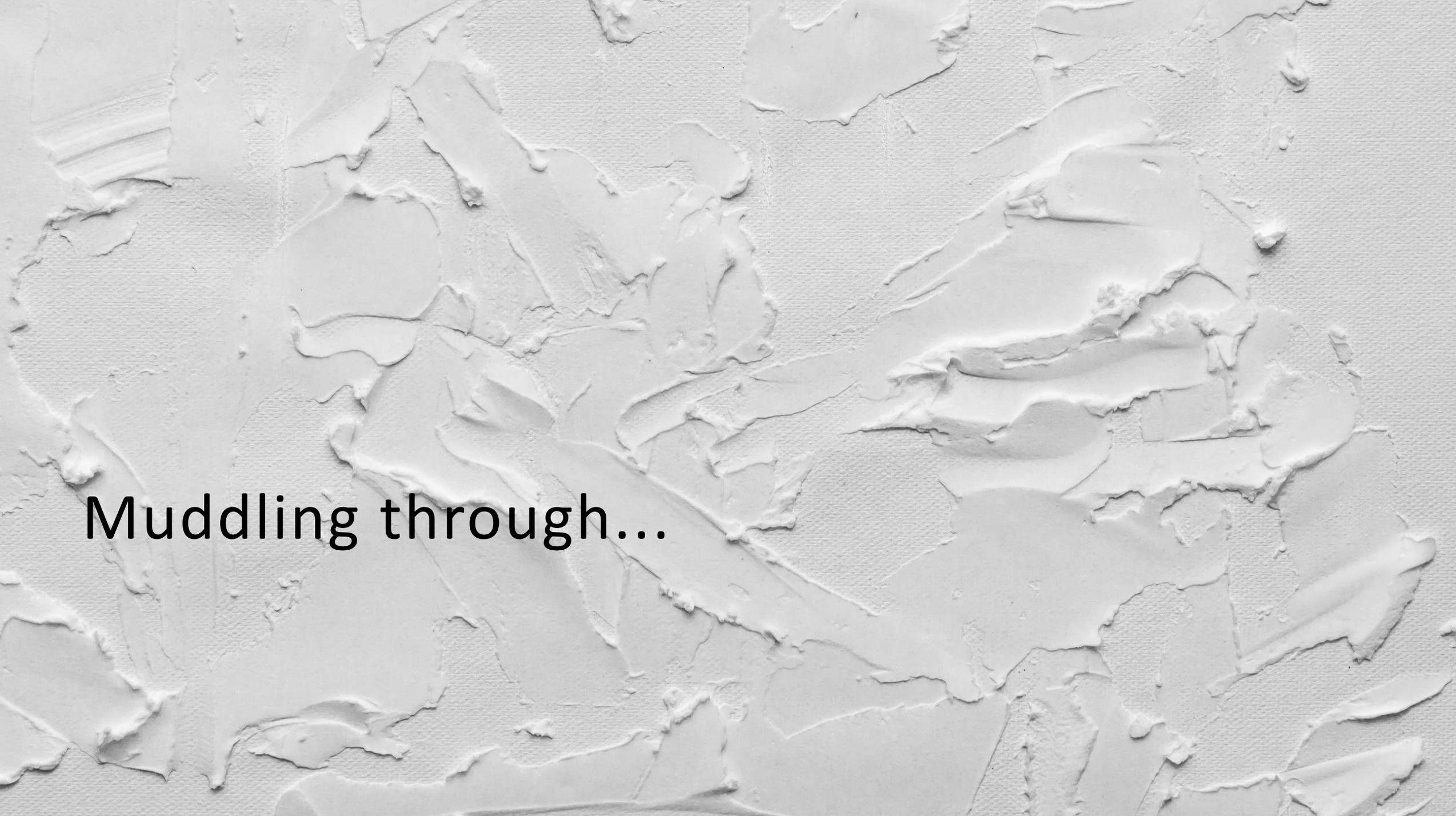
With whom?

stakeholder engagement/consultations; crowdsourcing.



When?

Timing: commencement, phased-implementation, sunset clauses, experiments.



Muddling through...

Regulating Innovation (I)

Literature



Borras (2016, 2017, 2019), Cortez (2014), Edquist (1997), Ford (2017), Hemel (2019), Lobel (2013), Mazzucato (2011,2017, 2020), Moses (2011), Ouelette/Hemel (2019); Ranchordas (2015, 2016, 2020), Wu (2010)

Regulating Innovation (II)

Policy & Legislation



Innovation principle: EESC (2016), European Commission (2019)
Innovation-friendly measures: EU AI Coordinated Plan (2019),
Council of Europe (Nov. 2020), AI Regulation Proposal (2021)

Flexibility and Experimentation: The Promise?





The experimental method

|

Better regulation trend:

Experimentalism

Collaborative initiatives

Sandboxing



[Home](#) > [Press](#) > [Press releases](#)

● Council of the EU Press release 16 November 2020 17:39

Regulatory sandboxes and experimentation clauses as tools for better regulation: Council adopts conclusions

The Council today adopted a set of conclusions on the role of regulatory sandboxes and experimentation clauses in an innovation-friendly, future-proof, sustainable and resilient EU regulatory framework.

Regulatory sandboxes are defined as concrete frameworks which, by providing a structured context for experimentation, enable where appropriate in a real-world environment the testing of innovative technologies, products, services or approaches – at the moment especially in the context of digitalisation – for a limited time and in a limited part of a sector or area under regulatory supervision ensuring that appropriate safeguards are in place.

Experimentation clauses, often the legal basis for regulatory sandboxes, are defined as legal provisions which enable the authorities tasked with implementing and enforcing the legislation to exercise on a case-by-case basis a degree of flexibility in relation to testing innovative technologies, products, services or approaches.

In these conclusions, the Council affirms that regulatory sandboxes can offer significant opportunities particularly to innovate and grow for all businesses, especially SMEs, including micro-enterprises as well as start-ups, in industry, services and other sectors.

6. BEHAVIOURAL INSIGHTS, REGULATORY SANDBOXES AND COMBINATIONS OF INSTRUMENTS INTRODUCTION

More effective policy instruments could emerge if insights provided by behavioural sciences and empirical studies are available. Assumptions about the behaviour of individuals and businesses based on classical rational choice theory are not necessarily corroborated by observed evidence. Behavioural sciences may help bridge the gap between conventional assumptions that are adopted in most models and the observed biases in such a way to obtain a realistic representation of the problem matter and of its determinants. The IA tool on problem drivers provides several examples where the design or the intensity of the instrument is affected by behavioural insights¹⁹⁶.

Technological transformation, the emergence of new products, services, and business models can be quite challenging from a regulatory perspective. To enable firms to test innovations in a controlled real-world environment, under a specific plan developed and monitored by a competent authority, a relatively new policy instrument – a ‘regulatory sandbox’ – can be set up. A more detailed description of regulatory sandboxes can be found in Tool #69 (*Emerging methods and policy instruments*).



Fintech

Une Sandbox réglementaire - bac à sable réglementaire - pour quoi faire ?

Image de fond



S'abonner



Partager

Un rapport des Nations Unies partage ses réflexions sur l'innovation réglementaire au bénéfice des services fintech et de l'inclusion financière ; il modère l'apport des sandboxes réglementaires. L'ACPR et la Banque de France sont cités parmi les institutions engagées sur l'innovation avec le Pôle Fintech et le Lab.

[Télécharger la version PDF du document](#)



Regulatory sandbox

What is a regulatory sandbox?

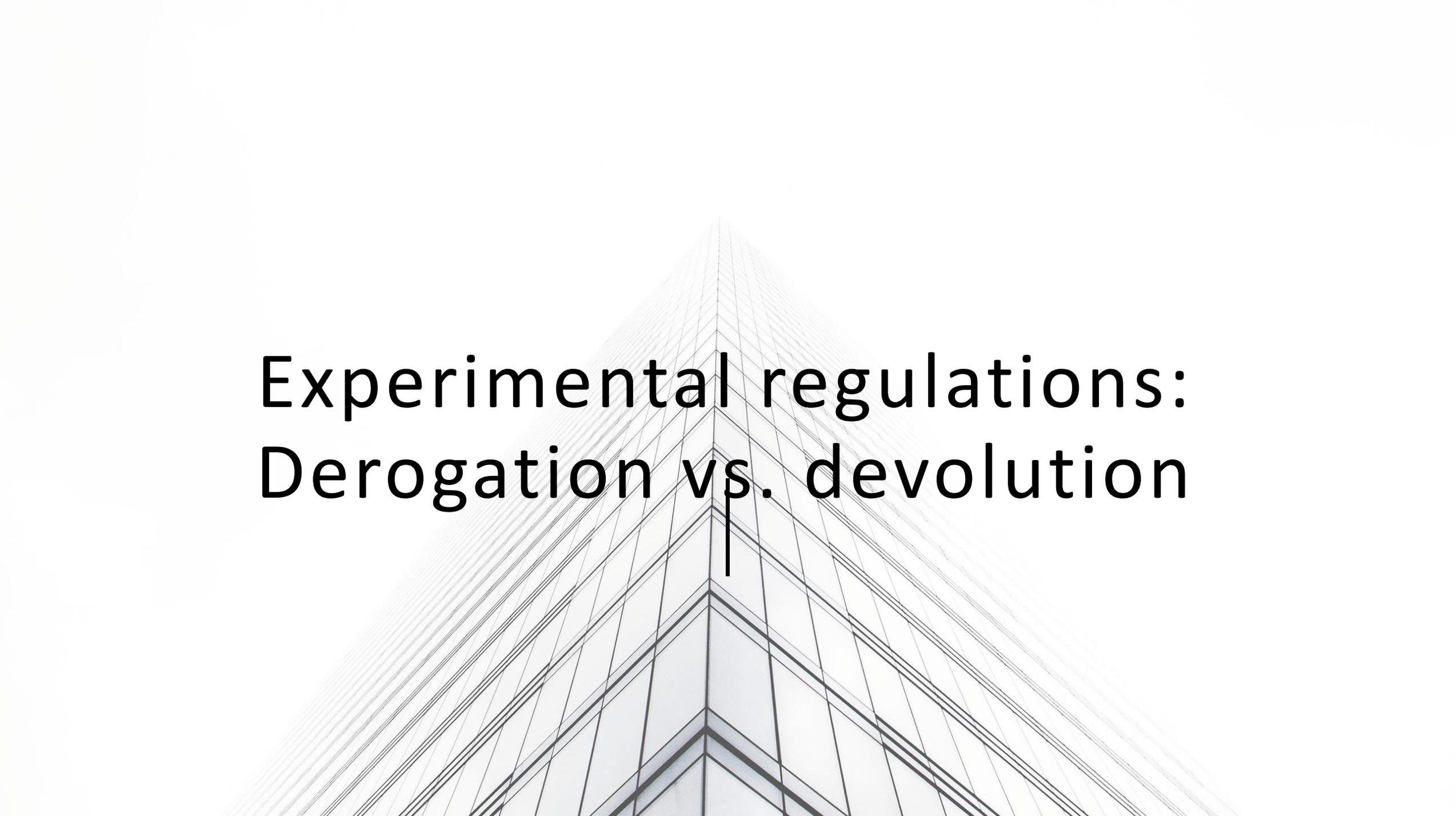
The regulatory sandbox is a controlled environment where supervised entities and FinTech operators will be able to **test, for a limited period of time, technologically innovative products and services** in the banking, financial and insurance sectors. The tests will take place in close liaison with the supervisory authorities and can eventually benefit from a simplified transitional regime.

In Italy, [Decree 100/2021 issued by the Ministry of Economy and Finance](#), implementing the delegated act envisaged under [Decree Law 34/2019](#) ('Growth Decree'), sets out the 'FinTech Committee rules and experimentation', i.e. the *regulatory sandbox* of FinTech activities at the supervisory authorities.

Objectives

Through the sandbox, the supervisory authorities aim to support the growth and development of the Italian FinTech market, thanks to the **introduction of innovative models in the banking, financial and insurance sectors**, while guaranteeing adequate levels of consumer protection and competition, and safeguarding financial stability.

At the same time, the supervisory authorities can observe the **latest technological developments** and identify the most appropriate and effective **regulatory interventions** to facilitate the development of FinTech, thereby limiting the spread of potential new risks from the outset.



Experimental regulations: Derogation vs. devolution



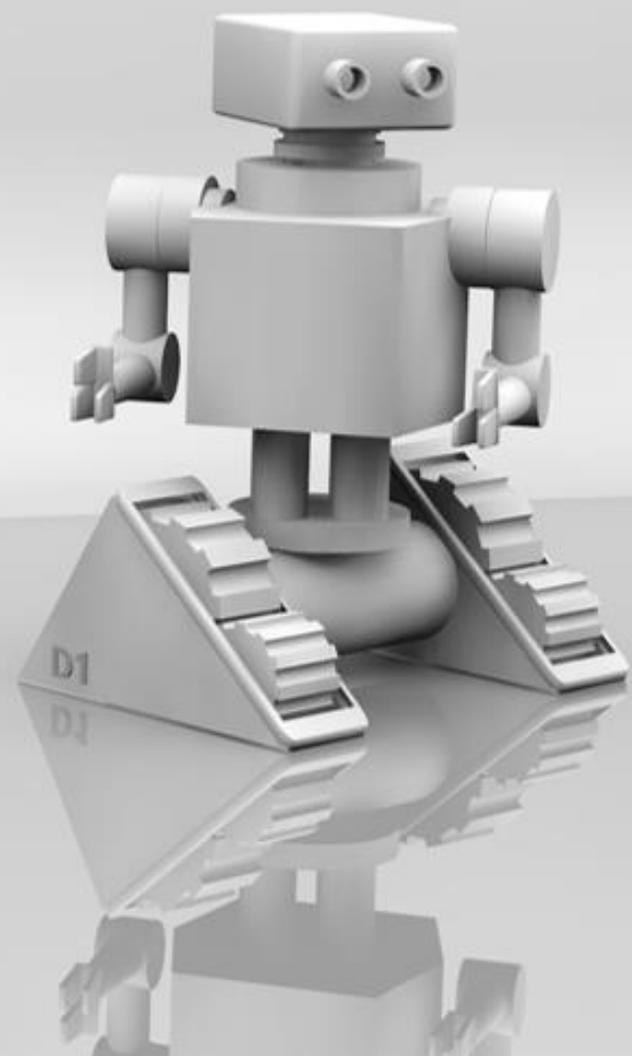
**Regulatory Sandboxes:
Safe testbeds, compliance
guidance & collaboration**

The sandbox theory

The sandbox is a regulatory paradigm based on experimentalism and flexibility, meant to keep with ever faster innovation paces in ICT industries. To do so, regulatory sandboxes set **a testing framework where both the regulator and stakeholders engage and interact**. The main aim is: (i) to assess a fast-paced adaptation of existing regulations to new market trends; and/or (ii) to suggest modifications of the sandbox participants' business models to be able to comply with existing regulation. The sandbox articulates a trade-off between calibrated regulatory leniency and consumer safeguards.

On the one hand, **regulators are able to constantly assess the suitability of existing legal frameworks with regards ongoing market dynamics**. This might be transposed into an increased regulatory quality taking an innovation-friendly approach. Moreover, the data generated from the testbed might save transaction costs to the regulator when drafting/amending a new regulation.

On the other hand, **companies can integrate the results of the testbed to adjust their business models**



AI Regulation Proposal (I)

Measures to support innovation:

AI Regulatory Sandboxes (Title V): supervision and guidance, not derogation;

Other measures to reduce regulatory burdens for SMEs: provision of priority access to the AI regulatory sandboxes, specific awareness raising activities tailored to the needs of the SMEs and start-ups, (proportionate) fees for conformity assessment.

[< Article précédent](#)

[Article suivant >](#)

Le Conseil d'État publie aujourd'hui son étude « Les expérimentations : comment innover dans la conduite des politiques publiques ? », réalisée à la demande du Premier ministre.

Dressant le bilan de près de vingt ans de pratique des expérimentations par l'État, les collectivités territoriales et leurs opérateurs, le Conseil d'État souligne que nombre d'entre elles n'ont pas suivi une méthodologie propre à assurer la plus grande fiabilité de leurs résultats, et qu'il pourrait y être recouru davantage dans certains domaines. C'est pourquoi le Conseil d'État propose aujourd'hui un guide de bonnes pratiques de l'expérimentation et formule des propositions au Gouvernement pour favoriser leur développement.

Compliance with Methods

=

Compliance with Law?

Design & Methodological issues

- Internal validity & external validity;
- Principles of good science/ principles of good regulation;
- Better design with a general framework: **clear formulation of hypothesis, proportionate duration and implementation, random assignment (when possible), evaluation.**

Design & Methodological issues (II)

- Limited learning value of experiment;
- Political capture;
- **Legal implications.**

Paradigm Shift?



Anticipatory Regulation
Benefits/Concerns & Half-measures
Legal Issues

Anticipatory Regulation



Future-proofing



Iterative learning

=



Outcomes-based
regulation



Experimental
approaches

Anticipatory Regulation: Legal and Methodological Concerns



Future-proofing

Legal uncertainty and indeterminacy?

Rule of law



Iterative learning

Politicization of evidence; legal unity and fragmentation;

Transparency



Outcomes-based regulation

Feasibility?
Proportionality of measures?



Experimental approaches

Methodology and research design (French Council of State, 2019);
Equal treatment (cfr. CJEU AG Maduro C-127/07)

Conclusion (I)



Wait and see..



**Customize &
guide**

Regulatory sandboxes

Measures for SMEs



**Experiment &
derogate**

Regulatory sandboxes
with temporary
derogations (random
character?)

experimentalist
governance (Zeitlin)

"Innovations generate regulation designed to address them.

But a central problem for regulation in responding to innovation is that political legitimacy and the rule of law require public, state-sanctioned rules to have and maintain a degree of certainty, constancy, transparency, and public accountability.

Because regulation-makers must take these considerations into account, regulation is legally and structurally encumbered, in responding to change, in a way that private sector innovation is not."

|

C.Ford, Innovation and the State (2017)



Thank you.

Sofia Ranchordas
s.h.ranchordas@rug.nl
@SRanchordas

Artificial Intelligence and Data Protection

Florina Pop

Data Protection Expert, Senior Lecturer

Data

Lawfulness,
Fairness and
Transparency

Data
Minimisation

Purpose
Limitation

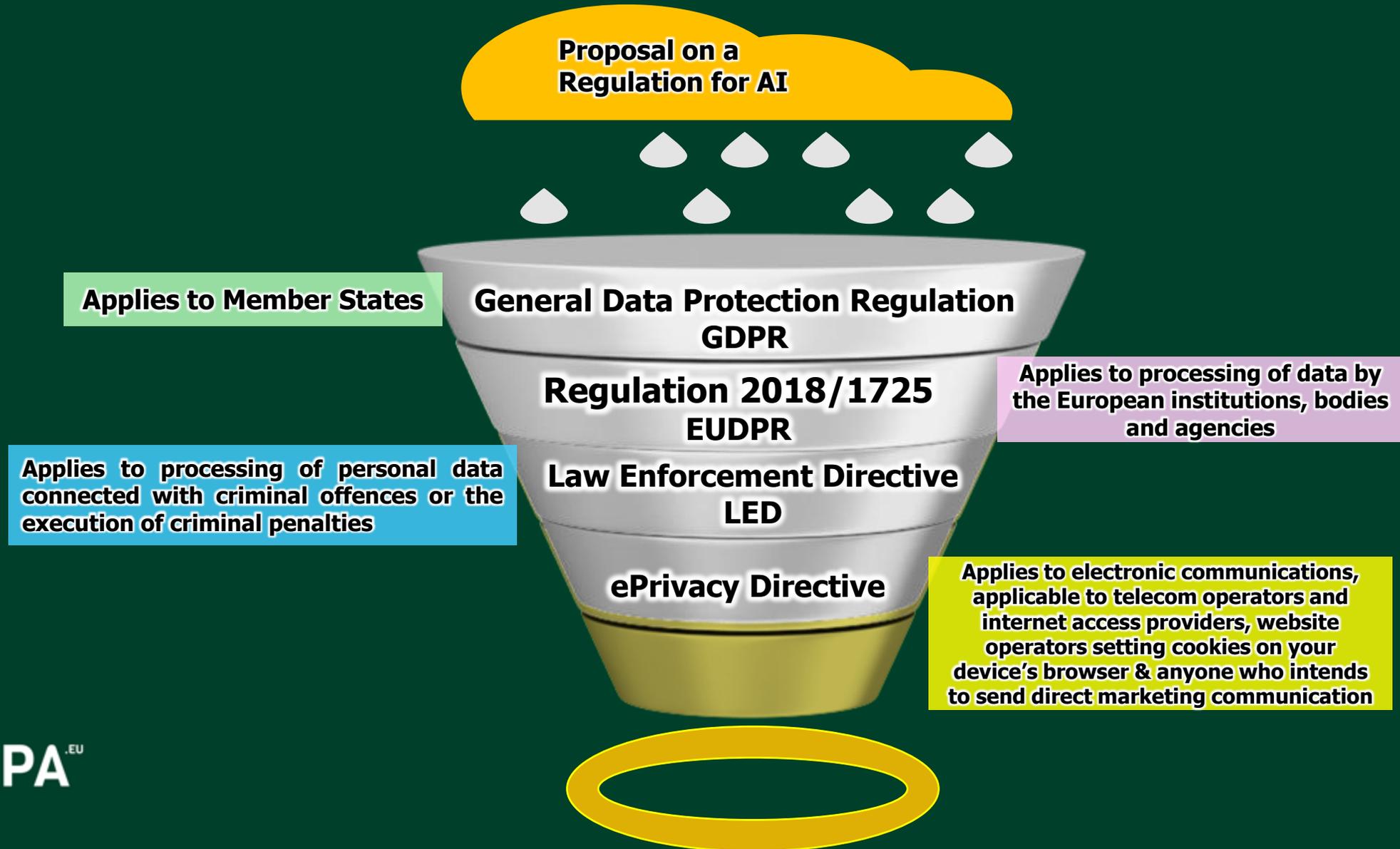
Accuracy

Storage
limitation

Integrity and
confidentiality
(data security)

Data Protection
by Default & by
Design

Comprehensive Data Protection Framework



AI Act Proposal v. Data Protection Framework

AI Act Proposal (?)

Extends to the EU institutions, bodies, agencies

- *Explanatory Memorandum 1.2 - “the proposal is without prejudice and complements GDPR and LED with a set of harmonised rules applicable to the design, development and use of certain risk and restriction on certain uses of remote biometric identification systems”*

EDPS-EDPB Joint Opinion – clarifying in Article 1 of the Proposal that the Union’s legislation for the protection of personal data, in particular the GDPR, EUDPR, ePrivacy Directive and the LED, shall apply to any processing of personal data falling within the scope of the Proposal.

AI Proposal v. Data Protection Framework



AI Proposal (?)

lex specialis

Compatibility Test for AI Systems?

In the AI regulatory sandbox personal data lawfully collected for other purposes shall be processed for the purposes of developing and testing certain innovative AI systems in the sandbox under the following conditions:

- (a) the innovative AI systems shall be developed for safeguarding *substantial public interest in one or more of the following areas*:
 - (i) the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, including the safeguarding against and the prevention of threats to public security, under the control and responsibility of the competent authorities. The processing shall be based on Member State or Union law;
 - (ii) public safety and public health, including disease prevention, control and treatment;
 - (iii) a high level of protection and improvement of the quality of the environment.

Purpose limitation and further processing of personal data

Art. 5 (1) b) GDPR

Personal data shall be collected for specified, explicit and legitimate purposes and not further processed in a manner that is incompatible with those purposes (purpose limitation principle);

Art. 6 (4) GDPR Further processing for another purposes provided that the compatibility is ascertained, *inter alia*

- a) any link between the purposes for which the personal data have been collected and the purposes of the intended further processing;
- b) the context in which the personal data have been collected, in particular regarding the relationship between data subjects and the controller;
- c) the nature of the personal data, in particular whether special categories of personal data are processed or whether personal data related to criminal convictions and offences are processed,
- d) the possible consequences of the intended further processing for data subjects;
- e) the existence of appropriate safeguards, which may include encryption or pseudonymisation.

Compatibility Test for AI Systems?

In the AI regulatory sandbox personal data lawfully collected for other purposes shall be processed for the purposes of developing and testing certain innovative AI systems in the sandbox under the following conditions:

- (a) the innovative AI systems shall be developed for safeguarding *substantial public interest in one or more of the following areas*:
 - (i) the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, including the safeguarding against and the prevention of threats to public security, under the control and responsibility of the competent authorities. The processing shall be based on Member State or Union law;
 - (ii) public safety and public health, including disease prevention, control and treatment;
 - (iii) a high level of protection and improvement of the quality of the environment.

Legal Basis – In the Public Interest

Council Proposal Recital 72

- This Regulation should provide **the legal basis for the use of personal data collected for other purposes for developing certain AI systems in the public interest within the AI regulatory sandbox**, in line with Article 6(1)(e) and 9(2)(g) of GDPR..., and without prejudice to LED
- This new legal basis under this Regulation is without prejudice to the possibility for participants to rely on other legal bases for processing of personal data
- All other obligations of data controllers and rights of data subjects under GDPR remain applicable
- In particular, this Regulation should not provide a legal basis in the meaning of Article 22(2)(b) GDPR – **exception from the right not to be submitted solely to an automated decision**

Derogatory Instrument

Whether the European Commission has envisaged a derogatory instrument that would allow the private entities:

- to test their new AI systems,
- under the supervision of the competent national authorities,
- in a de-regulated space.

What does a de-regulated space means when we discuss about fundamental rights?

Data Protection – A Fundamental Right?

Art. 8.1 EU Charter on Fundamental Rights

“Everyone has the right to the protection of personal data concerning him or her.”

Art. 8.2 EU Charter on Fundamental Rights

“Such data must be processed fairly for specified purposes and on the basis of the consent of the person concerned or some other legitimate basis laid down by law. Everyone has the right of access to data which has been collected concerning him or her, and the right to have it rectified.”

Art. 8.3 EU Charter on Fundamental Rights

“Compliance with these rules shall be subject to control by an independent authority.”

Data Protection Authorities – Gatekeepers of AI Regulatory Sandboxes

- ❑ DPA – regulator with powers to enforce data protection legislation, how to strike a balance with the other cap?

*Proposal Council Art. 53 (3) “The participation in the AI RS shall not affect the supervisory and corrective powers of the authorities supervising the sandbox. However, provided that the participant(s) respect the sandbox plan and the terms and conditions for their participation as referred to in paragraph 6(c) and follow in good faith the guidance given by the authorities, **no administrative enforcement action shall be taken by the authorities for infringement of applicable Union or Member State legislation.**”*

- ❑ IN PRACTICE, exemption from any enforcement has been given by Norwegian DPA but not by CNIL (French DPA)



ICO Regulatory Sandbox Beta

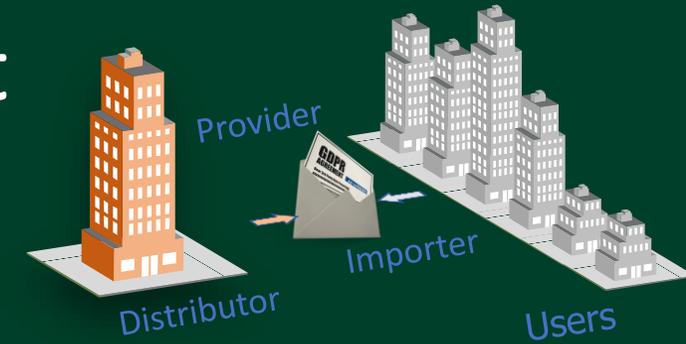
- In 2018 ICO started the beta phase of Regulatory Sandbox. The criteria for selecting participating projects were based on three elements: **innovative use of personal data, demonstrable public benefit, operation in the 'grey area' of data protection law.**
- Participation in the Regulatory Sandbox has several benefits to both the ICO and participants, namely it increases awareness, compliance, and confidence in data protection standards. At the same time, it allows ICO to inform future guidance.



ICO Regulatory Sandbox Beta – lessons learnt

ICO highlighted that many of the participants were struggling to identify roles of controller, processor, joint controller - mostly due to the innovative character of the projects and technologies used.

- Majority of the Sandbox participants concluded a DPIA as required by the UK GDPR – as it should be completed whenever new technologies are being used with a high risk to the rights and freedoms of individuals. ICO provided **guidance and consultations to ensure compliance and mitigate identified risks.**
- ICO identified unclarities in terms of what participants consider personal data, particularly personal data which could indirectly identify individuals. This was further compounded by misunderstandings surrounding anonymisation, pseudonymisation and encryption techniques. These misunderstandings were cleared through consultations but ICO noted this proved the need for further guidance from ICO.
- Regulatory Sandbox allowed ICO to gain insights into specific sector issues and topics. Whereas the participants were able to benefit from the guidance provided by ICO.



Regulatory Sandboxes
benefit both the
regulator and the
manufacturer

What does then an AI RS encompass?

- Merely organises access to regulatory expertise and guidance

OR

- Includes an IT infrastructure in each MS with some additional legal grounds for further processing of personal data

Council Proposal - Recital 72 AI Proposal

Access to the AI regulatory sandbox and regulatory supervision should be in principle free of charge without prejudice to exceptional costs that may be recovered by national authorities in a fair and proportionate manner, in particular in cases where the authorities have provided additional services for the actual development, testing and validation of the AI system such as technical or physical environment and tools for the testing, access to data, etc.

Considerations

- Should we interpret the regulatory sandboxes as a consultative service (ICO example) rather than complex development, testing and validation mechanism?
 - Inspiration can be drawn from **GDPR Art. 36 (Prior Consultation)** which requires the controller to consult the supervisory authority on processing operations that present high risks which cannot be mitigated with measures taken pursuant to a data protection impact assessment.
 - As ICO notes: *The Regulatory Sandbox is a service* developed by ICO to support organisations who are creating products and services which utilise personal data in innovative and safe ways.

Considerations

- Should a strict liability regime apply to high-risk AI systems that were part of the regulatory sandbox process?
 - Art. 53 of the Proposal notes that participants remain liable for any damages caused in the course of their participation in the Sandbox. Regulation does not differentiate in terms of liability between AI applications participating in Sandbox or not. This could affect manufacturer's motivation to participate in the Sandbox process

Considerations

- Could regulatory sandboxes create a false sense of safety and compliance?
 - Regulatory Sandbox could create a false sense of safety and compliance following project participation in the sandbox. Particularly when comparing the AI based systems that participated in the Regulatory Sandbox and those that did not

Considerations

- Should the implementation of regulatory sandboxes be left to the Member States, could it foster regulatory sandbox shopping? Could it confuse due to the nature of regulatory sandboxes as non-compulsory mechanisms and most likely not unified within EU MS?
 - The Proposal allows for MS to establish an AI Regulatory Sandbox, this could potentially lead to different sandbox frameworks and implementations
- Council Proposal – AI RS may be established:
 - ❑ *At the sole initiative of the national competent authorities*
 - ❑ *Upon request of any provider or prospective provider*

Reluctance to Participate

- ❑ Supervisory authority gains insights into specific sector issues and topics
- ❑ Exposure of trade secrets and algorithms

BUT

- ❑ Lift the quality of AI
- ❑ Avoid financial and reputational damages (e.g. Childcare Benefit Case in the Netherlands)



EIPA

European
Institute of
Public
Administration

We would be happy to help.



Break



Ministerie van
Economische Zaken
en Klimaat

NLAIC event 'AI Regulatory Sandbox'

Huub Janssen

Radiocommunications Agency Netherlands

31 March 2022



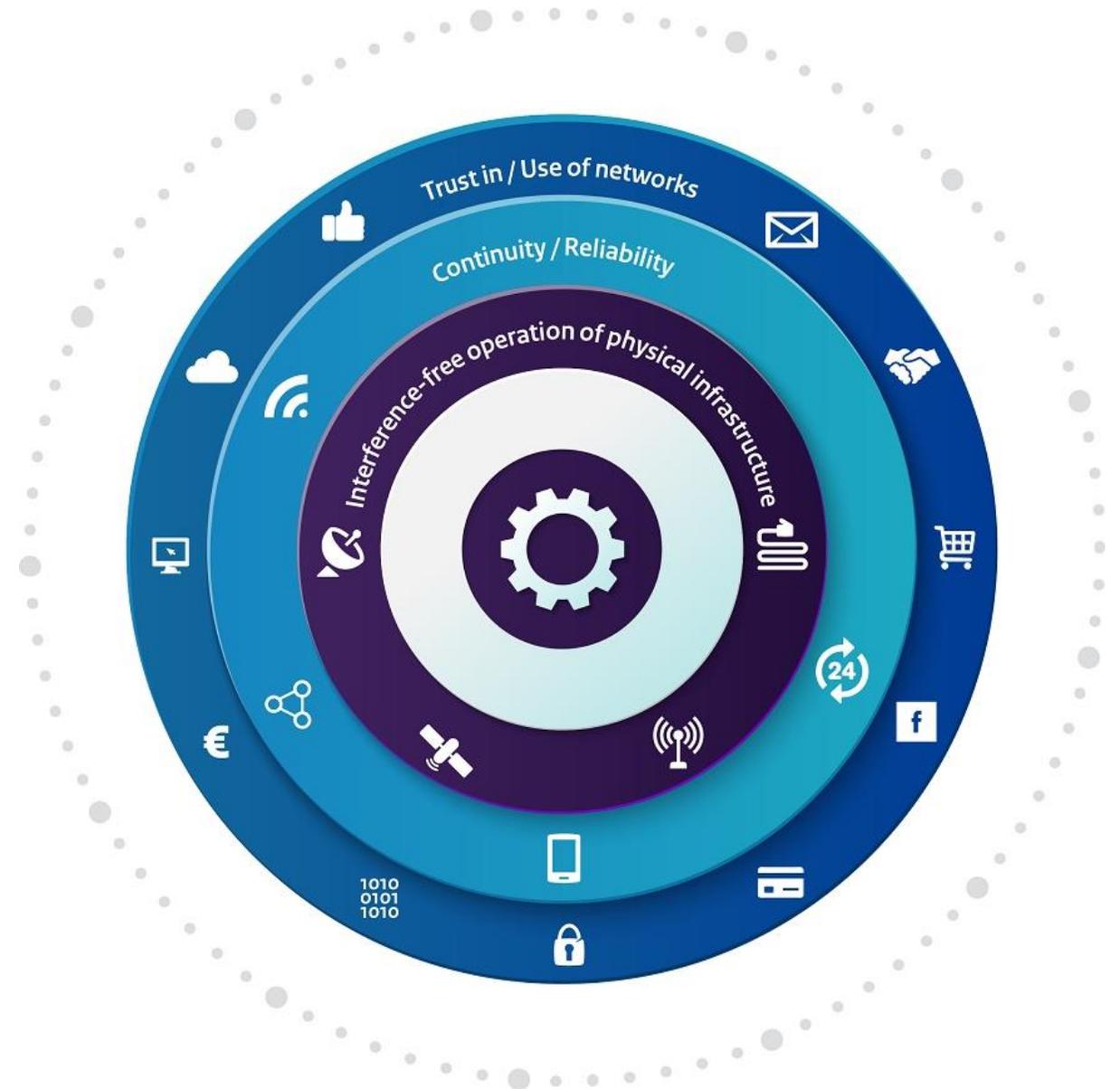
Agentschap Telecom
*Ministerie van Economische Zaken
en Klimaat*

Table of contents

- ✓ Introduction
- ✓ AI Act
- ✓ Competent authorities and supervision
- ✓ Usecase: Investigating AI-modules
- ✓ Questions

Radiocommunications Agency Netherlands

- ✓ Digital infrastructure
 - Cable, ether, satellite
- ✓ Continuity, reliability and availability
 - Digital infrastructure, IoT, Radio devices, social media
- ✓ Security
 - Energy, cloud, online marketplaces, trust services

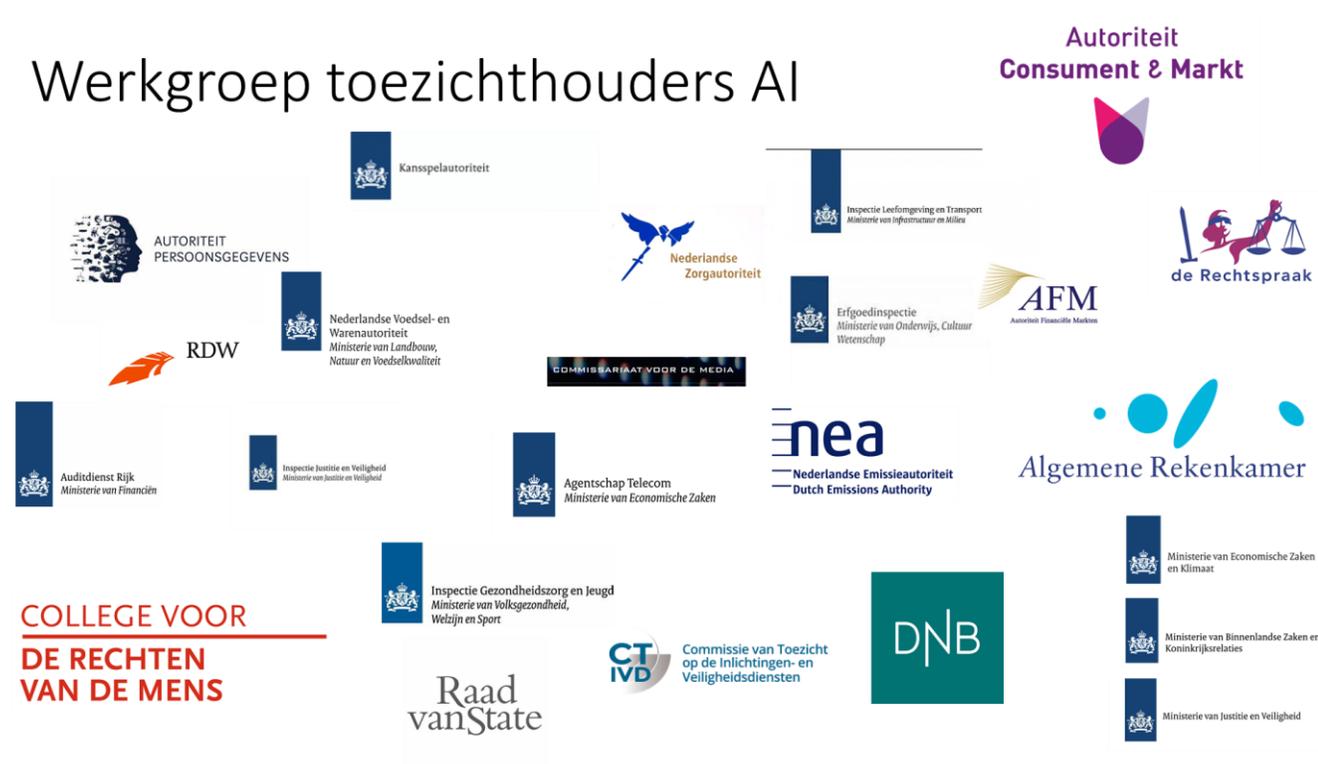


Huub Janssen

✓ 3 roles:

- Programme manager AI@AT
- Chair NL working group CA's on AI
- Chair EU working group CA's on AI

Werkgroep toezichthouders AI



AI ACT

A European approach to Artificial Intelligence



- AI Act is not yet approved
 - Negotiations still going
- Core is product regulation
- Compliance: standards are crucial
 - Role for ESO's
- AI and Cyber: ENISA

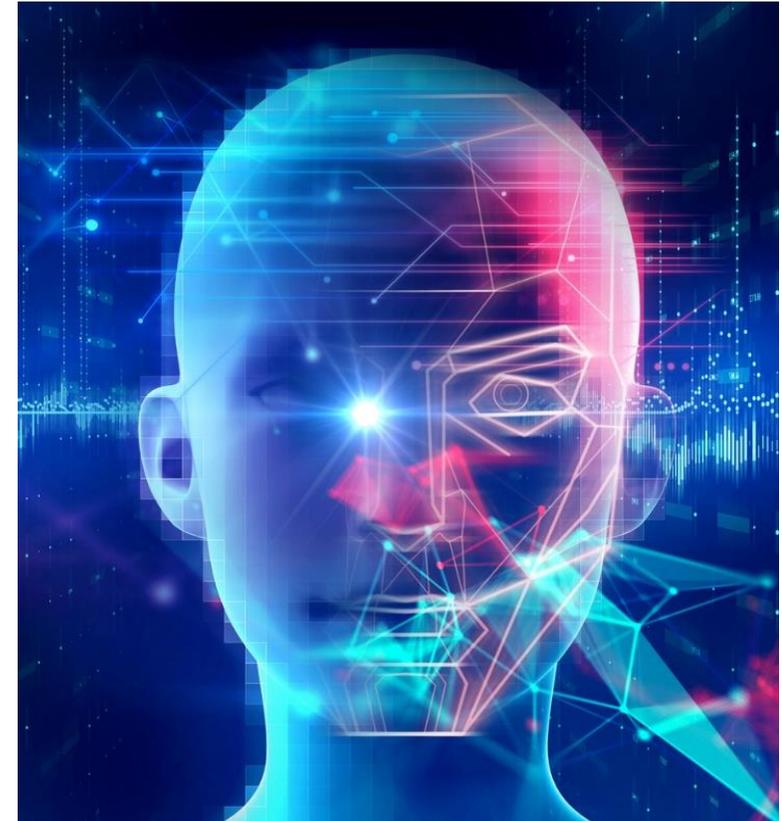
Competent authorities and supervision

- Will to cooperate exists, but
 - Different legislation
 - Different role and powers
 - Different vision
 - Who will have which role?
 - Limited resources
 - Independent
- What's needed?
 - Dialogue
 - Usecases: Learning by doing sandboxes are helpful



Usecase: Investigation AI modules

- ✓ Responsible for supervision of trust services in NL, according to European eIDAS regulation
- ✓ Trust services rely heavily on the identification of natural persons
- ✓ Trust service providers are adopting innovative solutions for the (remote) identification of natural persons, sometimes including AI components
- ✓ We need to establish if all elements and components the trust service meet the requirements in the eIDAS regulation, including any AI components involved



How AI is used in identification

- **Liveness Detection:**
ensuring the person requesting identification
is a real-live person
(no photo, video, mask, doll, balloon...)

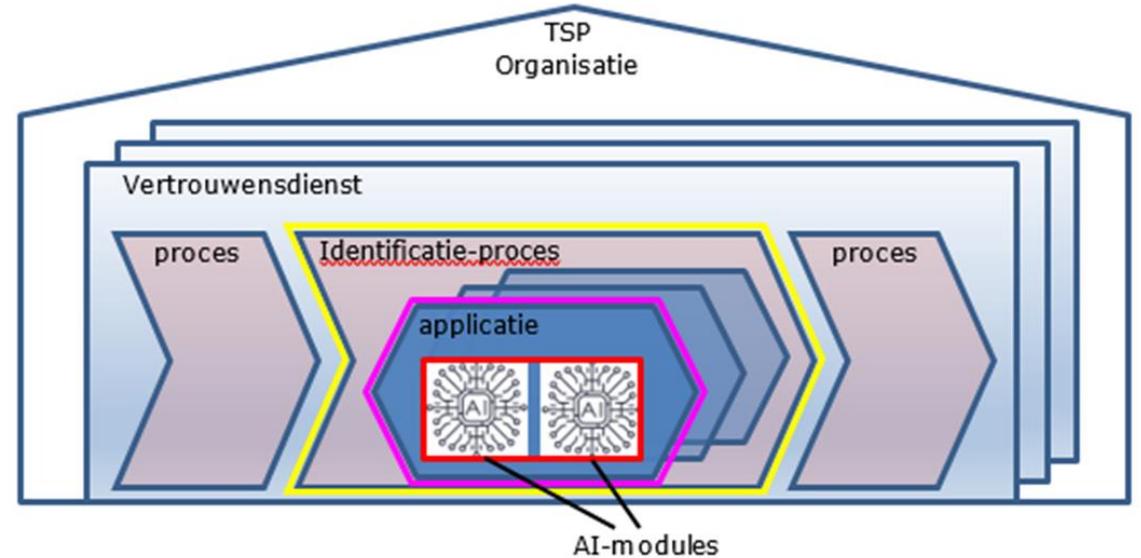


- **Face Comparison:**
matching the person requesting
identification to a (digital) ID-photo
(from passport, ID-card...)



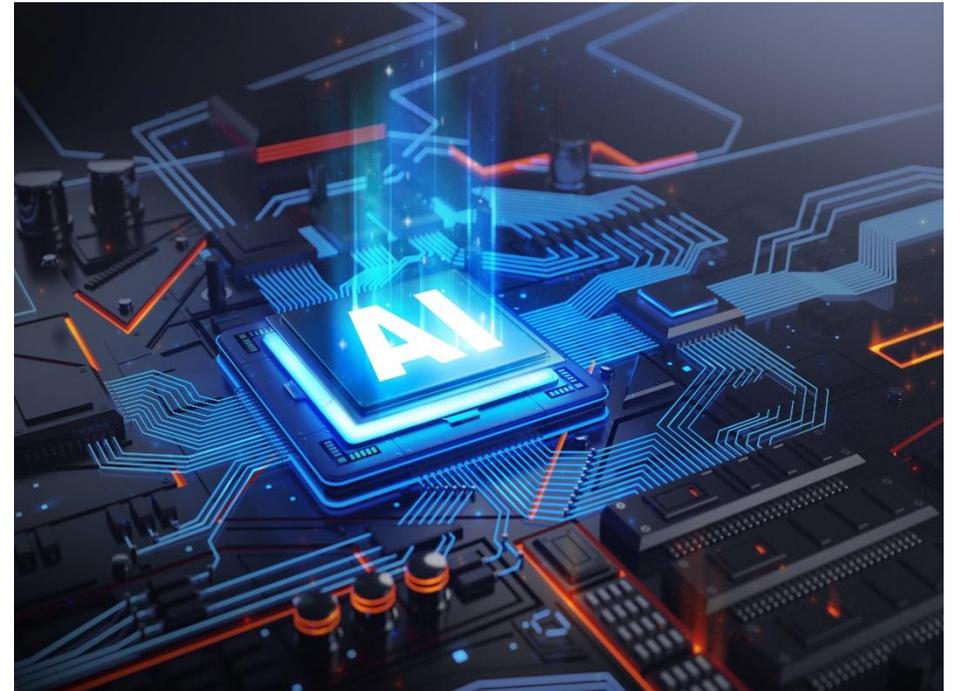
Lessons learned: Context is key

- ✓ Where is the AI component located?
- ✓ What is the exact role of the AI component?
- ✓ Is it a tool, an operator or both?
- ✓ Where are the developer, tester, integrator, administrator and user, and who is responsible?
- ✓ Without this information, assessing impact, quality and/or risk is not possible



Lessons learned: Knowledge required

- ✓ A multi-disciplined investigation team is required to cover all elements of the investigation
- ✓ The following knowledge was used:
 - Domain (trust services, eIDAS regulation)
 - Application (identification of natural persons)
 - AI technology (algorithms, data-science, statistics)
 - Software development (process, quality controls, testing)
 - Systems integration (API tests, communication, security measures)
 - IT Auditing (norms and standards, overall product-audit)





Questions?

- Why wait?
- How can we help?



For a **safely connected** Netherlands



www.agentschaptelecom.nl



info@agentschaptelecom.nl



communicatie@agentschaptelecom.nl

The End

Questions?