

UN WP.6 Bureau (and all subgroups) - Project update

# Regulatory compliance of Products with embedded Artificial intelligence or other Digital technologies

Markus Krebsz  
UNECE GRM

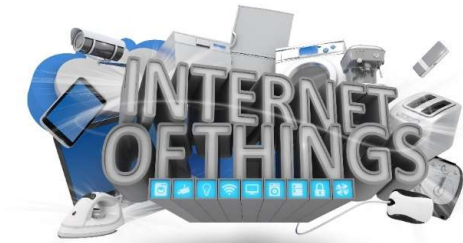
16 March 2023 – UNECE GRM Group meeting



# UNECE disclaimer

- The author and the speaker of this presentation confirm that they have authorization to use all photos and visual elements.
- The material is either copyright-free or the author / speaker holds the necessary copyright.
- The UNECE will remove any material from its events and supporting websites if there is unlawful use of copyrighted material.
- The author / speaker takes responsibility for any infringements on copyright and holds the UNECE harmless to this effect.

# WP.6 - Horizontal AI Project Launch



- **Title:** *“Regulatory compliance of Products with embedded Artificial intelligence or other Digital technologies”*
- **Reach:** Horizontally, across all four subgroups (GRM, GRS, MARS & START)
- **Aims:**
  - 1) UN Recommendation (ca. 3-5 pages) on **“Product compliance with integrated AI and other digital technologies”**
  - 2) UN Guidance document (ca. 40 pages) for **effective technical regulation, regulatory impact assessment & regulatory cooperation**
- **Deliverables:**
  - Clear **definition of Artificial intelligence** within a product context
  - Clear **definition of Software embedded into products**
  - Whole **product lifecycle** consideration within digital regulation context incl. *Risk Management, Standards, Conformity assessment, Surveillance, Metrology*
  - Provide **guidance** how **to balance** the multitude of **various regulatory objectives**
  - Consider **cross-sectoral impact assessments / horizontal digital frameworks**
- **More information:** [https://unece.org/trade/wp6/Projects#accordion\\_4](https://unece.org/trade/wp6/Projects#accordion_4)

16 March 2023 – UNECE GRM Group meeting



# International project team

## UNECE WP.6 Representation

- International project working group
- From a large selection of different sectors
- With horizontal representation / reporting:
  - GRM
  - GRS
  - MARS
  - START
- Key areas of work



## External expert(s)

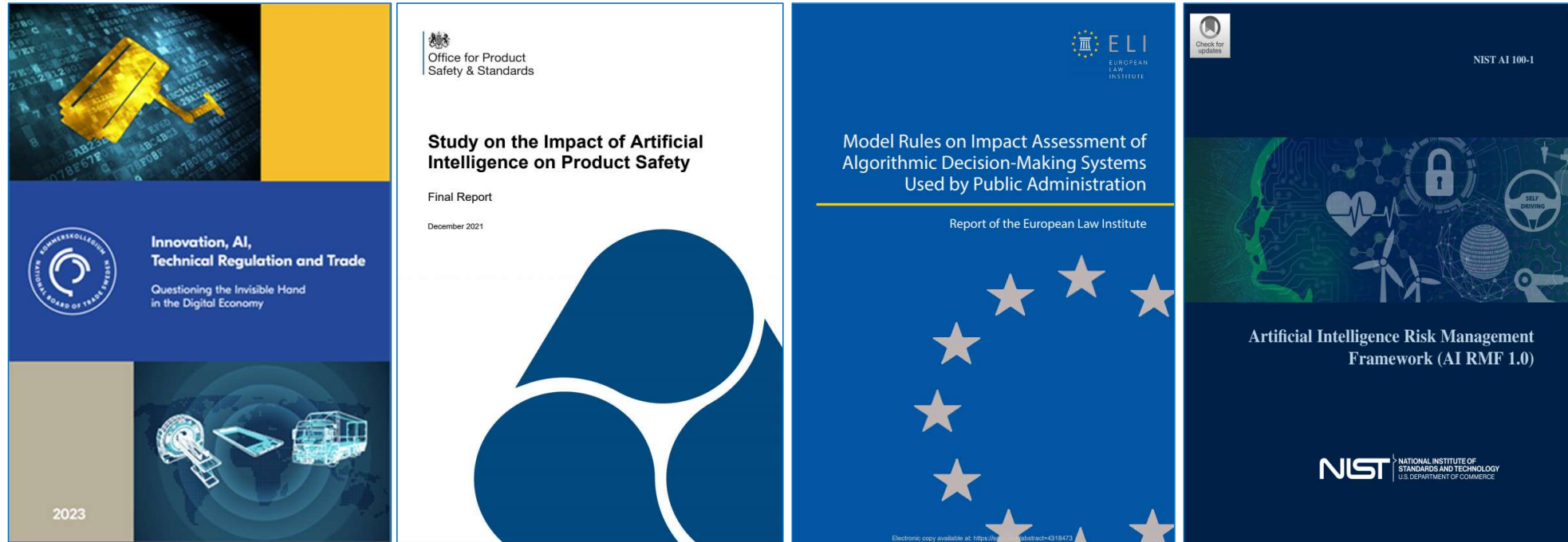
- Currently in preliminary conversations with **Prof. Stuart Russell OBE**  
(<https://cs.berkeley.edu/news/2021/06/stuart-russell-named-officer-most-excellent-order-british-empire>)

We will be identifying & reaching out to further experts as and when needed.



16 March 2023 – UNECE GRM Group meeting

# Key documents (links in appendix 1)



## Plus

- ISO / IEC TR 24027 (“Bias in AI systems”)
- ISO / IEC TR 24028 (“Trustworthiness of AI”)

16 March 2023 – UNECE GRM Group meeting



# Appendix 1 – References

- **REPORT: “Innovation, AI, Technical Regulation and Trade”**, Kommerskollegium – National Board of Trade Sweden, Website accessed 16 March 2023, <https://www.kommerskollegium.se/globalassets/publikationer/rapporter/2023/innovation-ai-technical-regulation-and-trade-short-version.pdf>
- **REPORT: “Study on the impact of artificial intelligence on Product safety”** – UK Office for Product Safety & Standards, Website accessed 16 March 2023, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1077630/impact-of-ai-on-product-safety.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1077630/impact-of-ai-on-product-safety.pdf)
- **REPORT: “AI Risk Management Framework (Ai RMF 1.0)”** – US National Institute of Standards & Technology / Information Technology Laboratory, Website accessed 16 March 2023, <https://doi.org/10.6028/NIST.AI.100-1>
- **REPORT: “Model Rules on Impact Assessment of Algorithmic Decision-Making Systems Used by Public Administration”** – European Law Institute, Website accessed 16 March 2023, [https://www.europeanlawinstitute.eu/fileadmin/user\\_upload/p\\_eli/Publications/ELI\\_Model\\_Rules\\_on\\_Impact\\_Assessment\\_of\\_A\\_DMSs\\_Used\\_by\\_Public\\_Administration.pdf](https://www.europeanlawinstitute.eu/fileadmin/user_upload/p_eli/Publications/ELI_Model_Rules_on_Impact_Assessment_of_A_DMSs_Used_by_Public_Administration.pdf)
- **TECHNICAL REPORT: “ ISO/IEC TR 24027:2021 / Information technology — Artificial intelligence (AI) — Bias in AI systems and AI aided decision making”**, ISO, Website accessed 16 March 2023, <https://www.iso.org/standard/77607.html>
- **TECHNICAL REPORT: “ ISO/IEC TR 24028:2020 / Information technology — Artificial intelligence (AI) — Overview of trustworthiness in artificial intelligence”**, ISO, Website accessed 16 March 2023, <https://www.iso.org/standard/77607.html>



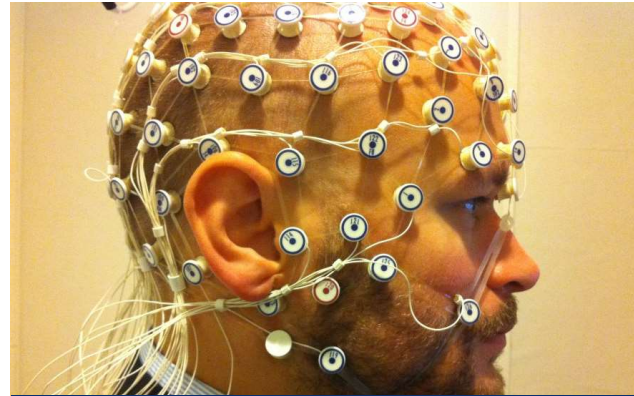
# Appendix 2 - Product risk stemming from AiNR-Tech



## Artificial Intelligence

AI is an engineered system of a set of methods or automated entities that together build, optimize and apply a model so that the system can, for a given set of predefined tasks, compute predictions, recommendations, or decisions.

Source: <https://www.iso.org/obp/ui/#iso:std:iso-iec:22989:dis:ed-1:v1:en:term:3.1.37>



## NeuroTechnology

Devices and procedures used to access, monitor, investigate, assess, manipulate, and/or emulate the structure and function of the neural systems of natural persons.

Source: [OECD - Responsible Innovation in Neurotechnology](#)



## Robotics

Robots are programmable machines that can carry out actions and interact with the environment via sensors and actuators either autonomously or semi-autonomously.

They can take many forms: disaster response robots, consumer robots, industrial robots, autonomous vehicles and drones.

Source: <https://unctad.org/page/technology-and-innovation-report-2021>



# Appendix 3 – Scope comparison

## UN / UNECE WP.6 - AI Project

- ☑ **In scope:** the **compliance of products** which **integrate digital technologies** such as artificial intelligence.
- ☒ **Out of scope:** how AI and other technologies can be **used by administrations** in regulatory **processes**.

## UN / UNECE WP.6 - Working Group

“The work of UNECE WP.6 in the area of Risk Management aims at

- developing **guidance** and **best practice (recommendations)**
- on how regulatory authorities can **establish regulatory frameworks**
- which effectively **manage the risks that confront consumers, citizens and communities.**”

Specifically, **UN / UNECE GRM** works on the following priorities:

- Risk Management in developing and implementing **technical regulations**
- **Standards** as risk management tools
- Risk Management in **Conformity Assessment**
- Risk Management in **Market Surveillance**
- Implementing the recommendations and best practice **at country level**
- Fostering the use of risk management tools in the context of the development and implementation of **sustainable development and resilience to disasters** (natural and man-made)



Source: <https://unece.org/trade/wp6/thematic-areas/risk-management>

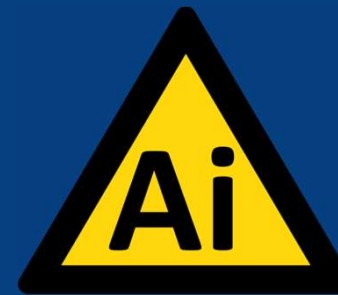
16 March 2023 – UNECE GRM Group meeting





# Thank you.

Prof. Markus Krebsz  
The Human Ai Institute  
Contact@Human-Ai.Institute  
Krebsz@web.de  
+44 (0) 79 85 065 045  
www.Human-Ai.Institute



Artificial  
intelligence



NeuroTech



Robotics

16 March 2023 – UNECE GRM Group meeting

