JTC 21 PRELIMINARY VIEWS ON AI ACT TIMELINE AND HORIZONTAL/VERTICAL INTEGRATION

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REGULATORY CONTEXT & TIMELINE

Horizontal/Vertical regulation context

The AI Act (AIA) proposal requires **full consistency** with existing Union legislation applicable to sectors where high-risk AI systems are already used or likely to be used in the near future (Annex II.A and Annex II.B)

Policy aim: all high risk AI systems must comply with horizontal requirements of the AIA irrespective of a sector.

Two main processes provided in the AIA to achieve this in practice (important differences between e.g. health and automotive)

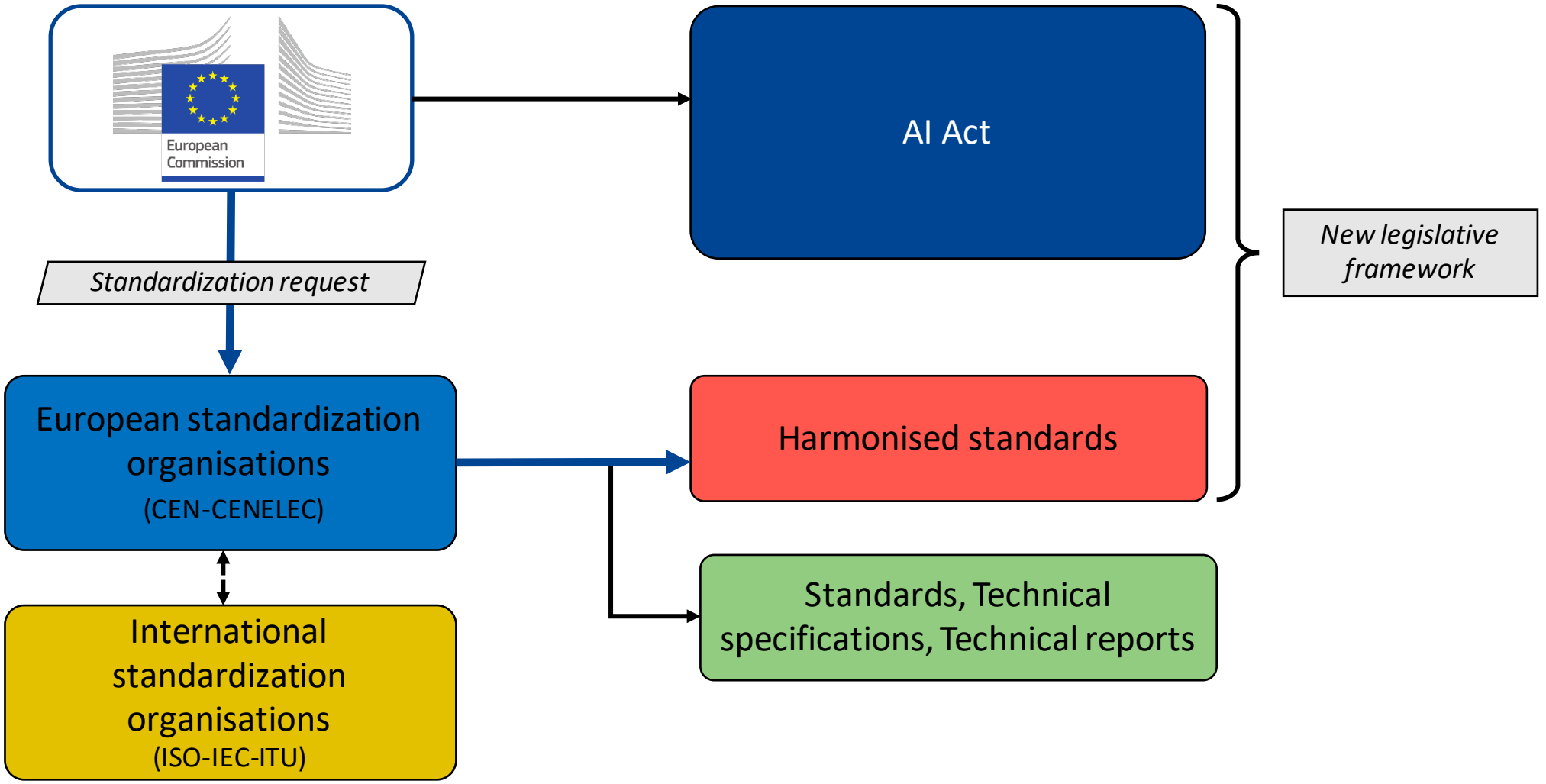
A. New Legislative Framework (NLF) legislation (e.g. machinery, medical devices, toys)

B. Old Approach legislation (e.g. aviation, cars)

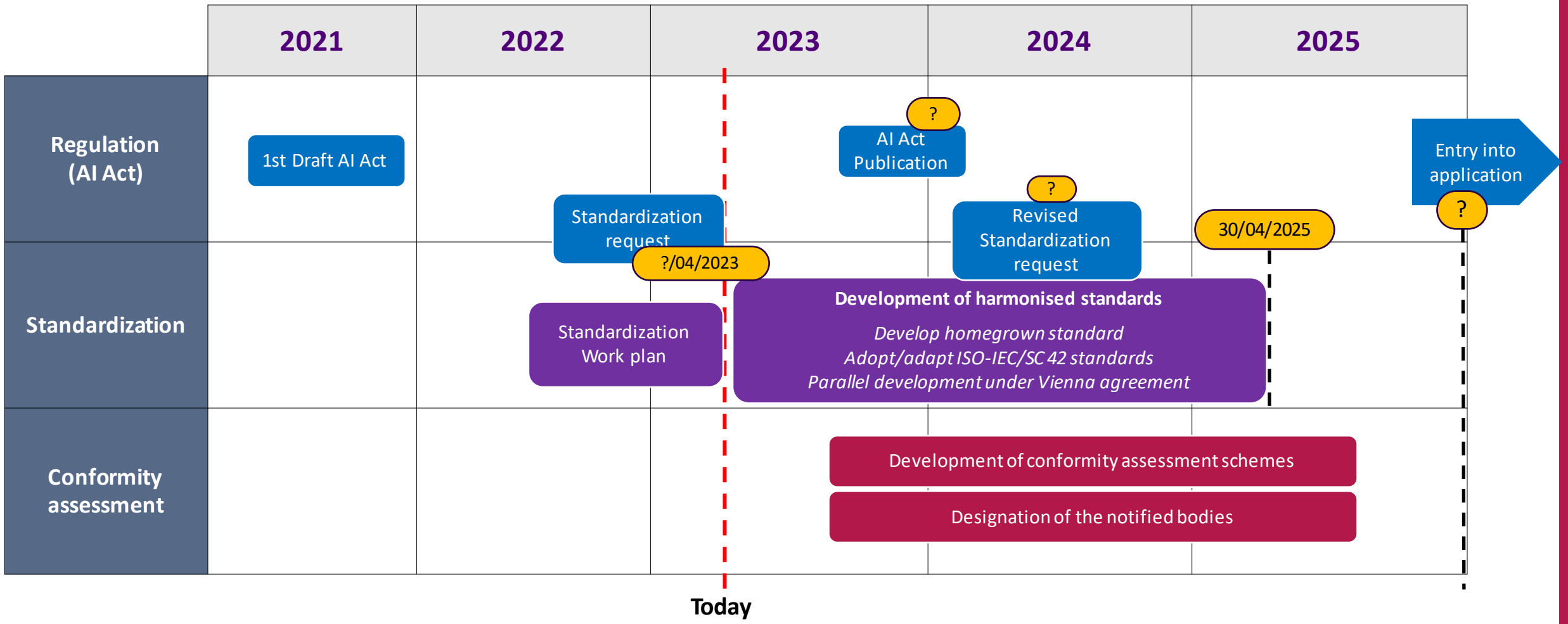
The ex-ante essential requirements for high-risk AI systems set in the AIA will have to be taken into account when adopting relevant implementing or delegated legislation under those acts.

New regulatory and standard framework on AI

ARTICULATION BETWEEN REGULATION AND STANDARDIZATION



General timeline for horizontal harmonized standards development



« HORIZONTAL » CONTEXT

Request for standardization to strengthen the AI act

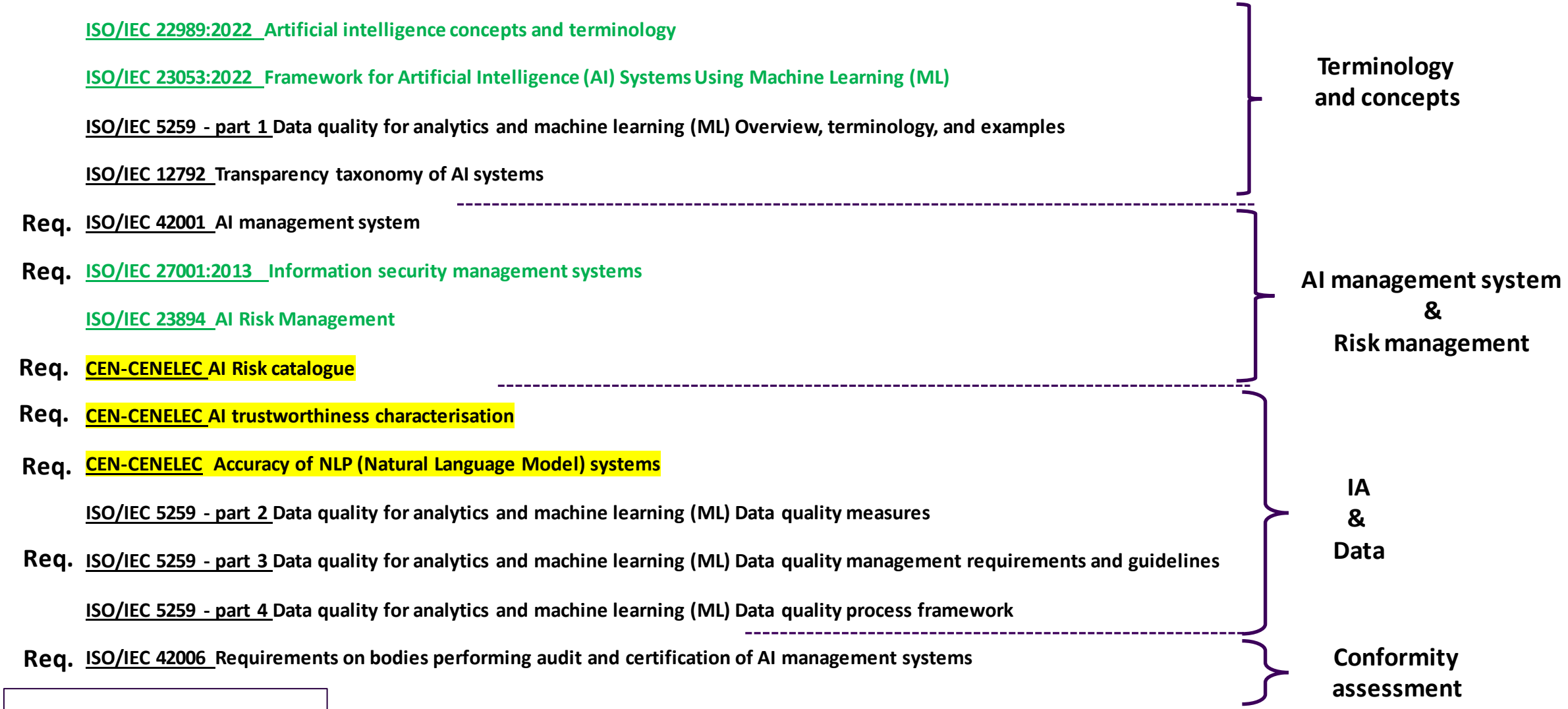
Standardization request

1. **risk management system** for AI systems
2. **governance and quality of datasets** used to build AI systems
3. **record keeping -** built-in logging capabilities in AI systems
4. **transparency and information** to the users of AI systems
5. **human oversight** of AI systems
6. **accuracy** specifications for AI systems
7. **robustness** specifications for AI systems
8. **cybersecurity** specifications for AI systems
9. **quality management system** for providers of AI system
10. **conformity assessment** for AI systems

> We need a horizontal approach to unleash the potential of artificial intelligence in all areas. **A cross-cutting technology can only be effectively regulated by horizontal rules** that provide solutions to common challenges.
>
> Commissioner Thierry Breton

- Set of AI standards to be published by Q2 2025
- CEN-CENELEC JTC 21 will:
  - Adopt/adapt ISO-IEC/SC 42 standards
  - Develop standards jointly with SC 42
  - Develop homegrown standard if/when needed

Draft standardization work programme for the AI Act
(category view)



Green : published
Black : in developpement

HORIZONTAL APPROACH
&
VERTICAL STANDARDIZATION

Principles for Horizontal/Vertical integration

- Horizontal standards set the foundations in line with the Standardization Request
- Horizontal standards set terminology and requirements aligned with the AI Act
- Vertical standards should align with the terminology and requirements of the sector legislation
- Vertical standards build upon horizontal standards
- Vertical standards only add sector or technology specifics

Anticipating and addressing « inconsistencies »

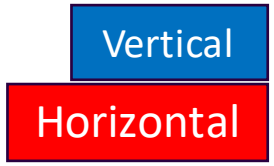
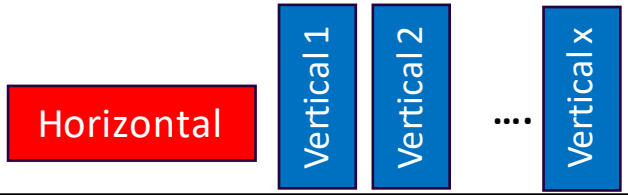
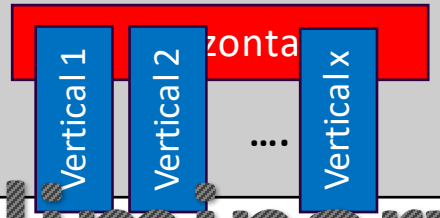
Verticals should contribute to the development of Horizontal harmonized standards (not the reverse)

If horizontal terminology and requirements are not covering sectoral needs:
- Complement should be developed by Verticals

If horizontal terminology and requirements conflict with sectoral regulation:
- Justified adaptation/derogation should be done by Verticals

Preliminary views

« Horizontal/Verticals » integration options

		Potential actions by « verticals »
Option 1 **Fit to verticals**		Contribution to horizontal standards development
Option 2 **Complemented**		Contribution to horizontal standards development + complement(s) to develop
Option 3 **Adapted**		Contribution to horizontal standards development + adaptation(s) to develop
Option 4 **Silo**		**Not preferred options**
Option 5 **Horizontal adaptation**		

Preliminary views

Conclusion

Close cooperation between JTC 21 and verticals is essential to:

- ❑ **ensure compatibility**
- ❑ **avoid any possible inconsistencies between horizontal and sector specific standards.**

SPARE

Horizontal requirements & Vertical specificities

Base line: Strong horizontal/transversal baseline in AI

Horizontal AI requirements

- AI Terminology and concepts/taxonomy/ontology
- Technical requirements frameworks (trustworthiness, metrics, control..) on AI components
- AI management framework, Risk management framework, risk catalogue (not exhaustive)
- ….

Vertical specificities

- Established « Verticals » standards landscape, including harmonized standards
- Use cases
- Context/Environnement
- Operational domain
- Regulatory requirements
- …

Integration of Horizontal requirements into vertical domain

- Risk assessment and treatment concepts: further specification/ operationalization/integration coming from AI horizontal standards
- Technical requirements on AI systems (and components): further specifications coming from AI horizontal requirements/standards
- Integration of AI specific standards into existing domains specific assessment schemes
- …

Preliminary views