

A.2 Catalogue of non-safety-relevant sub-attributes

Sub-attribut		Definition (source)	Non-safety-relevance
Functional Appropriateness		Capability of a product to provide functions that facilitate the accomplishment of specified tasks and objectives (ISO/IEC 25010:2023).	Concerns task efficiency and usability, not risk of hazards to humans, environment, or property.
Inclusivity		Capability of a product to be utilised by people of various backgrounds (ISO/IEC 25010:2023).	Concerns usability and social accessibility.
Appropriateness Recognizability		Capability of a product to be recognized by users as appropriate for their needs (ISO/IEC 25010:2023).	Relates to perception and decision-making support.
User Engagement		Capability of a product to present functions and information in an inviting and motivating manner encouraging continued interaction (ISO/IEC 25010:2023).	Relates to motivation and user satisfaction.
Self-descriptiveness		Capability of a product to present appropriate information, where needed by the user, to make its capabilities and use immediately obvious to the user without excessive interactions with a product or other resources (ISO/IEC 25010:2023).	User guidance and interaction clarity.
Non-repudiation		Capability of a product to prove that actions or events have taken place, so that the events or actions cannot be repudiated later (ISO/IEC 25010:2023).	Addresses accountability and proof of actions but does not involve functional risks.
Authenticity		Capability of a product to prove that the identity of a subject or resource is the one claimed (ISO/IEC 25010:2023).	Addresses identity verification and trust.
Resistance		Capability of a product to sustain operations while under attack from a malicious actor (ISO/IEC 25010:2023).	Addresses security, which is not in the scope of this work.
Fairness		The extent to which a system prevents unjust predictions towards protected attributes (race, gender, income, etc). Ability of the model to output fair decisions [1].	Social and ethical relevant.
Value Alignment		The extent to which the AI system behaviour is aligned with human values [2].	Social and ethical relevant.
Privacy Protection		The extent to which the product or system protects the privacy and handles sensitive information of the stakeholders involved (users, people in training examples) [2].	Relevance in data protection and ethics without direct relation to prevention of hazards.

Literatur

- [1] J. Siebert, L. Joeckel, J. Heidrich, K. Nakamichi, K. Ohashi, I. Namba, R. Yamamoto, and M. Aoyama, "Towards guidelines for assessing qualities of machine learning systems," in *Quality of Information and Communications Technology*, M. Shepperd, F. B. e Abreu, A. R. da Silva, and R. Pérez-Castillo, Eds., vol. 1266. Cham: Springer International Publishing, 2020, pp. 17–31.

- [2] J. Kelly, S. A. Zafar, L. Heidemann, J.-V. Zacchi, D. Espinoza, and N. Mata, "Navigating the eu ai act: A methodological approach to compliance for safety-critical products," Mar. 2024.