Current Practices for Data Annotation Requirements in AI-enabled Perception System Development (AIePS)

Current Practice	Description	Interview ID
Data Annotation Requirements Practices		
Data Annotation Requirements Elicitation	Defining and refining data labelling guidelines, quality expectations, and constraints through stakeholder input and iterative feedback, evolving with AIePS goals and data complexity.	**ID3**
Data Annotation Requirements Gathering	Collaborative definition of annotation objectives and quality criteria during the initial phase, supported by iterative reviews to formalize requirements.	**ID2**
Data Annotation Requirements Definition and Specification	Formalizing structured guidelines to ensure standardization, traceability, and clarity in annotations, evolving through feedback and quality assessments.	**ID15**
Quality and Standards Followed		
Quality Aspects Related to Requirements	Ensuring annotation guidelines support accuracy, consistency, clarity, and completeness to enhance AIePS performance and reduce ambiguity.	**ID7**
Requirements Quality Standards	Standards for clarity, consistency, specificity, and safety compliance, including ISO/IEC 5259, IEEE P2801, ISO 26262, SAE J3016, and custom in-house standards. Also addresses bias, IAA, validation, and the inclusion of edge cases.	**ID9, ID15**
Edge Cases Inclusion	Incorporating rare or ambiguous cases into guidelines to improve robustness and generalization in AIePS.	**ID16**

Evolution and Documentation of Requirements		
Evolving Requirements	Continuous revision based on project needs, stakeholder feedback, and system performance, with emphasis on traceability and refinement.	**ID3, ID9**
Reporting and Documentation	Version-controlled documentation practices that support traceability, regulatory compliance, and alignment with quality controls.	**ID15**
Requirement Decomposition	Translating high-level client or legal needs into actionable, understandable annotation tasks to reduce ambiguity.	**ID3**
Documentation Methods	Combining formal standards with annotation guidelines, training materials, and tool-specific instructions tailored to project and organisational needs.	**ID15**