CHECKLIST FOR DEVELOPER AND REVIEWER

Capture of AI/ML Constituent Requirements

- Have you captured all requirements necessary to design and implement the AI/ML constituent?
  - ○ Yes / No
- Have you allocated subsystem requirements to the AI/ML constituent?
  - ○ Yes / No
- Has the AI/ML constituent's safety requirements been captured?
  - ○ Performance: **[YES/NO]**
  - ○ Reliability: **[YES/NO]**
  - ○ Resilience: **[YES/NO]**
- Have information security requirements for the AI/ML constituent been captured?
  - ○ Yes / No
- Are functional requirements for the AI/ML constituent captured?
  - ○ Yes / No
- Are operational requirements for the AI/ML constituent captured, including: - ODD monitoring: **[YES/NO]** - Performance monitoring: **[YES/NO]** - Detection of OoD input data: **[YES/NO]** - Data-recording requirements: **[YES/NO]**
- Are non-functional requirements for the AI/ML constituent captured, such as: - Scalability: **[YES/NO]**
- Have interface requirements for the AI/ML constituent been captured?
  - ○ Yes / No

Definition of AI/ML Constituent ODD Parameters

- Has the set of parameters pertaining to the AI/ML constituent ODD been defined?
  - ○ Yes / No
- Are these parameters traceable to the corresponding OD parameters when applicable?
  - ○ Yes / No

Trustworthiness Analysis

- Is a trustworthiness analysis being performed for the AI/ML application?
  - ○ Yes / No

- Are all four building blocks of AI trustworthiness (Figure 3) being considered: - Data quality: **[YES/NO]** - Model validation: **[YES/NO]** - Explanation and transparency: **[YES/NO]** - Monitoring and auditing: **[YES/NO]**

Types of Learning

- Is the AI approach data-driven?

  ○ Yes / No

- Are supervised learning, unsupervised learning, and reinforcement learning being considered: - Supervised learning: **[YES/NO]** - Unsupervised learning: **[YES/NO]** - Reinforcement learning: **[YES/NO]**