

Identity and Purpose Checklist

Inference Model Verification (IMP - 08)

Item	Yes/ No
Evaluate the performance of the inference model based on test data set	<input checked="" type="checkbox"/> <input type="checkbox"/>
Document the result of the model verification	<input checked="" type="checkbox"/> <input type="checkbox"/>
Measure final performance with test data set and feed back to safety assessment process	<input checked="" type="checkbox"/> <input type="checkbox"/>
Link evaluation to metrics defined under SA-01 and explain any divergence compared to LM-09	<input checked="" type="checkbox"/> <input type="checkbox"/>

Inference Model Stability (IMP - 09)

Item	Yes/ No
Verify stability of the inference model throughout M L constituent ODD	<input checked="" type="checkbox"/> <input type="checkbox"/>
Address nominal cases, singular points, edge, and corner cases	<input checked="" type="checkbox"/> <input type="checkbox"/>
Verify stability in operational phase due to fluctuations in data input (e.g. noise on sensors)	<input checked="" type="checkbox"/> <input type="checkbox"/>

Inference Model Robustness (IMP - 10)

Item	Yes/ No
Perform and document verification of inference model robustness in adverse conditions	<input checked="" type="checkbox"/> <input type="checkbox"/>
Support test cases with edge or corner cases within ODD (e.g. weather conditions like snow, fog)	<input checked="" type="checkbox"/> <input type="checkbox"/>
Refine anticipated MOC based on MLEAP project deliverables	<input checked="" type="checkbox"/> <input type="checkbox"/>

Inference Model Integration into AI/ML Constituent (IMP - 11)

Item	Yes/ No
Perform requirements-based verification of inference model behavior when integrated into AI/ML constituent	<input checked="" type="checkbox"/> <input type="checkbox"/>
Capture and uniquely identify all requirements necessary to design and implement AI/ML constituent	<input checked="" type="checkbox"/> <input type="checkbox"/>
Develop AI/ML constituent architecture based on requirements capture	<input checked="" type="checkbox"/> <input type="checkbox"/>
Validate requirements for AI/ML constituent	<input checked="" type="checkbox"/> <input type="checkbox"/>

Note: This checklist is generated based on the provided text and is intended to be a low-level, detailed checklist for developers and reviewers of artificial intelligence-machine learning software.