

§7.2. Testing environment

Green means no change to the text (including no numbering change)

Blue means an editorial proposal.

Orange means an open issue or substantive proposal for amendment

Original text	Change proposals	Comments
7. Compliance assessments		
7.2. Assessment of the Testing Environment	7.2. Assessment of testing environments	Sec: There is more than one environment.
		Sec: Alignment-Virtual testing comes before physical testing in the requirements.
7.2.1. Appraisal of the physical testing facilities and environment	7.2.1. Physical testing environment	Sec: Brevity Sec: The ADS guidelines differentiate track and real-world testing. These methods use very different environments. Why are they combined here?
7.2.1.1. The assessor shall appraise the physical testing (proving ground and/or public road) facilities and environment for their suitability to conduct the testing and gather evidence to support the safety case. In particular the assessor shall verify that:	7.2.1.1. The physical testing facilities used to generate evidence to support the claims of the safety case shall be assessed for compliance with the provisions under para. 6.2.x.	Sec: The following paragraphs state requirements for the testing environment. The provisions should be moved to the requirements chapter.
7.2.1.1.1. the physical testing facilities used by the manufacturer includes static and dynamic elements representative of the ODD and the expected operating conditions and as relevant to the tests being performed;	(a) The physical testing facilities include static and dynamic elements relevant to the test(s) and representative of the ODD of the ADS feature(s) and the expected operating conditions,	Sec: Change to list of criteria per the preceding text. Remove unnecessary wording (e.g., it's already clear that the facilities being assessed are the ones used by the manufacturer).

		Define “expected operating conditions”. The ODD means the conditions under which the ADS feature is expected (designed) to operate.
7.2.1.1.2. the facilities and capabilities are suitable to assess the aspects of the safety case under test;	(b) The facilities and capabilities are suitable to assess the aspects of the safety case under test;	Sec: What does this explicitly mean? Where are the objective criteria? The testing generates evidence to support the claims: Check the “claims” section for verifiable criteria. The capabilities of what?
7.2.1.1.3. the facilities have all the relevant equipment and accreditations;	(c) The facilities have all the relevant equipment and accreditations;	Sec: What equipment and accreditations are necessary?
7.2.1.1.4. the equipment undergoes periodic calibrations to ensure that the measurements are characterized by sufficient accuracy and precision.	(d) The equipment has undergone periodic calibrations to ensure that the measurements are characterized by sufficient accuracy and precision.	Sec: Would it be simpler to require maintenance records to demonstrate that the equipment is kept in proper running order?
7.2.1.2. The assessor may request to witness the execution of some of the physical tests performed by the manufacturer to verify their suitability to conduct the testing and gather evidence to support the safety case as well as to verify that the manufacturer is following the agreed processes for doing the physical testing.		Where is the criteria to determine “suitability”? Where are the “agreed processes” to be found?
7.2.2. Appraisal of the credibility framework developed by the manufacturer for virtual testing	7.2.2. Virtual testing environment	Where is this “credibility framework”?
7.2.2.1. The assessor shall verify that the simulation toolchain(s) used by the manufacturer in the assessment of the safety case is suitable for conducting virtual tests and in compliance with requirements listed in 6.2.1. and subparagraphs	7.2.2.1. The assessment shall verify compliance of the simulation toolchains with the provisions under section 6.2.1. of this Regulation.	“Suitability” is determined by the requirements.

<p>7.2.2.2. The assessor shall review the manufacturer’s credibility framework to determine whether the simulation toolchain(s) is suitable to undertake virtual testing.</p>		<p>Where is this “credibility framework”?</p>
<p>7.2.2.3. The assessor shall review the documentation and evidence supporting the manufacturer’s claims about the capability of the simulation toolchain(s), including its scope, to confirm that it can be used to perform virtual testing as part of the ADS assessment.</p>		
<p>7.2.2.4. The assessor shall audit the information provided by the manufacturer and may request or carry out additional physical or virtual tests. The results of these additional tests shall be reviewed and any concerns or discrepancies shall be raised and reviewed with the manufacturer.</p>		
<p>7.2.3.4.1. If the results do not sufficiently replicate those of the manufacturer or raise other concerns and the manufacturer cannot provide an explanation for the discrepancies then the assessor shall inform the manufacturer that they need to undertake their own review to identify the reasons.</p>		
<p>7.2.3.4.2. The manufacturer can resubmit once they have identified and resolved the issue and updated the information. The manufacture shall explain the issue and its extent. The assessor shall conduct a further review that will include an</p>		

assessment of the additional information supplied by the manufacturer.		
7.2.3.5. The assessor may request to witness the generation of some of the virtual testing results to verify the evidence indicated in the previous points.		