VMAD-SG4-14-05 Submitted by SG4 Leadership

DRAFT SG4 AMENDMENTS TO NATM GUIDELINES

Meeting notes in red

14th VMAD SG Meeting 26 October 2022



VMAD-SG-14-02



Draft Amendments to the NATM Guidelines

- Incorporates UK Comments (VMAD-27-04)
- Review of consistency between Annexes of the NATM Master Document and the NATM Guidelines
- Concern only linguistic changes

Merely align the text with previously agreed upon text.

Please inform us of any comments or concerns by 18 November, EOB

UK Comments (VMAD-27-04)



Several UK comments could affect content of the NATM guidelines Therefore not yet included in the draft amendments (SG4-14-02)

Proposed approach:

- 14th SG4 Meeting: Discussion of proposed amendments with a view of seeking preliminary agreement
- Review period until 15th SG4 Meeting (9 November 2022)

UK Comments (1/6)



Track Testing - A. How the pillar interacts with other pillars

Original text

47. It is recommended that information generated during the track-test be used as additional data to validate the virtual tests by comparing an ADS' performance within a virtual test with its performance on a test track when executing the same scenario.

UK Comment

47. It is recommended that information generated during the track-test be used as **additional** data to validate the virtual tests by comparing an ADS' performance **between** a virtual test and a track test **on the same scenario**.

Provisionally agreed upon text

47. It is recommended that information generated during the track-test be used as **additional** data to validate the virtual tests by comparing an ADS' performance **between** a virtual test and a track test **on the same scenario**.

UK Comments (2/6)



Track Testing - A. How the pillar interacts with other pillars

Original text

47. It is recommended that information generated during the track-test be used as additional data to validate the virtual tests by comparing an ADS' performance within a virtual test with its performance on a test track when executing the same scenario. For instance, track testing can be used as an additional tool/method to validate the quality/reliability of the virtual toolchain by comparing an ADS' performance within a virtual test with its performance on a test track when executing the same scenarios. However, it is important to keep in mind the limitations described in the NATM Master Document.

UK Comment

Isn't this duplication rather than an example? Performance is a catch all for any of the test.

UK Comments (2/6)



Track Testing - A. How the pillar interacts with other pillars

Original text

47. It is recommended that information generated during the track-test be used as additional data to validate the virtual tests by comparing an ADS' performance within a virtual test with its performance on a test track when executing the same scenario. For instance, track testing can be used as an additional tool/method to validate the quality/reliability of the virtual toolchain by comparing an ADS' performance within a virtual test with its performance on a test track when executing the same scenarios. However, it is important to keep in mind the limitations described in the NATM Master Document.

UK Comment

Isn't this duplication rather than an example? Performance is a catch all for any of the test.

Text as proposed above was provisionally accepted. (Note the strikethrough)

UK Comments (3/6)



Real World Testing

Original text & proposed amendment

See document VMAD-SG4-14-04

UK comment

Should recommendations be in a list rather than separate paragraphs to make hem easier to "spot".

SG4 leadership comment

Would also align the structure of the parts with the parts on audits and simulation.

Please review the new structure in document VMAD-SG4-14-04, and send us any objections/concerns to the new structure by 18 November, EOB.

UK Comments (4/6)



Real World Testing

Original text & proposed amendment

54. Specific infractions identified during real-world testing may be reviewed and/or assessed by evaluating the data gathered during the original test and any data gathered during additional virtual, track and real-world testing.

UK comment

Specific **safety requirement** infractions identified during real-world testing may be reviewed and/or assessed by evaluating the data gathered during **the original that** test and any data gathered during additional virtual, track and real-world testing.

Please review and send us any objections/concerns to adding 'safety requirements' by 18 November, EOB.

Replacement of "the original" to "that" was provisionally accepted.

UK Comments (5/6)



Real World Testing - A. How the pillar interacts with other pillars

Original text & proposed amendment

Data generated during real-world testing may be used as additional data to validate whether portions of a virtual and/or track-testing environment were modelled properly by comparing an ADS' performance within a simulation and track test with its performance in a real-world environment when executing the same test scenario.

UK comment

55. Data generated during real-world testing may be used as **additional** data to validate whether portions of a virtual and/or track-testing environment were modelled properly by comparing an ADS' performance within a simulation and/or track test with its performance in a real-world environment when executing the same test scenario.

Provisionally agreed upon text

55. Data generated during real-world testing may be used as **additional** data to validate whether portions of a virtual and/or track-testing environment were modelled properly by comparing an ADS' performance within a simulation and/or track test with its performance in a real-world environment when executing the same test scenario.

UK Comments (6/6)



Real World Testing - A. How the pillar interacts with other pillars

Original text & proposed amendment

57. The information gathered from real world testing may also support improvements in the hazard and risk analysis and design of the ADS systems.

UK comment

Is this relevant to the activities of testing?

Please review the paragraph and inform us whether you are in favour of deleting the paragraph by 18 November, EOB.