

SCSC Data Safety Initiative – WG Meeting 66

20th December 2021, Zoom

Minutes

Attendees

Paul Hampton (PH) – CGI, Michael Green (MG) – Ecomergy, Mike Parsons (MP) – AAIP, Oscar Slotosch (OS) – Validas, Mark Templeton - Qinetiq

Apologies

Arash Saberi (AS) – TomTom, Andy Williams (AW) – Consultant, Mark Nicholson (MN) – University of York, Sam Robinson (SR) – EDF, Paul McKernan (PMcK) - Dstl, Fan Ye (FY) – ESC, Tim Rowe (TR) - Consultant

Agenda

1. Welcome
2. Content of Guidance V3.4
3. Data Safety in the News
4. Covid-19 Data Systems
5. SSS'22
6. Actions
7. AOB
8. Next meeting

NOTE: All comments or opinions in these notes are attributed only to individual attendees of the meeting, not to their respective organisations.

*[Note that actions are presented in the form **N.Mx** where **N** is the meeting number, **M** a reference number for the action raised in that meeting and **x** is an optional letter that differentiates related actions arising from the same discussion point].*

The meeting slides are available at: https://scsc.uk/file/gd/66th_DSIWG_Slides_v1-1293.pptx

1. Welcome

MP opened the meeting and explained this meeting was largely concerned with producing the next version of the guidance, V3.4 for February 2022.

2. New Guidance Document Version 3.4

MP proposed that the next version should be PDF due to the time constraints. If we can produce a hardcopy version available in time for SSS'22 (i.e. ready in KDP by 1st week February 2022) then that is great, but for now the aim is the PDF.

MP discussed content for the next edition of the guidance v3.4. There were 6 items for consideration:

1. Inputs/clarifications/corrections from the TomTom work
2. More accident examples (MA is preparing one)
3. Sufficiency Issue (need MA/PH agreements)
4. Distracting/Dazzle Data (Appendix is ready)
5. Thor Myklebust's earlier comments on the guidance document
6. New Covid-19 data table

Each were discussed and actions agreed.

1. Inputs/clarifications/corrections from the TomTom work

The main issue for TomTom seemed to be the interpretation of the likelihood table (Table 9), especially with the text explaining the lowest option should be used. Various options were discussed and proposed, including colour coding and assigning numbers to cells. The meeting agreement was that the table should stay as-is, but that the text beneath should be amended to make clearer that this was an example, and different projects may use different tables.

Action 66.1 (MT) – Draft some better words for inclusion below table 9.

MP mentioned that other factors could be included in other tables for the same purpose, with things like Coverage and Security.

PH supplied a proposal for a numerical scheme by email which has merit and should be considered:

Action 66.2 (PH) – Draft numerical proposal for table 9 for group consideration.

The other issue that TomTom found was that it was not clear if all the rows in the mitigation method tables need to be considered in all situations. The meeting agreed that not all methods need to be used but they should be considered, and some sort of explanation provided if not used. MG suggested that the rows could be ordered to present the highest priority methods first. This was thought to be a good idea but difficult to do in the general case as some methods are more important than others for some projects.

2. More accident examples (MA is preparing one)

Martin Atkins has not yet provided the incident text. MP will chase.

3. Sufficiency Issue (need MA/PH agreements)

There was general agreement that having just the right amount of data, not too little and not too much was the issue. This could be referred to as the 'Goldilocks' data property, and the term was seen as useful and easy to remember.

Action 66.3 (MT) – Add the 'Goldilocks' amount of data property to the tables in the guidance document.

Action 66.4 (MT) – Consider adding Guidewords to Hazop from Section 3 of DSIWG meeting 62 minutes.

4. Distracting/Dazzle Data (Appendix is ready)

This annex is ready for inclusion in the guidance document.

Action 66.5 (MP) – Send MT the latest version of the Dazzle Data annex for inclusion.

5. Thor Myklebust's earlier comments on the guidance document

Thor's original suggestion was to include properties of 'Analysability' and 'Testability'. The meeting agreed that a third property, 'Explainability', would be useful, particularly for ML/AI systems. It was also agreed that 'Testability' should be generalised to 'Verifiability'.

Action 66.6 (MT) – Add these three properties to the user-visible further work section. If time allows then develop into the guidance further.

6. New Covid-19 data table

It was agreed that the Covid-19 section should be updated, including a new table of data systems related to the pandemic.

Action 66.7 (MP) - Send MT the latest Covid-19 data systems table

The cover of the new version was viewed in the meeting. Updates to the back cover text will be required.

Action 66.8 (PH) – Update the new cover with new back cover text and a new sticker on the front

Action 66.9 (ALL) Volunteers are needed for proof-reading the drafts of the new guidance document version. Please contact MP if you can help in January 2022.

3. Data Safety in the News

See AOB

4. SCSC SSS'22

MP Explained that SSS'22 is still planned to go ahead in Bristol but likely with much smaller numbers in person and the majority joining online.

5. AOB

OS mentioned the Log4j security issue which is a major problem, <https://logging.apache.org/log4j/2.x/security.html>. This will clearly have an impact on some safety-related systems. This bug is related to settings in configuration files, *'When the logging configuration uses a non-default Pattern Layout with a Context Lookup (for example, `$$${ctx:loginId}`), attackers with control over Thread Context Map (MDC) input data can craft malicious input data that contains a recursive lookup, resulting in a StackOverflowError that will terminate the process.'*

Action 66.10 (OS) – Produce an incident report about the Log4j security issue for the new issue of the guidance, if possible referencing safety issues caused by this data-related security problem

6. Actions, etc.

Not discussed.

7. Next Meeting

Next meeting will be held 11th January 2022 by Zoom. MP to arrange.

8. Thanks

Thanks to MP for taking the minutes.

Thanks to MP for chairing.

14. Summary of Open Actions

Actions greyed out are considered closed and will be removed from the list at next issue.

Ref	Owner	Description	Target Guidance Version
42.9	MP	Work out a matrix of data categories (previously 'types') and data properties (as per DB discussion)	N/A
43.4	MP	Write up a data focussed FMEA approach.	3.4
44.2	MP	To discuss with AK on how to get the Wikipedia article published	N/A
46.1	MP	Review the application of DSALs to higher level forms of aggregation	N/A
49.6	MT	Review Overleaf briefing material and aim to hold a briefing before end of March 2021 in the use of Overleaf in the production of the guidance.	N/A
53.1	MP	To talk to Kevin King about what we need to do in the guidance for digital twins.	3.4
56.2	DA	Consider impact of Dark Data on the Data Safety Tool	N/A
61.1	MP, PH, MT	Check existing data property definitions and add a case related to "Unexpected" data [Related to 'Sufficiency' issue – suggest encompasses this as well.]	3.4
61.2	AW	Research the relevance of digital currencies and report back to the group (with MA and MT)	3.4
62.1	MA	Create war story for the next issue of the guidance on the Buncefield data loss	3.4
62.3	MP/MT	Consider issues of porting and importation of legacy data	3.4
63.1	CT	Look at both Dark Data and Dazzle Data for sensors (e.g. when a sensor is saturated, in noisy environment or when readings are below the detection level floor)	3.4
64.1	MP	Contact Thor and establish the details of the guidance proposals in the paper.	3.4
64.2	MP	Process the Dazzle Data comments from PH and produce updated version	3.4
65.1	MP	Contact Davy Pissort and see if any interest in this funding route for Data Safety	-
65.2	DA/MA	See if access to the tool can be given to TomTom for evaluation	-
66.1	MT	Draft some better words for inclusion below table 9.	3.4
66.2	PH	Draft numerical proposal for table 9 for group consideration.	3.4
66.3	MT	Add the 'Goldilocks' amount of data property to the tables in the guidance document.	3.4
66.4	MT	Consider adding Guidewords to Hazop from Section 3 of DSIWG meeting 62 minutes.	3.4
66.5	MP	Send MT the latest version of the Dazzle Data annex for inclusion.	3.4
66.6	MT	Add these three properties to the user-visible further work section. If time allows then develop into the guidance further.	3.4

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66.7	MP	Send MT the latest Covid-19 data systems table	3.4
66.8	PH	Update the new cover with new back cover text and a new sticker on the front	3.4
66.9	ALL	Volunteers are needed for proof-reading the drafts of the new guidance document version. Please contact MP if you can help in January 2022.	3.4
66.10	OS	Produce an incident report about the Log4j security issue for the new issue of the guidance, if possible referencing safety issues caused by this data-related security problem	3.4