



SCSC Data Safety Initiative – WG Meeting 61

18th May 2021, Zoom

Minutes

Attendees

Mike Parsons (MP) – AAIP, Divya Atkins (DA) – MCA, Martin Atkins (MA) – MCA, Paul McKernan (PMK) - DSTL, Paul Hampton (PH) – CGI, Andy Williams (AW) – NewTechNo, Carl Tipton (CT) – Johnson Matthey, Dale Callicott (DC) – BAE, Mark Templeton (MT) - Qinetiq

Apologies

Michael Green (MG) - Ecomergy.

Agenda

- 1. Welcome
- 2. Sufficiency Issue
- 3. Recent Accidents/Incidents
- 4. Planning for 2021/22
- 5. Covid-19 and Data
- 6. Version 3.3 of DSG Update
- 7. ISO 8000
- 8. SCSC Events
- 9. AOB, etc

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/61st_DSIWG_Slides_v2-1155.pptx

1. Welcome and Update

MP welcomed the group.

2. Sufficiency Issue

There was discussion on the issue raised by Mark Templeton (MT) around the possibility of a missing HAZOP guide word related to "Sufficiency" when a system receives a message it was not expecting.





The group discussed whether a new guideword is required or whether it could be covered by existing HAZOP guidewords.

In the end it was agreed that a new case 'Unexpected' was probably the right way to go. This could cover the case of too much data supplied and the case of receiving data when not expecting it.

It was also noted that some of the existing property definitions look in need of a refresh.

Action 61.1 (MP, PH, MT): Check existing data property definitions and add a case related to "Unexpected" data

3. Recent Accidents/Incidents

The TUI flight loading problem misclassifying passengers was discussed: https://www.theregister.com/2021/04/08/tui_software_mistake It was noted that the software apparently was developed offshore and there were language and cultural issues.

A system detecting elderly drivers who may be at risk of an accident was considered: https://www.mobihealthnews.com/news/voice-assistants-predict-driving-accident-risk-seniors

4. Planning for 2021/22

MP proposed a list of topics to be covered in the next edition of the guidance which was amended in the meeting. Digital currencies were thought to be of great interest and use technologies which may be relevant to safety.

- 1. Machine Learning Training Data
 - 1. Vehicle / automotive systems
 - 2. Medical systems
- 2. Covid-19 Data Issues
 - 1. Management systems e.g. vaccination passports, quarantine management
 - 2. Data about the pandemic itself & misinformation / Covid false data
 - 3. Infodemiology
- 3. Blockchain / authentication data
- 4. Fraudulent data / masquerade data / deep fakes / falsification / misinformation
- 5. Digital Twin data
- 6. Digital Currencies technologies used could be useful for data safety?

Action 61.2 (MA, MT, AW): Research the relevance of digital currencies and report back to the group

MP said he would update the words on ML for the next issue of the guidance.

5. Covid-19 and Data

MP presented the table of data-reliant systems in all areas of Covid-19 (see slides).

There was concern that vaccine side effect data (including serious injury and deaths) were not being reported properly. In the US the vaccine reporting system is public; not so in the UK. References:

- (1) https://vaers.hhs.gov/data/datasets.html
- (2) https://gab.com/guymanly/posts/106255405468743214





(3) https://doctors4covidethics.medium.com/the-israeli-peoples-committee-report-of-adverse-events-related-to-the-corona-vaccine-april-2021-47891f17d452

It was noted that the NHS mobile phone app now shows vaccination status, but this can't be used with older phones.

6. Version 3.3 of DSG Update

MP said there have been 320 downloads of the DSG v3.3 (i.e. about 100 per month). There have been no sales of the physical document.

7. SCSC Events

Future SCSC events are shown below:

MP mentioned that the call for abstracts is out for SSS and he would welcome any data-related abstracts submitted

MT noted that Black Swan events can be due to the most unlikely combination of events (e.g. the Buncefield explosion destroying backups for the PNC police database).

MP noted the 'Safety Futures Initiative' event planned for July 1st. This is aimed at younger members and those with 3 years or less experience in safety. Please could everyone contact those in their organisation who may be interested.

SFI: Safety Futures Initiative "Get To Know You" event x2

July 1, 2021 - Zoom

Young or early career* technologists are often highly trained and very knowledgeable about engineering topics such as programming, systems development, testing, etc. How there are limited ... >>

Seminar: Can we quantify risk?

September 23, 2021 - London, UK and blended online

In many areas of safety attempts are made to quantify risk. Some of these are apparently more successful than others, but some areas are notoriously difficult to quantify, especially those which ... >>

Seminar: Safe Use of Multi-Core and Manycore Processors

November 11, 2021 - London, UK and blended online

This is the event postponed from 2020. It will be held in London as a blended online / in-person event

Confirmed speakers are:

Oliver Charrier, WindRiver - Multicore Processors usage ... >>

Seminar: Managing 'Black Swans': Handling Rare and Severe Events Now and in the Future

December 2, 2021 - London, UK and blended online

This seminar will consider how to manage recovery from 'Black Swan' events in a safety context, ie. events which are rare, unexpected and have high impact. Events such as Fukushima ... >>

Symposium: Safety-Critical Systems Symposium (SSS'22)

February 8 - 10, 2022 - Bristol, UK and blended online

The Safety-Critical Systems Symposium 2022 (SSS'22) will be held 8-10th February 2022 in person in Bristol, UK and as an online (blended) event. It is our 30th Symposium and as such will ... >>

8. AOB

ISO 8000 was noted by Jeanette Baldwin as data-relevant and MP said he would respond to Jeanette's email.

Action 61.3 (MP): Respond to Jeanette Baldwin re: ISO 8000.





CT mentioned that he had a list of process-related accidents that he could share with the group.

Action 61.4 (CT): Send the list of process-related accidents to MP

9. Actions, etc.

See table at end.

10.Next Meeting

Next meeting will be held on 30th June by Zoom 3:30-5:00 BST.

It may be possible to hold a blended (in-person / online) meeting in July or August.

11.Thanks

Thanks to all participants. Thanks to MP for chairing the meeting and taking the minutes.





Summary of Open Actions

Ref	Owner	Description	Target Guidance Version
42.6	PH	Define the process to publish a document developed in Overleaf via Amazon	3.4
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	3.4
61.2	MA, MT, AW	Research the relevance of digital currencies and report back to the group	3.4
61.3	MP	Respond to Jeanette Baldwin re: ISO 8000.	N/A
61.4	СТ	Send the list of process-related accidents to MP	N/A