

SCSC Data Safety Initiative – WG Meeting 64

6th October 2021, Zoom

Minutes

Attendees

Mike Parsons (MP) – AAIP, Andy Williams (AW) – Consultant, Paul Hampton (PH) - CGI, Richard Garrett (RG) – SQEP, Oscar Slotosch (OS) – Validas, Brent Kimberley (BK) - Durham

Apologies

Carl Tipton (CT) – Johnson Matthey, Jim Mateer (JM) – SQEP

Agenda

- Welcome
- Data in the Offshore Industry
- TomTom Interest
- Sufficiency Issue (if Mark/Paul present)
- Covid-19 Data Systems
- SCSC Events
- SSS'22
- Actions
- Next Guidance Version
- 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/64th_DSIWG_Slides_v1-1257.pptx

1. Welcome

MP welcomed the group.

2. Data Safety, Sources, and Data Flow in the Offshore Industry

MP reported an email exchange with Thor Myklebust of SINTEF in which he mentioned a recent conference paper “Data Safety, Sources, and Data Flow in the Offshore Industry”, available in DSIWG resources as: [https://scsc.uk/file/gd/Thor_Myklebust - ESREL2021paperDatasafetyv2Delivered-](https://scsc.uk/file/gd/Thor_Myklebust_-_ESREL2021paperDatasafetyv2Delivered-)

[1256.pdf](#)). This paper describes data flows in offshore rigs and makes lots of references to the Data Safety Guidance. It has the following recommendations:

6.1.2. SCSC Guide recommendations

The next edition of the guide should include more definitions, see Section 2.3 above. In addition, the data properties should add analysability and testability. The ML category should be extended with AI.

Action 64.1 (MP): Contact Thor and establish the details of the guidance proposals in the paper.

3. TomTom Interest

MP received a request for assistance from Arash Saberi of TomTom in the Netherlands as to how to interpret some of the latest guidance document. He has been in communication and has set up an initial meeting week beginning 11th October. There is some interest and recognition of our work:

“First of all, I commend you (and other authors) for making such well written document and for being so ahead of time with these concepts. I am firm believer that data safety will soon be the core issue for safety assurance, if not already.”

4. Covid-19 and Data

The current list of Covid-19 systems involving data was discussed. There was mention of the issue of faked vaccination certificates, <https://www.telegraph.co.uk/news/2021/10/03/man-arrested-police-alerted-fake-vaccine-passports-sold-750/>

5. Digital Twins

MP mentioned that he had emailed Kevin King of BAE Systems about data safety in digital twins. There was some discussion about what the term meant in context, as it apparently can mean lots of things to different groups. MP said that he was using it in the sense of digital model, i.e. “a digital twin is a virtual representation that serves as the real-time digital counterpart of a physical object or process”, https://en.wikipedia.org/wiki/Digital_twin, the concern being that a digital twin can contain large amounts of data that can be safety-related.

OS mentioned the simulations being conducted for car accident studies where a real accident is modelled/simulated and then the vehicle is replaced in the model by an autonomous one, and the accident simulation re-run showing how much better the outcome would be, i.e. the accident is avoided.

6. Dazzle Data

PH mentioned that he had made some comments on the ‘Dazzle Data’ work, https://scsc.uk/file/gd/Words_for_Dazzle_Data_for_DSIWG_Guidance_3.4_v0.4-1246.docx
MP thanked PH and said he would incorporate these.

Action 64.2 (MP) Process the Dazzle Data comments from PH and produce updated version

7. New Guidance Document Version 3.4

Topics for inclusion in the new version of the guidance document are now:

- Inputs from TomTom?
- Inputs from SINTEF?
- Additional accident case studies ('war stories')
- Sufficiency Issue and Hazops
- Possibly something on Dazzle Data, if can be matured in time

8. SCSC Events

Future SCSC events (see <https://scsc.uk/events>) were described and are shown below:

Seminar: Can we quantify risk?

October 21, 2021 - Radisson Blu Edwardian Bloomsbury Street Hotel, London, UK and Virtually Online

PLEASE NOTE NEW DATE: Thursday 21st October 2021

In many areas of safety attempts are made to quantify risk. Some of these are apparently more successful than others, but some areas are ... »

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

An event flyer is now available.

Confirmed speakers are:

Lee Jacques, Leonardo - WG ... »

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

November 24, 2021 - Zoom

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

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 ... »

9. AOB

None noted.

10.Actions, etc.

PH mentioned that he had created a series of YouTube videos explaining how the publishing process via KDP worked. [This must have been a lot of work – thank you Paul!] This closes action 42.6.

See table at end.

11.Next Meeting

Next meeting will be held end of November 2021 in person and by Zoom. MP to arrange. There was some discussion as to the best location and format, and whether it would be worth travelling in terms of time and money; MP thought that a "bumper meeting" could be put together with presentations,

workshops, brainstorming, etc. (all the things that are more difficult to do online) and could feature drinks/meal afterwards.

12.Thanks

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

16. 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
42.6	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 [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