

## SCSC Data Safety Initiative – WG Meeting 56

11<sup>th</sup> November 2020, Google Meet

### Minutes

#### **Attendees**

Mike Parsons (MP) – CGI, Divya Atkins (DA) – MCA, Martin Atkins (MA) – MCA, Dale Callicott (DC) – BAE, Andy Williams (AW) – NewTechNo, Paolo Giuliani (PG) – EDF, Carl Tipton (CT) - Johnson Matthey, Paul Hampton (PH) – CGI, Duncan Dowling (DD) – DARD, Dave Banham (DB) – Blackberry, Nick Hales (NH) – ex-MOD

#### **Apologies**

Paul McKernan (PMK) - DSTL, Mark Templeton (MT) – Qinetiq

#### **Agenda**

1. Covid-19 and Data
2. MOD Reports
3. Government Data Strategy
4. Dark Data Implications
5. Data Safety in the News
6. Update on Guidance Document v3.2 (downloads/sales)
7. Aims for 2021
8. SCSC Events
9. Data Safety Tooling/Risk Ontology
10. 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/56th\\_DSIWG\\_Slides\\_v1-927.pptx](https://scsc.uk/file/gd/56th_DSIWG_Slides_v1-927.pptx)

### **1. COVID-19 and Data**

The group discussed data in the Covid-19 crisis and the poor presentation of safety-related data in the media, with misleading plots and axes without scales, etc. It was noted that Edward Tufte's books: *The Visual Display of Quantitative Information*:

<https://www.amazon.co.uk/Visual-Display-Quantitative-Information/dp/0961392142/> )

and *Envisioning Information*, <https://www.amazon.co.uk/gp/product/0961392118/> have many good examples about how to display this sort of information well.

It was noted that the problems of software modelling (and, of course Excel's row limits) had been highlighted in the media, but it was thought poor data was a bigger issue. MP suggested that a study ought to be conducted on the impact of data on the handling of the crisis, but this would take some time to put together.

It was noted that there are lots of data aspects to the vaccination trials (presumably all conducted double-blind) but the details were not known. The UK Track and Trace service and the NHS app were apparently not working very well.

## **2. MOD Data Strategy**

MP noted the two documents from the MOD which reference data and seem to give it some importance:

1. Defence Data Management Strategy,  
[https://scsc.uk/file/gd/Defence\\_Data\\_Management\\_Strategy\\_2020\\_FINAL\\_FINAL-910.pdf](https://scsc.uk/file/gd/Defence_Data_Management_Strategy_2020_FINAL_FINAL-910.pdf)
2. MOD Science and Technology Strategy,  
[https://scsc.uk/file/gd/20201019\\_MOD\\_Science\\_and\\_Technology\\_Strategy\\_2020-909.pdf](https://scsc.uk/file/gd/20201019_MOD_Science_and_Technology_Strategy_2020-909.pdf)

## **3. Government Data Strategy**

MP noted the UK Government Data Strategy Consultation:

<https://www.gov.uk/government/consultations/uk-national-data-strategy-nds-consultation>

He mentioned that it would be good to have a DSIWG input to this.

## **4. Dark Data Implications**

MP explained that he had written a short article on the safety implications of Dark Data, <https://scsc.uk/r160.2:1> for the latest issue of the SCSC Newsletter to follow on from David Hand's main article: <https://scsc.uk/r160.1:1> He then presented some additional work linking Data Safety Categories to Dark Data Types, e.g:

## Dark Data Implications

No	Category	Description	Explanation	Typical Containers	Dark Data Cases
1	Predictive	Data used to model or predict behaviours and performance	Data for studies, models, prototypes, initial risk assessments, etc. This is the data produced during the initial concept phase which subsequently flows into further development phases.	Prototype results, evaluations, analyses	DD-1, <b>DD-2</b> , DD-3, DD-4, <b>DD-5</b> , DD-6
2	Scope, Assumption and Context	Data used to frame the development, operations or provide context	Restrictions, risk criteria, usage scenarios, etc. explaining how the system will be used and any limitations of use.	Concepts of operation, Safety Case Report Part 1	DD-1, <b>DD-2</b> , DD-3, DD-4, <b>DD-5</b> , DD-6, DD-8, DD-10, DD-12, DD-13

DD-2 (Unknown unknowns):  
**Unknown usage scenario**

DD-2 (Unknown unknowns):  
**Missed constraint / limitation**

PH wondered if Data Safety Properties could be linked to Dark Data in the same way.

**ACTION 56.1 (PH): Consider linkage of Data Safety Properties to Dark Data types**

**ACTION 56.2 (DA): Consider impact of Dark Data on the Data Safety Tool**

It was re-iterated that a standalone appendix on Dark Data should be in the next version of the guidance (3.3) to be issued in Feb 2021.

**ACTION 56.3 (MP): Set up separate meeting to consider DD and impact including Properties and Tooling. Participants are: PH, MP, DA, MA and DC**

It was noted that the latest NHS Track and Trace App has dark data issues as it is no longer possible to establish who has been asked to isolate.

## 5. Data Safety in the News

It was noted that the recent U.S. election was an interesting case of dark data, in that partial data was arriving in real time, with potentially ambiguous and confusing results.

The Covid-19 vaccination data presented in the media appears to be well-controlled but is all early data. Also the way vaccination trials are conducted (double-blind) are perhaps a good example of an intentional dark data example.

## 6. Update on Guidance Document v3.2 (download/sales)

MP noted that there have been 1821 hits and 808 downloads of the guidance document since Feb 2020. PH said there had been one sale of a hardcopy version in the last month.

## 7. Update on SSS'21

MP noted that SSS'21 is now online, spread over 3 afternoons and one evening and is free to SCSC members <https://scsc.uk/e683>. It was noted that NH is giving a Covid-19 Data Safety paper at the symposium.

## 8. Aims for 2021

It was agreed that the version 3.3 to be produced for SSS'21 will have:

- Covid-19 Intro
- Appendix on Dark Data
- More accident case studies
- Tidy up the text (as needed)
- Addressing comments arising from Thor Myklebust's comments

**ACTION 56.4 (NH): Prepare a Covid-19 and Data Safety intro for the Guidance 3.3**

**ACTION 56.5 (PH): Address Thor's comments on the guidance**

**ACTION 56.6 (PH): Consider suggested updates to the cover of V3.3, e.g. elephant with mask(!)**

It was felt that a better understanding of the Overleaf production process for new versions of the guidance would be helpful. PH will coordinate with MT.

## 9. Future Events

MP noted the upcoming SCSC Events:

### **Seminar: New Safety Analysis Techniques**

November 12, 2020 - Online, Free to Members

*This seminar is relevant to safety engineers and safety consultants who have to perform analysis of systems. It will also be useful for safety auditors and assessors who may have to interpret or ... »*

### **Seminar: Management and Oversight of Complex Systems**

December 3, 2020 - Online, Free to Members

*This online seminar will be useful for all those involved in running a complex operation that involves safety. It is aimed at Managers, Operators, Regulators and Assurance staff. If you operate a ... »*

### **Symposium: Safety-Critical Systems Symposium (SSS'21)**

February 9 - 11, 2021 - Online, Free to Members

*The 29th SCSC Safety Critical Systems Symposium 2021 (SSS'21) will be held from 9-11th February 2021 in an online format. It will be split into three sessions, held in the afternoons over the ... »*

## 10. Minutes and action status

See table at end.

## 11. Tooling

DA will send out the link for trialling the use of the web-based Data Safety management tool in the near future.

## 12. Risk Ontology

DB explained that the Risk Ontology WG was meeting weekly and had had 29 meetings to date. Work was progressing well.

## 13. AOB, etc.

MA noted the data aspect to this aviation incident: <https://www.flightglobal.com/safety/wizz-a321-left-out-of-balance-by-seat-allocation-mishap/140542.article>

## **14.Next Meeting**

A Google Meet meeting in early December 2020 was proposed. MP to arrange. [Now set for December 9<sup>th</sup>.]

## **15.Thanks**

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

## Summary of Open Actions

Rows have been greyed-out to indicate that the actions were closed during this meeting. Those entries will be deleted from future versions of the action log.

Ref	Owner	Description	Target Guidance Version
42.6	PH	Define the process to publish a document developed in Overleaf via Amazon	3.3
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.	3.3
44.1	MT	Review last 12 months of DSIWG minutes and put any actions referring to v3.3 or v4.0 into Appendix O.	3.3
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
50.4	PG/DA	Arrange remote meeting for EDF staff to demonstrate the tool	N/A
50.5	DA	Start up the sub-group and initiate first teleconf	N/A
51.2	DA	provide access to the tool for all registered users.	N/A
52.1	All	Contact MP or PH if you would like to contribute to the LRF proposal or work on activities	N/A
53.1	MP	To talk to Kevin King about what we need to do in the guidance for digital twin.	3.3
55.1	MA	Create additional 'war story' for the Excel data loss for version 3.3 of the guidance. Now re-assigned to MA.	3.3
55.2	MP/MT	Create appendix on Dark Data for version 3.3 of the guidance	3.3
56.1	PH	Consider linkage of Data Safety Properties to Dark Data types	3.3
56.2	DA	Consider impact of Dark Data on the Data Safety Tool	N/A
56.3	MP	Set up separate meeting to consider DD and impact including Properties and Tooling. Participants are: PH, MP, DA, MA and DC	3.3
56.4	NH	Prepare a Covid-19 and Data Safety intro for the Guidance 3.3	3.3
56.5	PH	Address Thor's comments on the guidance	3.3
56.6	PH	Consider suggested updates to the cover of V3.3, e.g. elephant with mask(!)	3.3