

## SCSC Data Safety Initiative – WG Meeting 49

26<sup>th</sup> November 2019, Webex/Teleconf

### Minutes

#### Attendees

Mike Parsons (MP) – CGI, Paul Hampton (PH) – CGI, Paul McKernan (PM) – DSTL , Martin Atkins (MCA) – Mission Critical Applications, Divya Atkins (DA) – Mission Critical Applications, Mark Templeton (MT) – Qinetiq, Tim Rowe (TR) – Consultant.

#### Apologies

Nick Hales (NH) – ex. MOD, Fan Ye (FY) – ESC, John Bragg (JEB) – MBDA, Paolo Giuliani (PG) – EDF Energy, Louise Harney (LH) – Leonardo, Robert Green (RG) – NATS, Dave Banham (DB) – ex. Rolls-Royce.

#### Agenda

- Introduction and Status
- Report on Data Safety Evolution Seminar
- New Issue of Guidance Document
- Tooling Status
- Data Safety at SSS'20
- Sales/Downloads Update
- Future Events
- Minutes and action status
- AOB, etc.
- Data Safety in the News
- 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 [1].

### **1. Introduction and Status**

An informal DSIWG meeting #48 took place after the Data Safety Evolution seminar on 14<sup>th</sup> November 2019. In the meeting it was agreed that a version 3.2 of the Data Safety Guidance should be produced in time for SSS'20.

## 2. Report on Data Safety Evolution Seminar

MP reported on the Data Safety Evolution Seminar that took place on the 14<sup>th</sup> November 2019, <https://scsc.uk/e651> and was considered very successful with several new (and enthusiastic) attendees. The feedback was very good (and higher than average for an event of this type):

Eval Forms: 18 returns	1	2	3	4	5	Average
Interest				4	14	4.8
Relevance				5	12	4.7
Presentations			2	12	4	4.1
Panel Session			2	7	4	4.2
Networking			2	6	9	4.4
Audio / Visual		1		8	9	4.4
Venue / Location				3	15	4.8
Refreshments / Lunch				5	13	4.7
Event Administration				2	16	4.9
Value				4	13	4.8

MP added that there seemed to be a lot of interest generated during the event and noted that many people stayed behind afterwards for networking opportunities. The venue was also noted as being a very good location although there were some issues with the length of the lunch break, the audio/video and room temperature.

## 3. New Issue of Guidance Document

PH showed the front cover page for version 3.2 of the guidance. The only comments were that the spine version should be 3.2 and the colour of the sticker should be green rather than red. (It was noted that if there was a chance to add minor tweaks to the elephant image then this would be a nice-to-have.)

**Action [PH] 49.1** Change the spine version to 3.2 and the front cover sticker from red to green.

It was agreed that a paper copy would also be published via KDP/Amazon. It was agreed that a PDF ready version by end of January would be required to meet the publishing timescales.

The following guidance changes were discussed to establish the effort required and who would make the changes:

### The numbering from MCA/DA's tool

MT agreed to incorporate this change in Overleaf but will need to work with MCA to ensure the identifiers are consistent.

**Action [MT] 49.2** Add MCA's identifiers to the methods and techniques table.

### The 737 MAX as an additional war story

MCA agreed to produce a war story for the 737 MAX accidents.

**Action [MCA] 49.3** Produce a war story by 15<sup>th</sup> December that relates to data for the 737 MAX accidents for MT to incorporate in Overleaf.

#### Links to DB's Ontology

It was noted that the ontology work is going to be a paper for SSS'20 and so should have a reference in the guidance [Note: the SSS proceedings reference is SCSC-154].

**Action [DB] 49.4** Produce a one-page description of the role of the Ontology work and add a reference to the SSS'20 paper for incorporation in a future work appendix.

**Action [MT] 49.5** Add a teaser appendix to the Data Safety Guidance to include future work not incorporated in version 3.2.

PH suggested that MT give a short briefing on the use of Overleaf so others could be in a position to make changes.

**Action [MT] 49.6** Review Overleaf briefing material and aim to hold a briefing Webex (between 16<sup>th</sup> and 20<sup>th</sup> December 2019) in the use of Overleaf in the production of the guidance.

MT said people were interested in a process flow diagram for the guidance to help them navigate the guidance.

MT said Appendix O has a list of future changes that could be applied to the guidance.

**Action [PH/MP/DA/MCA/MT/TR/DB/PM] 49.7** Review Appendix O and volunteer for items to be cleared off by 15<sup>th</sup> December 2019. Offers to be provided by 3<sup>rd</sup> December 2019.

MP was keen to have a section on Machine Learning / Training data included in the guidance.

**Action [MP] 49.8** Produce section on Machine Learning data and its relationship to data safety.

#### Separate out Organisation Risk Appetite from the DSAL

TR and PH agreed that the ODR assessment is not a determination of risk appetite of the organisation and should be decoupled from the DSAL.

**Action [PH] 49.9** Suggest some wording on how the ODR relates to risk appetite.

#### Data Categories

There is a need to update the guidance to make a change from Data Types to Data Categories along with an explanation.

**Action [MT] 49.10** Update the guidance to make a change from Data Types to Data Categories along with an explanation.

## **4. Tooling Status**

DA said that Phase 1 funding from LRF was to be completed by end of this year but a request will be made to extend this for another 3 months. DA said they are looking for a tooling subgroup to help test and collaborate on the development of the tool. DA said a demonstrator website has been set up: [www.data-safety.net](http://www.data-safety.net) with the aim a functioning demonstrator by the end of March 2020.

DA said the LRF caseworker is looking for something different for Phase 2 rather than refinement of Phase 1 work so for example more engagement with potential users of the product.

PH suggested that the subgroup is announced more formally and a request for members sent to all DSIWG members.

**Action 49.11 [DA/MP]** Prepare an introductory email to send out to the DSIWG group inviting people to join the tooling subgroup, called **DSIWG-TRG** or similar.

## 5. Data Safety at SSS'20

MP said there are two papers on Data Safety at SSS'20:

- Safety Critical Integrity Assurance in Large Datasets (Sutherland and Hessami);
- Formalising the Language of Risk (Dave Banham – subject to attendance confirmation).

## 6. Sales/Downloads Update

MP said there were 1441 downloads of the Data Safety Guidance Version 3.1 to date.

PH said there were 4 purchases of the Data Safety Guidance v3.1 hardcopy from Amazon in October.

## 7. Future Events

MP showed the up and coming events at SCSC:

- Seminar: Creating and Maintaining an effective Safety Culture 5<sup>th</sup> Dec 2019, <https://scsc.uk/e631>
- Safety-Critical Systems Symposium (SSS'20) 11-13 February 2020, <https://scsc.uk/e619>
- Seminar: Safe Use of Multi-Core and Manycore Processors 30<sup>th</sup> April 2020, <https://scsc.uk/e638>
- Seminar: New Safety Analysis Techniques 11<sup>th</sup> June 2020, <https://scsc.uk/e654>
- Management and Oversight of Complex Systems, 3<sup>rd</sup> December 2020, <https://scsc.uk/e661>

## 8. Minutes and action status

The actions table was updated during the meeting.

## 9. AOB, etc.

None.

## 10. Data Safety in the News

None.

## 11. Next Meeting

It was agreed that the next meeting should be a Teleconference/Webex mid-January 2020. [Now 14<sup>th</sup> January 2020]

## 12. Thanks

Thanks to PH for taking the minutes.

Thanks to MP for chairing the meeting.

## 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
41.8	MT/BJ	Ensure Data Safety Guidance PDFs have no ligature problems. Note that this also affects copy-and-paste from the low-resolution PDFs.	N/A
42.4	LH	Get an update from RO on cyber-data properties mapping, which has been published.	N/A
42.6	PH	Define the process to publish a document developed in Overleaf via Amazon	3.2
42.9	MP	Work out a matrix of data categories (previously 'types') and data properties (as per DB discussion)	N/A
43.3	GH	Speak to Stephen Boyle & James Weston on Cyber security aspects of IT/OT to see if they could contribute.	4.0
43.4	MP	Write up a data focussed FMEA approach.	4.0
44.1	MT	Review last 12 months of DSIWG minutes and put any actions referring to v4.0 into Appendix O.	4.0
44.2	DB/LH	To develop the Wikipedia article to get it into a position where it can pass review and be published.	N/A
44.3	MT/MP	Make contact with Martyn Clarke to see if there is any progress on Action 36.4 (production of training material)	N/A
46.1	MP	Review the application of DSALs to higher level forms of aggregation	N/A
46.2	PH	Put together a positioning paper on how ODRs, tailoring and DSALs operate together.	N/A
46.3	MP	Make it more obvious why only a handful of data categories have been selected for the guidance when there are over 30 in the appendices.	3.2
47.1	PH	Contact Mark Thomas (now at BAE Wakefield?), make sure he is aware of the event, and ask if he is doing Data Safety-related work.	N/A
47.2	MP	Contact FDB and the other healthcare organisations that MP is interacting with, to let them know about the seminar.	N/A
47.3	MP	Agree with DB whether to make terminology Note into SSS'20 paper.	N/A
47.4	MP	Ask MT about the effort needed to release a version 3.2 in the timescales.	3.2
47.5	MP	Consider what else we might want to add to version 3.2	3.2
47.6	MT	Add upcoming changes section to the guidance, from the existing list (currently not visible)	3.2
47.7	Seminar Presenters	The presenters at the seminar were encouraged to upload their slides for review asap.	N/A
49.1	PH	Change the spine version to 3.2 and the front cover sticker to green from red.	3.2
49.2	MT	Add MCA's identifiers to the methods and techniques table.	3.2
49.3	MCA	Produce a war story by 15 <sup>th</sup> December that relates to data for the 737 MAX accidents for MT to incorporate in Overleaf.	3.2
49.4	DB	Produce a one-page description of the role of the Ontology work and add a reference to the SSS'20 paper for incorporation in a future work appendix.	3.2
49.5	MT	Add a teaser appendix to the Data Safety Guidance to include future work not incorporated in version 3.2.	3.2

Ref	Owner	Description	Target Guidance Version
49.6	MT	Review Overleaf briefing material and aim to hold a briefing Webex (between 16 <sup>th</sup> and 20 <sup>th</sup> December 2019) in the use of Overleaf in the production of the guidance.	N/A
49.7	PH, MP, DA MCA. MT, TR, DB, PM	Review Appendix O and volunteer for items to be cleared off by 15 <sup>th</sup> December 2019. Offers to be provided by 3rd December 2019.	N/A
49.8	MP	Produce section on Machine Learning and its relationship to data safety.	3.2
49.9	PH	Suggest some wording on how the ODR relates to risk appetite.	3.2
49.10	MT	Update the guidance to make a change from Data Types to Data Categories along with an explanation.	3.2
49.11	DA/MP	Prepare an introductory email to send out to the DSIWG group inviting people to join the tooling subgroup.	N/A

## References

Ref	Title	Location
[1]	Meeting slides	<a href="https://scsc.uk/file/gd/49th_DSIWG_Slides-616.pptx">https://scsc.uk/file/gd/49th_DSIWG_Slides-616.pptx</a>