



#### SCSC Data Safety Initiative – WG Meeting 47

25<sup>th</sup> September 2019, Webex/Teleconf

#### **Minutes**

#### **Attendees**

Mike Parsons (MP) – CGI, Paul Hampton (PH) – CGI, Martin Atkins (MCA) – Mission Critical Applications, Divya Atkins (DA) – Mission Critical Applications, Dave Banham (DB) – Rolls–Royce PLC.

#### **Apologies**

Mark Templeton (MT) – Arcade Experts, Nick Hales (NH) – ex. MOD, Paul McKernan (PM) – DSTL, Mike Ainsworth (MA) – Ricardo, Amira Kawar (AK) – CGI, Fan Ye (FY) – ESC, Andrew Eaton (AE) – CAA, John Bragg (JEB) – MBDA, Martyn Clarke (MC) – Consultant, Paolo Giuliani (PG) – EDF Energy, Rob Ashmore (RA) – Dstl, Sam Robinson (SR) – EDF Energy, Alastair Faulkner (AF) – Abbeymeade, Steve Clugston (SC) – Consultant, David Smith (DS) – FNC, Louise Harney (LH) – Leonardo, Paul Mukerjee – Astellas, Graham Sutherland (GS) – Consultant, Jeanette Baldwin (JBa) – Thales, Jenny Brain (JB) – Wood PLC, Julian Lockett (JL) – FNC, Gordon Hurwitz (GH) – Thales, Chris Barnes (CH) – Highways England, Dale Callicott (DC) – Consultant

#### <u>Agenda</u>

- 1. Introduction and Status
- 2. Preparation for Data Safety Evolution seminar in November
- 3. Updates for Guidance Document 4.0
- 4. Tooling Update
- 5. Training Course Development
- 6. Overleaf status
- 7. Sales/Downloads Update
- 8. Formal modelling activity update
- 9. Dissemination update
- 10. Standards update
- 11. Future Events
- 12. Minutes and actions status
- 13. AOB, etc.
- 14. Data Safety in the News

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

MP provided a summary of the status of the working group. He observed that things are slowing down a bit, but that this was a sign that we were moving to the next stage of maturity, tooling, etc.

#### 2. Preparation for Data Safety Evolution seminar in November

MP announced that he is organising a Data Safety Seminar for 14th November. The announcement on the SCSC website is at https://scsc.uk/e651.

He is still looking for two speakers. Currently speakers are:

- MP: Introduction: Why is data a safety problem? (40min)
- DA: Introduction to the SCSC Data Safety Guidance (40min)
- PH: Applying the SCSC Data Safety Guidance: Practical Considerations
- MCA: Data Safety Tooling (60min)
- Alastair Faulkner: Exploring the Data Safety Model (DSM) as part of the Assurance Solution (40min)

MP asked if DB could present his Terminology / Modelling work. DB said that his main problem was travel to the event, but MP said that travel costs could be covered by the event, if DB was presenting something.

It was noted that a talk on experiences of applying the guidance would be good, and that there have now been applications in the maritime area, and to UAVs (Mark Templeton and Martyn Clarke).

PH's talk will be Healthcare-related, but most attendees are likely to be Aerospace or Defence. MCA's example will be Aerospace-related, and so there will be a balance. DA said that Sean White was keen to support the event, and will circulate the announcement to the attendees of the York Data Safety in Healthcare workshop.

DA asked if it would be possible to do a combined seminar/webinar. MP replied that it should be possible, but that things like the panel discussion are difficult technically.

**Action PH [47.1]** Contact Mark Thomas, make sure he is aware of the event, and ask if he is doing Data Safety-related work.

**Action MP [47.2]** Contact FDB and the other healthcare organisations that MP is interacting with, to let them know about the seminar.

#### 3. Updates for Guidance Document 4.0

Updates that could be included:

- Minor fixes/changes already merged
- DB's Terminology / Modelling work (8 pages), probably as an appendix. Should have a
  covering note saying that it is "incoming", and the main text takes precedence if there are
  inconsistencies. It still needs a little work. It could also be a paper for SSS'20, or the
  newsletter.





- Consistency updates from the Ontology working group
- A section listing expected changes in the following versions

It was agreed that this would probably be version 3.2, rather than version 4.0.

Action MP [47.3] Agree with DB whether to make Terminology note into SSS'20 paper.

Action MP [47.4] Ask MT about the effort needed to release a version 3.2 in the timescales.

Action MP [47.5] Consider what else we might want to add to version 3.2

One other desirable would be a discussion of Machine Learning / Training data, for which it might be worth involving AAIP or Philip Koopman.

#### 4. Tooling Update

DA gave an update on the Data Safety Tooling.

Funding from Lloyds's Register Foundation was secured for a phase 1 of the project, which will run for 6 months (July to December 2019).

The key goals of phase 1 are:

- 1. Further develop the proof-of-concept tool.
- 2. Engage with prospective users of the tool, to establish that the tool will be used, and to get collaborators for the full tool development in phase 2.
- 3. Conduct survey with organisations owning critical data, to establish the need for formal data safety assurance.

Phase 2 of the project will be funded if phase 1 is successful, and will be the development of a deployable tool.

DA is talking to a number of organisations for collaboration in phase 2, of which NHS Digital has signed up so far.

#### 5. Training Course Development

No update.

#### 6. Overleaf status

No update.

#### 7. Sales/Downloads Update

MP showed the download statistics from the SCSC website, and the map showing downloads by location. He noted that the proportion of people who visit the Data Safety page, who go on to download the guidance is around 70%, and is much higher than for the other documents on the website.

PH said there were 4 purchases of the Data Safety Guidance v3.1 hardcopy from Amazon in the last 90 days.

#### 8. Dissemination update

No update.

#### 9. Standards Update

No update.





#### 10. Future Events

MP showed the up and coming events at SCSC:

- Tutorial: Safety Assurance of Autonomy and Machine Learning 26<sup>th</sup> Sep 2019, https://scsc.uk/e624
- Seminar: Data Safety Evolution 14th November, https://scsc.uk/e651
- 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, <a href="https://scsc.uk/e619">https://scsc.uk/e619</a>
- Seminar: Safe Use of Multi-Core and Manycore Processors 30th April 2020, https://scsc.uk/e638

#### 11. Minutes and action status

The actions table was updated during the meeting.

#### **12.** AOB, etc.

MCA pointed out that a data category that is conspicuously missing is the Adaptation category, and that adding this would be a good improvement for the new guidance. The Behavioural category is also closely related, and could be considered at the same time. MP already has an action (46.3) looking at the Categories.

**Action MT [47.6]** Add upcoming changes section to the guidance, from the existing list (currently not visible)

**Action Seminar [47.6]** The presenters at the seminar were encouraged to upload their slides for review asap.

#### 13. Data Safety in the News

The NHS are now talking explicitly about "Data-driven health" [2] and [3].

The ABI (Association of British Insurers) is proposing that data is automatically collected in the event of a crash on the roads, opening up many data-safety issues. See <a href="here">here</a> for the original article, and <a href="here">here</a> for an overview of the Insurance Industry's view. This is a new area for data-safety to address.

#### 14. Next Meeting

The aim is to hold a meeting in the week commencing 18th November 2019. It was noted that this is just after the seminar, but it was felt that discussion about the guidance release would be needed.

#### 15. Thanks

Thanks to MCA 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.



# **DSIWG**

| Ref  | Owner                 | Description  | Target<br>Guidance<br>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  | 4.0                           |
| 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<br>Presenters | The presenters at the seminar were encouraged to upload their slides for review asap.  | N/A                           |



## **DSIWG**

### References

| Ref | Title       | Location   |  |  |  |
|-----|-------------|--|--|--|--|
| [1] | Meeting     | https://scsc.uk/file/gd/47th DSIWG Slides-603.pptx                         |  |  |  |
|     | slides      |  |  |  |  |
|     |             |  |  |  |  |
| [2] | Code of     | https://www.gov.uk/government/publications/code-of-conduct-for-data-       |  |  |  |
|     | Conduct for | driven-health-and-care-technology/initial-code-of-conduct-for-data-driven- |  |  |  |
|     | data-driven | health-and-care-technology   |  |  |  |
|     | health and  |  |  |  |  |
|     | care        |  |  |  |  |
|     | technology  |  |  |  |  |
| [3] | How we're   | https://www.hra.nhs.uk/planning-and-improving-research/research-           |  |  |  |
|     | supporting  | planning/how-were-supporting-data-driven-technology/                       |  |  |  |
|     | data driven |  |  |  |  |
|     | technology  |  |  |  |  |