SCSC Data Safety Initiative – WG Meeting 40

1st June 2018, NATS, London

Minutes and Actions

Attendees

Bill Blackburn (BB) – Process Renewal Group, Paul McKernan (PM) – DSTL, Mike Parsons (MP) – NATS, Eric Bridgstock (EB) - Raytheon, Nick Hales (NH) – DE&S, Mark Templeton (MT) – QinetiQ, Dale Callicott (DC) – BAE/UKHO, Gordon Hurwitz (GH) – Thales, Martyn Clarke (MC) – SCSS.

Apologies

Vincent Martin (VM) – Raytheon, Robert Oates (RO) - Rolls Royce PLC, Paul Hampton (PH) – CGI, Martin Atkins (MaA) – Mission Critical Applications, Divya Atkins (DA) - Mission Critical Applications, Michael Aspaturian (MAs) – EDF Energy, Ebby Joseph (EJ) – RINA, Dave Banham (DB) Rolls–Royce PLC, John Bragg (JEB) – MBDA, Louise Harney (LH) – Leonardo, Phil Wright (PW) – DSTL, Fan Ye (FY) – ESC, Paolo Guiliani (PG) – EDF, Chris Hartgroves (CH) – Leonardo, Shaun Cowles (SC) – EDF, Paul Dart (PD) – NCC Group, Mark Nicholson (MN) - University of York, Sam Robinson (SR) – EDF Energy, Ged Lancaster (GL) – JLR, Carolyn Stockton (CS) – BAE, John Spriggs (JS) – NATS, Maria Kelly (MK) – Leonardo, Paul Caseley (PC) – DSTL, Andrew Eaton (AE) – CAA, Ashley Price (AP) - Raytheon

Agenda

1. Data Strategy Session
2. Report on Highways England meeting
3. Overleaf status
4. Sales/Downloads Update
5. Tooling update
6. Dissemination update
7. Standards update
8. Future Events
9. Minutes and actions status
10. AOB
11. Data Safety in the News
12. Data Safety in Job Adverts

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].*

Slides used in the meeting are available in [5].

1. Data Strategy

The progress on the individual data safety topics from last meeting was discussed.

Cloud

EB presented VM's slide giving initial thoughts [1] on 'Data Safety in Cloud' using a list based on Hazop guidewords. No causes or mitigations were included as yet. MP mentioned the need to include configuration data as this determines cloud behaviour to a large degree. BB also stressed the need to look at the positive aspects of cloud. It was noted that patching could have a big impact.

Action 40.1. [MP] to get an expert from NATS to brief the WG on the configuration data challenges of cloud.
Action 40.2. [VM] to better define 'Cloud' in the context of data safety and cloud. What level (scope) should this be defined at?

Internet of Things (IoT)

MP presented his working draft on IOT [2], where IoT were defined as multiple small devices connecting through systems and networks. Discussion on the need to get experts from these domains to brief the DSIWG. MP mentioned the upcoming SCSC seminar on Safety of IoT: https://scsc.uk/e564

Action 40.3 [All] Specific domain owners to identify experts to brief the DSIWG on their domain so as to identify the hazards and issues.

Big Data

PM explained his early thoughts on big data. MP stressed the need to focus on big data as it applies to data safety.

Action 40.4 [PM] to contact RO and/or DB about real world examples of big data applied to data safety.

[Note: When using term 'knowledge' we need to understand that this is not necessarily 'absolute'.]

2. Report on visit to Highways England

MP explained that he had been invited to a meeting on Data Safety at Highways England (HE), based on introduction from an ex-Network Rail contact. Highways England have been supportive and offered to host the next meeting at their offices in Birmingham (https://scsc.uk/e577).

HE recognise there is a possible issue in that subcontractors collect and produce lots of data but this is not always exploited. There are also potential system safety issues related to data – e.g. motorway signage needs to be set correctly, or accidents may result.

This raised the issue of data 'non-use' / 'data wastage': is this a data safety risk? (Probably but needs more consideration.)

MT asked if sub-contractors should be obliged to advise or highlight concerns?

HE will host the next DSIWG meeting and further discussions will take place at the meeting.

3. Overleaf Status

Can we use Overleaf for tracking issues? MT advised that it is not really suitable. MT has addressed some of the issues from his list addressing Typo's etc for guidance document v3.0.1. MT to provide MP with invoice for Overleaf subscription.

MP asked can we access the lessons learned from MT training course delivery? Permission has not yet been given to release this. MT explained the training course and objectives to MC. MT has the feedback from the course. The consensus that 3hours was too short a time to deliver the course and 4 hours would be better.

Action 40.5 [MP] to feedback guidance document table queries from NHS breast screening example from V3.0 to MT (see email [4]).

Action 40.6 [MT] to check that internet searches lead to DSIWG Guidance (NH search shows lots of returns from internet Amazon, Google books etc)

Action 40.7 [MP] to discuss cluster map downloads of DSIWG Guidance with Brian Jepson.

4. Sales/Downloads

MP provided update on sales.

5. Tooling Update

There was an E-mail update from DA. DA and MA are trying lots of funding routes for tooling development but no success as yet. They areiInterested in developing a training course on toolsets to support the guidance.

6. Dissemination update

It was noted that there were no data safety abstracts for SSS'19 yet submitted. It would be good to keep up a strong data safety presence at this event if at all possible.

7. Standards update

MC mentioned recent changes to Def Stan 00-970 that references DSIWG

Action 40.8 [MC] to e-mail MP with 00-970 references to DSIWG (Part 13 Reqt 1.7.1)

How do we introduce DSIWG Guidance into IEC 61508? It is recognised that this is a challenge. Next steps are we going to push for change into new edition?

Action 40.9 [MP] to check with Audrey Canning on access to IEC 61508/update cycle. May be better to have SCSC as a permanent representative on 61508 committee.

Def Stan 00-051 Environment standard is now issued at V1. Should there be a data safety element in this standard?

8. Future Events

SSS'19 Bristol, February 19, https://scsc.uk/e569 . Data safety abstract(s) need to be submitted by 3rd June 2018.

There is the potential for a data safety training course to be offered on the day before, or possibly as a session during the symposium.

It was noted that MC has an ongoing action (36.4) regarding training material, which relates to the new action 40.10 below:

Action 40.10 [MT] to ask if his Qinetiq course can be released to DSIWG and be presented at SSS'19.

Action 40.11 [MP] to ask Alex King if reduced day rate for SCSC events (SSS) could be made available to retired personnel.

NH's already submitted abstract for SSS'19 was discussed.

9. Minutes and actions status

32.6, 37.10, 37.13, 37.14, 38.4, 39.1 were agreed closed.

39.2 was agreed BAU.

10. AOB

It was noted that the Pharma industry deal with vast amounts of safety-related data related to medicines, etc.

Action 40.12 [BB] to investigate if a potential connection in Pharma could be involved in some manner with the DSIWG

MT noted that the working copy of the updated guidance will be known as v3.0.1.

It was noted that Pete Goodliff of Thales (Cyber Security Engineering Manager) presentation on security and safety could be equally applicable to data safety.

RO's presentation from the SCSC safety and security seminar, https://scsc.uk/e560 was discussed. It was noted that this gives a mapping of cyber security elements to data safety elements, thereby explicitly linking the two areas.

11. Data Safety in News

The NHS breast cancer recall problem was briefly discussed. See also [4].

12. Data Safety in job advert

MP highlighted a recent job advert from the University of York which mentioned data safety:

"You will have or be able to develop a good understanding of system safety, enabling you to undertake research on such issues as assurance of systems that learn, data safety, etc."

13. Next Meeting

The next meeting is July 11th 2018 at Highways England, Birmingham, 11:00-17:00, https://scsc.uk/e577 .

Future meetings may be held at UKHO, Taunton or Thales, London. DC and GH to investigate.

14. Thanks

Thanks to PM for taking notes and actions
Thanks to MP for hosting the meeting

15. Summary of Open Actions

Ref	Owner	Description	Target Guidance Version
33.5	LH	Add a couple of posts before making the LinkedIn page public.	N/A
33.6	LH	Add everyone on the DSIWG distribution list to the LinkedIn page.	N/A
36.4	MC	Coordinate the production of training material (based on v3.0).	N/A
37.3	DB	Ensure the model is included in the next version of the document	4.0
37.5	MP	To coordinate with BJ on the close down old docuwiki, remove content, and refer future authors to MP	N/A
37.7	DB	Produce a baseline model for review including any outstanding issues.	N/A
37.9	MP	Speak to Tim Kelly to coordinate working group leader meetings to ensure there is no overlap	N/A
39.3	MP	Act as champion for production of IOT (a) positioning table	3.1
39.4	DA	Act as champion for production of Crytography (b) positioning table.	3.1
39.5	PM/RO	Act as champion for production of Big Data (c) positioning table.	3.1
39.6	VM	Act as champion for production of Cloud (d) positioning table.	3.1
39.7	RO/NH	Act as champion for production of Autonomy and ML (e) positioning table.	3.1
39.8	MA	Act as champion for production of Blockchain (g) positioning table.	3.1
39.9	PH	To feed comments back to Paolo on the worked example.	3.1
39.10	PH	Rework the Trifold to change front page so it focuses more on data safety rather than SCSC.	N/A
39.11	MAs	To look at what funding routes may be available from Nuclear Sector for tooling.	N/A
40.1	MP	To get an expert from NATS to brief the WG on the configuration data challenges of cloud.	N/A
40.2	VM	To better define 'Cloud' in the context of data safety and cloud. What level (scope) should this be defined at?	N/A

Ref	Owner	Description	Target Guidance Version
40.3	All	Specific domain owners to identify experts to brief the DSIWG on their domain so as to identify the hazards and issues	N/A
40.4	PM	To contact RO and/or DB about real world examples of big data applied to data safety.	N/A
40.5	MP	To feedback guidance document table queries from NHS breast screening example from V3.0 to MT	N/A
40.6	MT	To check that internet searches lead to DSIWG Guidance (NH search shows lots of returns from internet Amazon, Google books etc)	N/A
40.7	MP	To discuss cluster map downloads of DSIWG Guidance with Brian Jepson	N/A
40.8	MC	To e-mail MP with 00-970 references to DSIWG (Part 13 Reqt 1.7.1)	N/A
40.9	MP	To check with Audrey Canning on access to IEC 61508/update cycle. May be better to have SCSC as a permanent representative on 61508 committee	N/A
40.10	MT	To ask if his Qinetiq course can be released to DSIWG and be presented at SSS'19	N/A
40.11	MP	To ask Alex King if reduced day rate for SCSC events (SSS) could be made available to retired personnel.	N/A
40.12	BB	Action 40.12 [BB] to investigate if a potential connection in Pharma could be involved in some manner with the DSIWG	N/A

16. References

Ref	Title	Location
[1]	Data hazards and Issues of cloud draft	https://scsc.uk/file/gd/Cloud_Positioning_Table-446.xlsx
[2]	Data hazards and Issues of IoT draft	https://scsc.uk/file/gd/IoT_list_of_identified_issues_as_they_relate_to_data-447.docx
[3]	Data hazards and Issues of Big Data draft	https://scsc.uk/file/gd/Big_data_Table_-_first_draft_2-445.docx
[4]	Email with table queries from NHS breast screening example	https://scsc.uk/file/gd/Table_queries_from_NHS_data_issue-448.txt
[5]	Slides from the meeting	https://scsc.uk/file/gd/40th_DSIWG_MP_Slides-444.pptx