

Minutes of SPIRE IDT, 7 December 2000, Imperial College

Present:

Giovanni Bisaglia
Matthew Fox
Christophe Morisset
Marc Sauvage
Neal Todd
Apologies: Walter Gear

Trevor Dimbylow
Ken King
Seb Oliver
Sunil Sidher
Gillian Wright

Announcement:

Ken: The instrument group will freeze the design of the instrument interfaces at the end of March 2001. They need to know from data processing people what they want the interfaces to provide. Meeting needed between ICC and instrument group early in new year.

1. Action on Trevor to set date for meeting.

Edinburgh action items:

URD deadline 10th November –
 Outstanding: Trevor; MOC, Gillian; Instrument Engineering
 Neal awaiting FSC comments on FSC URD draft 3
ORAC class diagram –
 On ATCs to-do list

Manpower:

One response to Trevor's email for support contribution to IDT: Anna Digorgia (IFSI) to provide OBSM support (no coding contribution). This leaves the people at this meeting (+Walter) and the ATC support as the composition of the IDT.

Discussion on whether we have enough design and coding effort available to support work required for both the FCSS and ICC Internal development. At the moment we don't know who will be doing what as we don't yet know exactly what we have to do and what time profiles are required to do them.

For the FCSS some of this can be worked out from the SPMP work packages, but for the Internal work this will have to come from the URD/Use-case work which will produce a SIP (analogous to the SPMP).

Combined FCSS and Internal coding effort:

Neal	50%
Matt	50%
Giovanni	50%
Marc	20-50%
Sunil	50% (min)
RAL	50% (new software engineer starting December 2000)
ATC	30% (design or coding - whichever is needed)

Ken: If effort is not enough to fully support development RAL could recruit a full time Java programmer if needed because original SIP was based on late development (i.e. staffing levels ramping up later).

Java training:

Trevor: Cost not known yet (~£1000/person for 5 day course). Week of 22nd January at RAL confirmed. Possibly up to 12 places.

People wishing to attend: Neal, Matt, Marc, Christophe, Sunil.

Neal: In order to get the most out of the course it would be advantageous for attendees to learn the basics of Java beforehand, using an agreed upon Java book (pitched at scientists and engineers).

2. Action on Neal – Identify a suitable book and inform everyone to get a copy (Gillian to let Neal know what book the ATC used).

3. Action on course attendees – Get to an agreed upon point within the book before the 22nd January.

4. Action on course attendees – Inform Trevor of the areas we want the trainer to focus on, including possible SPIRE-relevant case-studies.

5. Action on Trevor – Inform trainer of what we want from the course.

Trevor: Together training still too expensive at the moment, still negotiating.

7. Action on Neal – Send Seb the ESA Coding Standards document to put on the ICC web page.

Ken: Instead of having the web page that one person has to maintain we could have a Livelink ICC directory in which the IDT (via one account) could read and write draft and non-official ICC documents.

8. Action on Ken – Set up a Livelink ICC directory and inform IDT of account details.

URD / Use-case development:

Gillian: Normal operations URD: Scope is really a superset of the scope of other URDs. Gillian to write textual description illustrating how the scopes of other URDs are tied together under the heading of normal operations.

Discussion on how to proceed. The SPIRE consortium needs to review the URDs and a development plan for transforming the URDs, though use-cases, into a SIP which details work packages for ICC implementation. To this end, we must produce "version 1.0"s of the URDs and a development plan. These will be presented to a SPIRE consortium meeting. A subset of the consortium (the "SPIRE board") will be requested to provide formal feedback to the IDT.

SPIRE board to provisionally consist of: the two project scientists; observer from FSC; observer from HIFI and/or PACS ICC; software developer from ATC.

9. Action on Neal – URD Scope: re-order sections in terms of priority and size of task.

10. Action on all – URD authors should finalise their URDs, label them as version 1.0 and submit them to Seb by the 15th December 2000. People wishing to send comments to the authors of the URDs should do so ASAP before then.

11. Action on Trevor – Bring up the subject of an ICC review at the next Project meeting.

12. Action on Trevor – Produce a draft of the aims of the review. To be circulated to IDT by 13th December 2000.

13. Action on Ken and Trevor – Canvas SPIRE consortium on their availability for the review meeting near the end of January / beginning of February (week of 5th February 2001?)

14. Action on all – Confirm availability for IDT meeting on 10th January at Sussex to produce development plan and prepare for consortium meeting.

Marc: Discussion on interface support for modules contributed to SPIRE IA by scientific community. Such modules would not be supported by the ICC. Neal: Significant thought would have to be given at the design stage for such an interface. Ken, Gillian: ESA should support distribution, in some way, of "contributed" modules, even though they wouldn't on their current stance.

Summary reports:

Ken: System Review:

3 days of review of hardware.

First two days: Interface documents had not been produced. Meeting became an interface working group.

System review arose because of criticism at last PDR for not showing subsystems. Also, to present development plan for instrument. This didn't have sufficient margin on delivery time. Current schedule 4-6 months late. Result of review noted progress of systems aspect of design but would make only one recommendation: a schedule for delivering subsystems. Reviews of individual institutes over the next few weeks.

Sunil: FGSSE Group

FGS design description document: Interaction with EGSE has resulted in rapid development of ILT section.

Requirements in the ICD are being reviewed.

Role of group beyond issue 1 – during ILT group operates in a way faithful to commonality. Ken: why is it necessary to continue meeting once ILT is under way?

SPMP Work Packages:

Discussion on IA and QLA – how should this be developed? Develop QLA as a component of IA (infrastructure of IA developed by the FSC) to save developing two systems. Neal: Need list of the things from instrument people that they will want QLA to display (i.e. need to know what is in the telemetry packets the instrument will produce). Also need to know what provision they want for 'quick and dirty' QLA.

15. Action on Neal – Circulate the PACS view of IA showing how they work separately from the FCSS environment.

Part of the QLA design will be sitting down with instrument people to get their user requirements. When should this happen and who should it involve?

WP 24250: SPIRE (and HIFI) PUS packets.

Should be zero man weeks because it shouldn't involve work on our part – only PACS should have to because of their packet decompression requirements. What is to be done about this?

WP 24500: RTA

Software engineering – less effort needed in the 24510 sub-package

Software manager effort – 6 weeks

Software engineering – 2 people, 10 weeks per person (one person also the software manager, in addition to their 6 weeks design)

16. Action on Trevor – Add additional sub-package for support people (Trevor and Sunil).

WP 24600: TC Command History

Ken: Same amount of effort needed as RTA? Yes, more than just writing a file into database: Lots of checking/verification to be done – comparison with schedules, manual telecommanding, whether all TCs were carried out, etc.

Can run parallel with RTA. Probably one person needed – whoever looks at how SCOS2000 works.

QLA WP: To be defined as part of the use case analysis.

Have crude simulated telemetry available early 2002 for initial QLA prototyping. Further prototype ready for mid-2002 for the instrument engineers to test on the instrument simulator. Feedback used for 3-4 month final development of QLA ready for ILT, October 2002.

Need a WP for test telemetry generation (done by someone in SPIRE EGSE?).

17. Action on Trevor – circulate to institutes a list of work to do, how long it will take and when it needs to be done. This is in order to decide who is best placed to do what.

Technical Notes:

Three technical notes on the FCSS are available (SPIRE authors: Trevor, Sunil and Neal). They need to be reviewed by relevant SPIRE people to see if they support what SPIRE wants from the FCSS. Reviewers:

ILT: Ken, Sunil

Products: Christophe, Walter, Jean-Paul

Design Document + Normal Operations: SPIRE Co-Is

18. Action on Seb – Send out the documents to relevant people for comment and collect comments back.

Comments to be studied at a future IDT meeting to produce feedback to FCSS members.

AOB:

Trevor and Neal have already started some use-case analysis based on the current URDs. This involved splitting up user requirements between what is already covered by the FCSS use-cases and what new use-cases need to be written. Further meetings arranged for Trevor, Neal and Sunil: 4th and 5th January 2001, Imperial College.

Next Meeting:

10th January 2001. Sussex. Producing ICC development plan.

Action item hit parade:

Trevor:	1, 5, 11, 12, 13, 14, 16, 17
Neal:	2, 7, 9, 15
Ken:	8, 13
Seb:	18
Java training:	3, 4
All:	10, 14