

Response To Reviewers Post MODAF Review Board 7th July 2005

MODAF ECC Deskbook

Issues Addressed By The Review Board

There were 101 issues raised against the MODAF ECC Deskbook. The vast majority of these were typos, or had already been fixed. The remaining, more serious issues, were raised for review board consideration – there were 21 of these.

The issues fall into 4 broad categories:

- URD
- Capability Management/ Equipment Planning
- Document Layout
- Individual issues

The review board sequentially reviewed each of the 21 issues and either actioned them for resolution, or provided an appropriate response to the Reviewer.

A record of the review board response to the 21 ECC Deskbook issues is contained within this document.

URD

These are a set of issues that all relate to the URD Development part of the ECC Process

Page:

Section:

Issue: Link to URs

Category: Major Technical

Description: It is not clear how the views should link to the URs. Many actual URs will be scenario sensitive, especially their measures and therefore there should be a mapping (or priority scoring) between the URs and the scenarios.

Evidence:

User's Proposed Solution: probably needs some more thought and some good examples. Unless there is a good linkage there is a danger that the views are seen as a burden rather than a tool.

References:

Action: Jon Lee: For the board to identify a URD authority to which we can go to confirm the proposed use of MODAF views within a URD, and thus confirm the linkage and approach to MODAF articulated scenarios supporting a requirement set.

Status: Open

Refer to Review Board

Review Board Action: Kathy Lamb to identify the URD process owner, for engagement and confirmation of URD MODAF views

Response: Action: Jon Lee to place caveat on proposed URD MODAF views and development sequence for MODAF release version 1.0

Page: 9 **Section:** top of pag
Issue: MODAF and Requirements Engineering

Category: Minor Technical

Description: "Consistent, comprehensive and less ambiguous requirements documents (amongst other documents)". It is only true for the higher level (ECC) requirement documents such as CRD and/or URD.

Evidence: p.8 "The System Views are closely linked with the generation of System Requirements Documents (SRD) and System Design, both of which are not functions of the ECC and so the Views are not mandated or recommended for ECC stakeholders."

User's Proposed Solution: Section 3.7 and 3.8 could be improved by putting MODAF into the requirement set context, perhaps written from a requirements engineering POV. MODAF deals well with functionality, but it does not does not justify performance requirements (MOPs) at system level, additional modelling is needed for this. For example a SRD requirement "... shall detect a 1m3 object at 120km"; these numbers would not emerge

References:

Action: Jon Lee: As per issue 3 - For the board to identify a URD authority to which we can go to confirm the proposed use of MODAF views within a URD. Although MODAF could not clarify all aspects of the SRD/ URD, its articulation of some of the textual requirements by MODAF views should improve their clarity I would have thought.

Status: Open **Refer to Review Board**

Review Board: Action: Kathy Lamb to identify the URD process owner, for engagement and confirmation of URD MODAF views

Response: Action: Jon Lee to place caveat on proposed URD MODAF views and development sequence for MODAF relaease version 1.0

Page: 16 **Section:** Figure 4.1
Issue: Inclusion of a mandated or optional OV4 for URD development

Category: Minor Technical

Description: The inclusion of an OV4 to encourage stakeholder analysis in terms of key roles and organisations would be beneficial as a starting point for both the URD and the OV5s. In other words we are asking who is the User and once that has been established we can ask what does he do within the capability functions.

Evidence: See AMS website http://www.ams.mod.uk/ams/content/docs/reqweb/pages/05_user/frame.htm
quote first activity: "1. Identify the individual stakeholders or stakeholder classes who have a legitimate interest in the system throughout its life cycle. This includes, but is not limited to, users, supporters, developers, producers, trainers, maintainers, disposers, acquirer and supplier organizations, regulatory

User's Proposed Solution: Include OV4 as a mandated or at least optional view

References: AMS Requirements Web - User Requirements

Action: Jon Lee: As per issue 3 - For the review board to identify a URD authority to which we can go to confirm the proposed use of MODAF views within a URD. Use of OV-4 to enforce a stakeholder analysis seems a little overkill.

Status: Open **Refer to Review Board**

Review Board: Action: Kathy Lamb to identify the URD process owner, for engagement and confirmation of URD MODAF views

Response: Action: Jon Lee to place caveat on proposed URD MODAF views and development sequence for MODAF release version 1.0

Page: 30

Section: 3.8

Issue: CADMID Process

Category: Major Technical

Description: The inference is that the URD is baselined at MG and at this point the IPT begins to develop the solution etc. As I recall, by MG solutions should have been developed to be taken forward into Manufacture, although this may involve further down-selection. A URD, albeit not mature, will have been presented at IG to support the Business Case and industry will have been involved during the Assessment Phase.

Evidence:

User's Proposed Solution: Clarify the linkage between the URD development process using AF and the established CADMID cycle.

References:

Action: Jon Lee: As per discussions in integration meeting - 5 Jul - and issue 3 - For the board to identify a URD authority to which we can go to confirm the proposed use of MODAF views within a URD. Whether all views should be mandated for IG. Specifically considering mandation of OV-5 at IG.

Status: Open

Refer to Review Board

Review Board: Action: Kathy Lamb to identify the URD process owner, for engagement and confirmation of URD MODAF views

Response: Action: Jon Lee to place caveat on proposed URD MODAF views and development sequence for MODAF release version 1.0

Page: 36 **Section:** Beyond URD
Issue: Requirements Maintenance and Assurance

Category: Major Editorial

Description: This could need further development - we could have some URD examples (User Group action?), we could also refer onwards to the verification and validation cycle when the ECC will be involved to ensure the requirements are met?

Evidence:

User's Proposed Solution: For consideration.

References:

Action: Jon Lee: Review board to advise whether the "beyond URD baseline" section requires further development in the ECC deskbook, noting that the acquisition Deskbook identifies URD development throughout CADMID.

Status: Closed **Refer to Review Board**

Review Board Response: Action: Jon Lee to add a sentence or two on change control to this section and linkage to AMS URD process

Capability Management/ Equipment Planning

These are a set of issues that all relate to the Capability Management & Equipment Planning parts of the ECC Process

Page: 25 **Section:** 3.6
Issue: Use of Recommended Views

Category: Major Technical

Description: pgs25-26 - The use of StV-5 and OV-1a is strongly recommended, but is not shown on Fig 3-1.

Evidence: If Fig 3-1 is adopted as an aide-memoire, the omission of these recommended views could lead to a less than complete analysis than would otherwise be performed.

User's Proposed Solution: Expand Fig 3-1 to include all recommended views, as appropriate.

References:

Action: Jon Lee: Review board to decide whether StV-5 and OV-1a can be added to the ECC process diagram with a caveat identifying that in normal circumstances, there is not time to develop the capability options in this manner - possibly as a 'desirable' change in' COI process.

Status: Closed **Refer to Review Board**

Review Board Response: Action: Jon Lee to discuss with Carl Longley offline and confirm addition to ECC process diagram
Follow-up action: Jon Lee to incorporate StV-5 and OV-1a/b as a highly desirable view for capability option articulation - but to form part of DEC processes at a later date, rather than initial implementation.

Page: 27 **Section:** Review
Issue: DEC and C2 Capability Review

Category: Minor Technical

Description: What level of information is looked at here - it requires knowing something or knowing where to get data based on the dependency? Can we assist the reader any further here? What information is reviewed? Draft URDs? Business Casesà

Evidence:

User's Proposed Solution: For consideration.

References:

Action: Jon Lee: Information required to support the cross-DEC review is not currently known. For the review board ECC representative to identify whether they would like a greater depth of COI process explained here, and whether other documentation containing MODAF views is likely to be used. E.g. URD/ business case

Status: Closed **Refer to Review Board**

Review Board Response: Action: Jon Lee to add text to describe where information in AcV-2 comes from, i.e.dependencies between capabilities etc (PTs may not exist) E.g. using StV-3 and 5 as examples.

Page: 47
Issue: Requirements Development

Section: Figure 5-16

Category: Minor Editorial

Description: Why did we not touch on our OV-1b and OV-1c or add the words that are supposed to go with the OV-1a? Completeness of examples!

Evidence:

User's Proposed Solution: Edit

References:

Action: Jon Lee: For Review Board to decide whether ISTAR worked example should include OV-1b and 1c for Capability Options.

Status: Closed **Refer to Review Board**

Review Board: Action: Jon Lee to update documentation to reflect OV-1b modification - OV-1b is now "Operational Graphic Description" and is mandatory with every OV-1a produced

Response: Action: Jon Lee to discuss applicability of OV-1c to capability option development with Carl Longley offline

Follow-up action: Jon Lee to incorporate OV-1c as a highly desirable view for capability option articulation - but to form part of DEC processes at a later date, rather than initial implementation.

Document Layout

Issues relating to the way the document is structured or published - each of these issues should be considered individually

Page:

Section:

Issue: General

Category: Major Editorial

Description: Text layout is completely different from the MODAF Technical Handbook. We should be adopting the same standard across all docs

Evidence: THE MODAF Tech handbook is better laid out in use of para headings, numbering and less indentation of paragraphs. - also uses less paper for the same information.

**User's
Proposed
Solution:**

References:

Action: Jon Lee: The integration meeting - 5 Jul -agreed that the Deskbooks would be revised inline with the format of the Handbook. The integration meeting would like to ask the review board whether they would also like to see the paragraphs numbered through all the Deskbook sections.

Status Closed

Refer to Review Board

Review Board Response: Action: MODAF Partners to define and use common paragraph numbering scheme

Page: 9 **Section:** first
Issue: Structure of MODAF docs

Category: Minor Editorial

Description: We have 5 deskbooks currently - but this may change in the future - we do need to refer to MODAF lifecycle at some point. A section on MODAF Further development, inputs for new ideas and modifications, or at least a note on these issues seems to make sense.

Evidence:

User's Proposed Solution: For consideration.

References:

Action: Jon Lee: For review board to decide how the ongoing MODAF development be handled, and whether it should be noted in the Deskbooks (if at all). If a section is added to the introduction, the MODAF project really needs to have the governance processes in place to be able to handle ongoing user suggestions for modification.

Status: Open **Refer to Review Board**

Review Board: Action: MODAF Partners to add a section that directs users to where they can send comments and suggestions

Response: Action: Kathy Lamb to determine contact mechanism to which users can send these comments and suggestions

Page: 15 **Section:** Overview
Issue: Approach to mapping MODAF Views to ECC Processes

Category: Minor Editorial

Description: Should we mention the option of hybrid views here?

Evidence:

User's Proposed Solution: For consideration.

References:

Action: Jon Lee: Review board to decide where hybrid views should be mentioned in the MODAF documentation - where we cater for more experienced users. The proposed user audience of the Deskbooks would find hybrid views a 'concept to far' to grasp, but experienced users would find it useful. The current Deskbook cut-off point is at a less experienced user level. Should the Technical Handbook support more experienced users in this context?.

Status: Closed **Refer to Review Board**

Review Board Response: Action: MODAF Partners to include a short statement on hybrid views in Deskbook introduction

Page: 16
Issue: ECC Process

Section: Figure 4-1

Category: Minor Technical

Description: Are there any side branch activities that can be supported? e.g. COEIA?

Evidence: Look at Col workshop

User's Proposed Solution: Edit

References:

Action: Jon Lee: As per issue 48 - Review board to decide where we cater for more experienced users. The ECC community wish to keep the Deskbook at a high level, so branching out into specific activiites is currently not catered for.

Status: Closed **Refer to Review Board**

Review Board Response: No action. Has been registered and will be picked up in future stages

Page: 74
Issue: Appendix B

Section: Matrix

Category: Minor Technical

Description: Need a full one of these in the end for a view across all processes to be used by the management team

Evidence:

User's Proposed Solution: Discussion?

References:

Action: Jon Lee: View-Process matrix no-longer forms part of Deskbook Version 2.0 following DEC request to simplify the document. Review board to advise on whether this matrix is still a requirement

Status: Closed **Refer to Review Board**

Review Board Response: No action required. MODAF Partners have produced COI scope diagrams to integrate across the MODAf piece

Individual Issues

Not grouped with any other issues - each of these issues should be considered individually

Page:
Issue: BMS

Section:

Category: Major Editorial

Description: To determine what BMS process mapping approach should be -

Evidence:

User's Proposed Solution: BMS Process linkage could form an individual section in each Deskbook or could be a combined section held together in one place, e.g. Exec Summary/ Appendix

References:

Action: Jon Lee: As discussed in the integration meeting - 5 Jul - we need some guidance from the review board as to how to incorporate the BMS linkage.

Status: Closed **Refer to Review Board**

Review Board: Deskbooks will not contain linkage to BMS process for version 1.0

Response: Action: Acknowledge BMS in the Technical Handbook and Executive Summary

Page: **Section:**
Issue: Language style and mandation nature

Category: Major Editorial

Description: The first paragraph of section 2.1 contains language that I would expect to turn off most if not all military people. It would freak most engineers and almost all managers that I know. I would have assumed that the average ECC desk officer is an "intelligent layman" in systems engineering terms, and the language of the entire document should reflect this target audience. Further, the early part of the document and specifically page 14 refers to mandated views. I would suggest that it is inappropriate for the deskbook to mandate views: this is a policy issue that should be managed independently of the deskbook - Otherwise you will have to re-issue the deskbook every time the policy is changed. Also individual IPTs and communities of interest may wish to vary the level of mandation - this again will be difficult if local practice is at variance with an apparently authoritative document.

Evidence: What is the evidence for the issue: p5, 12, 14.

User's Proposed Solution: 1. Remove references to mandating throughout document. 2. Mandation should be managed centrally so that multiple documents do not need to be amended if the mandation policy changes. 2. Have a careful discussion with the target audience to see whether the language style on page 5 is a turn-off.

References:

Action: Jon Lee: Review board to recommend that there is need to make language in section 2 more 'simple', and to suggest an appropriate response to the comment that Deskbook should not be mandating views. (may also be worth considering Kathy comment on mandation here - issue)

Status: Closed **Refer to Review Board**

Review Board: Action: MODAF Partners are rationalising the introduction section to the Deskbook, to significantly simplify the content. The detail will be incorporated into the Executive Summary.

Response: Action: The terminology 'Mandated' will be changed to 'Essential', Recommended becomes 'Highly Desirable', Supportive becomes 'Desirable'. This enables mandation to be recommended by recommending that the Essential views are mandated.

Page:

Section:

Issue: Ownership of Products

Category: Minor Technical

Description: I suspect some of the early views should be owned cross-DECs - for example, the capability taxonomy. Some might be owned by a DEC, The later ones will be project specific and therefore have to be produced by the desk officer.

Evidence:

User's Proposed Solution: Include a recommendation in fig 3.1

References:

Action: Jon Lee: For the board to decide whether Deskbooks should identify the specific ownership of each view within the COI. Recommendation is that the requested level of ownership should not be attempted at this time, because it is something that the COI parties would best determine for themselves during MODAF implementation, having reflecting on the experiences of using MODAF views.

Status: Closed

Refer to Review Board

Review Board: Action: Core-DEC will take responsibility for cross-DEC issues.

Response: MODAF documentation can be revised in due course with more specific ownership of MODAF views within the community. When MODAF is implemented in earnest, a greater clarity of view use and ownership will be achieved - this is a 'to-be' situation that cannot be documented at this time.

Page: 5 **Section:** All
Issue: Foreword

Category: Minor Editorial
Description: Ensure that ECC Rep is chasing this so that it is produced on time

Evidence:

User's Proposed Solution: Review at MODAF Mgt Mtg

References:

Action: Jon Lee: Review board need to confirm that ECC representative is chasing the Foreword:

Status: Open **Refer to Review Board**

Review Board Response: Action: Kathy Lamb to write Foreword and forward for approval

Page: 9 **Section:** bottom of
Issue: Differentiate between Equipment Capability and Military Capability

Category: Major Technical

Description: "Development of new and improved military capability" One example is cited (in one document) where a distinction is needed between MODAF Equipment Capability (EC) and Smart Acquisition Military Capability (MC). Also affects StV-3 guidance (see discussion thread).

Evidence: Smart Acquisition Handbook (Ed.5 Jan. 2004) p.13 shows MC to be the contribution of all the LODs, and NOT JUST EQUIPMENT alone.

User's Proposed Solution: Explain early on that MODAF is dealing with EC (thereafter referred to as "capability") and that MC is delivered by all the LODs which MODAF does always cover (e.g. Sustainability).

References:

Action: Jon Lee: For board to decide whether it is o.k. for MODAF StV-3 to ignore other LODs, focussing on equipment capability only, and thus be different to StV-2 which would detail military capability. This may impact the meta-model - do we now need two capability data elements, equipment vs military?

Status: Closed **Refer to Review Board**

Review Board: Capability in the MODAF Strategic views StV-2,3,5 is Military Capability. StV-3 maps Military Capability to a single LOD - the system, system of systems.

Response: Action: Jon Lee/ Ian Bailey to add paragraph to Technical Handbook and Deskbooks that clarifies what is meant by 'capability'

Page: 20
Issue: Capability Audit

Section: EP View

Category: Minor Technical

Description: so will the MS Excel EP View need adapting for MODAF - question for Col / User Group

Evidence:

User's Proposed Solution: Edit

References:

Action: Jon Lee: Review board to determine message that should be communicated to COIs when BESPOKE tools that contain MODAF compliant views are not supported by a MODAF meta-model /XMI interoperability capability at this time. Should they be adapted?

Status: Closed **Refer to Review Board**

Review Board: Answer: Yes, the tools need adapting to incorporate the data elements and relationships of the MODAF meta-model to make the tools MODAF compliant

Response: Action: Jon Lee to ensure that the ECC Deskbook clarifies that the EP View isn't supported by the MODAF meta-model.

Page: 37 **Section:** Overview
Issue: ISTAR Worked Example Intro

Category: Major Editorial

Description: Surely we should introduce the AV1 and AV2 here?

Evidence:

User's Proposed Solution: Edit

References:

Action: Jon Lee: Review board to consider how AVs are used to detail the architecture - is the scope of an ECC architecture inline with the view set that forms a document e.g. URD? Or does it cover, say, one year of ECC process?

Status: Closed **Refer to Review Board**

Review Board: Action: Jon Lee to ensure ECC Deskbook introduces AV-1/2. Minimum use is that if you create an AV-1/2 when you generate an architecture , or to inherit the AV-1/2 from the previous architecture for update and modification.

Response:

Page: 49
Issue: Requirements Development

Section: Figure 5-20

Category: Major Editorial

Description: Check with COI but I would have thought there may be room for using the OV-4, or SV-9 / TV-2 combo at some point during the ECC Deskbook

Evidence:

User's Proposed Solution: For consideration.

References:

Action: Jon Lee: ECC review board representative to comment on use of OV-4, SV-9 and TV-2 in ECC processes.

Possible OV-4 uses? (1) stakeholder analysis in URD as per issue 49 (2) Operational Analysis (although covered by C&D Deskbook)

Status Closed **Refer to Review Board**

Review Board Action: Andy North to provide overview of these proposed views to Jon Lee; their use in the ECC community

Response: Action: Jon Lee to discuss use of these views with Carl Longley offline, and incorporate as appropriate.

Follow-up action:

OV-4: the organisational angle is being provided by StV-5 in capability option articulation - Jon Lee to incorporate StV-5 as a highly desirable view for capability option articulation - but to form part of DEC