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22.4(i)	Granta should write new UCDs for E-R-04, E-R-09, E-D-01 and E-I-05. These should be circulated to members ASAP.	Granta
22.4(ii)	There should then be a teleconference on 17 th December at 3pm UK, 4pm France, 10am Eastern time, 9am Central time, to discuss the new UCDs and confirm the voting procedure	Granta
23.3	The members were invited to comment on the scope of the RSDB	All
23.4	Wayne Ziegler will contact Carol Leblanc to look at the wider DoD needs for regulations to be included in the database	ARL
24.1	It would be useful to circulate guidance regarding the content of the member presentations	Granta
26.1	Members were asked to suggest other organizations that may like to join the Consortium	All
27.2	Christian Zimmermann to confirm next meeting at Astrium's offices in Toulouse France.	Astrium

MINUTES DAY 1 (WEDNESDAY 21 OCTOBER 2009)

CHAIR AMY NEAL

1 Introductions

- 1.1 Amy Neal took the chair and welcomed the Consortium to Emerson's offices at the Batelle Institute in Columbus, Ohio.
- 1.2 The members and observers introduced themselves. Wayne Ziegler from ARL is attending for the first time, supported by Carole Leblanc from OSD. Mark Bohley and Mike Gorelik from Honeywell are observers (MDMC members).
- 1.3 The Agenda was reviewed. There were no changes.

2 Minutes of meeting held on 20-22 April 2009 at Rolls Royce

- 2.1 The minutes of the meeting held at Rolls Royce from 20-22 April 2009 were reviewed and approved.
- 2.2 Minute 7.3: Completed.
- 2.3 Minute 11.6: Provision of generic articles in the Restricted Substances Database (RSDB) is under review by Granta.
- 2.4 Minute 11.7 and 11.8: These changes will be made to the RSDB prior to its release with MI 3.1 in December.
- 2.5 Minute 11.11: Members have been asked to provide case studies.
- 2.6 Minute 11.12: Completed
- 2.7 Minute 15.3: These items will be added to the Substance Declaration template prior to the MI3.1 release.
- 2.8 Minute 15.5: In progress
- 2.9 Minutes 20.1, 20.4: Completed.

3 Aims and Objectives, Software Development Process

- 3.1 David Cebon presented some background to the EMIT Consortium including its objectives, the technology development focus and the software development process.
- 3.2 David highlighted the other initiatives on Eco-design software, running concurrently with the EMIT project. The software and data systems developed by each project will be available to the other projects – so the activities are synergistic:
- (i) NASA – the 1-year ‘AMIS’ project is now finished. Further funding is not yet available, but the team is continuing to look for additional sources.
 - (ii) ‘STEPUP’ – a 4-year EU Framework 7 project on nano-filled polymer composites. This project started recently. It will involve development of Eco-Design tools.
 - (iii) ‘Samulet’ - a UK Technology Strategy Board (TSB) project with Rolls Royce concerned with development of software for Eco Audit, with a focus on processing. This project started recently.
- 3.3 David explained the software development process and schedule. Granta MI 3.1 is entering the final release phase. It includes quite a large amount of software development directed specifically at restricted substances management and reporting. Most of the planning for MI version 4.0 is completed with development about to start. Planning for MI Version 5.0 is underway and provides an opportunity for extensive input from EMIT members. All aspects of the restricted substances solution will be discussed during the current meeting.
- 3.4 The Software development process now incorporates a new type of document: Use Case Descriptions (UCD) that provide more detail on each of the use cases voted highly at the last meeting. Thirteen UCDs will be discussed at this meeting and voted after the meeting. These UCDs apply to version 5 of the software. They are at the ‘Discuss’ stage, when there is the opportunity to review and enhance them and to persuade other members of the importance of various use cases.
- 3.5 Key aims of this meeting are:
- (i) To enhance the Restricted Substances system to fully-working status, suitable for implementation by the members.
 - (ii) To *preview* the Granta MI 3.1 release (Q4, 2009)
 - (iii) To *report* on the development of the MI 4.0 (Release Q2, 2010)
 - (iv) To *review* functionality for MI 5.0 (Release Q2, 2011)

4 Member Presentation, Eurocopter

- 4.1 Lauren Arnould gave a presentation on the activities at Eurocopter on environmental issues since the last meeting:
- (i) Creating a declarable substance list with 170 substances and a timetable focusing on obsolescence planning and new qualifications
 - Priority 1 ECHA- 2010 (7)
 - Priority 2 AFFSETS2 2011 (+ 89)
 - Priority 3 ECPDSL (+ 64)

- (ii) Defining the specification of a Global Reach Tool
 - To validate all substitutions technologies by experts (including their TRLs)
 - To have a design office language (standards, protection codes against corrosion)
 - To select the best substitution preparations, linked with Granta Material Database - Need for a performance data synopsis
 - To provide a user-friendly tool for designers to select new green alternative technologies,
 - To develop a specification for a single (global) integrated tool
- (iii) Defining further 'must have' requirements
 - Carbon footprinting / LCA is needed as soon as possible. EC is evaluating Gabi (version 4) for end users and Eco Selector (Eco Audit) for subcontractors or SMEs.
 - Rules and procedures for dismantling and recycling for future work with selection. They need to consider recovering composites as well as metallic components, also separate mixed metal/composites.

5 Member Presentation, ARL

- 5.1 Wayne Ziegler introduced himself and activities at ARL. The main focus of the project is managing material Information. The environmental aspects are of secondary interest to the Army but are one of Wayne's key priorities.
- 5.2 Wayne described the lifecycle of Army materials data and the need for Information management tools. There is a need for an Army solution (covering water and air systems, as well as land) and a solution across all three services.
- 5.3 A Materials Selection and Analysis Tool (MSAT) is being developed in conjunction with NASA. The restricted materials component is concerned with logistics, compliance and sustainability. This interest comes from both sourcing and fielding.
- 5.4 The main issues looking forward are:
 - Single source – integrate with existing data source
 - Track material to components through acquisition cycle
 - Investigate restricted materials use
 - Target implementation strategies

6 Observer Presentation, Honeywell

- 6.1 Mark Bohley reviewed activities on REACH at Honeywell
 - Honeywell is reviewing Bills of Parts...BoMs are not complete or available
 - Honeywell has highlighted the difference between generic and more specific material grades and see the EMIT system as being able to help with this.
- 6.2 Important issues that have been identified are:
 - MSDS sheets tend to call out substances according to the local region – eg OSHA in the USA. This means that they are not a reliable source of information for regulations in other regions.
 - Companies are tending to remove restricted substances from their products without notice: so substances databases may go out of date rapidly.
 - There are significant differences between the compositions of uncured and cured products. MSDSs specify the composition of the uncured product and so are inaccurate for describing the product delivered to customers.

7 MI 4.0 MSDP Report

7.1 David Cebon reviewed the contents Granta MI3.0 (released in August 2009), MI3.1 (due Dec 2009) and MI 4.0 (due Q2 2010). He highlighted the features that have been driven by the requirements of the EMIT consortium. Decisions about the contents of each release are based on the requirements of the three Consortia (MDMC, EMIT and Mat Strat), other externally funded projects (TSB, EU) and customer projects. See presentation for details.

7.2 Granta MI 4.0, should include:

- Enhancements to 'Tabular Data'. This is central to the ability to roll-up the effects of legislation across substances, materials and components.
- The data updater (Use Case E-M-02). This is needed to facilitate quarterly updates of the RSDB
- Eco Audit (E-R-08) – Central to work at Emerson and Eurocopter and needed by the STEPUP and Samulet projects.
- User notifications (E-A-01) - Needed so that users can subscribe to changes to the database (e.g. changes to regulations) and then be notified on a specified basis.

7.3 Granta MI 5.0 for Q2, 2011 is not yet specified. EMIT use cases for MI5.0 will be a focus of the discussion over the next two days.

8 Member Presentation, NASA MSFC

8.1 Marceia Clark-Ingram presented a discussion of work on materials obsolescence at NASA. Key regulatory drivers for NASA are:

- USA Clean Air Act Amendments
- Clean Water Act, OSHA
- Executive Order 13514
- National Ambient Air Quality Standards
- Europe: Montreal Protocol, REACH, Restrictions (particularly Lead-free electronics, brominated flame retardants) on hazardous substances.

8.2 NASA has many facilities and centers across the USA. Each location can have different regulatory and manufacturing challenges that impact selection and use of materials and processes. Many components are manufactured in more than one state and by more than one contractor.

8.3 Major obsolescence issues have been:

- HCFC 141b (blowing agent in thermal protection systems)
- Trichloroethane (TCA) critical bonding processes
- Heavy metals – Lead, Hex Chrome, Cd
- Lead-free electronics – tin whiskers
- Brominated flame retardants
- Perfluorooctanoic acid (PFOA)

8.4 The mitigation planning is both short term (stock piling, exemptions) and long term (green design, avoid ozone depleters, perform risk assessment, prioritize material replacement efforts, evaluate available alternatives).

8.5 There are several centres for NASA expertise including Environmental Management Centre, Materials and Process Laboratories, RRAC, SEA and TEERM.

9 Software Demonstration MI 3.1

9.1 Alexandre Faget presented key new functionality in Granta MI 3.1:

- Tabular data
- Supplier declaration workflow
- Reach Article 33 reports for In-house parts and Bought-in parts

9.2 Alex demonstrated tabular data and explained how the roll-up procedure works. There was discussion of how superseded regulations are presented in the tables. A rating of N/A would be better than a dash '—'. Alex also demonstrated user 'Profiles'. These are predefined sets of table subsets and layouts that affect the tabular data roll-ups.

9.3 Alex showed how a supplier declaration form can be generated from a list of substances in the database and how completed declarations can be imported.

9.4 Alex also demonstrated how to read a BoM report into Granta MI and how to generate a REACH Article 33 report.

DAY 2 (THURSDAY 22 OCTOBER 2009)

CHAIR DENNIS GRIFFIN

10 MI 5.0 MSDP Review - I

10.1 David Cebon began the process of reviewing the Use Case Descriptions (UCDs). These were circulated to members before the meeting. Each Use Case was described and the workflow steps summarized.

10.2 Use case E-R-06 'Find substances across all products'

- (i) No changes made to UCD
- (ii) An additional requirement proposed by NASA for an XML file that can be used by an external system (e.g. ERP etc for substance roll-up) is covered existing tools in MIViewer.

10.3 Use case E-S-02 'Substance Substitution'

- (i) This use case is intended to give guidance on alternative substances. Specialist input is needed on the actual substitution. Eurocopter is developing a substitution list for substances that are becoming obsolete.
- (ii) The ability to flag an official substitute was added as an additional workflow step in the UCD: "Where a substance has been officially approved (in-house) for substitution in-this application, this should be flagged."

10.4 Use case E-S-03 'Material substitution'

- (i) Two additional workflow steps were added:
 - 'Optionally look for alternatives in other databases'
 - 'Ideally show application pedigree / typical uses of possible substitutes.'

10.5 Use case E-R-07 'Find substances used to manufacture a specified product'

- (ii) No changes made to the UCD
- (iii) It was noted that E-C-05 is a pre-requisite of this Use Case.

10.6 Use case E-C-05 ‘Assign processes to components’

- No changes made to the UCD

11 Restricted Substances Database

11.1 Andrew Miller gave a presentation about the RSDB. Since the last meeting, the main developments have been:

- The database has been updated to MI version 3 functionality, particularly tabular data
- All legislation has been checked. Granta has hired an external expert to make an independent check on the substances and legislation. Granta has also made extensive internal checking and testing.
- All regulations have been updated, and particularly all of the REACH regulations
- Some case studies have been developed and tested.

11.2 Andrew summarized the main changes to the contents of the database:

- Revised legislation table and subsets
- Revised contents of the substances records (this has been reduced from the original version)
- Changes to material records

11.3 Kim Marshall summarized the revised definitions of substance ratings as shown in the table below

Banned	Specifically bans use of material/chemical
Banned with Exemptions	Specifically bans use of material/chemical, except in certain exempt applications. Includes legislations that state a substance is banned for particular applications.
To be Phased Out	Sets a deadline for the removal of substances from the market. Only legislation which specifies phase out dates falls into this category.
Regulated	Places controls on the use and marketing of substances.
Caution	Instruments of change other than law or regulation which affect substances in process or production materials. E.g. international treaties, and voluntary industry standards.
Unregulated/ Unrated	Listed in the RSDB for other reasons and may be outside the scope of legislation affecting substances in production and processing materials. Includes legislation that is provided for reference purposes

11.4 Kim showed the new regulations that have been added, in particular, the new REACH records. She also showed the new mechanisms for handling superseded regulations and not-applicable regulations (e.g. those for safe use or labeling of chemicals). These are retained in the database, but do not have substance ratings set.

11.5 Marceia Clark-Ingram commented that some of the NESHAP regulations that have been ‘de-rated’ are applicable. She offered to provide a list of all applicable NESHAP regulations.

(ACTION: Marceia Clark-Ingram)

11.6 Members were asked to check the definitions of the substance ratings (Minute 11.5) and to check the legislation that has been excluded (Minute 11.6). Granta will send out detailed information for checking.

(ACTION: Granta, All)

11.7 Amy Neal pointed out that the terminology used for exemptions should be improved. There is a difference between ‘Restricted Use’ (e.g. “cannot be used for children’s toys”), and ‘Exemptions’, where specific companies or industry sectors are exempt from the regulations for a specified time period. An example of this is RoHS. Granta will review this aspect of the database

(ACTION: Granta)

- 11.8 There was discussion of the restricted uses in REACH Annex 17, which cover a wide range of substances and reasons. It was concluded that for this, and other regulations that cover many different restrictions, it would be better to divide the legislation record into smaller groups of applications or materials, so that individual groups can be included in the subset/profile or not. Granta will review this aspect of the database. (ACTION: Granta)
- 11.9 It would be desirable to improve the method for finding out the reason for exemptions. At present it is necessary to search the text of the legislation. One way to improve this would be to link the text of the exemption to the word 'Yes' in the tabular data. Granta will review the options. The methods for companies to add company-specific exemptions should also be reviewed. (ACTION: Granta)
- 11.10 Andrew demonstrated a case study a wiring harness, developed by the external consultant.
- 11.11 The members were asked to provide further use cases. (ACTION: All)
- 11.12 Amy noted the need to run a REACH report according to the legislation applicable at a previous date, so as to show that a particular article was compliant at that date. This use case was added to the list of use cases: E-R-09 'Historical BoM Report.'

12 CAD/CAE/PLM Integration (E-C-01, E-C-02a)

- 12.1 Arthur Fairfull presented a discussion of the implanted client functionality. He explained progress in this area over the past 6 months.
- 12.2 A comprehensive range of underlying web services has been created as a basis for scalable implanted client technology.
- 12.3 The first release of the Pro/Engineer plug-in is expected at the end of 2009.
- 12.4 Arthur demonstrated the Pro/E implanted client for a simple solid model of a cam-follower mechanism. He showed the current capabilities:
- Browsing and searching for materials
 - Assigning materials to parts
 - Importing material properties onto the parts (for FE Analysis)
 - User favourites
 - Report generation for an assembly or BoM, for example REACH reports.
- 12.5 Arthur re-capped the short-list of 12 software systems currently planned for implanted clients. Current active projects are Pro/E; Abaqus CAE and Teamcenter. Future projects are up for discussion and prioritization by the three consortia.
- 12.6 Members who are interested in having a materials plug-in for CATIA V5 were asked to provide letters of support to Granta. (ACTION: Astrium, Eurocopter)
- 12.7 Arthur discussed UCD E-C-02. 'Implanted clients for specified CAD/CAE/PLM systems'. There were no changes.
- 12.8 Arthur discussed UCD E-C-06 'Connection with ERP systems'. There is a need for ERP systems to be able to obtain declaration information for a multitude of bought-in components. It will be necessary to define the boundaries of the Granta MI solution in this area.
- (i) It is necessary for the report generator to include components that do not have materials assigned. (ACTION: Granta)

- (ii) Honeywell has many different material code numbers in use across its divisions (eg 127 different internal codes for 6061 alloys across 3/27 sites.) Some form of Material ID translation software is needed. David Cebon noted that this is on the list of Use Cases (E-R-04), but received a low prioritization vote in June 2009.
- (iii) It was agreed that at some point in time it would be useful to break out the UCDs for CAD/CAE/PLM and ERP, and also to prioritize these UCDs separately.

12.9 Members were asked to comment on the existing implanted client system. (ACTION: All)

13 MI 5.0 MSDP Review - II

13.1 The remaining Use Case Descriptions were reviewed.

13.2 Use Case E-R-02 'REACH Article 33 Report' Two additions were made to the UCD

- (i) Where declaration data is not available for a component, it would be useful to assess whether making the entire component from one of the SVHCs would push the assembly/article ('spareable item') over the 0.1% limit for that substance.
- (ii) Ideally a 'data fidelity' score could be calculated based on: (a) the percentage of declaration data available for the article and (b) the quality of the declaration data, as assessed by some quality score information.'

13.3 Use Case E-I-03 'Connect to external substances databases'

- (i) The workflow section was clarified.

13.4 Use Case E-I-04 'Check accuracy of supplier declarations'

- (i) 'Smart checks' were added... is the substance consistent with the application?... eg is it part of a polymer additive package?

13.5 Use Case E-A-01 'Alert users of potential substance obsolescence'

- (i) This use case is shared with MDMC.
- (ii) Two of the open questions in Section 4 were answered. It was agreed that it should be sufficient to subscribe to 'all changes', but the notifications should tell user what changes were made – e.g. data added/deleted, etc It was also considered desirable to send notifications to implanted client users.

14 Site Visit

14.1 The members were treated to a fascinating visit to some of the Battelle Materials Research facilities.

15 Member Presentation, Astrium

15.1 Christian Zimmermann gave a presentation about activities at Astrium. Astrium is divided into 3 separate companies: Satellites, Space Transport and Services; these are sited across Western Europe.

15.2 Christian described the REACH reporting process at Astrium, which is currently based on SAP. The main objectives are to be REACH compliant and to anticipate material obsolescence.

- 15.3 Key questions concern the supplier declaration process and tracking materials used in house for parts manufacture, in assembly integration and testing and in non-flight hardware. ITAR is a concern – because US suppliers of equipment will not provide supplier declarations.
- 15.4 Christian described the list of tasks needed at Astrium to comply with REACH; for other restricted substance regulations other than REACH; and for the Astrium Materials Database ‘AMDB’.

16 Member Presentation, NPL

- 16.1 Graham Sims gave a presentation on sustainability and described the wide range of database activities at NPL. A new doctoral researcher at NPL will be concerned with sustainability and materials substitution. Graham invited the members to provide case studies.
- 16.2 The British Standards Institute (BSI) is working on standards for sustainability, greenhouse gas management, renewable energy sources, etc. It is setting up new standards activity for the sustainable use of materials. Graham also described the VAMAS G16 Initiative) www.vamas.org) and TSB UK strategy paper on sustainability which emphasizes materials aspects such as reduced use, avoidance of scarce or REACH materials. ..

17 Supplier Declarations (E-I-02, E-I-04)

- 17.1 Ben Henrie led a discussion on the supplier declaration process.
- 17.2 Emerson has found an in-house-developed internet portal to be a better solution for supplier declarations than circulating template files to their 27,000 suppliers for 1million parts:
- An important feature is the ability to deal with product families easily.
 - The supplier parts are pre-populated.
 - The suppliers sign the forms electronically.
- 17.3 Eurocopter has begun asking suppliers for declarations. The objective is to have a common portal for all of EADS. Much of a helicopter is bought-in. All new contracts will have requirements to provide declarations. US suppliers are not cooperative with declaration requests.
- 17.4 Emerson is concerned that CAS numbers cannot be checked easily and therefore supplier declarations can be invalid. The Chemical Abstracts Service charges \$30 for each check. The checksum built-into the CAS number is not sufficient to ensure that the correct number has been entered.
- 17.5 There was no change to UCD E-I-02 ‘Supplier declaration process - phase 2’
- 17.6 It was concluded that a new UCD should be written to discuss the provision of a company portal using Granta MI, so that suppliers could enter their declaration data directly into the database.
(ACTION: Granta)

18 Member Presentation, Rolls Royce

- 18.1 Tom Searles gave a member presentation for REACH work at RR.
- 18.2 RR is not worried about consumables, because these are covered by the existing MSDS system. RR designed parts are also less of a problem. The main concern is with design-and-make parts and bought-in parts. RR will ideally use a portal for supplier declarations. This should ideally be connected to RR’s existing global supplier portal.
- 18.3 The procurement process for IT tools for REACH is proceeding, with vendor demonstrations next week and an objective to get up-and-running during 2010.

19 Member Presentation, Emerson

- 19.1 There was no formal member presentation from Emerson (see presentation for Open Workshop). The following specific issues were raised during other sessions.
- 19.2 Emerson believes that full material declaration by suppliers is the only way forward because of the need to repeat the process frequently. It will be impossible to get full disclosure for all products, but there is a 'due diligence' defense. About 6% of Emerson parts have SVHCs.
- 19.3 Emerson has implemented a supplier declaration portal... see 17.2.
- 19.4 Emerson is concerned about the energy use of their products, particularly as affected by the (rapidly developing) EuP legislation.
 - (i) They have investigated LCA tools, but found these to be too cumbersome for product development purposes.
 - (ii) They have begun to develop a database containing carbon footprint analyses of their products using Granta's Eco-Audit tool.
 - (iii) Emerson consider the Granata eco-data are the best available.

20 MI 4.0 SFDP Discuss

- 20.1 The members did not have any specific small features to put forward for Granta MI 4.0.
- 20.2 David Cebon noted that there are already quite a few small features needed for restricted substances functionality in MI 4.0. These are for finishing off functionality that has been released in MI 3.1 (eg a number of details of tabular data), and completing high priority features for EMIT member demonstration projects.

MINUTES DAY 3 (FRIDAY 23 OCTOBER 2009)

CHAIR GRAHAM SIMS

21 Preliminaries

- 21.1 Bob Rivett joined the meeting.
- 21.2 The Chairman thanked Granta Design for the hospitality at the EMIT dinner the previous evening.

22 Clarification of Voting Process for MI 5.0 MFDP.

- 22.1 David Cebon requested any further comments on the UCDs that were circulated prior to the meeting. No points were raised, all having been discussed earlier in the meeting.
- 22.2 As a consequence of Honeywell's presentation (Minute 12.8(ii)): there was discussion of the use case E-R-04 'Material ID Translation': David noted that this Use Case didn't receive much support at the most recent prioritization vote in June and so a UCD wasn't written. The possibility of adding an ID translation table to the BoM spreadsheet tool was proposed as a possible solution.

- 22.3 David noted that three other use cases have been captured (and added to the Use Cases Spreadsheet) during this meeting:
- (i) E-R-09 ‘Historical BoM report’
 - (ii) E-D-01 ‘Reasons for exemptions’
 - (iii) E-I-05 ‘Supplier Declaration Portal’
- 22.4 There was discussion of whether or not to vote on these new Use Cases in the post-meeting prioritization and whether additional UCDs should be prepared. It was agreed that:
- (i) Granta should write new UCDs for E-R-04, E-R-09, E-D-01 and E-I-05. These should be circulated to members ASAP.
 - (ii) There should then be a teleconference on 17th December at 3pm UK, 4pm France, 10am Eastern time, 9am Central time, to discuss the new UCDs and confirm the voting procedure
 - (iii) The members should vote after the teleconference on all of the UCDs
 - (iv) Voting should proceed in the same way as last time – namely each company should assign votes of 1, 2, 3... 10 and the votes for each item simply added to give the final priority order
(ACTION: Granta, All)

23 Prioritization of Database Development

- 23.1 Database development over the last six months has concentrated on improving the quality of the existing information and bringing it up to date, rather than adding new legislation and substances.
- 23.2 David noted that several items of legislation have been added to the database prioritization spreadsheet since the vote in June and at the meeting as follows.
- (i) Eurocopter added AFFSET2 (French), BAUA, and IEC 62474.
 - (ii) MASCO would like to include Consumer Product Safety Improvement Act, California Proposition 65, California Green Chemistry initiative,
 - (iii) Additional NESHAP regulations will be added as a consequence of minute 11.5 above.
- 23.3 It was noted that the planned scope of the database is confined to regulations that affect the use of substances in materials and manufacturing processes. A definition of regulations to be included in the database is indicated below. The members were invited to comment on this definition. (ACTION: All)

Scope of the RSDB: Legislation, regulations, international treaties and industry standards that apply to the use of substances within materials and preparations or manufacturing processes. Legislation which applies controls on the handling, safe use, storage and labelling of chemicals and emergency response planning is considered to be outside of the scope of the RSDB , however it may be included in the RSDB for reference purposes, but is not given a rating.

- 23.4 Wayne Ziegler agreed to contact Carol Leblanc to look at the wider DoD needs for regulations to be included in the database. (ACTION: Wayne Ziegler)

24 Review of Meeting

24.1 There was a review of the meeting. The members were generally happy with the overall format.

- The middle day was very long. It would be preferable to run 8am-5pm, rather than 8-6.
- It would be good to schedule more discussion / open networking time into the agenda, or coffee breaks could be scheduled to be longer.
- The balance of member presentations to Granta presentations, etc is about right.
- The focus of member presentations should continue to be about what has been tried and experience gained: what worked and what didn't work; and what features are really needed. It would be useful to circulate guidance regarding the content of the member presentations
(ACTION: Granta)

25 Chairman for the next year

25.1 Dennis Griffin agreed to be Chairman of the EMIT Consortium for 2009/2010 and was unanimously elected. This term will run from the end of this meeting until the end of the Fall 2010 meeting.

26 Recruitment

26.1 Members were asked to suggest other organizations that may like to join the Consortium
(ACTION: All)

27 Future Meetings and Teleconferences

27.1 There will be a teleconference on **17th December at 3pm UK, 4pm France, 10am US Eastern time, 9am Central time.**

27.2 It was agreed to hold the next EMIT meeting on **14- 16 April, 2010**. Christian Zimmermann offered Astrium's Offices in Toulouse France. He will confirm that this is possible.

Post meeting note – Christian has confirmed date and venue (ACTION: Astrium)

27.3 Dennis Griffin offered to host the following meeting at NASA Marshall Space Flight Center in Huntsville Alabama, from **6-8 Oct 2010**.

28 Any other business

28.1 There was no other business.

28.2 Amy Neal and Bob Rivett were thanked for hosting the meeting.

28.3 The meeting was closed at 10.30am

DC, GS
5 November 2009