Environmental Materials Information Technology (EMIT) Consortium

Minutes of Steering Committee Teleconference

April 21, 22, 2010

ATTENDANCE

Members

Emerson Electric	Amy Neal
Eurocopter	Lauren Arnould, Nicolas Capelle
Granta Design Limited	David Cebon, Will Martin, Kim Marshall, Arthur Fairfull
Honeywell	Mark Bohley
NASA Marshall Space Flight Center	Ben Henrie, Marceia Clark-Ingram, Dennis Griffin
National Physical Laboratory (NPL)	Graham Sims
Rolls Royce	Andy Clifton
ARL	Wayne Ziegler

Apologies

EADS Astrium	Christian Zimmerman
Eurocopter	Jean-Marc Berthier
Rolls Royce	Andy Page, Mike Clarke

SUMMARY OF ACTIONS

Minute	Action	Responsible
2.2	The members were asked to provide further use cases for substance content of articles.	All
2.3	It would be useful to circulate guidance regarding the content of the member presentations	Granta
2.4	Members were asked to suggest other organizations that may like to join the Consortium	All
4.2(iii)	It would be useful for the BoM and EcoAudit report to include part numbers, 'parent' part numbers and drawing numbers for tracking purposes.	Granta
4.3(ii)	Check whether an e-mail notification for changes in the Watch List can be included in MI 4.1.	Granta
5.4 (ii)	Check whether NASA data could be shared with EMIT members	NASA, Granta
5.4 (iii)	To discuss (in Denver) whether Honeywell has data that can be shared with EMIT members	Honeywell, Granta
5.4 (iv)	Check availability and usefulness of Kaye and Laby Tables of Physical and Chemical constants to add to EMIT MI database.	NPL, Granta
5.5	To organize a members vote on database priorities (see 5.2)	Granta
6.3	Consider adding a BoM converter into the workflow for E-R-06	Granta
7.2(i)	Check whether EMIT members need capabilities for generating REACH Notification reports	Granta
8.4	Future EMIT Agenda item: sharing declaration information between EMIT members.	Granta

9.3	Investigate 'PCN Alert' in the context of evaluating business risk due to undocumented material reformulation.	Granta
9.4	Granta and RR to discuss ideas for evaluating business risk	RR, Granta
9.5	Granta and NPL to provide a structure for brainstorming further use cases	NPL, Granta
10.2(iii)	Develop UCDs for database projects and circulate before next meeting	Granta
10.3	Propose additions to the legislation voting list by 7th May	All
11.1	Organize Webex for 19th May (16.00 UK time)	Granta

MINUTES DAY 1 (WEDNESDAY 21 APRIL 2010)

CHAIR DAVID CEBON

1 Introductions

1.1 David Cebon took the chair and welcomed the Consortium to the teleconference, which is being held due to travel problems caused by the Iceland Volcano.

1.2 The members and observers introduced themselves.

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 Emerson Electric's office in Columbus from 20-23 October 2010 were reviewed and approved.

2.2 Minute 11.11, meeting of April 2009: The members were asked to provide further use cases for substance content of articles. (ACTION: All)

2.3 Minute 24.1, meeting of April 2009: It would be useful to circulate guidance regarding the content of the member presentations (ACTION: Granta)

2.4 Minute 26.1, meeting of April 2009: Members were asked to suggest other organizations that may like to join the Consortium (ACTION: All)

2.5 Minute 23.4, Meeting of April 2009: Wayne Ziegler and the NASA Marshall team have arranged a set of three workshops on restricted substances at NASA, the DoD and the Aerospace Industries Association (AIA). There will be a combined workshop in June to review the findings and discuss joint activities and priorities. Dennis Griffin pointed out that this initiative was sparked by the EMIT activities.

3 Aims and Objectives, Software Development Process

3.1 David Cebon reviewed the software development process and schedule. Granta MI 4.0 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 5.0 is completed with development about to start. Planning for MI Version 6.0 will begin soon and provides an opportunity for extensive input from EMIT members. All aspects of the restricted substances solution will be discussed during the current meeting.

3.2 Key aims of this meeting are:

(i) Focus on system 'power':
- Optimizing input and output capabilities
- Leveraging the right data with the right tools
- Refining the existing tools to maximize ROI.

(ii) *Preview* MI 4.0 (Release Q2, 2010)

(iii) *Report* Major Software Development Projects (MSDPs) for MI 5.0 (Release Q2, 2011): Refine three software requirements documents (SRDs).

(iv) *Discuss* MSDPs for MI 6.0 (Release Q2, 2012): Compile new Use Cases, prior to a prioritization vote.

4 MI 4.0 MSDP Preview

4.1 David Cebon previewed the major features in MI 4.0, to be released in the next month or so.

4.2 *Planned for MI 4.0.* The following is the status of the EMIT software features that were planned for inclusion in MI4.0:

(i) Assigning Processes to components. This has been completed for BoMs in files that are uploaded into MI Viewer. Process assignment in the MI Gateway (CAD and PLM systems) will be completed in MI 4.1, due for release in Q3, 2010.

(ii) Process substance reporting. The software will be completed in MI 4.1. NB a major data project is needed to collect 'where-used' data for process substances, before this reporting can be used effectively with the ProcessUniverse database.

(iii) Eco Audit. The Eco Audit tool is partially complete. Energy and CO2 can be calculated for the material, processing and transport phases for a file upload. Energy for the Use and End of Life phases will be added in MI 4.1 (Q3, 2010). The whole Eco Audit tool will run in MI Gateway (CAD & PLM) in the MI 4.1 release. Dennis Griffin noted that it would be useful for the BoM and EcoAudit report to include part numbers, 'parent' part numbers and drawing numbers for tracking purposes. (ACTION: Granta)

(iv) Database Updater – complete.

4.3 *Prioritized for MI 5.0 and completed in MI 4.0.* The following items have been developed in MI 4.0, having been prioritized by the EMIT members for development in MI 5.0. This is because their development has been pushed forwards by the Material Strategy Consortium and the MDMC respectively:

(i) Material Substitution. The first version of a material substitution tool has been completed. This enables users to find materials with the nearest match to the property profile of a reference material, subject to constraints such as 'not banned' or 'strength > X'.

(ii) User Notifications. The first version of a user notifications tool has been completed. The user specifies which records/folders/tables he would like to 'watch' and the system provides a message in his 'in-box' in the database when any 'watched' entity changes.

Ben Henrie noted it is very important for the watch system to email the change messages to users. David Cebon noted that this functionality will be added in a future release. He will find out whether it can be included in MI 4.1. (ACTION: Granta)

5 Restricted Substances Database (strategy, contents, priorities)

5.1 Will Martin gave a presentation on development of the restricted substances database. He began by examining the data requirements of various Use Cases in MI 3.x, 4.x, 5.x and some Use Cases not yet scheduled.

5.2 Will presented a set of possible data projects

(i) Bulk Materials – polymers, metals, etc
(ii) Coatings (this project is largely in-hand, in collaboration with Rowan Technology)
(iii) Adhesives
(iv) Process fluids
(v) Device working fluids
(vi) Additional substance attributes – extending data to physical and chemical properties
(vii) Additional Legislation

For each project he described the scope of entities; the EMIT Use Cases involved; possible sources of data and the current status of the project.

5.3 Based on January 10 voting current work on item (vii) 'Additional Legislation' includes adding

- JIG Joint Industry Guide (Material Composition Declaration for Electronic Products)
- Toxic Substances Control Act containing a TSCA inventory (specifically, Section 6 - chlorofluorocarbons in aerosols, asbestos, certain substances in metalworking fluids and polychlorinated biphenyls)
- GADSL (Global Automotive Declarable Substance List)
- AFSSET List

5.4 Members made the following comments:

(i) Emerson: Amy Neal pointed out that these are massive projects. It will be worth doing them if the data can be obtained easily. The tools would provide a 'compass' for tackling restricted substances issues. Amy noted that Emerson's discussions with EU officials have revealed that 100 SVHCs are expected to be on the REACH Candidate List by 2012 and up to 1200 CMRs to be on the Candidate List by 2020. This makes it very important to have tools to guide obsolescence planning and risk management. Emerson's top priority projects are probably process fluids and coatings.

(ii) NASA: Dennis Griffin and Marceia Clark-Ingram noted that the top priority projects for NASA are probably process fluids and coatings. NASA has 'chemical fingerprinting' data for off-gasing of VoCs from 15,000 non-metals at 120 degF, (CAS Number and percentage composition data is stored). Some of this data could possibly be shared with EMIT members, though its availability depends on the prime contractor for whom it was developed. NASA and Granta to discuss. (ACTION: Granta, NASA)

(iii) Honeywell: Mark Bohley noted that it is very important to be able to assess directions of changes. He also noted that process fluids are more important than they had previously recognized… for example Boric Acid is used as a buffer in electro-plating with Nickel Alloys. Its obsolescence could have a strong effect on business. Honeywell may have some data that can be shared with EMIT members. Granta and Honeywell to discuss in Denver in June. (ACTION: Granta, Honeywell)

(iv) NPL: Graham Sims noted that NPL has copyright for the Kaye and Laby tables of physical and chemical constants. This could possibly be made available. (ACTION: Granta, NPL)

(v) Eurocopter: Lauren Arnould noted that process fluids, adhesives and coatings are probably the most important for Eurocopter.

(vi) Army: Wayne Ziegler noted that this data development is the right thing to do and would make a much more powerful system.

5.5 There was a brief discussion of the planned approach to the IMDS steering committee to obtain 'where-used' information.

5.6 There will be a vote to prioritize these projects after the meeting. (ACTION: Granta)

6 MI 5.0 MSDP SRD 'Find Substances across all products' (E-R-06)

6.1 Kim Marshall presented the SRD on finding substances across all products. (The full SRD E-R-06 was circulated last week.)

6.2 The main workflow involves:

(i) Building a folder containing a set of BoMs
(ii) Specifying the substance of interest
(iii) Pointing the report generator at the target directory
(iv) Running an off-line reporting process to calculate the 'where-used' information

6.3 The members commented that bringing BoMs into a standard form across the enterprise will be challenging. It may be worthwhile adding a BoM converter into the workflow. (ACTION: Granta)

7 MI 5.0 MSDP SRD 'Substance declaration and reporting workflow' (E-W-01)

7.1 Will Martin presented a new SRD on substance declaration and reporting. This is intended to enhance the power of the system: make it more flexible, tolerant to lack of supplier data and more accurate. The aim is to extend functionality delivered by UCD E-R-02 'Article 33 REACH Reports' and to improve capability and flexibility of substance declaration workflow.

7.2 The main requirement proposed in the SRD are:

(i) REACH Notification reports: These are required if a supplier is to import more than 1 tonne of a substance into Europe, where it has not previously been registered for that application. From the discussion, it is not clear whether EMIT members want this capability or not. Granta will contact individual members individually and check. (ACTION: Granta)

(ii) Provide a variety of declaration types:

- A Does contain / does not contain
- B More than or less than 0.1%,
- C Discrete levels (<0.1%; 0.1-0.3%; 0.3-1%; 1-3%; 3-10%; 10-30%; 30-100%)
- D Continuous scale (exact % reported)
- E Industry standard IPC 175, ASD/SAE 9535

(iii) Provide a self declaration against an unreported material or article using the Materials Universe. This would enable a user to either (a) complete a conventional declaration form for a part or (b) specify the material (from the MaterialUniverse).

(iv) Apply a declaration sourced from a commercial database. Obtain declarations for standard parts from commercial subscription databases like 1Source, BoMCheck or IMDS; or from an internal compliance tool like SAP EH&S or PTC Insight. Mark Bohley noted that sometimes there can be conflicting data in two different products and these need to be resolved.

(v) Increased precision of REACH 33 report: By making use of 'where-used' information for substances and maximum percentages, it should be possible to maximize the precision of reports in the cases where no supplier declaration exists. It was generally thought that this capability would be very useful for guiding users to likely locations of substances in products.

(vi) Generate reports in industry standard formats (e.g. IPC 175, ASD/SAE 9535 etc), so that outputs from the system can be used for making declarations to customers.

7.3 It was decided that this list of features should be separately prioritized as small features for MI 5.0 and developed as needed.

8 MI 5.0 MSDP SRD 'Supplier Declaration Portal' (E-I-05)

8.1 David Cebon presented the SRD 'Supplier Declaration Portal' (E-I-05). The Portal is a version of the MI restricted substances database that is generated by copying components of the corporate MI Restricted substances database onto a separate server in the customer's DMZ. Suppliers log in to the portal and enter declaration information. This information is then periodically uploaded into the main corporate substances database.

8.2 The functionality in the SRD was generally considered to be correct. The need for the supplier's software interface to be simple and clear was highlighted.

8.3 The issue of more than one supplier providing a declaration for a standard component was discussed. It was thought best for each supplier's version of the component to have its own declaration record and for the compliance report generated by the system to report the worst case of all available declaration information for the component.

8.4 It was generally thought worthwhile exploring the possibility of sharing declaration information between EMIT members, particularly for components with industry standard part numbers – and possibly having a single EMIT group declaration portal. This should be discussed at a future meeting when the portal functionality is available. (ACTION: Granta)

9 MI 6.0 MSDP Discussion of Use Cases

9.1 David Cebon described the updated Use Cases spreadsheet. There has been a slight reorganization and two additional use cases have been added:

(i) E-W-01 'Substance declaration and reporting workflow' – discussed in item 7 above.

(ii) E-B-01 'Tools to evaluate business risk'. This highlights five separate business risks identified by Andy Page of Rolls-Royce.

- Uncontrolled reformulation by suppliers
- Suppliers electing to stop supply
- Inadequate funding for developing replacement substances
- SMEs not up to the job of providing REACH declarations
- Inadequate knowledge of substance content by suppliers, resulting in failure to register substances for an important application.

Note: After the meeting this use case was divided into five separate use cases E-B-01 to E-B-05

9.2 There was discussion of the business risk use case E-B-01. The members generally agreed with its importance.

9.3 Mark Bohley noted the system, called 'PCN Alert' (www.pcnalert.com), which is used for flagging product change notices. Granta to investigate. (ACTION: Granta)

9.4 Andy Clifton noted that Rolls-Royce has some ideas about evaluating business risk, which it may be willing to share with other members. (ACTION: RR, Granta)

9.5 It was agreed to hold another teleconference in one month to brainstorm further use cases to add to the spreadsheet. Granta and NPL will try to provide a structure for the brainstorming process so as to spark the idea generation. (ACTION: NPL, Granta)

10 Clarification of Voting Items

10.1 David Cebon described the updated RSDB voting list spreadsheet. There has been a slight reorganization of the items in the legislation voting list and another worksheet has been added, with the high level database projects discussed in Minute 5.2 above (labeled E-D-01, etc). The overall concept is to vote to prioritize the high level database projects, and also vote to prioritize the legislation to be added in project E-D-01 'Legislation and substances data'.

10.2 There was discussion of how best to move forward in the prioritization process for database development projects.

(i) The members unanimously agreed that E-D-01 'Legislation and substances data' and E-D-02 'Where-used data for Bulk Materials' are the highest priorities for immediate development. (E-D-02 is particularly important because of its need for generating REACH Article 33 reports.)

(ii) The members also agreed that development effort should be divided approximately equally between these two use cases.

(iii) Granta will write UCDs for all of the data development projects and will circulate them to members before the next EMIT meeting (in October). (ACTION: Granta)

(iv) There should be a vote on the priority order for the various database development projects after the next EMIT meeting.

10.3 There should be a vote to prioritize work on E-D-01 after this meeting. It was agreed that members should propose additions to the list over the next two weeks. These should then be compiled into a voting list for discussion during a Webex one month from now. (ACTION: All)

10.4 There was discussion of how best to move forward in the prioritization process for the small features in E-W-01 (see Minute 7.2). The members all agreed that Granta should decide on the priority order, based on discussions with the members and practical issues that arise from the development process.

11 Date of Future meetings

11.1 The next teleconference will be at 16:00 UK time (GMT + 1) on Wed 19th May. The agenda items will be:

(i) Review RSDB legislation voting list

(ii) Brainstorm additional use cases for MI 6.0 MSDPs.

11.2 The next EMIT meeting will be held on 6-8 October, 2010 at NASA Marshall Space Flight Center in Huntsville Alabama.

12 Any other business

12.1 There was no other business.

12.2 The meeting was closed at 5.15pm UK time.

DC, GS
22 April 2010