

EUROPEAN MIDDLEWARE INITIATIVE

EMI 1 DOCUMENTATION REVIEW

EMI DOCUMENT

Document identifier: **EMI-SA2-QAReport-EMI1Documentation-v3_0**

Date: **14/07/2011**

Activity: **SA2**

Lead Partner: **CERN**

Document status: **DRAFT**

Abstract:

This is a SA2 report within the context of Quality Assurance containing a detailed analysis of the results of the documentation review carried out for EMI 1.

Copyright notice:

Copyright (c) Members of the EMI Collaboration. 2010.

See <http://www.eu-emi.eu/about/Partners/> for details on the copyright holders.

EMI ("European Middleware Initiative") is a project partially funded by the European Commission. For more information on the project, its partners and contributors please see <http://www.eu-emi.eu>.

This document is released under the Open Access license. You are permitted to copy and distribute verbatim copies of this document containing this copyright notice, but modifying this document is not allowed. You are permitted to copy this document in whole or in part into other documents if you attach the following reference to the copied elements: "Copyright (C) 2010. Members of the EMI Collaboration. <http://www.eu-emi.eu>".

The information contained in this document represents the views of EMI as of the date they are published. EMI does not guarantee that any information contained herein is error-free, or up to date.

EMI MAKES NO WARRANTIES, EXPRESS, IMPLIED, OR STATUTORY, BY PUBLISHING THIS DOCUMENT.

Document Log

Issue	Date	Comment	Author / Partner
1	01.07.2011	V1.0 created.	Maria Alandes / CERN
2	04.07.2011	V2.0: Added feedback from Arc InfoSys and DPM/LFC.	Maria Alandes/CERN
3	14.07.2011	V3.0: Added Feedback from CEmon	Maria Alandes/CERN

Document Change Record

Issue	Item	Reason for Change
1	First Version	
2	Corrected table 2 and figure 4	ARC Infosys confirmed that there is no client install&config guide and templates for the client part.
3	Corrected table 2	DPM/LFC confirmed the availability of certain documents.
4	Corrected table 2	CEmon confirmed availability and applicability of certain documents.

TABLE OF CONTENTS

1. TABLE OF REFERENCES	5
2. EMI 1 DOCUMENTATION REVIEW BY THE DOCUMENTATION TEAM.....	6
3. EMI 1 DOCUMENTATION REVIEW BY SA2	7
3.1. RESULTS.....	7
3.2. EMT TASKS TRACKING DOCUMENTATION ISSUES.....	12
3.3. DOCUMENTATION ISSUES REPORTED BY EGI.....	13
4. ACTION LIST	15

1. TABLE OF REFERENCES

R1	EMI 1 Product list http://www.eu-emi.eu/kebnekaise-products
R2	Documentation Policy https://twiki.cern.ch/twiki/pub/EMI/EMISa2DocumentationPolicy/EMI_SA2_Documentation_v_2_0.pdf
R3	EMI 1 Documentation Review Process https://twiki.cern.ch/twiki/pub/EMI/EMIDocReviewProcess/EMI_SA2_Doc_Review_Process_EMI1.pdf
R4	QA Report 2: Minimum Required Documentation Status (Section 5.6) http://cdsweb.cern.ch/record/1277601?ln=en
R5	EMT Tracker https://savannah.cern.ch/task/?group=emi-emt
R6	EMI Technical Development Plan https://twiki.cern.ch/twiki/pub/EMI/DeliverableDNA132/EMI-DNA1.3.2-1277543-Technical_Development_Plan-v1.0.pdf

2. EMI 1 DOCUMENTATION REVIEW BY THE DOCUMENTATION TEAM

54 Products have been released in EMI 1 [R1]. The documentation associated to each product was reviewed by the Documentation Team according to the Documentation Review process.

The Documentation Team is responsible for reviewing and approving the documents relevant to EMI software products. The Documentation Team is coordinated by the SA2.5 task and is comprised of members from NA2 and SA2 activities [R2]. In the case of EMI 1, the documentation review process was coordinated by SA2.2.

The Documentation Review Process defined for EMI 1 is described in [R3]. The results of the review were collected in a shared spreadsheet. The Latest QA Report [R4] contains a summary of the review results. The results of the review were inconsistent due to some problems found during the review process:

- The same product was analyzed more than once. This happened because the documentation was updated after feedback from the Documentation Team was received and a newest version of the document was quickly provided. The Documentation Team analyzed the new version as well, having several entries for the same product. Moreover and due to human errors, some reviewers checked the same products even if a responsibility matrix was defined, assigning which product should be evaluated by which reviewer.
- Some documents were indeed outdated and this was not detected by the Documentation Team. Detecting problems in the documentation requires a good technical knowledge of the products which not all the members of the Documentation Team have. Moreover, detecting inconsistencies or outdated information just by reading the document is not always straightforward. The Documentation Team didn't have the effort to follow in practice user or system administrator guides, so the review was not fully efficient.
- Some members of the Documentation Team considered some documents as "Not Accepted" because their format didn't meet the format specified in the Documentation Policy [R2]. Although aiming at sharing homogeneous formatting across technical documents is a reasonable goal, it requires time to implement. Moreover this shouldn't be confused with having outdated or incomplete documentation.

Even if the Documentation Team did a very good job going through 436 documents, there were a series of unfortunate circumstances that prevented from having satisfactory review results:

- The Documentation Policy was approved very late in year 1. This fact delayed the moment when documents could be reviewed by the Documentation Team, starting very close to the EMI 1 release deadline and leaving little time to consolidate the review process.
- The Documentation Review Process was also defined very late and very quickly. It was new to all the members of the Documentation Team which didn't have much time to be familiar with it beforehand.
- There were some changes in the Documentation Review Process. A Survey Monkey form was defined at the very beginning by NA2 and we had to finally switch to Google Docs because the results were not coherent. This caused confusion and didn't help the Documentation Team to have clear instructions from the beginning.

Due to all these reasons, SA2 considered that a careful analysis of the review results was needed once EMI 1 release was announced. Moreover, the need to making sure that the information available in the EMI 1 release pages was also correct also aroused. The results of this analysis are presented in the next sections.

3. EMI 1 DOCUMENTATION REVIEW BY SA2

The Documentation Review performed by SA2 is based on the EMI 1 Documentation Review by the Documentation Team and the analysis of the documentation published in the EMI 1 release pages [R1]. The results of this review are performed in the next section.

3.1. RESULTS

The SA2 review has been organised taking into account the product type and the applicability of each document type. Four main product types have been identified:

- Service
- Libraries or Utilities
- Clients
- Service and Clients

These categories are aligned to what it is described in section 4 of the EMI Technical Development Plan [R6], which describes product types as “service”, “client”, “library” or “internal”. The mapping is the following:

SA2 Product Type	EMI Technical Development Plan Product Type
Service	Service
Libraries/Utilities	Library or Internal
Clients	Client
Service and Clients	Product that contains elements that are services and clients

Table 1 - Product Types

The distribution of product types in the EMI 1 release is presented in Figure 1 below:

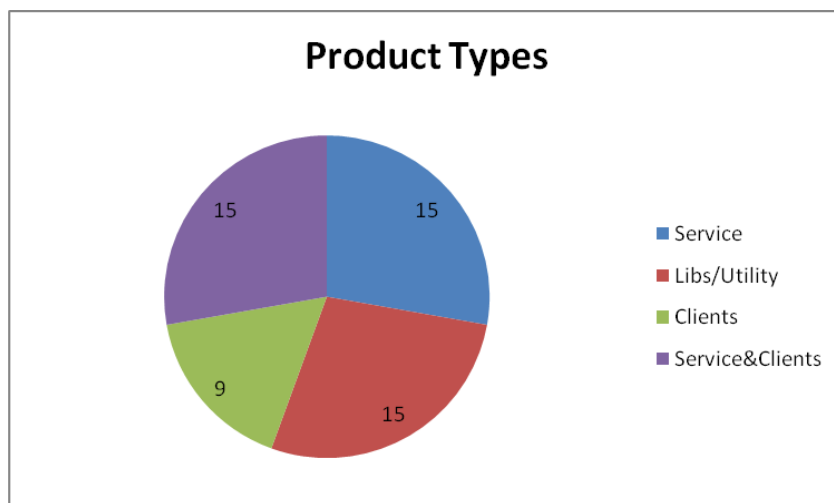


Figure 1 - Product types in EMI 1

Table 2 presents a summary of the results of the documentation review and the status of available documents at the time of writing this document. The following colour legend applies:

	Mandatory Document
	Not Released (NR)
	Service
	Clients
	Service and Clients
	Libs/Utility

OK: Document OK; X: Document not applicable; NA: Document not available; D: Document outdated

EMI Product	General Docs			User Docs					Developers Docs				Sys Admin Docs			
	Functional Descr	SW Req Spec	SW Design Descr	User Guide	Client Install&Config	Client Conf Template	Man pages/Help	Troubleshoot Guide	API Documentation	Service Interface Descr	Build Documentation	Error Code Docs	Sys Admin Guide	Service Conf Template	Service Ref Card	Troubleshoot Guide
AMGA	OK	X	X	OK	OK	X	X	X	NA	X	X	X	OK	X	OK	X
APEL Parsers	OK	X	X	OK	OK	OK	X	OK	NA	X	X	X	OK	X	OK	OK
APEL Publisher	OK	X	X	OK	OK	OK	X	OK	NA	X	X	X	OK	X	OK	OK
ARC CE	OK	X	OK	NA	NA	NA	NA	NA	NA	OK	X	X	OK	OK	OK	X
ARC Clients	OK	X	X	OK	OK	OK	OK	OK	NA	NA	NA	X	NA	NA	NA	NA
ARC Core	OK	X	OK	NA	NA	NA	NA	NA	NA	X	X	X	OK	X	NA	X
ARC gridftp server	OK	X	X	NA	NA	NA	NA	NA	NA	X	X	X	OK	X	OK	X
ARC InfoSys	OK	OK	OK	OK	NA	NA	X	X	NA	OK	X	X	OK	X	OK	X
ARGUS	OK	X	X	NA	NA	NA	X	NA	NA	X	X	X	OK	X	OK	X
ARGUS-EES	OK	X	OK	NA	NA	NA	OK	NA	OK	X	X	X	OK	X	OK	X
BDII core	X	X	X	NA	NA	NA	X	NA	NA	X	X	X	NA	X	OK	X
BDII site	OK	X	OK	NA	NA	NA	X	NA	NA	X	X	X	OK	X	OK	OK
BDII top	OK	X	OK	NA	NA	NA	X	NA	NA	X	X	X	OK	X	OK	OK
BLAH	OK	X	X	OK	NA	NA	OK	X	NA	X	X	X	OK	X	OK	X
CEMon	OK	X	OK	OK	OK	NA	OK	X	OK	X	X	X	OK	X	OK	X
CREAM	OK	X	OK	OK	OK	OK	OK	OK	OK	X	X	OK	OK	X	OK	OK
CREAM LSF module	OK	X	X	NA	NA	NA	NA	NA	NA	NA	X	X	OK	X	NA	X
CREAM TORQUE module	OK	X	X	NA	NA	NA	NA	NA	NA	NA	X	X	OK	X	NA	X
dCache	OK	X	X	OK	OK	X	X	X	NA	X	X	X	OK	X	OK	X
Delegation java	OK	X	OK	NA	NA	NA	NA	NA	X	OK	X	X	NA	NA	NA	NA
DGAS-sensors	OK	X	X	OK	OK	X	X	X	NA	NA	X	OK	OK	OK	OK	X
DPM	OK	X	X	OK	OK	X	OK	X	OK	X	X	OK	OK	X	OK	OK
EMI UI	OK	X	X	OK	OK	X	X	OK	NA	NA	NA	X	OK	NA	OK	X
EMI WN	OK	X	X	NA	NA	NA	NA	NA	NA	NA	NA	X	OK	NA	OK	X
FTS	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
GFAL/lcutil	OK	X	X	OK	OK	X	X	X	NA	NA	X	X	NA	NA	NA	NA

EMI Product	General Docs			User Docs					Developers Docs				Sys Admin Docs			
	Functional Descr	SW Req Spec	SW Design Descr	User Guide	Client Install&Config	Client Conf Template	Man pages/Help	Troubleshoot Guide	API Documentation	Service Interface Descr	Build Documentation	Error Code Docs	Sys Admin Guide	Service Conf Template	Service Ref Card	Troubleshoot Guide
gLExec	OK	X	OK	OK	OK	X	OK	X	NA	NA	OK	OK	OK	X	D	OK
gLite Cluster	OK	X	X	NA	NA	NA	NA	NA	NA	NA	X	NA	OK	X	NA	X
gLite MPI	OK	OK	OK	OK	OK	X	OK	OK	NA	NA	X	X	OK	NA	NA	NA
glite-gsoap/gss	OK	X	X	NA	NA	NA	NA	NA	X	X	X	X	NA	NA	NA	NA
glite-proxy-renewal	OK	X	X	NA	NA	NA	NA	NA	NA	NA	X	X	OK	X	OK	X
glite-yaim-core	OK	X	OK	OK	OK	NA	OK	X	NA	NA	OK	OK	OK	X	NA	X
gridsite	OK	X	X	OK	OK	X	X	X	X	X	X	X	OK	X	OK	X
Hydra	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
LB	OK	X	X	OK	OK	X	OK	OK	OK	OK	X	X	OK	X	OK	OK
lcg-info-clients	X	X	X	X	NA	NA	X	X	NA	NA	X	X	NA	NA	NA	NA
LFC	OK	X	X	OK	OK	X	OK	X	OK	X	X	OK	OK	X	OK	OK
SAGA-SD	OK	OK	OK	OK	OK	X	OK	X	OK	X	OK	OK	OK	X	NA	X
StoRM SE v.1.7.0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
TORQUE server config	OK	X	X	NA	NA	NA	NA	NA	X	X	X	X	OK	X	X	X
TORQUE WN config	OK	X	X	NA	NA	NA	NA	NA	NA	NA	X	X	OK	NA	NA	NA
Trustmanager	OK	NA	NA	NA	NA	NA	NA	NA	X	X	X	X	NA	NA	NA	X
UNICORE Client	OK	X	X	OK	OK	X	X	X	NA	NA	X	X	NA	NA	NA	NA
UNICORE Gateway	OK	X	X	NA	NA	NA	NA	NA	NA	X	X	X	OK	OK	OK	X
UNICORE HILA	OK	X	X	OK	OK	OK	OK	X	X	X	X	X	NA	NA	NA	NA
UNICORE Registry	OK	X	X	NA	NA	NA	NA	NA	NA	X	X	X	OK	X	OK	X
UNICORE SE (Services Environment?)	OK	X	X	NA	NA	NA	NA	NA	X	X	X	X	OK	X	OK	X
UNICORE TSI	OK	X	X	NA	NA	NA	NA	NA	X	X	X	X	OK	X	OK	X
UNICORE UVOS	OK	X	X	NA	NA	NA	NA	NA	X	X	X	X	OK	OK	OK	X
UNICORE XUADB	OK	X	X	NA	NA	NA	NA	NA	X	X	X	X	OK	OK	OK	X
UNICORE/X (WS?)	OK	X	X	NA	NA	NA	NA	NA	NA	X	X	X	OK	X	OK	X
VOMS	OK	X	X	OK	OK	X	OK	X	OK	OK	X	X	OK	X	OK	X
VOMS Admin	OK	X	X	OK	OK	X	X	X	NA	X	X	X	OK	X	OK	OK
WMS	OK	X	X	D	OK	X	X	OK	X	X	X	X	OK	X	OK	X

Table 2 - EMI 1 Documentation Review results by SA2

The following graphics present the status of the minimum required documentation as described in the Documentation Policy [R2] at the time of writing this document.

Figure 2 represents the number of available functional description documents in EMI 1. Most of the released products have provided a functional description. The two missing ones are lcg-info-clients and BDII core. Two tasks have been opened to track that this is fixed. See section 3.2 for more details.

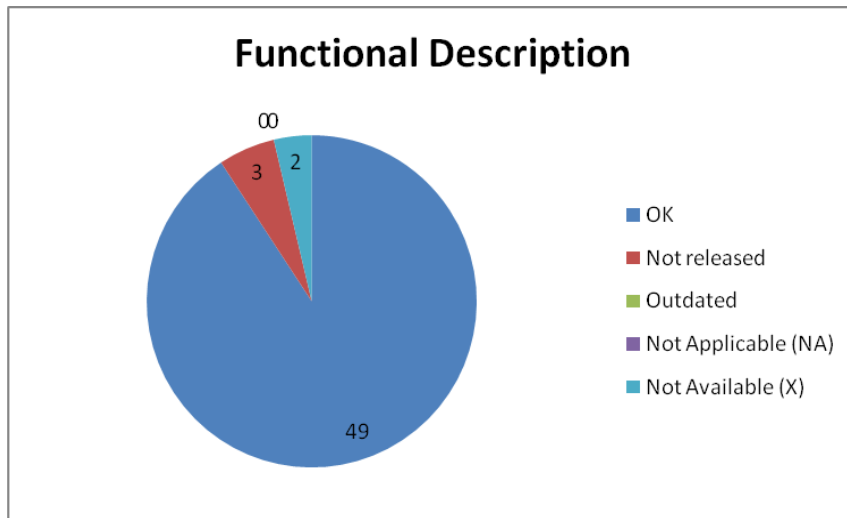


Figure 2 - Functional Description Status

Figure 3 represents the number of available user guide documents in EMI 1. The review indicates that there is only one product that should provide a user guide according to their product type. This is lcg-info-clients. SA2 has opened a task to track the missing user guide for lcg-info-clients. See section 3.2 for more details. SA2 has also detected that the WMS user guide may be outdated and a task has been opened to track this. See section 3.2 for more details.

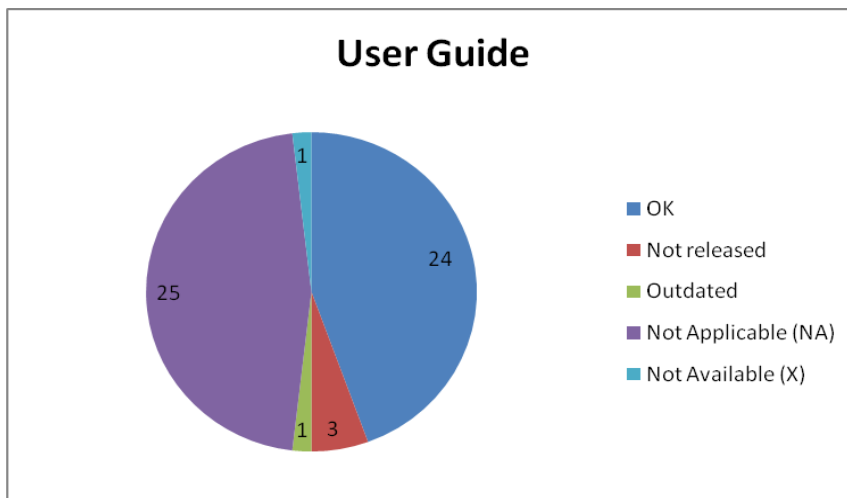


Figure 3 - User Guide Status

Figure 4 represents the number of available client installation and configuration guides in EMI 1. It seems the document is provided by all relevant products and is in good shape.

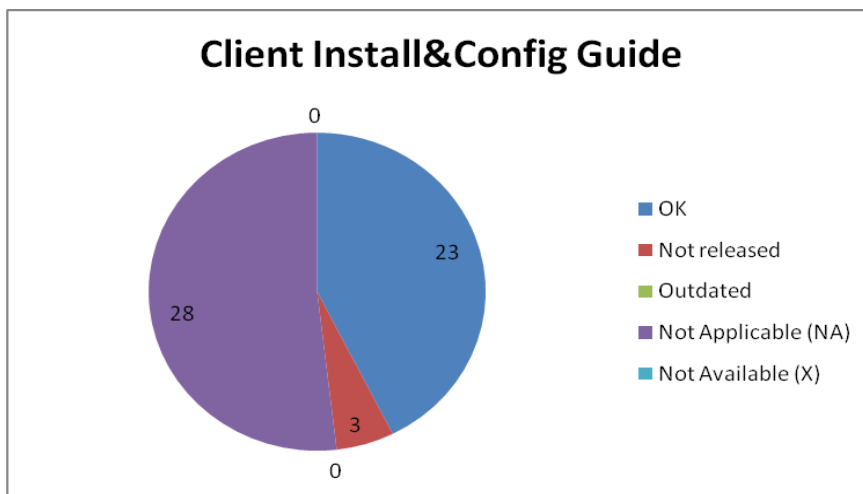


Figure 4 - Client Installation and Configuration Guide Status

Figure 5 represents the number of System Administrator Guides in EMI 1. This type of document is provided by all relevant products and it seems to be in a very good shape. In some cases though, like the EMI WN and the TORQUE WN, the existing documents could be more detailed and tasks have been opened to track the incomplete information. See section 3.2 for more details.

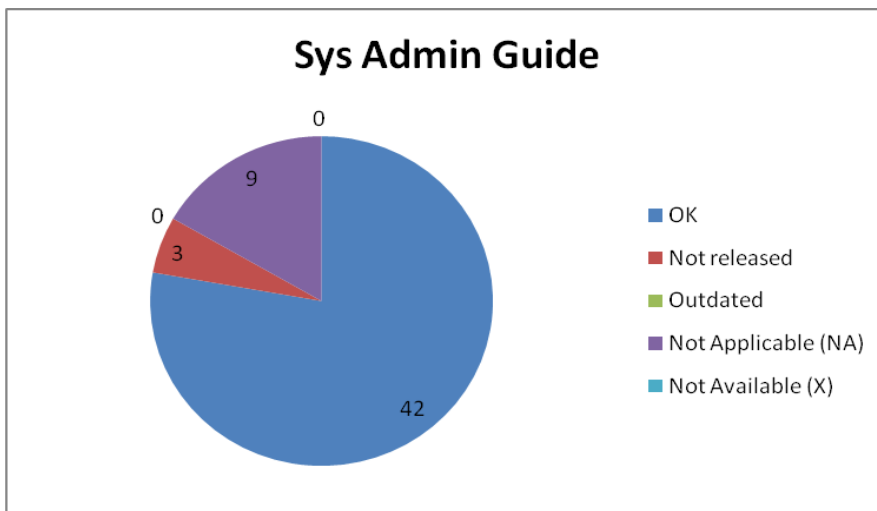


Figure 5 - System Administrator Guide Status

Figure 6 represents the number of Service Reference Cards in EMI 1. This type of document is provided by all relevant products and it seems to be in a very good shape. Only gLexec has an outdated link and TORQUE server is missing it. Relevant tasks have been opened in the EMT tracker to track this. See section 3.2 for more details.

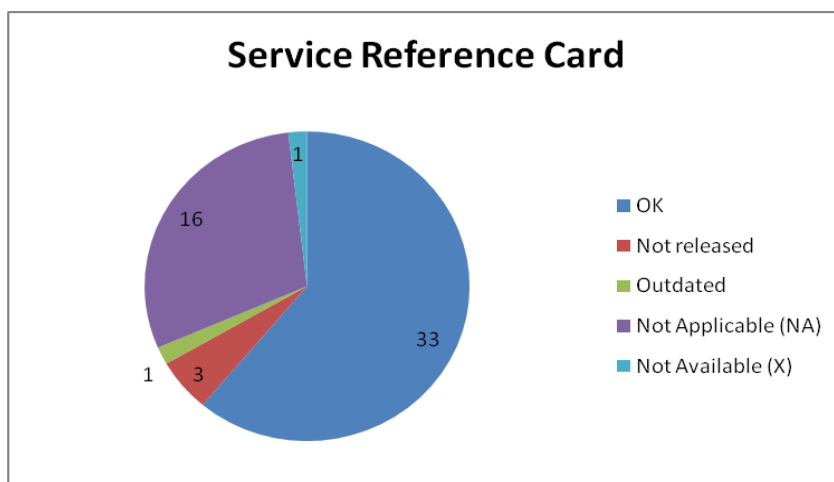


Figure 6 - Service Reference Card Status

The remaining documents not detailed in this report are not considered to be mandatory according to the Documentation Policy [R2]. They have been in any case reviewed as presented in Table 2. In fact, the list of mandatory documents will be reviewed for EMI 2 so maybe new documents will be considered as mandatory in the next EMI major release.

3.2. EMT TASKS TRACKING DOCUMENTATION ISSUES

27 tasks have been opened in the EMT task tracker [R4] under the category “EMI Documentation” to track the different issues found while doing the review. Table 3 and Table 4 present open and closed documentation tasks respectively at the time of writing this document:

Task Number	Task Description
#21297	TORQUE Server Service Reference Card: Missing document
#21259	BDII core: Add link to General Documentation
#21256	glite-MPI User Troubleshooting Guide: Outdated
#21252	TORQUE Server Sys Admin Guide: Incomplete Documentation
#21251	TORQUE WN Sys Admin Guide: Incomplete Documentation
#21250	EMI UI Sys Admin Guide: Incomplete Documentation
#21249	EMI WN Sys Admin Guide: Incomplete Documentation
#21247	WMS User Guide: Outdated
#21245	UNICORE UVOS Release Pages
#21242	UNICORE WS and UNICORE Services Environment Release Pages
#21140	lcg-info-clients User Guide: Missing Document
#21139	lcg-info-clients Functional Description: Missing Document
#21136	LB Documentation in Release Pages

#21135	yaim-core Documentation in Release Pages
#21063	gLexec Documentation in Release Pages
#21062	gLexec Service Reference Card: Wrong Link

Table 3 - Open Documentation Tasks

Task Number	Task Description
#21298	ARC Infosys Client Install and Config Guide: Missing Document
#21290	ARC CE release pages
#21248	WMS Sys Admin Guide: Wrong Link
#21240	UNICORE Hila Release Pages
#21141	lcg-info-clients Release Notes: Missing Document
#21138	lcg-info-clients Documentation in Release Pages
#20738	LFC Service Reference Card: Wrong Link
#20737	DPM Service Reference Card: Wrong Link
#20736	BDII Service Reference Card: Wrong link
#20735	BLAH Service Reference card: Missing
#20733	ARGUS-EES Service Reference Card: Missing
#20732	ARC gridftp server Service Reference Card: Missing
#20731	AMGA Service Reference Card: Wrong link

Table 4 - Closed Documentation Tasks

The tasks are assigned to the relevant PTs by SA2 and once the document is fixed, the task is re-assigned by SA2 to “emi-emt-docs” who is the Savannah squad representing the maintainers of the EMI web pages. Once the EMI web pages are updated, the task is closed. This will be properly documented in the Documentation Review Process since currently it is missing.

3.3. DOCUMENTATION ISSUES REPORTED BY EGI

As part of the certification of the EMI 1 release performed by EGI, the EMI documentation has been also exposed to real use by EGI certifiers. A set of GGUS tickets has been opened by EGI reporting inconsistencies or outdated information. It will be very interesting if SA2 could follow up on these tickets making sure the updated and fixed documentation is provided by PTs and actually made available as well in the EMI web pages.

Table 5 presents the existing GGUS tickets opened so far by EGI reporting about EMI 1 documentation issues.

GGUS tickets related to Documentation	Product	Comments	Status
https://ggus.eu/tech/ticket_show.php?ticket=71756	DGAS	Mainly typos	Verified
https://ggus.eu/tech/ticket_show.php?ticket=71449	LB	Related to test material, not so much on documentation.	Assigned
https://ggus.eu/tech/ticket_show.php?ticket=70691	ARGUS and gLexec	Wrong links	Assigned
https://ggus.eu/tech/ticket_show.php?ticket=71580	EMI web page	Past Documentation	In Progress
https://ggus.eu/tech/ticket_show.php?ticket=70473	EMI Install and Config Guide	OS installation steps missing	In Progress
https://ggus.eu/ws/ticket_info.php?ticket=71120	ARC CE	Wrong link in Release Notes, outdated SRC	On hold
https://ggus.eu/ws/ticket_info.php?ticket=71251	ARC CE	Child of previous ticket	In Progress
https://ggus.eu/tech/ticket_show.php?ticket=71205	DPM	Outdated install guide only referencing gLite	Verified
https://ggus.eu/tech/ticket_show.php?ticket=71353	DPM	Outdated config guide only referencing gLite	Verified
https://ggus.eu/tech/ticket_show.php?ticket=71593	LFC	Outdated install guide only referencing gLite	Verified
https://ggus.eu/tech/ticket_show.php?ticket=71065	WMS	Related to test material, not so much on documentation.	Waiting for Reply
https://ggus.eu/tech/ticket_show.php?ticket=72017	CREAM	Comments on the way update info is presented. Not so much related to the Doc itself.	In Progress

Table 5 - EMI Documentation GGUS tickets opened by EGI

4. ACTION LIST

The following items describe which actions are considered necessary by SA2 to improve the EMI technical documentation and the documentation review process.

1. Review the Documentation Policy for EMI 2.
 - Review the list of mandatory documents and check whether it makes sense to tailor the list per type of product.
 - Propose a homogeneous way of presenting information related to installation and configuration so that system administrators always find this type of information presented in the same way.
2. Review the Documentation Review Process for EMI 2 and EMI 1 Updates.
 - Describe the way the Documentation EMT tasks are handled specifying the workflow and the involved people.
 - Consolidate the existing process defined for EMI 1 and integrate it with the QA Dashboard where the status of the product documentation can be maintained and monitored.
 - Integrate the Documentation Review Results into the Verification Report. This can be done automatically with the Dashboard.
 - Define the way to make sure documentation is updated after each EMI 1 Update without the need of reviewing the documents every time. Since there is not enough effort to review the documentation of a product for each update, a way to contact the developers and get information on whether a certain product update impacts the documentation needs to be defined. This should have an impact on the Dashboard and on the communication with the EMI web pages maintainers.
3. Transfer the coordination of the Documentation Review Process from SA2.2 to SA2.5. SA2.5 mandate as defined in the EMI DoW clearly includes the validation of documentation. This task has been carried out so far by SA2.2 who has been more involved in the definition of the policies. Now that the policies are clear, SA2.5 should be able to take over this task. Tasks have been already created in the internal SA2 tracker to guide SA2.5 on how to take care of the documentation reviews for upcoming EMI 1 Updates.
4. Improve the communication with EGI. EGI has reported some problems related to documentation when certifying EMI 1 release. EGI seems to have the necessary resources to certify EMI releases using the product documentation in practice. EMI should work more closely with EGI to benefit from this effort and to make sure the reported problems are fixed within EMI.
5. Follow up GGUS tickets related to documentation. SA2.5 has to make sure that when GGUS ticket report a problem about documentation and the PTs provide updated documents, the EMI web pages are updated accordingly. Monitoring of GGUS tickets is therefore needed.

All these actions are about improving the Documentation Policy, in particular the Documentation Review Process. The deadline for reviewing the Documentation Policy is 01.08.2011. This deadline is applicable to all the items in the previous list.