

# EGEE

## BAR FACE TO FACE MEETING – 24 TO 25 OCTOBER 2005

PLANNING FOR DJRA4.4

---

Document identifier:	<a href="#">EGEE-JRA4-BAR-F2F-October05-v0-2.doc</a>	Deleted: EGEE-JRA4-BAR-F2F-October05-v0-1.doc
Date:	<a href="#">31/10/2005</a>	Deleted: 31/10/2005
Activity:	<b>JRA4: Development of Network Services</b>	Deleted: 28/10/2005 Deleted: 21/10/2005
Document status:	<b>DRAFT</b>	
Document link:	<a href="https://edms.cern.ch/document/xxxx/1">https://edms.cern.ch/document/xxxx/1</a>	

---

Abstract:

Deleted: 31/10/2005

Deleted: 28/10/2005

Formatted: Font: Not Bold, Do not check spelling or grammar

Copyright (c) Members of the EGEE Collaboration. 2004.

See <http://public.eu-egee.org/partners/> for details on the copyright holders.

EGEE (“Enabling Grids for E-science in Europe”) is a project funded by the European Union. For more information on the project, its partners and contributors please see <http://www.eu-egee.org>.

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) 2004. Members of the EGEE Collaboration. <http://www.eu-egee.org>".

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

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

### Document Log

Issue	Date	Comment	Author/Partner
0-1	21/10/2005	Added agenda	Charaka Palansuriya
<u>0-2</u>	<u>31/10/2005</u>	<u>Added minutes</u>	<u>Florian Scharinger /Charaka Palansuriya</u>

### Document Change Record

Issue	Item	Reason for Change

Deleted: 31/10/2005  
Deleted: 28/10/2005  
Formatted: Font: Not Bold, Do not check spelling or grammar

**CONTENT**

**1. INTRODUCTION..... 4**

1.1. PURPOSE..... 4

1.2. APPLICATION AREA ..... 4

1.3. REFERENCES ..... 4

1.4. DOCUMENT EVOLUTION PROCEDURE..... 4

1.5. TERMINOLOGY..... 4

**2. VENUE..... 5**

**3. DAY 1 – MONDAY 24 OCTOBER 2005..... 6**

3.1. ATTENDED..... 6

3.2. AGENDA ..... 6

3.3. MINUTES ..... 7

3.3.1. BAR use cases..... 7

3.3.2. BAR requirements revisited..... 9

BAR-to-BAR communication..... 10

3.3.3..... 10

3.3.4. BAR end-to-end specification..... 10

3.3.5. L-NSAP interface model..... 11

3.3.6. Dummy L-NSAP ..... 12

3.3.7. GN2 NSAP..... 13

3.3.8. BAR Demo..... 13

3.3.9. Open Issues ..... 13

**4. DAY 2 – TUESDAY 25 OCTOBER 2005 ..... 14**

4.1. EXPECTED..... 14

4.2. AGENDA ..... 14

4.3. MINUTES ..... 14

4.3.1. TOC for DJRA4.4..... 15

4.3.2. Status of the current development ..... 15

4.3.3. Scope of development for DJRA4.4..... 16

4.3.4. Analyse Schema/WSDLs..... 17

4.3.5. Test Plan..... 18

4.3.6. Workplan for DJRA4.4..... 18

**5. LIST OF ACTIONS..... 19**

**6. OPEN ISSUES..... 20**

6.1. BAR..... 20

Deleted: 1. INTRODUCTION . 4¶  
1.1. PURPOSE . 4¶  
1.2. APPLICATION AREA . 4¶  
1.3. REFERENCES . 4¶  
1.4. DOCUMENT EVOLUTION PROCEDURE . 4¶  
1.5. TERMINOLOGY . 4¶ ... [1]

Deleted: 8

Deleted: ¶ ... [2]

Deleted: 8

Deleted: ¶ ... [3]

Deleted: 8

Deleted: ¶ ... [4]

Deleted: 8

Deleted: ¶ ... [5]

Deleted: 8

Deleted: ¶ ... [6]

Deleted: 8

Deleted: ¶ ... [7]

Deleted: 9

Deleted: ¶ ... [8]

Deleted: 9

Deleted: ¶ ... [9]

Deleted: 9

Deleted: ¶ ... [10]

Deleted: 9

Deleted: ¶ ... [11]

Deleted: 10

Deleted: ¶ ... [12]

Deleted: 10

Deleted: ¶ ... [13]

Deleted: 10

Deleted: ¶ ... [14]

Deleted: 10

Deleted: ¶ ... [15]

Deleted: 10

Deleted: ¶ ... [16]

Deleted: 11

Deleted: ¶ ... [17]

Deleted: 12

Deleted: ¶

Deleted: 31/10/2005

Deleted: 28/10/2005

Formatted: Font: Not Bold, Do not check spelling or grammar

## 1. INTRODUCTION

### 1.1. PURPOSE

This document contains the minutes of BAR face to face meeting held on Monday 24<sup>th</sup> October 2005 and Tuesday 25<sup>th</sup> October 2005 (morning only session).

### 1.2. APPLICATION AREA

This document is for members of the JRA4 BAR team.

### 1.3. REFERENCES

[R1] DJRA4.1: BAR interface	<a href="https://edms.cern.ch/document/501154/1">https://edms.cern.ch/document/501154/1</a>
[R2] MJRA4.5: BAR End to End Specification	<a href="https://edms.cern.ch/document/593453/1">https://edms.cern.ch/document/593453/1</a>
[R3] JRA4 Security: Component installation and basic usage guide	<a href="https://edms.cern.ch/document/565465/1">https://edms.cern.ch/document/565465/1</a>
[R4] BAR Security	<a href="https://edms.cern.ch/file/571891/1">https://edms.cern.ch/file/571891/1</a>
[R5] BAR Functional Specification	<a href="https://edms.cern.ch/document/589518/1">https://edms.cern.ch/document/589518/1</a>
[R6] BAR design	<a href="https://edms.cern.ch/document/591621/1">https://edms.cern.ch/document/591621/1</a>
[R7] DJRA4.4 work plan	<a href="https://edms.cern.ch/document/654249/1">https://edms.cern.ch/document/654249/1</a>
[R8] BAR demo	<a href="https://edms.cern.ch/document/672064/1">https://edms.cern.ch/document/672064/1</a>
[R9] BAR F2F Agenda – October 05	<a href="http://agenda.cern.ch/fullAgenda.php?ida=a056693">http://agenda.cern.ch/fullAgenda.php?ida=a056693</a>
[R10] <a href="#">Use Cases and Requirements</a>	<a href="https://edms.cern.ch/document/476742/1">https://edms.cern.ch/document/476742/1</a>

Formatted: Bullets and Numbering

### 1.4. DOCUMENT EVOLUTION PROCEDURE

Document can be updated by the JRA4 BAR team.

### 1.5. TERMINOLOGY

#### Glossary


#### Definitions

BAR	Bandwidth Allocation and Reservation
TLS	Transport Layer Security
GDFT	Guaranteed Deadline File Transfer
VLL	Virtual Leased Line

Deleted: 31/10/2005

Deleted: 28/10/2005

Formatted: Font: Not Bold, Do not  
check spelling or grammar

## 2. VENUE

Room # 19

Palazzo dei Congressi di Pisa

Pisa, Italy

Deleted: 21

Further details available from <http://indico.cern.ch/conferenceDisplay.py?confId=a0514>

Deleted: 31/10/2005

Deleted: 28/10/2005

Formatted: Font: Not Bold, Do not  
check spelling or grammar

### 3. DAY 1 – MONDAY 24 OCTOBER 2005

#### 3.1. ATTENDED

Anand Patil (AP), Gloria Vuagnin (GV), Florian Scharinger, Kostas Kavoussanakis (KK) and Charaka Palansuriya (CP)

Deleted: EXPECTED

#### 3.2. AGENDA

Note that this agenda also available from [R9].

9:30 Logistics for the meetings (KK)

9:45 BAR use cases (CP/FS)

- List/analyse complete use cases
- Identify ones we can support

10:30 Coffee Break

11:00 BAR requirements revisited (KK)

- Check against the use cases

11:30 BAR-to-BAR communication (FS)

- request flow
- interface

12:10 BAR end-to-end specification (CP)

- Two-stage reservation
- SR-SA mapping
- Resource management
- List changes required to the end-to-end document
- Issues to discuss with SA2 and JRA1

13:10 Lunch Break

14:30 L-NSAP interface model (AP)

- request flow

Deleted: 31/10/2005

Deleted: 28/10/2005

Formatted: Font: Not Bold, Do not check spelling or grammar

- interface

15:00 Dummy L-NSAP (AP)

- Scope of functionality

15:20 GN2 NSAP (AP)

- When?

- interface

15:50 Coffee Break

16:20 BAR Demo

16:50 Open Issues

### 3.3. MINUTES

#### 3.3.1. BAR use cases

The list of BAR use cases is taken from [R10]. The use cases listed are supported by BAR, except otherwise stated explicitly.

Formatted: Normal

##### 3.3.1.1. Use Case 3.4.1: A Tier 1 Site retrieves raw data from the LHC

Formatted: Heading 4,H4,T4

A Site Data Distribution Service reserves bandwidth from CERN (same as LHC?) to the site to ensure all data files are transferred on time.

Formatted: Font: Not Bold

The actual transfer itself may be done by another service.

I.e., it is highly likely the SA is done by an independent service.

Actor: Data Manger

##### 3.3.1.2. Use Case 3.4.2: User submits a job to run on the Grid

Comment [f1]: Charaka, Does BAR support this use case???

##### Who are the BAR users:

- Resource Broker
- The Job ?

Formatted: Heading 4,H4,T4, No bullets or numbering, Tabs: Not at 0.5"

Formatted: Font: Bold

Formatted: Bullets and Numbering

##### Who uses SR & SA:

SR happens when the Resource Broker calculates the cost of retrieving all the replicas of that logical file. (Step 4)

Formatted: Font: Bold

Formatted: Font: Bold

SA happens when the job requests each logical file which should be transferred (Step 7).

Deleted: 31/10/2005

Deleted: 28/10/2005

Formatted: Font: Not Bold, Do not check spelling or grammar

Formatted: Font: Bold

**What happens if SR can not be done?**

Gloria: In practise, there would need to be a SR all the time, since experiments run all the time.

Either SR can be placed in advanced, then BAR can be used, otherwise Best Effort needs to be used.

**Reservable Path**

When the Resource Broker calculates the costs of retrieving the replicas of a file, the Glue schema could hold the information if a "reservable path" between certain CEs and SEs exists.

Formatted: Font: Bold

**3.3.1.3. Use Case 3.4.3: X requests a logical file to be transferred to an SE**

Higher level components do not know where the actual physical files of the logical file are located. This implies that lower level components need to be modified and have to do the SR and SA!

Formatted: Heading 4,H4,T4, No bullets or numbering, Tabs: Not at 0.5"

**SR & SA:**

Unclear where/when SR happens.

SA happens when 'getBestReplica' requests that the best replica should be transferred to the target SE.

Formatted: Font: Bold

Comment [f2]: Comments here anyone?

Formatted: Heading 4,H4,T4, No bullets or numbering, Tabs: Not at 0.5"

**3.3.1.4. Use Case 3.4.4: X requests that a physical file be transferred to an SE+**

Comments to 'Extensions':

- 1a. The request violates VO policy at Site level.
- 2a. The request violates VO policy at Data Scheduler Level in a fatal manner.
- 2b. The request must be transformed or delayed so as to avoid breaking VO policy.

Formatted: Indent: Left: 0", First line: 0", Tabs: 0", Left + Not at 0.5"

Formatted: Bullets and Numbering

Formatted: Indent: Left: 0", First line: 0", Tabs: 0", Left + Not at 0.5"

1a – 2b: Not tasks of BAR, BAR does at it is told.

**3.3.1.5. Use Case 3.6: Site Transfer Service transfers a file**

Same use case as 3.4.4 above, just other users.

Formatted: Heading 4,H4,T4, No bullets or numbering, Tabs: Not at 0.5"

**3.3.1.6. Use Case 3.5: A site transfer service schedules a time period in which file transfer should take place -> SR**

- Service passes the parameters
  - file source/destination
  - latest arrival time
  - earliest pickup time
  - any bandwidth limitation
- Ensure VO does exceed any limits – who (BAR) ?
  - KK: BAR does it as it "told"
- Detail is passed to another service (S1) which performs the physical transfer -> SA

Formatted: Bulleted + Level: 1 + Aligned at: 0.25" + Tab after: 0.5" + Indent at: 0.5"

Formatted: Bulleted + Level: 2 + Aligned at: 0.75" + Tab after: 1" + Indent at: 1"

Formatted: Bulleted + Level: 1 + Aligned at: 0.25" + Tab after: 0.5" + Indent at: 0.5"

Formatted: Bullets and Numbering

Formatted: Bulleted + Level: 1 + Aligned at: 0.25" + Tab after: 0.5" + Indent at: 0.5"

Comment [f3]: Again not sure what the conclusion was here, do we support this?

**3.3.1.7. Use Case 3.6: Bio med**

- File transfer
  - No actors are identified.
  - Require transfer of large file – even with compression.
  - Confidentiality is also required.
    - How does BAR guarantee confidentiality? -> contains a flag to indicate this

Formatted: Heading 4,H4,T4

Formatted: Bulleted + Level: 1 + Aligned at: 0.25" + Tab after: 0.5" + Indent at: 0.5"

Formatted: Bulleted + Level: 2 + Aligned at: 0.75" + Tab after: 1" + Indent at: 1"

Formatted: Bulleted + Level: 3 + Aligned at: 1.25" + Tab after: 1.5" + Indent at: 1.5"





Deleted: 31/10/2005

Deleted: 28/10/2005

Formatted: Font: Not Bold, Do not check spelling or grammar

- SA2-7-2: Connection quality for services requests
- SA2-10: Explicit specification of network path
- SA2-14: VPN channel emulation
- JRA4.16: Prioritisation of service messages

[KK] Merge SA-2.6.1 and SA-2.8 requirements

[KK] Mark SA2-13 as out of scope – no effort.

[KK] Fix commentary of SA2.3.3 with Afrodite.

JRA4.16 – already supports – as long as u can distinguish between control traffic and data traffic

### 3.3.3. BAR-to-BAR communication

Have a separate “east” interface for the Remote BAR. Currently, this is identical to the BAR “north” interface.

SR-ID has to be communicated from BAR to Remote BAR. Note, this is in addition to the parameters in the BAR (north) interface.

It is possible last mile to be over booked. What stage should we do summing of aggregation – SR or SA ?

SA? What stage should the summing up of aggregation be done at -> SR or SA? E.g. if SR/SA to be done between Sites. A<->B and A<->C, then a common last mile is used between SR/SA.

[AP] define the term “last mile” in the BAR end2end specification.

**A decision:** BAR stores details of service requests

If the last-mile is not over-booked by a received SR, BAR invokes NSAP, and passes then the returned SR ID to L-NSAP and RemoteBar.

Note that SR ID has to be passed to Remote BAR meaning that the East Interface has to be changed.

[FS] Add parameter SR ID to East Interface

### **3.3.4. BAR end-to-end specification**

NSAP accepts multiple subnets for a single SR. This could be useful when an endsite has several local networks, and on SR stage it is not known from which subnet the SA will come.

#### 3.3.4.1. SA to SR mapping

To ensure that user of SA is authorised to do so, BAR needs to store the VO credentials of the SR.

Passing SR ID at SA: It doesn't verify the SA, but it would speed-up the search for the correct SR for the passed SA. There still have to be another way of authorising the SA. SR ID could be optional to

Deleted: ¶

¶

Formatted: Heading 3,I3,H3,Level 2  
Heading,Level 2,h2,h3,1.2.3.,T3

Deleted: ¶

Formatted: Font: Bold

Deleted: ¶

Formatted: Heading 4,H4,T4, Space  
After: 0 pt, Widow/Orphan control,  
Adjust space between Latin and  
Asian text, Adjust space between  
Asian text and numbers, Tabs: Not at  
0.39" + 0.78" + 1.17" + 1.56" +  
1.94" + 2.33" + 2.72" + 3.11" +  
3.5" + 3.89" + 4.28" + 4.67"

Deleted: 31/10/2005

Deleted: 28/10/2005

Formatted: Font: Not Bold, Do not check spelling or grammar

speed-up. There always has to be a way to figure out, to which SR the passed SA belong to. Still, there has to be some kind of authorised on VO based.

**Decision:**

Formatted: Font: Bold

The BAR Design document should state more detailed information on that, but not the code.

In code: If SR ID is not passed, we raise a SR ID Not Found Exception. This means, if – in theory – BAR implements an algorithm to find the correct SR ID later on, it can raise the same exception, meaning that the behaviour to clients does not change.

Deleted: ¶

Formatted: Heading 4,H4,T4, Space After: 0 pt, Widow/Orphan control, Adjust space between Latin and Asian text, Adjust space between Asian text and numbers, Tabs: Not at 0.39" + 0.78" + 1.17" + 1.56" + 1.94" + 2.33" + 2.72" + 3.11" + 3.5" + 3.89" + 4.28" + 4.67"

**3.3.4.2. SR/SA Work Flow**

SR stage:

1. BAR checks if SR exceeds last-mile bandwidth limits, taking into account other active SRs for the duration of the current SR.
2. BAR forwards SR to NSAP
3. NSAP responds with SR ID
4. BAR contacts L-NSAP and passes SR + SR ID
5. L-NSAP checks if SR exceeds interconnection link capacity.
6. BAR contacts RemoteBar and forwards SR + SR ID
7. RemoteBar contacts L-NSAP and passes SR + SR ID
8. Remote L-NSAP checks if SR exceeds interconnection link capacity

Deleted: :

Formatted: Bullets and Numbering

In case any L-NSAP rejects SR, BAR needs to cancel SR at NSAP, and any L-NSAP.

SA stage:

1. BAR checks its “database” to find the SR for the passed SR ID
2. BAR checks if the SA parameters (duration) fit to SR (TBD)
3. BAR could check if the user of the SA is valid to use the SR by checking the VO stated in the SR (TBD)
4. BAR forwards the SA to L-NSAP
5. L-NSAP checks if SA does not exceed bandwidth limits of SR
6. BAR forwards the SA to RemoteBar
7. RemoteBar forwards the SA to its L-NSAP
8. Remote L-NSAP checks if SA does not exceed bandwidth limits of SR
9. BAR responds to client with success

Formatted: Bullets and Numbering

In case any L-NSAP rejects SA, BAR cancels SA at other L-NSAP and responds to client with a failure message.

At SA stage, there is no contact to NSAP.

**3.3.5. L-NSAP interface model**

Deleted: 31/10/2005

Deleted: 28/10/2005

Formatted: Font: Not Bold, Do not check spelling or grammar

Deleted: ,

Formatted: Bullets and Numbering

[AP/MB] In DJRA4.1, add to SR stage.

- Request installation of SR – check/block a SR will not violates local policy of interconnected link.
- Query SRs and Cancel SRs

Operations in BAR:

L-NSAP SR Interface:

- Create
  - o Validate subnet belongs to “my” domain.
  - o Creates an entry for SR in L-NSAP if the current request (in addition to existing SRs) does not exceed the interconnect link capacity. Interconnect link -> link between last mile and adjacent network domain
- Query
  - o Pass SR id -> return details.
- Cancel
  - o Cancel the SR.

Formatted: Bullets and Numbering

L-NSAP SA Interface:

- Create
  - o Validate SA belongs to a SR.
  - o Check aggregation within the SR.
- Query
  - o Give SA id -> return details.
- Cancel
  - o Cancel SA.

Formatted: Bullets and Numbering

Decision for DJRA4.4: Call NSAP and then L-NSAP

L-NSAP does not need to distinguish between GDFT and VLL. This will influence the RemoteBar interface. We could keep VLL and GDFT in the RemoteBar interface to use the same as the North Interface.

Deleted: SR Flow:¶  
HLM asks BAR for a SR¶  
BAR asks NSAP if SR is possible¶  
NSAP answers yes or no in an asynchronous mode. ¶  
If NSAP says yes BAR asks the local and remote L-NSAP to create SR.¶  
Once both L-NSAP say yes => success.¶  
If any L-NSAP says no then cancel NSAP SR and cancel any L-NSAP SR.¶  
¶  
SA flow:¶  
HLM asks BAR for SA.¶  
BAR asks local and remote L-NSAP if SA is possible¶  
If both local and remote L-NSAP say yes => success¶  
If any L-NSAP says no then cancel any L-NSAP SA.¶

[MB] Remove “Service Class” from the L-NSAP interface.

### 3.3.6. Dummy L-NSAP

[AP] implement thresh holds for accepting 6 SR/SA operations (not random “yes” or “no”☺. If time permits -> implement persistence storage of SRs and SAs.

Deleted: ¶

Deleted: ¶

Deleted: 31/10/2005

Deleted: 28/10/2005

Formatted: Font: Not Bold, Do not check spelling or grammar

### 3.3.7. GN2 NSAP

Current status: Alpha release.

It is important to note that *Create* and *Cancel* operations are asynchronous. This means that both operations need to be queried (maybe several times) to ensure that the actual operations really was executed.

Deleted: S

Formatted: Font: Italic

Formatted: Font: Italic

Forward and backward bandwidth has to go now into *two* separate reservations.

Formatted: Font: Italic

### 3.3.8. BAR Demo

The BAR Demo will show a short introduction of BAR, followed by a “walk through” with screenshots of the BAR Client.

The slide with the BAR end-to-end architecture had to be modified by adding descriptions to the steps of the workflow.

### 3.3.9. Open Issues

SA2 SLA issues

Deleted: 31/10/2005

Deleted: 28/10/2005

Formatted: Font: Not Bold, Do not  
check spelling or grammar

## 4. DAY 2 – TUESDAY 25 OCTOBER 2005

### 4.1. EXPECTED

Anand Patil (AP), Gloria Vuagnin (GV), Florian Scharinger ([FS](#)), [Kostas Kavoussanakis \(KK\)](#)  
and Charaka Palansuriya (CP)

### 4.2. AGENDA

9:00 TOC for DJRA4.4 (CP)

9:15 Status of the current development (CP)

9:30 Scope of development for DJRA4.4

9:30 Wish List

9:45 BAR Service Functional Scope (CP/FS)

- storing data

10:00 BAR Client Functional scope (FS)

10:10 GN2 NSAP Functional scope (AP)

10:15 L-NSAP Functional scope (AP)

10:20 Updating BAR fault handling (FS)

10:30 Break

11:00 Analyse Schema/WSDLs,

11:00 BAR Schema/WSDL (CP/FS),

11:20 GN2 NSAP Schema/WSDL (AP)

11:40 L-NSAP Schema/WSDL (AP)

11:55 Test Plan (CP)

12:15 Workplan for DJRA4.4 (CP)

13:00 Close/Lunch

### 4.3. MINUTES

Deleted: 31/10/2005

Deleted: 28/10/2005

Formatted: Font: Not Bold, Do not check spelling or grammar

Formatted: Bullets and Numbering

Deleted: ¶

#### 4.3.1. TOC for DJRA4.4

- [DJRA4.4 BAR Script](#)
- [Complete interface document – DJRA4.1 which includes L-NSAP interface](#)

#### 4.3.2. Status of the current development

The current prototype has the following features:

- GDFT
- VLL
- Query
- Cancel
- Reading a BAR configuration file
- BAR-NSAP Request Mapping
- Client API/library
- Client JSP
- Host certificate based Client-BAR authentication

Issue: In SR interface.

- 1.Should we distinguish between service types?
2. If we do **not** distinguish between the service types then what values do we use for metrics like, packet loss? (for future)
- 3.If we do distinguish between service types then what do we specify in SR for GDFT. In this case SR and SA have to be the same type.

Formatted: Indent: Left: 0.75", Hanging: 0.13", Bulleted + Level: 2 + Aligned at: 0.75" + Tab after: 1" + Indent at: 1", Tabs: 0.88", List tab + Not at 1"

KK: What is the proper general solution?

AP: SR is a temporary throw away feature. Should keep this interface as simple as possible.

Only bandwidth should be specified.

[KK] Ask Tiziana and Elisabetta for their opinions on SR and SA interfaces.

Issue: How should the operations in the BAR interface be named?

- SR
- saGDFT
- saVLL
- QuerySR
- QuerySA
- CancelSR

Formatted: Bullets and Numbering

Deleted: 31/10/2005

Deleted: 28/10/2005

Formatted: Font: Not Bold, Do not check spelling or grammar

Deleted: ¶

- CancelSA

### 4.3.3. Scope of development for DJRA4.4

#### 4.3.3.1. Wish-List

##### MUST

Formatted: Heading 4,H4,T4

Deleted: ¶

Formatted: Font: Bold

1. Description of BAR-L-NSAP interface (model)
2. BAR SR and SA management
  - a. Identify who does resource management: is it BAR or L-NSAP
3. Updated JSP client which support SR and SA
  - a. Create a SR page which include create, query and cancel
  - b. Create a SA page which includes what we have now.
4. What SR and SA interface look like.
  - a. SA interface is almost identical to what we have now.
  - b. SR interface look similar to the current VLL interface.
5. Implement the new request flow minuted here.
6. Integrate with the GN2-SA3 NSAP service.

Formatted: Bullets and Numbering

##### SHOULD

Deleted: ¶

Formatted: Font: Bold

- 1) Development of dummy L-NSAP
- 2) A separate interface for BAR-BAR (east-west) communication
- 3) Identify a user for SR

See KK action to ask this from Tiiziana and Elisabetta

Deleted: ¶

##### MAY

Formatted: Font: Bold

- 1) Validate HLM requests based on local BAR configuration.
- 2) BAR-NSAP security
- 2b) BAR-L-NSAP security
- 3) Integrate NRS to L-NSAP
- 4) Evaluating EGEE Agreement interface
- 5) Further investigation of gLite Service Discovery
- 6) Improve client JSP GUI.
- 7) Look at WS-Agreement.

Deleted: ¶

##### NOT IN SCOPE

Formatted: Font: Bold



Deleted: 31/10/2005  
Deleted: 28/10/2005  
Formatted: Font: Not Bold, Do not check spelling or grammar

- 1) BAR-BAR security
- 2) BAR-L-NSAP security
- 3) HLM-BAR user authentication

Deleted: ¶

#### 4.3.3.2. **BAR Service Functional Scope**

- BAR-RemoteBAR communication
- Write SR interface
  - In DJRA4.1
  - In the form of WSDL
- Operations for SRs and SAs
- Implement operation for SRs and SAs.
- Hand shaking with an L-NSAP service
- Integrate with the GN2-SA3 NSAP service.

Formatted: Bullets and Numbering

Deleted: ¶

#### 4.3.3.3. **BAR Client Functional scope**

- Update the client API to support SR/SA operations
- Update JSP client to support SR/SA operations.

Formatted: Bullets and Numbering

Deleted: ¶

#### 4.3.3.4. **GN2 NSAP Functional scope**

- Point-to-point reservation
- Ingress point has to specified.

Formatted: Bullets and Numbering

Deleted: ¶

Formatted: Heading 4,H4,T4

#### 4.3.3.5. **L-NSAP Functional scope**

- Implement 6 interfaces
- Simple thresh hold base responses
- If time permits, secondary storage.

Deleted: ¶

Formatted: Bullets and Numbering

Deleted: ¶

#### 4.3.3.6. **Updating BAR fault handling**

Dependent on available time. Evaluate during mid-development cycle.

#### 4.3.4. **Analyse Schema/WSDLs**

BAR Schema/WSDL (CP/FS),

Not covered.

GN2 NSAP Schema/WSDL (AP)

GN2 NSAP comes with a Client that BAR could use.

[AP] Send list of valid keys for NSAP WSDL

For BARVLL service where forward and reverse bandwidth are specified two reservations within one NSAP service must be specified. Currently, if one reservation failed then whole service fails.

Deleted: 31/10/2005

Deleted: 28/10/2005

Formatted: Font: Not Bold, Do not  
check spelling or grammar

L-NSAP Schema/WSDL (AP)

Not discussed.

#### 4.3.5. Test Plan

The System Testing document should cover manual end-to-end tests to be done by a non-developer. That is, someone not familiar with the code must be able to run the tests defined in here and know the expected results.

#### 4.3.6. Workplan for DJRA4.4

We should have a test plan – re-evaluate the effort.

Refer to DJRA4.4 work plan [R7] for task assignment.

Deleted: 31/10/2005

Deleted: 28/10/2005

Formatted: Font: Not Bold, Do not  
check spelling or grammar

## 5. LIST OF ACTIONS

[KK] Merge SA-2.6.1 and SA-2.8 requirements

[KK] Mark SA2-13 as out of scope – no effort.

[KK] Fix commentary of SA2.3.3

[AP] define the term “last mile” in the BAR end2end specification.

[AP/MB] Add notification of Service Requests to L-NSAP.

[AP/MB] In DJRA4.1, add to SR stage.

- Request installation of SR – check/block a SR will not violates local policy of interconnected link.
- Query SRs and Cancel SRs

Formatted: Bullets and Numbering

[MB] Remove “Service Class” from the L-NSAP interface

[AP] implement thresh holds for accepting 6 SR/SA operations (not random “yes” or “no”☺. If time permits -> implement persistence storage of SRs and SAs.

[KK] Ask Tiziana and Elisabetta for their opinions on SR and SA interfaces.

[AP] Send list of valid keys for NSAP WSDL

[FS] Add parameter SR ID to East Interface

Deleted: 31/10/2005

Deleted: 28/10/2005

Formatted: Font: Not Bold, Do not check spelling or grammar

Formatted: Heading 1,H1

Formatted: Heading 2,A.B.C.,Heading2-bio,Career Exp.,H2,T2

Formatted: Bullets and Numbering

## 6. OPEN ISSUES

### 6.1. BAR

- How should BAR store requested SRs to validate SA against them later on?
- Do we distinguish between GDFT and VLL at SR stage?

**1. INTRODUCTION ..... 4**

- 1.1. PURPOSE ..... 4
- 1.2. APPLICATION AREA ..... 4
- 1.3. REFERENCES ..... 4
- 1.4. DOCUMENT EVOLUTION PROCEDURE ..... 4
- 1.5. TERMINOLOGY ..... 4

**2. VENUE ..... 5**

**3. DAY 1 – MONDAY 24 OCTOBER 2005 ..... 6**

- 3.1. EXPECTED ..... 6
- 3.2. AGENDA ..... 6
- 3.3. MINUTES ..... 7
  - 3.3.1. *BAR use cases* ..... 7
  - 3.3.2. *BAR requirements revisited* ..... 7
  - 3.3.3. *BAR-to-BAR communication* ..... 8

**3.3.4. BAR END-TO-END SPECIFICATION 9**

**3.3.5. L-NSAP INTERFACE MODEL 9**

**3.3.6. DUMMY L-NSAP 10**

**3.3.7. GN2 NSAP 10**

**3.3.8. BAR DEMO 10**

**3.3.9. OPEN ISSUES 10**

**4. DAY 2 – TUESDAY 25 OCTOBER 2005 12**

#### **4.1. EXPECTED 12**

Page 3: [9] Deleted charaka 10/31/2005 4:05:00 PM

#### **4.2. AGENDA 12**

Page 3: [10] Deleted charaka 10/31/2005 4:05:00 PM

#### **4.3. MINUTES 13**

Page 3: [11] Deleted charaka 10/31/2005 4:05:00 PM

##### **4.3.1. TOC FOR DJRA4.4 13**

Page 3: [12] Deleted charaka 10/31/2005 4:05:00 PM

##### **4.3.2. STATUS OF THE CURRENT DEVELOPMENT 13**

Page 3: [13] Deleted charaka 10/31/2005 4:05:00 PM

##### **4.3.3. SCOPE OF DEVELOPMENT FOR DJRA4.4 14**

Page 3: [14] Deleted charaka 10/31/2005 4:05:00 PM

##### **4.3.4. ANALYSE SCHEMA/WSDLs 16**

Page 3: [15] Deleted charaka 10/31/2005 4:05:00 PM

##### **4.3.5. TEST PLAN 16**

Page 3: [16] Deleted charaka 10/31/2005 4:05:00 PM

##### **4.3.6. WORKPLAN FOR DJRA4.4 16**

Page 3: [17] Deleted charaka 10/31/2005 4:05:00 PM

#### **5. LIST OF ACTIONS 16**