ID		Description	Source	Areas		Status	Date	Link to discussion page
1		All grid entities MUST be described using the most recent GLUE2 model	GIN	Information		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqIS1
2		For each grid entity which can NOT be described in conformance with GLUE, PGI should propose extensions	GIN	Information		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqIS1.2
3		If functions provided by one Endpoint have different GLUE properties, then the Endpoint MUST be split in different Endpoints, each one having homogeneous properties	Etienne Urbah	Information		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqIS2.2
4		Each service must publish information regarding its service properties	GIN	Information		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqIS3
5		The Execution Service must not expose information about the entities which the Execution Service does not manage	Etienne Urbah	Information		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqIS4
6		Instance of Execution Service MUST provide access to attributes/meta data that describe this instance using GLUE2. (V-2 note: The appropriate sections of the XML rendering of GLUE2 need to be identified.). Different levels of verbosity should be offered.	Strawman functionality	Information		Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqIS5
7		The Execution service instance MUST publish all data-staging capabilities (for example: supported protocols like GridFTP, ByteIO,...).	Draft Spec	Information, Data		Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqIS6
8		The vector limits for each of the vector operations should be exposed	Draft Spec	Information		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqIS7
9		Servers MUST authenticate to Clients with SSL certificates	General	Security		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqAA1
10		SSL certificates of servers MUST be signed by a CA belonging to IGTF	General	Security	9	Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA1.1&referrerPageName=RequirementsTable
11		Each Service MUST publish the Authentication and Authorization methods accepted by its Endpoints in conformance with GLUE recommendations	General	Security, Information		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA2&referrerPageName=RequirementsTable
12		For Client authentication, Services MUST require security credentials	General	Security		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA3&referrerPageName=RequirementsTable
13		For Client authentication, Services MAY accept full X509 certificates	General	Security		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA3.1&referrerPageName=RequirementsTable
14		For Client authentication, Services MAY accept RFC-3820-compliant X509 proxies	General	Security		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA3.2&referrerPageName=RequirementsTable

15		For Client authentication, Services MAY accept SAML assertions	General	Security		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA3.3&referrerPageName=RequirementsTable
16		For Client authentication, Services MAY accept Shibboleth credentials	General	Security		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA3.4&referrerPageName=RequirementsTable
17		For Client authentication, Services must accept a certain number of authentication methods	General	Security		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqAA3.5
18		For Client authorization, Services MUST require security credentials	General	Security		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA4&referrerPageName=RequirementsTable
19		For Client authorization, the packaging of security credentials MUST be designed to prevent that any software component gains undue privilege by extracting only some credentials from the package	Etienne Urbah	Security		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA4.1&referrerPageName=RequirementsTable
20		For Client authorization, Services MAY accept the DN of the X509 certificate or RFC-3820-compliant X509 proxy	GIN	Security		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA4.2&referrerPageName=RequirementsTable
21		For Client authorization, Services MAY accept X509 VOMS-style Attribute Certificates (VOMS extensions)	GIN	Security		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA4.3&referrerPageName=RequirementsTable
22		For Client authorization, Services MAY accept SAML assertions	GIN	Security		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA4.4&referrerPageName=RequirementsTable
23		For Client authorization, Services MAY accept Shibboleth credentials	GIN	Security		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA4.5&referrerPageName=RequirementsTable
24		For Client authorization, Services MUST accept at least one of DN, X509 VOMS extensions, SAML assertions	GIN	Security		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA4.6&referrerPageName=RequirementsTable
25		For Client authorization, Services SHOULD accept SAML assertions	GIN	Security		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA4.7&referrerPageName=RequirementsTable
26		Cross-organization delegation, particularly to (university) campuses and other partner institutions, use native authentication mechanisms to national resources. I can use my credentials at University X to retrieve another credential for University Y that is in the same trust federation. For example: in US a lot of efforts towards SAML and 'incommon' driven by Internet2 (i.e. Shibboleth). Different attributes: Ways to use WS-Trust to work on this.	NSF 08-571	Security		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA4.8&referrerPageName=RequirementsTable
27		In order to keep middleware complexity and bandwidth usage as low as possible, grid Services should NOT send the full description of their security interface inside each message, but only when specifically requested	GIN	Security		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA7&referrerPageName=RequirementsTable

28		Service has to act on behalf of another identity. Services often need to delegate those Credentials to other Service. Therefore, Services MUST offer interoperable methods for Credential delegation.	GIN	Security		Proposed	3/17/2010 http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA8&referrerPageName=RequirementsTable
29		The delegation procedure might require multiple steps (one approach might be the delegation portType)	GIN	Security		Proposed	3/19/2010 http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA8.3&referrerPageName=RequirementsTable
30		Delegation credential renewal should be supported	GIN	Security		Proposed	3/19/2010 http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA8.4&referrerPageName=RequirementsTable
31		Associate Activity to a specific delegation certificate	Luigi Zangrando	Security		Proposed	3/19/2010 http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA8.5&referrerPageName=RequirementsTable
32		We must authorize a user to manage Activities submitted by other users (access control lists/methods/policies)	Luigi Zangrando	Security, Compute		Proposed	3/19/2010 http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA9&referrerPageName=RequirementsTable
33		It is assumed that the clients obtain security setup info through out-of-band mechanisms which are not covered by this specification.	Draft Spec	Security		Proposed	3/19/2010 http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA11&referrerPageName=RequirementsTable
34		An easy way of launching applications or pre-configured /pre-installed software w/o specifying location details. The exposure of these installed/pre-configured ones should be exposed as well as part of the resource description.	GIN	Compute		Proposed	3/19/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqAR1
35		Application management, for example: pre-installed applications, abstract notion of the application (i.e. specify w/o executable locations), global namespace of this applications might be beneficial as well.	NSF 08-571	Compute		Proposed	3/20/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqAR2
36		If we do accounting: Usage Records OGF - For example: DEISA & TeraGrid uses UR today for tracking resource usage. Most likely improving UR in terms of network and storage resource tracking and improvements of compute parts of multi-core-business. Grid-level attributes (for example: start-time on Grid vs. in batch-system).	NSF 08-571	Accounting		Proposed	3/20/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqAc2

37		In order to permit efficient Log analysis and Security audit, a grid infrastructure MUST provide a Logging and Bookkeeping functionality (without real time requirements) which consolidates Activity logs at the grid level from various logging systems, and keeps Activity logs even after Activities have finished	PGI	Compute		Proposed	3/26/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqLB1
38		The Logging and Bookkeeping functionality MUST accept requests querying the Status of an Activity (primarily for completed and finished jobs), and MUST return the Activity Status with different levels of verbosity (basic, detailed, more detailed)	PGI	Compute		Proposed	3/26/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqLB2
39		The Logging and Bookkeeping functionality MUST accept requests querying the Activity Log, and MUST return the Activity logs (job lifetime and history) with different levels of verbosity (basic, detailed, more detailed)	PGI	Compute		Proposed	3/26/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqLB3
40		In terms of queries, the Logging and Bookkeeping functionality SHOULD support query languages	PGI	Compute		Proposed	3/26/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqLB7
41		In order to prevent overloading the Execution Service (which has performance requirements for Activity Management), the Logging and Bookkeeping functionality SHOULD be separated from the Execution Service	Etienne Urbah	Compute		Proposed	3/26/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqLB8
42		For Activity submission, Clients MUST query the Information Service in order to get an adequate Endpoint of an Execution Service	Etienne Urbah	Information		Proposed	3/17/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqJM1
43		The Execution Service MUST provide a way to create Activities.	General	Compute		Proposed	3/19/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqJM2
44		Activities submitted by Clients to an Execution Service MUST be specified using a well-defined Job Description document	General	Compute		Proposed	3/17/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqJM3
45		On creation of an Activity, the Execution Service MUST return to the Client an Activity ID permitting the Client to perform subsequent actions (Query, Cancel, ...) on this precise Activity	General	Compute		Proposed	3/17/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqJM4
46		The service assigns a global unique Activity ID - not the client	General	Compute		Proposed	3/20/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqJM4.1

47		The Activity ID MUST be suitable for manual transfer by a human (In case of problems with the Activity).	Etienne Urbah	Compute		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqJM4.3
48		In case of an activity being moved to another execution service it still must be accessible via the initial execution service, which created the activity.	Etienne Urbah	Compute		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqJM4.4
49		An execution service may offer several endpoints to create and later manage the activities while the latter endpoint must be stay fixed.	Etienne Urbah	Compute		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqJM4.5
50		The Execution Service MUST NOT assume that the Client is able extract any information from the Activity ID. Therefore, the Activity ID can be completely opaque.	General	Compute		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqJM4.7
51		From the Activity ID, the Client MUST be able to extract the Endpoint suitable for Activity Management, but the Execution Service MUST NOT assume that the Client is able to extract any other information from the Activity ID	General	Compute		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqJM4.8
52		From the Activity ID, the Client MUST be able (for example by querying a Name Server) to dynamically retrieve the Endpoint suitable for Activity Management, but the Execution Service MUST NOT assume that the Client is able to extract or retrieve any other information from the Activity ID	General	Compute		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqJM4.9
53		Define exactly what an Activity ID is.	GIN	Compute		Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqJM4.10
54		Operations dealing with Activity management of the service should operate on Activity IDs in order to ensure a good performance	GIN	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqJM4.11
55		A simple activity is defined by a simple job description containing only one local job executed only by one batch system	Etienne Urbah	Compute		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM5&referrerPageName=RequirementsTable
56		The Execution Service SHOULD accept vectors of simple Activities as input parameter for several operations such as Create(), ChangeState(), ActivityStatus(), Cancel(), Purge() (implementation aspect longly discussed in Munich - worth to keep)	Draft Spec	Compute		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM5.1&referrerPageName=RequirementsTable

57		The execution service may have limits with respect to the size of the vector due to implementation aspects and if requests exceed the implementation limits the service communicates this via a fault.	Draft Spec	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM5.2&referrerPageName=RequirementsTable
58		Execution Service will NOT take into account Collection Activities (these are not vectors), which are containers for a limited number of explicitly described independent Single Activities	Draft Spec	Compute		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM5.3&referrerPageName=RequirementsTable
59		Execution Service will NOT take into account Parameter Sweep Jobs, which describe independent Single Activities to be created dynamically	Draft Spec	Compute		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM5.4&referrerPageName=RequirementsTable
60		Execution Service will NOT take into account DAG Jobs, which describe a DAG workflow of a limited number of explicitly described Single Jobs	Draft Spec	Compute		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM5.5&referrerPageName=RequirementsTable
61		The Execution Service SHOULD support any Activity running massively-parallel processes using MPI and large-scale HPC Systems	Strawman functionality	Compute		Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM5.6&referrerPageName=RequirementsTable
62		The Execution Service MUST log enough grid information inside logging systems (which MAY vary during the lifetime of the Activity), in order to permit efficient Log analysis and Security audit	Etienne Urbah	Compute		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM6&referrerPageName=RequirementsTable
63		The Execution Service MUST accept requests querying the Status of an Activity, and MUST return the Activity Status	Draft Spec	Compute		Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM6.1&referrerPageName=RequirementsTable
64		Executions service provides the activity status information with different levels of verbosity (basic, detailed, more detailed)	Draft Spec	Compute		Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM6.2&referrerPageName=RequirementsTable
65		In order to minimize polling of the Activity Status, the Execution Service MAY implement a mechanism for notification. Asynchronous notification of Activity status (for example: e-mail, SMS, etc.) - human level notification	NSF 08-571	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM6.5&referrerPageName=RequirementsTable
66		The Instance of Execution Service MUST permit any Client to request the list of all Activities managed by this instance on which the Client has authorization	Strawman functionality	Compute		Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM6.7&referrerPageName=RequirementsTable
67		If a client queries for an already finished activity, the execution service may response with an error.	Etienne Urbah	Compute		Proposed	3/26/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM6.8&referrerPageName=RequirementsTable

68		The Execution Service MUST accept requests querying the detailed Information of an Activity, and MUST return the detailed Activity Information (more than just the status, for example: GLUE2 Activity). Provide Activity information with different levels of verbosity (basic, detailed, more detailed).	Draft Spec	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM6.9&referrerPageName=RequirementsTable
69		Obtain Activity session directory/staging-directory (maybe as part of more general) information via an Activity ID.	Draft Spec	Compute, Data		Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM6.10&referrerPageName=RequirementsTable
70		The Execution Service MAY provide the functionality to monitor (poll) the state of activities via filters (defined by queries, i.e. not requiring explicit Activity ID).	Luigi	Compute		Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM6.12&referrerPageName=RequirementsTable
71		The Execution Service MUST provide information about the Activity history (i.e. Activity status) and invoked operations on this Activity (log on ws level?!). Adopt potentially the JSDL instance specification.	Etiene Urbah	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM6.13&referrerPageName=RequirementsTable
72		The execution service MUST publish state information according to the common PGI state model, but status information might be optionally published according to multiple state models.	Draft Spec	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM6.14&referrerPageName=RequirementsTable
73		The execution service should offer more flexibility enabling complex queries on resource and Activity information expressed according to the GLUE2 model without explicit specification of the Activity IDs. The Execution Service MAY support multiple query languages in addition to the mandatory one.	Draft Spec	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM6.15&referrerPageName=RequirementsTable
74		The execution service should offer separate(!) operations to query Resource and Activity information.	Draft Spec	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM6.16&referrerPageName=RequirementsTable
75		In order to apply the principle of 'Full Automation of Processing' inside the Activity State Model there should be not a 'Hold' state for Activities	Etienne Urbah	Compute		Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqJM8
76		In order to permit the Client to perform client-directed processing of submitted Activities (for example client-directed data staging), the Execution Service SHOULD manage 'Hold' points for Activities. Fault if not supported.	Strawman Doc	Compute		Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqJM9

77		The Execution Service MUST be able to create Activity 'in hold state'	Draft Spec	Compute		Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM9.1&referrerPageName=RequirementsTable
78		Requirement to have a pending state (i.e. waiting to be scheduled)	Morris	Compute		Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM9.2&referrerPageName=RequirementsTable
79		When the client wants to perform client initiated data-staging-in, the client MUST also specify in the Job Description via 'Hold' points that the Activity holds.	Draft Spec	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM9.3&referrerPageName=RequirementsTable
80		The service MAY offer the hold and corresponding resume functionality of Activity processing. Change state operation to resume a hold execution and to put the Activity into 'Hold'.	Draft Spec	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM9.4&referrerPageName=RequirementsTable
81		On Activity submission, if the Execution Service fails to create the Activity for any reason, the Execution Service MUST return to the Client a descriptive error	General	Compute		Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM10&referrerPageName=RequirementsTable
82		It is important that optional Job Description elements MUST NOT be ignored by the service and rather throw a corresponding fault in the case that the service does not support this optional client request.	GIN	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM10.1&referrerPageName=RequirementsTable
83		The Execution Service MUST provide to the Client a Web Service using SOAP	General	Compute		Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM11.1&referrerPageName=RequirementsTable
84		The Execution Service NOT REQUIRED to provide any service management capability (e.g. start/stop accepting new activities).	GIN	Compute		Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM12&referrerPageName=RequirementsTable
85		Activity recovery via 'changestatus' mechanism after Activity was failed.	Balazs Konya	Compute		Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM13&referrerPageName=RequirementsTable
86		The Execution Service offers the possibility to 'cancel/terminate/kill/destroy' an Activity. The cancel means that active data-staging processes SHOULD be cancelled and active executions in RMS MUST be cancelled.	Strawman Doc	Compute		Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM14&referrerPageName=RequirementsTable
87		Lease of Activities (several Activities may get purged by the Execution Service if they loose contact with the client or after a timeout), 'automatic cleanup' in case the lease was not renewed	Luigi	Compute		Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM15&referrerPageName=RequirementsTable
88		Request routing capabilities (for example: preferred shares, etc.) - prepare for TIME CONSUMING DISCUSSIONS!	GIN	Compute		Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM16&referrerPageName=RequirementsTable

89		Request Forwarding capabilities, prepare for TIME CONSUMING DISCUSSIONS!	GIN	Compute		Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM17&referrerPageName=RequirementsTable
90		Execution Service SHOULD perform validation (potentially several steps). An incomplete validation can be done immediately while a full validation will be only performed asynchronously as requested by client	GIN	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM18&referrerPageName=RequirementsTable
91		The validation must happen as part of the activity creation and not later. If validation fails a error has to be provided.	GIN	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM18.1&referrerPageName=RequirementsTable
92		The execution service can decide which level of activity validation is appropriate	GIN	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM18.2&referrerPageName=RequirementsTable
93		The execution service should offer Time estimations to completion of asynchronous operations such as Statechange, Cancellation, Purge	Draft Spec	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM19&referrerPageName=RequirementsTable
94		Requirement to have a purge (maybe called wipe) operation. This operation is only allowed on any final state according to the state model. The operation is not supposed to kill Activities, that is why its only allowed on final states.	Draft Spec	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM20&referrerPageName=RequirementsTable
95		Cleanup of BES - a number of compromises were made to satisfy parties, drop, improve, etc. - but not breaking the general BES concept (more on GridForge BES session)	NSF 08-571	Non-functional		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM21&referrerPageName=RequirementsTable
96		If underlying naming and binding mechanism be resilient to failure to migration and replication, for example: create Activity and its decided its to hand it of to another BES and (a) makes this new BES responsible or (b) migrate completely to the new BES (i.e. automatic forwarding). Migration is an important activity not only in compute but also in data.	NSF 08-571	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM22&referrerPageName=RequirementsTable
97		A user should be able to know the full routing of the forwarding actions of Activities by services. JSDL instance is partly tackling this problem.	NSF 08-571	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM23&referrerPageName=RequirementsTable
98		The user should be able to contact the end of the path (final) service.	NSF 08-571	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM24&referrerPageName=RequirementsTable
99		StartAccepting and StopAccepting activities might be still required (for example: for Desktop Grids and HTC). Preserve backwards compatibility from PGI perspective.	NSF 08-571	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM25&referrerPageName=RequirementsTable

100		The Job Description document MUST reference all grid entities in conformance to the GLUE specification	GIN	Compute		Proposed	4/1/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJD3&referrerPageName=RequirementsTable
101		The Job Description document specification MUST permit the Client to request automatic data stage-in and stage-out	GIN	Compute		Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJD4&referrerPageName=RequirementsTable
102		The Job Description document specification MUST permit the Client to request the number of time the Execution Service should perform automatic resubmission in case of Activity failure	Etienne Urbah	Compute		Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJD5&referrerPageName=RequirementsTable
103		The Job Description document specification MUST permit the Client to request that at specified Activity states, the Execution service sets the Activity on 'Hold'	Draft Spec	Compute		Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJD6&referrerPageName=RequirementsTable
104		The Job Description SHOULD allow to specify n different alternative(!) data sources to perform data-stagings (i.e. NOT all of them).	Draft Spec	Compute		Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJD7&referrerPageName=RequirementsTable
105		Job Description supports, 1) service-directed data-staging (i.e. specify data-stagings),2) client-initiated data-staging (i.e. specifiy data-staging but service will do nothing only control whether files existing), 3) manual data-staging (i.e. no specification of data-staging elements)	Draft Spec	Compute		Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJD8&referrerPageName=RequirementsTable
106		The Job Description SHOULD allow to specify n different alternative(!) data targets to perform data-stagings (i.e. ALL of them must be processed, the usual JSDL case).	Draft Spec	Compute		Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJD9&referrerPageName=RequirementsTable
107		Job Description should be only used for Job Description not for any kind of feedback. Job status information should not be communicated with a 'changed JSDL'	Draft Spec	Compute		Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJD11&referrerPageName=RequirementsTable
108		Job Description comes with support for requesting multi-processor Activities (for example: threads/node, network topology, task/core mappings, multi-threading and such like).	Strawman Functionality	Compute		Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJD13&referrerPageName=RequirementsTable
109		Job Description document should be with simple structure, which avoids unnecessary overlaps (e.g. memory in different places defined)	GIN	Compute		Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJD14&referrerPageName=RequirementsTable

110		Job Description document supports simple ranges only in the case of necessary elements	Draft Spec	Compute		Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJD15&referrerPageName=RequirementsTable
111		Job Description document should offer grouped data-stagings for a better clean structure	Draft Spec	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJD16&referrerPageName=RequirementsTable
112		Job Description document should offer a clear seperation of describing resource description and application (for example: suggest to put memory information into resource)	Draft Spec	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJD17&referrerPageName=RequirementsTable
113		Job Description document should offer a new re-usable structure to describe an executable composed as path and argument.	Draft Spec	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJD18&referrerPageName=RequirementsTable
114		Job Description document should offer a new re-usable structure to describe a software requirement, to express relations (OR, AND, GREATER, SMALLER, ...) of software requests and other requests.	Draft Spec	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJD19&referrerPageName=RequirementsTable
115		Job Description document should offer a new re-usable structure to define 'scalabletime' requests optionally depending on benchmark results.	Draft Spec	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJD20&referrerPageName=RequirementsTable
116		Clearly separate file and directory in the data-stagings.	Draft Spec	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJD22&referrerPageName=RequirementsTable
117		New structure to describe the context in which the Job Description was generated (i.e. meta).	Draft Spec	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJD23&referrerPageName=RequirementsTable
118		Improvement of JSDL specifications in terms of: 'OR' and 'NEGATION', currently there is only 'AND'.	NSF 08-571	Compute		Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJD24&referrerPageName=RequirementsTable