

ID	Description	Source	Areas	Quick agreement (yes/no/unclear)	Status	Date	Link to discussion page
1	All grid entities MUST be described using the most recent GLUE model	GIN	Information	no - Andrew	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	yes	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 (here Execution Service) have different GLUE properties, then the Endpoint MUST be split in different Endpoints, each one having homogeneous properties, heterogeneous resources can't be described with one GLUE endpoint entity	Etienne Urbah	Information	No	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	yes	Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqIS3
5	The Execution Service must not expose detailed information about the GLUE entities which the Execution Service does not manage (all that are not expressed by the computing part of GLUE), example Storage element GLUE entity not exposed via execution service, no details about storage entity	Etienne Urbah	Information	yes	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 GLUE. (V-2 note: The appropriate sections of the XML rendering of GLUE need to be identified.). Different levels of verbosity should be offered.	Strawman functionality	Information	yes	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	yes	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 - If the Execution Service provides vector functionalities, then it MUST publish the vector limits according to the GLUE endpoint. If these vector functionalities have different vector limits, then they MUST be grouped inside separate GLUE Endpoints entities having each a homogeneous vector limit.' (Problem GLUE2 space), example: createQuickActivity[1000], createValidatedActivity[10] - this information must be exposed when they have limits	Draft Spec	Information	Yes	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	no	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	no	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, example: endpoint capabilities for security like WS-Security and X.509, WS-SecurityPolicy within the GLUE element, list of authentication and authorization methods (e.g. profiles like WS-SecureCommunication) - extend capability_t values security.authentication.ssl and security.authorization.ssl - do we extend with Strings only or do we insert XML (WS-SecurePolicy)	General	Security, Information	unclear (after 10 min)	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	no	Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA3&referrerPageName=RequirementsTable http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA3.1&referrerPageName=RequirementsTable
13	For Client authentication, Services MAY accept full X509 certificates, transport or message level is open?	General	Security	unclear	Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA3.2&referrerPageName=RequirementsTable http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA3.3&referrerPageName=RequirementsTable
14	For Client authentication, Services MAY accept RFC-3820-compliant X509 proxies	General	Security	unclear	Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA3.4&referrerPageName=RequirementsTable
15	For Client authentication, Services MAY accept SAML assertions	General	Security	unclear	Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA3.5&referrerPageName=RequirementsTable
16	For Client authentication, Services MAY accept Shibboleth credentials	General	Security	unclear	Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA3.6&referrerPageName=RequirementsTable
17	For Client authentication, Services must accept a certain number of authentication methods	General	Security	no	Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqAA3.5
18	For Client authorization, execution service MUST require security credentials, example: typically anonymous requests not allowed, perhaps a policy-decision rather than requirement	General	Security	no	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, example: a man in the middle might extract one credential from 'the package' and this should be not allowed, are such packages existing? E.g. several SAML assertions in the SOAP Header. What set of assertions have been delegated with signature chain together as 'one package' - the SAML assertions (even 3) are always together signed	Etienne Urbah	Security	yes	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	yes	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	yes	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	yes	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	yes	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	no	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	no	Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA4.7&referrerPageName=RequirementsTable
26	Requirement of cross-organization trust federation mechanism, single sign-on. (E.g. Cross-organization delegation, particularly to (university) campuses and other partner institutions, use native authentication mechanisms to national resources. E.g. 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 (authentication mechanism) and 'incommon' (project name of authentication mechanism, incommon.org using Shibboleth version 2) driven by Internet2 (large network provider) (i.e. Shibboleth developers). Related Shibboleth E.g. Different attributes: Ways to use WS-Trust to work on this.	NSF 08-571	Security	No	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	no	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 mechanism for Credential delegation.	GIN	Security	yes	Proposed	3/17/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA8&referrerPageName=RequirementsTable
29	We need delegation and have to define exactly what delegation is and its methods. E.g the delegation procedure might require multiple steps (one approach might be the delegation portType) , e.g. gridsite delegation method - bringing delegation to the portType level using operations.	GIN	Security	yes	Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA8.3&referrerPageName=RequirementsTable http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA8.4&referrerPageName=RequirementsTable
30	Delegation credential renewal should be supported	GIN	Security	yes	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 credential, e.g. certificate or SAML assertion, or..., Each job belong to a credential (associate them), when ever one credential expires then the execution service may terminates the corresponding activities	Luigi Zangrando	Security	yes	Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqAA8.5&referrerPageName=RequirementsTable
32	There must be a mechanisms that allows users to manage Activities submitted by other users (access control lists/methods/policies). In order to authorize (or not) an request on an Activity, each instance of the Execution Service MUST enforce a consistent authorization method,	Luigi Zangrando	Security, Compute	yes	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	no	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. Installed/pre-configured ones should be exposed as well as part of the resource description. The available software should be exposed through the service and in turn be requestable for resource/applications statements in JSDL. E.g. extending the JSDL with "pre-configured sw pieces" and/or "software libraries", e.g. global namespace of this applications might be beneficial as well , etc.	GIN, NSF 08-571	Compute	Yes	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),	NSF 08-571	Compute	Yes	Duplicate (# 34)	3/20/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqAR2
36	The execution service should provide accounting record for every managed activity. e.g. OGF Usage Records,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	Yes	Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqAc2

37	The execution service should provide local log records that permit efficient log analysis and security audit, e.g. changes of activity states, faults, user / job mappings, ..	PGI	Compute	Yes	Proposed	3/26/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqLB1
38	Execution service should provide functionalities for accepting requests querying on local log records and provide different levels of verbosity, e.g. request an operation that exposes logs on the portType level	PGI	Compute	No	Proposed	3/26/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqLB2
39	Some Logging and Bookkeeping functionality MUST accept requests in order to obtain the Activity Log, and MUST return the Activity logs (job lifetime and history) with different levels of verbosity (basic, detailed, more detailed)	PGI	Accounting & Logging	yes	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, e.g. at least one complex query language like XPath, XQuery, in order to obtain the activity logs, etc.	PGI	Accounting & Logging	No	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	no	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	no	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	yes	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	yes	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	yes	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	yes	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	no	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 manageable via the initial execution service, which created the activity, e.g. one endpoint used for job submission then all subsequent requests have to be supported as well (e.g. query statuses, manage the job, etc.)	Etienne Urbah	Compute	no	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 (e.g. URI / EPR) to create and later manage the activities while the latter endpoint must be stay fixed., e.g. job submitted via portal to execution service and its answers with the endpoint that really manages this submitted activity (might be forwarded for execution by another service / endpoints) - MAYBE ILLUSTRATION HELPS (after 10 Min)	Etienne Urbah	Compute	unclear (after 10 Min)	Proposed	3/17/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqJM4.5

	The Execution Service MUST NOT assume that any Client is able extract any information (including addressing information) from the Activity ID. Therefore, the Activity ID may be completely opaque. - UNDERSTANDING WHAT AN ACTIVITY ID IS... 50 (Time Consuming)	General	Compute	no	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	no	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	no	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	yes	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	no	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	no	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 be able to support bulk operations for several operations such as Create(), ChangeState(), ActivityStatus(), Cancel(), Purge() (implementation aspect longly discussed in Munich - worth to keep), e.g. one implementation might be to support vectors for operations within Execution service	Draft Spec	Compute	no	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 for its bulk operations. E.g. 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	no	Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM5.2&referrerPageName=RequirementsTable
58	The Execution Service should support collections (different from vectors since collections have an id and group different activities)	Draft Spec	Compute	no	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	no	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	no	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	yes	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	yes	Duplicate (#37)	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	no	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	no	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	yes	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	no	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	yes	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	no	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 within an Activity ID.	Draft Spec	Compute, Data	no	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	no	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.	Etienne Urbah	Compute	no	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 activity status information according to the common PGI state model, but status information might be optionally published according to multiple (simultaneously) status models (maybe additional own state model).	Draft Spec	Compute	no	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 GLUE model without explicit specification of the Activity IDs. The Execution Service MAY support multiple query languages in addition to the mandatory one. E.g. in comparison with BES et al. we need a bit more than a basic filter mechanism being able to get information about specific jobs	Draft Spec	Compute	no	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	no	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 not be a 'Hold' state for Activities	Etienne Urbah	Compute	no	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	no	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	no	Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM9.1&referrerPageName=RequirementsTable

78	Requirement to support a incoming/pending/queued state (i.e. waiting to be executed), e.g. a sub-state of running, having submitted a job to a batch system like LoadLeveler, Torque, and such like pending means it was accepted, is scheduled, but not running yet (kind of waiting to be executed).	Morris	Compute	no	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	no	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	no	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	yes	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	no	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	no	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 does not intend to cover service management capability (e.g. start/stop accepting new activities).	GIN	Compute	no	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., e.g. if an activity failed because of post-processing errors, it can be changed to be before data-staging	Balazs Konya	Compute	no	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	yes	Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM14&referrerPageName=RequirementsTable
87	Avoiding to have ghosts / zombie jobs, a job out of control of user possibly happened by an error/exception, those jobs that lost their owners: a mechanism of "automatic cleanup" is required. E.g. Lease mechanism triggers a 'automatic cleanup' in case the lease was not renewed	Luigi	Compute	no	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	unclear - postponed	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	unclear - postponed	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 a certain to be agreed set of validations (potentially several steps). Not all of them are necessarily needed to be done as part of the activity creation. An incomplete validation maybe done at activity creation but a full validation should be completed later, e.g. support of scientists that perform manual data-stagings might need some very well validated jobs in order to not redo a lot of manual data-stagings	Draft Spec	Compute	no	Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM18&referrerPageName=RequirementsTable
91	The full validation (including numerous steps) must happen as part of the activity creation and not later. If validation fails a error has to be provided.	Draft Spec	Compute	no	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	no	Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM18&referrerPageName=RequirementsTable
93	The execution service should offer Time estimations to completion of asynchronous operations such as Statechange, Cancellation, Purge	Draft Spec	Compute	no	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. Removing all presence (except logs & usage records) of the activity (when it is not longer active or once finished). This functionality is only allowed on any final state according to the PGI state model. The functionality is not supposed to kill Activities, that is why its only allowed on final states.	Draft Spec	Compute	yes	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	no	Rejected	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJM21&referrerPageName=RequirementsTable
96	If an activity is migrated to another execution service because of a failure or optimization, the original execution service must be allowed to "forget" about the activity, thereby passing responsibility for the activity on to the second execution manager	NSF 08-571	Compute	no	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	unclear (postponed)	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	no	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	no	Related (#84)	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	yes	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	yes	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 local automatic resubmission in case of Activity failure, e.g. failed once but can be re-submitted locally to the batch system	Etienne Urbah	Compute	yes	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	no	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 of any single input data.(semantics: data may be fetched from some of the alternative sources)	Draft Spec	Compute	no	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. specify 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	no	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 data targets of any single output data. Later to be decided how the targets will be handled.	Draft Spec	Compute	unclear (after 30 min)	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	yes	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	yes	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	no	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 , e.g. simpler than currently defined in JSDL	Draft Spec	Compute	no	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	no	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 separation between resource requirements and application requirements (for example: suggest to put memory information into resource), e.g. improving the JSDL specification in this context (if necessary)	Draft Spec	Compute	no	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	unclear (after 10 min)	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	yes	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. scalabletime composed of time request, benchmarkname, benchmarkvalue, e.g. The JSDL document should offer a newly structure where scaled time required	Draft Spec	Compute	unclear (after 10 min)	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., e.g. within the job description there the element are clearly labelled as file or directory , e.g. different aspect of handling directory or a file, you can not differentiate	Draft Spec	Compute	yes	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),, e.g. meta of how job was generated	Draft Spec	Compute	no	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	yes	Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqJD24&referrerPageName=RequirementsTable
119	The Execution service MUST support a common state model	General	Compute	yes	Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqSM1&referrerPageName=RequirementsTable
120	The Execution service MUST expose one or several state where the Activity is finished (with success, error, cancellation, failure, ...)	Etienne Urbah	Compute	yes	Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqSM2&referrerPageName=RequirementsTable

121	The Execution service MUST NOT separate 'Payload Success' (= 'Application Success') and 'Payload Error', which are both detected by the Payload itself, and where Payload and Activity logs are complete	Etienne Urbah	Compute	unclear	Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqSM3&referrerPageName=RequirementsTable
122	The State Model for simple Activities MUST have a single state grouping 'Payload Success' and for 'Payload Error'	Etienne Urbah	Compute	unclear	Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqSM3.1&referrerPageName=RequirementsTable
123	The Execution service MUST clearly separate the 2 following concepts : 'Payload Error', which is detected by the Payload itself, and should be investigated by Application specialists first 'Activity Abortion', which is caused / managed by the Execution Service, and require grid skills to be investigated 0 'Payload Error', which is detected by the Payload itself, and should be investigated by Application specialists first	Etienne Urbah	Compute	unclear	Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqSM4&referrerPageName=RequirementsTable
124	The State Model for simple Activities MUST have separate states for 'Payload Termination' and for 'Activity Abortion'	Etienne Urbah	Compute	unclear	Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqSM4.1&referrerPageName=RequirementsTable
125	Inside 'Activity Abortion', the Execution service MUST clearly separate the 2 following concepts : 'Activity Failure', which happens suddenly, is detected by the Execution Service itself, and where Activity logs can be partial or missing 'Activity Cancellation', which is triggered by the Client, cleanly processed by the Execution Service, and where Activity logs are complete	Etienne Urbah	Compute	unclear	Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqSM4.2&referrerPageName=RequirementsTable
126	On Activity failure, the Execution service MAY, as many times as specified in the well-defined Job Description document, perform an automatic resubmission of the Activity by setting the Activity state to 'Submitted'	General	Compute	unclear	Proposed		http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqSM5&referrerPageName=RequirementsTable
127	Requirement to have a 'Purged' state, while purge refers to cleanup the whole existence of an activity - accounting and activity log must be still present and persistent, After an Activity has been purged, the Execution Service SHOULD NOT keep any information on this Activity, and SHOULD answer to any request on this Activity with an error message	General	Compute	No	Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqSM6.4&referrerPageName=RequirementsTable ; http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqSM6.2 ; http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqSM6.3
128	The Execution service MUST clearly separate the 2 following high level Activity states : 'Activity Submitted', where the Activity is (at least partially) validated, but storage / computing resources have perhaps NOT been allocated to the Activity ye - 'Activity Processing', where the Activity has already been fully validated, and storage / computing resources are being allocated or have already been allocated	Etienne Urbah	Compute	Unclear	Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqSM7&referrerPageName=RequirementsTable
129	Following Activity states MUST permit 'Hold' in 'Pre-processing', other active states, 'Post-processing'	General	Compute	No	Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqSM9.1&referrerPageName=RequirementsTable
130	For each state permitting 'Hold', the 'Hold' state MUST be implemented as a substate	General	Compute	No	Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqSM9.3&referrerPageName=RequirementsTable

131	The Execution service MUST perform the transition between Activity states requested by the Client ONLY if it makes sense. Otherwise, the Execution service MUST return an error to the Client.	General	Compute	Yes	Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqSM10.1&referrerPageName=RequirementsTable
132	By default, the Activity should not end up in a 'Hold' state.	General	Compute	No	Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqSM11&referrerPageName=RequirementsTable
133	State model should enable the monitoring of the data-staging process (i.e. more feedback to the end-user via substates or similiar methods)	GIN	Compute	Unclear	Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqSM12&referrerPageName=RequirementsTable
134	The execution service should have an hierarchical state model, Hierachical state model consists of 1-st level, 2nd-level, 3rd-level,states. Lower level states always sub-states of their parent-state.	Strawman Functionality	Compute	No	Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqSM13&referrerPageName=RequirementsTable
135	First two levels are mandatory or a reasonable level.	Draft Spec	Compute	No	Proposed	3/20/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqSM13.1&referrerPageName=RequirementsTable
136	The Execution Service MUST have an 'Output Data Retrieval' functionality	General	Compute	No	Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqDM3&referrerPageName=RequirementsTable
137	If the Execution Service manages 'Hold' points for Activities, it SHOULD be able to detect which computing resources (GLUE ExecutionEnvironments) run several Activities per core, and which run at most 1 Activity per core	Etienne Urbah	Compute	Unclear	Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqDM5.1&referrerPageName=RequirementsTable
138	If the Execution Service has detected that the computing resource runs several Activities per core, then the Execution Service MAY set running Activities to a 'Hold' State (waiting for Client action) without under-utilizing available cores	Etienne Urbah	Compute	Unclear	Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqDM5.2&referrerPageName=RequirementsTable
139	If the Execution Service has detected that the computing resource runs at most 1 Activity per core, then the Execution service SHOULD prevent running Activities to go to a 'Hold' State (waiting for Client action), in order to prevent under-utilizing available cores	Etienne Urbah	Compute	Unclear	Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqDM5.3&referrerPageName=RequirementsTable
140	If the Execution Service is NOT able to detect if the computing resource runs several Activities per core or only 1, then the Execution service SHOULD prevent running Activities to go to a 'Hold' State (waiting for Client action), in order to prevent under-utilizing available cores	Etienne Urbah	Compute	Unclear	Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqDM5.4&referrerPageName=RequirementsTable
141	Any client should be able to interact with the 'session directory' of any Activity created by the Execution Service	GIN	Compute	Unclear	Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqDM7&referrerPageName=RequirementsTable
142	The Execution Service MUST support client-directed data staging in and out by exposing the locations of the Activity processing directory/session directory.	GIN	Compute	Unclear	Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqDM8&referrerPageName=RequirementsTable
143	Data Staging MUST support the following protocols (not defined in the document, added by Grimshaw to start discussion): HTTP(S), scp, gridftp, mailto, RNS/ByteIO	GIN	Compute	No	Proposed	3/18/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqDM9&referrerPageName=RequirementsTable
144	Minimize the amount of calls required to interact with Execution Service (for example: in one WS: vector operations, service exposes the location where the client can stage any input data, service exposes the location where the client can fetch any output data.)	GIN	Compute	Yes	Proposed	3/19/2010	http://forge.gridforum.org/sf/wiki/do/createPage/projects.pgi-wg/wiki?pageName=ReqDM10&referrerPageName=RequirementsTable

145	Specifications MUST reuse as many existing standards as possible	General	NF	Yes	Proposed	3/17/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqNF2
146	Software components (Services and Clients) MUST ease traceability of the original author of a request	Etienne Urbah	NF	Unclear	Proposed	3/17/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqNF3
147	Software components (Services and Clients) MUST generate adequate logs	General	NF	Yes	Proposed	3/17/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqNF4
148	Software components (Services and Clients) MUST generate and propagate meaningful error messages, including context description	General	NF	Yes	Proposed	3/17/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqNF5
149	Specifications SHOULD prevent the occurrence of SPOFs and bottlenecks	General	NF	Yes	Proposed	3/17/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqNF7
150	Clean specifications and interface definitions, don't keep obsolete and never used elements	Balazs Konya	NF	Yes	Proposed	3/19/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqNF8
151	The specification should be as much self-contained as possible, limit external dependencies	Balazs Konya	NF	No	Proposed	3/19/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqNF9
152	Evolutionary aspect of existing specifications (marketing efforts, bad community reputation when OGF standards instable)	NSF 08-571	NF	Unclear	Proposed	3/20/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqNF10
153	Backwards compatibility (on-the-wire) not a precise requirements, conceptual backward compatibility a must - new portType - new compilation anyway but general concept should be kept.	NSF 08-571	NF	Unclear	Proposed	3/20/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqNF11
154	Basic SW Engineering basic principles - implementation encapsulation, seperation of policies, construction by composition, don't re-invent new mechanisms when some existing	NSF 08-571	NF	Yes	Proposed	3/20/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqNF12
155	Data is equally important as compute	NSF 08-571	NF	Unclear	Proposed	3/20/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqNF14
156	Need to support high availability and reliability	NSF 08-571	NF	Unclear	Proposed	3/20/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqNF15
157	Single global namespace for resources of all kind (storage devices, compute device), for example: a path mechanism - 'address the same things everywhere'. Definitely not XML namespaces - more identification of resources. Closest analogy might be DNS.	NSF 08-571	NF	Unclear	Proposed	3/20/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqNF16
158	Easier usage to get more users involved. How does it effects PGI?! A general rule like global namespaces (for example: path)	NSF 08-571	NF	Unclear	Proposed	3/20/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqNF17
159	Potential re-use of PGI portTypes by other services (for example: information portType)	GIN	NF	Unclear	Proposed	3/19/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqNF18
160	Execution Service MUST NOT try to provide ALL grid functionalities, but MUST have a well defined scope, and MUST work together with other grid services : Security, Accounting, Data (Storage, Movement, Catalog, ...), perhaps Information, Logging and Bookkeeping	Andrew		Unclear	Re-proposed	4/28/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqNF13
161	Whenever multiple protocols are possible, Services SHOULD implement at least the 2 most used protocols	Etienne		No	Re-proposed	4/28/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqNF1.2
162	Software components (Services and Clients) MUST implement the Security Policies defined by the JSPG (Joint Security Policy Group), in order to be resilient to attacks	Etienne		No	Re-proposed	4/28/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqNF6
163	Each Service MUST publish its properties (Name, Type, Endpoints, ...) and the properties of its Endpoints in conformance with GLUE recommendations	Etienne		Unclear	Re-proposed	4/28/2010 http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqIS2

164	For not yet finished Activities, the Information functionality MUST accept requests querying the Activity Status, and MUST return this Status with different levels of verbosity (basic, detailed, more detailed)	Etienne	Unclear	Re-proposed	4/28/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqIS8
165	For already finished Activities, the Information functionality SHOULD accept requests querying the Activity Status, but MAY return an error	Etienne	Unclear	Re-proposed	4/28/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqIS9
166	For requests querying Activity Status, the Information functionality SHOULD support query languages	Etienne	Unclear	Re-proposed	4/28/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqIS13
167	In order to permit efficient Accounting, a grid infrastructure MUST provide an Accounting functionality (without real time requirements) which consolidates Accounting records at the grid level from various systems, securely keeps Accounting records even after Activities have finished, implements complex accounting queries, and supports the corresponding CPU load	Etienne	No	Proposed	4/28/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqAc0
168	After creation of the Activity, the Endpoint used by the Client to manage the Activity MAY vary	Etienne	No	Re-proposed	4/28/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqJM4.6
169	The Execution Service MAY provide its functionalities to Clients through various protocols (RPC, Corba, ActiveMQ, ...), but MUST provide them to Clients through a Web Service	Etienne	yes	Re-proposed	4/28/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqJM11
170	In order to permit the Client to perform direct manual processing inside submitted Activities (for example manual data staging), the State Model MUST contain <ul style="list-style-type: none"> • one State permitting manual processing before Payload execution • one State dedicated for Payload execution • one State permitting manual processing after Payload execution 	Etienne	Unclear	Re-proposed	4/28/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqSM8
171	One of the storage resources allocated to the Activity MUST be following a concept we refer to as 'Session Directory'; including its precise definition	Etienne	Yes	Re-proposed	4/28/2010	http://forge.gridforum.org/sf/wiki/do/viewPage/projects.pgi-wg/wiki/ReqDM6.1
PROCESS THOUGHTS						
OUTCOME: 53 YES, 30~ Unclear, 80~ NOs,						
~ 80 nos (maybe 20 minute why no + 3 alternative or majority decision ~ 2 hours)						
[1 Step] ~ 30 unclear (maybe 10 minutes) - min. 3 PGI TelCons - One team only - but all "new personal" should join						
[2 Step?] Prioritization on nos (~ 50 %), how prioritization process is ... (extraordinary many of these)						
[2 Step?] Splitting in groups doing it in parallel - potential challenges: (a) personal interpretation along with it and "inside" the requirements - objective requirements might be here a positive sign - (b) lack of expertise potentially that have the background of OGF in general and the relevant groups in particular - start with 2 parallel groups? - e.g. gLite currently can provide one expert for this						

	[not 2 Step?] Investigator approach providing the reason why no - E.g. single person - the majority think this makes no sense	Emanouil	Steve Brewer???	Globus	??		
		Steve Crouch	Tim Parkinson	OMII-UK	David		
		Mark Kazu	Duane ???	GENESIS NAREGI	Andrew, John ???		