

## First Review Recommendations concerning gLite

**Recommendation 2.** *The reviewers recommend that any opportunity to simplify the operating environment be exploited during the final year in order to increase the dependability of the (very complex) infrastructure and reach a very high level of stability before the hand-over to EGI. Candidates for simplification include: fewer software versions, more stringent rules for adoption of new software by sites, fewer VOs by regrouping and pruning.*

**Response:** To reduce the range of software versions deployed in the EGEE production infrastructure, SA1 will maintain a well-defined list of versions supported (in collaboration with JRA1 and SA3), and enforce upgrades by active tracking of sites falling behind. [...]

**Recommendation 15.** *JRA1: Appropriate software engineering processes, despite progress in this area, have to be defined and enforced consistently and vigorously. They should include adherence to appropriate documentation, code commenting, interface documentation, and Intellectual Property management standards.*

**Response:** JRA1 will actively contribute to the revision of the Developer's Guide and Software Process document maintained by SA3, especially in view of the further devolution of responsibilities of the gLite maintenance to distributed Product Teams.

The existing tools supporting the software engineering processes, mainly ETICS and Savannah, will be leveraged to better track the workplan.

The existing documentation covers most of the needs, but it is often spread in multiple places and, as a consequence, often difficult to access. References to the documentation will be properly collected and presented from the glite.org web site, which will be revised together with SA3. Any missing documentation will be provided. Special attention will be devoted to the documentation of interfaces, including CLIs, APIs and WSDLs. The web site will also be augmented with information about of the gLite Collaboration (Implemented through new milestones MJRA1.5 and MJRA1.6).

Experience has shown that code guidelines need to be in place already at the start of a project, otherwise it is extremely difficult to propose and enforce them when significant code has already been written. The lessons and the best practices developed within EGEE will be captured and passed onto future middleware projects.

Copyright and license attributions will be thoroughly checked and an ETICS plugin is already available for this purpose. All the necessary changes will be applied before the end of the project.

**Recommendation 16.** *JRA1: The focus of activity in year 2 should be on producing a functionally complete and stable version of gLite for at least one reference platform with a significant reduction of outstanding change requests.*

**Response:** In the second year of the project a stricter discipline in release management will be applied. It is proposed to have gLite major releases approximately every six months. Within a gLite major release, change requests to a component, either needed to fix a defect or to introduce an improvement, will be properly evaluated and authorized before being applied. In any case backwards compatibility will always be strictly guaranteed. Non-urgent changes or backwards incompatible changes can only be

introduced in a future gLite major release.

This policy will improve stability of a given major release (by only introducing backwards compatible functionality changes and bug fixes), providing at the same time the chance for the product teams to introduce improvements in their products on a reasonable time scale.

The schedule of all the component releases will continue to be maintained and tracked in the JRA1 Release Schedule tracker in Savannah.

To make the number of outstanding change requests more representative of the user experience, bugs found in development and those pertaining to obsolete issues will be removed from the metrics.

The multi-platform policy of the project will be followed. The aim is to have gLite built on many platforms, although support can only be guaranteed on one platform due to limited resources.

**Recommendation 17.** *JRA1: Following the successful introduction of interworking with ARC, the gLite interoperability should be extended to UNICORE. This is especially important in view of the transition to EGI/NGI.*

**Response:** The key to progressing gLite/UNICORE interoperability is to establish the engagement of UNICORE and of a user community which requires an inter-infrastructure workflow. To identify the latter, we will work with NA4 and the EUFORIA project which has users of UNICORE enabled resources. We will then try to understand what the requirements are on the middleware. If we have appropriate engagement and clear requirements on the middleware we will consider incorporating these into the JRA1 workplan, favouring any which have already been identified by the EMI (proposed Middleware project submitted under forthcoming call INFRA-2010-1.2.1) as "harmonisation opportunities". There are already tasks in the workplan which will promote interoperability, e.g. issuance of SAML assertions by VOMS.

**Recommendation 18.** *JRA1/SA3: Take steps to remove the inconsistencies between the GGUS ticketing system and the Savannah bug tracking system. In particular, users should not have direct access into Savannah: a clean process between GGUS and Savannah has to be defined. Use of Savannah by JRA1 should be kept separate from the user tickets. The classification of tickets (especially the critical state of the tickets) should be re-examined and a process of reclassifying tickets within GGUS and Savannah should be put in place.*

**Response:** A proposal on "Problem Management and Change Management in gLite" will soon be finalized by SA1, SA3 and JRA1 and approved by the TMB. It foresees that incidents occurring to users on the production infrastructure always be reported through GGUS. If an incident is actually caused by a software defect, a corresponding entry will be created in Savannah and the two will be cross-referenced. The GGUS issue will remain open while the Savannah ticket is treated, and will be closed only when the Savannah ticket is closed.

Once the procedure is in place, complete user-oriented metrics could be calculated only from GGUS data. However, comparison with past metrics may not be meaningful.