Quality Criteria Definition Review

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Quality Criteria

collection of both **functional** and **non functional requirements** that software must meet in order to be included as part of a UMD release.

Used for verification of software by Criteria Verification task

- **Appliance**: implementation of a UMD capability, most QC refer to appliances
    - E.g. Job Execution
- **Product**: installable solution from TP (it may contain more than one Appliance)
    - We only do verification of products!
    - E.g. CREAM, GRAM5

https://wiki.egi.eu/wiki/EGI_QA_Glossary

- **If tests are mandatory → must come as formal requirement**
    - For Release 2, changed most of the "Input from TP" to do not require tests, but functionality.
    - Tests from TP are welcomed, but if they are not available, the verification team will write them

EMI Feedback (II)

- Complete API support may not be feasible for some appliances
  - If the TP claims to support API X, it should test the API!
  - A general rephrasing was done in documents to avoid "complete" API testing. Exceptions should be documented.
- Some comments come from confusion on the applicability
  - Review of the mapping of product/criteria

EMI Feedback (III)

- Mixed functional / non functional criteria
  - We are working on Release 3 on better classification of the criteria

- One by one comments of EMI Feedback:
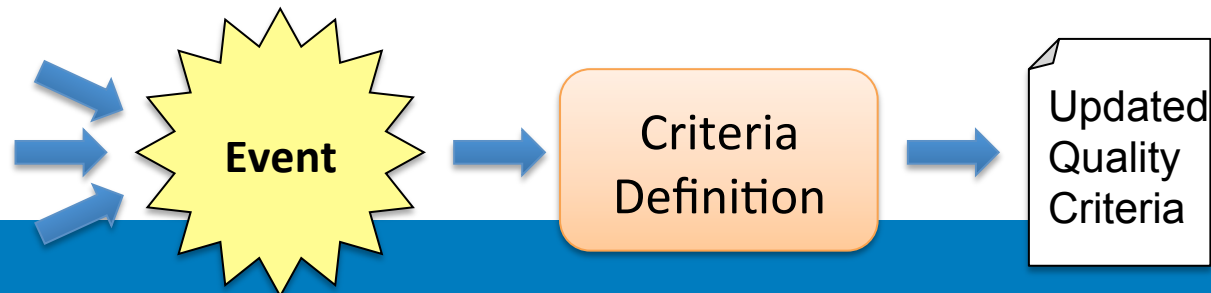 - https://wiki.egi.eu/wiki/ EGI_Quality_Criteria_Release_2_EMI_Review

Criterion Example

SRM API Support	
ID	STORAGE_API_1
Description	Storage Management Appliances must provide support for SRM2.2 specification.
Mandatory	YES
Applicability	Storage Management Appliances

Input from Technology Provider	Valid SRM v2.2 API implementation, any deviations from the API implementation should be documented. Ideally, also provide a complete test suite and results for the API support	
Test Description	**Pre-condition**	Valid user credentials.
	Test	Test SRMv2.2 functionality, with correct/incorrect input and with valid and invalid credentials. Use S2 [R5] test suite for reference.
	Expected Outcome	Log of all the operations performed. All the documented functions work as documented.
Pass/Fail Criteria	Pass if SRM v2.2 support is provided (as tested with S2 test suite). If the API is not completely supported, this should be documented.	
Related Information	UMD Roadmap [R1] SRM v2.2 [R4]	
Revision Log		

IGE Feedback

- IGE provided one by one check of the criteria and the mapping to their products

- Some comments from EMI also apply:
  - Applicability misunderstanding
  - Complete API tests may not be feasible

- Some IGE criteria has been introduced in Release 2 of QC
  - E.g backwards compatibility

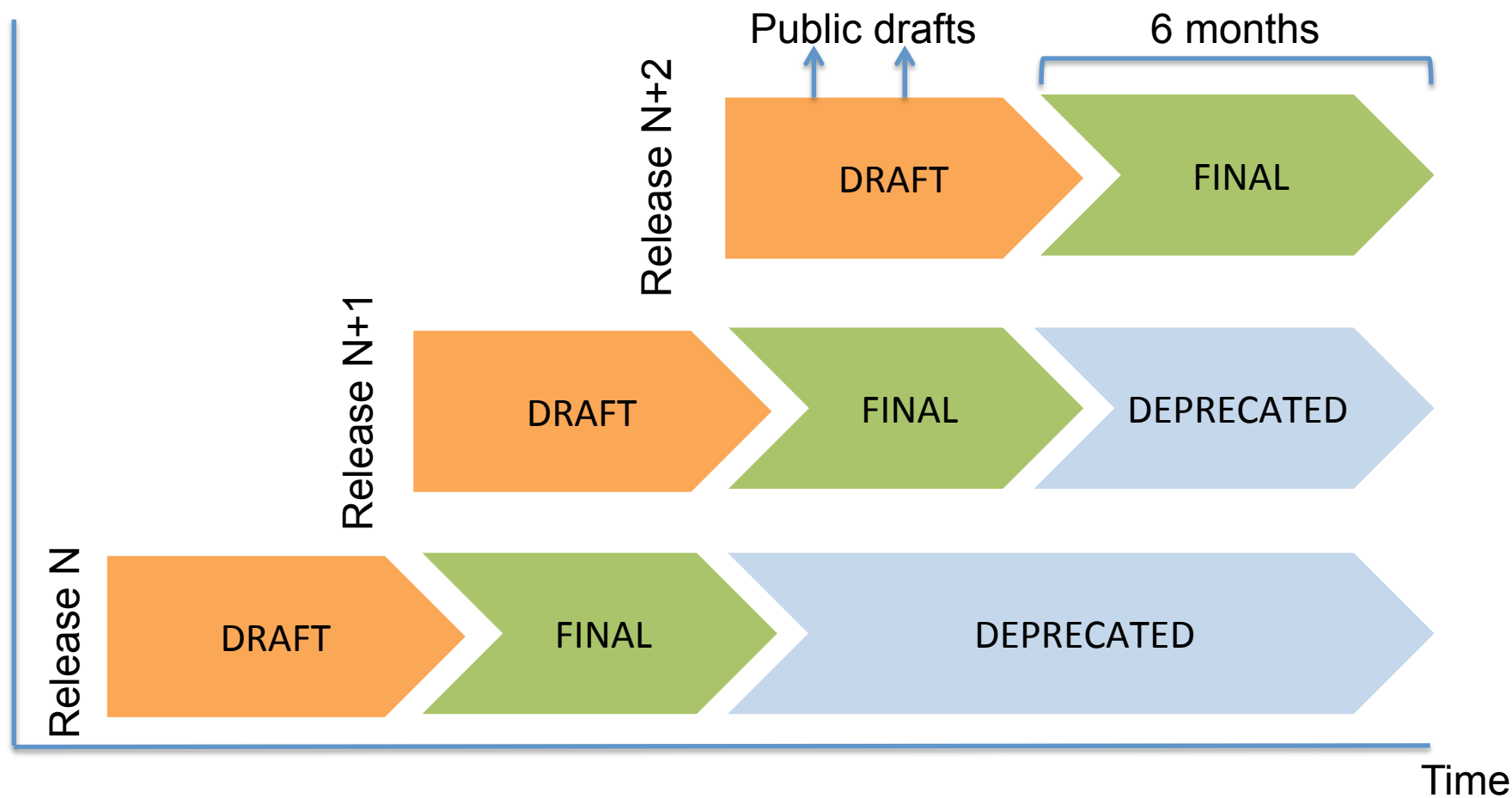| Backwards Compatibility	
ID	**GENERIC_SOFT_1**
Description	Minor/Revision releases of a product must be backwards compatible.
Mandatory	YES
Applicability	All Products.

Input from Technology Provider	Products must maintain backwards compatibility between releases of the same major version. Ideally, TP provides tests to assure the backwards compatibility of the product.
Pass/Fail Criteria	All the changes in a minor or revision release *must* be backward compatible (test should be done with previous releases of clients within the same major version). Any new features should not introduce changes in the previous features.
Related Information	MS503: Software Provisioning Process IGE QC
Revision Log	

Quality Criteria Evolution

- Quality Criteria **evolve** with community needs

- Sources of change:
  - DMSU – Ticket analysis
  - Operations – incident post mortems
  - TCB – Requirements review
  - Verification and Stage Rollout Reports
  - Security Vulnerability Group Reports

Event → Criteria Definition → Updated Quality Criteria

Binary Distribution	
ID	**GENERIC_DIST_3**
Description	Products must be available in the native packaging format of the supported platform.
Mandatory	YES
Applicability	All Products.

Input from Technology Provider	Binary distribution of product in the native packaging format of the supported platform (RPM, DEB, …)
Pass/Fail Criteria	Binary packages using the standard packaging format of the OS (i.e. RPM, DEB...) must be provided for all the supported OS and/or architectures.
	Packages *should* follow OS packaging policies (e.g. names of packages, use of filesystem hierarchy, init scripts). Any deviance from the policies must be documented.
	Second level dependencies (i.e. software not provided by the TP in their repository) **must** be provided by the OS distribution or standard OS repositories (EPEL in SL5).
	In the case of needing a different version for a specific package or packages from other repositories, the verifier will decide whether to accept or not the packages depending on the reason given for such dependencies on external packages.
Related Information	Verification reports from EMI release 1.
	#1357: Middleware use standard file locations
Revision Log	V2: Turn to mandatory, better description.to avoid problems found in verification. Changed ID (previously GENERIC_REL_5)

Quality Criteria Lifecycle

Quality Criteria Releases

Release 1
- Focused on covering UMD capabilities
- Created prior to real verifications

Release 2
- Fixes faults of 1st release found in verification
- Better coverage of UMD capabilities

Release 3
- Focus on analysis of DMSU, operations incidents and requirements
- Target 100% coverage of UMD capabilities

More Information

- EGI.eu wiki:
  - http://wiki.egi.eu/wiki/EGI_Quality_Assurance
- Releases:
  - FINAL: http://go.egi.eu/qualitycriteria-2
  - DRAFT: http://go.egi.eu/qualitycriteria-draft
  - DEPRECATED: http://go.egi.eu/qualitycriteria-1