



DELIVERABLE 5.2.1
QUALITY ASSURANCE PLAN
DRAFT

WP5 Task 5.2

Document Filename: **CG- 5-D5.2.1-001-QAP.doc**
Work package: **WP5 Management**
Partner(s): **CYFRONET, UCY**
Lead Partner: **CYFRONET**
Config ID: **CG-5-D5.2.1-001-QAP-1-0-DRAFT-B**
Document classification: **PUBLIC**

Abstract: This document specifies the CrossGrid quality assurance policy



Delivery Slip

	Name	Partner	Date	Signature
From	W. Funika CYFRONET W. Marton CYFRONET M. Turala CYFRONET M. Dikaiakos UCY	CYFRONET	09 June 2002	
Verified by				
Approved by				

Document Log

Version	Date	Summary of changes	Author
1-0-DRAFT-A	22-May-02	Draft version	Wlodzimierz Funika
1-0-DRAFT-B	09-June-02	Added reports description, changes to document publication rules	Witold Merton, Dick van Albada, David Rodriguez Gonzalez

CONTENTS

1	<u>INTRODUCTION</u>	7
1.1	<u>APPLICATION AREA</u>	7
1.2	<u>QAP EVOLUTION PROCEDURE</u>	7
1.3	<u>APPLICABLE DOCUMENTS AND REFERENCE DOCUMENTS</u>	7
1.4	<u>DOCUMENT AMENDMENT PROCEDURE</u>	8
1.5	<u>LACK OF ADHERENCE TO PROJECT QUALITY ASSURANCE</u>	8
1.6	<u>TERMINOLOGY: GLOSSARY</u>	8
2	<u>QUALITY OBJECTIVES</u>	10
2.1	<u>PROJECT CHARACTERISTICS</u>	10
2.2	<u>QUALITY SYSTEM</u>	10
2.3	<u>QUALITY ORGANISATION</u>	10
3	<u>PROJECT MANAGEMENT</u>	12
3.1	<u>COLLABORATION BOARD</u>	12
3.2	<u>PROJECT COORDINATOR</u>	13
3.3	<u>MANAGEMENT OF WORKPACKAGES</u>	14
3.4	<u>TECHNICAL ARCHITECTURE TEAM</u>	15
3.5	<u>STEERING GROUP</u>	16
3.6	<u>INTERNAL REVIEW BOARD</u>	17
3.7	<u>PUBLICATION BOARD</u>	17
4	<u>PERIODICAL REPORTS</u>	18
5	<u>DOCUMENTATION MANAGEMENT</u>	19
5.1	<u>INTRODUCTION</u>	19
5.2	<u>DOCUMENTS PUBLICATION RULES</u>	19
5.2.1	<i>Document layout</i>	19
5.3	<u>DOCUMENTS PRESENTATION</u>	21
5.4	<u>DOCUMENT REVIEW</u>	21
6	<u>INTERNAL REVIEW PROCEDURE</u>	22
6.1	<u>IRP SUMMARY</u>	22
6.2	<u>TIMELINE</u>	22
6.3	<u>IR TEMPLATES</u>	22
6.4	<u>CROSSGRID PUBLICATION POLICY</u>	22
7	<u>PROJECT REPOSITORY</u>	23
7.1	<u>CVS REPOSITORY FOR WP3</u>	23
7.1.2	<i>Proposed structure of CVS</i>	23
7.2	<u>SYSTEM BUILDING</u>	24
A	<u>STRUCTURE OF THE PERIODIC WORK PROGRESS (QUARTERLY) REPORT</u>	26

1 INTRODUCTION

The Quality Assurance Plan (QAP) defines the organisation and the methodology that all the partners shall apply throughout the project. It forms a common standard for the entire project lifecycle.

The QAP is intended to:

1. define quality objectives
2. define roles and responsibilities to ensure successful progress of the Project
3. present the project organisation, monitoring and reporting
4. describe software management practices: procedures and rules for the CG project:

1.1 APPLICATION AREA

The Project Quality Plan shall be applied:

- by all partners,
- for all deliverable to European Commission,
- and for deliverables between partners.

Consortium Partners, supervise and check the work performed by their own staff in accordance with the CrossGrid QAP.

This QAP is designed to be consistent with ISO 9001 and should be interpreted with reference to:

- The Terms and Conditions for EC contracts.
- The CrossGrid proposal: IST proposal: Annex 1: Description of Work.

1.2 QAP EVOLUTION PROCEDURE

Different events may cause modifications of the content of this document. Any project partner may request amendments but each amendment must be analysed by the Quality Engineer and then approved by the CrossGrid Project Coordinator.

1.3 APPLICABLE DOCUMENTS AND REFERENCE DOCUMENTS

Applicable documents

Reference documents

[R1]	CrossGrid Technical Annex
[R2]	Documents Publication Rules
[R3]	SRS Draft Template
[R4]	Documents Publication Policy
[R5]	Internal Review Procedure. Proposal

- [R6] Software Engineering Tools
 [R7] EU DataGrid Quality Assurance Plan

1.4 DOCUMENT AMENDMENT PROCEDURE

The content of this document can be modified in the context of the CrossGrid Quality Assurance Plan development or in case an evolution of project characteristics dictate so. Any project partner may request amendments but each amendment must be analysed by the Internal Review Board and then approved by the CrossGrid Project Coordinator.

1.5 LACK OF ADHERENCE TO PROJECT QUALITY ASSURANCE

If there is a conflict between a Consortium Partner's Quality Assurance procedures and those imposed on this project, this should be brought to the attention of the Project Coordinator. Normally, precedence shall be given to the CrossGrid Project Quality Assurance Plan.

1.6 TERMINOLOGY: GLOSSARY

[Ax]	Applicable Document
[Rx]	Reference Document
AT	Architecture Team
CAF	Corrective Actions Form
CB	Collaboration Board
DG	The EU DataGrid Project IST-2000-25182
EC	European Commission
External Deliverables	Deliverables to the European Commission and/or the public
IRB	Internal Review Board
IRC	Internal Review Coordinator
IRP	Internal Review Procedure
IST	Information Society Technologies
Moderator	IRB member undertaking the coordination of a particular review
PC	Project Coordinator
POC	Project Office
QAP	Quality Assurance Plan
QE	Quality Engineer (for each WP)
RP	Responsible Partner (for Deliverable)
SG	Steering Group
TAT	Technical Architecture Team
TATL	Technical Architecture Team Leader
TL	Task Leader
Tx.y	Task y in WP x
WP	Work Package
WPL	Work Package Leader
WP1	Application Development
WP2	Grid Application Programming Environment
WP3	New Grid Services and Tools

WP4	International Testbed Organization
WP5	Project Management

2 QUALITY OBJECTIVES

2.1 PROJECT CHARACTERISTICS

The CrossGrid project is characterised by:

- Long life development cycle (36 months)
- Distributed development of software (21 partners)
- Evaluation and production phases that have to be managed in parallel with refinement phases
- Open source
- Modularity of the layers and of the components

The Project is driven by the Applications requirements in terms of time-scale, performance and reliability.

From a usability point of view, the CrossGrid project must address the following quality factors:

- Conformity: conformance to requirements
- Efficiency: the software must use resources in the best way (memory, CPU, ...)
- Reliability: the software run without anomaly
- Portability: the software can be easily ported on different environments and computers
- Flexibility: aptitude of the software to evolve with appearance of new requirements
- Maintainability: easy to debug and correct
- Testability: complete test suit for non regression testing
- Documented: the deliverables must be well documented

To summarise: CrossGrid is a large Research & Development project with demanding requirements and constraints.

2.2 QUALITY SYSTEM

The quality system applied on the project is described in the present QAP and the following Project Plans:

Project Plans	Described in:
Naming and coding conventions	Document publication rules: CG-5.1-SPR-0002-1-0-DRAFT-A
Internal Review Procedures	Web page; CG-5.1-DOC-UCY004-1-0-DRAFT
Project repository	see Chapter 7
Publication Policy	Document Publication Policy: CG-5.1-DOC-UvA002-1-0-DRAFT-B
Document templates	Admitted using EU DG templates

2.3 QUALITY ORGANISATION

The quality organisation includes:

- Quality Engineers (QE) for WPs:
WP1 – Elena Zudilova

WP2 – Włodzimierz Funika

WP3 – Paweł Wolniewicz

WP4 – David Rodriguez

WP5 – Piotr Nowakowski

3 PROJECT MANAGEMENT

This chapter presents the organisation of the CrossGrid managerial structures, which comprises:

- Collaboration board
- Project coordinator
- Management of workpackages
- Technical coordination
- Steering group
- Internal review board
- Publication board

Short description of each body, their compositions, responsibilities and operations are presented below.

3.1 COLLABORATION BOARD

The Collaboration Board (CB) of the CrossGrid is the highest governing body of the Consortium, taking strategic decisions essential for all partners; examples are: acceptance of the managerial structures, acceptance of the redistribution of responsibilities, accepting new associated partners, etc.).

The CrossGrid Collaboration Board is formed by the representatives of all partners; the list as in March includes

- | | |
|-------------------|-----------------------|
| - CO1, Cyfronet | - Marian Bubak |
| - AC1, ICM | - Wojciech Wislicki |
| - AC2, INS | - Krzysztof Nawrocki |
| - AC3, INP | - Piotr Malecki |
| - AC4, INS | - Krzysztof Nawrocki |
| - CR5, UvA | - Peter Slood |
| - AC6, II SAS | - Ladislav Hluchy |
| - AC7, Univ. Linz | - Dieter Kranzmueller |
| - CR8, FZK | - Holger Marten |
| - AC9, USTUTT | - Matthias Mueller |
| - AC10, TUM | - Roland Wismueller |
| - CR11, PSNC | - Norbert Meyer |
| - AC12, UCY | - Marios Dikaiakos |
| - AC13, DATAMAT | - Federico Rossi |
| - AC14, TCD | - Brian Coghlan |
| - CR15, CSIC | - Jesus Marco |

- | | |
|-----------------|----------------------|
| - AC16, UAB | - Miquel Senar |
| - AC17, U.S.C. | - Andres Gomez Tato |
| - AC18, Demo | - Christos Markou |
| - AC19, A.U.Th. | - Charicila Petridou |
| - AC20, LIP | - Jorge Gomes |
| - AC21, Algo | - Yannis Perros |

These representatives have a duty to inform all the collaborators of their institutions about CrossGrid events and actions of the global range (project duties – deliverables in respect to the EU IST Brussels office, discussions and decisions of the project managerial bodies, working meetings and conferences).

The chair of the Collaboration board is Brian Coghlan, of the Trinity College Dublin (TCD) elected at the first Collaboration Board meeting at the time of the first CrossGrid conference in Cracow (17-20 March, 2002).

The Collaboration Board will meet ‘ad persona’ at the occasion of big CrossGrid conferences/workshops (at least once a year). In the meantime it could act, when necessary, conducting discussions and taking decisions via electronics means of communication.

3.2 PROJECT COORDINATOR

Academic Computing Center Cyfronet, Cracow, Poland is a coordinating partner of the CrossGrid Consortium. Cyfronet appoints a Project Coordinator (PC) in consensus with all principal contractors (CR) of the Consortium. Michal Turala of ACC Cyfronet and the Institute of Nuclear Physics, Cracow, Poland, has been appointed the CrossGrid Project Coordinator.

The Project Coordinator has following responsibilities in the Consortium:

- organise, in consultation with all principal contractors (CR), the managerial structures of the project (listed in this section)
- organise a CrossGrid Office (CGO) at Cyfronet, with a necessary administrative, financial, informatics and legal supports
- manage the CrossGrid project, in cooperation with the Steering Group (SG) and the Technical Architecture Team (ATT)
- supervise and support CrossGrid dissemination / exploitation activities
- keep regular contact with the EU IST Brussels office, in particular with the CrossGrid Project Officer (PO), Guy Weets
- supervise the timely preparations of the CrossGrid deliverables, in particular the quarterly and yearly reports
- establish cooperation with the other Grid projects; in particular participate in the activities of the GridStart cluster project,
- represent the CrossGrid project in the EU IST Office, and the other organisations.

Michal Turala is available daily at ACC Cyfronet and/or INP Cracow, his phone nr is. (+48-12) 633-33-66 or mobile (+48) 691-712-170, his e-mail address is Michal.Turala@cern.ch.

3.3 MANAGEMENT OF WORKPACKAGES

To realise the programme as presented in the technical Annex1 the CrossGrid project has been structured into five workpackages, lead by the following persons:

- WP1 CrossGrid Application Development - Peter Slood (CR5, UvA)
- WP2 Grid Application Programming Environment - Holger Marten (CR8, FZK)
- WP3 New Grid Services and Tools - Norbert Meyer (CR11, PSNC)
- WP4 International Testbed Organisation - Jesus Marco (CR15, CSIC)
- WP5 Project Management - Michal Turala (CO1, Cyfronet)

The workpackage leaders (WPL) are top experts in the field of computer sciences, who originate from the principal contractors of the CrossGrid Consortium, and they are essential part of the management. It is up to them to prepare the workplan for their workpackages, execute it, and to report periodically on the progress.

The work in every workpackage is factorised into “tasks”, which are lead by the following persons:

- T1.0 Coordination and management - Peter Slood (CR5, UvA)
- T1.1 Interactive simulation and
visualisation of a biomedical system - Dick van Albada (CR5, UvA)
- T1.2 Flooding crisis team support - Ladislav Hluchy (AC6, II SAS)
- T1.3 Distributed data analysis in high
energy physics - Celso Martinez-Rivero (CR15, CSIC)
- T1.4 Weather forecast and air pollution
modelling - Bogumil Jakubiak (AC2, ICM)
- T2.0 Coordination and management - Holger Marten (CR8, FZK)
- T2.1 Tool requirements definition - Roland Wismueller (AC10, TUM)
- T2.2 MPI code debugging and verification - Matthias Mueller (AC9, USTUTT)
- T2.3 Metrics and benchmarks - Marios Dikaiakos (AC12, UCY)
- T2.4 Interactive and semiautomatic
performance evaluation tools - Wlodzimierz Funika (CO1, Cyfronet)
- T2.5 Integration, testing and refinement - Roland Wismueller (AC10, TUM)
- T3.0 Coordination and management - Norbert Meyer (CR11, PSNC)
- T3.1 Portals and roaming access - Mirosław Kupczyk (CR11, PSNC)
- T3.2 Grid resource management - Miquel Senar (AC16, UAB)
- T3.3 Grid monitoring - Brian Coghlan (AC14, TCD)
- T3.4 Optimisation of data access - Jacek Kitowski (CO1, Cyfronet)
- T3.5 Tests and integration - Santiago Gonzalez (CR15, CSIC)

-
- | | |
|---|---------------------------------|
| - T4.0 Coordination and management | - Jesus Marco (CR15, CSIC) |
| - T4.1 Testbed set-up and incremental Evolution | - Rafael Marco (CR15, CSIC) |
| - T4.2 Integration with DataGrid | - Marzel Kunze (CR8, FZK) |
| - T4.3 Infrastructure support | - Josep Salt (CR15, CSIC) |
| - T4.4 Verification and quality control | - Jorge Gomes (AC20, LIP) |
| - T5.1 Project coordination and Administration | - Michal Turala (CO1, Cyfronet) |
| - T5.2 CrossGrid Architecture Team | - Marian Bubak (CO1, Cyfronet) |
| - T5.3 Central dissemination | - Yannis Perros (AC21, Algo) |

The duty of task leaders is to coordinate daily activities of all partners working on the same technical task. It is also their duties to respond positively and timely to the requests of the WP leaders and the Project coordinator concerning the activities of particular workpackage and the project as a whole.

The coherency and synchronisation of all the work is done by the central management, the Technical Architecture Team (TAT) and the Steering Group (SG).

3.4 TECHNICAL ARCHITECTURE TEAM

The technical coordination of the CrossGrid project is provided by the Technical Architecture Team (TAT). It focuses on:

1. Merging of requirements from WP1, WP2, WP3
2. Specification of the X# architecture (i.e. new protocols, services, SDKs, APIs)
3. Establishing of standard operational procedures
4. Specification of the structure of deliverables
5. Improvement of X# architecture according to experience from SW development and testbed operation
6. Synchronisation of the WPs and tasks
7. Working out Quality Assurance criteria and procedures
8. Following the progress of the project

TAT (located at CYFRONET) works out proposals on the architecture of the CrossGrid. TAT consists of:

- Marian Bubak
- Marek Garbacz
- Maciej Malawski
- Katarzyna Zając

The representatives of workpackages who are responsible for integration of TAT proposals are:

1. WP1 – Dick van Albada
2. WP2 – Roland Wismueller
3. WP3 - Santiago Gonzalez
4. WP4 - Rafael Marco

3.5 STEERING GROUP

The CrossGrid steering Group consists of:

- | | |
|--------------------------------|--|
| - Michal Turala (CO, Cyfronet) | - Project Coordinator and WP5 leader |
| - Peter Sloom (CR5, UvA) | - WP1 leader |
| - Holger Marten (CR8, FZK) | - WP2 leader |
| - Norbert Meyer (CR11, PSNC) | - WP3 leader |
| - Jesus Marco (CR15, CSIC) | - WP4 leader |
| - Marian Bubak (CO1, Cyfronet) | - Technical Architecture Team leader |
| - Marios Dikaiakos (AC12, UCY) | - Internal Review Board chair |
| - Yannis Perros | - responsible for dissemination/
exploitation |

The CrossGrid Steering Group is responsible for:

- overall project workplan (as described in the CrossGrid Technical Annex1)
- timely execution of the project workplan (organisation of working meetings, preparation of deliverables)
- quality assurance of documents and software (in particular creation of an Internal Review Board and a Publication Board, identification of reviewers for these bodies)
- timely preparation of quarterly and yearly status reports to the EU IST Brussels office
- supervising CrossGrid central dissemination/ exploitation activities
- solving daily managerial problems and identifying ones which need further consultation with the CrossGrid Collaboration Board or the EU IST Office in Brussels

The Steering Groups meets regularly, either in person or using electronics communication means (telephone conferencing, VRVS - Virtual Room Reservation System), with the frequency defined by the current needs of the project – which, right now, means approximately every two weeks. The meetings are called by the Project coordinator, and he prepares the agenda in the consultation with the other members of the Steering Group. The dates and agendas of the meetings are distributed to the whole Consortium before the meeting. The members of the Steering Group, who cannot participate in a particular meeting, are expected to send their representatives; any member of the Consortium could be invited to a meeting if his/her presence is justified by the agenda. Witold Merton, the Secretary of the CrossGrid Office, participates, if possible, in every meeting of the Steering Group, to take the minutes. The minutes, once checked by the SG members, are available to the members of the

Consortium (distributed via e-mail to the contact persons, and posted on the CrossGrid Intranet web pages, <http://www.eu-crossgrid.org/wp5-1-login/minutes.htm>).

As the collaboration between different grid projects is highly desirable, and because of a particularly close collaboration with the EU DataGrid project, Fabrizio Gagliardi, the EU DG Project Manager has a permanent invitation to the CrossGrid Steering Group meetings. As a reciprocal measure, Michal Turala, CrossGrid Project Coordinator is invited to the EU DataGrid Project Management Board meetings.

3.6 INTERNAL REVIEW BOARD

The role of IRB is to guarantee the quality of project deliverables prior to sending them to EC and the public. It carries out the Internal Review Procedures according to the QAP. It consists of IRB Coordinator, Technical Architecture Team Leader, one WP designate per WP, experts designated by the Project Coordinator. Its current composition is comprised in the table below.

Name	Email	Organization	Role
Marios Dikaiakos	mdd@ucy.ac.cy	UCY	Coordinator
Marian Bubak	bubak@uci.agh.edu.pl	Cyfronet	TATL
Andres Gomez Tato	agomez@cesga.es	USC	Expert
Celso Martinez-Rivero	mrivero@ifca.unican.es	CSIC Santander	WP1 Rep.
Roland Wismueller	wismuell@informatik.tu-muenchen.de	TUM	WP2 Rep.
Pawel Wolniewicz	pawelw@man.poznan.pl	PSNC	WP3 Quality Engineer, WP3 Rep.
Jorge Gomes	Jorge@lip.pt	LIP	WP4 Rep.
Krzysztof Zielinski	kz@ics.agh.edu.pl	Cyfronet	Expert Publication Review Team Coordinator
Miquel Senar	MiquelAngel.Senar@uab.es	UAB	WP3 Rep.
Elena Zudilova	elenaz@science.uva.nl	UvA, Amsterdam	Quality Engineer, WP1
Włodzimierz Funika	funika@uci.agh.edu.pl	Cyfronet	Quality Engineer, WP2
Pawel Wolniewicz	pawelw@man.poznan.pl	PSNC	Quality Engineer, WP3
David Rodriguez	drodrig@ifca.unican.es	IFCA, Santander	Quality Engineer, WP4
Piotr Nowakowski	ymnowako@cyf-kr.edu.pl	Cyfronet	Quality Engineer, WP5

3.7 PUBLICATION BOARD

The Publication Board Coordinator is prof. K. Zielinski from Cyfronet. His e-mail address is kz@ics.agh.edu.pl

4 PERIODICAL REPORTS

To monitor the progress of the Project the following reports are to be generated:

1. Yearly reports and reviews: they should reflect the major milestones of the project and support preparation of the Conference in M9/M10.
2. Quarterly reports: they will provide WP technical achievement synthesis on current situation, status of milestones, plans for the next reporting period, etc.

The quarterly report is a deliverable presenting a comprehensive overview of the partners' activities undertaken in their respective tasks, the manpower consumed, issues/problems encountered and the dissemination effort for the reporting period.

It also includes WP executive summaries by WP leaders and an introduction by the project coordinator. It is based for a large part on the materials contained in monthly reports and dissemination questionnaires collected by POC and Algosystems.

As there is no official template of the quarterly report the CrossGrid quarterly report is based on the examples provided by Brussels and the Datagrid consortium and approved by the CrossGrid steering group.

[SEE ANNEX A]

3. Monthly reports

The aim of the monthly report is to provide continuous information about the work progress in the project for the purposes of managing the Consortium, provide materials to WP leaders for their input to the Quarterly Reports and ensure a timely preparation of the Quarterly Report by the POC.

Every month the consortium partners are asked to report to CG-office in the form of short information on the work performed within the tasks they take part in, the persons involved and the hours spent on the project (EU-funded or additional depending on their financial participation model).

At the beginning a simple WORD table was used, progressively an ACCESS database making a swift exchange of data between partners possible has been created and is now in the phase of testing.

It also enables export of data concerning work progress inside each WP to WP leaders for a given period of time.

5 DOCUMENTATION MANAGEMENT

5.1 INTRODUCTION

The aim of this chapter is to describe the documentation management procedure for the CrossGrid project. It defines standard rules and procedures related to documentation production that all the partners should apply throughout the project.

The documentation management procedure is applicable:

- by all partners,
- for all deliverable documents to European Commission,
- and for documents exchanged between partners.

5.2 DOCUMENTS PUBLICATION RULES

The document publications rules are described in the Document Publications Rules proposal. These rules are to be applied in the CrossGrid project. The basis for the document is the DataGrid Project Quality Plan, however several modifications were introduced in order to simplify naming convention and to eliminate duplication of several information such as version numbers. After approval of the contents of this document it will become part of CrossGrid Project Quality Plan. The content of the document is placed below.

5.2.1 Document layout

All partners will use standard document templates in order to apply consistent look for all project documents. There will be one generic document template provided and several specific templates for particular document types like quarterly reports, design documents, etc.

The generic document template contains the following:

1. *Layout of the title page*
2. *Layout of the headers and footers*
3. *Styles that are to be used in the document*

The specific document templates will contain predefined layout of particular document sections. Each section can include hints what the contents of the section should be – when using such template that text is to be replaced with target content.

5.2.1.1 Document attributes

Each document shall have the following attributes:

- *Title*
- *Subtitle*
- *Name of the workpackage that produced the document*

- *Document filename*
- *Partner(s)*
- *Lead Partner*
- *Config ID*
- *Document classification*

5.2.1.2 Document filename and config ID

Each document has to be uniquely identified together with its version. The document config ID (an identifier that uniquely describes the particular file together with its version) has to be unique. The document filenames themselves don't necessarily have to be unique but this rule will be forced for the sake of clarity. The uniqueness will be forced by using the document number defined within WP that produced it. It will be one of the filename constituents.

The document filename is defined as

1. *For deliverable documents*

<Project name>-<WP number>-<Deliverable identifier>-<Doc number>-<description>

2. *For non-deliverable documents*

<Project name>-<Task number>-<Doc type>-<Doc number>-<description>

The config ID has to identify uniquely the document and its version. It will have the following form:

1. *For deliverable documents*

<Project name>-<WP number>-<Deliverable identifier>-<Doc number>-<version>

2. *For non-deliverable documents*

<Project name>-<Task number>-<Doc type>-<Doc number>-<version>

Note that the second field is different for deliverable and non deliverable documents. In case of deliverable documents the task number is not necessary.

Description of particular names constituents:

- *Project name – it is proposed to use abbreviated form of the project name, i.e. CG for conciseness.*
- *WP number – the number of the work package producing the document*
- *Task number – the number of the task producing the document*
- *Deliverable identifier – this field is required only for deliverable documents*
- *Document type – this field is required only for non-deliverable documents. The valid document types are listed in [TBD].*

- *Document number* – Within each WP and for each partner, each document should have assigned unique number. The number range from 001 to 999 is allocated for each partner in WP. The number is to be preceded immediately by the partner's acronym, e.g. UvA037, or CYF123. The document number doesn't necessarily have to reflect the chronological order in what the documents were created.
- *Version* – Each document should have the version assigned. The proposed convention of the version is as follows:
 - <major>.<minor>-<draft_status>, where:
 - *major* – major version number
 - *minor* – minor version number
 - *draft status* – determines whether the current version of the document is draft version (before quality gate) or not (after passing the quality gate). It should have the form of string *DRAFT_<L>* where <L> - subsequent alphabet letters in case of the draft version. It should be empty for non-draft versions.

5.3 DOCUMENTS PRESENTATION

In order to produce standardised documentation, all partners will use standard documentation templates mentioned in the table below.

Template	Comment
SRS Draft Template	Template for CrossGrid Software Requirements Specification
Other templates	TBD

All documents will be written in English and produced using word processing software from the list of tools described in the *Software Engineering Tools* document (CG-5.1-DES-0008-1-0-DRAFT-A).

5.4 DOCUMENT REVIEW

Deliverables to European Commission are reviewed at IRB meeting according to the Internal Review Procedures (see 6).

6 INTERNAL REVIEW PROCEDURE

The purpose of the Internal Review Procedure (IRP) is to guarantee the quality of project deliverables prior to sending them to EC and the public. It will be published as a formal document of the Consortium, and will be referenced by the Quality Assurance Plan (QAP) of CrossGrid.

6.1 IRP SUMMARY

Internal reviews of project deliverables are coordinated by a group of experts belonging to the CrossGrid consortium and constituting the Internal Review Board (IRB). Actual reviews are conducted by CrossGrid and/or external experts.

All participants in the project are expected to use the proposed IRP. Deliverables to European Commission are reviewed by the IRB, while internal deliverables are reviewed during internal reviews organised by WP Leaders (WPL) according to the QAP. For each Project Deliverable, an involved partner is expected to provide his specific contribution according to the project Work Plan and in line with CrossGrid's QAP. The final version of a document is checked according to the QAP by QE from the respective WP and the WPL before the document's release to the IRB for Internal Review.

For each deliverable, a member of the Internal Review Board is designated by the IRB to act as Moderator and is in charge of the review process. The Moderator assigns two or three reviewers to review the particular deliverable. Each reviewer completes a standard Internal Review Form (IRF) with his comments and submits it to the Moderator. Subsequently, the IRB comes with a final recommendation, which is inserted in an IRF by the Moderator. All IRF's are communicated to the Responsible Partner (RP) for the particular deliverable.

If the review approves the deliverable, the Responsible Partner coordinates the handling of IRB comments and recommendations by respective partners, completes a standard form with the corrective actions taken (CAF), and submits the deliverable to the Project Management for further release to the EC and/or the public. Attached to the EC deliverables are the IRF's and the CAF of the WPL. If the deliverable is not approved, involved parties need to re-work and re-submit it for a second internal review.

6.2 TIMELINE

The procedure of Internal Reviews is conducted during prescheduled IRB Consultations. For the internal review process and resulting amendments to be carried out in time, IRB consultations should be scheduled at least 7 days before the due date of each deliverable. To this end, the latest version of the deliverable should be placed on the web at least 13 working days before the due date. For each entry, the date/version of the document should be given.

6.3 IR TEMPLATES

For the Internal Reviews, IRB uses the Internal Review Form and the Internal Review Summary. See the templates in *CG-5.1-TEM-UCY001-IRForm.doc* and *CG-5.1-TEM-UCY001-IRSummary.doc*.

6.4 CROSSGRID PUBLICATION POLICY

The rules and guidelines to which the CrossGrid partners should adhere in publishing results related to the project are described in the **CG-5.1-DOC-UvA002-1-0-DRAFT-B** document.

7 PROJECT REPOSITORY

The central repository of the Project is located at FZK (Karlsruhe).

According to the establishments done on the kick-off meetings it was suggested to define at the beginning one CVS repository per every workpackage. Below the CVS repository is presented. The repository structures for other workpackages are under construction.

7.1 CVS REPOSITORY FOR WP3

For Workpackage WP3 a repository has been created by PSNC. The server address is tulip.man.poznan.pl.

7.1.2 Proposed structure of CVS

This structure can be discussed and can be still changed. At the moment its structure is:

```
WP3
  WP3_1
    bin
    doc
    etc
    include
    lib
    reports
    src
  WP3_2
    bin
    doc
    etc
    include
    lib
    reports
    src
  WP3_3
    bin
    doc
    etc
    include
    lib
    reports
    src
  WP3_4
    bin
    doc
    etc
    include
    lib
    reports
```

	src
WP3_5	bin
	doc
	etc
	include
	lib
	reports
	src
	pub
	reports
	rpm

7.2 SYSTEM BUILDING

One common need is to record which versions of which source files went into a particular build. To do this with CVS the user uses the `tag` command to record which versions went into a given build.

Release tags

Common format of naming release tags:

WP x - y - z - w

x - workpackage number for example 1-2

y - release number

z - patch/update number

w - build number

Module naming

There should be chosen such modules names that are meaningful to the user when he will have to choose a module to download. It is necessary to be concise but as explicit as possible.

As much as possible, WPs should create one top-level module per final individual package they intend to release. This will ensure that there won't be any naming confusion at the package level.

Source and binary packages

Packages are created from module tagged releases. The name of created packages should be of the following form:

Type	Package name
Generic tarball sources	cg-myModule- x - y - z - w .src.tar.gz

Linux i386 tarball binaries	cg-myModule-x-y-z-w.i386.tar.gz
Generic source RPM	cg-myModule-x-y-z-w.src.rpm
Linux i386 RPM binaries	cg-myModule-x-y-z-w.i386.rpm

The cg- prefix is there to recall the inclusion of this module in the CrossGrid software. The item myModule is module name, while x, y, z, w is the version upon which the package is created. Important: this figure should exactly match the CVS tag of the related module.

Packages should be completely relocatable, and should never write anything above the relocated directory.

The files should deploy in a local substructure with the following structure:

```
anypath_relocable/ What's in it
  README      file, briefly describing the module and its change history with every module
  bin         Commands binaries
  etc         Configuration file
  include     Header files of libraries
  lib         Libraries
  src         Source files
  doc         Documentation
  sbin        Configuration binaries
  var         Variable data (might be a symlink)
```

A global shell variable \$CG_ROOT has to point to the top level of this hierarchy, and being acknowledged by each executable when searching for configuration files, libraries, executables and other CrossGrid related items.

By default, the root base of this sub-directory should be /opt/cg.

A Structure of the periodic work progress (*quarterly*) report

Overview

INPUT FROM WP LEADERS

(1/2 to 1 page long)

1. Work progress

What is here:

Here are reported the tasks, the institutions involved therein, and the work done according to the scheme:

WPx

Task x.x

Duration (for ex. M1-M36)

Involved institutions and respective PM for whole project (for ex. ICM (20), CSIC (15)....)

Partner

Work done by that partner during in relevant period (here 3 months)

INPUT FROM WP LEADERS

This field is to be filled by WP leaders basing on the materials CGoffice (myself) will provide.

The point here is to aggregate the monthly reports into one concise m3 report for each partner (cut off redundant phrases, rephrase the work done) - the aim is to obtain max. 3-4 sentences for each partner in each task.

1.1 Status of Deliverables and milestones

What is here: a table containing the deliverables for month 3 and the responsible partners thereof, including their.

INPUT FROM WP LEADERS

Indicate degree of realization (ready; draft version - end version postponed until....)

1.2 Issues

INPUT FROM WP LEADERS TOGETHER WITH PC

Major deviation from work plan, problems encountered, comments/suggestions sent to partners, problems with key people originally assigned to project leaving the company, but also positive remarks about work progress.

2. Meetings, conference, publications

2.1 Project meetings

INPUT FROM WP LEADERS AND AT LEADER

What is here: internal working meetings, for example WP # meetings, date, location, participants, Outcome
(short report)

2.2 Conferences /workshop organized

What is here: date, location, topic, participants, outcome (short report)

Who fills the information: Algosystems on the basis of enquiries gathered monthly from each partner (or each task)

2.3 Conferences attended

What is here: date, location, topic, participants, outcome (short report)

Who fills the information: Algosystems (see above)

2.4 Publication and conference contributions

What is here: Titles, abstract, Journal/Conference status (submitted/accepted)

Who fills the information: Algosystems (see above)

CROSSCHECK OF ITEM 2.2 to 2.5 BY WP LEADERS

3. Effort for the reporting period

What is here: a table containing PM consumption for relevant period

Who fills the information: Cgoffice (me) based on the information provided in the monthly reports.