Effective Operations in Ports

D II.1.1

Evaluation Guidelines and Procedures
PROJECT DELIVERABLE
D II.1.1 – EVALUATION GUIDELINES AND PROCEDURES

Due date of deliverable: 31/10/07
Actual submission date: 15/12/07

Start date of project: 01/05/2006
Duration: 42 months

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Issuing entity: ISSUS / TUHH
Partner Code: 2
Date of Issue: 15/12/07
Status: FINAL
Revision: 1

Contributing Partners / Authors: -

Pages: v / 8
Figures: 0
Tables: 0
Annexes: 0

Project co-funded by the European Commission within the Sixth Framework Programme (2002-2006)

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Date: 15/12/07
RECORD OF CHANGES

This is a controlled document for any changes and amendments done for the deliverable.
Amendment shall be by whole document replacement.

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<td>1.0</td>
<td>Final</td>
<td>15/12/07</td>
<td>Jens Froese</td>
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LIST OF ABBREVIATIONS /GLOSSARY

DoW    Description of Work (Technical Annex)
EC    European Commission
FP    Framework Programme (European Commission)
HLG    High Level Group
IPR    Intellectual property rights
QAM    Quality Assurance Manager
SP    Sub-Project
TCT    Technical Co-ordination Team
WP    Work Package
TABLE OF CONTENTS

PROJECT DELIVERABLE........................................................................................................ II
RECORD OF CHANGES.......................................................................................................... III
LIST OF ABBREVIATIONS / GLOSSARY................................................................................ IV
TABLE OF CONTENTS.......................................................................................................... V

1.0 FRAMEWORK.................................................................................................................. 1
2.0 OBJECTIVES AND GENERAL APPROACH..................................................................... 2
  2.1 PURPOSE AND SCOPE.................................................................................................. 2
  2.2 EVALUATION CRITERIA................................................................................................ 2
    2.2.1 OVERALL ASSESSMENT....................................................................................... 2
    2.2.2 OBJECTIVES......................................................................................................... 3
    2.2.3 WORKPLAN AND RESOURCES.......................................................................... 3
    2.2.4 IMPACT................................................................................................................. 3
    2.2.5 CONSORTIUM PARTNERSHIP.............................................................................. 4
    2.2.6 MANAGEMENT...................................................................................................... 4
    2.2.7 USE AND DISSEMINATION OF KNOWLEDGE.................................................... 5
    2.2.8 OTHER ISSUES.................................................................................................... 5
3.0 EVALUATION TARGETS.................................................................................................. 5
4.0 EVALUATION TYPES...................................................................................................... 6
  4.1 CONTINUOUS ASSESSMENT....................................................................................... 6
  4.2 SELF ASSESSMENT...................................................................................................... 6
  4.3 INTERNAL EVALUATION BODIES............................................................................. 6
    4.3.1 QUALITY ASSURANCE MANAGER................................................................. 6
    4.3.2 TECHNICAL CO-ORDINATION TEAM............................................................ 6
    4.3.3 EFFORTS-PORTS............................................................................................... 7
    4.3.4 HIGH LEVEL GROUP.......................................................................................... 7
  4.4 EXTERNAL ASSESSMENTS......................................................................................... 7
    4.4.1 COMMISSION ASSESSMENT.............................................................................. 7
    4.4.2 NON-EFFORTS PORTS........................................................................................ 7
    4.4.3 USER FOR A, WORKSHOPS AND CONFERENCES......................................... 7
5.0 CONCLUSION.................................................................................................................. 8
Evaluation Guidelines and Procedures

1.0 Framework

Within work package II "Integration", Task II/1, these guidelines aim at providing the methodology and performance for the evaluation of detailed task objectives, work plans, methodologies and applied technologies and tools in order to identify and to pursue the most appropriate approach in scientific, technical and economic terms and to ensure optimum interoperability of activities and interconnectivity of results within the project. Integration of project activities as well as results shall provide synergies for improved work performance and usability of results.

The basic quality principles and procedures are provided in

D I.2
Quality Assurance Manual
submitted 11/07/2007

These Evaluation Guidelines and Procedures are amending the Quality Assurance Manual to achieve an overall EFFORTS quality approach.

Evaluation is part of quality assurance and it must be recognized that all elements of quality deterioration such as delays, weak performance and non-satisfactory results develop an increasing impact on the overall quality the longer it takes to apply countermeasures to improve work quality effectively. Also costs for countermeasures increase over time elapsed. Efforts and costs do not develop linear but exponential over time! Thus the purpose of quality assurance is not only to satisfy the "client" but also to ensure the best cost-benefit-ratio between resources invested and results achieved.

The worst result of an EC-initiated official audit is a so-called "red flag". This means that financing is brought to a complete halt and all efforts to get back into the "green" area must be paid by the consortium itself. Besides the stress and the bad reputation a consortium and its members will experience the necessary efforts are enormously because of the pressure to meet a deadline set by the Commission economic planning of resources, especially workforce is
not possible. Frequently it is only possible to get back on track by sub-contracting expensive specialists.

The principles of evaluation are according to those applied by the European Commission during the process of evaluating the proposal and can be found on e.g. CORDIS web site. The following guidelines provide the specific application within the EFFORTS environment.

2.0 Objectives and General Approach

2.1 Purpose and Scope

The overall evaluation objective is to actively and timely monitor and control the work progress in order to achieve quality results according to schedule. Both, deviation from project plan and change of goals as a result of changes in techniques, technologies, operations and policies, might require corrective actions to modify or amend plans.

Continuous assessments on all working levels and scheduled audits shall ensure an efficient management but allowing the working teams a maximum of autonomy and flexibility.

Assessment results shall allow to identify required support actions, trigger early warnings if partners do not meet project obligations or even initiate sanctions on them but also to appreciate results and to determine potential beneficiaries.

2.2 Evaluation Criteria

The evaluation criteria are derived from the criteria provided by the European Commission to conduct project reviews. In order to achieve a good review result the following criteria need to be fulfilled:

2.2.1 Overall Assessment

The overall assessment scores the achievement of objectives (Technical Annex) and technical goals according to the Description of Work (DoW) and to schedule.
A "good" to "excellent" results requires that the project has fully achieved its objectives and technical goals for the period and has even exceeded expectations.

2.2.2 Objectives

Assessment of fulfilment of objectives follows the criteria

- Have the objectives for the period been achieved?
- Are the overall objectives still relevant and still achievable within the time and resources available to the project?
- Are changes in objectives required in order to keep up with the current state-of-the-art?

2.2.3 Workplan and Resources

The work progress towards the workplan and allocated resources is being assessed by investigating the following questions

- Has the project as a whole been making satisfactory progress in relation to the DoW?
- Has each work package (WP) been making satisfactory progress in relation to the DoW?
- Have planned milestones and deliverables been achieved for the reporting period?
- Have resources been deployed as foreseen?
- Have costs incurred, i.e. personnel costs and other major cost items, been a) necessary for the implementation of the project and b) economic?


2.2.4 Impact

The impact of the project is in the focus of the assessment. It is required to clearly show where and what improvements will be achieved. This requires a comprehensive documentation of the state-of-the-art to be compared to the scientific, technological and operational status after applying project results. Positive reactions from practice (experts) can contribute to successful assessment.
2.2.5  **Consortium Partnership**

The partnership within the consortium needs to fulfil the following criteria:
- Effective collaboration
- Contributions of partners to the project as planned and according assigned tasks.

Conflicts or evidence of underperforming partners, lack of commitment or change of interest of partners will be identified and if necessary, change of responsibilities recommended.

All consortium partners will benefit from synergies through close co-operation. However, it is obvious that an efficient consortium-wide co-operation requires a comprehensive exchange of information which is rather time-consuming. The benefits of advanced communication technology meanwhile resulted in an information overflow going beyond the perception capacity of some individuals. All partners are requested to contribute ideas how to improve co-operation without increasing the flows of information. The achievable cooperation culture really is worth to invest some brain. Past experiences have shown that such co-operations can become sustainable surviving the duration of a project and are truly improving the European cohesion which probably is the most relevant spin off of European research.

2.2.6  **Management**

Issues of assessment of management comprise
- Performance of scientific/technical management
- Performance of administrative and financial management
- Handling of contractual matters
- Maintenance of the consortium agreement
- Maintenance of intellectual property rights (IPR)
- Technical collective responsibility
- Sub-contracting
- Competitive calls
- Establishment of (electronic) information and communication networks to support interactive working between involved teams
- Interaction with other related 5th and 6th FP projects or national/international programmes?
2.2.7  Use and Dissemination of Knowledge

The assessment criteria here are

- Significance of use potential
- Development of use and dissemination of knowledge
- Dissemination of project results and information
- Involvement of potential users and other stakeholders outside the consortium.

2.2.8  Other Issues

As far as applicable the following issues will be assessed

- Policy-related and regulatory issues
- Ethical issues
- Safety issues
- Gender issues.

3.0  Evaluation Targets

Targets of assessment are

- Work performance, i.e. the effectiveness and efficiency of the work
- Results i.e. all kind of deliverables and demonstrators
- Reactions from the professional world.

Assessment of work performance includes exploitation of available resources, quality of staff engaged and the ratio between the budget and results achieved.

Assessment of results includes peer reviews but also evaluation by all kind of experts preferably professionals as future users or responsible for introduction of solutions/purchase of systems within the industry.

Assessment of reactions from the professional world beyond those described in the prior paragraph will be performed through user fora, workshops and conferences.
4.0 Evaluation Types

4.1 Continuous Assessment

There is continuous assessment of work progress conducted by the working teams themselves, the Task-, WP- and SP-Leaders and the Technical Coordination Team (TCT).

4.2 Self-Assessment

It is strongly advised to perform continuous self-assessment according to the criteria provided above. Each WP-Team should establish self-assessment methods and procedures such as internal audits, presentations to expert bodies etc.

It is part of each first TCT-Assessment of a WP to recommend and elucidate self-assessment methods and procedures.

4.3 Internal Evaluation Bodies

4.3.1 Quality Assurance Manager

The role of the Quality Assurance Manager (QAM) and the scope of her or his work is described in the Quality Assurance Manual (D I.2). The QAM shall act in an independent way being in the fore to detect weaknesses in the system and in performance.

4.3.2 Technical Co-ordination Team

In co-operation with the WP-Teams the TCT will review approach, progress and results either periodically or according to requirements or on request of any consortium member asking for support in problem solving.
4.3.3 EFFORTS-Ports

The consortium ports, led by the SP-Leaders, are in the forefront to assess results in the view of their port needs. They will become specially approached by the TCT to provide their opinion of all achievements.

4.3.4 High Level Group

The High Level Group as a body is not part of the consortium but it serves as an independent advisory and steering group within the consortium. The HLG is composed of outstanding experts from various port-related fields.

Project results will be periodically presented to the HLG for review.

4.4 External Assessments

4.4.1 Commission Assessment

The Commission through the responsible project officer may and will organize audits by involving external experts either periodically or in case of problems recognized.

4.4.2 Non-EFFORTS Ports

The ports associated to EFFORTS but not being consortium members will also become approached by the TCT to assess achievements and to provide recommendations for possible improvement but also for exploitation.

4.4.3 User Fora, Workshops and Conferences

User fora, workshops and conferences are ideal events to benchmark project results achieved versus the state-of-the-art. Also the preparedness of practitioners to familiarize themselves with new technologies and apply those can be measured to support exploitation.
Reports, however, shall be produced by independent experts to avoid subjective assessments in favour of the consortium. Only then these reports can well serve to support official audits (4.3.1)

5.0 Conclusion

These evaluation guidelines are not to further burden the researchers by exaggerated administration work but to ensure quality of work at the earliest possible stage always keeping in mind that efforts required to compensate for deficiencies in quality increase by order of magnitude at each production step. It simply becomes the more expensive the further away from the desk of the originator a piece of work gets.

The consortium members are kindly requested to communicate solutions to improve quality of work and results especially when administrational efforts can become reduced at the same time. Experiences from industrial projects frequently can become transferred to research projects.