

Handbook

Celtic-Plus Project Manual

Version 2017



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ACRONYMS

AR	Annual Report
CFA+	Celtic-Plus Frame Agreement
CG	Celtic Core Group
CLDoA	Confirmation Letter-and Declaration of Acceptance
CPP	Celtic-Plus Project Proposal
GoE	Group of Experts
IPR	Intellectual Property Rights
MR	Monthly Report
MTR	Mid-term Review
PA	Public Authority
PCC	Project Coordination Committee
PCO	Project Coordinator
PCR	Project Change Request
PD	Project Description
PM	Person Month
PO	Proposal Outline
PRO	Celtic-Plus Programme Coordinator
PY	Person Year (= 12 PM)
QR	Quarterly Report
SME	Small Medium Enterprise
TC	Technical Committee
TCO	Technical Coordination Committee
TL	Task Leader
WPL	Work Package Leader
WPT	Work Package Team
WS	Work Summary

ABOUT THIS HANDBOOK

Celtic-Plus has prepared this Handbook as a general guideline and tool to assist projects and participants in preparing proposals and for successfully running projects. The Handbook should be regarded as a living document. Described processes may be improved; new processes may be added if it turns out that this would be useful for the project definition and management.

Only few processes are mandatory and have to be followed by the project participants. However, most of the described processes should be regarded more as recommendations and suggestions for good practise.

The purpose of the Celtic-Plus Handbook is to provide information about established processes related to the

- Definition and submission of proposals
- Evaluation and labelling of projects
- Definition of project consortia and set-up of a project
- Requirements for managing Celtic-Plus projects
- Reporting and quality assurance of results

1 THE CELTIC-PLUS ORGANISATION

1.1 Introduction to Celtic-Plus

Celtic-Plus is a follow-on programme of the successful first EUREKA cluster programme called "Celtic-Initiative" ('Cooperation for a sustained European Leadership in Telecommunications'), which has been running from 2003 to 2011. Celtic-Plus has been defined for a 8-years period until the end of 2019. Celtic-Plus is supported by nearly all major European players in telecommunications.

Celtic-Plus is an industry-driven European research initiative to define, perform and finance through public and private funding common research projects in the area of telecommunications, new media, future Internet, and applications & services focusing on a new "Smart Connected World" paradigm. Celtic-Plus is a EUREKA ICT cluster and belongs to the inter-governmental EUREKA network.

The telecommunications area, over the past years, has experienced dramatic changes. The Internet has become the global hub for information and communication where different actors, including citizens, share their contents and connect with each other. They are connected to social networks and virtual worlds, sharing knowledge within their communities. They want all those features to be accessible anywhere, anytime and on any device. But it has also become more and more obvious that the traffic volumes and services quality will be difficult to assure with the current Internet platforms and new strategies for a better Internet need to be found and implemented rather soon.

Scope and purpose of the Celtic-Plus Organisation is to stimulate, organise and co-ordinate research and development work within the goals of the Celtic-Plus Programme executed by Celtic-Plus Participants. Celtic-Plus is a not-for-profit organisation.

The major Celtic-Plus objectives are to:

- Carry out pre-competitive R&D focusing on Integrated System Solutions with regard to a system view, basic technologies and sub-systems
- Enabling trials and evaluations of Service concepts, Technologies, System solutions and business models
- Be open to pre-competitive cooperation, including with other R&D initiatives.

As Celtic-Plus is a EUREKA cluster project a number of administrative requirements need to be observed and followed to assure that Celtic-Plus projects are set-up, managed and controlled according to established and required rules.

1.2 Structure

The Celtic-Plus Organisation is composed of the following management bodies:

- Celtic Core Group
- Celtic Group of Experts, Legal Group
- Celtic-Plus Ad-hoc Committees
- Celtic Office
- CELTAC (Celtic-Plus Authority Committee). Public Authorities are involved in the decision making, coordination and exchange of information

The figure below demonstrates the inter-relationships of the different bodies:

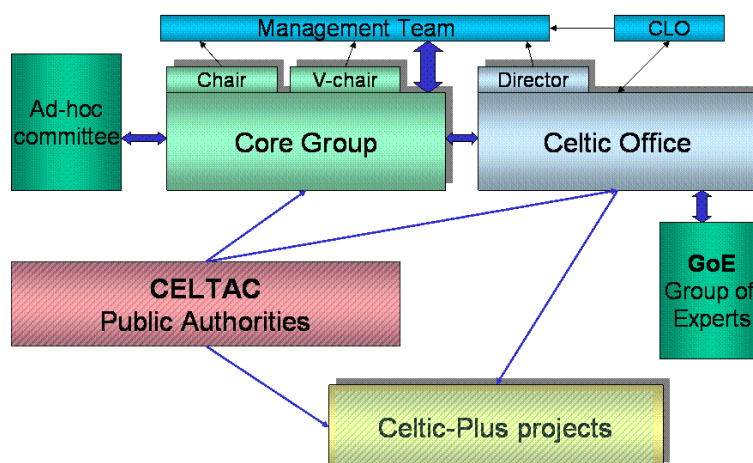


Figure 1 Celtic-Plus Organisational Structure

1.3 Responsibilities

1.3.1 Celtic Core Group

The Core Group is the main executive body. It is formed by the founding members (currently Alcatel-Lucent, BT, Deutsche Telekom, Ericsson, Eurescom, Orange-FT, Italtel, Nokia Siemens Networks, RAD Data Communications, Technicolor, Telefónica, Telenor, and Turkcell) and led by a chair and a vice-chair.

The Celtic-Plus Core Group is mainly responsible for the:

- Programme strategy and coherence;
- Representation of the Programme in front of Public Authorities;
- Interface and influence to the PAs for all issues related to the Celtic-Plus Programme;
- Decision on tasks and guidelines for the Celtic-Plus Support Group (e.g. for Project selection and Celtic-Plus Participant search);
- Definition and updating of guidelines for the structure and organisation of the Programme; the admission and control of rules for Programme and Project management;
- Selection of Projects, assisted by the Celtic-Plus Support Group's recommendations;
- Execution and overall management of the Programme;
- Decision on Projects in individual cases;
- Approval of the budget for the Celtic-Plus Organisation
- Financial audit of the Celtic-Plus Organisation

1.3.2 Celtic Group of Experts and Ad-hoc Committee

The Celtic Core Group may install from time to time and for a limited duration a Celtic- Ad Hoc Committee, which has delegated responsibilities and which shall execute specific tasks and responsibilities. As an example, Celtic Ad Hoc Committees may be created for the purpose of assisting the Celtic Core Group or the Celtic-Group of Experts with monitoring the progress for the PAs.

The Group of Experts (GoE) is responsible for the evaluation of project proposals and for taking part in Celtic project reviews. The GoE will be composed by several sub-groups, responsible for a particular technical area. Each GoE will be chaired by an expert. Members for the GoE will be nominated by Core group members.

1.3.3 Celtic Office

The Celtic Office, which is hosted at Eurescom in Heidelberg, Germany, is a facilitator for project consortia building and it will ensure the day-to-day administration and follow-up of the Programme. The Celtic Office is formed by a team of experts, headed by the Director.

The Celtic Office will have the following tasks and responsibilities:

- General administration of the Programme,
- Accounting and billing of participation fees,
- Payment of Celtic Office costs, Celtic Office personnel according to the budget plan,
- Admission and control of the rules for participation to the Programme,
- Interface for all Celtic-Plus Participant, organisation of a Programme database,
- Monitoring of Projects, assisted by the Celtic-Plus Support Group, under Celtic Core Group responsibility,
- Organisation of reporting and reviewing activities at Project and Programme levels (Technical Reports, handling of Change Requests, Project Reviews, Programme Review, Forums,...),
- Information and communication to the Celtic-Plus Participants,
- Communication to the outside and interface with the PAs on general funding issues, following instructions of the Celtic Core Group,
- Support and assistance to all other executive bodies in the Celtic-Plus Organisation.

1.4 Public Authorities

The Public Authorities are the national contact points for the application of national project funding. For Celtic the Public Authorities are organised in the 'Celtic Public Authorities Committee' (CELTAC). Each EUREKA country has, at least, one representative who acts as the official Public Authority. In many cases a dedicated responsible has been nominated for the Celtic-Plus cluster.

Public Authorities are involved in CELTAC through common meetings with the Celtic Core Group in the selection process of received proposals.

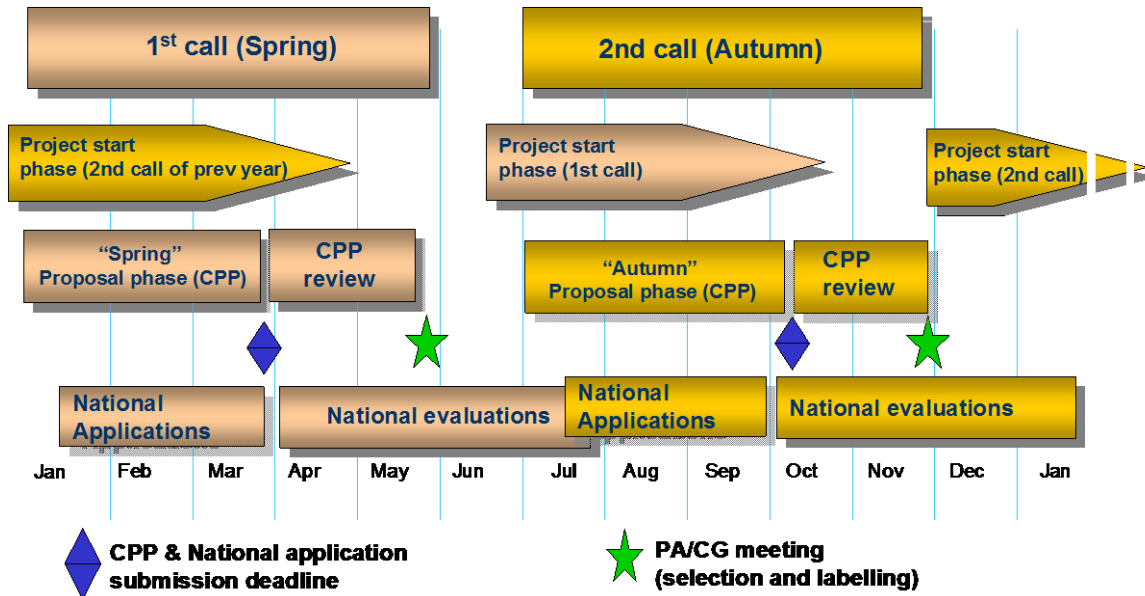
The availability of national funding, the conditions to receive funding, and the rules on the application for national funding are very different from country to country. Contact details of Public Authorities and specific funding and application conditions are available from the Celtic-Plus web site.

2 THE CELTIC-PLUS CALL PROCESS AND PROJECT DEFINITION

2.1 Celtic-Plus Call Phase

With the start of Celtic-Plus the Call for proposal process had been changed. While the former Celtic-Initiative call process considered two different proposal phases – Proposal Outline (PO) and Full Project Proposal (FPP) in Celtic-Plus only one fully defined Celtic-Plus Proposal (CPP) will be considered. The different process offers, however, the possibility to run two full calls per year.

The call process is shown in the figure below



The Spring call generally starts at the beginning of a year and ends around end March. The Autumn call starts in June and ends around early to mid October.

Each call lasts only around 6 months until a label may be assigned for the succeeding proposals. In order to speed up the set-up process for the labelled calls the following changes must be observed:

- Already at an early project definition phase, contacts with the involved Public Authorities must be established.
- At the same time when submitting the proposal to Celtic funding applications have to be sent to each involved Public Authority. In case an official application cannot be submitted (e.g. because no national call is currently running) a pro-forma or provisional application (e.g. for eligibility check), in accordance with the concerned Public Authority should be submitted instead.
- While the Celtic Group of Experts will evaluate the submitted proposals the Public Authorities will also evaluate the proposals and also the funding applications.
- At the common meeting Celtic Core Group and Public Authorities will agree on all suitable proposals to receive the Celtic label.
- The further set-up process can then start and the funding decisions will be further handled by the Public Authorities.

It is important to know that there will no longer be a "conditional label" assignment. A proposal may either be accepted and receive the label or it will be rejected. However, for certain proposals a re-submission of an improved proposal may be possible at the next call (i.e. 6 months later). It may, however, also be possible that a labelled proposal may receive some important improvement requests, which have to be considered before the project can start.

In the following chapters recommendations are given for the definition of good proposals as well as further details of the call process and proposal evaluation.

2.2 Celtic-Plus Work programme

Celtic-Plus Research Areas (Purple Book)

The possible research areas of Celtic-Plus projects are described in the Celtic-Plus Purple Book. The traditional boundaries between networks, service platforms and applications have become increasingly blurring. This is why better suited views on the whole communications system are needed. In Celtic-Plus, the main research areas will be “Get connected” and “While connected”.

Get connected

“Get connected” addresses everything needed to establish, run and secure the communication, basically, the infrastructure and connectivity aspects. Key topics of Celtic-Plus projects will be related to network elements and infrastructures. This includes wireless, optics and energy efficiency, as well as network architecture and connectivity, like networking and autonomic networks.

While connected

“While connected” tackles all aspects while a communication is running, including, all requirements for new end-to-end services and applications. Celtic-Plus projects will deal with future end-to-end services, like digital home, digital enterprise, digital city, digital school, digital transport, and e-health, as well as horizontal services, like security, public safety and identity. The latter is particularly relevant for protecting the privacy rights of European users.

Celtic-Plus and the Future Internet

Celtic-Plus projects will also focus on the architecture and challenges of the Future Internet. One major challenge is to further develop the network infrastructure, which makes mobile Internet with high Quality of Service happen in conjunction with a much higher flexibility, capacity and mobility, so that future applications do not suffer from the current limitations of the Internet. One important aim is the establishment of a “Celtic-Plus Use-case Factory”. The “factory” shall be complementary to the Future Internet PPP Calls under the EU’s Framework Programme (FP7). As there will be more excellent Future Internet use case projects to be expected than can be funded under FP7 Celtic-Plus offers another opportunity to realise some additional of these. Another focus may also be on capacity building, test cases/ platforms or alternative foundation platform.

Celtic-Plus and Green Internet

Celtic-Plus intends to be a driving force in Europe and beyond for future “greener” telecommunications. Three major challenges are addressed:

- make environmental issues
- encourage better energy efficiency
- develop multidisciplinary solutions.

Telecoms and ICT should be used to manage and control the best use of energy in other business e.g. health, transport, energy, e-government, urbanization, cleantech, etc.

To respond to societal challenges, solutions are required at multidisciplinary level. Celtic-Plus intends to liaise with related initiatives in order to address global solutions. Other EUREKA clusters in energy, water technologies, manufacturing industry, but also the other ICT clusters, are the first candidates.

2.3 Funding of Celtic-Plus projects

For a Celtic-Plus project, generally, the same funding conditions and funding rules apply as for a stand-alone EUREKA project. As Celtic-Plus is an endorsed EUREKA cluster the access to public funding is generally easier and faster as for an independent proposal as the Public Authorities support the collaborative work programme of Celtic-Plus and are more closely involved in providing the funding for proposals that have been Celtic-Plus-labelled.

Similar to projects that are EU-funded or funded on national basis only a portion of the overall costs will be covered by the public funding. This portion depends on the national funding rules of the partners involved in a particular project.

This means that still the major part of the costs must be covered by the involved partners. This approach assures that there must be a potential business and research interest for the participants and their interest to work in a project cannot only be based on the fact that this work is paid by public money.

Differently to the funding rules of a EU project (e.g. Framework 7) there are no common funds available that are shared among the successful proposals.

Due to the fact that each country decides on own criteria on possible funding it can happen that a project may not be able to start as intended. The non-funded partner may decide to remain in the project on a self-funded basis or to step out from the project and the project may then either be restructured (e.g. by including another partner) or may it be stopped if the partner cannot adequately be replaced. In case a project partner still waits for a pending funding decision the remaining consortium may decide to start the project already and to include the partner later. This is generally recommended for partners who start their work at a later stage or where the work is not indispensable at the early stage.

2.4 Checklist for preparing a successful proposal

The following checklist may be helpful when preparing a proposal that could have a good chance of being accepted as a Celtic-Plus project. Certainly, there will be no guarantee that a proposal will be successful even if all criteria have been fulfilled. The final decision depends, of course, also on other aspects, in the forefront, on the availability of funds that, sometimes, require a prioritisation among other good proposals.

Successful proposals should comply with the following criteria:

- The objectives are in line with the Celtic-Plus objectives described in the Purple Book
- The project does not focus on competitive aspects, e.g. direct development of products
- The consortium is adequate with regard to the expected results
- The composition of the consortium promises sufficient impact of the results (e.g. a good mixture of large, important companies, SMEs and academia)
- All needed expertise is available and well covered in the consortium
- For each involved country the national impact and expectations for new business and new products is clearly described.
- The project description is well prepared and was intensively discussed in the consortium. All information is given at the required level of detail to be understood by the reviewers.
- At least two partners from two different countries must be in the consortium and no partner should have a too dominating share (e.g. more than 60% of the total).
- The number of involved countries does, ideally, not exceed 6 (a recommended figure by the Public Authorities). The more countries are involved the more critical becomes the funding process and the agreements among the involved countries.

2.5 Project Proposal Definition (CPP)

The Celtic Project Proposal should present all details of the planned project that are needed to start the project on the basis of this information. This mean, a detailed project plan must be elaborated, including a complete project management structure, detailed project calendar, specifications of deliverables and due dates and details about the project partners. Furthermore it is required to provide reliable budget figures and work assignments. Detailed information on the requirements for a Celtic Project Proposal are given in the guidelines for proposers (CPP).

The recommended steps for the project proposal are as follows:

2.5.1 Define a project consortium

For the definition of a proposal outline it is necessary that a strong and convincing consortium is already in place. To assist companies that intend to prepare a proposal in finding additional partners Celtic-Plus has established a platform on its website where a consortium can search for suitable experts or experts can find a suitable project consortium. Another possibility is the Celtic-Plus Proposers Day. At this proposers day experts can present their ideas and attract other companies to form a consortium.

For the selection of companies for the consortium also the funding considerations and special requirements for a national consortium should be checked. As a first indication information from the Public Authorities is available on the Celtic-Plus Web site.

2.5.2 Non-Disclosure or Confidentiality Agreement (NDA)

In order to assure that sensitive information that is discussed during the preparation phase will not be disclosed by other partners of the proposal it is recommended that each partner signs a NDA or confidentiality agreement. This NDA assures that, in case a proposal will not succeed or a partner will step out, the confidential information will not be further used in a non-authorised or even damaging way.

Examples of a NDA can be found at the Celtic-Plus Website. Please note that the NDA is not mandatory and the template may be modified according to the needs of the consortium.

2.5.3 Drafting and finalising the Proposal

The requirements on the structure and the level of details that should be contained in a proposal description are laid out in the Guidelines for Proposers. As a general rule the proposal must have a sufficient level of details to allow a meaningful assessment of the intended activities, the organisation of the work (project structure), the planned results, the companies involved, the time frame (calendar), and the required budget.

Before submitting your proposal you should check if the following conditions are met by your proposal outline:

- Are the objectives covered in the Celtic-Plus Purple Book?
- Are the main objectives not focusing on the development of a product (i.e. is the proposal not too close to market introduction)?
- Are detailed figures given on budget needed and effort planned?
- Provide the proposal sufficient details to allow a reviewer to assess the proposal?
- Is there a sufficiently large consortium defined to carry out the planned work (as a minimum at least two companies from two countries must be specified)?
- For the submission of the proposal an online submission tool is available that has to be used. Please follow the instructions given at the Call page.

2.6 Proposal evaluation

For the Celtic Project Proposals an evaluation process has been defined that will be carried out by selected qualified experts. The proposal evaluation follows to some degree the Eureka Project Assessment Methodology (PAM) but is adjusted and extended for several technical criteria. Each proposal will be evaluated and rated, generally, by 3 experts of the same Group of Experts (GoE). Within each GoE a common rating and recommendation will be produced for each proposal.

After the evaluation of Celtic Project Proposals the GoE will provide recommendations to the Celtic-Plus Core Group who will decide, in discussion with the Public Authorities, if a proposal should become a Celtic-Plus project and should receive a Celtic-Plus label.

The proposals in both phases are assessed and rated according to the rules laid down in the evaluation criteria.

All proposers will receive information about the outcome of the assessments after the end of each phase.

2.7 Celtic-Plus Label

Supported by the recommendations from the reviewers the Celtic-Plus Core Group will discuss with the Public Authorities the outcome and will decide, which projects should receive a Celtic-Plus label.

A Celtic-Plus label is the indication that the project has successfully passed the assessment and is considered a recommended Celtic-Plus project. For this reason the project will receive a "Celtic-Plus Label. This label is also recognised by the Public Authorities and, generally, increases the chances to receive public funding. **Important note: the assignment of a Celtic-Plus Label does not mean that public funding will automatically be granted for that project!**

The Celtic-Plus label is assigned not only to the project but also to all involved companies. The project and the companies are entitled to mention in publications or web pages this label and to show the Celtic-Plus logo. This logo may, however, only be used in connection with the project to which it was assigned. It shall not be used for general purposes. The logos for Celtic-Plus label can be found at the Celtic-Plus web site.

The assignment of the Celtic-Plus label requires that the project has to be started within the following twelve months. Otherwise, the assignment may be withdrawn. In case a partner withdraws from the project or fails to accept the rules of Celtic-Plus (e.g. payment of Celtic-Plus fees, reporting requirements, etc.) the Celtic-Plus label may be withdrawn for that company. In such case the concerned PA will also be informed about this fact.

3 LAUNCHING A CELTIC-PLUS PROJECT

The set-up and kick-off process for launching a Celtic-Plus project is shown in the following diagram.

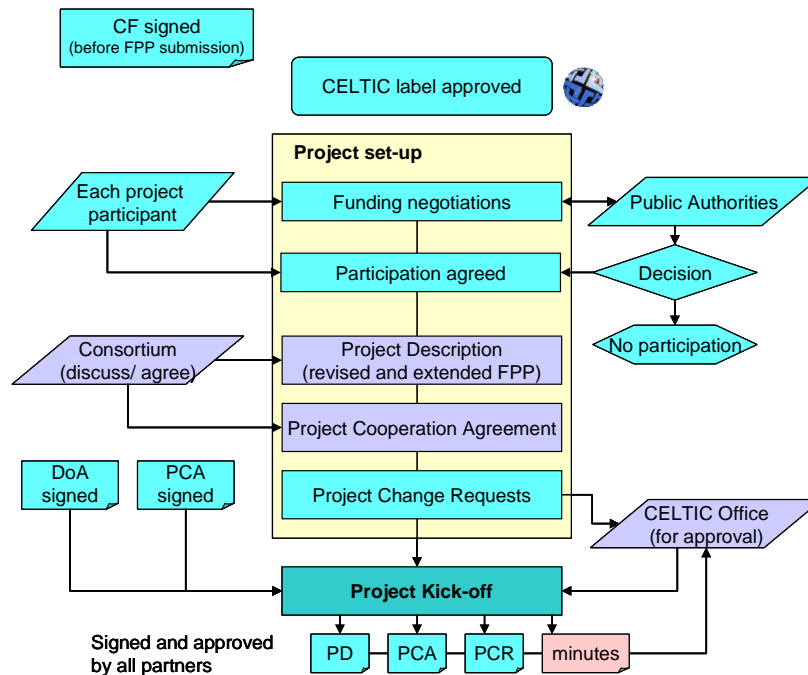


Figure 2 Set-up and kick-off process

After the Celtic-Plus label has been granted the project consortium, under the leadership of the project coordinator (PCO), can start the set-up activities for the project. The PCO will be invited to the PCO-Workshop (in January) that gives additional information for the setup phase and for the project execution. At the first place of the preparation work is the assurance of the public funding for the different consortium partners. If the funding is assured for the partners the further preparation of the contract and the technical description of the project can continue and be finalised. It may be left to the decision of the consortium to start the set-up process even if one or more partners still have no confirmed funding. This, however, bears the risk that the consortium or the project work may need to be changed in case a partner wants to step out because of no funding.

3.1 Funding negotiations

The first step for assuring funding is done by establishing early contacts with the Public Authorities before or during the preparation of a proposal. This is also important because for some countries fixed deadlines are defined until when applications for funding must be submitted. This may, sometimes, be even before the Celtic-Plus proposal phase has been closed. For some countries even an additional proposal competing applies and the partners have to submit a national proposal also.

The second important step for assuring the funding are the meetings and the discussions of the Public Authorities (PA) and Celtic-Plus. At those meetings the PAs of other countries that are involved in the same proposal can agree on funding. Those agreements generally facilitate the later assurance of the funding.

The consortium should also be prepared for a fallback approach in case funding is not approved or granted not to the percentage as expected. Possible solutions could be that a partner may decide to remain in the consortium even without or with reduced funding. Other solutions could be to focus already on partners from different countries that could perhaps take over the work. This is particularly recommended in case funding possibilities be expected difficult or uncertain.

3.2 Contracts and other legal documents

For the preparation of proposals and the preparation of the project set-up a few legal requirements are necessary.

All legal documents described below and all forms and templates that need to be signed can be found at the Celtic-Plus website (<http://www.Celtic-Plus-initiative.org/Projects/project-support.asp>).

3.2.1 Confirmation Letter and Declaration of Acceptance (CLD)

The new combined agreement “Confirmation Letter and Declaration of Acceptance (CLD) has to be signed and submitted together with the submission of the Celtic Project Proposal.

With the CLD a company confirms that it accepts the Celtic-Plus rules and is ready to pay the Celtic-Plus fees soon as the company becomes actively involved in the indicated Celtic-Plus project. The CLD is also necessary for all project partners. For details on the Celtic-Plus fee please refer also to chapter 9.

In case the CLD will not be available when the assignment of the Celtic-Plus label takes place those companies will receive the Celtic-Plus label only under the condition that the CL will be submitted within a very short delay. Otherwise the Celtic-Plus label may be withdrawn for that company. As the withdrawal of the label may have an impact for the whole project it is strongly advised that all participants take care to send the CLD before the assessments start.

As explained in the following chapter the DoA part must be signed together with the Confirmation Letter part as one agreement. Differently to previous projects the DoA needs now to be signed for each individual project. With the DoA part the partner agrees to accept the rules of the CFA-Plus as referred to in the Project Cooperation Agreement (PCA-Plus)

3.2.2 Celtic-Plus Frame Agreement (CFA-Plus)

The Celtic-Plus Frame Agreement (CFA-Plus) is the main legal document of the Celtic-Plus organisation. It had been signed by all Celtic-Plus parties, i.e. companies that are in the Celtic-Plus Core Group and who decide on the common policy and work programme of Celtic-Plus.

The CFA-Plus contains, in addition, a number of articles that refer to the handling of Intellectual Property Rights (IPR), patents or access rights that are important for the project consortium. Since it is the general understanding of the Celtic-Plus organisation that those rules are handled on a common basis they are not part of the Project Cooperation Agreement. This means that project participants need to know these rules and they have to declare that they accept them for the work in a Celtic-Plus project. For this reason they have to sign a Declaration of Acceptance confirming that the rules of the Frame Agreement are accepted.

3.2.3 Celtic-Plus Project Cooperation Agreement (PCA-Plus)

The Project Cooperation Agreement (PCA) is the basic legal document of the project consortium. In the PCA all individual details for the consortium partners are specified. A number of rules refer, however, to the Frame Agreement, that, by signing the CLD, is also part of the legal documents of the project.

The PCA has to be discussed within the Consortium. Changes related to the legal text in this document may be aligned. However, changes to legal text in the related Frame Agreement are, generally, not possible and acceptable only in special cases. Those cases should be forwarded to the Celtic Office for clarification and decision.

The PCA has to be signed by all participants. For practical reasons the Project coordinator sends out the final and agreed version to all participants. Each participant has to sign the signatory page (chapter 15.1) as many times as partners are in the project. The signed pages are returned to the coordinator. After all pages have been signed and returned the coordinators combines the signed pages and sends the complete PCA with all (original) signatory pages to each participant.

The PCA has to be sent to the Celtic Office. The Celtic Office reserves the right to request modifications, e.g. in case the PCA is not in line with the rules of the Frame Agreement and the Celtic Core Group could not agree to these modifications.

3.2.4 Subcontracting of Project Participants

It is possible that an, already registered project participant subcontracts work for another organisation for doing active work for the contracting project participant. In case of subcontracting the following requirements must be observed and fulfilled:

1. The effort performed by the subcontracted organisation must be included in the effort of the subcontracting party (the official project participant). This means the subcontracting partner will be charged for the effort of the subcontracted organisation. This means that the effort figures of the subcontracting partners increases by the effort for the subcontracted organisation. In this case the subcontractor will not appear as official project partner.
2. Alternatively, if the project partner should be listed as official project partner, the subcontract has to indicate all effort figures of work performed in the project including the subcontracted organisation. The fees will then be charged to the subcontracting party. This requires that the subcontract is made known to Celtic and the invoicing process can be handled by the subcontracting partner.
3. In the exceptional case a subcontractor shall act as a project coordinator a special authorisation from Celtic Office is required. If accepted the case has to be handled as indicated under item 2. It is not possible that the subcontracted organisation, as coordinator, will not appear as consortium partner.

3.2.5 Project Change Request (PCR)

It is not unusual that a project may need to modify their originally project planning during its lifetime. Changes in the project may happen due to a delayed start (e.g. in case some partner had delays in receiving public funding), due to partners stepping out from the project or joining it later, or due to delays in finalising planned work and results. The procedure of issuing an official Project Change Request is an approved process and may be applied whenever official changes become necessary.

In all cases where the agreed project data, as defined in the CPP or in a Project Description (PD), is affected a Project Change Request (PCR) must be issued by the concerned project partners and submitted to the Celtic Office. By default the project co-ordinator is responsible that a PCR is prepared by the concerned project partners.

In case of significant changes of the approved project the reported changes, generally, need to be approved by the Celtic Core Group. Also the concerned Public Authorities may be contacted to confirm that they also agree with the changes. Minor changes that do not affect the original planning too significantly can be authorised by the Celtic Office.

The approved PCR will become part of the project description. A revised version of the PD may become necessary in case the changes are too significant. Otherwise the PCR will be considered as additional document that contains revised data.

IMPORTANT: As long as no PCR has been submitted the original project description (resp the latest revised version) will be considered as latest information. Also the billing of the Celtic-Plus fee (see chapter 9) will be based on the latest official data. Modifications of project data, which affect past periods are, generally, not possible and will only be accepted in case no retrospective claim of past invoices will be issued.

The PCR has to be submitted via the Celtic online tool. Each project will receive a dedicated link to the latest approved PCR form, which is intended to be updated. The valid links are accessible to all project partners are visible from the individual project domain of the Celtic-Plus web.

3.3 Kick-off a Celtic-Plus project

The kick-off is considered as the real start of the project work. Before organising a kick-off meeting some preliminary preparation should have been completed to assure that the work can start after the meeting.

In preliminary discussions the project proposal should be revised and completed. A draft Project Description that will be part of the Project Cooperation Agreement (PCA-Plus) should be available.

Also the PCA-Plus should have been discussed before the meeting to avoid that a partner might disagree with the legal text.

At the kick-off meeting the following items should be agreed upon:

- Project Description (see next chapter)

- Project Change Requests
- Project Consortium Agreement (PCA-Plus)

At the meeting all necessary management bodies as identified in the Project Description should be nominated (e.g. Project Coordination Committee, technical/ WP committees, if any, etc.).

After the meeting the Project Coordinator should send the minutes of the meeting to Celtic Office and all project participants. The minutes must also include an official launch indication if, when and with which participants the project has started.

3.3.1 Project Description

The Project description (PD) is the general reference document for the defined work of all consortium partners. The basis of the Project Description (PD) is the submitted and agreed Celtic Project Proposal (CPP). The difference between the CPP and PD is basically that the PD is a more current and more detailed version of the CPP. In principle the CPP document can be used to prepare the PD. All updates that incurred between the submission of the CPP and the date of the kick-off should be reflected in the PD.

In addition the PD should specify the detailed work not included in the CPP. In particular the work at task level within a work package is often not precise enough to coordinate and carry out the work. It should be noted that the purpose of the PD is to define in a clear and transparent way all work items a partner is supposed to carry out including all inter-dependencies between other work items and expected input and output to and from other tasks, including dates, etc. The degree of details in the PD is left to the coordinator and the consortium.

The PD should also consider any revision of:

- Start and end dates of the project and work items (tasks, WP)
- Delivery dates of results (deliverables, tools, platforms, etc.)
- Milestones
- Budget and effort for each partner on a , at least, yearly basis (a quarterly breakdown is often more recommended)
- Responsibilities within the project (WP-, Task Leaders, committee members, etc.)

On the Celtic-Plus Project Support Website the Guidelines for PD preparation and the PD templates are available.

The PCA, including the PD, must be sent to the Celtic Office after it has been agreed by the consortium.

3.4 Project Information and Publications

3.4.1 Project Web pages

As soon as a project has been started after the kick-off date the project is requested to provide general project information that will be published at the Celtic-Plus Web site. The project management is responsible that this general information is provided as early as possible and is updated whenever required.

The general Celtic-Plus Project Web includes also by default a project internal Web (Project Intranet). This Web provides access to the online reporting tool and access to the project database. It can also be used by the project consortium to publish project internal and project management information. The project Intranet can only be accessed through login to the Project Domain. Each Project will receive a group password for its own project domain.

Besides the general project Web page the project is free to create a project-owned Web site. Celtic-Plus offers, through its EuresTools services, to host such Web sites. The design and the functionality of the project-owned Web are free and can be decided by the consortium. The Celtic Office offers, against additional charges, to produce the web design and to implement it. The correctness and consistency of the information is under the responsibility of the project consortium. It is strongly proposed that Celtic-Plus-hosted project web sites use a common URL standard: <http://www.Celtic-Plus-<project-acronym>.org> (e.g. www.Celtic-Plus-madeira.org). The Celtic -Office will reserve the project URL if this is requested by the project. In case the project consortium prefers to host the web site on own servers different URLs may also be used.

3.4.2 Project Leaflet

In addition to this standard Web page each project shall produce a two page leaflet, informing in more details about the started project. This project leaflet shall be produced early after the kick-off (not more than 3 to 4 months after the project has started). Those leaflets are intended for dissemination to a broader audience (e.g. at conferences, exhibitions, etc.). The layout and content shall follow a common style as provided by Celtic-Plus. By default the leaflet will be produced in PDF format and are mainly intended for download from the Celtic-Plus web. There will also be a high-definition pdf file produced that can directly be used for professional printing, e.g. in case of dissemination at conferences, etc.

The Celtic Office will approach new projects to provide input for the leaflets. It will also take the responsibility to produce a consistent layout in printing format (pdf).

Examples of project leaflets are found at the Celtic-Plus Web site: www.celticplus.eu.

4 MANAGEMENT OF CELTIC-PLUS PROJECTS

Celtic-Plus projects can be very different with regard to the size of the consortium, the work volume and the duration. A management structure should be defined that corresponds best to the requirements of the actual project to assure an efficient but not overburdening management.

Some general requirements and concepts that should be respected for an efficient Celtic-Plus project management are the following:

- The project is led by a Project coordinator (PCO) from the (main) consortium partner
- A Technical Coordinator (TCO) may assist the PCO in the technical coordination (optional)
- A project is divided by a number of different work packages (WP), each led by a WP leader
- A Project Coordination Committee (PCC) is, generally, recommended that jointly decides on the activities of the project. The PCC is composed of the PCO, the TCO (if any), and the WP leaders
- A work package is organised in several tasks, each led by a task leader (TL)
- There are defined links to report to and to inform the Celtic organisation about the project progress
- There are some defined processes (e.g. internal review) to assure a good quality of the deliverables
- Critical risks, that could endanger the smooth roll-out of the project, are identified and a contingency plan ('what-if') for those risks is defined
- IPR issues are handled in a controlled manner

Optional management structures:

- A technical coordinator may be defined who takes over responsibility over the technical roll-out
- A Technical Committee may be defined which jointly takes all immediate technical decisions of the project
- An Advisory or Support Board/ Committee may be defined to handle scientific, IPR issues and questions regarding, e.g., business exploitation of the results

4.1 Example Management Structure

A possible management structure and management concept for an average Celtic-Plus project could be defined as follows:

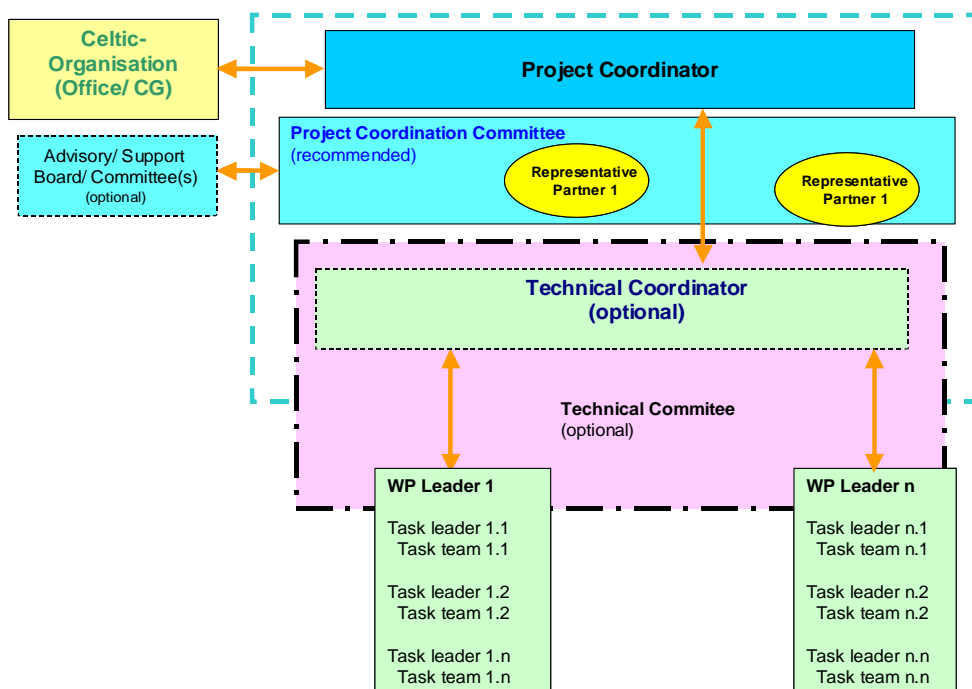


Figure 3: Project management structure (example)

The management of the project is subdivided in two main activities:

- Project coordination and administrative handling: General project administration, contractual issues, interfacing with the Celtic Office etc.
- Technical coordination: Overall technical coordination, flow of information among the different WPs, responsible of the subdivision of activities and monitoring their progress.

4.2 Detailed project management roles

Note: The following description refers to the example management structure. This structure is not mandatory. Consequently, the roles may vary depending on the management concept agreed by the Consortium.

The Project Coordinator shall be responsible for the day-to-day management of the project. He/she shall provide an interface between the project and the outside world. In general terms, the duties of the Project Coordinator include: organization and chairing the Project Coordination Committee (PCC), meetings, execution of the PCC decisions on behalf of the project, circulating PCC minutes and actions to partners in a timely fashion, communication with the Celtic Office, non-technical liaison with other projects and outside organizations.

The main tasks of the Project Coordinator are to:

- Act as the intermediary between the consortium and the Celtic Office. All information related to the project shall be transmitted by the consortium to the Office through the co-ordinator.
- Perform overall legal, contractual, ethical, financial and administrative management of the consortium (day-by-day basis).
- Prepare, update and manage the consortium agreement between the participants.
- Perform project controlling.
- Evaluate reports (progress and budget).
- Issue a project change request (PCR) when needed and submit it to Celtic.
- Act as first instance conflict resolution.
- Initiate reviews and audits.
- Chair PCC, write minutes and distribute them among all partners.
- Coordinate, when necessary, the relationships between each partner and the EUREKA national representatives.

The Technical Coordinator, in case this position is considered, will be the permanent reference point of the project on a day-to-day basis, regarding the overall technical direction of the project. He shall take care of the coordination of the technical activities across the working packages, organization and chairing of the technical meetings. The Technical Coordinator will ensure accomplishment of the project technical objectives: promoting visibility in the international standardization bodies and being responsible for reporting on the technical progress of the project work.

The main tasks of the Technical Coordinator are to:

- Co-ordinate, at consortium level, the technical activities of the project (day-by-day basis).
- Co-ordinate, at consortium level, the knowledge management and other innovation-related activities.
- Oversee science and society issues related to the research activities conducted within the project.
- Give technical advice and technical direction recommendations.
- Participate at the PCC technical discussions.
- Provide technical conflict resolution.
- Perform technical project controlling (e.g. result evaluation, etc.).

In case a TCO is not considered the tasks will mainly be taken over by the PCO and selected WP Leaders.

The WP leaders will be responsible for the organization of work and outputs of its WP and for the timely solution of any problem that may arise. WP leaders will be in charge of organizing the work plan of the different activities, in collaboration with the partners involved in each WP. This will include definition of the lowest level task to be performed by each individual partner. Each WP leader will report to the Technical Coordinator for technical issues and to the Project Coordinator for the rest of matters. WP leaders will present the progress, issues and results of their WP at the consortium meetings.

The Project Coordination Committee (PCC) will consist of an official delegate from each partner, the Technical Coordinator and will be chaired by the Project Coordinator. The PCC will be in charge of the high level management of the project, addressing all the administrative, contractual and financial matters. It will take all the important decisions related to the contractual execution such as: contract changes or renegotiation, change of consortium configuration, reallocation of work, responsibilities and manpower. Consequently, the PCC will determine the strategic direction of the project. It is also responsible for resolving conflicts between participants not resolved at lower decision levels.

The Technical Committee (TC), if considered, will consist of the Technical Coordinator, the WP Leaders and partner technical experts. The committee is entitled to elaborate technical planning and decisions and provide general technical directions related to project objectives and quality assurance. It provides the tools to ensure efficient and productive cooperation and inter-working between the different WPs. TC is the main responsible for approving the project deliverables. Particularly, the TC will be responsible for implementing of the directives of the PCC, guiding and monitoring the technical work, coordinating the WPs, timely preparing and approving the Deliverables produced by each of the WPs. Furthermore, it is also in charge of the resolution of conflicts among WPs (at a lower level than PCC).

Work-package Teams (WPT) are in charge of carrying out the technical work needed for each of the WPs. Each WPT is composed of the WP Leader and the technical contributors. The practical work of a WP team shall be conducted by assistance to periodic meetings, contributions and activities. Each WP will be coordinated by a WP Leader (whose responsibilities are stated above).

4.3 Decision procedures and conflict resolution

In general, it is expected that the instructions of overall co-ordinating tasks (e.g. the WP-managing task within each WP) will be followed by the concerned WPs, or that conflicting views will be solved bilaterally.

In the exceptional case that conflicts cannot be solved on WP level, the PCC may be called by the respective WP-Leader and asked to solve the conflict.

It is expected that the co-ordinating tasks will consult the concerned WPs before making any decision and especially ensure that no heavyweight overhead is generated. The goals for the co-ordinating tasks are always to improve the overall functioning of the IP as a joint project and to improve the quality, consistency and impact of the project results.

Voting will be the only valid method to solve conflicts and to approve any change in the consortium structure. It should be clarified by the project consortium how a voting

The PCC will be the highest project authority. Decisions will be taken in the PCC by voting majority. Each partner will have a vote in the PCC. In case of tie in a voting result, the chairman's (Project Coordinator) vote will be a casting vote.

As far as work package internal decisions are concerned, they will be taken by majority of the participants. In case no majority results, a vote proportional to the work package participant shares will be taken. In case of conflict, the decision will be taken by the TC.

4.4 Project Quality Assurance

Large and complex project require clear processes to assure that the quality of the project is assured and that the projects delivers results in time and in a technical quality which is acceptable to all involved players, including the funding partners.

It may be recommended that a project establishes a management quality plan, where details how the project quality will be assured are further specified and responsibilities are indicated. Such plan should include:

- Project calendar and important milestones
- Clear assignments of responsibilities for work packages, tasks and sub-tasks
- For each (major) milestone the expected date and expected results should be indicated. Also, it should be listed who will be responsible to check and confirm the correct fulfilment of a milestone

- Major project deliverables should undergo an internal review process. The internal review process may be defined in one or several review loops. It is recommended that internal reviewers, checking the quality of deliverables, are not directly involved in the production of the deliverable. The main internal reviewer should approve the release of a deliverable.

Further details on quality assurance are given in chapter 7.

4.5 Risk management

In large, complex and relatively long projects where many partners are involved, it is unavoidable that problems turn up from time to time. It is of paramount importance that potential risks are clearly identified and assessed, and that the project is prepared for cover-up actions if required.

Potential risks can be classified into the following groups:

- Partner problems (e.g. a partner is underperforming or a key partner is leaving the project)
- Expertise risks (e.g. a key person with a specific expertise is not available or leaving the project)
- Project execution risks (e.g. key milestones or critical deliverables are delayed)
- Agreement risks (e.g. Consortium partners cannot agree because of different interests)
- Technological risks (e.g. key technologies or components are not available at the expected time)
- Dissemination risks (e.g. no major customers for using the results are found)
- Market and user related risks (e.g. the market environment or the user views change and makes the results obsolete)
- Competition risks (e.g. a competing solution comes up and makes the results less valuable)

Several of these potential risks can be assessed concerning their probability and level of (negative) impact. Risks with a high probability and a severe impact are handled with particular caution during the project. The following measures are foreseen to meet those risks:

- For the ones with medium to high probability and severe impact countermeasures and contingency plans are discussed, and they will be flagged throughout the execution of the project as “risk items”. This ensures that all levels of the project take special care of those items.
- For the ones with low probability or low impact, and for the ones that cannot be foreseen at this stage, the PCO will ensure that such are identified in an early phase, and that necessary countermeasures are taken.

4.6 Management of knowledge, intellectual property and innovation related activities

The management of knowledge, intellectual property and innovation related activities, including exploitation of results and business creation, are handled by the PCO and PCC.

Each partner, who brings an IPR into the project or has developed some IPR within the project, shall give a statement on this IPR on an electronic form provided by the Project Coordinator. Such statement shall include any special requirement for the use of this IPR in addition to or deviating from the standard IPR-rules of the PCA and CFA. Within one month the other partners may raise objections against such a statement. If no objections have been raised within this month, the statement shall be considered as accepted. Any objections have to be dealt with by the PCC without undue delay.

5 PROJECT DELIVERABLES

A project result, generally called “deliverable” can be defined as a final or an important intermediate product of Celtic-Plus project or any of its work packages that can be used by the project participants, the funding agencies, or if so foreseen by a third party or the public.

Deliverables can be of different nature both with respect to the type of results, the intended further use, and the confidentiality level with respect to further dissemination.

5.1 Types of project deliverables

Project deliverables may be:

- Documents in various formats
- Hardware and software
- Other documents issued by participants in the project
- Prototypes, demonstrators, test beds, laboratory equipment

5.1.1 Deliverables as documents

Deliverables as Word or PDF documents

This is the conventional form of a project result document. Deliverables shall be structured in such a way to address different kinds of users:

- High-level executives, addressed by an Executive Summary
- Technical managers and experts with decision-making competence, addressed by the main volume of each deliverable
- Experts and implementers who use the deliverables in their work, addressed by other volumes of each deliverable containing full technical information.

Deliverables as Web pages

Projects can deliver their achievements and results as Web pages. The amount of information delivered via the Web can range from minimum information about the project results with reference to electronic documents and contact to further information, up to full-fledged sites embracing the latest technological features of the Web, such as search capabilities, audio/visual effects and extensive navigation help.

Deliverables as multi-media information

Sometimes projects produce results that may be effectively presented using multi-media, i.e. text mixed with visual and sound information. For this purpose, CD-ROMs or videos may be appropriate.

5.1.2 Deliverables in the form of hardware and software

Hardware implementations can be prototype equipment that is able to demonstrate an achievement or a low volume production used for trials and pilots.

Examples of software are:

- Specifications in a formal language, e.g. UML, SDL, IDL etc.
- Reference implementations, e.g. C++, or Java code of an application a service or a protocol implementation.
- Software developed, e.g. to test algorithms to be proposed for standardisation.
- Test suites for end-to-end or node-to-node testing of services and applications or network services.

For both hardware and software produced in a project the Project Steering Board (or similar) needs to give clear guidelines for usage by other project participants, the funding countries, or third parties.

5.1.3 Other types of documents

Contributions to standards bodies, journals, international conferences etc.

Projects are encouraged to produce documents that enable the Participants to influence European and international standardisation processes, public opinion building, as well as policy development at the European level.

In the case of standardisation, document style and format are usually defined by the relevant organisation addressed.

Project publicity leaflets and booklets

Projects are encouraged to produce publicity leaflets and other externally appealing “glossy” documents, as this serves to publicise and exploit the work and results of the projects. Sometimes, a publicly available deliverable may need to be re-designed as a “glossy” booklet.

Customers of the leaflets and booklets are people who do not usually require very detailed information. This implies that the information given in such documents has to be simple and understandable for a very broad audience.

Project presentation slides

Participants are often requested to present the project and its results. For such presentations slides are useful.

For efficient and consistent dissemination of results, the production of slides should be co-ordinated at project level. The slides shall then be archived in the document repository by the project management on the project Web/ftp server, so that project participants may use them for presentation of results.

5.1.4 Prototypes, demonstrators, test-beds and laboratory equipment

When the main, or sometimes exclusive, objective of a project is to establish and run hardware and software based demonstrators or test-beds, then different kinds of project results can be envisaged – an example is the experience gained.

In addition to the deliverables containing the conclusions of experiments disseminated to the customers, the participants obtain, directly or indirectly, laboratories or equipment that can be re-used for other purposes. The further use of such results may be subject of rules captured in the PCA.

5.2 Confidentiality levels of deliverables

Project deliverables shall be handled by all project participants in such a way, as to respect the IPR, and confidentiality rules as laid down in the PCA and the project contract.

Four confidentiality classifications for project results are foreseen:

- For full publication
- Restricted to a group specified by the consortium
- Confidential, only for members of the consortium

Project results shall always be accessible by the funding national agencies.

The confidentiality classification is decided by the contractors and is stated in the project contract. As an exception, the confidentiality classification may be changed during the project execution, by a decision jointly taken by all contractors. After a project has been closed, the request for a change of the confidentiality classification of published deliverables is still possible.

Note: For any document, information, Knowledge, Pre-existing know-how or other material communicated as being confidential according to project contract, the period of confidentiality is agreed in the PCA.

5.3 Publication of project deliverables

Project results are only considered as delivered once they have been published to the outside world, or in case of internal or confidential deliverables, to the project consortium or a targeted group.

Before publishing a deliverable an internal or external review process should have been applied (e.g. as described in chapter 7. This review process is to be defined under the discretion of the project consortium.

As soon as the deliverable is considered ready for publication (with or without review) it has to be approved by the project consortium. The management body who has to approve the publication should be defined in the project description. Further approval of Celtic-Plus or national bodies is generally not necessary unless this has been specifically requested.

6 PROJECT PROGRESS REPORTING

6.1 Basic Principles of Reporting

In order to keep track with the progress of large projects with several involved partners a consistent and well-defined reporting process is strongly advised. Without a regular reporting the responsible people in a project (Project Coordinator, WP leader) will have no clear information if a project progresses according schedule or is delayed with the work. Delays and problems in a project should therefore become known early enough to allow counter-measures.

As a basic principle reporting of a Celtic-Plus Project should not impose a high administrative burden. It is, however, left to the project coordinator and the project consortium to agree on a tighter and more demanding reporting scheme if this is felt necessary.

The Celtic Office provides the Web-based online reporting tool set "EuresTools", developed by Eurescom GmbH that significantly simplifies the reporting process. In addition the tool provides access to the project database for an immediate overview on the project progress and discrepancies between planned and current status. The reporting tool and the database are included in the project intranet and can be accessed through the login to the Project Domains. Each project will be assigned an individual group account to access only their own project intranet.

The main steps in the reporting process are as follows: The participant submits his WS and the WP leader approves the document. The WS are compiled by the WP leader to a WP report that is also submitted in the reporting tool. The WP report is a special WS. This report is send to the Celtic Office. The following diagram shows the roles and action for the reporting process:

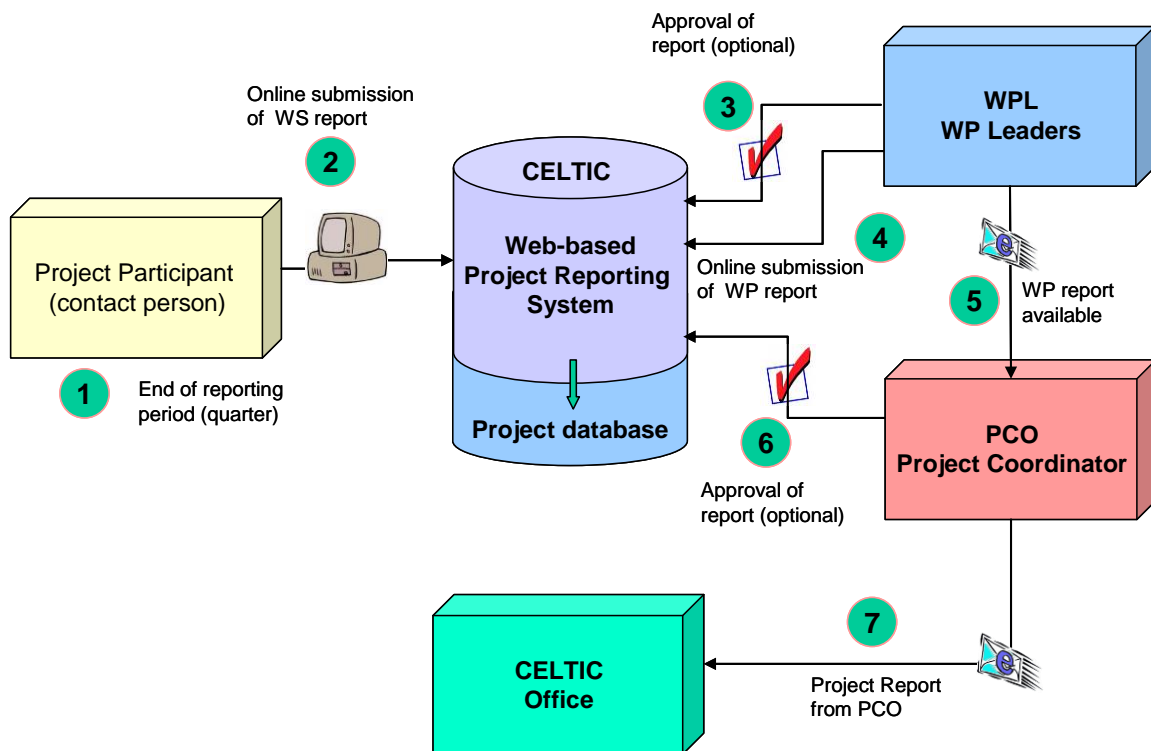


Figure 4 Project reporting process

6.2 Reporting of Work Packages and tasks

Details on the online reporting tool are provided in Annex 1 (excerpt from the Reporter Manual)

6.2.1 Monthly Report (MR) *(optional if requested by project team)*

Monthly reporting schemes may be introduced on the request of the project coordinator, WP-leader or project committee. Especially in larger projects a monthly reporting scheme can significantly improve the controlling of the work progress. It is recommended that the monthly reporting should be lightweight and

should not require significant time to be completed. For monthly reporting either freeform reporting or small templates, developed within the project team can be used or the “*Eurescom Project Reporter*”, upon request, can be set-up to monthly, (or bi-monthly) reporting scheme.

6.3 Quarterly Project Report (QR)

The project coordinator compiles from all received (WPR) of each participant a consolidated quarterly report. The QR should summarise the effort spent by each participant for the different work packages. In addition the QR should indicate all deliverables or other achievement during the reported quarter. Very important are statements about variations from plan (e.g. delays, skipped or modified work items, etc).

7 REVIEWS AND QUALITY ASSURANCE

A well-defined review process is essentially for assuring a good quality of the project results according to the promised descriptions in the plan upon which funding has been agreed. It should therefore be in the interest of the project consortium that a review process is defined, scheduled and carried out, at least at a basic level to assure good quality.

As for the reporting Celtic-Plus does not intend to impose a high administrative burden and high additional effort for the reviews.

Reviews should be considered before deliverables are to be published.

7.1 Deliverable Reviews

It is recommended that all deliverables are reviewed by one or more internal reviewers before public release. Internal Reviewers should be project participants who are not directly related to this deliverable. They may also be recruited from not involved departments within consortium companies.

If a draft deliverable becomes available, it is reviewed by one or more internal reviewers. They provide their comments directly to the editor of the deliverable who will take them into account.

The internal reviewers should be nominated from project team members already during project kick-off.

7.2 Mid Term Reviews

A mid-term review (MTR) is envisaged, generally, after about 1 year, maximum 1,5 years, of project work. Mid-term reviews are also requested by Public Authorities, who will be informed about the outcome of the MTR.

The mid-term review shall assess the current status and achieved progress of a project. In case of deviations or unsatisfactory results solutions shall be discussed and proposed to solve the problems, or, in the worst case, to even stop a project.

For each project at least one reviewer will be nominated from the Celtic-Plus group of Experts. In addition to this (main) reviewer one or two alternative reviewer(s) may also be appointed, in particular for large and complex projects. The main reviewer and, generally, the Programme Coordinator from the Celtic Office will perform the review during a physical meeting with the project consortium. It may be possible, if requested by the Public Authorities, that a representative from a PA will attend the review meeting also.

In order to minimise the effort for the review it is envisaged that a mid-term review will be held during a normal project meeting, where about ½ day should be considered for the review.

The following documents have to be provided by the project before or during the review:

- A Project Self-Assessment (see Annex 2) prepared by the PCO. This document has to be sent to the reviewer(s) at least two weeks before the planned review.
- Work Package/Task Status Reports of the Work Packages and Tasks (taken from the online reports).
- Any other documents as appropriate, such as completed deliverables, early drafts of deliverables, (draft) amendment to the PCA, Project Plan, etc.
- During the review some presentations or demonstrations of the project work/ results should be envisaged.

The Project Coordinator forwards these documents to the reviewers and to the Celtic Office.

- The review results will be discussed with the Project Coordinator and/ or the Project Coordination Committee.
- In case of substantially negative review comments, the Project may have to undergo a more extended assessment, maybe, also with assistance of Celtic-Plus and Public Authorities. After this more elaborated assessment, a decision will be taken whether to continue the project in a modified form or to close it. In case it is proposed to stop a project the Public Authorities, funding this project, will be contacted in beforehand and a decision will be taken in agreement with them.

The implementation of the requested improvement actions shall be promoted by the Project Coordinator and monitored by the Celtic-Plus Programme Coordinator.

The Midterm review report (see Annex 2) will be sent to the Celtic-Plus Core Group and all involved Public Authorities. It will also be part of the annual Celtic-Plus report.

7.3 Final Reviews

The Final Review (FR) is realized after the end of the project or just before the project terminates. It is carried out to verify that the project achieved the goals that were laid down in the project proposal and in the project description. The project has the possibility to present the achievements and to show the demonstrations that the project has realized. A second very important aspect is to discuss with the project partner the outcome of the project focussing on technical achievements, on the product development and on business related aspects. The project shall demonstrate the impact that the project already had or that is expected to achieve in the next 1 or 2 years.

A representative from the Celtic Office carries out the final review. He can receive the support from the reviewers from the Group of Experts if this is deemed necessary. The representatives from public authorities from the participating countries are also invited to the final review.

In order to minimise the effort for the review it is envisaged that a final review will be held during a normal project meeting, where about ½ day should be considered for the review.

The following documents have to be provided by the project before or during the review:

- A Final Project Report is prepared by the PCO. This document has to be sent to the reviewer(s) at least two weeks before the planned review.
- In case those recommendations have been formulated during the midterm review, the project should explain the actions that were triggered by the MTR.
- The project partners should indicate the impact of the project, including publications, contributions to standards, impact on existing products or creation of new products.
- During the review some presentations or demonstrations of the project work/ results should be envisaged.

The Final Review Report (see Annex 3) will be sent to the Celtic-Plus Core Group and all involved Public Authorities. It will also be part of the annual Celtic-Plus report.

Independently from the final review, the project partners have to fill in a Web based questionnaire where they should answer questions on the impact of the project for their organisation.

8 CLOSING A CELTIC-PLUS PROJECT

The Project Contract commits the participants in a Celtic-Plus Project to finalise the Project in such a way that all the expected Project results are delivered and are of agreed quality

8.1 Conclusion of technical work

The conclusion of the technical work is reached when no more actions are needed by the participants in the Project. This means that the Project has presented its results, has produced all the expected Project Deliverables.

Projects reach the completion of their technical work through two final events:

- Final Review meeting (optional)
- Delivery of Final Project Documents.

8.2 Final Project Documents

The Project Coordinator delivers to the Celtic Office:

- the final Deliverables,
- the Final Reports,

8.3 Final Project Overview

A final project overview shall provide a picture of the whole project, its variations and modification during the project lifetime. The final overview will also be provided to all involved public authorities to allow them to update and cross-check their own project data, budget figures and funding with the final overview figures. The overview consists of the Final Project Report (online submission) and the Final Review Report (see 7.3).

8.4 Final Evaluation and Statistics

It is envisaged that the project consortium will be approached some time after project closure and asked about the impact of the project and the use of the results. This evaluation will be used also for statistical purposes and future improvements.

9 CELTIC-PLUS FEE - INVOICING AND PAYMENT PROCEDURE

As for other EUREKA cluster projects a special contribution fee is requested also for Celtic-Plus to assure the operation of the Celtic-Plus organisation.

The annual fee has been set to 1,500 Euro per (planned) person year (PY). The obligation to pay the fee starts at the moment a project partners decides to become active in a project. The availability of public funding is not relevant for the obligation to pay the fee.

New: The fee is mandatory for all project participants. The Celtic Core Group decided that all project partners have to pay the Celtic-Plus fee for projects labelled in 2017 and later. Therefore no fee exemptions will be accorded for project labels in 2017 and later.

Already during the submission of Celtic Project Proposals each participant has to confirm by a Confirmation Letter and Declaration of Acceptance (CLD) that the rules for the Celtic-Plus fee are accepted. Without this confirmation a Celtic-Plus label will not be assigned for the concerned participants.

In case a CLD is not available at the time the Celtic-Plus labels will not be assigned to the defaulting project participant.

Invoicing schedule and invoiced amount

Celtic-Plus has defined two invoicing dates: 31 May and 30 November.

As a general principle the invoiced amount will be calculated from the planned figures and not from the actual work carried out during the year. This means that changes in the plan must always be announced through a Project Change Request (PCR) before the invoicing deadlines (see also chapter 3.2.5). Please note that the planned figures will also be reported to the Public Authorities, as they are the basis for the public funding.

Invoices on 31 May will be issued for all projects that have started before that date. The invoices at this date consider the first 6 months of the planned annual effort. Please note that the invoice does not take into account when the project really has started and how much work has already been done. In case work will start only at the second half of the year a PCR must be sent to the Celtic Office at least one week before the invoicing date.

In practise this basically means that the invoiced amount in the first half of the year will be 50% of the fees calculated from the planned effort.

At the invoice date 30 November the invoiced amount will be another 50% of the fees calculated from the planned annual effort. Projects that started after 31 May will be invoiced 100% of the fees calculated from the planned annual effort.

It is important to understand that the invoiced amount for the first invoicing date will not be recalculated if a Change Request has not been submitted before the invoice data. In this case the invoiced figures correspond to the planned figures of the first half while the invoiced figures of the second half year will consider only the (revised) planning from July onwards. It is also important to understand that a recalculation of past figures, where invoices had already been issued, is generally not possible.

Payments must be received within 2 weeks after the issue date of the invoice. Objections to an invoice must be stated within 8 days after receipt of the invoice.

In the following figure three scenarios for calculation the invoice are presented that demonstrate different invoicing conditions.

- Scenario 1 describes a situation where no PCR has been issued during the whole year, i.e. the invoices are based on the planned annual budget figures as indicated respectively in the CPP and Project Plan. At the first invoice date, 31 May, the fee will be 50% of the planned annual amount. Assuming no changes in the planned annual figures the other 50% will be invoiced at the end of the year.
- Scenario 2 describes a situation where a project starts later during the first half of the year and also with a reduced annual budget as planned (X2). A PCR was issued in time before the first invoicing date. Consequently, the first invoice will be based on the new, reduced annual effort. Half of the new annual effort will be invoiced at the first invoicing date. Another PCR is then issued in the second half of the year indicating an increase in the planned annual effort from X2 to X3. The second invoice at the end of the year will now be based on the new annual figure X3. Half of the effort (X3) will be invoiced in second half of the year.

- Scenario 3 shows a project that started later as planned (in second half). This delay was announced by a PCR. Consequently there will be no invoice at the first invoicing date. For the second invoicing date the invoiced amount is based on the new annual effort (X2).
- Scenario 4, finally, shows a project that reduces its annual figures from X1 to X2 after the first invoicing date. In this case the project will be invoiced 50% of the original annual amount (X1) at the first invoice date. Since the annual amount will be reduced after the first deadline only the invoice at the second invoice date will consider the new annual amount and 50% of the new annual figure (X2) will be charged.

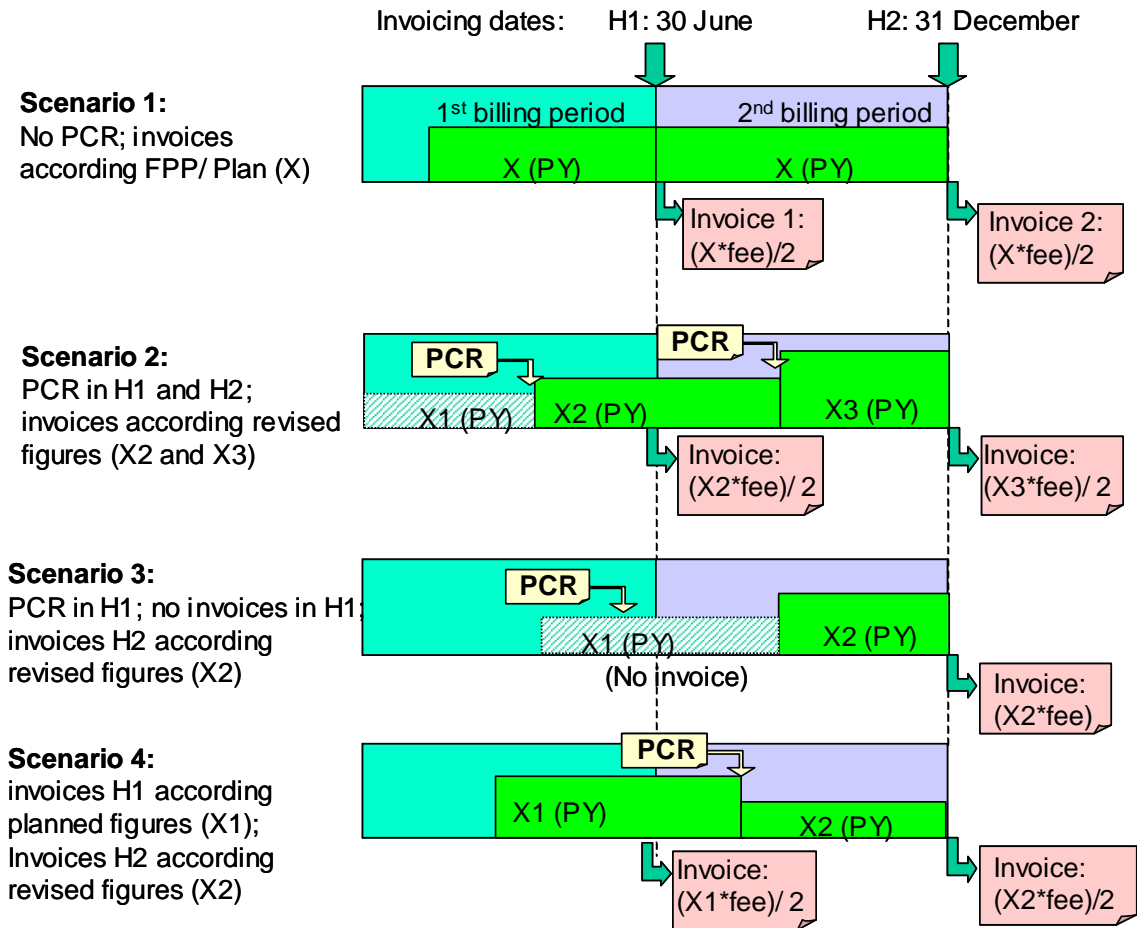


Figure 5 Invoicing scenarios based on planned effort

10 SUPPORT SERVICES

10.1 Recommended Standards for Document Editing

This section gives recommendations on various standards for document editing in a collaborative environment. Documents include text-, spreadsheet-, database-, project management- documents, web pages and images. By conforming to these standards, the electronic exchange and processing of documents within a Project and between Projects is significantly improved.

These standards shall be regarded as recommendation, based on the best-practise experiences with large multi-national, collaborative research projects. The Project Consortium may decide on alternative tools and standards. It should, however, always be assured that a smooth document exchange will be assured and deliverable can be edited and read by all consortium partners.

10.2 EuresTools services

Celtic-Plus, provides access to EuresTools for all Celtic-Plus projects. This section lists the information and communication services which Eurescom can offer to support project collaboration, project management and dissemination of results.

All the services are offered on a demand basis. At the kick-off of a project a “shopping list” with the requested services shall be forwarded to Celtic Office.

The following services and tools that support project collaboration are included in the Celtic-Plus fee:

- Audio conference bridge
- E-mail exploder lists (mailing lists) + Archives
- Web server
- FTP server (File Transfer Protocol server)
- Alternatively to Web or FTP a WIKI Server can be provided

The following collaboration services can be offered at additional (license) costs:

- BSCW server (Basic Support for Collaborative Work server)
- Sharepoint portal server (Microsoft)
- Web conference portal
- Forum server (e.g. PHP-based discussion forum)

The following services and tools support project management:

- Web reporting (basic reporting included in Celtic-Plus fee; enhanced reporting at additional license costs)

The following services and tools support project dissemination:

- Web server
- Web seminar
- CD or DVD creation with recorded presentation audio and slides

All these services are supported by the Helpdesk who also can offer web-authoring support if needed (for these services additional costs may apply).

11 VERSION HISTORY

Release date	Version	Modifications
1 December 2010	V1.0	First issue
1 January 2012	V2.0	Updated according new legal documents
3 May 2013	V3.5	Modifications and additions WRT PCR and invoicing

ANNEX 1: PROJECT REPORTING

For reporting on the work progress (work summaries) the following principles must be observed:

- 1) A WS report has to be submitted for each work package where a partner has assigned effort.
- 2) Only one submission is possible for each WP and partner. In case more people/ divisions of a company are involved in the same WP a responsible person for reporting of this WP has to be nominated who reports for this partner.
- 3) The responsible WP leader will check all work summaries of his WP and will approve the reports.
- 4) By e-mail the Project Co-ordinator is informed about the approved WS reports. He/ she checks the reports with respect of the overall progress and deviation from plan and informs the Celtic-Plus Programme Coordinator.

Access and log-in

The EPR is accessible from every secure project web page using your project log-in account.

The default link to the EPR is: <https://ws.eurescom.de/>. This link is a secure connection.

The EPR home page requests to enter the user name and the password. This log-in data has been communicated to all concerned project partners responsible for the reporting. If the log-in data is not available or if the password has been forgotten the Celtic Office should be contacted.

Main Menu

According to your log-in account the EPR start window shows the related Celtic-Plus Project and the company name according to the entered user name.

In the main menu the following two basis functions can be selected:

- **Submit a Work Summary Report** to submit your latest report
- **List Work Summary Reports** to check already submitted reports from project partners
- **Approve Work Summary Reports** (Only for project coordinator and WP leaders)

Submit Work Summary Report

The first screen of this menu asks you to select the

- Quarter you want to report (or, depending on the configuration, the reporting months)
- Select the work package (WP) you want to report

Please note that you can only report on work packages that have been assigned to your company!

The Work Summary Form is divided in three parts.

Part I: In this part the performed activities and produced results shall be listed as short text statements for each WP the reporting organisation is involved.

Part II: For each involved WP the worked effort in person months (PM) shall be indicated as total figures of all people working in that WP. Additionally a specification of the people and individual efforts shall be given.

Part III In this part an assessment of the current project situation is requested. In case of problems a yellow flag, for serious problems a red flag should be marked. In addition a short statement on the achievements and, if the case, deviations from plan shall be given, including a statements how problems will be solved.

Please note that for CELTC **12 person months correspond to 1 person year**. In case company-internal reporting uses a different number (e.g. 1 PY = 10 PM) the reporting figures should be normalised by a correction factor to avoid data inconsistencies with other reporting partners and the project plan.

Project: CELTIC-EnComPAS
 Partner: P01 C005 logout
 Username: ce-encompas-01

EUROSCOM PROJECT REPORTER

Main Menu | Submit WS Report

CELTIC-EnComPAS	Quarterly Work Summary Report	Reporting period (Project Months): 06 - 08 (Quarter): Q4 2004
WP0	Contractor P01 Alcatel Bell	

Session timeout after 60 minutes.
(You must save or submit the form within 60 minutes after opening)

Name of compiler Submitted on *(automatically inserted)*

PART I - Activities and results

WP	Summary of work done <i>(in Workpackage)</i>	Results / documents produced <i>(E.g. type, title, file name)</i>
WP0	<input style="width: 90%; height: 20px;" type="text"/>	<input style="width: 90%; height: 20px;" type="text"/>

PART II - Effort *(in PM)*

WP	TOTAL PM in WP <i>(Max. 2 decimals, E.g. 0.84)</i>	Name of all experts who have worked in Workpackage <i>If several experts have worked in the same WP, please list name and effort for each of them. (E.g. Tom Fischer (1 PM), Maria Lopez (0.8 PM), etc.)</i>
WP0	<input style="width: 50px;" type="text"/>	<input style="width: 90%; height: 20px;" type="text"/>

PART III - Assessment of project situation / Comments

Indicate level of your assessment:

Green flag, project running as planned

Yellow flag, minor issues, none of them critical (please specify)

Red flag, critical issues that need management actions (please specify)

Issues that have an impact on the project.
(e.g. delays, re-allocation of responsibilities, new work items, amber-flag items, red-flag items, etc.)

Comments:

1) Results produced by subcontractors must be reported in Part I.
Choose one option to leave the form:

Use "Save as private draft" only if you are unable to fully prepare the report immediately, and you want to continue later.
A report saved as private draft is only visible to the report editor.
Once you completed your report you must press "Submit". Only after this the WPL will be able to view and approve your report.

After completing the form it can be submitted by pressing the Submit button. In case the form cannot be completed in the session it can be saved as private draft and opened later for continuation and completion.

ANNEX 2: MID-TERM REVIEW FORMS**Mid-term assessment forms**

Project Self-Assessment: to be prepared by the PCO at least 14 days before the mid-term review

<p>PROJECT MID-TERM REVIEW</p> <p>SELF-ASSESSMENT</p>

Acronym:	
Project title:	
Planned start date	Real start date
Planned finish date	Expected finish date
Involved partners (current status)	
Project status and current achievements	
Produced deliverables so far:	
Types of deliverables (software, prototypes, documents, demos, etc)	
Perceived quality of produced results	
Perceived quality of current consortium	
Dissemination activities so far:	
Missed milestones (not produced deliverables, etc)	
Self assessment of overall situation and impression of project quality and efficiency:	
Encountered or expected problems in the project	
Proposals for further improvements	

Mid-term Review form: to be prepared by the reviewer(s)**PROJECT MID-TERM REVIEW**

Acronym:		
Project title:		
This mid term review was carried out by (name, company):	on (date):	
1)		
2)		
3)		

1) Conformity of the work done compared to plans

(How much does the project adhere to the project plans; are there any important deviations from plan? Were the promised results obtained? Are there differences? What consequences can be derived? Were the necessary actions taken?)

2) Quality of the results provided so far

(Can the results be used as envisaged? Are there limitations, deviations, etc.?)

3) Quality and efficiency of the project consortium

(What is the overall impression on the quality (expertise, engagement, type of knowledge) of the project consortium. Are the produced results in acceptable relation to the effort and budget used?)

4) Missing achievements

(What results should have been expected but are missing. What is the impact of those missing achievements?)

5) Unacceptable points

(What is acceptable from the reviewer's point of view and what must be changed urgently??)

6) Overall impression

(Express your impression on the overall judgement. What are good/ bad points. Is the project still worth the money?)

7) Recommendations to the project

(What should be improved to overcome detected problems?)

ANNEX 3: FINAL REVIEW FORM**Final Review Report: to be prepared by the reviewer(s)****PROJECT FINAL-REVIEW REPORT**

Acronym:		
Project title:		
This Final Review was carried out by (usually the Celtic-Plus Programme Coordinator):	on (date):	
1)		

1) Attendance

(The participants from the project partners, The Celtic-Plus Programme Coordinator and if applicable a representative from the public Authorities)

2) Overall impression

(Express the impression the overall judgement of the reviewers. What are good/ bad points? Is the project still worth the money?)

3) The conclusion of the FR was based on the following input documents and results

(Self-assessment, Project descriptions, Deliverables, Milestones, Project reports, FR presentation during the FR and Demonstrations)

4) Conformity of the work done compared to plans

(How much does the project adhere to the project plans; are there any important deviations from plan? Were the promised results obtained? Are there differences? What consequences can be derived? Were the necessary actions taken?)

5) Reaction on Mid Term Review

(How did the project react on the conditions and recommendations that were expressed by the experts during the MTR)

6) Quality of the results

(Appreciation of the results based on the evaluation of the project documents and the results shown during the FR meeting)

7) Quality and efficiency of the project consortium

(What is the overall impression on the quality (expertise, engagement, type of knowledge) of the project consortium. Are the produced results in acceptable relation to the effort and budget used?)

8) Expected impact of the results

(degree of innovation, technological advances, market, competitive advantages, expected or already achieved commercialisations of the results: New products, new business, new jobs...)