DELIVERABLE D1.1

Project Quality and Management Handbook

Project	Free Secure Interoperable Communication
Acronym	FREESIC
Contract Number	FP7-SEC-285205
Start date of the project	1st February 2012
Duration	30 months, until 31st July 2014
Date of preparation	22nd March 2012
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Dissemination level	PU - Public

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1 Deliverable context

1.1 Purpose of deliverable

Deliverable D1.1 fulfils the objective of Task 1.1. to establish administrative and reporting procedures needed to maintain the project and reporting requirements. This includes the provision of a project secretariat, handling of the reporting to the Commission, handling of Financial Statements and Financial Management, and organization of the internal and external liaisons for the project.

Deliverable D1.1 is a guideline for Task 1.2 Project management and in broader sense to all project activities. Established project management structures will be used for project management and reporting and the methodology for monitoring and performing the project activities and deliverables. It also includes mechanisms for risk assessment, contingency planning, quality control, corrective actions and for dealing with the changes that may become necessary during the life cycle of the project.

Deliverable objectives:

1. Express common understanding of project mission
2. Establish project management procedures
3. Put in place risk management and quality control mechanisms
4. Create clear procedures for delivery of quality results
5. Provide consortium with guidance for project reporting
6. Provide consortium with templates for project outputs

1.2 Related Documents

List of related documents from project:

- DOW FREESIC Version date: 2012-01-26 – pages 4-5 (WP1)
- DOW FREESIC Version date: 2012-01-26 – pages 27-31 (Management structure and procedures)
- Consortium Agreement Version signed

Related external documents - Guidance documents CORDIS:

- Wiki on FP7 Periodic Report and NEF (Forms C on-line tool for Information Society and Media DG projects) [HTML]
- Amendments Guide for FP7 Grant Agreements [PDF] Version 2: 2010-02-01
- Guidance notes for beneficiaries and auditors on certificates issued by external auditors [PDF] Version: 2010-07-01
- Guide to Financial Issues [PDF] Version 5: 2012-01-16;
- Guidance notes on project reporting [PDF] Version: 2010-06 and:
  - Template for periodic report [DOC]
  - Template for final report [DOC]
- Guidance notes on project technical review [PDF] Version: January 2011
  - Template for technical review [DOC]

2 Methodology used

2.1 Methodology

Project quality handbook was created based on best practice experience from previous collaborative projects of project partners. The approach was discussed on the kickoff meeting in Bratislava on 20th February 2012 as a part of management/administration session.

The scope of project quality and management handbook has been drafted by project coordinator (Miroslav Konecny) first. Then inputs from broader coordination team were collected (Ardaco). In next step, this draft was shared with project partners to incorporate possible inputs and additional requirements. Finally the deliverable was reviewed by a person outside the preparation team and his remarks were implemented by deliverable responsible person.

This deliverable is Public and its final version is going to be published on the project website. Due to confidentiality and IPR issues, some deliverable parts don't include all facts but it is necessary to read them in junction with related documents such as Consortium Agreement or Description of Work.

Methodology of Project quality handbook is based on PMI standards.

The main deliverable document is supported by Annexes that contain following information:

- List of Deliverables
- Deliverable structure (template)
- List of Milestones
- Quarterly Progress reporting (template)
- Risk register (template)
- Problem log (template)
- Reporting periods (overview)

This document can be updated based on lessons learned in FREESIC.

2.2 Partner contributions

Ardaco as the beneficiary in charge of D1.1 has created the deliverable structure, concept and first complete draft of Chapter 3 – Project Quality Handbook.

In the next step it was reviewed by other beneficiaries. Remarks by partners were incorporated on line in the SVN document management system.

3 Project Quality Handbook

3.1 Project Objectives Common Understanding

3.1.1 Project concept

FREESIC was created as a response to European Research Executive Agency call FP7-SEC-2011-1 in programme FP7 – Topic 5.2-1 Technical solutions for interoperability between first responder communication systems.

As a response, FREESIC project has proposed a solution that will allow highly secure and cost effective interoperability between communication infrastructures over the entire Europe. The project has been inspired by legal, organizational and operational barriers we encountered during our attempts to provide interoperability for end users in the previous research project SECRICOM. FREESIC will utilize the lessons learned; will continue in collaboration with original end-user groups and new ones - experts who will help us address the interoperability issues on non-technical level as well.

Existing interoperability solutions such as gateways are the right approach and will simplify FREESICs adoption and in return FREESIC will open broader possibilities for them. It will be operated free-of-charge and will offer open source gateway, documentation and operational guidelines for others to use. It is project ambition to continue the free-of-charge operation after the project's end as well. The operational costs will be covered by the new business opportunities. Other end users will be motivated to request the integration from their system vendors or integrators.

The FREESIC architecture will take into account on-going standardization research (e.g.: NCOIC Interoperability Framework) to reduce the integration time and costs. The integration process will be simple; the system integrator takes the gateway and modifies it as needed. The gateway remains the property of the integrator. The integrators do not have to worry about disclosing any know-how or information. The communication between gateways will be end-to-end encrypted and the gateway will be under full control of end user to avoid security concerns.

3.1.2 Shared vision

Vision of FREESIC project is described in DOW, chapter 1.1. Concept and objectives. All partners will work together to reach desired objectives in project activities. Project coordinator will regularly update partner and put all progressing tasks in context of shared project vision. Vision of FREESIC project should be important starting point of project meetings and driver of dissemination and exploitation activities.

3.1.3 Success criteria

The scope of the interoperability issues is very broad and FREESIC needs to mark reasonable boundaries. Kick off meeting and WP2 first meeting have identified several areas to focus on:

- **Technical obstacles** – the proposed solution must be easy to integrate and cost-effective to operate from end-user's agency and their system operator's point of view.
- **Security concerns** – the FREESIC solution must provide reasonable security (authenticity/privacy/confidentiality) assurance. The assurance must be acceptable by different organizations and EU member states.
- **Commercial aspects** – the solution must open new business opportunities and provide added value to current system vendors and operators. It should not threaten their current business model otherwise they will "fight back" instead of willingly integrating systems of their end-users.
- **Legal limitations** – this is perhaps the most complicated topic to address. We will start discussions, identify the root-cause of problems and suggest solutions.
- **Processes and cultural issues** – processes, way of handling tasks and relationships is different in different agencies. Though there are some common patterns there could be even some reluctance to cooperate between some agencies for historic reasons.

The technical solution is needed but it will never come to real life use if the other areas of issues around the technical solution would not be resolved. We have called these layers around the technical solution the "onion problem". These layers have varying thickness from agency to agency.

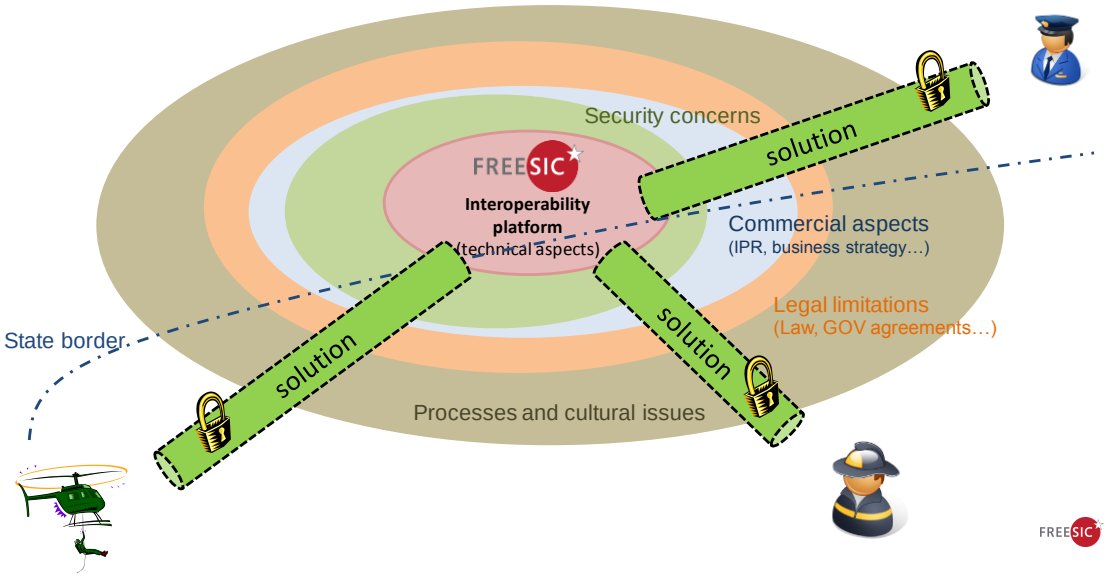


Fig. 1 – The "onion" problem

It is not possible to resolve all problems in a single project, even a small subset of these issues would be a major project in its own right. So, the FREESIC will create a vignette – a proposal of solution for 3 different agencies which will address the issues in every layer (area of problems). Of course it is not in the power of our consortium to change EU legislation so in case of such problems the success criteria is not to change legislation but to propose how the problems could be solved.

The technical solution is more predictable and we would consider the success criteria in project domain as follows:

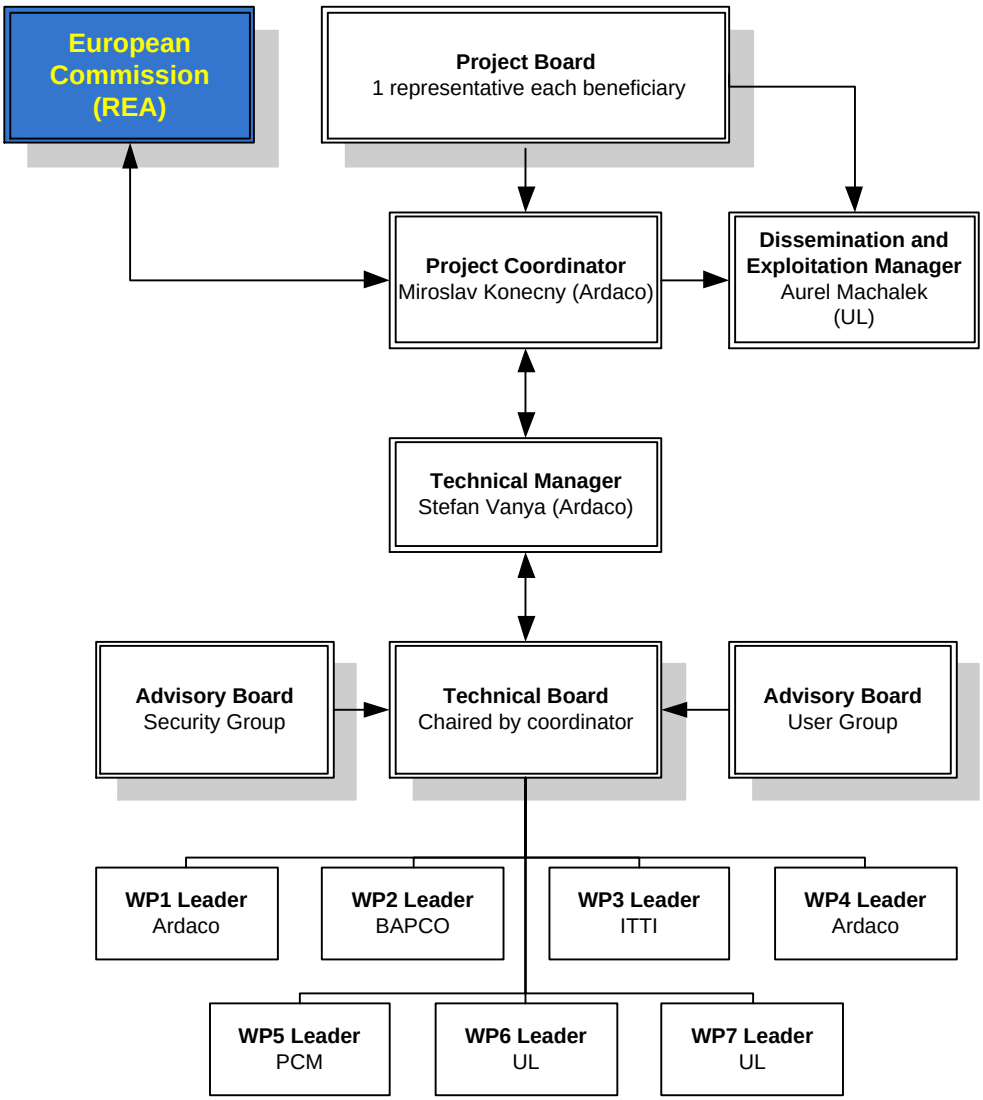
1) The software for communications interconnectivity (servers, gateways) will be implemented
2) The software will be operated on appropriate hardware on multiple places over Europe to provide resilience
3) It will be operated free of charge for emergency agencies

4) At least 3 different communication systems will be integrated into the FREESIC platform
5) Raise the public awareness about these issues and the FREESIC solutions.

3.2 Project Management

3.2.1 Description of the project management structure

To successfully manage a cooperative project of this scale, a clear and well defined management and decision making structure is required. We have outlined this structure below and discussed how is has been designed to focus the project on our needs.



There was assembled a **Project Board** that will be responsible for the delivery and success of the project. This board consists of 1 senior representative from each Partner in the Consortium, that are authorized to make decisions on their organizations behalf to avoid any unnecessary delays. Each board member will be given a single equal vote with the majority decision being carried. In the event of a conflict we have decided that a vote consisting of more than two thirds of votes, will overall the decision and therefore steer the direction of the project towards project needs. In the event of a

significant conflict resulting from a Board decision, we will request for the issue to be escalated to the European Commission for advice and guidance.

A project Coordinator, Technical Board and Dissemination and Exploitation Manager have been appointed for the FREESIC project. The **project Coordinator** is responsible for the general administration and organization of the project, which includes including chairing official meetings and liaising with the European Commission. **Technical manager** assists the Co-ordinator in the execution of his duties, such as but not limited to monitoring of tasks as allocated, Project Deliverables tracking, and monitoring against the plan for Project Deliverables. The **Technical Board** chaired by the technical manager is responsible for overseeing the progress of the work package leaders and the on-time delivery of the technical deliverables. Each **work package leader** will be a representative of the organization undertaking the majority of work in a particular work package. The **Dissemination and Exploitation Manager** is responsible for ensuring the publicity and commercial success of the project, under the guidance of Project Board.

3.2.2 Roles and operation of project management bodies

Project Board: The project Board has been empowered to ensure the overall success of the project and resolve any contractual issues within the consortium and for the European Commission. The Board is responsible for overseeing the development of the project and reviewing its progress in accordance with each work package, milestone, objective and deadline. The board will follow a gated management system which will enable them to control the direction and speed of the project, by signing off the completion of each work package and the performance of each partner involved.

The Project Board shall be responsible for the overall direction of the Project, and specifically, subject to the relevant provisions of the GA, for:

- deciding upon any proposal made by the Technical Board for the allocation of the Project's budget in accordance with the GA, and reviewing and proposing budget reallocations to the Parties;
- making proposals to the Parties for the review and/or amendment of the terms of the GA;
- deciding within a period of 30 days after having received any proposal made by the Technical Board that the Project Board should propose to the Parties (other than the Defaulting Party) to serve notice on a Defaulting Party in accordance with CA and deciding to assign the Defaulting Party's tasks to specific entity or entities (preferably chosen from the remaining Parties);
- deciding upon any proposal made by the Technical Board for the launching of competitive calls if required by the terms of the GA, and the entering into the GA and CA of new Parties for participation in the Project;
- deciding upon any change and exchange of work packages between the Parties and proposing corresponding amendments to the GA;
- deciding upon sensitivity procedures and tools for the marking and handling of information exchanged between Parties in the performance of the Project;
- deciding upon proposals from the Technical Board to propose to the Parties that they enter into a Project Co-operation Agreement with the parties of another project;
- deciding upon proposals from the Technical Board for the plan for using and disseminating Foreground.

The Project Board shall normally meet at the request of its chairperson or at any other time when necessary at the request of one of the Parties. Meetings shall be convened by the chairperson with at least 10 days' prior notice. This notice shall be accompanied by an agenda, proposed by the chairperson. The agenda shall be deemed to be accepted unless one or more of the Parties notifies the chairperson and the other Parties in writing of additional points to the agenda, at the latest 2 working days before the meeting date.

Minutes of the Project Board meetings shall be transmitted to the Parties by the Co-ordinator within 10 days after the meeting date. The minutes shall be considered as accepted by the other Parties if, within 10 days from receipt, no Party has objected in writing to the chairperson.

Technical Board: The Technical Board will support the project Coordinator by monitoring the progress of each of the work packages and coordinating activities between each of the Work Package leaders on monthly basis (teleconference or personal meeting). The Technical Board is responsible for managing the project risk log and contingency plans and will therefore also be acting as the project Risk Manager also. The technical board will be chaired by Project Coordinator.

The Technical Board shall be responsible for:

- making proposals to the Project Board for: allocating the Project's budget in accordance with the GA; reviewing and proposing budget reallocations to the Parties;
- within 10 days after having been informed by the Co-ordinator thereof, making proposals to the Project Board that the Project Board should, within a period of 30 days, propose to the Parties (other than the Defaulting Party) to serve notice on a Defaulting Party in accordance with CA and that the Project Board decide to assign the Defaulting Party's tasks to specific entity(ies) (preferably chosen from the remaining Parties);
- without prejudice to Section 4, proposing to the Project Board the plan for using and disseminating the Foreground in accordance with GA;
- implementing Article II.12.1 of the GA and deciding upon press releases and (without prejudice to Section 4.4) joint publications by the Parties with regard to the Project;
- deciding upon the technical roadmaps with regard to the Project;
- deciding upon any proposed designation of a third party in charge of part of the management of the Project;
- deciding upon measures in the framework of controls and audit procedures to ensure the effective day-to-day co-ordination and monitoring of the progress of the technical work affecting the Project as a whole;
- management and progressing of the Project;
- proposing to the Project Board procedures and tools for the marking and handling of information exchanged between Parties in the performance of the Project; and
- evaluating opportunities for co-operation with other projects and proposing to the Project Board that it proposes to the Parties that they enter into a Project Co-operation Agreement.
- generating, updating and distributing to the Parties, a schedule of proposed meetings of committees of standards organizations relevant for the potential submission of Foreground as standards proposals. At the request of any Party, the Technical Board shall (i) generate and distribute to the Parties, a schedule of proposed meetings, or (ii) update and re-distribute, a schedule already generated by the Technical Board, by entering on the schedule, any meeting to which the Party wishes to submit any

Foreground as part of a standards proposal, provided the Party informs the Technical Board, in writing, of the date of the meeting at least three months in advance.

- monitoring the progress of each of the work packages and coordinating activities between each of the Work Package leaders on regular basis (teleconference or personal meeting).
- managing the project risk log and contingency plans and will therefore also be acting as the project Risk Manager also.

The Technical Board shall meet at least bi-monthly at the request of its chairperson or at any other time when necessary at the request of one of the Technical Board members. Meetings shall be convened by the chairperson with at least 15 days' prior notice, accompanied by an agenda proposed by the chairperson. The agenda shall be deemed accepted unless one of the Technical Board members notifies the chairperson and the other Technical Board members in writing of additional points to the agenda, at the latest 2 working days before the meeting date.

Minutes of the meetings of the Technical Board shall be transmitted to the Technical Board members within 10 days after the meeting date. The minutes shall be considered as accepted if, within 10 days from receipt, no Technical Board member has objected in writing to the chairperson.

The chairperson of the Technical Board shall transmit the agenda and the minutes of the Technical Board meetings to the Parties. The agenda shall be transmitted at the latest 2 working days before the date of the meeting.

Project Coordinator: is responsible for the general administration and running of the project. The coordinator is responsible for:

- Organizing and chairing Project Board meetings;
- Management of contractual, ethical, legal and financial information;
- Liaising with the European Commission and facilitating audits;
- Collating all deliverables, milestones and technical reports;
- Quality management.
- General administration.

Technical Manager: is the main technical person of the project. He coordinates technical delivery of the project. The technical expert shall report directly to the coordinator. His duties are as follows:

- Monitoring of tasks as allocated;
- Project Deliverables tracking;
- Monitoring of activities against the plan for Project Deliverables;
- Risk management;
- Organizing and chairing Technical Board meetings.

Dissemination and Exploitation Manager: The role of the Dissemination and Exploitation Manager is to ensure public outputs during the project lifetime and the future and commercial success of the project. Dissemination material such as technical papers and presentations must be approved and submitted to the relevant journals and technical institutions. In addition he is responsible for organizing and attending conferences and trade shows to disseminate the scientific and technical results of the project.

Work Package Leader: Each Work Package has been allocated a Work Package Leader, who is responsible for delivering the objectives outlined in the Work Plan. Each Work Package Leader will be responsible for:

- Proper coordination, monitoring and control of progress of all activities under WP responsibility in order to ensure timely achievement of all objectives and milestones agreed and produce relating deliverables to be sent to EC;
- Initiation of corrective action for program deviations in its area; ensuring program times, costs and resources are maintained and flag any discrepancy immediately to project coordinator;
- Preparation of Activity and Progress Reports to Technical board about activities progress and possible critical issues; assistance in the preparation and consolidation of Project Annual Management Reports; to be technical reference as far as the technical description in their WP activities is concerned;
- Arrangement of regular technical meetings as required for their WP and organization of technical presentations in WP activities.

Advisory Boards: The project consortium will seek for advice of two advisory boards established alongside the FREESIC project. Their main role is to reinforce the knowledge with complementary experience and independent feedbacks from the outside perspective.

The **User group** will consist of emergency communication professionals in different EU member states who will evaluate proposed and performed work on various stages of the project – system analysis and design, system implementation and performance monitoring.

The **Security group** will consist of security related professionals with state service, private and academic background. Their role is to consult and propose enhancement of security aspects within the FREESIC activities. The Security group will be formed on the system analysis and design stage and activated in all fundamental decisions.

3.2.2 Establishment of project management structures

Project partners are represented in the Project Board as follows:

Organisation name	Project Board Representative
Ardaco, a.s.	Miroslav Konecny
National Security Authority of the Slovak Republic	Michal Ivančík, deputy Marek Repka
Université du Luxembourg	Aurel Machalek
British Association of Public Safety Communication Officers	Shaun Oneill
ITTI Ltd.	Wojciech Dymowski

NEXTEL S.A.	Mikel Uriarte
Centre de Communications du Gouvernement	Jean-Marie Laures
World Consult	Vojtech Lampert
Pramacom	Filip Sobol

Project partners are represented in the Technical Board as follows:

Organisation name	Technical Board Representative
Ardaco, a.s.	Miroslav Konecny (WP1) Stefan Vanya (WP4)
Université du Luxembourg	Aurel Machalek (WP6 and WP7)
British APCO	Shaun Oneill (WP2)
ITTI Ltd.	Andrzej Adamczyk (WP3)
Pramacom	Kamil Knotek (WP5)

3.2.3 Decision Making Mechanisms

The Project Board has the most senior decision making responsibility, where each member of the Board has 1 equal vote. The Project Board shall be chaired by the Co-ordinator's representative.

- Any decision requiring a vote at a Project Board meeting must be identified as such on the agenda, unless there is unanimous agreement to vote on a decision at that meeting and all Parties are present or represented.
- Any decision required or permitted to be taken by the Project Board may be taken in accordance with the above:
- in a physical meeting or a meeting via teleconference and/or via email; or

- without a meeting but with prior notice of at least 7 days, and without a vote, provided that, in such case, (i) a consent in writing, setting forth the decision taken, is signed by the representatives of the Parties with not less than the minimum number of votes necessary to take such decision at a meeting at which all Parties entitled to vote on such decision were represented and were voting, and (ii) the consent has been delivered for signature to all Parties' representatives.

The Project Board shall not deliberate and decide validly unless at least two-thirds of its members are present or represented ("quorate").

- In voting, each Party shall have a number of votes equal to the percentage that its Project Share bears to the total cost of the Project.

- In the cases specified in CA, decisions shall be taken unanimously by all of the Parties.

- In the cases specified in CA, the decision shall be taken by 75% of the votes of the non-Defaulting Parties present or represented by proxy at a quorate meeting.

- In the cases specified in CA, the decision shall be taken by 75% of the votes of the Parties present or represented by proxy at a quorate meeting.

- In the cases specified in CA, decisions shall be taken by a majority of 75% of the votes of Parties present or represented by proxy at a quorate meeting, provided that a Party whose scope of work, time for performance, costs, Project Share or liabilities would be changed, or whose information would be published, disclosed or disseminated, or whose name would be included in a press release, may veto such decisions on reasonable grounds.

Technical Board:

Any decision required or permitted to be taken by the Technical Board may be taken in accordance with the below:

- in a physical meeting or a meeting via teleconference and/or via email; or

- without a meeting with prior notice of at least 7 days and without a vote, provided that, in such case, (i) a consent in writing, setting forth the decision so taken, is signed by the Technical Board members having not less than the minimum number of votes that would be necessary to take such decision at a meeting at which all Technical Board members entitled to vote on such decision attended and were voting, and (ii) the consent has been delivered for signature to all Technical Board members.

- The Technical Board shall not deliberate and decide validly unless a majority of three fifths (3/5) of its members are present or represented ("quorate"). Where decisions are to be taken unanimously, all Technical Board members must be present or represented at the meeting. Each Technical Board member shall have one vote.

- In the cases specified in CA the decision shall be taken unanimously by all of the Technical Board members who are representatives of non-Defaulting Parties.

- In the cases specified in CA, decisions shall be taken by a majority of 75% of the votes of the Technical Board members present or represented by proxy at a quorate meeting. A Technical Board member who represents a Party whose scope of work, time for performance, costs, Project Share or liabilities would be changed, or whose information would be published, disclosed or disseminated, or whose name would be included in a press release, may veto such decisions on reasonable grounds.

- In the cases specified in CA, decisions shall be taken by the majority of the votes of the Technical Board members present or represented by proxy at a quorate meeting, provided always that a Technical Board member who represents a Party whose scope of work, time for performance, costs or liabilities would be changed, or whose information would be published, disclosed or disseminated, or whose name would be included in a press release, may veto such decisions on reasonable grounds.

3.2.4 Conflict escalation and resolution

Each level of management within the project will be able to take decisions accordingly with cooperative and agreement-seeking approach. If this fails the difference in opinion will be escalated to a more senior level. The decision making structure is show in table below:

Management level	***Responsibility magnitude***	***Senior manager***
Work package Leader	Work package tasks and all decisions impacting the deliverables of a work package.	Technical Manager
Technical Board	Project-level scientific and technical issues, for which contingency actions exist	Project Coordinator
Dissemination and Exploitation Manager	Dissemination and exploitation issues where contingency actions exist	Project Board
Project Coordinator	Project financial and management issues where contingency actions exist	Project Board

In the event of a contingency action not existing for a conflict or action which will render the project unable to complete a deliverable on time and to budget, the conflict will be presented and discussed within the next project Board Meeting.

3.3 Risk Management

The Project Technical Manager will be responsible for the Risk and Contingency Management of the overall Work Plan. Each Work Package Leader is required to maintain risk logs on quarterly basis that contain expected risks and an issue log of events that have actually happened. Template of Risk Log is in Annex of this project quality handbook.

The Project Technical Manager will use this information to identify any issues and potential risk which may occur across the different Work Packages. The probability of a risk occurring will be estimated along with the individual and communicative impacts of the risk, on the remainder of the project deliverables. Every quarter an evaluation of the project performance against its deliverables will be undertaken, enabling an assessment to be made of the projects progress.

3.3.1 Risk Management plan

The project quality handbook puts in place a formal risk management plan for this project. WP leaders will be responsible for ensuring that threats to the successful delivery of the projects objectives are assessed and managed through successful mitigation strategies as part of their normal business processes. These risks will be recorded in a risk register, submitted to the Project Coordinator and Technical Manager as part of the quarterly progress reporting and will be reviewed and updated during the project.

The risk management plan will cover the following aspects:

- Definition of the scope and applicability of risk management
- Outline of processes and techniques to be used for risk identification and analysis
- Requirements for quantitative analysis
- Frequency of risk reporting and updates
- Outline of roles and responsibilities for the risk process
- Definitions of probability and impact for the assessment of individual identified risks
- Methodologies for risk identification
- Requirements for the recording and reporting of associated mitigation action, including secondary risk
- Contingency planning and residual risk assessment

3.3.2 Risk management process

The process will include:

- **Planning** – WP Leaders review the project requirements and plans;
- **Identification** - Techniques used to identify risk may include experience, workshops, structured interviews, work breakdown structures and network analysis. Once identified, risks are validated and entered into the risk register. A qualitative analyses of the risks are then conducted, and they are ranked according to their probability impact scores;

- **Mitigation** - To identify mitigation actions and re-assess the risk, leading to a reduction in the severity of risk. Depending upon the risk, the mitigation strategies may include identifying alternative or additional sources of resource, suppliers, technology and skills;
- **Risk review** – the risks will be reviewed as part of quarterly progress reporting by the Technical Board.

3.4 Quality management

3.4.1 Quality management

This Handbook recognises that a range of Quality Processes and Standards will be in place with the Consortium Members. The Consortium Members will, therefore, work to their existing Quality Processes and Standards (where in place). Examples include:

- Quality systems such as ISO 9001:2000
- Testing and calibration such as ISO 17025
- Security management such as ISO 27001
- Project management such as PMI
- Health, Safety and Environment Legislation

These processes and standards will be used throughout the project lifecycle. Project specific processes related to deliverables and milestones are described later in this Handbook.

Each Consortium Member will be responsible for the quality of their individual contributions to this project. As part of their project team, each Consortium Member will identify and maintain a representative for quality for their contributions to this project.

The Project Coordinator and Project Board will work with the quality representatives to address any quality issues with individual contributions to the project. The Project Coordinator will be responsible for the review of the project and progress towards the project milestones as described later in this Handbook.

3.4.2 Problem Reporting

For the purpose of FREESIC project a problem is defined as an occurrence that if left unchecked would have an adverse effect on the quality or timely delivery of a deliverable or end product. The Project Coordinator and Project Technical Board must be kept aware of all significant problems.

Problem reporting will be through the quarterly progress reports, or where more urgent action is necessary, by direct correspondence between the respective Partner through the WP Leader and the Project Coordinator.

Problems will be reported, investigated, solved and actioned at the quarterly reporting cycle or, if necessary, as they occur. Following investigation it may be necessary to register the problem as a risk and place it on the Risk Register.

A problem log will be maintained according to a template at Annex of this PQH. The problem log is to be completed and updated by the WP leader and submitted with the quarterly progress report to the Project Coordinator.

3.5 Deliverables Preparation Procedure

3.5.1 Deliverable definition

Project deliverable is a tangible result of specific activity or more activities in FREESIC project. It is often related to reporting the result of project task in a consistent document to the project sponsor (REA).

Particular deliverables fulfil one or more project objectives. Deliverables are not an end in themselves. They are the physical outputs that enable the Objectives to be achieved. FREESIC project deliverables are listed in D1.1 Annex A.

Most of FREESIC deliverables are in the form of a written report, which can encompass extensive amounts of information and data. Beneficiaries should do their best to keep documents concise with clear value added.

3.5.2 Deliverable structure

FREESIC project deliverables will have common structure described in Annex B of D1.1. This approach may ease the understanding of deliverable purpose, methodology and added value to both internal team and EC review team.

Deliverable structure description:

Chapter	*Objective*	*Extent*
1 Deliverable context Subchapters: 1.1 Purpose of deliverable 1.2 Related Documents	Keep the team aware of the purpose of deliverable, its objectives and context. Identify related documents inside project and outside..	1 page maximum
2 Methodology used Subchapters: 2.1 Methodology 2.2 Partner contributions	Explain methodology used to create the deliverable and individual roles of partners. Make the understanding of resource use easy.	1-2 pages maximum
3 Main contents of deliverable Subchapters: 3.1 subchapter 1 3.2 subchapter 2	Body of deliverable. Introduces results of task(s) and new findings. Includes graphs, diagrams and maps of knowledge.	Concise, not limited

4 Summary	Explains relevance of deliverable to overall project objectives and specific added value.	1 page maximum

3.5.3 Deliverable preparation procedure

Purpose of deliverable preparation procedure is to put in place a procedure supporting quality in project delivery. Its implementation should avoid shortage of time, resources and internal review.

Typical schedule of deliverable preparation should be as follows:

1. Planning (deadline 2 months from the related task start)
    - Beneficiary in charge identifies a person responsible for deliverable (Deliverable Author)
    - Deliverable Author:
        - Creates a document based on deliverable template on SVN repository
        - Defines deliverable context and methodology (Chapter 1 and Chapter 2)
2. Main contents creation (during entire task lifetime)
    - Deliverable Author works with co-authors (all partners represented in respective tasks) on Chapter 3 using task results
    - Regular updates of the document on SVN repository before the monthly Technical Board meeting/tele-conference
3. First complete draft (deadline 6 weeks before submission date)
    - Deliverable Author is responsible for achieving this deadline
        - Chapter 3 – Main contents of deliverable is drafted completely
        - Chapter 4 – Summary is drafted
4. Review of first complete draft by work team of task (deadline 4 weeks before submission date)
    - All partners enhance specific parts in chapter 3 and 4
    - The review at this stage is primarily for content, technical accuracy and feasibility
5. Pre-Final review by Author (deadline 2 weeks before submission date)
    - Deliverable Author approves/rejects partner contributions in the document, makes final changes
6. Final review by Project Coordinator and Technical Project Manager and Submission to NEF (submission date = last day of due month in DOW)
    - Includes spellcheck, formatting and final contextual changes

3.5.4 Sensitivity of deliverables

FREESIC doesn't create any confidential documents according to national legislations of EU member states. However the intellectual property rights of project beneficiaries and future exploitation of project results require protection of data and project outputs.

The sensitivity of deliverables under preparation will be considered by Project Board during their regular meetings:

- Each project beneficiary will be represented in Project Board
- The level of sensitivity will be proposed by beneficiary in charge before deliverable submission
- The rest of project beneficiaries can object this level of sensitivity in the meeting and to require a specific treatment

3.6 Project Reporting

3.6.1 Periodic progress reporting

Creation of Periodic progress reports is foreseen by the Grant agreement and Description of work. FREESIC project is divided in 2 reporting periods:

- Period 1 – February 2012 to April 2013 (15 months)
- Period 2 – April 2013 to 09 to July 2014 (15 months)

The Consortium is required to submit a periodic project report within 60 days after the end of the respective period as detailed by GA Annex II.4.

The report is to include:

- An overview of the progress of work towards the project objectives, including achievements and attainment of any milestones and deliverables identified in the DOW
- An explanation of the use of the resources
- Financial statement from each Consortium Member together with a summary financial report consolidating the claimed grant of all the Consortium Members in an aggregate form based on the information provided at Annex VI (Form C) to the Grant Agreement.

The periodic report will be collated by the project coordinator from the inputs listed above as provided by each Consortium Member. To achieve the required timescales, the project coordinator will require the following:

- An overview of progress from each work-package leader and an explanation of resources within 30 days after the end of the respective period
- Financial statements within 45 days after the end of the respective period

3.6.2 Interim progress reporting

To facilitate the progress monitoring, two interim progress report deliverables were inserted into DOW:

- D1.2 – Interim progress report 1 – due in Month 8 (months 1-7)
- D1.3 – Interim progress report 2 – due in Month 23 (months 16-22)

Structure of these periodic reports will be the same as other project deliverables. Data will be provided by all individual beneficiaries in a fashion similar to Periodic progress reports based on quarterly progress reporting:

- An overview of the progress of work towards the project objectives, including achievements and attainment of any milestones and deliverables identified in the DOW
- An explanation of the use of the resources (Man-Months)

3.6.2 Quarterly progress reporting

Every project beneficiary submits the Quarterly progress report – based on template in Annex D. This duty is for each active Work-Package. Partners submit to project coordinator on quarterly basis:

- Q1 (Month 1 – Month 4)
- Q2 (Month 5 – Month 7)
- Q3 (Month 8 – Month 11)
- Q4 (Month 12 – Month15)
- Q5 (Month16 – Month19)
- Q6 (Month 20 – Month 22)
- Q7 (Month 23 – Month 26)
- Q8 (Month 27 – Month 30)

Overview of progress reporting is in Annex G. Quarterly progress reporting is an internal procedure serving for project management mechanisms.

3.7 Project Communication

3.7.1 Meetings

All-level meetings can be organized by using electronic communication means (video, web or teleconferencing) within agreed times and representation. This is the way of reducing costs, effort and making the work as effective as possible.

Personal meetings of the Project board and the Technical board should take place every 6 months and/or in case it is the most suitable way to consult and proceed with project work.

All formal project meetings will be tracked and minutes uploaded onto the project management tool.

3.7.2 Communication

The basic internal information flow practice includes the following specialized mailing lists used for these groups:

- all@freesic.eu – all relevant contacts mailing list
- projectboard@freesic.eu – Project Board mailing list
- technicalboard@freesic.eu – Technical Board mailing list

Every email must be marked in its subject as follows:

FREESIC – WP (number) - subject

3.7.3 Project publications

In case of dissemination activities and project publications, the beneficiary with the intention sends a notice with a link to document (preferably link to SVN document) to all partners involved at least one week before any publication. All partners have a chance to review the publication outcome. If anybody objects this publication, it is terminated until next Project Board meeting where the issue is resolved.

3.7.4 Document management

A web-based project document management tool such as SVN with differentiated access rights has been established:

https://project.freesic.eu:8443/svn/freesic/

These SVN operations will be used during the project work:

- SVN update
- SVN Commit
- SVN + (adding a file to the repository)
- Get lock / release lock

All Consortium Members are responsible for ensuring that backup copies of any data files essential to their work are adequately maintained. Masters and backup copies are to be stored in separate locations.

Preferred format of documents circulated in consortium and shared on SVN workspace is MS Office 2003-2007.

4 Deliverable Summary

Establishment of project management procedures was the very first action in WP1 - Project management. A completed Project Quality Handbook gives a practical guidance to coordinator, coordinating bodies (Project Board, Technical Board) and project partners for project management and administration.

- Common understanding of project success criteria should drive all work in project and allow keeping common views on various topics. List of Deliverables and Milestones is attached in Annex A and Annex C.
- Project management is defined in more detail than in DOW and Consortium agreement. It also lists members of Project Board and Technical Board. Decision making mechanisms are in place and project partners are aware of possible conflict resolution techniques.
- Risk management responsibilities and mitigation strategy was defined in subchapter 3.3.
- Quality management in project is based on proven standards used by project partners for work similar to FREESIC (management, research and technical development, analytical work). Quality will be under systematic control of WP leaders and coordinator.
- Deliverables preparation procedure is guidance for preparation of project outputs. Typical structure and process was defined.
- Project reporting was structured according to requirements of Framework Programme 7 and quality management on three levels – Periodic reports / Interim reports / Quarterly reports.
- Project communication options were defined including the approach to make most of communication electronic to save financial and natural resources.

Deliverable 1.1 Project Quality Handbook is a cornerstone document for professional management of project of this size and scope in Framework Programme Seven.

5 Annexes

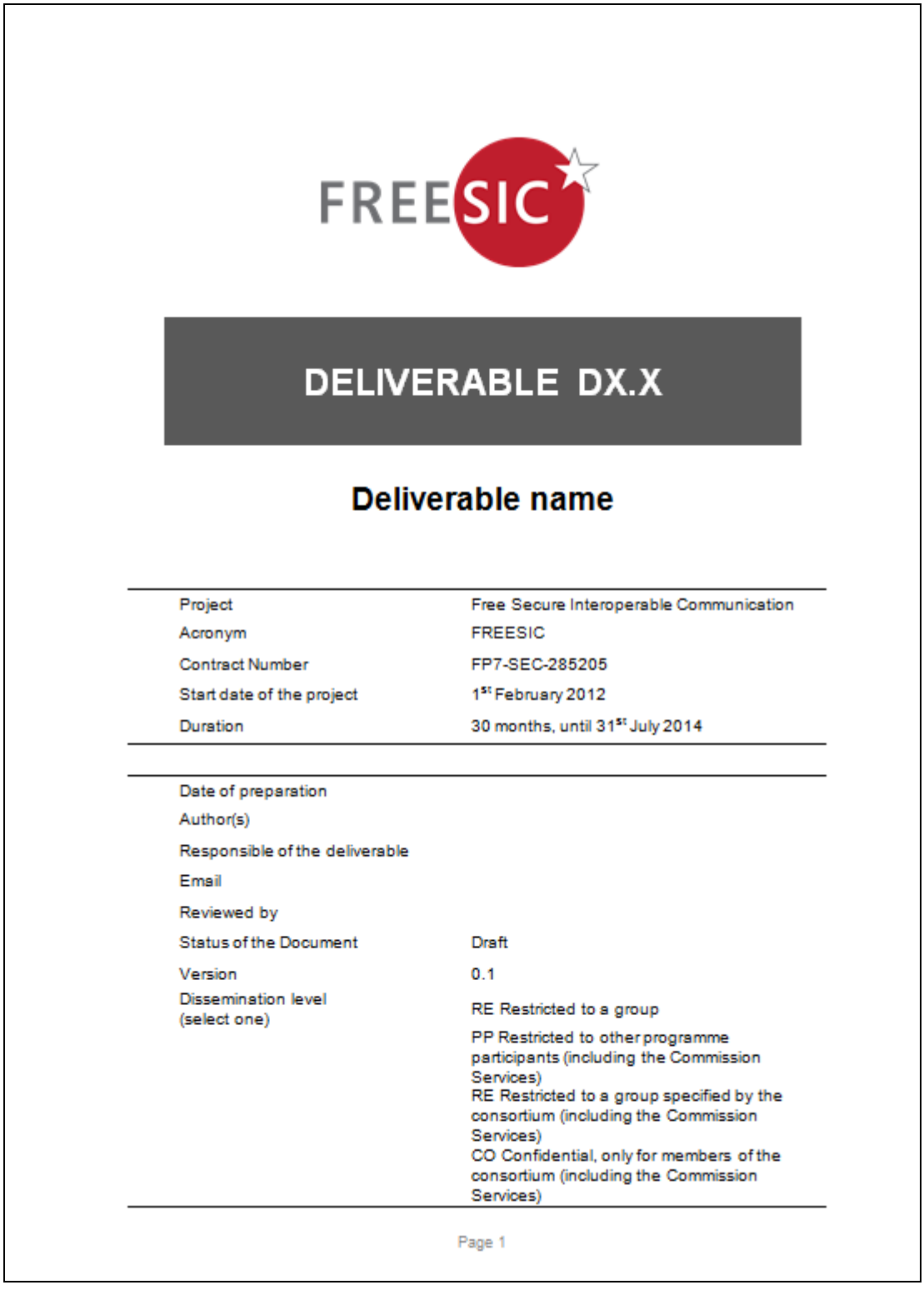
ANNEX A: List of Deliverables

Delive-rable Number [61]	Deliverable Title	WP number [53]	Lead benefi-ciary number	Estimated indicative person-months	Nature [62]	Dissemi-nation level [63]	Delivery date [64]
D1.1	Project quality handbook	1	1	4.00	R	PU	2
D1.2	Interim Progress Report 1	1	1	5.00	R	PP	8
D1.3	Interim Progress Report 2	1	1	5.00	R	PP	23
D2.1	The formal requirements specification document	2	1	54.00	R	PP	7
D3.1	The operational procedures, guidelines and recommendations - Interim	3	6	29.00	R	PP	8
D3.2	The system architecture document - Interim	3	1	32.00	R	PP	8
D3.3	The operational procedures, guidelines and recommendations - Final	3	6	7.00	R	PU	29
D3.4	The system architecture document - Final	3	1	8.00	R	PU	29
D4.1	The system release notes	4	1	15.00	R	PP	12
D4.2	The open source gateway prototype	4	1	29.00	R	PP	14
D4.3	The system operation and maintenance report	4	1	27.00	R	PP	30
D5.1	The integration report	5	9	33.00	R	PP	21
D5.2	The operations report	5	9	21.00	R	PP	29
D5.3	The system security evaluation report	5	2	15.00	R	PP	29

Delive-rable Number [61]	Deliverable Title	WP number [53]	Lead benefi-ciary number	Estimated indicative person-months	Nature [62]	Dissemi-nation level [63]	Delivery date [64]
D6.1	The first test report	6	3	10.00	R	PP	15
D6.2	The final test report	6	3	13.00	R	PP	29
D7.1	Web page FREESIC	7	3	8.00	O	PU	2
D7.2	Dissemination plan	7	3	5.00	R	PP	4
D7.3	Exploitation plan	7	1	6.00	R	PP	15
D7.4	Dissemination plan update	7	3	4.00	R	PU	15
D7.5	Exploitation plan final update	7	1	6.00	R	PU	30
			Total	336.00			

ANNEX B: Deliverable Structure (Template)

Front page:



DELIVERABLE DX.X

Deliverable name

Project	Free Secure Interoperable Communication
Acronym	FREESIC
Contract Number	FP7-SEC-285205
Start date of the project	1st February 2012
Duration	30 months, until 31st July 2014

Date of preparation	
Author(s)	
Responsible of the deliverable	
Email	
Reviewed by	
Status of the Document	Draft
Version	0.1
Dissemination level (select one)	RE Restricted to a group PP Restricted to other programme participants (including the Commission Services) RE Restricted to a group specified by the consortium (including the Commission Services) CO Confidential, only for members of the consortium (including the Commission Services)

Page 1

Deliverable structure:

1 Deliverable context (1 page)

1.1 Purpose of deliverable

1.2 Related Documents

2 Methodology used (1-2 pages)

2.1 Methodology

2.2 Partner contributions

3 Main contents of deliverable (concise)

3.1 Chapter 1

3.2 Chapter 2, etc

4 Summary (1 page)

ANNEX C: List of Milestones

Milestone number [59]	Milestone name	WP number [53]	Lead beneficiary number	Delivery date from Annex I [60]	Comments
MS1	Project ready	WP1	1	2	Deliverable D1.1. is published
MS2	Formal requirements	WP2	4	7	Formal requirements specification document is released
MS3	Ready for system implementation	WP3	6	8	First concepts of solution, procedures and system architecture are available
MS4	Platform ready	WP4	1	12	The platform is up and running and accessible from the internet
MS5	First users integrated	WP5	9	21	The interoperability between at least 2 systems is validated by end users
MS6	Final report	WP1	1	30	Final report is made available to EC and Partners

ANNEX D: Quarterly Progress reporting

FREESIC Progress Report **(1 Page)**	**WP No.** **Task No.**	**Period covered:**
Progress:		
Highlights:		
Lowlights:		
Dissemination:		
Estimated expenditure in ManMonths (Quarterly reporting only):		
TX.X:	TX.X:	TX.X:
Risks:		
Completed by:		**Date:**

Table: Progress reporting table (quarterly reporting per WorkPackage)

ANNEX E: Risk Register (template)

WP No and Title:								
Risk No.	**Risk Title**	**Probability of occurrence**	**Impact (High, Med, Low)**			**Mitigation plan**	**Fallback Plan**	**Risk Owner and WP**
			Time	Cost	Performance			

ANNEX F: Problem Log (template)

WP No. and Title:				
Problem No.	**Problem title**	**Action required (including by who and by when)**	**Solution / Outcome**	**Transfer to risk register (Y / N) date**

ANNEX G: Reporting periods – overview

<table>
<tr><th>Month</th><th>Quarterly reporting</th><th>Interim Reporting</th><th>Periodic Progress Reporting</th></tr>
<tr><td>M1</td><td rowspan="4">Q1</td><td rowspan="7">D1.2</td><td rowspan="15">PPR1</td></tr>
<tr><td>M2</td></tr>
<tr><td>M3</td></tr>
<tr><td>M4</td></tr>
<tr><td>M5</td><td rowspan="3">Q2</td></tr>
<tr><td>M6</td></tr>
<tr><td>M7</td></tr>
<tr><td>M8</td><td rowspan="4">Q3</td></tr>
<tr><td>M9</td></tr>
<tr><td>M10</td></tr>
<tr><td>M11</td></tr>
<tr><td>M12</td><td rowspan="4">Q4</td></tr>
<tr><td>M13</td></tr>
<tr><td>M14</td></tr>
<tr><td>M15</td></tr>
<tr><td>M16</td><td rowspan="4">Q5</td><td rowspan="7">D1.3</td><td rowspan="15">PPR2</td></tr>
<tr><td>M17</td></tr>
<tr><td>M18</td></tr>
<tr><td>M19</td></tr>
<tr><td>M20</td><td rowspan="3">Q6</td></tr>
<tr><td>M21</td></tr>
<tr><td>M22</td></tr>
<tr><td>M23</td><td rowspan="4">Q7</td></tr>
<tr><td>M24</td></tr>
<tr><td>M25</td></tr>
<tr><td>M26</td></tr>
<tr><td>M27</td><td rowspan="4">Q8</td></tr>
<tr><td>M28</td></tr>
<tr><td>M29</td></tr>
<tr><td>M30</td></tr>
</table>