

Project management shared workspace

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Revision history

Date	Editor	Changes to the document
13.01.2017	Chiodelli, Luce	First version of the draft (structure)
14.02. 2017	Chiodelli, Luce	Editing draft after consensus on project management
10.03.2017	Chiodelli, Luce	Introducing ULPEC
14.03.2017	Chiodelli, Luce	General requirements for ULPEC's project workspace
15.03.2017	Chiodelli, Luce	Necessary features for ULPEC's project management
20.03.2017	Chiodelli, Luce	Monitoring budgets, preparing the periodic reporting, internal communication
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04.04.2017	Pfeiffer, Michael	Agreement from Bosch for the use of EMDesk
12.04.2017	Fompeyrine, Jean	Agreement from IBM Research Zurich for the use of EMDesk
12.04.2017	Chiodelli, Luce	Draft edition (2 nd pass)
12.04.2017	Chiodelli, Luce	Final edition sent to the consortium for formal validation
21.04.2017	Saïghi, Sylvain	Final review for quality assessment

Context of production, justification for delay

This deliverable was initially due by March 2017.

However, the negotiations on the content of ULPEC's *Consortium Agreement* delayed IBM Research Zurich's accession to the agreement to January, 18th 2017. For this reason, the ULPEC project could only start effectively from that date, as IBM Research's role is crucial to the development of the technology targeted by ULPEC.

This delay from the start also consequently resulted in the kick-off of the meeting not taking place in January as foreseen in ULPEC's *Description of Work*, but on February 14th 2017, therefore further slowing down the decision-making process towards a consensus for project-management-related aspects.

Furthermore, the pick of a project-management tool for ULPEC had also to take more time than we had hoped, as confidentiality and protection of the project's data internal policies of IBM Research Zurich and Bosch required screening from their IT and legal services, before agreeing to its use.

Finally, since we wished this deliverable to also serve as an internal document for the project, an additional time was necessary to enable all project partners to read, review and agree with its content.

Please note that due to the deadline set for this deliverable, this document has been edited while ULPEC's visual identity is still under construction. An updated version to this deliverable will be provided for coherence of our documentation, as soon as ULPEC's style guide is determined for good.

Preface

The *8.1 - Project Management Shared Workspace* deliverable is to be read in relation with the deliverable *8.2 - Project Management Guidelines*. This document intends to describe:

- the internal exchange and work procedures, which were established for the duration of the ULPEC project,
- the coordinator's choice of the appropriate tool to foster collaboration and knowledge exchange among the consortium.

Picking the appropriate tool for project management shall guarantee the proper implementation of the ULPEC project, in compliance with the Horizon 2020 regulations and the Annex I of ULPEC's Grant Agreement no. 732642.

Scope of this deliverable

The aim of the Project Management Shared Workspace is to provide a handbook describing the steps and requirements for the pick of project management tool to help implement a project successfully.

This document, shall present key elements of project management, and a project manager's requirements to facilitate his/her daily work in the administrative and financial follow-up of the project.

The Project Management Shared Workspace, just like the Deliverable 8.2 – *Project Management Guidelines*, is designed to facilitate project management and set an example of good practice for running and upcoming projects in the context of the Horizon 2020 framework programme.

By disseminating ULPEC's internal guidelines for project management to a public level, we aim to support and help project managers and teams towards the successful implementation and promotion of their projects.

This document to be read in association with the deliverables 8.2 and 7.1 for a complete overview of ULPEC's practices for qualitative project management.

In this deliverable, the reader will find the project management requirements, practices, procedures, tools and documentation essential to the implementation of Horizon 2020 projects and compliance with the European Union's values and policies for research and innovation.

Readers will first learn of the ULPEC project in terms of structure, partners and research, then read about the project's general expectations in terms of project management tools.

They will then be provided by the list of features essential to the following aspects: administrative and financial management, dissemination and exploitation of the results of the project, collaborative work and document edition.

They will furthermore learn about the motives for the choice of the EMDesk platform to facilitate project management for ULPEC.

Annexed to this document, a focus will finally be made on the user experience of the tool and the structure of the project's shared repository for internal collaboration.

Project particularities and related requirements

Project structure

ULPEC is the acronym for **Ultra Low-Power Event-Based Camera**.

Participant name	Abbreviation	Country	Status	Website
University of Bordeaux	UBx	FR	Coordinator	Link
Chronocam SAS	Chronocam	FR	Beneficiary	Link
IBM Research Zurich GmbH	IBM	CH	Beneficiary	Link
Robert Bosch GmbH	Bosch	GER	Beneficiary	Link
Universitet Twente	UTwente	NL	Beneficiary	Link
Université Pierre et Marie Curie – Paris 6	UPMC	FR	Beneficiary	Link
Centre National pour la Recherche Scientifique	CNRS	FR	Beneficiary	Link
Twente Solid State Technology B.V	TSST	NL	Beneficiary	Link

Call identifier: H2020-ICT-2016-1

Topic: ICT-03-2016 - SSI - Smart System Integration

Project duration: 48 months

Start date: January, 1st 2017

Maximum grant amount: 3 876 396, 25 €

Keywords: *micro (system) engineering, ferroelectric memristor; neuromorphic engineering; event-based camera*

WP List	Title	Lead
WP1	<i>Architecture of neural network</i>	UPMC
WP2	<i>Memristive devices</i>	CNRS
WP3	<i>CMOS design</i>	UBx
WP4	<i>Memristors / CMOS integration</i>	IBM
WP5	<i>Evaluation</i>	Chronocam
WP6	<i>Industry perspectives and exploitation</i>	Bosch
WP7	<i>Dissemination and public engagement</i>	UBx
WP8	<i>Project coordination and management</i>	UBx
WP9	<i>Ethics requirements</i>	UBx

WP9 matches the ethics requirements, as requested for all the Horizon 2020-funded research projects.

General requirements for ULPEC's project workspace

A simple, yet powerful, tool to centralize activity and information related to the project

The ULPEC project collects information and work issued by eight partners, during four years. A project this size and duration requires a single powerful tool, which could help centralize, sort and archive the information collected throughout the project.

The tool which would help project management during the ULPEC project should be simple of use for all contributors. Contributors to the tool might be administrative and finances staff, as much as researchers.

One important requirement for the tool was indeed the user experience: all contributors should easily grasp how to store and access project information on all the aspects reviewed by the European Commission (project implementation, finances, publications and dissemination activities, technical and financial reporting). This stance is particularly relevant for researchers, who might need to use the project on several aspects but may not necessarily have sufficient time for an in-depth training.

Access to different levels of information

Accordingly to the status and role played by each contributor to the project, both at partner and consortium level, different access rights must be available for attribution: coordinators' rights, partner rights, administrative contributor, technical contributor, etc.

Security and confidentiality requirements

As the ULPEC consortium is working on developing a *Key Enabling Technology (KET)*¹, confidentiality and security of the project's documentation, production and data prevail, for several reasons:

- the ULPEC consortium complies with the open data policy of the European Commission², though not all research data may be granted open access.
Indeed, the ULPEC project aims to develop a technology leading to setting new technology standards and patents by coming to its term. Such an objective requires a high level of confidentiality, in order to protect the work accomplished and secure/ensure its market exploitation, as it would be determined all along the four years of the project;
- The ULPEC research work will also partially rely on technology, which was developed by ULPEC's partners within the framework of previous research projects, and for which confidentiality is still to be ensured due to patenting actions;
- The tool specifications must also comply with ULPEC's participants security and confidentiality internal policies, namely those of international groups, such as IBM and Bosch, which are more likely to be targeted by intrusions.

¹ [Definition of KETs on DG GROW webpage](#)

² [FAQ on H2020 Open Data and Data Management](#)

ULPEC's necessary features for qualitative project management

Monitoring project implementation

Keep track of the engagements taken at the launch of the project

First and foremost, the project management workspace must enable the coordinator to monitor that the project is implemented properly, in accordance with engagements taken within the *Description of Work* and the *Annex 1* of ULPEC's Grant Agreement.

It is indeed important for the project manager and the administrative team involved in ULPEC at the University of Bordeaux to have a tool enabling monitoring on deliverables' production, progress made on work packages and goals achieved. It implies that all the aspects of the project's implementation as described in Annex 1 of the Grant Agreement are recorded within the tool, namely:

- the list of deliverables,
- the list of milestones,
- the description of tasks,
- the goals and structure of work packages,
- the roles and contributions of participants.

Automatic solicitations and partners' reports to contribute to risk management

As for project monitoring, the tool picked for project management shall help:

- send several reminders to participants, for internal or official submission deadlines (milestones, deliverables, internal matters),
- announce the upcoming implementation stages and events.

Reminders are not the only necessary feature for project monitoring. It is also very useful for project management that contributors have the possibility to submit themselves information about the work performed under their responsibility, such as: current state of progress made on tasks, deliverables, milestones, as well as emerging (un-) foreseen risks. Providing the coordinator with regular progress assessment proves relevant for the project manager, who may adapt her management strategy.

Archiving information submitted to the European Commission

The tool used for project management shall also enable archiving work and submitted versions of deliverables, record their submission date, for coherence with the European Commission's Sygma platform records, when describing the work in periodic technical reports (especially in the technical report part B).

Keep track of all dissemination activities

It is necessary for the project to organise and participate to several dissemination activities to promote the project, such as conferences, fairs or networking events, as well as to publish the results of the research carried out during the project. It is therefore essential when managing the project to keep track in detail of all the activities, events, publications related to the project, since they will highlight the involvement of the consortium into promoting the action and its research.

By doing so, the project manager may also ensure coherence with declarations made within the Periodic Reports of the project, in which publications' and dissemination activities' lists are required.

Keeping track of dissemination activities also proves useful to help assess the impact of the project and describe the work carried out during each reporting period.

Monitoring budgets, justifying the use of resources

Project management requires to monitor both the progress made on technical aspects, as well as the use of financial resources, with regard to the activity declared during the project.

A common interface for simplification and homogeneity

As ULPEC's management implies regular resource reporting, both in the context of internal and external periodic reporting, partners should be enabled to share and update information on their use of resources through the tool, to simplify its treatment and verification by the project manager.

On the one hand, partners would indeed contribute to the financial management of the project by using one single interface, relying on the same display for the calculation and declaration of their use of resources. The project manager, on the other hand, will receive information recorded and displayed identically for each beneficiary, which will allow her to save time and energy when proof-reading their declarations. A common interface for budget reporting simplifies the reading and allows the reader to focus more easily on the content.

Use of resources and personnel costs calculation to reduce errors

It is therefore essential for ULPEC to resort to a tool, which can standardize submission and information processing. In addition to homogenous records and budget archive, the choice of a relevant tool for project management implies to take into account another crucial feature, which is the capacity for the tool to proceed with the calculation of the hourly cost and the personnel activity in person-months, in accordance with the Grant Agreement and the Horizon 2020 financial regulations. Such a feature aims to contribute, along with advice and knowledge shared by the coordinator with the consortium, to simplify information treatment and, above all, reduce for each partner the risk of making errors in reporting the use of resources, which are common for Horizon 2020 projects.

Keep track of payments, budget transfers and amendments to the GA

Finally, on the top of the calculation of the use of resources and partners' contribution to budget reporting through the tool, the tool should enable the coordinator to keep track of any change related to the ULPEC project (amendments to ULPEC's Grant Agreement, budget transfers and grant redistribution), and of payments made by

the coordinator to the consortium during the project. This feature is indeed necessary not only for budget monitoring, but also for declarations in technical and financial periodic reports sent to the European Commission for review.

Preparing the periodic reporting

Periodic reporting is usually a **challenge** in itself for research projects.

It indeed requires additional time, effort and management, on the top of the regular research activities dedicated to the project, in order to produce high-quality, clear, concise financial and technical reports in due time.

A module dedicated to the drafting of reports appears therefore essential, for several purposes:

- to collect drafts, which will build up the technical and financial reports,
- to draft the report in line with the structure as provided by the European Commission in its *Periodic Report Template*³
- to foster smooth collaboration,
- to coordinate drafting and distribute editing roles,
- to blend partners' contributions for seamless interaction,
- to easily follow progress made on drafting the reports,
- to export content as a ready-made, formatted document, suitable to meet the European Commission's expectations.

Distribution of roles and edition rights

Partners in ULPEC will all contribute to drafting by writing their assessments on the activities / tasks under their responsibility. Work package leaders and task leaders are responsible for coordinating the partners' involvement in drafting. They are also in charge of summarizing the progress made on the work package / task under their supervision. Sections concerning the consortium will be supervised and drafted by the coordinator, with the help of all partners' remarks and contributions.

Drafting the reports: versioning, exporting written contributions in form of reports

Drafting periodic reports shall allow asynchronous editing, versioning and help editors compare the engagements taken in the Description of Work with their assessment on activity and matching results as of the evaluated reporting period. Some sections may need to be drafted jointly by partners, for which a module would be of precious help. Finally, energy and time is saved by the possibility of exporting all or part of drafted contributions in form of reports in .docx or .pdf formats, for final review and submission.

Internal communication

The tool for project management should be more than simply a way to centralise information on technical and financial aspects.

As we were explaining the general features necessary for ULPEC's project management tool, the aim is also to make it easy for non-administrative staff to contribute.

³ [Periodic Report Template](#), issued for Horizon 2020 projects by the European Commission (Version 1.2 of 8 August 2016)

It will be fostered by two methods:

- embrace the **KISS philosophy** (*"Keep It Simple, Stupid"*) as much as possible, to avoid fostering researchers' potential reluctance towards any non-technical aspect of the project,
- use an *all-in-one* tool, to encourage participants contribute to all aspects of the project.

For this reason, the project management tool picked for the ULPEC project will need the following features:

- The possibility of **storing** essential documentation, for example in a cloud service, in order to share knowledge among the consortium⁴ on all topics related to the project;
- A **calendar** for the consortium to share its events, consortium calls, consortium meetings, etc.. Such a calendar can also be filled by each beneficiary when relevant, to let others know he is promoting the project through a conference, a workshop, or any other kind of event;
- A **forum** for on-going discussions related to project implementation (which also helps archiving decisions taken). The forum may prove useful, instead of e-mails exchanges, since more and more e-mail incoming boxes already are saturated, implying that e-mails related to the project end up disappearing within a non-ending list of communications;
- A **chat** window for short-noticed communications;
- A **wiki** page for drafting agendas, or any type of joint contributions, which would have to evolve over time;
- **Mailing-lists** to ease internal communication.

The choice of EMDesk

The University of Bordeaux makes the choice of using EMDesk to manage its Horizon 2020 projects for several reasons.

First, the EMDesk CMS is a tool, which has all the required features cited above to manage projects in a qualitative way. Moreover, the tool has been recommended specifically for Horizon 2020 project monitoring.

Second, the University of Bordeaux was already familiar with the tool, by testing its features as a partner within other Horizon 2020 projects. This case also applies to most of its partners within the ULPEC consortium, who were introduced to the tool through their participation to previous projects.

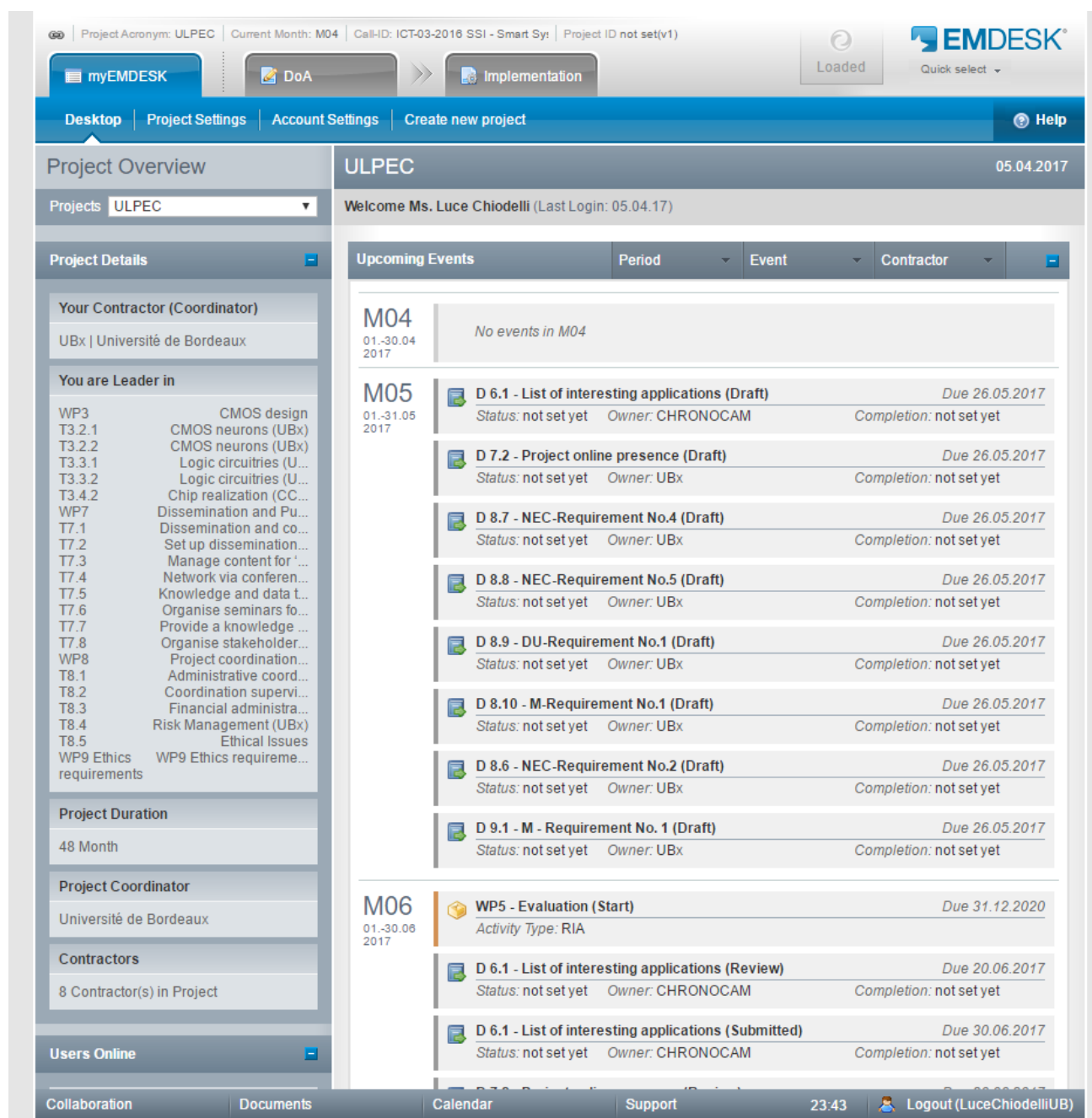
Relying on a benchmark lead by its IT-services, and judging by its previous positive experiences with EMDesk, and by the quantity and quality of the features available, the University of Bordeaux considers the choice of EMDesk as the best value for quality, in accordance with its principles.

⁴ For more information about the project management strategy for sharing knowledge among the consortium, please read ULPEC's 8.2 – *Project Management Guidelines* deliverable.

The University of Bordeaux, as a coordinator, offers the licence to the tool to all the ULPEC consortium. This gesture is financed by the University of Bordeaux' *Initiative d'Excellence* (IdEx Bordeaux) funds, to promote sound management in projects under its leadership.

Annexes

Website screenshots



The screenshot displays the myEMDESK web application interface for the ULPEC project. The top navigation bar includes links for Desktop, Project Settings, Account Settings, and Create new project. The main content area is divided into a left sidebar and a main workspace.

Left Sidebar:

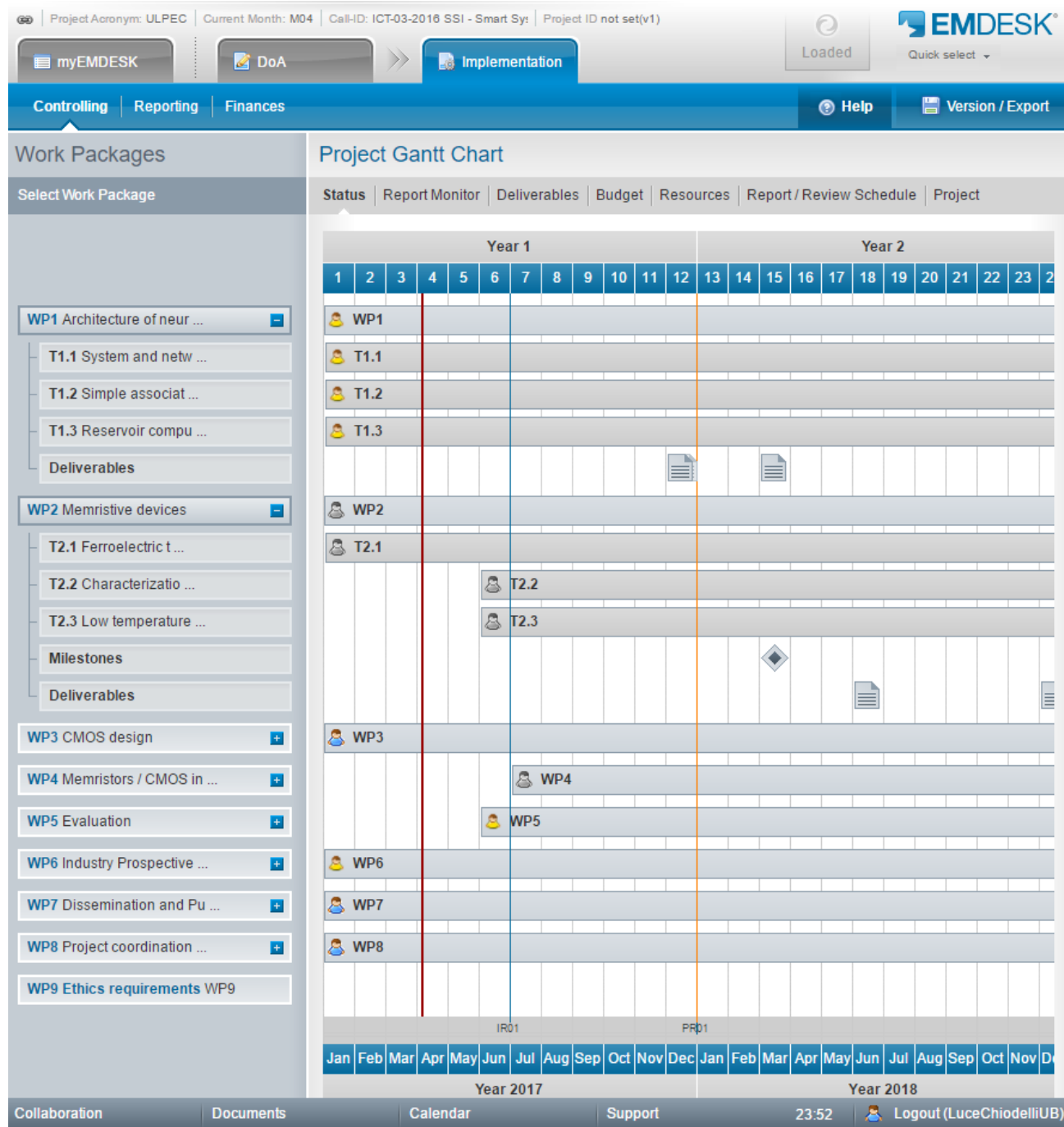
- Project Overview:** Shows the project name ULPEC and a dropdown menu.
- Project Details:** Includes a section for "Your Contractor (Coordinator)" listing UBx | Université de Bordeaux, and a "You are Leader in" section listing various work packages (WP3, WP7, WP8, WP9) and tasks (T3.2.1, T3.2.2, T3.3.1, T3.3.2, T3.4.2, T7.1, T7.2, T7.3, T7.4, T7.5, T7.6, T7.7, T7.8, T8.1, T8.2, T8.3, T8.4, T8.5, WP9 Ethics requirements).
- Project Duration:** 48 Month.
- Project Coordinator:** Université de Bordeaux.
- Contractors:** 8 Contractor(s) in Project.
- Users Online:** A section for active users.

Main Workspace:

- Project Overview:** Displays the project name ULPEC and the date 05.04.2017. A welcome message for Ms. Luce Chiodelli is shown.
- Upcoming Events:** A table listing events for the next three months (M04, M05, M06).

Month	Event	Status	Owner	Completion
M04	No events in M04			
M05	D 6.1 - List of interesting applications (Draft)	not set yet	CHRONOCAM	not set yet
M05	D 7.2 - Project online presence (Draft)	not set yet	UBx	not set yet
M05	D 8.7 - NEC-Requirement No.4 (Draft)	not set yet	UBx	not set yet
M05	D 8.8 - NEC-Requirement No.5 (Draft)	not set yet	UBx	not set yet
M05	D 8.9 - DU-Requirement No.1 (Draft)	not set yet	UBx	not set yet
M05	D 8.10 - M-Requirement No.1 (Draft)	not set yet	UBx	not set yet
M05	D 8.6 - NEC-Requirement No.2 (Draft)	not set yet	UBx	not set yet
M05	D 9.1 - M - Requirement No. 1 (Draft)	not set yet	UBx	not set yet
M06	WP5 - Evaluation (Start)			Due 31.12.2020
M06	D 6.1 - List of interesting applications (Review)	not set yet	CHRONOCAM	Due 20.06.2017
M06	D 6.1 - List of interesting applications (Submitted)	not set yet	CHRONOCAM	Due 30.06.2017

The bottom of the interface features a navigation bar with links for Collaboration, Documents, Calendar, Support, and a status bar showing the time 23:43 and a Logout button for LuceChiodelliUB.



Project shared repository

