MED1stMR Mixed Reality Training

TRAIN [SKILLS. RESILIENCE. PERFORMANCE] SAVE LIVES

D1.1

Project Manual including Quality Assurance Guidelines

Version
V1.1

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Project
MED1stMR

Project number
101021775

Type of Action
RIA

Start date of project
01.06.2021

Duration
36 months

Deliverable
D1.1

Deliverable Lead
RIA

Related work package
WP1

Dissemination level
Public

Due submission date
31.08.2021

Actual submission
26.01.2023

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Versions

Version	Date	Author(s)	Description
V0.1	03/08/2021	Vendula Rajdlova (AIT)	First Draft
V0.2	12/08/2021	Katharina Maurer (AIT)	Proofreading
V0.3	13/08/2021	Helmut Schrom-Feiertag (AIT)	Proofreading
V0.4	16/08/2021	Jaison Puthenkalam (AIT)	Proofreading
V0.5	25/08/2021	Vendula Rajdlova (AIT)	Feedback incorporated
V0.6	27/08/2021	Helmut Schrom-Feiertag (AIT)	Proofreading
V1.0	31/08/2021	Vendula Rajdlova (AIT)	Final formatting & upload
V1.1	26/01/2023	Helmut Schrom-Feiertag (AIT)	Fixing referencing error in text & upload

Report Review

Version	Date	Reviewer(s)	Statement
V0.3	16/08/2021	Entire Consortium – available on MS Teams	Feedback collected
V0.3	16/08/2021	Advisory Board	Feedback only from Andrea D´Angelo, the rest is on holidays
V1.0	31/08/2021	Georg Regal (AIT)	Final Coordinator Review

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List of Acronyms and Abbreviations

Acronym/ Abbreviation	
AB	Advisory Board
AEUCR	Agile End User Centred Research
AFO	Administrative and Financial Officer
CA	Consortium Agreement
DoA	Description of Action
EA	Ethical Advisor
EB	Executive Board
FRO	First Responder Organisation
GA	Grant Agreement
HF studies	Human Factor studies
MR	Mixed Reality
MS	Microsoft
MFR	Medical first responder
PC	Project Coordinator
PO	Project Officer
REA	Research Executive Agency
RP	Reporting Period
QA	Quality Assurance
SC	Steering Committee
TS	Training Scenarios
VR	Virtual Reality
WP	Work Package
WPL	Work Package Lead

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Table of Contents

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 101021775. The content reflects only the MED1stMR consortium's view. Research Executive Agency and European Commission is not liable for any use that may be made of the information contained herein.

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List of Figures

List of Tables

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Executive Summary

MED1stMR (Medical First Responder Training using a Mixed Reality Approach featuring haptic feedback for enhanced realism) is a 3-year Research Innovation Action project that has received funding from the European Union`s Horizon 2020 research and innovation program under the Grant Agreement No. 101021775.

The main aim of this deliverable is to provide all partners the guidelines to execute the project correspondingly with project objectives and timeline scheduled in the Grant Agreement (GA). It describes the detailed consortium organisation, roles description, allocation of responsibilities and resources, high-level planning, processes, methodology and tools that will be implemented during the project life cycle. As a public deliverable it will be uploaded to the dedicated project website.

All procedures described are the results of previous negotiations like the project proposal stage, Description of Action preparation and Kick-off meeting held on 15.6. – 16.6.2021. Several issues were also discussed during the monthly meetings on 15.07.2021 and 03.08.2021. The D1.1 sets out the main rules for the project execution and the coordinator will ensure their compliance.

Relation to other deliverables and tasks in MED1stMR

Table 1: The work and the document built on results from the following deliverables

No.	Title	Information on which to build
D8.1	Dissemination Plan and Communication Guideline	Provides all rules for dissemination and communication guideline, an overview is given in this document.
D9.6	GEN - Requirement No. 6	The ethic advisor Yannick Hill (UHEI) provides information useful for arranging new studies

Table 2: The results of this work will be incorporated into following work and development

No.	Title	Information on which to build
All	The document set up the project execution principles, allocate roles and responsibilities	Project executors have to follow the guideline settled in the D1.1

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1 Introduction

The Project Manual is the first deliverable (D1.1) from work package 1 (Project management) and has the following functions:

- It provides an overview of the project`s governance structure, work plan and the agreed processes and procedures, tasks, milestones and deliverables.
- It intends to standardise various elements of the project to ensure an appropriate level of control, quality assurance and consistency across all activities.

2 Key Documents and Tools

This is the list of key documents and tools that will be addressed all along the project execution:

Grant Agreement (No. 101021775)

- It is the funding agreement concluded between the European Commission as the funding agency and the project partners. It specifies the rights and obligations of the contracting parties. The grant agreement (GA) consists of the main legal text and annexes. The specific project part is incorporated in the Description of Action, that correspondent to the proposal. The Project Officer Cristina Longo on behalf of Research Executive Agency (REA) carried out the GA preparation together with project coordinator Helmut Schrom-Feiertag on behalf of MED1stMR consortium.

Consortium Agreement

- The consortium agreement (CA) is the internal agreement signed between the 19 members of the consortium: It specifies the rights and obligations between each other. It complements the GA and contains provisions concerning internal governance structure, the handling of intellectual property rights and internal financial plan.

MED1stMR Project Management Tool

- Provides general overview of project tasks and responsibilities on the timeline. The tools include an extended and detailed GANTT chart including time and allocation of responsibilities, a complete list of deliverables and the publication list. (see chapter 5.3 MED1stMR Project Management Tool). It is a living document, where all partners can check regularly the project development.
- Moreover, the consortium decided to use MS Teams as main communication and work platform. The platform was set up to function as the document sharing platform and communication tool between the involved project members and will be continuously used by all partners to keep track of project progress. It provides an overview of project tasks and related responsibilities, respective time and deadlines, list of deliverables and publications, etc.

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3 Project Governance Structure and Organisation

The MED1stMR consortium is aware of the importance of a productive and efficient management structure which is optimally aligned to the consortium size, the involvement of first responder organisations and the complexity of scientific and technological objectives. The project is managed at three different levels:

- Administrative, financial, overall coordination: project coordinator (PC) assisted by administrative and financial officer (AFO)
- Strategic and vision management, decision-making: steering committee (SC)
- Technical and content coordination: executive board (EB)

In addition, an external advisory board (AB) has been established to share knowledge and experiences with other independent parties active in this domain.

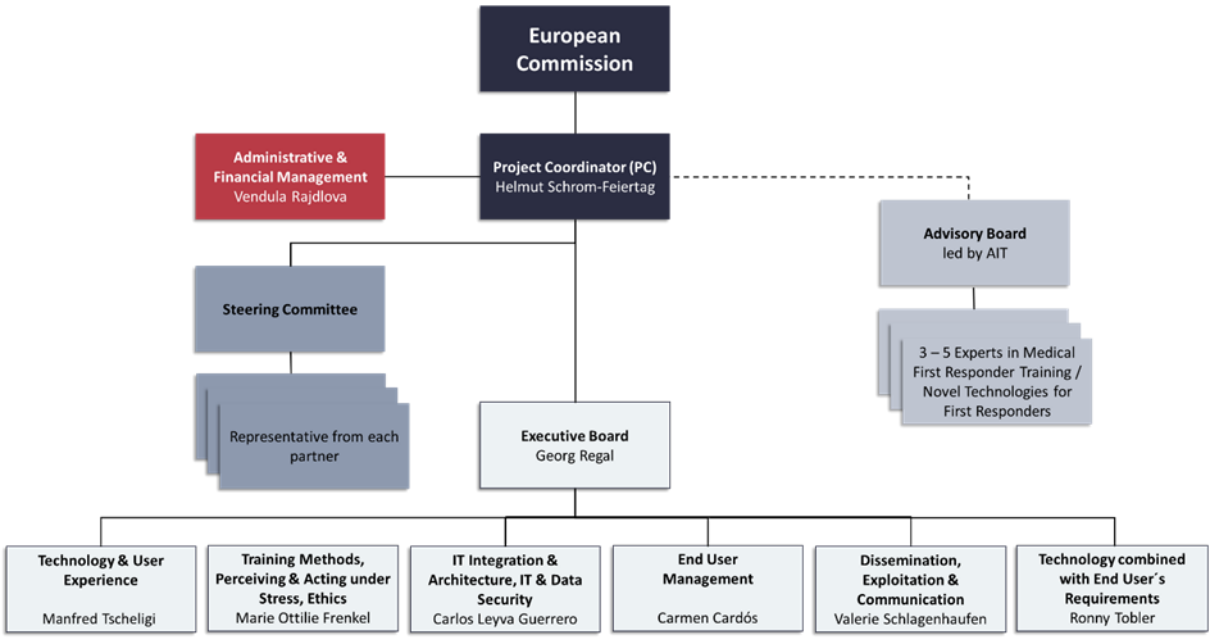

Figure 1: MED1stMR organisational structure

3.1 Consortium

The consortium was formed during the proposal development and remains unchanged since. All partners are aware of its rights and obligations set up by H2020 legislation. They are legally bound among each other by the consortium agreement (CA) and the grant agreement (GA).

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3.1.1 Roles within the project

Table 3: MED1stMR – roles within the project

Roles	Organisation
Project coordinator	AIT (Helmut Schrom-Feiertag)
Steering Committee	1 representative per organisation (See 3.4)
Executive Board	Lead by AIT (Georg Regal) supported by UHEI, SERMAS, USE, IDENER R&D and RFNS (see 3.3)
Dissemination	USE (Valerie Schlagenhaufen) – main rules and obligations see D8.1
Ethics Committee	UHEI (Ethics Advisor – Yannick Hill – see D9.6)
Administrative and Financial Officer	AIT (Vendula Rajdlova – see 3.2)
Deliverable review	AIT – final deliverable check (med1stmr@ait.ac.at) Responsible per Deliverable – see Annex 1
Publication review	AIT (Lead) and USE
PhD Round Table	AIT (Olivia Zechner)
WP Leader	Responsible for WP execution in cooperation with the task leaders, organisation of MS Team channel (updates of tasks and deliverables status), coordinates meetings and workshops on its own (provides meeting minutes)
Task leader	Responsible for task execution in cooperation with the staff of the participating project partners, reports to the WP leader, organisation of MS Team channel (update the tasks description and provide corresponding labels), coordinates meetings and workshops on their own (provides meeting minutes)

3.1.2 Description of the Consortium

The selection of the consortium partners was based on criteria such as expertise, matching the roles required in the project, capacity for strategic impact, dissemination and exploitation potential and previous collaboration.

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The MED1stMR consortium consists of 5 research organisations, 7 technology-oriented partners, 5 medical first responder (MFR) organisations and 2 network partners. The advisory board enhances the consortium with their view as external experts.

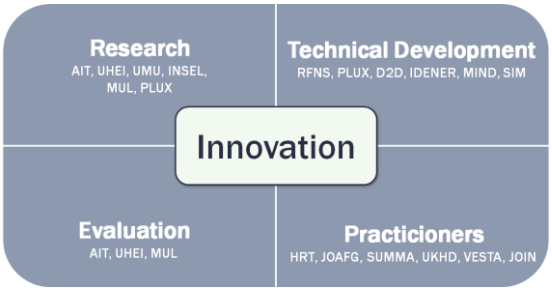

Figure 2: Consortium as whole

3.1.3 Complementarity of the Partners

MED1stMR is a multi-disciplinary project and great attention has been placed to ensure that the consortium covers the various aspects involved in this project. Not only are the partners capable of dealing as effectively as possible with the tasks they have chosen to participate, but attention has also been given to balancing the research implementation and evaluation aspects of this consortium.

The partners complement each other in the focus of their research, domain knowledge and technologies, as is reflected by the specific tasks in the roles. The description of partner complementarity is described in the GA.

3.2 Project Coordinator

The MED1stMR project is coordinated by AIT, represented by the Project Coordinator (PC) Helmut Schrom-Feiertag who has a longstanding experience in leading international and national projects.

Besides leading the overall scientific and administrative coordination of the project, the following tasks are solely assigned to the Project Coordinator:

- On behalf of the consortium the PC will serve as principal contact point for the European Commission and will ensure efficient communication flow within the consortium.
- The coordinator will be accountable for liaison with the EC Project Officer and reporting to the European Commission, ensuring efficient delivery of reports and deliverables.
- To keep track of time and resource-efficient progress of the project, the coordinator is further responsible for the controlling and managing of financial issues as specified in detail in the CA, e.g. for the distribution of payments to the consortium partners, etc.
- Finally, the PC will chair the steering committee´s regular project meetings.

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The PC is assisted by the administrative and financial officer (AFO) Vendula Rajdlova (AIT) who has several years of experience in grant writing, the coordination, project management and dissemination of collaborative research projects on national and international level and will be responsible for the following tasks:

- Managing the day-to-day legal, contractual, ethical, financial and administrative issues of the consortium,
- Setting up a collaborative working environment to ensure and enhance communication flow within the consortium,
- Preparing and organizing the consortium meetings and review meetings with the EC,
- Preparing, updating, and controlling the maintenance of the CA,
- Preparing and delivering project presentations both internally and externally,
- Managing and controlling procedures of financial issues: collecting partners' contributions to official and internal reports to keep track of time and resource-efficient progress of the project,
- Controlling procedures to ensure prompt delivery of all hardware, software and data identified as Deliverable items in the Contract or requested by the European Commission for reviews and audits.

3.3 Executive Board

The executive board (EB) as the supervisory body for the execution of the project will – amongst other duties - discuss the progress of the scientific and technical work, control adherence of project actions and goals. It will further discuss whether re-adjustment of project aims is necessary upon any arising major issues affecting the successful realisation of the project: e.g. inclusion/exclusion of partners, termination of project, etc. The EB supports the scientific and technological execution of the project.

The proposed EB members have been selected with attention to gender balance and disciplines in the consortium. It will be led by AIT and report to and be accountable to the steering committee:

- **Lead of Executive Board**: Georg Regal (m) (AIT)
- **Technology & User Experience**: Manfred Tscheligi (m) (AIT)
- **Training Methods, Perceiving & Acting under Stress, Ethics**: Marie Ottilie Frenkel (f) (UHEI)
- **IT Integration & Architecture, IT &Data Security**: Carlos Leyva Guerrero (m) (IDENER R&D)
- **End User Management**: Carmen Cardos (f) (SERMAS)
- **Dissemination, Exploitation & Communication**: Valerie Schlagenhaufen (f) (USE)
- **Technology combined with End User Requirements**: Ronny Tobler (m) (RFNS)

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3.4 Steering Committee

Procedure for strategic decisions by the steering committee: There is a quorum required of two-thirds (2/3) of its partners in total. Each partner has one vote. Absent partner members are not entitled to vote. Decisions will be taken by a simple majority of the votes.

Table 4: List of SC members elected by partners

Partner Organisation	SC Member	SC Proxy
AIT	Helmut Schrom-Feiertag	Vendula Rajdlova
UHEI	Cornelia Wrzus	Yannick Hill
UMU	Lina Gyllencreutz	Britt-Inger Saveman
UBERN	Thomas Christian Sauter	Tanja Birrenbach
MUL	Robert Galler	Robert Wenighofer
RFNS	Ronny Tobler	Philip Lacoste
PLUX	Pedro Duque	Rita Cristovao
D2D	Dervis Demirtas	Elvis Hyuseinova
IDENER R&D	Jose Antonio Perez Jimenez	Carlos Leyva Guerrero
USE	Gerhard Helletzgruber	Valerie Schlagenhaufen
MIND	Markus Karlseder	Thomas Thurner
SIM	Benjamin Roszipal	Thomas Wegscheider
HRT	Iosif Vourvachis	Meni Kourkota
JOAFG	Georg Aumayr	Pia Ferner
SERMAS	Carmen Cardos Alonso	Raquel Soriano
UKHD	Hannes Kenngott	Stefan Mohr
RJH	Pelle Håkansson	Marie Sherman
JOIN	Joachim Berney	Eva Pelgen
VESTA	Bavo Cauwenberghs	Kevin Beens

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3.5 Advisory Board

The consortium has formed an external advisory board (AB) of 3 experts from medical first responders' organisations and technology experts in the field of MED1stMR. The AB has no decision-making power within the project but a strong role in consulting. The AB will assist the project team by surveying its progress and by bringing in expertise through expert discussions, workshops, review of project results and discussion on project objectives.

They will be invited to all general assembly meetings and the final conference. They will support the consortium for open questions. A budget to cover travel expenses for participation is included in the budget of AIT. AB members have further agreed to be part of the internal deliverable review process by giving their feedback before uploading the final version to the funding & tender portal. The AB provides experts´ opinions from an external perspective and gives advice on the definition of the methodology, technology decisions and final deliverables. This will ensure a broader pan-European multi-cultural and multi-national dimension when developing MED1stMR. To keep objectivity, the AB members have no access to the communication tools.

The Advisory Board is formed by:

- **Stijn Van Kerckhove** (m) is Attaché ICM at the Federal Public Service (FPS) Health, Food Chain Safety and Environment of Belgium. The Department of Urgent Aid is among other duties responsible for the organization of the urgent medical aid (daily basis and mass casualty incidents), overseeing the training of paramedics and is therefore able to contribute to the MED1stMR project aims with advice.
- **Alonso Mateos Rodriguez** (m) is a university professor at University Francisco de Vitoria. He is a university expert in emergencies involved in several national and international projects, among other EMS/HEMS.
- **Andrea D´Angelo** (m) is president of the non-for-profit association SAFE, Security and Freedom for Europe, which is aiming at promoting high-impact activities in the rule of law, security and governance sector.

3.6 Work packages and WP-leaders

The work to be done in the project is divided into 9 work packages (WPs) and further in Tasks. Each WP is led by one of the consortium partners, chosen according to their expertise in reference to the main subject of a WP. The WP leaders will be responsible for directing and advising the collaborators involved, as well as reporting on the progress of the respective tasks.

Table 5: List of working package leaders

Number	Title	Lead
WP1	Project Management	AIT
WP2	End User Needs, Technical Requirements and System Architecture	AIT

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WP3	Development of Innovative Training Approaches for Effective Performance in Medical Emergencies	UHEI
WP4	Novel technologies for a Virtual Responsive Victim and Smart Wearables for Vital Data Measurements	PLUX
WP5	Mixed Reality Environment for Medical First Responders Training	RFNS
WP6	Evaluation in Field Trials, Generation of Final Results and Impact	UHEI
WP7	Future Technology Assisted Training and Education Concepts	UMU
WP8	Dissemination, Exploitation & Communication	USE
WP9	Ethics requirements	AIT

4 Internal Communication

4.1 Main communication tool

Microsoft Teams has been appointed as main communication and collaboration tool to support the MED1stMR consortium in discussing and sharing documents. The general concept was initiated by the coordinator and approved by the whole consortium. Each consortium member has defined several contacts that have access to the tool. Access rights can be modified by the members directly or by the coordinator team.

To facilitate the collaboration among partners, a contact list of all consortium members has been created. The contact list is divided into several categories – SC group, SC proxy, EB members, EB proxy, MS teams' access, PhD round and WP division. Each consortium member has access to the document since it has been uploaded on the MS Teams. Moreover, the contact list is going to be downloaded every 3 months in order to keep the evidence and follow the changes. The list will not be published externally due to GDPR reasons.

The PC (AIT) - as provider of the tool - has owner rights assigned to the Helmut Schrom-Feiertag, Georg Regal and Vendula Rajdlova. All other AIT members have local member rights. The rest of consortium has guest rights with no additional restrictions from side of the coordinator.

All partners have guest rights and can settle individual channels, schedule and carry out meetings, upload and review documents. All users are assigned to its organisation and each partner organisation has its own tag. This allows to tag messages accordingly to easily reach the responsible partner organisation.

Main platform structure:

General – contact list, resources

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- Contact list is a living document – each MS Teams member can update the list on behalf of its organisation – coordinator keeps records quarterly
- Resources – locked excel document managed by the AFO. It provides partners with a complete overview of project budget, as stated in the GA and the CA. The AFO provides updates based on internal reports.

Announcements – general announcements – all information posted under this channel must be "tagged".

- Tags – members of MS Teams are grouped per partner organisation – it is possible to tag the whole partner team if needed, or individual people

Executive Board – issues -tackling EB issues

- Meeting minutes, agenda, TO DOs

Work Package – each WP has its own channel

- Each WP leader is responsible to set the structure, that will be used by the working group respectively to the WP content
- The coordinator provides basic tools for better organisation of work using Tasks by Planner and To Do. Each WP has a prepared scheme of tasks and deliverables
- Each task and deliverable are assigned to the responsible organisation. In order to be able to sort out tasks according to partner, a labelling system has been developed. Each partner has its own label colour and members can quickly filter what kind of activities correspond directly to their organisation.

Partner channel(s) – partners can settle their own channel in order to facilitate internal team communication. Nevertheless, the execution of such channel is not under coordinator responsibility. Partners are aware that those channels are accessible/visible for the rest of consortium.

Templates – All templates necessary for the project execution are stored on MS Teams available to all partners. *WP8_01_Templates*

In the same folder logos, key visuals and project photos can be found.

4.2 Email

Emails are the most common way to achieve efficient internal project communication. They are especially useful for bilateral conversations. The coordinator encourages the use of e-mails in the case of solving small specific issues. The complete mailing list is available to all partners via MS Teams.

Furthermore, common email addresses for easier communication have been settled:

med1stmr@ait.ac.at – this email is provided by coordinator and serves for direct communication with the coordinator. Access to this mailbox was granted to Helmut Schrom-Feiertag, Georg Regal and Vendula Rajdlova. They are responsible for maintaining the mailbox and replying to the partners.

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med1stmr@usecon.at – provided by USE serves to channel project communication dealing with dissemination issues.

Email correspondence between partners should have the following subject:

MED1stMR_Topic

4.3 Conflict Resolution

Pragmatic negotiation shall be the basis for the consortium conflict resolution approach. This will be the responsibility of all involved partners and the PC – who act as an international mediator in dispute resolutions – to identify these conflicts at an early stage and take steps to talk to the involved parties to quickly resolve the conflict. In general, conflict resolution always occurs in the "lowest" level possible (i.e. 1st by Task Leader, 2nd WP-Leader, 3rd PC and the SC). Negotiation and decisions taken by consensus shall be the main tools to resolve conflicts. Should this approach and a majority decision not be achievable by the parties involved and the rest of the consortium, an independent referee shall be appointed by the PC.

4.4 Meetings

The meeting structure was settled by the coordinator together with partners to assure the smooth project execution. To assure the transparency rule all meeting minutes from below mentioned meetings have to be uploaded to MS Teams *WP01_04_meetings*. Moreover, there will be WP meetings, Deliverable content specific meetings, etc. Those other meetings are not directly organized by coordinator.

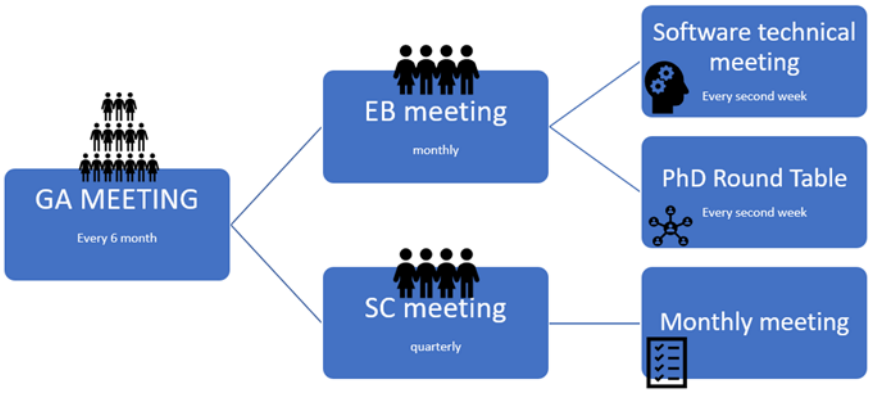

Figure 3: MED1stMR meeting structure

4.4.1 Face-to-face meetings

4.4.1.1 Preparation of face-to-face project meetings

By organizing face-to-face meetings several aspects must be taken into consideration. The checklist is presented below.

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- **Objective:** organize a meeting only if it is really required and there is a well-identified objective as to why it must be executed face-to-face.
- **Unique title:** give every meeting a unique title that everybody can refer to in all relevant documents (e.g. external reporting to the EC) and other communications.
- Provide the following **information**: organizer, dates, locations & accommodation (how to get together), goals, agenda. Agenda must be provided by the project organizer (coordinator, WP leader, etc.).
- **Announce the meeting** to the whole consortium well in advance.
- **Relevant material** must be provided in advance to allow all participants to prepare for the meeting accordingly.

4.4.1.2 Meeting execution

During the meeting, there are a number of important points to keep in mind in addition to the meeting organization. The meeting organizer is responsible that meeting minutes are taken.

- **Agenda:** Follow the agenda during the meeting.
- **Minutes:** Keep minutes of all sessions of the meeting. Store the minutes on the MS teams accordingly and send the participants of the meeting a link to the location of the minutes.
- **Attendants:** Include the attendants of the meeting in the minutes. The list serves as proof of attendance and might be required in an audit.

4.4.1.3 Post meeting tasks

After meetings the following tasks have to be considered:

- **Action items** agreed during a meeting must be followed up as agreed.
- **Travel Budget:** Every partner has travel budget allocated in the project budget. This travel budget serves two purposes:
  - Participating in MED1stMR project meetings, such as general assembly meetings, work package meetings or EC review meetings. It must be ensured by the partner that sufficient budget is available for attending these meetings as required.
  - Other travel: This comprises travel for disseminating MED1stMR results, e.g. by presenting a MED1stMR publication at a conference, or other travel necessary for obtaining information required for performing agreed MED1stMR tasks.
  - Each partner is responsible for their own travel budget, i.e., must make sure that there is sufficient budget available for performing its task and taking part in internal meetings as required. There is the possibility of shifting budget from, e.g., R&D, to travel should this be necessary and in line with the project goals. This should be done as early as possible in order to adjust the planning accordingly.

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4.4.2 General Assembly meetings

The general assembly meetings will be held every half a year preferably in person. The project results will be presented to the PO and members of AB. The main purpose of general assembly meeting is to gather all partners and to get new inputs for the best possible project execution.

Organisation of the meetings is assigned to the coordinator as part of Task 1.1 in cooperation with the hosting partner. The kick-off meeting was already held online on 15.6.-16.6.2021. The forthcoming meetings are scheduled to rotate between the partners' home bases, whenever possible in combination with other project activities, such as dissemination events, study conduction, etc.

The date must be scheduled 45 days in advance mostly because of travel arrangements and to assure the time availability of all participating parties. The agenda will be generated by coordinator and will be discussed during a monthly meeting prior to general assembly meeting. Meeting minutes will be uploaded on the MS Team *WP1_04_Meetings_01_General_Assembly* no longer than 2 weeks after the meeting.

Each partner is responsible for informing themselves about the current situation regarding travel restrictions. The general assembly meetings are scheduled as listed below.

Table 6: General Assembly meetings schedulte

	M1	M7	M13	M19	M24	M30	M36
Hosting partner	AIT	RFNS	HRT	AIT	SERMAS	UHEI	AIT
place	Vienna	Zürich	Thessaloniki	Vienna*	Madrid	Heidelberg	Vienna**

* due to COVID-19 held online

** 1 of the meeting can be held in Brussels

4.4.3 Steering Committee meetings

SC Meetings are held online quarterly 2 weeks after each third EB meeting. It will be enclosed to the monthly meetings. The SC represents the ultimate decision-making body of the consortium. All SC members or their deputies must be present since SC meetings are the only meetings where important decisions affecting project execution on behalf of the whole consortium can be taken. An agenda will be uploaded 1 week prior to the meeting on the MS Team by the AFO. All partners can add agenda points if needed by informing the AFO via MS Teams or email.

The meeting is divided into 2 parts (same structure as the monthly meeting). The first part is devoted to the administrative issues. The current project status based on internal financial progress report will be presented. This helps all partners to see how much effort was already invested in the project in person months and to facilitate the affective resources plan. The second part of the SC meeting is

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reserved for content-oriented issues based on the internal technical progress report. Furthermore, other open questions will be discussed. The SC meetings serve to complete the decision-making processes on behalf of whole consortium. In case of necessity, the SC meeting can be organized upon the request of EB.

Meeting minutes will be uploaded to the MS Teams *WP1_04_Meetings_03_Steering_Committee* and available to all partners no later than 7 calendar days after the meeting.

4.4.4 Executive Board meetings

These meetings are mandatory for the members of the EB, namely AIT, UHEI, IDENER R&D, SERMAS, USE and RFNS. Participants have been appointed, stated in the CA and in the contact list. The meetings are led by AIT, namely Georg Regal. It has been scheduled for every third Wednesday each month.

The EB meetings are mostly content oriented. An Agenda will be provided 1 week in advance, meeting minutes will be uploaded to the MS Teams *WP1_04_Meetings_02_Executive_Board* and available to all partners no later than 7 calendar days after the meeting.

4.4.5 Monthly meetings

These meetings are mandatory for all partners – at least 1 person per partner organisation must be present. The meetings are foreseen to tackle administrative issues and general content as well. The partners are going to be informed about the actual project progress and next steps.

Monthly meetings are led by the coordinator or its deputy. It has been scheduled to every first Tuesday of the month. An agenda will be provided 1 week prior to the meeting via MS Teams. Each partner can add issues or specify proposed agenda points. This meeting is also meant to start the deliverable review procedure. The meeting minutes will be uploaded to the MS Teams *WP1_04_Meetings_04_Monthly_Meetings* and are available to all partners.

4.4.6 Software technical meeting

The purpose of those meetings is to settle effectively all parameters needed for the final product development. The meetings start from September 2021 (M04) in a 2 weeks rhythm. The required participants are representants from RFNS, PLUX, MIND, D2D, SIM and IDENER. It will be initiated by the coordinator, even though PC will participate upon the request from the technical experts. All results will be reported to the EB. The meeting minutes will be uploaded to the MS Teams *WP1_04_Meetings_05_Software_Technical_Meetings* and available to all partners.

4.4.7 PhD Round Table

These meetings will be initiated by the coordinator and bring together all PhD students. The main aim is to cooperate, share ideas, support each other and consult research topics within MED1stMR. It fosters the scientific dissemination and exploitation of the project and prevents overlapping research and themes. The meeting minutes will be uploaded to the MS Teams *WP1_04_Meetings_05_Software_Technical_Meetings* and available to all partners.

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5 Project Management and Quality Assurance (QA)

As MED1stMR is a long-term, multidisciplinary, innovative and agile project, proper project management and quality assurance is a key for successful accomplishment. The following chapters provide a clear management plan concerning the procedures of the project, ensure compliance with the requirements set by the European Commission, minimise conflicts, and enable efficient and accurate work as well as a high-quality outcome.

5.1 Deliverable project management

As MED1stMR combines technology research and development with scientific research to develop a solution for the end users, there is a need to manage the different streams. Therefore, the deliverable management is a further key factor for the project's success.

The deliverables process is mandatory and must be followed by all partners. To facilitate the process, AIT has developed a deliverable tracking system as part of PM Tool, that provides an overview of all deliverables, responsible and involved partners, dissemination level, submission, and internal review date. Additional, information about delays or re-openings by the EC are indicated in this document. The respective deliverables and its progress are also listed on MS teams, per work package. The deliverable owner is responsible for filling in the corresponding information and appointing reviewers correspondingly.

5.1.1 Deliverables creation and peer-review process

The partner responsible for a deliverable must collaborate with all involved partners (involved partners are marked in the GANTT chart provided in the main PM tool and should be labelled also in MS Teams). The deliverable owner is responsible for the compilation of the deliverable and has to collect all relevant materials. The partner in charge of the deliverable is responsible for its quality. For documents (e.g. reports) the template available on MS Teams *WP8_01_Materials_01_Templates* must be used.

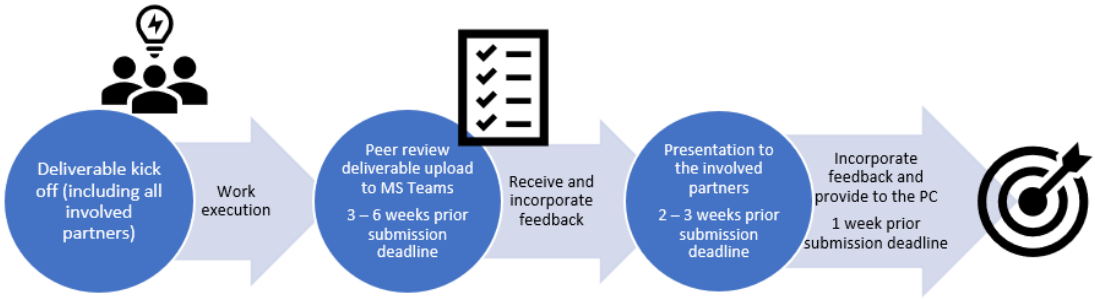

Figure 4: Deliverable peer-review process

1. **Deliverable a kick-off:** The process for deliverable starts with a deliverable kick-off. This takes usually place during monthly meetings. Moreover, a separate meeting is required in case the

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preparation of deliverable structure and defining the content is extensive and requires more time to define all terms and to gather necessary input from other partners. All involved partners must be present. In this meeting the efforts, responsibilities, objectives, and main content is set up together and strengthened via meeting minutes. The project management regarding timing is incumbent upon the deliverable owner. To improve collaboration and interdisciplinary input, deliverable owner may involve and / or gather input from other partners as planned in the Description of Action. For this reason, each directly involved partner organisation has to appoint 1 contact person, that will be in charge of proof-reading. The deliverable kick-off should be at least 60 days prior to the deadline.

2. **Peer review & feedback**: To deliver high-quality and beyond state-of-the-art solutions, the consortium decided to introduce a peer-review process. As soon as the draft deliverable is compiled the responsible person has to upload it on MS Teams to the respective folder. The above-mentioned scheme shows the desired time schedule for the whole review procedure. As an exception, deviations - in days - are allowed upon project execution.

   During the kick-off meeting the affected partners will appoint the responsible person on behalf of its organisation to provide deliverable owner with feedback. This feedback needs to be commented within the deliverables text and needs to be answered by the deliverable's owner. This feedback needs to be kept available to the EC if requested and therefore must be stored separately to the document (one document with comments, one without for submission).

   Additionally, the persons who make changes to the document as well as the persons who perform a review must be listed as reviewers in the version history table and their activities and scope must be described.

3. **Internal presentation**: Within two to three weeks before the deliverable is due, the **deliverable owner** must schedule an online meeting with members of EB and MFRs to present the key facts and content of the deliverable (as an executive summary slide deck). However, if the document has been reviewed by all partners and members of AB and there are no dissenting opinions, the deliverable owner can upload the presentation to the relevant folder and notify the partners**.**

4. **Final internal check**: After the re-iterations and corrections and at least one week before the submission, the document will be forwarded to the PC for the final revision, formatting, version controlling and quality control.

5. **Submission**: Subsequently, the deliverable will be submitted as PDF to the European Commission in a timely manner by the PC.

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5.2 MED1stMR Project Management Tool

The PM Tool visualises the project execution and clarifies the status of the overall project in real time to all project participants. It augments the agile collaboration and especially coordination between all WP activities. This tool offers an overview on the status of the project deliverables and software releases regarding **time**, **responsibilities**, **involvement,** and **efforts (person months) regarding the present, the past and the future.**

The **PM Tool** is available to all members of MS Team *WP1_00_PM_Tool*. The document is logged and can be updated only by the AFO. The PM tool was distributed to all partners at the beginning of project to support them to settle internal PM Tools and to bring consistence to the project execution. All feedbacks were taken into account and the tool represents the visualisation of project development on behalf of entire consortium.

TAB 1 – GANTT: This view represents for all partners the complete overview of WPs and corresponding tasks on the left side in line with due dates of the dependent deliverables within a monthly timeline. The responsible WPs and tasks leaders are visualised in a matrix to see who has be involved. On the right side the complete involvement of partners to the corresponding tasks have been defined. The respective person months are added to the right side, so that partners can have a quick look how much effort they planned for each task. Moreover, there is an overview of deliverables assigned to tasks.

This table supports the partners in getting a quick overview and considering the timing and dependencies of the different tasks and releases while accomplishing the project objectives.

TAB 2 – Deliverables: Accordingly, to the GA of MED1stMR, this list shows all relevant deliverables. This overview shows the deliverable nature, dissemination level, the responsible partner, deliverable review process and its deviation. The submission date and external approval are also noted in the list.

This table supports the partners in the deliverable creation considering timing and status.

TAB 3 – Publications: Each publication (scientific publication, conference paper, poster, etc.) must be reviewed internally. The list shows the status internally and the due dates.

This detailed view on planned publication allows partner to avoid bias and to cooperate on future project dissemination.

TAB 4 – Resources: Following the project evolution, this table summarises the financial data reports of each partner (person month) in a general view. Input comes from quarterly internal financial reports and is going to be updated by the coordinator.

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This table supports the partners to control their resources and to plan the project execution accordingly. Furthermore, it supports the coordinator to check whether the provided effort is being correspondingly reported in person months and avoid misunderstanding in project execution.

5.3 The MED1stMR Agile End User Centred Research Methodology

To solve the challenges, a highly multi-disciplinary approach across the project is used (see Figure 5) in order to span from requirement engineering, technological development and implementation over psychological research of human influence factors and optimal training design to resulting technology experiences and the scientific evaluation and validation of project results and subsequent integration into existing MFR training and work practices.

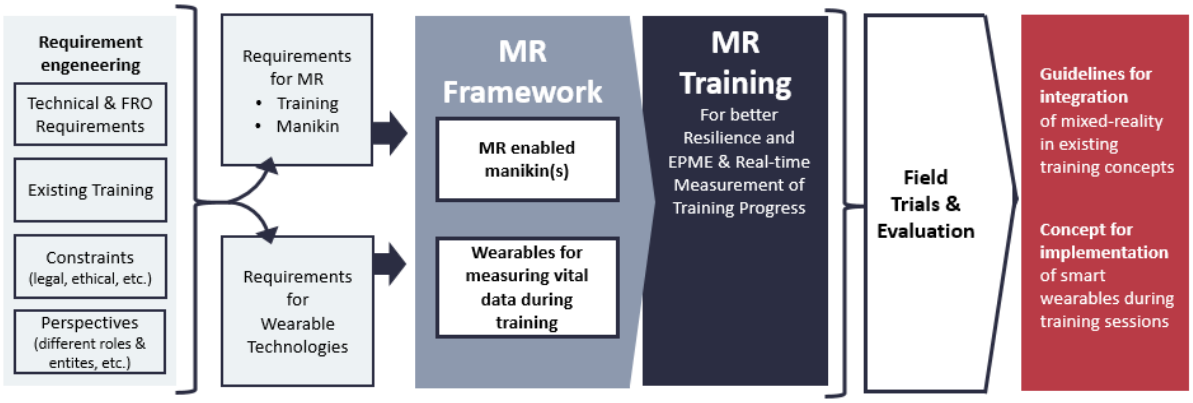

Figure 5: MED1stMR approach

Following the AEUCR methodology, co-creation (see e.g. Sanders, 2013) and design thinking methods (Micheli et al., 2019), e.g., brainstorming and future user journeys, will be employed in workshops to gain a common understanding of the end user requirements for the VR solution. Furthermore, the workshops will allow end users to ideate their expectations and needs for further novel technologies within their training curricula. Lastly, future VR scenarios will be developed collaboratively with end users in the workshops, e.g. through rapid prototyping with storyboards, models, or mock-ups (IDEO, 2015).

In terms of technical development, our AEUCR methodology will ensure that collected MFR requirements feed into the creation of the MR training environments, where RFNS will bring in their cutting-edge VR environment and extend it with D2D's manikin technology. Similarly, the monitoring of vital data will be integrated by wearable technology specially developed by PLUX for integration into MR-training. When observing the development of new technologies such as VR, it is often the case that the development is primarily led by what is technologically feasible (Keeling et al., 2019). In MED1stMR, we aim to involve end users throughout the whole development, testing and validation of

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our project in order to come up with novel technologies and experiences that are desired and required by the people they aim to serve.

Repeated hands-on workshops and user studies with FRO members throughout the technical development phase will ensure that their requirements are properly met. The evaluation will be done together with the end users within year 3. The system will be deployed at the available VR training centres in Switzerland, Spain, Germany, Sweden and Austria. The local partners will conduct several training sessions with different Training Scenarios (TS) under scientific observation for evaluation. Upon successful evaluation of TS functionality and of its intuitive deployment or applicability in the virtual environment, a final prototype will be created (including the most promising TS) and tested in a final evaluation. Finally, the EPME model, the training concepts, the MR system as training environment will be evaluated and compared against real-world exercises in extensive field trials in different locations.

5.4 Quality Assurance

The quality assurance ensures that the ME1stMR objectives in required and assured quality will be reached. It intends to ensure the quality of the entire project by setting goals and standards regarding the services and information, the description of the various processes and finally the measuring of the results against the goals set.

The components listed below are continuously monitored and regularly reviewed. The implementation of the objectives will be continuously supervised and improved by the project coordinator wherever necessary. Quality assurance procedures applies to the following project components:

- Project and financial management
- Structured Feedback
- Records
- Documents & MS Team

5.4.1 Project and financial management

The SC composed of elected representatives from all partners monitored by the EB ensures the reviews the technical and financial project execution based on input given by partners on a quarterly base. This will ensure the achievement of milestones, continuous deliverable procedure, and time management. The SC will be informed of any changes in scope, about possible trouble spots and will ensure the project is not in jeopardy. Based on input from EB will SC ensure high priority items to be effectively resolved.

The DoA and the PM Tool set up the guidelines for the project planning. The MS Teams provides via Task planner quick task overview and assigned responsibility. All meetings mentioned in chapter 4 are documented with meeting minutes as a complementation to the DoA. The PC uses the MED1stMR PM tool including a Gantt chart to monitor the status of all tasks of the project and the agile development

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of the MED1stMR solution. Input to update the PM Tool will be regularly taken from MS Team. This enables the PC to track the progress and to identify and prevent possible delays. Any changes in the project planning must be communicated to all partners by the coordinator during the SC meeting.

The following tasks are fulfilled by the coordinator AIT:

- Ensure frequent communication of progress among partners through e-mails and the other internal communication channels,
- Revise and maintain all work plan stream of the project,
- Keep the work breakdown up to date, planning and track progress regularly,
- Ensure that project information is available and well known to partners working on the project,
- Maintain the internal MS Teams where all project documents, templates and images will be kept, categorised, maintained and are made available to all project partners.

The AFO will be responsible for:

- Cost overrun potential,
- Each partner is responsible for the proper use of funds allocated to him and for the reporting of all expenses to the AFO on behalf of the PC,
- Actual versus budgeted euros and efforts to date,
- The PC and each partner will keep detailed accounts for the use of the funds of the project which will be available at all times (and up to 5 years after the end of the project) to be produced upon request of the PC, the EC or any external auditors assigned by the EC, Timely preparation of reports on progress, meetings and workshops (compiled by using input from the partners).
- Compiling the reports from the participants into consortium reports to the EC,
- Timely submission of Reports to the EC.

5.4.1.1 Financial recording

The following records are kept for financial control as below specified:

- **Timesheets**: All partners keep evidence in form of timesheets for each person working on MED1stMR for each month. The originals will be kept in the partners' premises ready to be presented to the European Commission in case of a second level-audit. The example of timesheets consisting of minimum requirements is provided on MS *Teams General_02_resources_01_Timesheet*,
- **Financial statements**: Each partner must draw up financial statements periodically in accordance with the reporting principles laid down in chapter 6 Reporting & Monitoring,
- **Transfer of funds**: The AFO will communicate to the partners information about received payment from EC. According to the agreed financial plan settled in CA will each partner receive corresponding amount of money.

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5.4.1.2 Risk assessment

To deal with risks within the project a risk assessment procedure was established. The risk assessment and details on measures to prevent misuse of research findings will be submitted within the deliverable D9.5 (M - Requirements)

To sum up the project management and financial management quality assurance, a meeting scheme is planned and executed (see chapter 4 Internal Communication). The regular meetings are scheduled in a logical sequence, so that each affected executor can provide feedback on the individuals topics, ensure a smooth flow of project execution and achievements of its objectives. The regularly reporting and internal communication tools should ensure the required know-how transfer within the partners and to detect challenges and potential risks regarding technical output and financial handling.

As stated in chapter 6 Reporting & Monitoring the partners have to submit internal and external reports on financial and technical status regularly to the PC, who revises them on potential risks and deviations.

Reviews at work package level

The work package leaders will monitor the day-to-day work. Possible deviations will be referred to the EB, which will then decide on appropriate actions and consult with relevant members of the SC when necessary. In case that something is urgent it can be discussed during monthly meeting. SERMAS is responsible to support MFR experts to assure efficient input.

Each task leader should report regularly to the corresponding WP leader. The reporting form is defined by each WP leader and is not given centrally by project coordinator. Nevertheless, these reports must contain current status against plan, progress made since last report, problems and plans for next period. The report should be sent by e-mail with a copy to the coordinator. Therefore, the MS Teams plan per WP have to be updated. All tasks should be assigned using labels (label system is part of contact list and each partner has its own colour). Tasks can be filtered according to labels and thereby each partner can create its own overview of assigned tasks and its evolution.

The work package leaders must report their progress to the coordinator AIT as latest during the monthly meeting at the latest and monitor regular completion and updating of tasks within MS Teams.

Reviews at project level

Each partner will keep monthly timesheets that will be kept in the partners' premises ready to be presented at the Commission's request.

Reviews at organisational level

Progress reports must be submitted by each partner in a timely manner to the coordinator.

5.4.2 Structured Feedback

Feedback is a fundamental criterion to ensure high quality of a project and it will be structured in MED1stMR by different feedback streams:

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- **End user stream:** in order to be able to develop the novel technologies and the mixed reality approach in close cooperation with the MFRs. There is a clear review plan of deliverables and meeting structure used for collecting feedback and inputs for further developments. SERMAS is responsible to encourage MFRs to act on time and to provide them in additional information out of EB meetings if needed. End user management and the feedback procedure are detailed described in D1.4.
- **Technical stream:** every technology will be created and developed in an iterative way by integrating an end users feedback loop. Every concept idea will be presented to the end users in form of an experience prototype and after a positive feedback the technology development will go into the next step. RFNS and SIM are in charge of active input to the EB meetings and encouraging end users to provide their feedbacks on time.
- **Societal stream:** social media channels (a LinkedIn group, a Facebook page, a Twitter account) will be set up and used to communicate the project and all major activities, events and accomplishments to a broader audience and enable feedback.
- **Expert stream:** AB Feedback – each deliverable will be reviewed internally before provided to the AB for additional feedback. AB has access to general assembly meetings and can thereby provide more significant feedback to the project execution.

All feedback streams focus on defined aspects and are stored for later usage in the requirements process or eventual project adaptions.

5.4.3 Records

In accordance with Art. 18 of GA, all records and supporting documents must be kept for five years in order to prove the proper implementation. Receipts and other documents must be stored in their original format – namely digitally formed receipts/documents must be kept in the original digital format, and paper receipts must be stored in their original.

Confidential information must be stored in a locked cabinet in a limited access room.

5.4.4 Documents & MS Teams

5.4.4.1 Document nomenclature

The WP leader preparing the report document is responsible for the issuing of version numbers, which are incorporated in the file sent to the partner. AIT is responsible for keeping all these documents as reference, properly archived including title, author, version, date, security, issued to and status (e.g., draft, revised draft, final) in an appropriate log. Reports will then follow the document flow (as described above).

All deliverables must be named in the following scheme:

MED1stMR_DX.Y_Deliverable Name_Version

e.g. *MED1stMR_D1.1_Project_Manual_v0.1*

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The coordinator is responsible for the maintenance of all documents, properly named and archived, which are made available on the MS Teams.

The report templates are provided by USE supported by MIND. All templates are available on MS Teams under *WP8_01 materials_01 templates*.

5.4.4.2 Documents standards format

All official project documents are produced in docx. format and the final version is converted into pdf. They are in A4 format and use Calibri English Font at 11-point size. The documents contain the following required fields that are already included in the template:

- **Cover page**: Project name and number, Title, Date of current version and the information if it is public or confidential
- **Page 2**:

  Version history (Version, Date, Author and Description) and the list of abbreviations

  Report review (Version, Date, Reviewed from and Remarks)

  List of acronyms and abbreviations

  Terms and definitions

  Relation to the objectives
- **Page 4 (and 5)**: Table of contents
- **Page 5 (or 6)**: List of figures
- **Page 6 (or 7)**: List of tables
- **Page 7 (or 8)**: Executive summary. The Executive summary must be included in all deliverables and outline the key facts and findings, impacts, further use of results and a brief summary of the content of the deliverable. The objective is to simply indicate the impact of this deliverable.

  Relation to the other deliverables and tasks in MED1stMR

  The results of the work as basis for next coming activities
- **The footer** of each document contains the EU emblem, the H2020 logo and the following sentence:

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A MS Word template will be provided to the partners to assure a consistent deliverable set-up.

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6 Reporting & Monitoring

The performance of all work processes will be systematically monitored by the EB and measured against the defined deliverables and milestones to ensure project focus and to identify any potential risks and mitigation strategies at an early stage. In addition to the official technical and financial reports (M18, M36), short half-yearly management reports will be prepared for internal controlling. The AFO is responsible for collecting and assembling the participants' sections. These interim reports provide a suitable juncture to review scientific progress and facilitate overall monitoring and controlling of the project's progress in accordance with the description of action.

6.1 External Report Procedures

According to the GA Art. 20 the coordinator has to submit the technical and financial reports within 60 days following the end of each reporting period. Based on project durations, 2 reporting periods are settled:

- Reporting period 1 (RP1): from month 0 (project beginning) to the month 18
- Reporting period 2 (RP2): from month 19 to the project end (month 36)

The requirements of external reports are listed in GA.

Having in mind the 60 days period for completing external reports defines the coordinator following time schedule:

- Notification starting the 60-days period will be send out automatically to all partners via Funding & Tenders Portal. Additional to it comes an announcement via MS Teams in order to reach all actively involved project participants.
- Partners will share with coordinator its expenses claim with description within the first 30 calendar days. Coordinator proof provided documents and check with internally financial reports.
- Each beneficiary complete own financial statements. Partners are obliged to e-sign and submit their Financial Statements to the Coordinator. (day 31 – 35)
- Technical report will be collected in parallel.
- Coordinator generate final Periodic Report and submits to the EC. (day 35 – 60)
- The EC reviews the submitted Periodic Report.

6.1.1 Periodic Technical Report

The content of **periodic technical report** is strictly defined in the GA and consist of following:

- an explanation of the work carried out by the beneficiaries

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- an overview of the progress towards the objectives of the action, including milestones and deliverables identified in Annex 1
- a summary for publication by the agency
- the answers to the "questionnaire", covering issues related to the action implementation and the economic and societal impact

6.1.2 Periodic Financial Report

The **periodic financial report** contains

- an individual financial statement from each beneficiary, for the reporting period concerned
- an explanation of the use of resources from each beneficiary, for the reporting period concerned
- a ´periodic summary financial statement´, created automatically by the electronic exchange system, consolidating the individual financial statements for the reporting period concerned and including – except for the last reporting period - the request for interim payment.

6.1.3 Final Report

The **final report** (request for payment of the balance) which the coordinator will submit within 60 days following the end of the last reporting report.

The **final technical report** with a summary for publication is containing

- an overview of the results and their exploitation and dissemination pathways
- the conclusions on the action
- the socio-economic impact of the action

The **final financial report** containing

- a **final summary financial statement**
- a **certificate on the financial statements** for each beneficiary

6.2 Internal Reports Procedure

Moreover, a regular quarterly internal reporting was defined, to enable the PC to discover and avoid discrepancies and deviations from the project objectives and possible financial misused. The templates are available on the MS Team.

6.2.1 Internal technical progress report

Description of the technical progress, per work package: The WPL is responsible to gather all information about the technical progress in the WP from the assigned task leaders, compile a WP report and send it to the coordinator. The additional compilation of a report slide deck and presentation in a SC meeting to the other partners offers the opportunity to emphasis an executive and understandable view on the results, thoroughly revise the message that is transported, and more concretely refers to the added value of the work done and planned. This slide deck represents a

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summarised and focused view on the tasks and therefore delivers the foundation of the executive summary for the deliverable.

Moreover, the tasks update in MS Teams is required. The WPL will encourage all task leaders to update the tasks plan with corresponding labels.

The technical report template (for the detailed written report and the presentation) is also provided by the coordinator and is summarised in the following table:

Table 7: Internal technical progress report

Topic	What needs to be answered
Technical Progress	progress in last 3 months
Partner Involvement	who and in which role
Review	pending or upcoming reviews
Marketing Aspects	external communication, external gatherings
Innovation	identify added value of this WP
Challenge/Deviations/Risks and Solutions	description
Forecast	plan for coming 3 months

6.2.2 Internal financial progress report

Each partner provides basic information for each reported period – person month spend per WP and other costs (with description). This information is also compiled as a slide deck and presented in a SC meeting to the other partners. The internal reporting on regular base should allow all partners to check, whether the administrative project execution is done properly and prepare a solid base for external report.

All reports regarding efforts will be reported within the MED1stMR PM Tool, available on the MS Teams. The financial report template (for the detailed written report and the presentation) is also provided by the coordinator and is summarised in the following table:

Table 8: Internal financial progress report

Topic	What needs to be answered
Person month	Identify effort per WP
Other costs	Specify other costs spent in last quartal

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Deviations	Describe and justify deviations
Forecast	Provide approximate plan for next 3 months in person months

6.3 Continuous Risk Management

As an essential part of the internal quality assurance, a regular risk assessment will be carried out and reviewed during the SC meetings. It is important to underline that risk management is a dynamic activity, which will be implemented and carried out during the whole duration of the project.

Risks will be constantly assessed and evaluated within the whole project duration. The methodology to be followed or risk management consists of four steps:

a) risk identification where areas of potential risk will be identified and classified,

b) risk quantification where the probability of events will be determined, and the consequences associated with their occurrence will be examined,

c) risk response where methods will be produced to reduce or control the risk, and

d) risk control and report where lessons learnt will be documented.

In the GA of the MED1stMR project, a set of foreseen risks associated to the work that will be implemented in each work package at technical, management and organisational level has been identified (GA ANNEX 1 section 1.3.5. “WT5 Critical Implementation risks and mitigation actions”).

In addition to the reviews, the identification and assessment of new unforeseen risks is a joint responsibility of all project partners who have to communicate them to the PC, suggesting possible interventions and solutions, as soon as they get aware of those risks. Mitigation measures need to be defined and the status needs to be reported. If mitigation measures do not work out, a contingency plan has to be added by the risk owner in cooperation with the PC.

7 Resources

7.1 Financial status

The coordinator is responsible for the overall financial management and timely distribution of the EC contribution. Furthermore, AIT will support the other partners by

- Providing detailed information on the individual budgets and H2020 financial rules at the project kick-off.

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- Advising all partners on financial matters according to the H2020 financial rules whenever requested.
- Monitoring expenses and efforts as part of the 3 monthly internal progress reports.

7.2 Resources and Staff Effort

MED1stMR is planned for 36 months with an effort of 875,5 person-months and a maximum grant amount of € 7.832.663,75. The total personnel cost of the project amounts to € 3,565,381. 35,2% of total costs are allocated to the 5 research organizations and universities (AIT, UHEI, UBERN, MUL, UMU) 32,9% are for 5 SME partners (USE, RFNS, MIND, PLUX, D2D) taking over most technical development activities 24,7% are assigned to the 7 end user organisations (SIM, JOAFG, HRT, SERMAS, UKHD, RJH) and another 7% are allocated to 2 non-profit organisations (JOIN, VESTA).

Other direct costs of MED1stMR amount to € 988.465: Thereof, 432.107 € (43,7% of other direct costs) are reserved for **travel costs**. Expenses are allocated to each partner in order to cover expenses to attend the half-yearly Consortium meetings, WP and review meetings with the EC. Costs for travel and attendance at various scientific and industrial events are scheduled to reach the foreseen dissemination and exploitation goals, as well as travel costs for the Scientific Advisory Board attributed to the budget of the Coordinator AIT. Additional travel budget for the end user organisations is foreseen for multilateral site visits for participating in the field trials.

Furthermore, an amount of 254.850 € (25,7% of other direct costs) is reserved for **other goods and services**. Equipment costs (301.508 €; 30,5%) mainly refer to technical and medical equipment needed for the development of the training environment, such as VR components, bio-signal sensors, etc. For the beneficiaries for whom the sum of the other direct costs exceeds 15% of the personnel costs a detailed justification is indicated in Part B of the GA. Expenses on the creation of dissemination materials, the organisation of the final conference, open access publishing, patent and audit costs as well as remunerations for study participants have been allocated to the respective partners.

The staff effort with an overview of the total budgeted person months, the planned and actual PMs for RP1 (M1-18) and the preliminary planned person months for RP2 (M19-end of the project) by partner and by WP is shown in the table below:

Table 9: Resources Plan by WP divided into 2 reporting periods

	WP1	WP2	WP3	WP4	WP5	WP6	WP7	WP8	WP9	Total
1 AIT	26,00	12,00	8,00	6,00	10,00	9,00	8,00	6,00	0,00	85,00
RP1 planned	13,00	12,00	5,23	3,00	3,57	1,64	0,00	2,00	0,00	40,44
RP1 actual										
RP2 to use	13,00	0,00	2,77	3,00	6,43	7,36	8,00	4,00	0,00	44,56
2 UHEI	3,00	10,00	32,00	8,00	4,00	30,00	10,00	6,00	0,00	103,00
RP1 planned	1,50	10,00	20,92	4,00	1,43	5,45	0,00	2,00	0,00	45,31

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RP1 actual										
RP2 to use	1,50	0,00	11,08	4,00	2,57	24,55	10,00	4,00	0,00	57,69
3 UMU	2,00	5,00	6,00	6,00	4,00	8,00	12,00	6,00	0,00	49,00
RP1 planned	1,00	5,00	3,92	3,00	1,43	1,45	0,00	2,00	0,00	17,81
RP1 actual										
RP2 to use	1,00	0,00	2,08	3,00	2,57	6,55	12,00	4,00	0,00	31,19
4 UBERN	2,00	6,00	9,00	4,00	8,00	8,00	6,00	5,00	0,00	48,00
RP1 planned	1,00	6,00	5,88	2,00	2,86	1,45	0,00	1,67	0,00	20,86
RP1 actual										
RP2 to use	1,00	0,00	3,12	2,00	5,14	6,55	6,00	3,33	0,00	27,14
5 MUL	1,00	1,00	1,00	0,00	0,00	6,00	1,00	1,00	0,00	11,00
RP1 planned	0,50	1,00	0,65	0,00	0,00	1,09	0,00	0,33	0,00	3,58
RP1 actual										
RP2 to use	0,50	0,00	0,35	0,00	0,00	4,91	1,00	0,67	0,00	7,42
6 RFNS	1,00	8,00	2,00	2,00	22,50	12,00	4,00	3,00	0,00	54,50
RP1 planned	0,50	8,00	1,31	1,00	8,04	2,18	0,00	1,00	0,00	22,03
RP1 actual										
RP2 to use	0,50	0,00	0,69	1,00	14,46	9,82	4,00	2,00	0,00	32,47
7 PLUX	1,00	8,00	4,00	25,00	12,00	9,00	3,00	4,00	0,00	66,00
RP1 planned	0,50	8,00	2,62	12,50	4,29	1,64	0,00	1,33	0,00	30,87
RP1 actual										
RP2 to use	0,50	0,00	1,38	12,50	7,71	7,36	3,00	2,67	0,00	35,13
8 D2D	1,00	8,00	4,00	12,00	22,00	6,00	4,00	4,00	0,00	61,00
RP1 planned	0,50	8,00	2,62	6,00	7,86	1,09	0,00	1,33	0,00	27,40
RP1 actual										
RP2 to use	0,50	0,00	1,38	6,00	14,14	4,91	4,00	2,67	0,00	33,60
9 IDENER R&D	1,00	8,00	4,00	20,00	8,00	6,00	2,00	4,00	0,00	53,00
RP1 planned	0,50	8,00	2,62	10,00	2,86	1,09	0,00	1,33	0,00	26,40
RP1 actual										
RP2 to use	0,50	0,00	1,38	10,00	5,14	4,91	2,00	2,67	0,00	26,60
10 USE	4,00	3,00	3,00	3,00	3,00	3,00	3,00	25,00	0,00	47,00
RP1 planned	2,00	3,00	2,00	1,50	1,00	0,50	0,00	12	0,00	22,00
RP1 actual										

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RP2 to use	2,00	0,00	1,00	1,50	2,00	2,50	3,00	13,00	0,00	25,00
11 MIND	1,00	2,00	2,00	8,00	11,00	2,00	4,00	10,00	0,00	40,00
RP1 planned	0,50	2,00	1,31	4,00	3,93	0,36	0,00	3,33	0,00	15,43
RP1 actual										
RP2 to use	0,50	0,00	0,69	4,00	7,07	1,64	4,00	6,67	0,00	24,57
12 SIM	1,00	10,00	0,00	0,00	0,00	10,00	3,00	3,00	0,00	27,00
RP1 planned	0,50	10,00	0,00	0,00	0,00	1,82	0,00	1,00	0,00	13,32
RP1 actual										
RP2 to use	0,50	0,00	0,00	0,00	0,00	8,18	3,00	2,00	0,00	13,68
13 HRT	1,00	14,00	4,00	4,00	2,00	15,00	8,00	3,00	0,00	51,00
RP1 planned	0,50	14,00	2,62	2,00	0,71	2,73	0,00	1,00	0,00	23,56
RP1 actual										
RP2 to use	0,50	0,00	1,38	2,00	1,29	12,27	8,00	2,00	0,00	27,44
14 JOAFG	1,00	10,00	4,00	1,00	1,00	12,00	4,00	3,00	0,00	36,00
RP1 planned	0,50	10,00	2,62	0,50	0,36	2,18	0,00	1,00	0,00	17,15
RP1 actual										
RP2 to use	0,50	0,00	1,38	0,50	0,64	9,82	4,00	2,00	0,00	18,85
15 SERMAS	0,00	8,00	2,00	1,00	1,00	9,00	2,00	0,00	0,00	**23,00**
RP1 planned	0,00	8,00	1,31	0,50	0,36	1,64	0,00	0,00	0,00	11,80
RP1 actual										
RP2 to use	0,00	0,00	0,69	0,50	0,64	7,36	2,00	0,00	0,00	11,20
FIIBAP	1,00	3,00	2,00	0,00	0,00	5,00	2,00	3,00	0,00	**16,00**
RP1 planned	0,50	3,00	1,31	0,00	0,00	0,91	0,00	1,00	0,00	6,72
RP1 actual										
RP2 to use	0,50	0,00	0,69	0,00	0,00	4,09	2,00	2,00	0,00	9,28
16 UKHD	1,00	10,00	4,00	1,00	1,00	12,00	4,00	3,00	0,00	**36,00**
RP1 planned	0,50	10,00	2,62	0,50	0,36	2,18	0,00	1,00	0,00	17,15
RP1 actual										
RP2 to use	0,50	0,00	1,38	0,50	0,64	9,82	4,00	2,00	0,00	18,85
17 RJH	1,00	8,00	2,00	1,00	1,00	7,00	3,00	3,00	0,00	**26,00**
RP1 planned	0,50	8,00	1,31	0,50	0,36	1,27	0,00	1,00	0,00	12,94
RP1 actual										
RP2 to use	0,50	0,00	0,69	0,50	0,64	5,73	3,00	2,00	0,00	13,06

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18 JOIN	0,00	1,00	0,00	0,00	0,00	1,00	2,00	5,00	0,00	**9,00**
RP1 planned	0,00	1,00	0,00	0,00	0,00	0,18	0,00	1,67	0,00	2,85
RP1 actual										
RP2 to use	0,00	0,00	0,00	0,00	0,00	0,82	2,00	3,33	0,00	6,15
19 VESTA	1,00	8,00	3,00	1,00	0,00	14,00	4,00	3,00	0,00	**34,00**
RP1 planned	0,50	8,00	1,96	0,50	0,00	2,55	0,00	1,00	0,00	14,51
RP1 actual										
RP2 to use	0,50	0,00	1,04	0,50	0,00	11,45	4,00	2,00	0,00	19,49

With the consent of the SC a re-distribution of person-months between partners and a budget transfer between beneficiaries may be considered. This re-distribution is allowed without requesting an amendment *(see EU GA: Article 55)* if it does not imply a substantial change to the action as described in the EU GA. Furthermore, a shift from one budget categories to another is possible unless it does not imply a significant change of work. All major re-allocations of budget items need to be discussed in order to decide whether they imply a change of work and therefore might prompt an application for an amendment to the EU GA.

8 References

IDEO. (2015). The field guide to human-centered design. Design Kit.

Keeling, D. I., Ruyter, K. de, Mousavi, S., and Laing, A. (2019). “Technology push without a patient pull". In: European Journal of Marketing.

Micheli, P., Wilner, S. J., Bhatti, S. H., Mura, M., & Beverland, M. B. (2019). Doing design thinking: Conceptual review, synthesis, and research agenda. Journal of Product Innovation Management, 36(2), 124-148.

Sanders, E. B.-N (2013). “Perspectives on participation in design". In: Wer Gestaltet die Gestaltung?: Praxis, Theorie und Geschichte des Partizipatorischen Designs, pp. 61-75.

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9 Annex

9.1 List of Deliverables

No.	Deliverable name	WP no.	Short name of lead participant	Type	Dissemination Level	Due date
D1.1	Project Manual including Quality Assurance Guidelines	1	AIT	R	PU	M03
D1.2	Ethical Guidelines & Procedures	1	UHEI	R	PU	M04
D1.3	Data Management Plan	1	AIT	R	PU	M06
D1.4	End User Management Approach and Methodology	1	USE	Other	CO	M04
D1.5	End User Database and Calendar	1	AIT	Other	CO	M12
D1.6	Updated End User Database and Calendar	1	AIT	Other	CO	M24
D1.7	Meeting Minutes Reports	1	AIT	R	CO	M36
D1.8	Technical and Financial Report and Societal Impact Report	1	AIT	R	CO	M18
D1.9	Technical, Financial Report and Societal Impact Report	1	AIT	R	CO	M36
D2.1	Planning, Setup and Methodology for Collection of User Requirements, Needs, and Expertise	2	AIT	R	CO	M04

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D2.2	End users Point of View: Requirements Report, Stakeholder Map and Expectation Summary for Smart Wearables, MR Training Framework and Curriculum	2	UMU	R	CO	M09
D2.3	Guidelines and Inputs for the future Training Scenarios	2	AIT	R	CO	M12
D2.4	High-Level System Architecture	2	IDENER	DEM	CO	M12
D3.1	Overview of Current Training and Best Practices of Training Curricula in European MFR and Impacts on the EPME Model and Training	3	UHEI	R	PU	M08
D3.2	Multi-Dimensional Conceptual EPME Model and Research Agenda for Validation	3	UHEI	R	PU	M10
D3.3	Concept for Physiological Measurement Suite for Stress Assessment	3	UHEI	R	CO	M16
D3.4	Real-Time Training Progress Assessment Tool	3	UHEI	DEM	CO	M22
D3.5	Aggregate team performance assessment model	3	UBERN	R	CO	M22
D3.6	European Framework for Training and Assessment (using VR) of EPME Behaviour of Medical First Responder Professionals	3	AIT	R	PU	M28
D3.7	Multi-Dimensional Conceptual EPME Model and Research Agenda for Validation - final	3	UHEI	R	PU	M28
D4.1	MR Technology Framework for Responsive Human-Manikin	4	D2D	Other	CO	M16
D4.2	Simulation Software for Manikin Control	4	D2D	Other	CO	M28
D4.32	Activity Recording for the Exercise Debriefing	4	D2D	Other	PU	M16

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D4.4	Physiological signals Acquisition Hardware and Software Framework	4	PLUX	Other	PU	M24
D4.5	Smart Wearables for First Responder Monitoring	4	PLUX	DEM	PU	M26
D4.6	Generic Integration Framework for Incorporation of Novel First Responder Technologies in MR	4	IDENER	DEM	PU	M28
D5.1	VR System Design Document and Evaluation Plan for MED1stVR MR Trainings Environment (WP6)	5	REL	R	CO	M10
D5.2	MR Trainings Environment, Trainings-Scenarios and MR Live Editor infrastructure for conducting the Evaluations	5	RFNS	DEM	PU	M26
D5.3	Integrated Physical Human Manikin	5	RFNS	DEM	CO	M26
D5.4	Integrated Sensorics for Physiological Measurement of Trainees	5	RFNS	DEM	CO	M26
D5.5	Smart Scenario Control Module	5	RFNS	DEM	CO	M26
D5.6	MR Debriefing System for Training Performance Evaluation and Output for Evaluation and Field Trials (WP6)	5	RFNS	DEM	CO	M26
D6.1	Field Trial and Studies Planning and Methods	6	UHEI	R	PU	M18
D6.2	Field Trial and Studies Combined Analysis Report	6	UHEI	R	PU	32
D6.3	Report on the MED1stMR Demonstration at the Final Conference	6	UHEI	R	PU	M36
D6.4	MED1stMR Final Evidence-based EPME Model	6	UHEI	R	CO	M36
D6.5	MED1stMR Final Evaluated VR Training Scenarios	6	UHEI	R	CO	M36

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D6.6	MED1stMR Final Guidelines for VR Training	6	UHEI	R	CO	M36
D6.7	MED1stMR Final Training Curriculum for EPME	6	UHEI	R	CO	M36
D7.1	Concluding reflection and knowledge of the technologies in relation to the different emergency scenarios	7	UMU	R	PU	M33
D7.2	Implementation concept of MR training by end users	7	UMU	R	PU	M36
D8.1	Dissemination Plan and Communication Guideline	8	USE	R	PU	M04
D8.2	Exploitation Plan and Business Outlook - Version 2	8	USE	R	PU	M17
D8.3	Exploitation Plan and Business Outlook - Version 3	8	USE	R	PU	M26
D8.4	Exploitation Plan and Business Outlook - final	8	USE	R	PU	M36
D8.5	(final) Demonstration Tools	8	RFNS	DEM	PU	M32
D8.6	1st Report on Dissemination Activities	8	USE	R	PU	M18
D8.7	2nd Report on Dissemination Activities	8	USE	R	PU	M36
D8.8	Final Conference Proceedings	8	AIT	R	PU	M35
D8.9	Project Website	8	USE	DEC	PU	M04
D8.10	Dissemination Material - Version 1	8	USE	DEC	PU	M12
D8.11	Dissemination Material - final	8	USE	DEC	PU	M35

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D8.12	Strategies for Policy-Makers	8	USE	R	PU	M30
D8.13	Knowledge and IPR management plan – Version 1	8	USE	R	CO	M03
D8.14	Knowledge and IPR management plan – Version 2	8	USE	R	CO	M18
D8.15	Knowledge and IPR management plan – Version 3	8	USE	R	CO	M34
D8.16	Exploitation Plan and Business Outlook - Version 1	8	USE	R	PU	M06
D9.1	H - Requirement No. 1	9	AIT	Ethics	CO	M04
D9.2	H - Requirement No. 2	9	AIT	Ethics	CO	M09
D9.3	POPD - Requirement No. 3	9	AIT	Ethics	CO	M04
D9.4	EPQ - Requirement No. 4	9	AIT	Ethics	CO	M09
D9.5	M - Requirement No. 5	9	AIT	Ethics	CO	M18
D9.6	GEN - Requirement No. 6	9	AIT	Ethics	CO	M02
D9.7	GEN - Requirement No. 7	9	AIT	Ethics	CO	M12
D9.8	GEN - Requirement No. 8	9	AIT	Ethics	CO	M35

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9.2 GANNT

Shown on the next pages.

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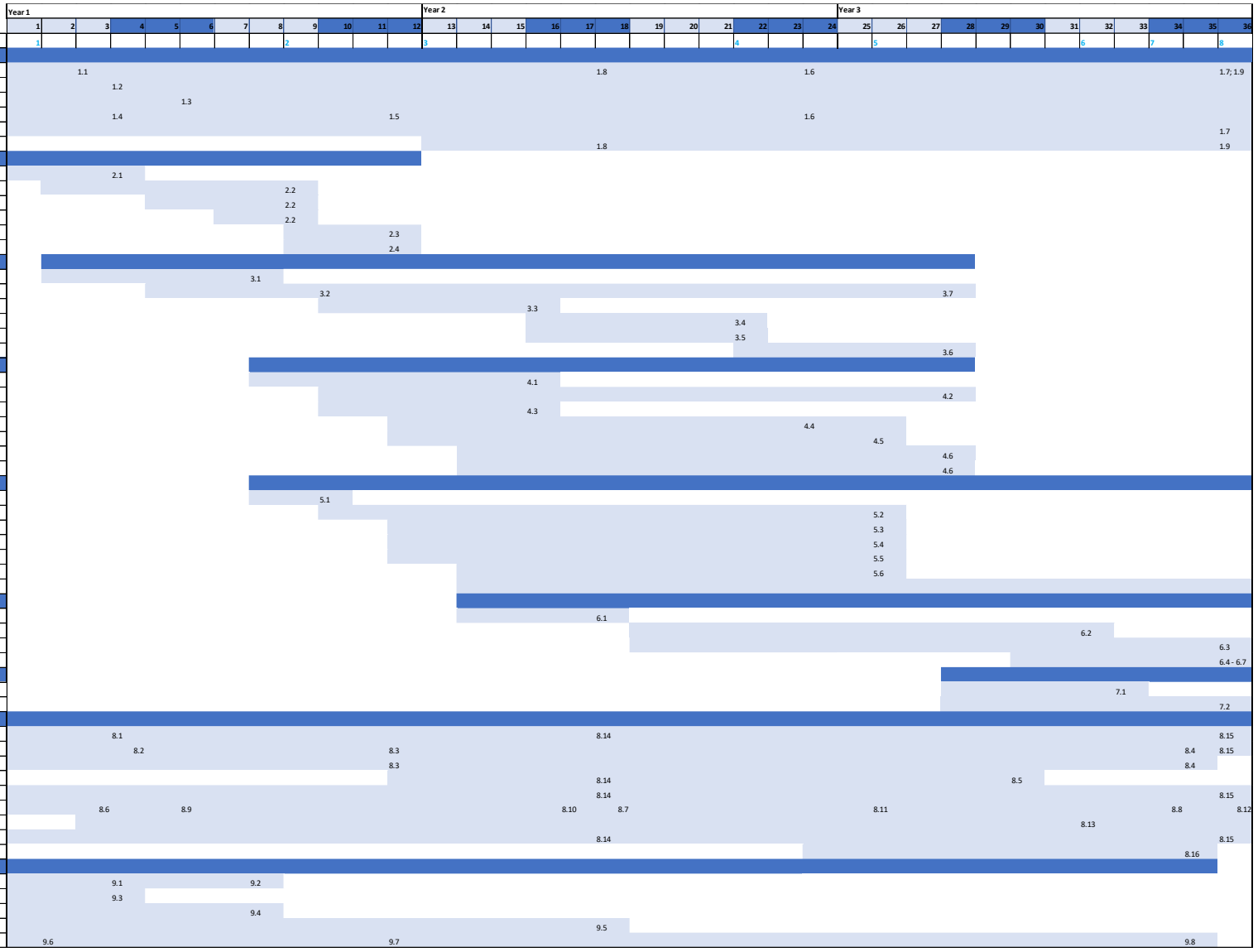
GANNT

		LEAD	FROM	TO
WP1	Project Management		1	36
T1.1	Project Administra	AIT	1	36
T1.2	Legal and Ethical Re	UHEI	1	36
T1.3	Data Management	AIT	1	36
T1.4	End User Managem	USE	1	36
T1.5	Innovation Manage	AIT	1	36
T 1.6	Societal Impact	AIT	12	36
WP2	End User Needs, Te	AIT	1	12
T2.1	Planning and Setup	AIT	1	4
T2.2	Identifying actual a	UMU	2	9
T2.3	Conduct co-creatio	AIT	5	9
T2.4	Conduction of focu	AIT	7	9
T2.5	Creating Guideline	AIT	9	12
T2.6	Creation of the Hig	IDENER	9	12
WP3	Development of In	UHEI	2	28
T3.1	Comparison and An	UHEI	2	8
T3.2	Development of M	UHEI	6	28
T3.3	Psychophysiologica	UHEI	10	16
T3.4	Real-time Measure	AIT	16	22
T3.5	Development of st	UBERN	16	22
T3.6	Development of Tr	UHEI	22	28
WP4	Novel technologies	PLUX	8	28
T4.1	Development of M	D2D	8	16
T4.2	Development of Si	D2D	9	28
T4.3	Implementation of	D2D	9	16
T4.4	Development of PH	PLUX	10	24
T4.5	Development of Sn	PLUX	12	26
T4.6	Implementation of	IDENER	16	28
T4.7	Implementation of	IDENER	20	28
WP5	Mixed Reality Envi	RFNS	8	36
T5.1	MR System Design	RFNS	8	10
T5.2	Agile Developmen	RFNS	10	26
T5.3	Integration of Resp	RFNS	12	26
T5.4	Integration of Sens	RFNS	12	26
T5.5	Development of Sn	RFNS	12	26
T5.6	Development of M	RFNS	14	26
T5.7	Provision of the ne	RFNS	14	36
WP6	Evaluation in Field	UHEI	14	36
T6.1	Preparation and De	UHEI	14	18
T6.2	Field Trials and Stu	UHEI	19	32
T6.3	Quantitative Analy	UHEI	19	36
T6.4	Final Results, Conc	UHEI	30	36
WP7	Future Technology	UMU	28	36
T7.1	Strengthening the	UMU	28	33
T7.2	Implementation Co	UMU	28	36
WP8	Dissemination, Exp	USE	1	
T8.1	Dissemination Plan	USE	1	36
T8.2	Media & Events	USE	1	36
T8.3	Printed Materials f	USE	1	35
T8.4	Strategies for Polic	USE	12	30
T8.5	Scientific Dissemin	AIT	1	36
T8.6	IPR management, E	USE	1	36
T8.7	Reach-Out to other	RFNS	3	36
T8.8	Synergies with rela	USE	1	36
T8.9	Conference for Sho	AIT	24	35
WP9	Ethic requirements	AIT	1	35
T9.1	H - Requirement	AIT	1	9
T9.2	POPD - Requireme	AIT	1	4
T9.3	EPQ - Requirement	AIT	1	9
T9.4	M - Requirement	AIT	1	18
T9.5	GEN - Requirement	AIT	1	35



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GANNT					Tasks organisation																				
		LEAD	FROM	TO	AIT	UHEI	UMU	UBERN	MUL	RFNS	PLUX	D2D	IDENER	USE	MIND	SIM	HRT	JOAFG	SERMA	FIIBAP	UKHD	RJH	JOIN	VESTA
WP1	**Project Management**		**1**	**36**	**26**	**3**	**2**	**2**	**1**	**1**	**1**	**1**	**1**	**4**	**1**	**1**	**1**	**1**	**0**	**1**	**1**	**1**	**0**	**1**
T1.1	Project Administration and Internal Commun	AIT	1	36	**X**	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	?	X
T1.2	Legal and Ethical Requirements	UHEI	1	36	X	**X**	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	?	X
T1.3	Data Management and Protection	AIT	1	36	**X**	X				X	X	X												
T1.4	End User Management	USE	1	36										**X**										
T1.5	Innovation Management	AIT	1	36	**X**																			
T 1.6	Societal Impact	AIT	12	36	**X**		X																	
WP2	**End User Needs, Technical Requirements and**	**AIT**	**1**	**12**	**12**	**10**	**5**	**6**	**1**	**8**	**8**	**8**	**8**	**3**	**2**	**10**	**14**	**10**	**8**	**3**	**10**	**8**	**1**	**8**
T2.1	Planning and Setup of the User Requirement	AIT	1	4	**X**	X	X							X		X	X	X	X	X	X	X	X	X
T2.2	Identifying actual and future hazard/disaster	UMU	2	9			**X**	X								X	X	X	X	X	X	X	X	X
T2.3	Conduct co-creation workshops to elaborate	AIT	5	9	**X**	X	X	X								X	X	X	X	X	X	X	X	X
T2.4	Conduction of focus groups to discuss actual t	AIT	7	9	**X**	X	X	X								X	X	X	X	X	X	X	X	X
T2.5	Creating Guidelines and Inputs for the future	AIT	9	12	**X**	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
T2.6	Creation of the High-Level System Architectu	IDENER	9	12	X					X	X		**X**											
WP3	**Development of Innovative Training Approac**	**UHEI**	**2**	**28**	**8**	**32**	**6**	**9**	**1**	**2**	**4**	**4**	**4**	**3**	**2**	**0**	**4**	**4**	**2**	**4**	**2**	**2**	**0**	**3**
T3.1	Comparison and Analytics of Existing Training	UHEI	2	8		**X**											X	X	X	X	X	X	?	X
T3.2	Development of Multi-Dimensional EPME Mo	UHEI	6	28	X	**X**	X	X	X	X	X	X	X	X	X	?	X	X	X	X	X	X	?	X
T3.3	Psychophysiological Measurement Suite	UHEI	10	16		**X**				X	X													
T3.4	Real-time Measurement of Training Progress	AIT	16	22	**X**	X				X	X													
T3.5	Development of statistical models to evaluat	UBERN	16	22		X		**X**		X	X													
T3.6	Development of Training Concepts, Toolkits &	UHEI	22	28	X	**X**	X	X	X	X	X	X	X	X	X	?	X	X	X	X	X	X	?	X
WP4	**Novel technologies for a Virtual Responsive V**	**PLUX**	**8**	**28**	**6**	**8**	**6**	**4**	**0**	**2**	**25**	**12**	**20**	**3**	**8**	**0**	**4**	**1**	**1**	**0**	**1**	**1**	**0**	**1**
T4.1	Development of MR Technology Framework f	D2D	8	16	X					X	X	**X**	X				X	X	X		X	X	?	X
T4.2	Development of Simulation Software and MR	D2D	9	28	X					X	X	**X**	X											
T4.3	Implementation of an Manikin Activity Recor	D2D	9	16								**X**	X											
T4.4	Development of Physiological signals acquisi	PLUX	10	24	X						**X**		X				X	X	X		X	X	?	X
T4.5	Development of Smart Wearables for Monito	PLUX	12	26		X		X			**X**						X	X	X		X	X	?	X
T4.6	Implementation of a Generic Integration Fran	IDENER	16	28						X	X	X	**X**											
T4.7	Implementation of a Data Management Syste	IDENER	20	28	X	X					X	X	**X**											

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WP5	Mixed Reality Environment for medical first	RFNS	8	36	10	4	4	8	0	22,5	12	22	8	3	11	0	2	1	1	0	1	1	0	0
T5.1	MR System Design on Identified Requiremen	RFNS	8	10	X			X		X	X	X	X		X									
T5.2	Agile Development of MR Training Environme	RFNS	10	26	X			X		X	X	X	X		X		X	X	X		X	X	?	?
T5.3	Integration of Responsive Human-Manikin	RFNS	12	26	X					X	X	X	X		X									
T5.4	Integration of Sensorics for Vital Data Measu	RFNS	12	26	X	X				X	X	X	X											
T5.5	Development of Smart Scenario Control	RFNS	12	26	X	X				X	X	X	X											
T5.6	Development of MR After Action Review Trai	RFNS	14	26	X	X				X	X	X	X											
T5.7	Provision of the necessary VR infrastructure a	RFNS	14	36						X	X	X	X											
WP6	Evaluation in Field Trials, Generation of Final	UHEI	14	36	9	30	8	8	6	12	9	6	6	3	2	10	15	12	9	5	12	7	1	14
T6.1	Preparation and Development of Research Ag	UHEI	14	18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
T6.2	Field Trials and Studies Execution	UHEI	19	32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
T6.3	Quantitative Analysis of the Impact of (simul	UHEI	19	36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
T6.4	Final Results, Conclusion and Recommendati	UHEI	30	36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WP7	Future Technology Assisted Training and Edu	UMU	28	36	8	10	12	6	1	4	3	4	2	3	4	3	8	4	2	2	4	3	2	4
T7.1	Strengthening the knowledge, awareness an	UMU	28	33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
T7.2	Implementation Concept for MR Training Set	UMU	28	36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WP8	Dissemination, Exploitation & Communicatio	USE	1		6	6	6	5	1	3	4	4	4	25	10	3	3	3	0	3	3	3	5	3
T8.1	Dissemination Plan and Communication Guid	USE	1	36	X									X	X									
T8.2	Media & Events	USE	1	36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	?	X	X	X	X	X
T8.3	Printed Materials for Policy-Makers and End U	USE	1	35										X	X									
T8.4	Strategies for Policy-Makers	USE	12	30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	?	X	X	X	X	X
T8.5	Scientific Dissemination	AIT	1	36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	?	X	X	X	X	X
T8.6	IPR management, Exploitation and Business I	USE	1	36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	?	X	X	X	X	X
T8.7	Reach-Out to other End User Partners (Showc	RFNS	3	36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	?	X	X	X	X	X
T8.8	Synergies with related Projects	USE	1	36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	?	X	X	X	X	X
T8.9	Conference for Showcasing and (external) Ev	AIT	24	35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	?	X	X	X	X	X
WP9	Ethic requirements	AIT	1	35																				
T9.1	H - Requirement	AIT	9	9	X																			
T9.2	POPD - Requirement	AIT	9	4	X																			
T9.3	EPQ - Requirement	AIT	9	9	X																			
T9.4	M - Requirement	AIT	9	18	X																			
T9.5	GEN - Requirement	AIT	9	35	X																			

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