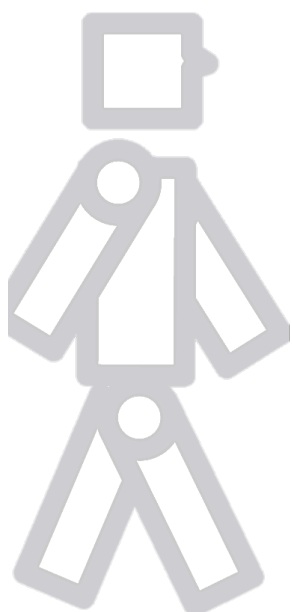| Deliverable Title	D1.1. Project Management Handbook
Deliverable Lead:	Agencia Estatal Consejo Superior de Investigaciones Científicas
Related Work Package:	WP1: Coordination & Management
Related Task(s):	T1.1 – Consortium operating procedures – Project Management Handbook
Author(s):	Pilar Raya
Dissemination Level:	Public
Due Submission Date:	31/03/2018
Actual Submission:	09/04/2018
Project Number	779963
Instrument:	Research and Innovation Action
Start Date of Project:	01.01.2018
Duration:	48 months
Abstract	Document summarising all the required knowledge for the good management of the project (administrative forms, financial aspects, quality…).

Versioning and Contribution History

| Version	Date	Modified by	Modification reason
v.01	19/03/2018	Pilar Raya	First version
v.02	21/03/2018	Sandra Correas Jaime Lara	Review, contributions regarding progress reporting and updates Annexes
v.03	09/04/2018	Diego Torricelli Pilar Raya	Final version

Table of Contents

1 Executive Summary

The purpose of this deliverable is to define the Consortium operating procedures summarising all the required knowledge for the good management of the project (in terms of administrative forms, financial aspects, quality process…).

This document will:

- Provide the necessary framework for a successful project management and monitoring.
- Define clear and measurable performance indicators and identifiable deliverables.
- Establish the guidelines for financial reporting, presentation standards for deliverables and reports.
- Define classified information and guarantee the maintenance of the chain of custody.
- Include an internal review procedure to guarantee the quality of the results of the project
- Include an internal communications framework that provides clear, informative and engaging two-way communications that are planned and effectively link together the key messages.

This document is based on the terms and conditions established in the Grant Agreement (GA) and its Annexes, as well as in the Consortium Agreement.
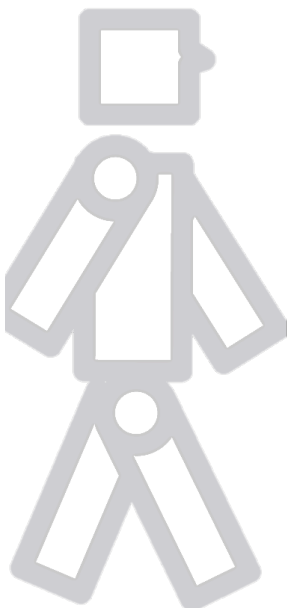
2 Introduction

The use of the present guidelines can ensure better collaboration among the consortium partners. This deliverable is intended to be used by all the project partners, to ensure quality assurance of project processes and outputs and prevent possible deviations from the project work plan.

The establishment of the Project Management Handbook is the very first accomplishment of WP1 – Coordination & management. The present document gives a practical guidance to all the partners for checking the progress of the project and assuring the quality of its outputs.

This document reports the procedures to be followed for the management of the resources, documentation production, project dissemination activities, etc. In particular it describes:

- Project management structures, role and responsibilities of the different project management bodies, the decision-making procedures as well as the communication channels within the consortium.
- Reporting requirements for WP leaders and project partners, procedures for the production of deliverables, reports, and financial statements. These procedures include document naming and version numbering protocols as well as formats to be used for various purposes. Templates, where appropriate, are provided in the Annexes.
- Procedures for the review and distribution of the various types of deliverables, reports, demos, publications and prototypes.
- Overall project monitoring procedures.
- Rules for the use of the project webpage and social media.
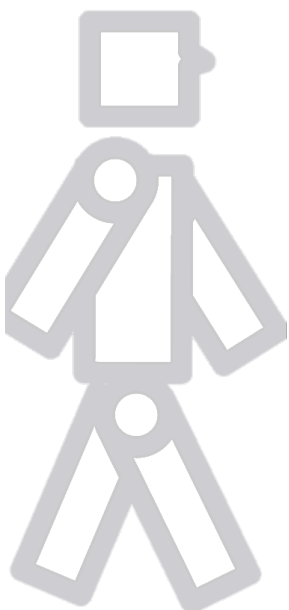
3 Management Structure - responsibilities and roles

The management structure aims at safeguarding the effective cooperation among the members of the Consortium and at producing high quality deliverables to the Commission during the various stages of the project life. The overall management structure will endorse links between EUROBENCH partners and build and strengthen new interactions, especially by enabling and fostering the transfer of complementary expertise between the involved research and industry players and countries. Within the EUROBENCH Consortium, each participant will take an active part in the efficient implementation of the Project, and will cooperate, perform and fulfil, promptly and on time, all of its obligations as foreseen in the GA.

The main challenges of EUROBENCH will be addressed through the organisational structure described in the Figure below.
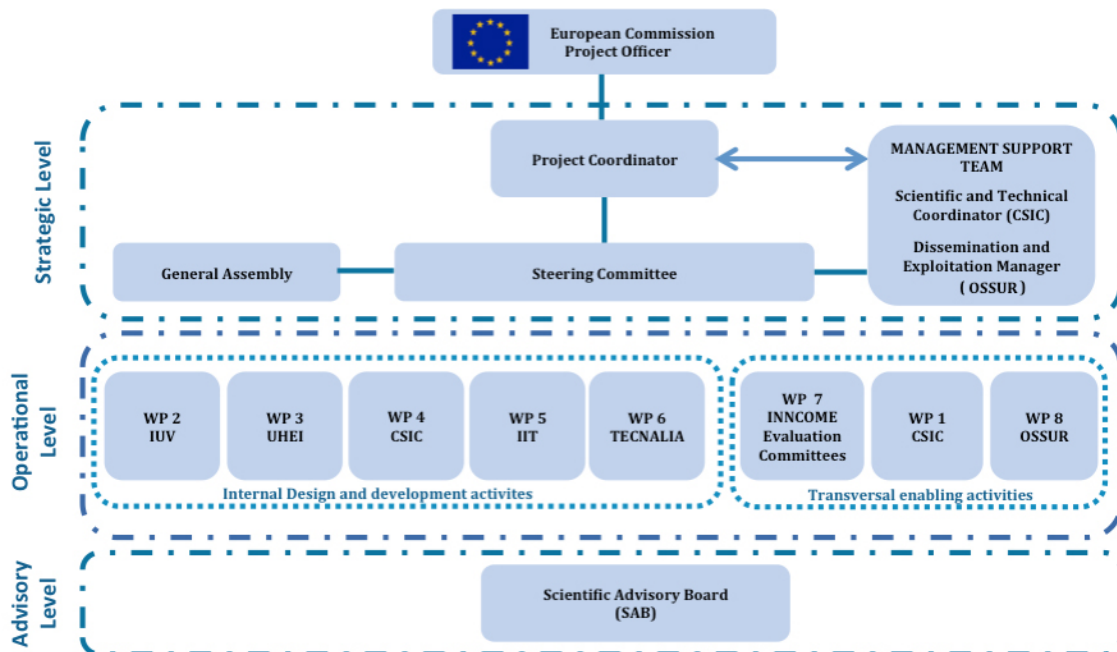

Figure 1: Management Structure

Three different levels, Strategic, Operational and Advisory, have been defined for the managerial structure of the project to give the appropriate and necessary tools to guarantee the compliance of the commitments with the European Commission detailed in the Grant Agreement.

A mailing list in the private area of the project website (www.eurobench2020.eu) was created including detailed information about the role of partner's main contacts that should be contacted depending on the purpose of the communication: technical/project organizational issues, administrative and financial issues, and dissemination issues.

3.1 Strategic level

Steering Committee (SC)
The Steering Committee is the governing body of EUROBENCH. It is chaired by the project coordinator and integrated by all WP Leaders. It will decide on modifications of the work plan and

This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 779963

6 **21**

budget distribution. It will oversee innovation, communication and dissemination procedures. As to the FSTP programme, the SC will:

- Appoint the FSTP Committee (a group of at least 5-10 experts that will become eligible as evaluators during the FSTP Actions,
- Perform the final review on FSTP proposals based on the evaluations performed by the experts, and
- Prepare the final list of funded and not-funded projects avoiding conflicts of interest.

If concerns or conflicts arise, the SC will be the body to deal with it and provide a decision. In the unlikely case that a scientific, industrial, or ethical concern or issue should fail to be resolved within an institution or WP, it will be brought to the Project Coordinator who will in turn present it to the SC for discussion and decision making and if necessary to the General Assembly (all partners) for the final decision.

Project Coordinator (PC)
Prof. José Pons (CSIC) will act as coordinator. The Project Coordinator (PC) will be ultimately responsible for the oversight of the entire project against milestones and KPIs and to apply Risk Management procedures (see D1.3. Risk Management Plan).

The PC will chair meetings of the Steering Committee and will duly inform the Project Officer of any contingency that may occur along the project and will be the spokesperson for the Project Officer.

The PC will be responsible for the administrative management, checking consistency of partners' resources and costs consumption with work fulfilled, receive and distribute all payments from EC to the partners, call for and conduct plenary meetings.

Management Support team (MST)
The MST will be in constant contact with the Project Coordinator.

The **Scientific and Technical Coordinator (STC)** will monitor the project evolution, collaborative work and integration of the project components, assess the technical decisions, promote strategic decisions (e.g., work plan redefinition, recourse reallocation), support preparation and timely delivery of the project outcomes, and assure the general quality of the project. Dr. Diego Torricelli (CSIC) is the Scientific and Technical Coordinator of the Project.

The **Demonstration and Exploitation Manager (DEM)** will be responsible for the overall Plan for Demonstration and Exploitation of results (PEDR) and related strategic activities and monitoring processes. The DEM will lead the Sustainability Working Group in T8.6 and take care of updating the PEDR including the identification and verification together with the Steering Committee of necessary corrective measures to be executed. As indicated in D1.2 Report on advisory management procedures, Freygarður Þorsteinsson is the Demonstration and Exploitation Manager of EUROBENCH.

3.2 Operational level

At this level, leaders have been appointed for the eight different Work Packages of EUROBENCH. Each WP will have one responsible partner (WP Leader) that will coordinate:

- WP tasks activities,

- communication of the partners involved in each task,
- drafting process of the deliverables, and
- identification of WP-specific risks.

The WP teams are responsible for an effective and efficient implementation of the work associated with a specific work package. A WP Team consists of a WP Leader, leading investigators of the consortium partners who are active in that work package, and researchers who are expert scientist in the area.

The following WP leaders have been assigned (and take part to the Steering Committee as previously defined):

- WP1: Prof José L. Pons (CSIC).
- WP2: Prof Nicola Vitiello (IUVO).
- WP3: Prof. Katja Mombaur (UHEI).
- WP4: Dr. Diego Torricelli (CSIC).
- WP5: Prof. Nikos Tsagarakis (IIT).
- WP6: Prof. Anthony Remazeilles (TECN).
- WP7: Dr. María Prieto (INN).
- WP8: Dr. Freygardur Torsteinsson (OSS).

Tasks included in every work package are not just a sub-division of the work but they constitute key elements of the project with a significant degree of autonomy, jointly contributing however to the goals of the Work Package (WP). In this sense, **Task leaders** have been also designated to maintain a solid structure with individual partners responsible for individual actions. The role of Task Leaders is essential for the project since they will be responsible for the co-ordination and management of their task(s) and the timely production of the associated deliverables with contributions by task team members. They will regularly report task status and performance to the pertinent Work Package Leader in order to enable the latter to identify variances against the task objectives/timetable/resource plan, evaluate the overall WP performance, and report to the STC and Steering Committee.

> The responsibility of the deliverables to be developed along the project duration lies with the different partners clearly defined in the Grant Agreement.

3.3 Advisory level

A Scientific Advisory Board (SAB) has been formally identified during the Kick-off Meeting of the Project. This will be an independent group composed by senior experts chaired by the Project Coordinator. The SAB will also be instrumental in dissemination and exploitation of project result as well as quality of deliverables and overall project status. The following experts have been already contacted by the Consortium, and agreed to be part of the SAB. They are:

- Angel del Pobil, expert in robotic benchmarking methodology.
- Gurvinder Virk, expert in wearable robotics, and particularly in standardization and certifications issues.
- Reinhard Gernt, expert in humanoid robotics, and particularly in competitions initiatives.

In addition, a complementary Advisory Board made up of Stakeholders or other key partners (e.g. INBOTS CSA, or other stakeholders that participated in T2.1) came up as a possibility during the

KOM. The potential creation of this complementary advisory board is further explored in D1.2.

4 Management operating procedures

4.1 Procedures for monitoring and reporting progress

4.1.1 Project Meetings

The following meetings will ensure the continuous communication between partners, efficient monitoring of project activities and timely identification of risks and contingency plans:

- **WP progress teleconference meetings**: These meetings will involve at least two partners of the project, and should include WP leader, and occasionally the STC. They will be held every two months to monitor and verify the work progress of the respective WP.
- **WPs coordination teleconference meeting**: These meetings will involve WP leaders and Project coordinator.
- **Annual WPs and plenary meeting**: once a year a plenary meeting will be held in a different location taking into account FSTPs Project development activities. During this same plenary meeting, different focus groups will carry out separated WP-specific meetings to debate and discuss the relevant topics, to address ongoing activities and to plan the work for the subsequent period.
  - The first plenary meeting was held in January (Kick-off Meeting). The calendar of the three remaining annual meetings is to be defined yet. Three further meetings are expected:
  - 2nd Annual Meeting, between January and June 2019 (before the 1st review meeting at M18)
  - 3rd Annual Meeting, between January and June 2020 (before the 2nd review meeting at M30)
  - Final Meeting, between July and December 2021 (before the final review meeting at M48)

4.1.2 Progress Reports

4.1.2.1 INTERNAL REPORTING

Reporting is performed on a three-level scheme:

- Three-monthly: The WP leader submits a brief summary progress report (2 pages) to the STC (see Annex I). This includes brief information about the technical progresses, results obtained (e.g. deliverables) and compliance with the work programme.
- **Six-monthly**: DEM and STC report to PC on progress made in previous six-monthly period. The report includes main achievements, deviations from plans and anticipated action in the next six-monthly period. The template is equal to the three-monthly report template.
- **Annually**: WP leaders will submit to the STC a summary progress report showing the technical work carried out during the year. The STC will prepare a consolidated annual progress report for the EC. Also, every 12 months the PC will prepare a consolidated

overview of the budgetary situation of the project on the basis of the costs statements received from the partners.

Progress will be monitored against the project milestones identified in the Grant Agreement (GA), Annex I. For an objective verification of milestone accomplishment, a set of KPIs has been also identified (they will be continuously updated in the D1.3. Risk Management Plan).

4.1.2.2 EXTERNAL REPORTING

The coordinator must submit a periodic report (technical + financial) within 60 days following the end of each reporting period (RP):

- RP1: from month 1 to month 18
- RP2: from month 19 to month 30
- RP3: from month 31 to month 48

Interim Reporting (M18, M30 y M48):

- The Periodic Technical report will:

    - Include an explanation of the work, overview of the progress, summary for publication and questionnaire.

    - Report on work progress to be submitted by participants to WP leaders (WP leaders will integrate and submit them to PC).

- The Periodic Financial report will include the **Individual financial statement** (Annex IV to G.A.), an explanation on the use of resources and a Periodic summary financial statement. It will be filled in by each participant in the Participant Portal and signed by the Financial Statement Authorised Signatory (FSIGN).

Final Report (M48):

- The Final Technical report will:

    - Contain an overview of the results and their exploitation and dissemination; the conclusions on the action, and the socio-economic impact of the action.

    - Report on work progress to be submitted by participant to WP leaders (WP leaders will integrate and submit them to PC).

- The Final Financial report include a final summary financial statement and a **certificate on the financial statements**, (Annex V to G.A.) from beneficiaries requesting a total EU-contribution > 325,000 € as reimbursement of actual costs and unit costs calculated on the basis of its usual cost accounting practices (CSIC and IIT).

Questions shall be forwarded to Project Coordinator, who will be the link with the PO.

Beneficiaries are obligated to:

- Fill in and sign their financial statement and have completed their deliverables on time.

- Keep records and other supporting documentation for 5 years.

- Make available all the records and documents during checks, reviews, audits or investigations and to keep them until the end of these procedures.

- Keep original documents or authorised digital copies.

4.1.3 Scheduling and rescheduling

Upfront effective activity planning within a project establishes a basis for promoting clarity, avoiding conflicts and allowing for corrective actions and appropriate decision-making. The work plan structure and initial activities, deliverables and milestones scheduling is provided in the Grant Agreement.

During the project implementation, there might occur a need to reschedule certain project activities due to internal or external reasons, e.g. delay of project initiation, alignment with calls for proposals or other important events, synchronization with similar activities of other initiatives in Europe, etc. In such cases, the WP Leader shall announce the Project Coordinator and initiate rescheduling procedure. Rescheduling procedure undergoes the following steps:

1. Assessment of tasks scheduling and their dependencies by WP Leader and/or Task Leader.
2. The scheduling issues shall be discussed with project partners and approved in consensus by the General Assembly. The agreement of activities rescheduling shall be achieved only during kick-off meeting and following project meetings. Thus, rescheduling shall be synchronized with other partner activities, as well workload allocation per partner, and approved by project partners.
3. If agreed, the change of schedule is recorded in the Gantt chart, deliverables and milestones tables by Project Coordinator.
4. The introduced changes to the work plan shall be communicated by Project Coordinator to Project Officer at EC, and approval must be acquired.
5. Once approval for schedule change is obtained, the new schedule enters into force.

4.2 Innovation Management and IPR Handling procedures

Management of knowledge and protection of intellectual property has priority over dissemination as it facilitates exploitation and maximised project value. Partner responsibilities, rights and obligations, inter-partner relations, dissemination and exploitation policy, management of knowledge and IP issues and access to results has been described in the Consortium Agreement (CA) that has been signed by all EUROBENCH partners.

Innovation management will be done through systematic evaluation of the work done by the technical developers.

The Consortium has a strict policy of checking if results can be protected before publishing, which involves screening the results for novelty and if potential novel concepts are found, a novelty check will be performed and based on the results from that and the potential uses foreseen for the new technology, a decision on patent application will be made. The key consideration will always be to maximise the project value.

4.3 Conflict resolutions procedures

The most prominent decisions (e.g. re-allocation of resources) will be made by the Steering Committee by majority vote. Any conflict, which impacts on organisational, technical or administrative issues, will be discussed and solved by majority and, if necessary, by the Steering Committee. In case of an important impact to the project scope, plan or contractual obligations, the proposal for implementing the change will be submitted to the Project Officer and review

board for final approval.

4.4 FSTP Management Procedures

The technical, legal and economic management of the FSTP Actions planned within the EUROBENCH Project is preliminary described in the GA, Annex I (including the procedures that will be followed for the management of the FSTP allocated budget) and will be fully defined in D7.1 FSTP Procedure Manual to be released in M4.

5 Document production and review

5.1 Formats

The following are the formats specified for use in partner communication, documentation, reporting, and deliverable production.

5.1.1 Reports and Deliverables

Reports and Deliverables will be produced in Microsoft Word: working drafts and editable working copies will be supplied to partners as Word documents. The Project Coordinator will make a final release version as a PDF file. This PDF version will also be made available to partners and will be regarded as the definitive version of the Report or Deliverable.

Reports and Deliverables should have a consistently styled cover sheet and structure, based on the template contained in this document (Annex II). The cover should contain:

- Title and ID of the project
- Logos of the project and of the H2020 Programme
- Title of the document
- Related Work package(s)
- Related task(s)
- Author(s)
- Dissemination level
- Due submission date
- Actual submission date
- Abstract

All pages should be numbered, and the document identification number should be included in the footer. They should also use the page layout (headers) suggested in the same Annex. Furthermore, they should abide to the following rules:

- Have a list of abbreviations used within the deliverable
- Have a table of contents
- Start with a one-page Executive Summary or Abstract
- Include a References section at the end of the document
- Include all technical details and other information in Annexes

The content of each deliverable report depends on the type of provided information. As a general principle, the responsibility for the content of each deliverable report is always with the author(s). Nevertheless, the reports should always meet a set of quality criteria, as described below:

A. <u>Completeness.</u> Information provided in the deliverable report must be reliable and must correspond with reality. This means that all background information used in the reports should be appropriately supported by references. Foreground information should be supplied in a clear fashion such that misinterpretation will be avoided.

B. <u>Accuracy.</u> Information used in the deliverable report should be focused on the key issues and be written in a fashion that takes into consideration the scope of the specific research work and its target audience.

C. <u>Relevance.</u> All information used should be provided to the depth needed for the purpose of the reports, according to the project and programme objectives.

D. <u>Appearance and structure.</u> Although deliverable reports will be authored by different partners, it is important that reports are prepared with uniform appearance and structure, such that they appear as originating from a single initiative. It is therefore necessary to observe the templates provided in the Annex II.

E. <u>Punctuality.</u> The report should be released on time.

5.1.2 Meeting Minutes and Agenda

All participants will be reminded of plenary meeting dates 30 days in advance. The meeting Chair will circulate an agenda not later than two weeks before the meeting. Agenda structure and appearance should be in accordance with template present in Annex III. All necessary working documents will be uploaded in the Intranet at least five working days in advance of the meeting date. The agenda of project meetings will consist at least of: (1) Presentation of the technical and financial situation of the project, (2) Management aspects, (3) Technical progress, (4) Problems and achievements, and (5) Standardization, Dissemination and Exploitation board aspects (if any).

Minutes will be circulated to the Partners no later than three weeks after the meeting. Minutes shall be deemed to be approved if no objection has been sent to the Coordinator within 7 days of the circulation of the minutes. Template of Minutes can be found in Annex IV.

5.2 Review procedure

CSIC has administrative responsibility for the transmission of all deliverables to the European Commission. Technical deliverables must be in final draft at least two weeks before the deadline, in order to undergo an internal review procedure from all the partners involved in the drafting process. The designated partners write a short report, according to the form shown in Annex V. At least one week before the deadline, all feedback provided by the internal peer reviewer and the rest of partners is forwarded to the author of the deliverable, who updates and completes it.

5.3 Repository

The quality records resulting from the review process are to be maintained by the Consortium and can be made available when necessary. All quality records are to be filed to allow easy retrieval. The records are retained for the time required under the Grant Agreement. An analysis of the records is carried out to indicate unsatisfactory trends so that corrective action can be taken. All records are kept in a suitable environment to minimize damage.

6 Performance indicators

To allow a proper monitoring of the activities, five operational objectives will quantify the degree of achievement of the EUROBENCH specific objectives, using means of verification (Milestones) and key performance indicators (KPI)

#	OPERATIONAL OBJECTIVES	Means of verification	KPIs
Op1	Definition of the EUROBENCH requirements and Key System Abilities involving stakeholders and end-users. Related specific objective: O1	Framework and FSTP defined (M-I)	Milestones achieved in time (KP1) At least 50 entities involved (KPI2)
Op2	Creating a methodological framework for humanoids and wearable robots integrated in a scalable software tool. Related specific objectives: O2, O3, O4	Benchmarking algorithms and scoring scale integrated in the Software (M-II) and validated (M-IV).	Milestones achieved in time (KP1) User evaluation score (see D6.6) > 7/10 points (KPI3)
Op3	Creating and making available two domain-specific experimental facilities, one for wearable robots and one for humanoids. Related specific objectives: O3, O4	Test Benches integrated in the facilities (M-III) and validated (M-IV)	Milestones achieved in time (KP1) 20+ test benches and/or methods successfully tested (KPI4) User evaluation score (see D7.12) > 7/10 points (KPI5)
Op4	Validating the ability of the EUROBENCH benchmarking framework to test wearable robots and humanoid platforms. Related specific objectives: O3, O4	FSTP actions completed and facilities and software successfully validated (M-IV)	Milestones achieved in time (KP1) 20+ bipedal robots successfully tested (KPI6) User evaluation score (see D7.12) > 7/10 points (KPI7)
Op5	Ensuring the exploitation and sustainability of the framework beyond the project duration Related specific objectives: O5	Sustainable business plan and commercialization agreements validated by stakeholders (M-V)	Milestones achieved in time (KP1) 40+ applicants to FSTP-2 (KPI 8) User evaluation score (see D7.12) > 7/10 points (KPI9)

- This preliminary KPIs shall be improved to cover all relevant aspects of each WP and to maximize the impacts of the project. In particular T2.5 (for the Methodological Framework) and T2.6 (for the Experimental Framework) will Provide (in D2.3) quantifiable metrics for evaluation of project outcomes.

- Specific assessments will be carried out regarding the impact of FSTP Actions (T7.9 and D7.10).

- Also, a set of indicators will be regularly checked and used to identify EUROBENCH's communication's strengths and weaknesses (D8.3).
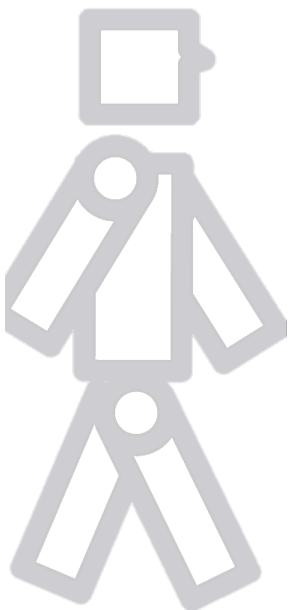
7 Annex I. Three-monthly report template

Three-monthly progress report

Clic here to select the date.

This document includes brief information about the technical progresses, results obtained (e.g. deliverables) and compliance with the work programme regarding WP1.

WP Tasks and objectives	Technical progress and results
Task X.1 Partners involved (in the reporting period):	[describe briefly the activites carried out and the preliminary results obtained]
Task X.2 Partners involved (in the reporting period):	
Task X.n Partners involved (in the reporting period):	

Deliverables
[indicate if any deliverable was released]

Short-term Action Plan

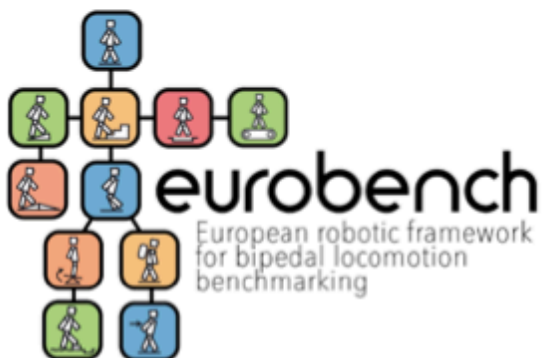[describe briefly the activites that will be perform during the next 3 months]

Deviations summary

☐ Temporal deviations: [describe very briefly the identified deviations]
☐ Technical deviations: [describe very briefly the identified deviations]

8 Annex II. Deliverable Template

Deliverable Title	DX.X Deliverable Title
Deliverable Lead:	Title of the lead organisation(s)
Related Work Package:	WP[Nº]: [WP Title]
Related Task(s):	Tx.x [Task Title]
Author(s):	Name of Author(s)
Dissemination Level:	Public / Confidential
Due Submission Date:	dd.mm.yyyy
Actual Submission:	dd.mm.yyyy
Project Number	779963
Instrument:	Research and Innovation Action
Start Date of Project:	01.01.2018
Duration:	48 months
Abstract	[Couple sentences to describe the objectives and key outcomes of the deliverable.]

This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 779963

17 **21**

9 Annex III. Agenda Template

TITLE OF THE
DOCUMENT
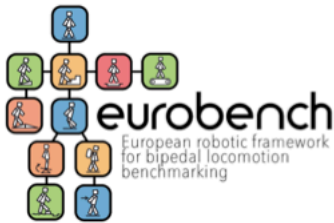
Clic here to select the date.

This project has received funding from the European Union's Horizon 2020
research and innovation program under grant agreement No 779963

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research and innovation program under grant agreement No 779963

18 **21**

10 Annex IV. Minutes Template

European robotic framework for bipedal locomotion benchmarking

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MEETING MINUTES

Version 1.0
17 January 2018

DOCUMENT HISTORY

HISTORY OF CHANGES		
Version	Date	Change
1.0	17.01.2018	Initial version

1. DATE:

2. LOCATION:

3. PARTICIPANTS:

4. AGENDA FOR THE MEETING (if applicable):

5. MEETING MINUTES AND CONCLUSIONS:

ANNEX: ATTACHED DOCUMENTS (list of documents used or produced during the meeting)

This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 779963

19 **21**

11 Annex V. Peer Review Report Template

Procedures used for peer review

The EUROBENCH Consortium uses a peer review process for its internal quality assurance for deliverables to assure consistency and high standard for documented project results. The Peer Review is processed individually by selected reviewers. The allocated time for the review is about two weeks. The author of the document has the final responsibility to collect the comments and suggestions from the Peer Reviewers and decide what changes to the document and actions are to be undertaken.

Overall Peer Review Result

Deliverable is:			
□ Fully accepted	□ Accepted with reservation	□ Rejected unless modified as suggested	□ Fully rejected

Comments of Peer Reviewers

One table for each reviewer

Comments of: [Reviewer name]			
Review result			
Deliverable should be:			
□ Fully accepted	□ Accepted with reservation	□ Rejected unless modified as suggested	□ Fully rejected
General comments			
Specific comments			
Criterium A: Completeness			

Reviewer comment:

Author response:

Criterium B: Accuracy

Reviewer comment:

Author response:

Criterium C: Relevance

Reviewer comment:

Author response:

Criterium D: Appearance & Structure

Reviewer comment:

Author response:

Criterium E: Punctuality

Reviewer comment:

Author response: