

D1.1: Quality, Risk and IPR Management

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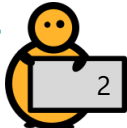
- University of Twente – Centre for Monitoring and Coaching (CMC)
- Roessingh Research and Development (RRD)
- Danish Board of Technology Foundation (DBT)
- Université Pierre et Marie Curie, Paris 6 (UPMC)
- University of Dundee (UDun)
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Abstract

This document contains all procedures on Quality Management, Risk Management and Intellectual Property Rights Management as used in the Council of Coaches project that are not otherwise specified in the Consortium Agreement.

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Symbols, abbreviations and acronyms

ATC	Acceptance and Commitment Therapy
BML	Broadcast Mark-up Language
CA	Consortium Agreement
CMC	Centre for Monitoring and Coaching
COUCH	Council of Coaches
D	Deliverable
DBT	Danish Board of Technology Foundation
DMP	Data Management Plan
EC	European Commission
EP	European Parliament
EU	European Union
HCI	Human Computer Interaction
IM	Innovation Manager
IP	Intellectual Property
IPR	Intellectual Property Rights
ISPRINT	Innovation Sprint
KPI	Key Performance Indicator
LGPL	GNU Lesser General Public License
M	Month
MA	Massachusetts
MIT	Massachusetts Institute of Technology
MfN	Mediatorsfederatie Nederland
MPL	Mozilla Public License
MS	Milestone
MT	Management Team
OA	Open Access
OWL	Web Ontology Language
PAE	Pain Alliance Europe
PhD	Doctor or Philosophy
PO	Project Officer
RDF	Resource Description Framework
ROAR	Registry of Open Access Repositories
RPN	Risk Priority Number

Council of Coaches

RRD	Roessingh Research and Development
SME	Small and Medium Enterprise
WP	Work Package
UDun	University of Dundee
UPMC	Université Pierre et Marie Curie, Paris 6
UPV	Universitat Politècnica de València
USA	United States of America
UT	University of Twente



1 Introduction

Quality, risk and Intellectual Property Rights (IPR) should be managed to a good standard. However, the researchers should not be burdened with unnecessary overhead and time-consuming procedures. Therefore, the Management of Quality, Risk and IPR should be effective and efficient.

In order to achieve this, the description of work contains a specific task: T1.4 Continuous Quality Control, Risk Identification and Mitigation Strategies. This task will monitor risks and quality throughout the project. Furthermore, IPR will be specifically addressed in Task 8.2 Exploitation and Business Planning.

This deliverable contains the guidelines concerning Quality Management in the third chapter, Risk Management in the fourth chapter, and in the fifth chapter the IPR Management will be discussed.

2 Objectives

As detailed in the Description of Work, the objective of this deliverable is:

The Deliverable D1.1 Quality, Risk and IPR management Procedures contains the main guidelines on the quality management/control procedures to be applied in the project, along with relevant risk management procedures and methodologies.



3 Quality Management

3.1 Documents

All deliverables will be written in the same template and will be going through the internal quality assurance process. All deliverables will be delivered and reviewed in Microsoft Word format using the provided template.

3.1.1 Collaboration

All documents will be available in a shared Dropbox folder, in order to ensure that all participants have access to the latest version. If participants want to cooperate on deliverables simultaneously, partners can choose to use e.g. an online Google document where participants can contribute to the deliverable at the same time. However, whenever the deliverable review process starts (see §3.1.3), documents should be transformed to the official Word document template.

Privacy sensitive data, such as patient- or user information will not be shared on public platforms like Dropbox or Google Drive. Shared document, such as deliverables, should always contain anonymized information if user related data needs to be reported.

Aside from Google Docs, all documents should be in a Microsoft Office Format (e.g. Word, Excel, PowerPoint etc.)

3.1.2 Version control

While in draft, all documents titles will follow the same format:

<Number> <Title> <Version> <Participant>.

Example: D1.1 Quality, Risk and IPR Management Procedures v0.1 JvL.

When finalized the document will change format to <Number><Title><Version>Final.

Version history will be kept within the document. All documents will start with version 0.1 and will increment to 0.2 only on the authority of the author. All other participants can edit the deliverable and the version will increment to the next available number behind the version number, e.g.: v0.1.1 Deliverables submitted to the European Commission (EC) for the first time will have version v1.0.

3.1.3 Reviews

All documents should be reviewed by one (1) internal reviewer before submission. The official internal reviewer will be appointed by the project management, and will be a member of an organization not directly involved with the writing of the deliverable. The deliverable reviewer will use the Review Sheet as explained below (§0).

The deliverable review procedure is outlined below (see also Figure 1).

- **T-10wd:** ten working days before the deadline – the main responsible author sends a complete draft document to the appointed reviewers (with CC to the Technical Manager). From this point only Word Documents will be used.
- **T-5wd:** five working days before the deadline – the reviewers send their comments and feedback to the deliverable's main author (with CC to the Technical Manager).
- **T-2wd:** two working days before the deadline – the author sends the corrected draft to the Reviewers, the Technical Manager and the Project Coordinator.
- **Last days:** In the last two days, the Project Coordinator and Technical Manager will check and approve the deliverable, where appropriate checking with the responsible author and reviewers, and submit the document to the EC.

In this procedure, we consider working days as all Mondays, Tuesdays, Wednesdays, Thursdays, and Fridays without any exception for holidays.

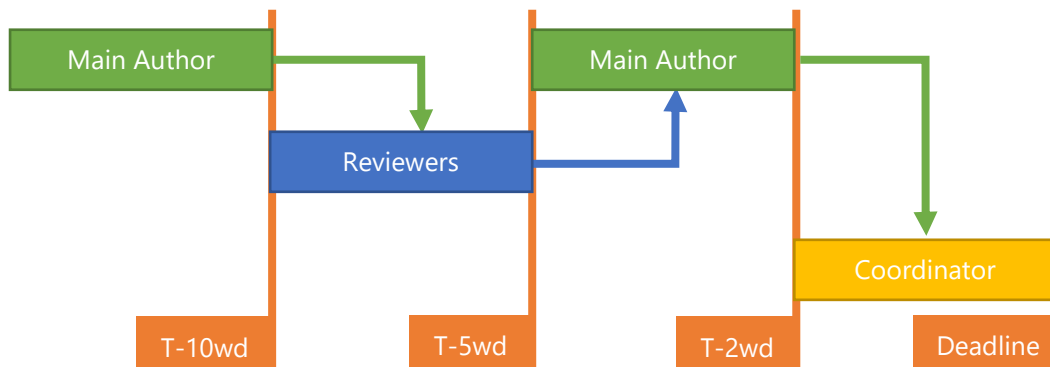


Figure 1: Deliverable review and submission procedure.

3.2 Review Sheet

A dedicated review template (Annex 1) will be provided to all reviewers in order to ensure the quality of the review process and thereby the quality of the deliverable.

A deliverable reviewer is required to fill in the checklist as well as provide his comments, changes and suggestions using Track Changes in the provided Word Document version of the deliverable.

3.3 Dissemination and external communication

An initial dissemination and communication plan will be delivered (D8.2, Month 2) for the first phase of the project. The plan will be updated in Month 12 and Month 24 to tailor the needs for Phase 2 and 3 in more detail.

External communication needs to be approved by all concerning partners before publication if the communication contains unpublished project results or describes activities of a partner that did not author the communication. This is to ensure no preliminary results will be made public and to ensure that the communication and dissemination activities are of sufficient quality. The detailed dissemination procedure will be described in section 5.5.1.

External communication should comply with the EU regulations on disclaimers and use of logo. Therefore, the following sentence and the EU logo should be added to communication and dissemination items where relevant.

"This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement #769553. This result only reflects the author's view and the EU is not responsible for any use that may be made of the information it contains."

3.4 Ethics

The project has dedicated an entire work package (WP2) on responsible innovations in order to ensure that all innovation within the project, including new tools and coaching methods, are aligned with societal values, are designed with the involvement of potential end-users, and meet all ethical considerations.

Ethical issues concerning patient testing and data storage of personal data will be specifically addressed in WP 9.

This Work Package has two deliverables that are due on M12. In D9.1 criteria for testing with human subjects will be specified. If required, official approval from Institutional Review Boards and medical ethical committees will be gathered. In D9.2 all matters concerning the safety and security of personal data and the data storage surrounding test subjects are specified. All EU and national regulations concerning privacy, data collection and human subject testing will be followed.

3.5 Standards

3.5.1 Templates

The project coordinator will provide the consortium with project templates for the following items:

- Deliverable reports
- PowerPoint presentation
- Posters
- Financial Statements
- Progress reports

Furthermore, the project coordinator will use standardized templates for:

- Meeting agenda's and minutes
- Management reports
- Change requests
- Review sheets

All templates will comply with EU regulations.

3.5.2 EU regulation

For all matters concerning patient testing and storage of personal data EU and national regulations will be followed.

All dissemination actions will have the EU disclaimer as specified in section 3.3.

3.5.3 Standards Contributions

The Council of Coaches project will make use of existing standards for the development of its platform, while at the same time selectively proposing and introducing extensions to standardization groups where the partners already participate. From the start of the project, and especially during the crucial design and specification phase, special attention will be given to the potential use of standards (e.g. RDF, OWL for ontologies, or BML, Emotion Mark-up Language for virtual agent's behaviour specification).

The process of standardization activities is addressed in WP8, specifically in T8.4: *Standardization Activities*, and all related activities will be reported in a series of three deliverables in M9, M18 and M36, specifically the initial, intermediate and final plan for standardisation and exploitation.

The guiding principles in the project's standardisation contribution strategy is that standards – especially open source – should be explored and used whenever adherence to the standard does not hinder or substantially delay the innovation process and thus threatens the project's ability to reach its objectives.

Specific attention will be given to the potential use of (parts of) the UniversAAL and FIWARE platforms and standards.

A note on contributions to standards, repeated here from the Grant Agreement:

If results are incorporated in a standard, the beneficiary concerned must — unless the Commission requests or agrees otherwise or unless it is impossible — ask the standardisation body to include the following statement in (information related to) the standard:

“Results incorporated in this standard received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 769553”.

3.6 External Advisory Board

As an additional instrument for ensuring that the project keeps focused on achieving its societal and economic impacts, an advisory board is created. The external advisory board consists of the following members:

Gert Jan van der Burg, MD (male) is a pediatrician and medical director of Gelderse Vallei Hospital in Ede, the Netherlands. He also works as an MfN-registered mediator and coach, in both the medical and social domains. He is a professional trainer in Motivational Interviewing and other communication techniques. In paediatrics, he focuses on self-management in paediatric diabetes and on eHealth applications to support this. He participates in the Horizon 2020 project PAL, in which the combination of a social robot, its (mobile) avatar, and an extendable set of mobile health applications support diabetic children.

Prof. JoAnna Dahl (female) presently holds the position of tenured professor in psychology at the University of Uppsala. She is also a licensed clinical psychologist with speciality in Cognitive Behaviour Therapy and Behaviour Analysis. JoAnna has worked on behavioural interventions for chronic asthma, pain, obesity and constipation. In over a decade, JoAnne has been doing clinical research using Acceptance and Commitment Therapy (ACT) for epilepsy, pain and obesity.

Lieke van Houtum, PhD (female) is a knowledge specialist at the Science and Innovation department of the Dutch Diabetes Research Foundation, an organization that aims to help the 1.2M Dutch citizens suffering from diabetes through providing public information and stimulating and assisting (inter)national research on diabetes. Lieke is an expert on supporting self-management in chronic care patients.

Joop van Griensven (male) is president of the Pain Alliance Europe (PAE) and is himself a chronic pain patient. The PAE is a pan-European umbrella organisation for national and regional patient organisations involved in chronic pain and currently has 34 member organisations from 17 different EU countries. The PAE has close connections with European patient organisations, healthcare professional organisations, European policymakers and the EC and European Parliament (EP).

Prof. Monika Hasenbring (female) is Professor of Medical Psychology and Head of the Dept. of Medical Psychology and Sociology at the Ruhr-University of Bochum, Germany. Her main research interests are in the fields of psychobiological pain research. She conducted a series of prospective longitudinal studies identifying clinical and psychological risk factors for the development of chronic pain, disability and work loss in subacute sciatic pain and non-specific low back pain. Monika is member of the committee developing the National Guidelines of Diagnostics and Treatment of Back Pain (NVL Back Pain).

Prof. Timothy Bickmore (male) is a professor in the College of Computer & Information Science of Northeastern University of Boston MA, USA with a background in computer science and a PhD in Media Arts & Sciences obtained from MIT. Bickmore has become a well-known author in the field of Relational Agents – computer agents designed to build and maintain long-term, social-emotional relationships with people. In recent work, Bickmore focuses on the application of Embodied Conversational Agents in healthcare and the behaviour change domain.

Prof. Annalu Waller (female) is Chair of Human Communication Technologies, set up the User Centre in Computer, runs the Augmentative and Alternate Communication (AAC) Research Group and has a history of working in technology and diabetes. Her most cited paper is: Patients' Engagement with "Sweet Talk: A Text Messaging Support System for Young People with Diabetes. Franklin, V. L., Greene, A., Waller, A., Greene, S. A. & Pagliari, C. 2008 In: Journal of Medical Internet Research. 10, 2, 10 p., e20

Dr. Riex op den Akker (male) is a retired associate professor and researcher in the field of Human-Computer Interaction with years of experience in the fields of natural language interaction, human-machine interaction, and virtual agents. Riex has many years of experience in the field of HCI for eHealth. Riex has served on the University of Twente's faculty of Electrical Engineering, Mathematics and Computer Science's ethical board.

The coordinator will invite the board members to provide their input on the progress of the project specifically at key moments during the design and delivery of project's results. These key moments correspond with the project's defined key intermediate milestones (MS) related to design and the release of prototypes, repeated here for convenience:

#	Milestone title	Due Date
MS1	Initial design and requirements	M6
MS2	First functional prototype	M9
MS3	Second functional prototype	M15
MS4	Third functional prototype	M21
MS5	Technical prototype	M27

Table 1: Key moments for requesting input from the External Advisory Board.

3.7 Change control

In case a partner wants to make significant changes to the proposed work, they can submit a change control request. A template will be made available for this on Dropbox. Once the request is handed in, a change control board, preferably the Management Team (MT), but in cases of substantial changes the General Assembly, will decide on the proposed change. In case of substantial changes, the change should be discussed with the Project Officer (PO) and an amendment on the Description of Action should be submitted to the EC.

Smaller changes will be addressed within the MT meetings.

4 Risk Management

Risk management is the systematic process of identifying, analysing, and responding to project risk.

It includes maximizing the probability and consequences of positive events and minimizing the probability and consequences of adverse events to project objectives.

It includes: (a) Risk management planning, (b) Risk assessment, (e) Risk response planning, (f) Risk monitoring and control.

4.1 Risk management plans/planning

The coordinator is responsible for the risk management plan. The risk management plan consists of a risk inventory and risk contingency plans for bigger risks. The inventory will be available at the start of the project and it will be updated after every MT meeting, or in case of unexpected consequences, immediately. The risk contingency plans will be reviewed annually or in case of emergency, immediately. The risk management plan will be discussed in every progress report. No contingency budget is available. In case of risk occurring with a big impact it might be necessary to redistribute the budget, in order to be able to mitigate the consequences. These decisions will be proposed by the Management Team and be taken by the General Assembly.

4.2 Risk Assessment

A Risk Assessment consists of the identification of the possible risks and the analysis of the impact of the potential risk. The Management Team is responsible for the continuing identification of risks throughout the project and how to deal with the risks and its consequences.

A risk inventory will be kept in the project management folder at all times. This inventory will be discussed at every MT meeting.

The risk inventory will contain:

- 1) The risk
- 2) The likelihood of happening
- 3) The impact when happening
- 4) The Risk Priority Number (RPN)
- 5) The person/partner responsible
- 6) First mitigation measures
- 7) Specified contingency plans for Risk with a RPN higher than 14.

4.2.1 Risk Identification

The Risk identification is the identification of possible obstacles that could endanger the correct implementation of the project. This has to be performed throughout the life-cycle of the project. It is important that awareness is created on risk identification. If risks are not identified in a timely manner, mitigation measures might not be sufficient or will be taken too late.

In order to create awareness in the project, risk identification strategies have been identified:

- Every MT meeting the WP leaders will discuss the existing and possible new risks.
- Furthermore, every annual consortium meeting will have a brainstorm session where all participants can contribute to identifying risks and response strategies.
- All participants can bring up risks to the WP leader and/or the coordinator. This risk will then be discussed in the next MT meeting.

Categories for potential risks are:

- Technical
- Financial
- Schedule
- Staffing
- Contractual
- Data management
- Ethics

4.2.2 Risk Analysis

All risks will be analysed both on impact and likelihood.

For each risk the responsible WP leader will identify:

- 1) The likelihood of the risk occurring (P)
 - 1 very unlikely
 - 2 unlikely
 - 3 not likely but not unlikely
 - 4 likely
 - 5 very likely
- 2) the impact the risk might have (I)
 - 1 very low
 - 2 low
 - 3 not low, not high
 - 4 high
 - 5 very high

When combined ($P \times I$) a risk priority number (RPN) can be calculated and classified as low, medium or high priority (see Figure 2 below).

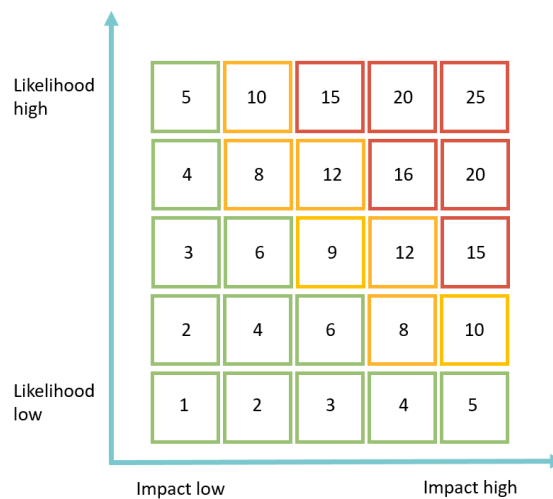


Figure 2: Risk Priority Matrix

4.3 Risk response planning

There are four ways to deal with risks:

- Avoid: try to avoid the risk from happening all together;
- Mitigate: take action so the risk will do as little damage as possible;
- Transfer: externalise the risk at some cost;
- Accept: if none of these measures are feasible, accepting the risk remains the only option.

For all risks with a RPN higher than 14 a risk response plan will be written. A risk response plan describes in detail if the risk will be avoided, mitigated, transferred or accepted and what measures will be taken to carry out the action. The person responsible will be identified, depending on the risk, this should be either a WP leader, the coordinator or a member of the General Assembly. Furthermore, in case of the risk occurring, a process will be described how to handle the risk and its impact, and a communication strategy will be put into place, so all participants will know how to act.

For all risks with a RPN between 7 and 14, the risk will be described in the risk inventory if the risk will be avoided, mitigated, transferred or accepted with enough detail to be able to be carried out in case of happening. Furthermore, a partner responsible will be identified, depending on the risk a WP leader or the coordinator.

For all risk with a RPN lower than 7 a responsible partner will be identified, preferably a WP leader, who will be in charge of strategy in case the risk occurs.

A special category will be taken into account, which is the very low likelihood but extremely high impact. This might be the case where certain actions might threaten the existence of companies for example. These risks will be identified beforehand and a risk owner will be identified, this will be someone from the General Assembly. Mitigation measures will be described. When the risks occur out of the blue, a risk task force will be put into place in order to mitigate the consequences.

Concerning mitigation measures, risk avoidance, risk sharing, risk reduction and risk transfer will be taken into account when considering options.

4.4 Risk monitoring and control

Identified risks and new risks will actively be monitored by the WP leaders and reported regularly to the Management team. Each MT meeting the Risk inventory will be discussed and updated.

Risk control will be executed by means of the risk response plans and ownership of all risks. In case risks are foreseen to have great impact on schedule, costs, technology, or society, the PO will be informed about the risks and the countermeasures.

The following table lists the project risks, their probabilities, as well as proposed mitigation strategies.

Description	Likelihood (1-5)	Impact (1-5)	RPN	Avoid, Mitigate, Transfer, Accept	Mitigation Plan	Responsible
Partners are not reacting as expected, lack of communication.	3	4	12	Mitigate	Organize plenary or bilateral physical meetings / General Assembly and Execute a conflict resolution plan. Alternatively take necessary actions based on CA.	CMC
Delay in consolidating technical specifications	3	3	9	Mitigate	Organize plenary meetings and perform in-depth monitoring of daily activities. Delivery of specs in iterations; aligned with the needs of WPs.	CMC, UPV
Integration Complexity	4	3	12	Mitigate	Establishment of a modular technical architecture; Frequent integration; Adoption of an agile methodology boosting continuous integration.	UPV
Problems with background technologies	2	3	6	Mitigate	Propose alternative solutions.	UDun, UPMC, RRD, CMC
Localization complexity of the product	1	3	3	Mitigate/ Transfer	Use of internationalization best practices; Employment of experts from the target countries/languages.	UPV, RRD
Poor engagement of patients in the Demonstrator processes	3	3	9	Mitigate	Early mobilization of users as part of the Demonstrator preparations in WP7; Extending reach of networks in responsible countries	DBT
The analysis of trial results do not match expectations	3	4	12	Mitigate	Identify the “weak” points and pivot, allowing the project to achieve a higher impact, with minor modifications.	CMC
Unforeseen technical or integration issues, which may be discovered during the pilot trials.	3	4	12	Mitigate	Agile approach throughout the whole implementation and integration process.	UPV
Ethical/Privacy Issues hinder the large scale validation of the project’s results (e.g., due to volunteers recruitment problems)	2	4	8	Avoid	The project has early on specified processes for obtaining participants consent and ensuring the anonymization and secure storage of personal data, both in the scope of the data collection for training algorithms and in the scope of learners’ participation in trials. These processes are outlined in Section 4 of this proposal.	DBT, RRD

Table 2: Initial risks and mitigation strategies.

5 IPR

Intellectual Property Rights management has become increasingly important in European Projects. IPR should be an integral part of overall project management and enables partners to:

- Disclose knowledge and ideas safely;
- Prove ownership;
- Profit from commercial exploitation;
- Prevent or discourage its unauthorised use by others (The European IPR Helpdesk, 2017).

5.1 IPR in the Consortium Agreement

The consortium will agree upon and sign a Consortium Agreement in order to legally establish the framework for IPR and cooperation within COUCH.

The CA deals with: 1) Protection of individual partners pre-existing know-how. 2) Protection of IPR gained in the project. 3) Definition of the exploitation strategy (patents, licensing etc.). 4) A contingency plan that ensures the access to foreground if a partner (with project-critical IPR) leaves the consortium 5) Settlement of Disputes.

5.2 How will background and results be organised and managed

5.2.1 Foreground management

The Innovation Manager will be responsible for the day-to-day Foreground Management and will be assisted by a group of technical experts, appointed by the partners (one per partner) and one legal expert.

This group will be responsible for updating the Foreground Management Plan, the Plans for use of Knowledge and the IPR strategy of the consortium. At the end of the project, the Innovation Manager will present the Final exploitation Plan to the General Assembly and the MT.

All guidelines concerning Innovation Management will be completed at M6 in D1.3 Innovation Management Guidelines.

5.2.2 IPR management

As mentioned in the project plan COUCH will produce foreground knowledge, including both open source (royalty free) and proprietary components. Relevant discoveries will be patented, for the use of COUCH partners, and relevant licensees and spin-offs will be transferred, so that both established companies and emerging companies can benefit from the COUCH research.

Work Package 8 will perform the monitoring of the COUCH IPR activities and IPR work, and based on this create and maintain the IPR Management List. IPR Management includes keeping track of background, and foreground technology, but also the use of external libraries, platforms or materials. The use of a detailed IPR Registry can help in the process of defining exploitation strategies as potential licensing or IPR conflicts can be detected immediately. The strategy for keeping track of IPR through the use of a project-specific IPR registry will be detailed in the Innovation Management Guidelines (D1.3). The assessment of Intellectual Property Rights furthermore involves mapping the IPRs in view of the COUCH deliverables (as a basis for providing stronger and more practical IPR agreements for these specific IPRs when needed).

The IPR policies of the targeted standardisation bodies and fora will also be considered in this context.

5.2.3 Data management

COUCH aims to improve and maximise access to and re-use of scientific data generated by the project. The project has a specific deliverable D1.2 "Data Management Plan" (M6) that will identify the best practices and specific standards for the generated data and assess their suitability for sharing and reuse in accordance with official guidelines. This deliverable will be updated during the project at mid-term and at the final review of the project.

The Data Management Plan (DMP) will include:

- (i) Data Types, Formats, Standards and Capture Methods;
- (ii) Ethics and Intellectual Property,
- (iii) Access, Data Sharing and Reuse;
- (iv) Resourcing;
- (v) Deposit and Long-Term Preservation, and
- (vi) Short-Term Storage and Data Management.

Moreover, the plan will describe quality-evaluating tools/procedures, which will prove the data intelligibility, and will define the type of accompanying information in the form of metadata or short description.

Means to measure and Key Performance Indicators (KPI's) of the first evaluation of Data Management Plan:

- At least 5 open data management packages uploaded
- At least 5 repositories, where open data management packages are uploaded
- At least 50 downloads
- At least 20 comments / questions received on the data packages

5.3 How will (joint) ownership be treated

Foreground IP shall be owned by the project partner carrying out the work leading to such Foreground IP. In Horizon 2020, results are jointly owned if:

- i. they have been jointly generated by two or more participants and
- ii. it is not possible to:
 - a. establish the respective contribution of each beneficiary, or
 - b. separate them for the purpose of applying for, obtaining or maintaining their protection. Ownership and transfer of ownership of results (The European IPR helpdesk, 2015).

The same shall apply if, in the course of carrying out work on the project, an invention is made having two or more contributing parties contributing to it, and it is not possible to separate the individual contributions.

Any details concerning the exposure to jointly owned Foreground IP, joint inventions and joint patent applications, exclusive license to third parties and transfer of knowledge will be addressed in the CA.

5.4 How will results be protected

Results that are of promise for potential for commercial and industrial exploitation should be protected. In case a partner does not want to protect results that are capable of industrial or commercial application, the partner is obliged to notify the EC up to four years after the end of the project and be careful not to perform any dissemination activity before this notification (The European IPR Helpdesk, 2017).

5.4.1 Access Rights to Background and Foreground IP during the project

Any details concerning the access rights to Background and Foreground IP for the duration of the project will be defined in the CA. Access to background can be requested in writing to a partner.

5.4.2 Patents

If patents are applied for the partner will inform the consortium at first coming the MT meeting. If applicable, the partner will disclose:

- Type
- Whether or not the application is confidential
- Application title
- A possible embargo end date.
- And application code
- IPR common data

5.5 How will results be made available and disseminated to the public

With regard to dissemination we distinguish between two types of dissemination actions: *dissemination of results*, and *publicity*. Dissemination of results covers e.g. scientific publications, making available data sets or the dissemination of outcomes, algorithms or software. Publicity covers any interactions with e.g. the press, or social media channels. The dissemination procedure is governed by the following principles:

- In general, all partners are encouraged to maximize dissemination of the project through these two types of actions.
- In case of *dissemination of results*, an official procedure is in place that allows partners to review the dissemination action and possibly object to its publication (see §5.5.1).
- In case of *publicity*, partners are free to disseminate information that relates to their own organisation or the project in general, where no reasonable objections can be made by other partners.
- All dissemination actions (results and publicity) should be reported to the project management.

5.5.1 Dissemination of results procedure

Before partners start a dissemination of results action, all partners should have the opportunity to review the dissemination action, in order to prevent premature dissemination of results. The disseminating partner will send the action to be reviewed at least 28 days before the publishing date to all WP leaders and the coordinator. All partners will then have 14 days to review. Objections should be made in writing to the coordinator and the disseminating partner with concrete proposals for changes. If a partner stays silent, it is assumed they have no objections to publication. The partner will send the final version of the action to all partners for a final approval. Again, if partners stay silent, it's assumed they approve of the publication.

As stated in the Consortium Agreement:

An objection is justified if

- (a) the protection of the objecting Party's Results or Background would be adversely affected
- (b) the objecting Party's legitimate interests in relation to the Results or Background would be significantly harmed.

5.5.2 Open Source and Standards

Some of the project partners may be either using Open Source code in their deliverables or contributing their deliverables to the Open Source communities. Alternatively, some of the partners may be

contributing to Standards, be they open standards or other. Details concerning open source code use and standard contributions will be addressed in the Consortium Agreement.

The partners commit to the selection of a business friendly license (such as MPL and LGPL) for the open source results of the project in order to make it possible for third-party European enterprises (i.e. enterprises outside the consortium, including SMEs) to benefit from the project's results.

5.5.3 Open Access publishing.

The project has not opted out of the Open Access (OA) publishing requirements made by the EU. Therefore all publications should be published through Open Access publishing.

COUCH researchers will be given the freedom to choose any of the two main open access publishing modalities:

- A. *Gold OA* in either full or hybrid open access journals. COUCH will allow partners to opt either for gratis or for libre open access and
- B. *Green OA* through self-archiving journal articles in OA repositories.

Researchers will be offered with the option of publishing in journals contained/registered in the Registry of Open Access Repositories (ROAR).

All publications should be registered within six months of publication.

In case the results should be kept confidential for a longer period, this can be requested by the WP leader and will be discussed in the MT meeting. Clear reasons should be given why the publication will be kept confidential for a longer period, and it should be specified how much longer the confidentiality should be put in place.

All papers fall under the dissemination procedure as mentioned in section 5.5.1. Furthermore the authors must provide the coordinator with the following information per paper:

- DOI
- Type of publication
- Repository Link
- Link to publication
- Title
- Authors
- Title of the Journal/Proceedings/Books series/Book (for book chapters)
- Number, date or frequency of the Journal/Proceedings/Book
- Relevant Pages
- ISBN
- Publisher
- Place of publication
- Year of publication
- Availability in Open Access (Gold, green, none)
- Peer reviewed publication (yes/no)
- Joint public/private publication (yes/no)

The Project Coordinator will keep an overview of all papers submitted and published.

5.6 How will results be exploited

Special care will be taken to avoid obstructions to the exploitation of results. Partners, who own the rights of specific foreground developed in the project, are encouraged to exploit these results, licensing the results or at least transfer the rights in exchange for an appropriate compensation to partners willing to exploit the rights.

Exploitation of the COUCH results will start as soon as possible. For this to happen, each partner will present their own exploitation plan. This will contain: A list of exploitable assets along with the exploitation modalities that each partner will employ in order to benefit from these assets. In case of specific exploitable assets a partner will set up a business plan, including market analysis and financial analysis.

Furthermore an overall exploitation plan will be created in WP8 at M9. These plans will be updated regularly at M18 and M36. The final plan will take into account that measures to exploit results should be still in place up to four years after the project has ended. These are:

- Confidentiality obligations
- Provisions concerning the transfer of results
- Obligations to protect results capable of commercial exploitation
- Notifications to the EC, when deciding to stop protection or not to seek extension
- Right of participants to request access rights

COUCH commits to share the generated data itself (the developed tools / frameworks will follow the exploitation plans of each partner) and will make the identified datasets for sharing discoverable, accessible, assessable and intelligible, useable and interoperable to specific quality standards. Data assets will be classified and strategies for handling these data will be outlined including legitimate use, ensuring open access by adopting the adequate licensing scheme (e.g. Creative Commons License).

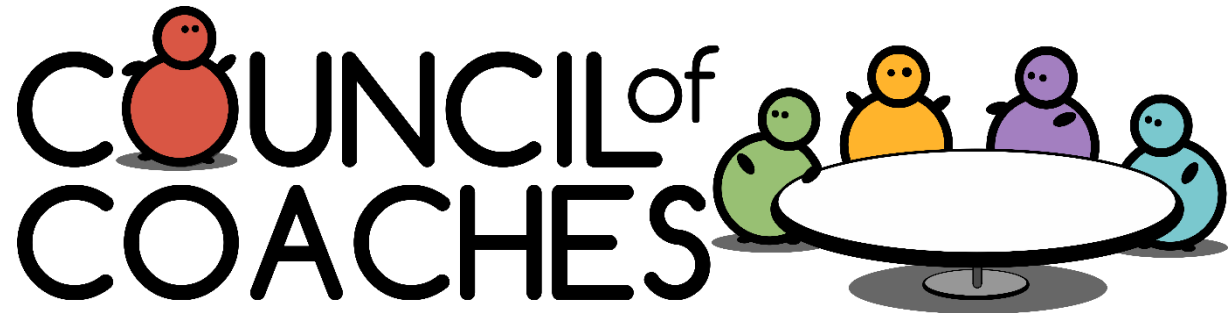
An exploitation agreement will be set up, in order to regulate IP shares.

6 Bibliography

The European IPR helpdesk. (2015, July 1). *Fact sheet: How to manage IP in Horizon 2020: project implementation and conclusion.pdf*. Retrieved August 8, 2017, from www.iprhelpdesk.eu: <https://www.iprhelpdesk.eu/sites/default/files/newsdocuments/Fact-Sheet-IP-Management-H2020-Project-Implementation-and-Conclusion.pdf>

The European IPR Helpdesk. (2017, August 7). *Horizon 2020 - A guide to IP Management*. Retrieved from www.iprhelpdesk.eu: https://www.iprhelpdesk.eu/sites/default/files/documents/EU_IPR_IP-Guide.pdf

7 Annex 1: Review Template



Review Template

Deliverable title:

Version:

Review Date:

Reviewer:

Introduction

All reviewers who are assigned to review a deliverable should fill out this review template. This template contains a general impression section, where the general impression and general improvements can be addressed. Furthermore, a checklist is provided in order to ensure the quality of the deliverable.

In case of specific remarks that take more explanation, please use the Further Comments box. Provide details on which section of the documents you're commenting on in the form of headers, page numbers etc. Put in suggestions for improvements.

All remarks and suggestions on spelling, grammar and other textual changes should be addressed in the Word Document of the deliverable with Track Changes. When submitting your edited deliverable, please pay attention to the file name (versioning) before returning the document.

For example, Albert Uther is the author of v0.8.0 of the deliverable, submitted for review:

D1.1 Quality, Risk and IPR Management Procedures v0.8.0 AU

The reviewer, Richard Eviewer, should after the review, change the document name to:

D1.1 Quality, Risk and IPR Management Procedures v0.8.1 RE

General Impression

General impression of deliverable:

General improvements:

Checklist

Section	Item	Y	N	Comments/Changes
Basics	The title page includes all required information from the Deliverable Template.	<input type="checkbox"/>	<input type="checkbox"/>	
	There is a table of contents, table of figures and table of tables reflecting correct page numbers and section names.	<input type="checkbox"/>	<input type="checkbox"/>	
	The document contains a "Symbols, abbreviations and acronyms" section, which is complete and accurate.	<input type="checkbox"/>	<input type="checkbox"/>	
	The document contains an "Introduction" section (§1), explaining clearly the scope and context of the deliverable.	<input type="checkbox"/>	<input type="checkbox"/>	
	The document contains an "Objective" section (§2), explaining clearly the purpose and structure of the deliverable.	<input type="checkbox"/>	<input type="checkbox"/>	
Content	Deviations from the description of work are sufficiently explained.	<input type="checkbox"/>	<input type="checkbox"/>	
	The outlook to future works follows from the research as described in the deliverable.	<input type="checkbox"/>	<input type="checkbox"/>	
	All figures and tables contain information that are described in the corresponding text.	<input type="checkbox"/>	<input type="checkbox"/>	
	All figures and tables are labelled accurately and consistently (numbering and clear captions).	<input type="checkbox"/>	<input type="checkbox"/>	
Copy Review	Abbreviations, product names and terminology are used consistently (e.g., proper nouns capitalized).	<input type="checkbox"/>	<input type="checkbox"/>	
	Acronyms are spelled out completely in the first instance.	<input type="checkbox"/>	<input type="checkbox"/>	
	All hyperlinks and references have been tested and work.	<input type="checkbox"/>	<input type="checkbox"/>	
	Spelling and grammar check are complete.	<input type="checkbox"/>	<input type="checkbox"/>	
Style	Footer contains the correct deliverable name and page numbers.	<input type="checkbox"/>	<input type="checkbox"/>	
	All Headings, Body Text, Tables and Captions are styled in accordance with the Deliverable Template.	<input type="checkbox"/>	<input type="checkbox"/>	

Further Comments

