

## D1.3: Innovation Management Guidelines

**Dissemination level:** Public

**Document type:** Report

**Version:** 1.0.1

**Date:** February 28, 2018 (original)

March 5, 2019 (this version)



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.

## Document Details

<b>Project Number</b>	769553
<b>Project Title</b>	Council of Coaches
<b>Title of deliverable</b>	Innovation Management Guidelines
<b>Due date of deliverable</b>	February 28 <sup>th</sup> , 2018
<b>Work Package</b>	1
<b>Author(s)</b>	Sofoklis Kyriazakos (iSPRINT)
<b>Reviewer(s)</b>	Harm op den Akker (RRD), Jorien van Loon (CMC)
<b>Approved by:</b>	Coordinator
<b>Dissemination level</b>	Public
<b>Document type</b>	Report
<b>Total number of pages</b>	15

## Partners

- University of Twente – Centre for Monitoring and Coaching (CMC)
- Roessingh Research and Development (RRD)
- Danish Board of Technology Foundation (DBT)
- Sorbonne University (SU)
- University of Dundee (UDun)
- Universitat Politècnica de València, Grupa SABIEN (UPV)
- Innovation Sprint (iSPRINT)

## Abstract

This deliverable presents the Innovation Management Strategy and plans for the COUCH project. The document presents the purpose of Innovation Management, and elaborates on the strategy and plans within the project framework. As the deliverable focuses on the guidelines of Innovation Management, a reporting table will be used to monitor the process; thus keeping the document alive with bi-monthly updates.

## Corrections

- v1.0.1
  - Correctly applied EU logo on header page.
  - Changed UPMC to Sorbonne University (SU).
  - Updated list of abbreviations.
  - Minor layout fixes.



## Table of Contents

1	Introduction .....	7
2	Objectives .....	8
3	Purpose of Innovation Management .....	9
4	Innovation Management Strategy .....	10
4.1	Innovation Potentials in the COUCH Project .....	10
4.2	Foreground Management .....	10
5	Organisation of Innovation Management .....	11
5.1	Innovation Management Team .....	11
5.2	Process Definition .....	11
5.3	Planning and Monitoring the Progress .....	12
6	Practical Summary .....	13
	Annex I – Innovation Management Table .....	14

## List of figures

Figure 1: Innovation Management Process (CEN/TS 16555-1:2013). .....	9
--	---

## List of tables

Table 1: Innovation Management Table in COUCH. ....	12
---	----



## Symbols, abbreviations and acronyms

AAL	Active Assisted Living
CEN/TS	European Committee for Standardization / Technical Specification
CMC	Centre for Monitoring and Coaching
COUCH	Council of Coaches
D	Deliverable
DBT	Danish Board of Technology Foundation
EC	European Commission
GA	Grant Agreement
IMT	Innovation Management Team
IPR	Intellectual Property Rights
ISPRINT	Innovation Sprint
KPI	Key Performance Indicators
M	Month
MS	Milestone
MT	Management Team
R&D	Research and Development
RRD	Roessingh Research and Development
SU	Sorbonne University
SWOT	Strengths Weaknesses Opportunities Threats
UDun	University of Dundee
UPV	Universitat Politècnica de València
USP	Unique Selling Proposition
UT	University of Twente
WP	Work Package

# 1 Introduction

This deliverable presents the Innovation and IPR management strategy and plans for the Council of Coaches project. The document presents initially the purpose of Innovation management, elaborates on the strategy and plans within the project framework. Under this scope, the Innovation Potentials of the project are presented. Furthermore, the document describes the Innovation Management Team. The relevant organisational processes are defined as well as planning and how to monitor the progress. Finally, the document provides a working table for the Innovation Management. In the Annex the templates that will be used throughout the process are included.

## 2 Objectives

The purpose of the deliverable is to provide the framework of operation of the Innovation Management activity. This activity is linked with the Project Management, as described in deliverable D1.1.

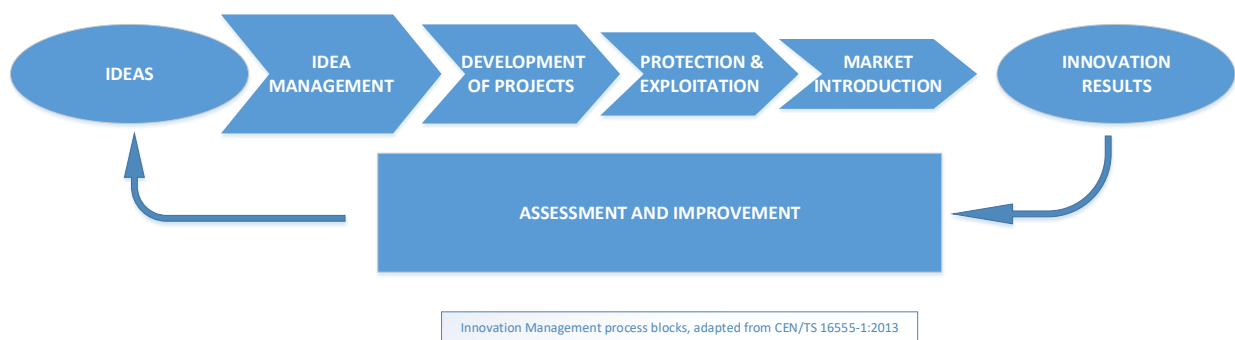
In addition, Innovation Management is bridging the exploitation activity efforts of WP8, by facilitating and keeping track of the evolution of innovation potentials into solid exploitable ideas, components, or products.

This document describes the purpose of Innovation Management, lay out the details – and finally provide a practical summary of the process to follow in the course of the project.

### 3 Purpose of Innovation Management

Innovation Management in the Council of Coaches project aims to monitor and control the process of creating novel outcomes with strong impact. These will be the output of the project, such as new ideas, algorithms, concepts, methods, products, services, or applications that can be exploited through an effective monitoring and controlling processes. In Council of Coaches we are defining a strategy that will address the ownership of foreground project outcomes and will enable the exploitation by the consortium and/or the future use by third parties, e.g. in the case of an open-source release for any of the projects' developments.

The Council of Coaches Innovation Management activities will reduce the gap between project results and targeted market, in order to reduce the time to that market and ensure an earlier adoption of project outcomes. The Council of Coaches Innovation Management plan will be based on procedures inspired on the European standard for innovation management, **CEN/TS 16555-1**, an innovation management system supported by interfaces and interactions between scientific and technological knowledge, knowledge about the organization and the market, as well as society as a whole.



**Figure 1: Innovation Management Process (CEN/TS 16555-1:2013).**

Based on this standard, innovation management activities will be based on the following three pillars:

- **Interface management**, which will continuously analyse the science, technology, and business actors in order to spot new knowledge crucial for the project and will create awareness for the Council of Coaches results;
- **Idea Management**, which will make management tools available to capture new ideas, intellectual property requirements, communicate the surveillance activities' captured information and to design business models for each of the project's results;
- **R&D Portfolio and Project management**, which will be aligned to the management tasks of the project (WP1) and the research and innovation assets portfolio management (within Exploitation & Marketing of the work plan).

These innovation management procedures will reinforce and guarantee that:

1. The expected results are aligned to market needs, including needs of Healthcare providers and (Active Assisted Living) AAL solutions;
2. The results will be disseminated and will reach their target groups;
3. The potential exploitation outcomes have a Unique Selling Proposition (USP) compared to the competition.

There is a clear business exploitation strategy for the Council of Coaches solution. The consortium will assign and document responsibilities for all these activities.

## 4 Innovation Management Strategy

The innovation management strategy focuses on how foreground innovation potentials of the project will be discovered and linked with the exploitation activity.

### 4.1 Innovation Potentials in the COUCH Project

The technological and scientific innovation potential in the Council of Coaches project, has been identified through a number of key research and technology innovations. These Key Innovations Potential Areas are likely to be extended in the course of the project as new ideas, components, algorithms, or other insights that might emerge.

The following Key Innovations Potential Areas have been described:

1. **Combining established behaviour change theories and state of the art persuasive system design models** – that have shown their effectiveness in one-to-one feedback and coaching – into a model of coaching suitable for the Council setting of multiple expert coaches providing a discussion and arguments in order to inform, challenge and motivate the user.
2. An extensive theoretical **model of tailoring Human Computer Interaction** in the physical activity domain will be extended, applied to, and evaluated in the domains of cognitive, mental, social, and health related coaching.
3. The project will **develop an Open Agent Platform in which autonomous virtual agents can interact with each other and with a user in group-based coaching sessions**. This innovation represents the core concept of the project and will push the state of the art both in terms of group-based interactions for virtual embodied agents as well as in real-time multi-party dialogue systems.
4. **Traditional sensing methods will be extended beyond the state of the art by providing fusion with data obtained through real-time interactions with the virtual coaches** (in verbal and non-verbal behaviour) and applying advanced machine learning and data mining techniques to detect and quantify relevant changes in user's behaviour.
5. **The project emphasizes Responsible Research and Innovation and all of its aspects including user involvement** (anchored in the work package on Responsible Research and Participatory Design) and will adopt innovative evaluation tools such as the modified DeChant framework and a Micro-Randomized Trial to demonstrate the effectiveness of the council's recommendations in terms of understanding, engagement, follow-up and outcomes.

### 4.2 Foreground Management

In Deliverable D1.1 (Quality, Risk and IPR management) the foreground management and the link with the Innovation Management have been described. 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 project's management team.

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. The innovation manager together with the experts will be tasked with facilitating the exploitation by monitoring the progress of the innovation potentials and to take measurable actions together with the Innovation Management Team (IMT) (See chapter 5.1).

## 5 Organisation of Innovation Management

### 5.1 Innovation Management Team

Innovation management will be handled through an Innovation Management Team.

The IMT will be coordinated by the Innovation Manager and carried out day to day by exploitation managers identified from within each beneficiary organization. Exploitation managers are responsible for capturing any relevant ideas created during their project work, prioritizing and developing these to a point where the team can present them to the GA for a decision about (i) inclusion within existing WPs and (ii) any associated changes to the delivery plan. The innovation management activities will be carried out in the scope of WP1 (Task 1.5).

The IMT will manage the Innovation Management table (see Annex 1) and will call bi-monthly meetings (virtual or physical) to enrich and update the list. In addition, team will create action points to ensure the reaching of each milestone.

An innovation management team has already been established. The overview includes the main contact person for each partner organization:

- **University of Twente – Centre for Monitoring and Coaching (CMC):** Hermie Hermens
- **Roessingh Research and Development (RRD):** Harm op den Akker
- **Danish Board of Technology Foundation (DBT):** Rasmus Øjvind Nielsen
- **Université Pierre et Marie Curie, Paris 6 (UPMC):** Catherine Pelachaud
- **University of Dundee (UDun):** Alison Pease
- **Universitat Politècnica de València, Grupa SABIEN (UPV):** Álvaro Fides
- **Innovation Sprint (iSPRINT):** Sofoklis Kyriazakos (Innovation Manager)

### 5.2 Process Definition

To ensure that relevant external or internal opportunities are identified and responded to, all consortium members will contribute to exploitation meetings (in coincidence with ordinary GA meetings) with a horizon scanning report detailing any such opportunities or relevant insights. The resulting horizon scanning capability will be important in informing development decisions throughout the project.

To ensure appropriate levels of rigor in technical and commercial feasibility assessment, and risk management, checkpoints are put in place. These checkpoints will be called Gates. The Partners' Exploitation Managers will propose targeted activities and will act as champions at these gates. The ideas and concepts, scientific and technological developments, proof of concepts, and demos are then challenged by the Technical Manager.

Where relevant, championed ideas and concepts will be tested against the Council of Coaches Advisory Board in order to gauge the relevant to the project's primary target end-users.

### 5.3 Planning and Monitoring the Progress

To support connection to market stakeholders, an Innovation Management table (see Table 1) will be established to provide insight for early stage creativity and on-going development, validation or design principles, and finally provide channels to support exploitation and dissemination of outputs.

The innovation management team will act in part as a focus group but will also provide connectivity to the full range of stakeholder groups to enable deployment of best practice “voice of customer” methods such as lead user analysis.

Exploitable Outcome	IPR	SWOT Analysis				Target users / market	Marketing plan	Execution plan	Dissemination level	Assigned	Resources	KPIs / metrics
		S	W	O	T							

**Table 1: Innovation Management Table in COUCH.**

The table columns are as follows:

1. **Exploitable Outcome:** List ideas, algorithms, concepts, methods, products, services or exploitable apps;
2. **IPR:** Name the partner(s) who own the IPR of each of the outcomes in (1). In case of joint ownerships, the percentage of the ownership should be included too;
3. **SWOT analysis:** Specification of the Strength - Weaknesses – Opportunities – Threats for each outcome;
4. **Target user/market:** Definition of the beneficiary of each outcome;
5. **Marketing plan:** Dissemination path and media;
6. **Execution plan:** Linked with (5);
7. **Dissemination level:** Define the reach level of activities, e.g. international, European, national or local level;
8. **Assigned:** Owner of the activity;
9. **Resources:** Define the effort or budget required to carry out these activities;
10. **KPIs/metrics** – Performance indicators on innovation strategy.

## 6 Practical Summary

In summary, the Innovation Management activity within the Council of Coaches project will have the following characteristics:

- The Innovation Management activity will facilitate the transformation of project results into potential exploitation outcomes that will be furthermore developed under the exploitation WP.
- The activity will be managed by the Innovation Manager, who will organize bi-monthly meetings (starting from M7) with the Innovation Management Team, in which all partners are represented (see chapter 5.1).
- The bi-monthly meeting has two main purposes:
  - Identify new Exploitable Outcomes & Describe outcome and identify “Outcome Owner” (Assigned).
  - Update the existing set of Exploitable Outcomes & Discuss process of SWOT Analysis / Marketing- and Execution Plans.
- The Innovation Management will also be supporting the IPR management activity (part of T1.2), in terms of reviewing the foreground ownership, the external dependencies of software artefacts, and will investigate different licensing options.
- The exploitable outcomes that are solid and have potential will be prioritized and forward to the exploitation WP for elaboration.
- The Innovation Manager will present to the GA, at any opportunity, the findings and the recommendations of the Innovation Management Team.

## Annex I – Innovation Management Table

Exploitable Outcome	IPR	SWOT analysis				Target users / market	Marketing plan	Execution plan	Dissemination level	Assigned	Resources	KPIs / metrics
		S	W	O	T							

1. **Exploitable Outcome:** List ideas, algorithms, concepts, methods, products, services or exploitable apps;
2. **IPR:** Name the partner(s) who own the IPR of each of the outcomes in (1). In case of joint ownerships, the percentage of the ownership should be included too;
3. **SWOT analysis:** Specification of the Strength - Weaknesses – Opportunities – Threats for each outcome;
4. **Target user/market:** Definition of the beneficiary of each outcome;
5. **Marketing plan:** Dissemination path and media;
6. **Execution plan:** Linked with (5);
7. **Dissemination level:** Define the reach level of activities, e.g. international, European, national or local level;
8. **Assigned:** Owner of the activity;
9. **Resources:** Define the effort or budget required to carry out these activities;
10. **KPIs/metrics** – Performance indicators on innovation strategy.