



HORIZON 2020



COORDINATING EUROPEAN RESEARCH ON MOLECULAR COMMUNICATIONS

## D3.2 Terms of Reference for the Expert Working Group

Gianluca Reali, Mauro Femminella, Ozgur B. Akan

Document Number	D3.2
Document Title	Terms of Reference for the Expert Working Group
Version	0.1
Status	Final
Work Package	WP3
Deliverable Type	Report
Responsible Partner	CNIT
Dissemination level	PU

## Change History

Version	Date	Status	Author (Unit)	Description
0.1	26/AUG/2015	Working	Gianluca Reali (CNIT), Mauro Femminella (CNIT), Ozgur B. Akan (Koc)	Create working version of deliverable
1.0	28/AUG/2015	final	Gianluca Reali (CNIT), Mauro Femminella (CNIT), Ozgur B. Akan (Koc)	Final version of the deliverable.

## Table of Contents

1.	Introduction .....	4
2.	EWG Role .....	4
3.	EWG MANDATE .....	5
4.	Nomination and Term of Office of EWG Members .....	7

## 1. Introduction

---

The present document establishes the roles and functions of the expert working groups (EWGs) of the project CIRCLE. This document is utilised by the EWGs to ensure that the project is implemented efficiently from the technical and scientific point of view.

The EWGs serve as a technical advisory board that informs and counsels as and when requested by the Advisory Board on the technical aspects of the CIRCLE Initiative.

Each EWGs is an interdisciplinary collaboration of experts working on a variety of activities in the field of ICT and bio-sciences for molecular communications, including knowledge synthesis, guideline development and dissemination.

## 2. EWG Role

---

The CIRCLE activities will include the presence of one or more than one EWGs. An EWG is envisaged as an independent expert group established to provide input to the CIRCLE consortium for further discussion.

The CIRCLE proposal outlines the objectives of EWGs as follows:

CIRCLE will create targeted Expert Working Groups with the objective of setting the agenda, invited guests and discussions of the three main CIRCLE Workshops being planned. The Expert Working Groups will support the documentation and continued update of three core outputs of CIRCLE, namely:

- Strategic Research Roadmap.
- Industry Engagement Roadmap.
- Skills Development Guide for Young Researchers.

Therefore, the Expert Working Groups will be made up of a variety of stakeholders that can contribute, such as research scientists from the fields of ICT, and life sciences, policy makers, educators, lawyers, entrepreneurs. The Expert Working Groups will abide by the CIRCLE gender policies set out in Section 1.3.4 and will report to and be monitored by the CIRCLE Advisory Board.

### 3. EWG MANDATE

---

The EWG will provide technical, scientific and managerial assistance necessary to the development and implementation of an action plan related to the achievement of the CIRCLE objectives.

The core mandate of the EWG is manifold as outlined below:

- Recommend the CIRCLE Advisory Board in:
  - Discussing and providing technical and scientific guidance related to the implementation of the CIRCLE objectives,
  - Preparing policy recommendations for their consideration.
- Reviewing results and suggesting any relevant experimental components and facilities, where and when appropriate, for inclusion in the CIRCLE experimental portfolio.
- Work with and support CIRCLE in delivering the following outputs:
  - Monitoring the existence of appropriate experimental infrastructures, and facilities for hosting different software components,
  - Monitoring the existence of suitable management procedures for keeping the experimental infrastructure for molecular communications research in place, operational, well maintained, and their correct use actively promoted,
  - Monitoring the suitability of policies, procedures, rules and regulations for the development, contribution/selection and acceptance, maintenance and additional components to be further integrated in the CIRCLE experimental facilities,
  - Monitoring the process of involvements of external stakeholders in the field of molecular communications.

The EWG will also advise on the identification and the implementation of appropriate Free Open Source Software and its management that would provide alternatives to the commercial software in the field of molecular communications.

The EWG will define the research and training needs for developing research on molecular communications, also taking the objectives identified in the European Commission into account. Particular attention will be given to research needs on the integration of the CIRCLE objectives, reported in what follows for convenience:

- O1 Harmonise heterogeneous islands of research in Molecular Communications across Europe by providing a structured research agenda through the collaborative specification and continual refinement of a research roadmap that will be developed within CIRCLE project.
- O2 Stimulate guided learning for young researchers entering the area of Molecular Communications, through improving efficiency of knowledge acquisition in key disciplines. (Shared with WP4)
- O3 Build a structured community across Europe of research leaders and collaborators working in the area of Molecular Communications.
- O4 Accelerate the exchange of knowledge and best practice between researchers with Europe and internationally focusing on Molecular Communications.
- O5 Facilitate a staff exchange program between partners within CIRCLE specifically focusing on young researchers.
- O6 Reduce the barriers for entry into the area of Molecular Communications for high tech SMEs through the collaborative specification and continual refinement of an industry engagement roadmap.

In order to fulfill these objectives, it is primarily expected to identify the research priorities, in terms of technological development, demonstration, pilot experiments, and to disseminate the results through innovative and traditional methods.

Furthermore, the EWG will consider how best to structure the research activities in order to maximise the involvement of potential stakeholders, i.e., principally research institutions, regional and national authorities, SMEs, large enterprises, in the field of Molecular Communications.

The EWG will also consider the future training needs in academic programs on Molecular Communications, in order to provide significant input to discussions on future priorities for the

community education and training programmes. Again, the focus of the EWG will be on the integration of the priority objectives identified for the proposal and in filling the gaps in knowledge, skills, and general competences involved in the CIRCLE activities.

## **4. Nomination and Term of Office of EWG Members**

The CIRCLE Advisory Board is in charge of selecting experts to participate expert working groups of Work Package 4. They will work with the executive committee to define the scope of the road-mapping activity of Work Package 4, as well as in editing the final roadmap reports at the end of the project (D4.4, D4.5, and D4.6). In addition, they are required to produce three reports, i.e., D4.1, month 8, D4.2, month 16, and D4.3, month 24, in which they illustrate the outcome of their periodic meetings.

They will also work with the project to identify key dissemination and exploitation activities for the project results.

The EWG members are appointed for the whole duration of the project CIRCLE.