



ECUC
Eddy CUrrent brake Compatibility

DELIVERABLE D7.1

Dissemination and Communication Plan

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1. EXECUTIVE SUMMARY

The aim of this document is to provide a dissemination strategy for the ECUC project and to describe the tools that will be used to facilitate the wide-spread of information and knowledge from the results created by the project, among and beyond the members of the consortium (and beyond the life of the project).

Therefore, an overview of the dissemination and exploitation activities to be undertaken during the project's life is going to be provided, followed by a separate and more detailed analysis for each activity.

Dissemination and exploitation of results is crucial to the acceptance and implementation of technologies developed in the project by suppliers and end-users.

The target audience is also defined in the General Overview section, along with an appropriate strategy on how to disseminate effectively to these audiences.

2. INTRODUCTION – GENERAL OVERVIEW

This document has been drafted in order to provide a clear Dissemination and Communication plan for the ECUC project. To facilitate this, the following aspects will need to be defined:

- Specific targets aimed;
- Dissemination activities associated to each target;
- Contribution of each partner.

2.1 Background

The linear eddy-current brake (ECB) is based on a simple principle: a magnetic field across an air gap between the bogie mounted magnets and the rail head produces a braking force due to eddy-current losses (Courants de Foucault). There is no mechanical contact between the brake and track, as the magnetic field operates across the air gap between train and rail. The braking force is independent of the coefficient of friction, and these brakes ensure high efficiency regardless of wheel-rail adhesion. This means that relatively high braking forces, which remain almost constant, even in high-speed applications, can be applied. The braking force can be accurately controlled by regulating the magnetic field.

The key objectives of the project are:

- ✓ To prove that ECB is a highly effective and applicable solution for increasing the braking capacity of new high-speed trains.
- ✓ To solve the concerns raised by infrastructure managers by proposing concrete and realistic solutions to overcome any possible drawbacks that ECB have experienced on some lines.
- ✓ To propose new designs and engineering and operational guidelines for eddy current brakes and signalling equipment.

This project will provide the technical background and the collection of evidence to define the requirements for linear eddy-current brakes and other subsystems.

Throughout the project, the WP7 exploitation and dissemination team will champion dissemination of information, particularly for the purpose of ensuring future exploitation. The widespread and targeted dissemination of project outputs is vital to the acceptance and implementation of the technologies developed.

General dissemination activities will include:

1. The inclusion of project results on the partners' web sites and internal newsletters;
2. Presentation of the results on the project website, which has links back to the partners' websites;
3. Publication of project results in technical papers, trade journals and conferences.
4. Initial dissemination of information through the project brochure to relevant associations and organisations;
5. Attendance and dissemination at industry trade events (e.g. Innotrans) and conferences.

2.2 Definitions

Throughout this document the terms ‘dissemination’ and ‘exploitation’ will be used frequently. The definitions used by the authors are shown below:

Dissemination: The aim of dissemination is to spread the outputs of the project among interested parties. This activity involves presentation of the project’s results to European railway Infrastructure Managers and Operators and the industrial and scientific community, while managing knowledge within the consortium. This will be achieved through a public website, conferences, publications and attendance at relevant events.

Exploitation: The aim of exploitation is to increase competitiveness through the use of the results of the project. This activity involves the use of the project’s results and developed technologies by the industries (as suppliers) and railway Infrastructure Managers and Operators (as end users). It involves working closely with all work packages to ensure outputs are captured and partners are able to engage with potential customers and also that they are supported in the development of the project outputs in order to produce products and services that can be sold.

Dissemination and exploitation of results is crucial to the acceptance and implementation of technologies developed in the project by suppliers and end-users.

2.3 Target groups / Target audience

The dissemination of the project will aim at reaching the widest audience possible relative to the amount of resources available. The key audience for the project can be seen in the figure below:

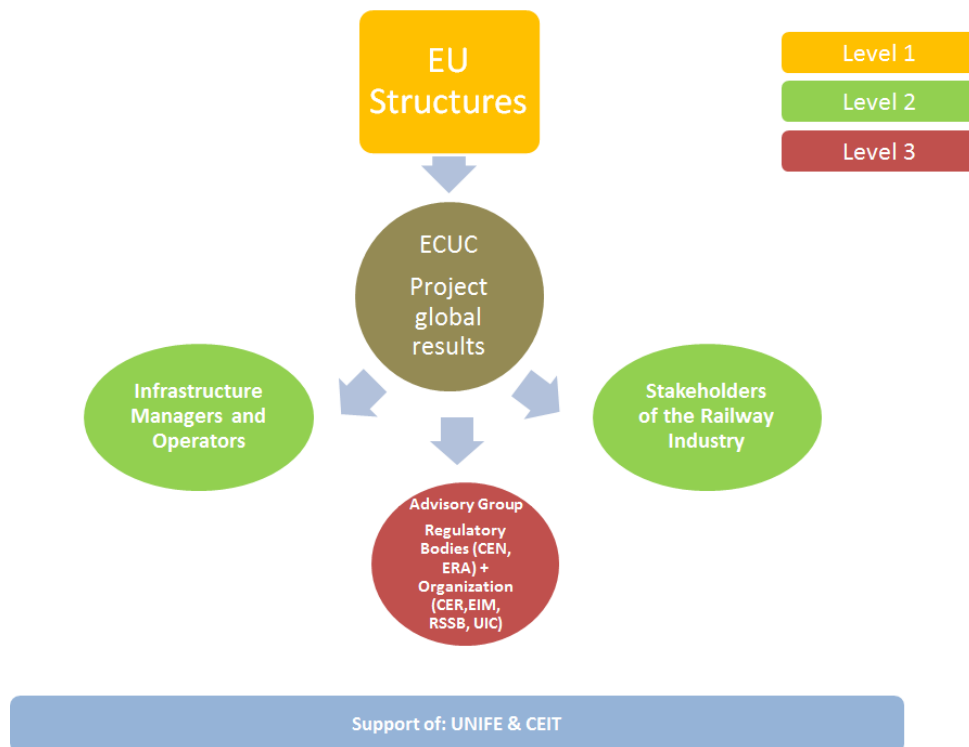


Figure 1: key audience for the project

At Level 1, the European Commission has a role to ensure that ECUC is performing according to the contractual agreements. Therefore it is important to have an open and informative dialog with the European Commission, represented by the Project Officer.

At Level 2, the Infrastructure Managers and Operators are the most important target audience. Moreover the stakeholders of the Railway Industry are also concerned by the project outputs. The media of communication targeted towards this group is mainly the deliverables and guidelines. During the time of the project, this group will be addressed in different ways, as in public conferences, events and seminars. Information will be presented to the top management in both the infrastructure management and operating companies through special information material (Flyer, Newsletters...). Railway Industry manufacturers/suppliers will be addressed within UNIFE committees. In the supply industry, the publications, deliverables and guidelines will be delivered to the top management directly via the UNIFE high-level committees (UNIRAILINFRA – UNIFE’s strategic/business infrastructure committee, UNIFE Technical Plenary, Strategy committee, Presiding Board) and will be available at UNIFE’s offices and at association events held throughout the year. Moreover the supply industry will have access to the ECUC public conferences, seminars and events.

At Level 3 an advisory group will be set up to involve a wider community of stakeholders in the project activities. This will help permit a two way of flow of information; stakeholders will have chance to contribute some input into the project and likewise it will be a good opportunity for the project to carry out some targeted dissemination to stakeholders. This group will review documents, contribute to standardisation activities and provide advice particularly on the technical aspects of the project.

3. DISSEMINATION PLAN

3.1 Objectives

As outlined in the ECUC description of work, the dissemination objectives are to:

- set up the dissemination strategy and tools to facilitate wide-spread information transfer among and beyond the members of the consortium;
- ensure that the research carried out in the project fully exploits existing knowledge and is focused on the aspects of the work. As a whole the project consortium incorporates a significant portion of the knowledge on the state-of-the-art which will be appropriately exploited;
- form a basis for the continuous uptake of the results of the project;
- arrive at convincing proposals for integration to existing standards. The proposals have to be of such a good quality so as to convince all interested stakeholders, starting from those participating in the project, of the effectiveness, efficiency and feasibility of the proposed functional solution;
- ensure the project outputs reach the relevant rail stakeholders who will implement them (via Technical Recommendation);

In order to achieve these objectives, the following dissemination and communication activities will need to be organised:

- Public project website and web links;
- Articles in journals and conference papers;
- Conferences, seminar meetings with users and stakeholders at EU/national/local level;
- Press releases;
- Briefing of relevant Associations;
- Briefing of relevant EU Technology Platforms or standardization groups (e.g. ERA);
- Three annual newsletters;
- Project leaflet/flyer;
- Publications in dedicated rail magazines & annual reports;
- Courses for professionals and students.

3.2 Dissemination Measures

3.2.1 Website

The website (<http://www.ecuc-project.eu>) will be openly available, with a section where visitors can register their interest. It will be divided in two parts: the public portal and the private portal or document repository (members' area).

The public portal will be open to the public and will display the key project information, partners, results, news/events and organisation. The project logo will be seen on the website and all materials. All the public deliverables will be published on the website and will be available for download. The public portal (Figure below) is open to the public and displays the key project information, partners, results, news/events and organisation:

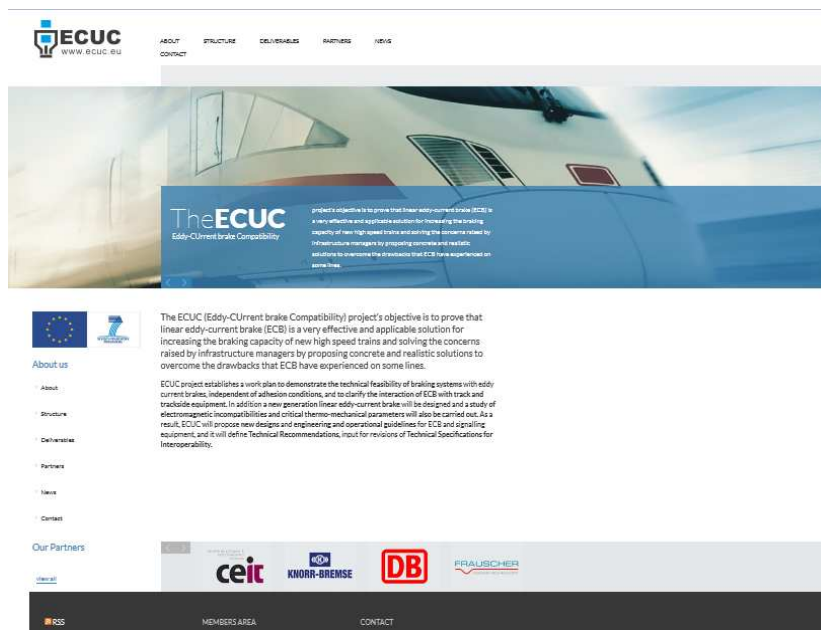


Figure 2: Screenshot of public portal (public website)

The document repository (members' area) aims at storing and sharing project documents, keeping them well organised and available for the project partners. It is a tool which allows following up meetings, work progress and actions at different levels.

3.2.2 Publications

Publications include preparation of flyers, newsletters and press releases and other relevant publications that can be also uploaded on the document repository.

A flyer will be developed at the beginning of the project and will be circulated widely via UNIFE's dissemination channels and via consortium members. It will present the project in a structured way and will be used by partners during conferences, workshops and exhibitions as a tool to disseminate project details. This brochure describes:

- The summary of the project
- The main objectives
- The project structure

- Main outputs
- Benefits and impact

An annual newsletter will be produced during the project's life. It will report on the current status of the project. It will also summarise activities, milestones and achievements from the past year.

The news items posted on the ECUC web site are available in RSS (Really Simple Syndication). RSS is a convenient way to keep up-to-date with news added on the Confidence web site.

Press releases and articles will be made at appropriate times/events and as requested by the media.

3.2.3 Dissemination events – Conferences & papers/journals

Certain conferences and events will be targeted where ECUC can be presented and communicated to a wide audience. ECUC results will be disseminated at the event INNOTRANS 2014 and maybe in other conferences and events including The World Congress for Rail Research.

A preliminary list of conferences & papers is shown in the following table. This list will be continuously monitored and updated throughout the project.

Papers/Journals	Countries addressed	Type of audience	ECUC - related work	Partners involved
UNIFE newsletter and Annual Report	European	Railway sector	Overall result	UNIFE
Railway Gazette				All
IRJ				All
RTR European Rail Technology Review				All
European Railway Review				All
Modern Railways				All
Eisenbahntechnische Rundschau	Germany, Austria, Switzerland	Railway engineering	Overall result	All
Signal und Draht	Germany, Austria, Switzerland	Engineering (signalling systems)	Results concerning the signalling systems	All
Events	Countries addressed	Type of audience	ECUC - related work	Partners involved
INNOTRANS	International	General audience from the rail sector	Overall result	All

Table 1: Preliminary list of conferences & papers

3.2.4 Planning and organisation of workshops dedicated to ECUC project

The project is proposing to organise workshops. The major objectives of such workshops are:

1. To enable other stakeholders not being directly involved in the project to be briefed on intermediate results at important project milestones;
2. To have an interactive discussion on the basis of their comments and proposals made to draft version documents and deliverables disseminated through professional associations – partners of the project;
3. To validate the proposed results by consensus of all stakeholders concerned;
4. To check the potential for the implementation of the proposed solutions;
5. To provide the orientation for further works and the completion of deliverables.

Taking into account the planning of deliverables, major project milestones and demonstrators, the celebration of three workshops is proposed:

- First workshop will take place during 2013;
- Second in Month 18 i.e. in February 2014;
- Third in Month 36 i.e. August 2015.

4. EXPLOITATION PLAN

4.1 Objectives

The objectives for the exploitation of results and standardisation are the following:

- To produce and coordinate the Technical Recommendation (TecRec) regarding ECB new requirements and the test procedure of ECB in the vehicle and the TecRec for Interoperability for the rest of the systems disturbed by ECB. The definition and technical content of these 2 TecRecs will be determined in WP6.
- To ensure the TecRecs approval process within UNIFE and UIC. CEN and CENELEC guidelines and template will be used as basis for the drafting of the TecRecs. When these texts are completed by the respective task leaders, they will be reviewed / revised (by ALL partners) and then sent to UNIFE and UIC members for review and approval (by UNIFE).

The final versions will be published as UIC/UNIFE Technical Recommendations for the sake of publicizing the project RTD results and make quickly publicly available the project results to the whole sector. They will be later on transferred to CEN/CENELEC as rail sector voluntary contribution to their standardisation works.

To publish a TecRec, UNIFE and UIC will consult their members on the final proposal to publish a consolidated version agreed by the vast majority of the railway stakeholders in Europe. These TecRecs will be available in the website www.tecrec-rail.org for any interested company. This process is based on a Memorandum of Understanding signed by UNIFE and UIC in December 2009. A TecRec serves as a common comprehensive standard, approved by UNIFE and UIC and therefore recognised as a voluntary sector standard aimed to improve the competitiveness of the European railway system. UNIFE and UIC published the first TecRec in March 2010.

4.2 Exploitation Measures

Activities to be performed are:

- Review of TecRec by UNIFE and UIC members external to the project;
- Compile/integrate comments in the final text;
- Publication of the agreed documents as Technical Recommendations (UNIFE + UIC).

4.3 Training workshops

ECUC consortium will provide at least one course focused on the disturbances generated between the rolling stock and the infrastructure. CEIT, in collaboration with the University of Navarra will provide the course for students in the last years of the degree of electrical engineering.

4.4 Intellectual property rights

In the context of this proposal, Intellectual Property (IP) is defined as any inventions (whether patentable or not) and applications thereof, patents, registered designs, copyright material including computer software, and technical knowhow and other information.

The rules concerning "knowledge" address its ownership, protection, use and dissemination as well as the so-called "access rights" to it, while the rules concerning background only cover the "access rights" to it.

Concerning the ECUC project, the **IPR management process** will be implemented at **three different operational layers**:

Consortium agreement. The consortium agreement will cover the specification of IPR framework as well as the education and confidentiality programs for IP management within ECUC project. Therefore, it will contain the following information:

- Form of co-operation among the partners
- Exploitation royalties between the companies
- Solution maintenance and evolution
- Configuration management
- Define the education on intellectual assets, also defining the procedures regulating the layers of Technology Development and IPR Management.
- Define the confidentiality and **non disclosure agreement** binding all consortium members.

Technology development. Technology development layer directly refers to the S/T methodology and associated work plan of ECUC project. The process defined in the technology development framework will ensure that IPR are managed along the whole project development path. At every major milestone of project development, patentability evaluation will be carried out. When required, the proper IPR management procedure will be activated.

IPR Management. IPR management process will be activated at every major milestone. In addition, IPR procedures may be activated when project progresses against the state of the art requires to consider intellectual property issues. IPR management procedures have the purpose to:

- Pro-actively encouraging reporting and evaluation of inventions in order to build a business focused patent portfolio.
- Counsel on intellectual property, agreements and licensing

ECUC will have a project IP officer, who will advise the Scientific Committee on all matters relating to the IPR of the project. The IP Officer will be responsible for:

- Identification of background to be protected from each partner, if any;
- Advising partners about knowledge protection;

It is the intention that intellectual property and foreground within the project would, at least initially, remain the property of the partner(s) responsible for its development. All parties will have a free licence to carry out research into any of the subject areas of this proposal. The rules concerning the ownership of foreground developed during the project and its IPR will be specified in the Consortium Agreement (CA). The CA will be ready before the European Community Contract is signed. In the following, we present a summary of the rules the consortium will be abiding:

- **Background.** Background knowledge remains the property of the Party which owns it.
- **Foreground.** Each partner is and remains the owner of its intellectual property over its foreground knowledge. Joint ownership is possible. In this case:
 - a) If an invention or design is made in the course of any collaborative/joint research work, and if the features of such joint invention or design are such that it is not possible to separate them for the purpose of applying for, of obtaining and/or of maintaining the relevant patent protection or any other intellectual property right, the parties concerned agree that they may jointly apply to obtain and/or maintain the relevant right together with any other parties concerned;
 - b) The parties shall seek to agree among themselves with the arrangements for applying, for obtaining and/ or for maintaining such right on a case-by-case basis;
 - c) To avoid confusion and any doubt, joint ownership of an invention or design shall not affect the obligations arising under the Consortium Agreement.
- **Access rights.** All participants in the project will enjoy access rights to:
 - a) The knowledge arising from work carried out under the joint programme of activities;
 - b) The background of the other participants when it is necessary for the project implementation.

Except where other conditions are set in the Consortium Agreement, access rights to foreground and background shall be granted on a royalty-free basis for the implementation of the project and will be detailed in the Consortium Agreement.

- **Access rights to third parties.** Dissemination material will require prior agreement of all project partners and the EC before dissemination in the case they touch directly upon the commercial interests of the partners. The veto of one partner will be sufficient to prevent publication. The Steering Committee will be the forum where the commercial significance of the results and questions concerning patents, copyrights and communications will be discussed in order to avoid premature disclosure.

5. CONCLUSIONS

This document has made clear plans in the areas of dissemination, exploitation and training. A series of dissemination events have been planned, and it is anticipated that more opportunities will arise as the project progresses. Routes to exploitation have been identified and the specific exploitation plan will be elaborated as the specifics of the innovation become available.

Dissemination, exploitation and training will be discussed at each Work Package 7 meeting and the dissemination and exploitation tables will be regularly updated.