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MS4 Initial dissemination plan

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Abstract

The dissemination effort aims to promote the project results outside the consortium and represents a core activity. A dissemination plan needs to be developed to ensure that project results are distributed to a wide audience, maximizing the impact of the project, raising awareness for the project results and stimulating interest around IRATI. This document presents the initial dissemination plan to be followed to ensure the broad impact of the project on the research, academic and industrial community.

Acronyms

CA Coordination Action
CCABA Advanced Broadband Communications Center
DAE Digital Agenda for Europe
EAB External Advisory Board
FIA Future Internet Assembly
FIRE Future Internet Research & Experimentation
FP7 Seventh Framework Programme
GTA Grupo de Teleinformatica e Atomação
ICT Information and Communications Technology
IP Internet Protocol
IP Integrating Project
IRATI Investigate RINA as an Alternative to TCP/IP
NoE Network of Excellence
OFELIA OpenFlow in Europe: Linking Infrastructure and Applications
RINA Recursive InterNetwork Architecture
RSS Rich Site Summary
SSA Specific Support Action
STREP Specific Targeted Research Project
TCP Transmission Control Protocol
TERENA Trans-European Research and Education Networking Association
UFRJ Universidade Federal do Rio de Janeiro

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1 Introduction

In IRATI project dissemination is an activity of key importance, since one of the biggest barriers for RINA adoption is the natural reluctance of humans to adopting radically new ideas that challenge the established state of the art, as the history of science has shown. Most of us have been taught TCP/IP as one of the major achievements in networking. Being capable of stepping back, seeing all the flaws and limitations of TCP/IP and understanding all the implications of RINA is not an easy exercise, it is a process that requires some time. In addition, there is an understandable reluctance on trusting on new network architectures, specially by Internet Service Providers and operators, if there is not sufficient scientific base and, above all, significant evidence of successful deployments in real network scenarios.

We believe that IRATI's objective of having two different functional prototypes of the RINA stack, one in C and another one in Java, and the testing and validation within OFELIA, are indeed some of the necessary first steps towards this change of mind and final adoption. This is why there will be a significant effort within the project to disseminate the results obtained in the IRATI among different channels targeting different communities of stakeholders.

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2 Dissemination Targets

Before deciding on a dissemination plan first it is important to identify the dissemination targets for IRATI project. A well-defined audience is key to finding the best dissemination strategies to follow and messages to send.

The dissemination targets of IRATI should include all sectors, institutions, organizations and people that:

- a) Are interested in the research conducted in IRATI
- b) Are interested to contribute to our work
- c) Are interested in learning about the project's findings
- d) Are or will be affected in the future by the outcomes of our research
- e) Are able to influence our work in some way
- f) Are able to benefit from our work

With these in mind dissemination clearly should be directed towards three main groups:

- **Academia**, targeting researchers, professors and students. RINA is still largely unexplored with many research topics looking for answers. Professors and researchers with interest in RINA can identify these research topics, attract public or private funding to work on them and provide possible solutions. Professors can supervise master or PhD. students on areas related to RINA research. Moreover, RINA provides a theory of what are the minimal elements in all forms of computer networking (mechanisms) and a framework for defining and plugging in/out all the elements that are configurable and optional (the policies), all within an architecture based on a sound theory of networking. Professors can design university or master-level courses to teach the students with the principles of networking derived from the RINA model and provides a framework to analyze existing work.
- **Industry**, targeting telecommunication companies, network providers, networking equipment manufacturers, application developers, Linux and FreeBSD development communities. The objective is to demonstrate the potential of the RINA solution to those people that can help in developing the IRATI software further and also to organizations and companies that affect the telecommunication market and can lead to RINA implementations that can be deployed in a real-world production environment.
- **Funding sources**, public and private. Dissemination of the RINA theory, as well as IRATI project results to people and institutions that might want to sponsor further RINA research.

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3 Dissemination Actions

In this chapter, we present the dissemination activities that are planned for IRATI. In the following sections, all planned activities are described in detail.

3.1 Project logo

A central element of the style and identity of the IRATI project is the project's logo (Figure 1). This logo will be included on the website and on all materials (templates deliverables, PowerPoint presentations and any documents linked to project communication) related to the project made available to the public as well as all materials presented to the European Commission.



Fig. 1: The project's logo

3.2 Public website

A public website is available at <http://irati.eu/> and it has been online since December 2012. The website was built using a WordPress installation. A web 2.0 approach has been followed making the IRATI website more a web communication platform than a static web site. The website will be used as the main vehicle of dissemination and interaction with the public who seeks information about the IRATI project and its areas of work. Besides giving information on the project, the website will also be used as the main vehicle to make available all the public deliverables, as well as other public reports that the project may decide to produce. The website will be maintained for at least one year after the end of the project to assist continued dissemination efforts.

The blog is part of the website. However, while the main website is positioned as an official channel containing information with the project as the responsible source/authorship, the blog is a more informal one, where any individual from the project will post in their own name and responsibility, not necessarily reflecting the position of the project as a whole.

Figure 2 shows a screenshot of the website. The website's content is structured through the main menu, showing the key items to be presented. We decided the main sections of the website to be:

- **Home**, the home page of the website briefly introduces the IRATI project and gives the important relevant information. The latest posts from the News & Events and Blog categories also appear in the home page.

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- **The Project**, which presents the project and its objectives, the partners participating and the work expected to be conducted during the project, organized under work packages and a FAQ page.
- **Research**, the section that concentrates all the outcomes of the project (deliverables, presentations, publications, reports and tutorials).
- **Software**, which will host the software produced by IRATI, mainly the open source RINA prototypes and other possible open source tools.
- **News & Events**, with updates on the latest news and events related to the IRATI project.
- **Blog**, a broadcast dissemination channel in which opinions of the persons involved in the project will be posted on topics that are relevant to the project.
- **Links**, a collection of web links relevant to the project, RINA, related projects and similar initiatives.
- **Contact**, which provides contact details and a contact form to be used by those interested in IRATI, to easily get in touch with the project personnel.

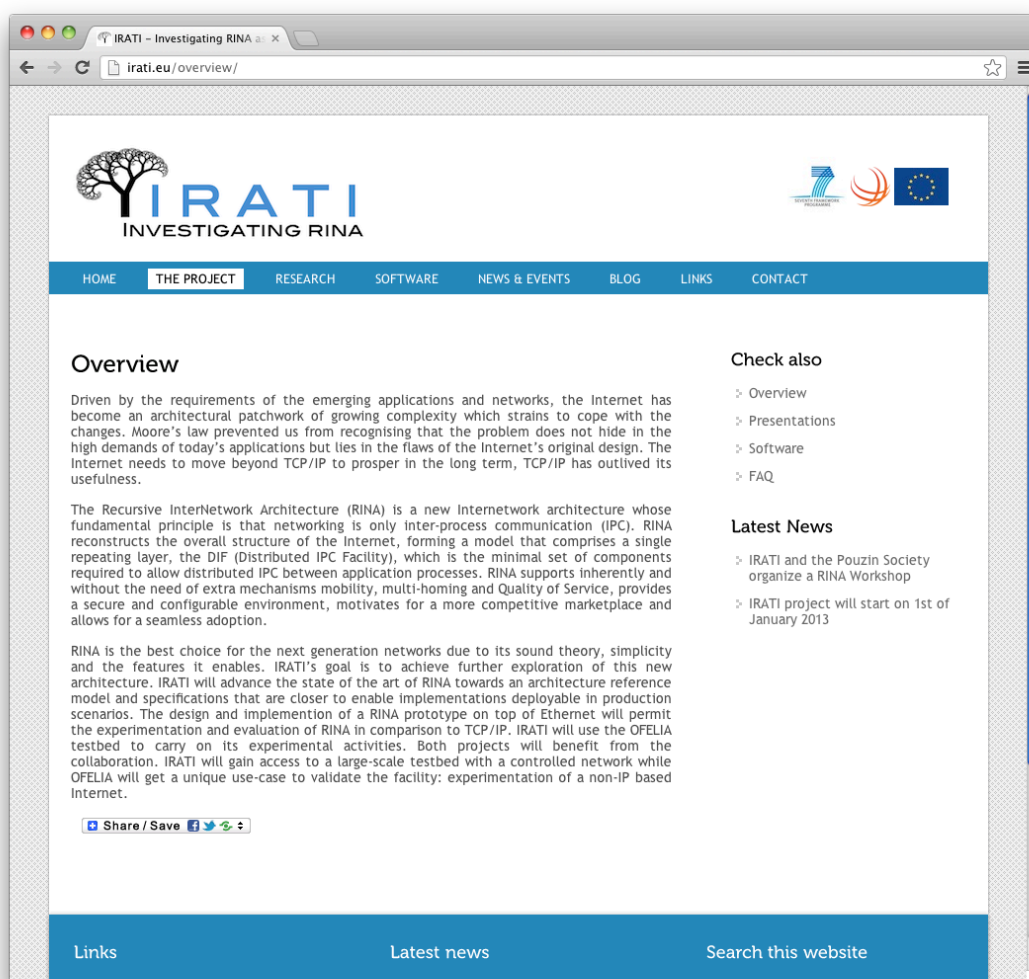


Fig. 2: The project's website



3.2.1 Web site statistics

By collecting and analyzing web usage information, web analytics offer a way to better understand and optimize a web site. One of the aims of the dissemination task is to ensure the broad external impact of the project. For this reason it is useful to identify the number of access users that navigate through the website as well as their browsing behaviour during their visit. These statistics can be used as an indicator of the amount of interest our project. They can show which topics attract more interest and provide us with indications of changes to achieve further publicity. This will secure an understanding of the actual value, as well as on which activities and posts spur the most interaction and reach. For these reasons, we added the Google Analytics tracking code in the template of IRATI’s website, enabling the tracking of statistics of the project’s website. Figure 3 shows a screenshot of the Audience overview of the Google Analytics web interface.

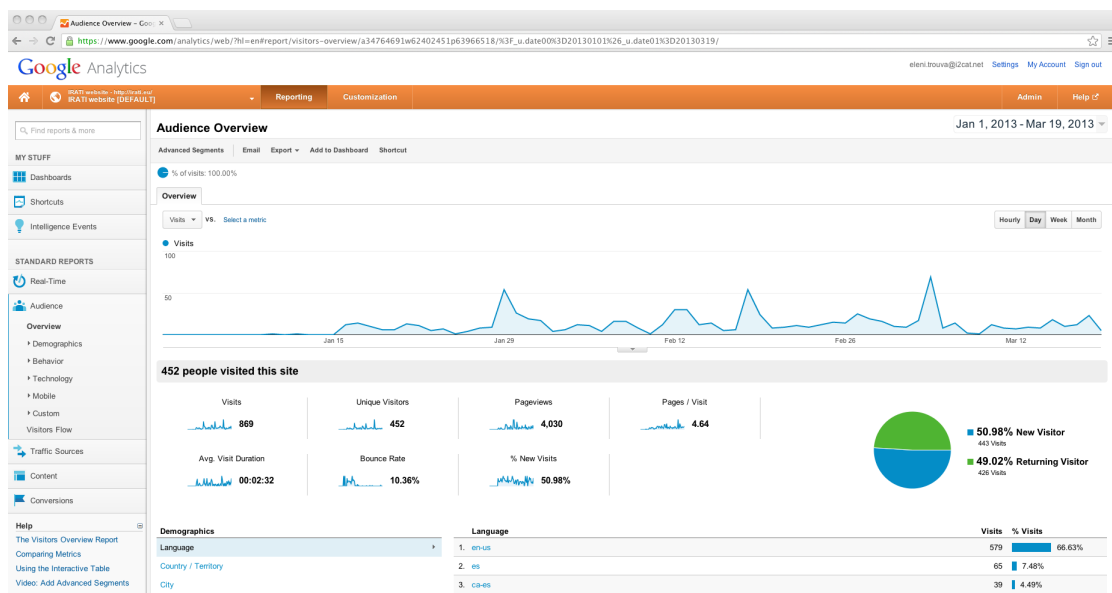


Fig. 3: Audience overview of the Google Analytics web interface for the IRATI web site

3.3 Project brochure, leaflet & poster

A fact sheet brochure has been designed, presenting the project’s overview, the objectives and the expected outcomes and also, the partners information and contact details. It can be found in D1.1.

A leaflet describing the IRATI project is under preparation (in terms of content and design), and it will be published soon. This leaflet will be used for the presentation of the project in main events such as conferences, workshops, meetings, etc. at both European and international level. The leaflet is being structured in a way that it shows the project’s main information, structure, goals, the partners’ information and contacts for further information.

In addition, a poster illustrating the project’s use cases will be designed to include some representative pictures. Again, the purpose will be to use it as one of the media to advertise and at the same time present the project in conferences, workshops and meetings.

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3.4 Social Networking

One way to improve the visibility of the research conducted in IRATI is making use of the available social networks such as Twitter, Facebook, LinkedIn and Slideshare. For this reason we decided the creation of special accounts for the project in the Twitter and Slideshare communities.

- Twitter: <https://twitter.com/iratiproject>
- Slideshare: <https://www.slideshare.net/irati-project/>

Twitter allows posting of short messages relevant to the project's content to express opinions on networking and announce results and events around IRATI. Slideshare provides the means to share presentations, videos, PDFs and other documents.

3.5 Wikipedia entry for RINA

Wikipedia is the largest online encyclopaedia that is build in a collaborative manner. Since a RINA Wikipedia lemma does not exist yet, we think that writing one will greatly help in promoting the knowledge around RINA, the fundamental principles on which it is based on, as well as its features.

3.6 Web 2.0 activities

IRATI will also address the dissemination task from a Web 2.0 viewpoint. The meaning of Web 2.0 is wide, but in this scope, IRATI uses the term as a synonym for social media. The main purpose of using various social media channels in the dissemination effort is to increase reach and visibility of the activities and the results of the project. The activity in social media channels will strive to enable and facilitate a two-way conversation with the audience, and as such with an audience broader than the one engaged in the more traditional dissemination activities. As a social media to a large extent is described as a conversational channel, it is implied that the whole project, to as large extent as possible, shall take active part in conversations.

To some extent, the social media channels to be used will be subject to a small-step trial-and-evaluation approach. It is not fully decided which channels existing today are the most suitable ones for the IRATI message, and furthermore, new channels will evolve as IRATI progresses. However, some channels are identified as starting points to share or disseminate IRATI related information through the web 2.0, which are listed below:

- The website
- The blog, hosted at the IRATI website
- Web 2.0 services such as Twitter and Slideshare
- An RSS feed
- Subscription to new posts through e-mail

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3.7 Publications in conferences and journals

Conferences and journals are an important way to disseminate scientific knowledge thus, we will also follow this approach. Project results, outcomes, and innovations will be submitted for publication in scientific journals and conferences relevant to the topic of the research activity carried out during the project. The submission of papers jointly written by project partners will be encouraged. Moreover, live demonstrations of the developed prototypes will be one of the goals in events that are able to maximize our work impact.

In particular, we will be targeting the following well-known conferences and journals:

Conferences

- IEEE GLOBECOM
- Network of the Future Conference
- TERENA

Journals

- IEEE Network
- Elsevier Computer Networks
- Elsevier Computer Communications
- IEEE Communications Magazine
- Communications letters
- Springer Computer Networks

3.8 Organization of IRATI workshops

Amongst the dissemination actions planned in IRATI is the organization of workshops. The objective of these workshops will be to disseminate the RINA theory, the project results, live demonstrations of the prototypes and symposiums will be done around the work of IRATI and RINA specifications.

In particular, we planned two IRATI workshops. The first one was organized and completed successfully. The workshop took place in Barcelona, Spain during the week of January 22nd and was organized by the i2CAT Foundation, Pouzin Society and IRATI. Representatives from different organizations that had already shown some interest on RINA were invited to the three-day event, hosted by the i2CAT Foundation. The audience, composed of a mixture of industrial organizations, academic institutions and funding bodies, has been presented with the latest results of the research and development activities around RINA.

A tutorial on the RINA reference model and the theory behind it was given and IRATI project was presented. After a round of questions and a brief discussion with the audience, it was the turn for a panel of the implementers of RINA prototypes. The panel, which ran for most of a day, was very useful in providing further details about the different components of the architecture, as well as in discussing multiple ways of how these components can be implemented (different programming languages, goals, operating environments, and so on).

A demonstration of the different prototypes closed the panel session, featuring instances of RINA in the US and in Europe exchanging data over the Internet. The very interactive event



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allowed the attendees to endorse in various discussions around the properties of the RINA architecture, the challenges of implementing it and the different opportunities for collaboration. Moreover, it generated media interest in Spain, as several Spanish media published news and articles on the successful organization of the workshop.

The date and location of IRATI's final workshop is still to be defined however, it is planned to take place at the end of the project. During this workshop it is intended to present all the results generated by the project to the different targeted groups: industry, academia and general public. For this reason several presentations, videos as well as live demonstrations of the prototypes developed within the project will be presented during the workshop. The workshop will also organize an interactive symposium to discuss further steps on the implementation and adoption of RINA architecture. Market players (representatives of key initiatives, manufacturers, service providers) from Europe and beyond will be invited and have an opportunity to provide the project with their inputs (visions, alternative solutions). Beyond disseminating the project results, the events will be an opportunity for all players in the field to discuss potential synergies through specific sessions within the conference. The second workshop will be particularly aimed at presenting the project exploitable results in order to discuss and refine the partners' exploitation plans. As it happened with the first workshop, this one will be organized in collaboration with the Pouzin Society to maximize its visibility.

3.9 Participation in target events

IRATI is targeting major events in the area of Networking and of Future Internet, not only in the research and development area, but also in industry, and later on encompassing a standardisation approach as well.

The project will actively participate and contribute to the Concertation activities organized at Future Internet Research and Experimentation (FIRE Conference and Workshops), Future Internet (FI Assembly) and ICT programme (ICT Conference) levels. The objective is to provide input towards common activities and receiving feedback, contributing advice and guidance and receiving information relating to FIRE community building as well as tools and platforms and ICT programme implementation, standards, policy and regulatory activities, relevant national or international initiatives, etc.

When appropriate, the project will also actively contribute to community support like the FIRE portal and community-building activities like joint workshops, schools, training, etc. By initiative of interested projects, thematic Clusters and Working Groups might be proposed; the project will actively participate and contribute to the relevant activities.

In general IRATI partners will have to be selective due to limited travel budget, therefore we will only participate in those events most relevant to IRATI and/or that happen when the project has interesting results to share. Special attention is given to events organised by the European Commission, at various levels, where the project will also play an active role. Our intention is to participate and contribute:

- FIRE events, conferences and workshops
- Future Internet Assemblies (FIA)
- Future Network & Mobile Summits



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We have already attended a FIRE event, the Engineering Workshop that took place in Ghent, Belgium on the 6-7th of November 2012, in which we presented IRATI. An overview of the project, the objectives, the phases, the contribution and the impact of the project were presented to the audience of the workshop.

Moreover, apart from the IRATI workshops, the project intends to participate in joint workshops with other projects on common topics of interest when appropriate. Such events will provide an opportunity to challenge the assumptions and results achieved in IRATI (which will provide a very useful feedback to the project), will favour intense exchange of information with the major players in the field and with experts who are carrying on related initiatives, and will allow a thorough dissemination and exchange of information with all the relevant stakeholders and interested parties.

3.10 Set up an open source community around the RINA prototypes

The online community, to be launched in the final stage of the IRATI project, will be one of the most important dissemination activities to be done. The community will pursue two main objectives: i) ensure that academia as well as industry is able to take advantage of the work carried out by IRATI, by accessing the open-source prototype source, code, binaries and other programming resources as well as detailed information about implementation details of the RINA specifications; ii) ensure that even beyond the IRATI project, the work carried on in the implementations will be able to be followed by academia and industry. Effectively allowing anyone interested to contribute to the software and take advantage of it.

The first steps towards the creation of the open source community will begin in the second year of the project when the development of the two RINA prototypes will have progressed. However as we plan ahead and have ideas, these will gradually shape how this open source community will be organized the shape it will finally take. Some ideas are:

- Set up an online portal with RINA to act as the main entry point for the developer's community.
- Setup a github-hosted project. Github hosts a large number of open-source projects, providing a set of tools for running an open-source project.
- Provide tutorials and webinars on how to use the developed software.
- Set up a forum to provide an interactive way for developers to get involved and also ask questions and get feedback from others. The existence of a forum would also help to develop a sense of community.

3.11 Interaction with other ICT projects and international bodies

IRATI will actively seek links and interaction with other projects in the area of Networks of the Future and Future Internet. The goal is not only the exchange of information, but also the creation of any possible synergies on the development of the technical work.

We will use the OFELIA facility for the experiments to be conducted in the project. Moreover, we will seek the collaboration and the coordination with the work carried out under the umbrella of the Pouzin Society organization. IRATI will therefore have strong relations with the



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partners involved in the Pouzin society, and will actively contribute to the improvement of the RINA specifications, as well as take advantage of the progress made by the Pouzin society in the state-of-the-art of the RINA stack specification. In particular, the collaboration with Boston University (USA) is expected to be highly productive for both sides.

Other interaction and collaboration activities will be held in the European Frameworks, where the previously mention target events will be a key vehicle for these links, targeting other European projects and fora, namely IPs, STREPs, NoEs, SSAs, and CAs of ICT FP7.

3.12 PhD and MSc theses

1-2 PhD and 1-2 MSc thesis are expected to be generated by the work carried out in the IRATI project. PhD and MSc theses will contribute to the dissemination of the IRATI results in the academia by involving other academic institutions and the people working in them. Up to now two PhD students are involved in the project, one in i2CAT Foundation working on the Inter-DIF Directory and one in iMinds working on routing in RINA.

Besides the PhD and MSc thesis from the IRATI partners, IRATI will also contact universities that usually cooperate with the members of the consortium. These dissemination actions are ultimately targeted towards encouraging the universities to adopt RINA research topics as part of their academic activities, and/or introduce the teaching of RINA concepts in the subjects taught at the universities. I2CAT has already two partners in place:

- With UPC, the Technical University of Catalonia. Initial contacts with the CCABA group (Advanced Broadband Communications Center) have taken place, resulting in a MSc student doing her master thesis on dynamic DIF creation related-topics.
- With the UFRJ, the Universidade Federal do Rio de Janeiro. Initial contacts with the GTA (Grupo de Teleinformatica e Atomação) have taken place, resulting in a MSc student doing his master thesis on RINA-related topics.

3.13 Internal dissemination within the partners organizations

Each partner will disseminate IRATI results to other groups within their organisations, potentially including customers in the case of industrial partners. Actions aiming at ensuring a good diffusion of information and documentation among the project partners with the aim of sharing the developed know-how. The internal dissemination will be achieved mainly through internal workshops and meetings.

3.14 External Advisory Board, EAB

Apart from being an advisory body, the EAB members are a close community of industrial partners that have already shown their interest in the project, and committed to meet three times during the project lifetime to be exposed to the project achievements. This is an excellent dissemination opportunity for IRATI; even more taking into account the names and nature of the companies in the EAB:

- Equipment vendors: Cisco Systems and Juniper Networks
- Telecom operator: Telecom Italia



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- IT Systems: Atos

3.15 Other dissemination activities

We have been asked to write an article for the Digital Agenda for Europe (DAE) about IRATI, explaining the rationale and the goals of the project. DAE is one of the seven flagship initiatives of the Europe 2020 Strategy. It defines the key role of Information and Communication Technologies (ICT) for Europe to succeed in its ambitions for 2020. The objective of this Agenda is to chart a course to maximize the social and economic potential of ICT, most notably the internet, a vital medium of economic and societal activity: for doing business, working, playing, communicating and expressing ourselves freely. Successful delivery of this Agenda will spur innovation, economic growth and improvements in daily life for both citizens and businesses.

3.16 Summary

The following table provides a summary of the afore-mentioned dissemination actions, with the audience targeted for each one and also its current status:

Dissemination Media	Target Audience	Status
Project's identity	Industry, Academia, Media, Public at large	The project's logo has been designed and used in all templates, in the website and in any document produced related to the project.
Website	Industry, Academia, Media, Public at large	The project's website is online, being the main vehicle of dissemination and interaction with the public who seeks information about the IRATI project.
Project brochure, leaflet and poster	Industry, Academia, Media, Public at large	A project brochure has been designed. A project leaflet and poster are under preparation.
Social networking	Industry, Academia, Media, Public at large	A Twitter and a Slideshare account have been created for the project.
Wikipedia entry for RINA	Public at large	We are in the process of writing a RINA lemma for Wikipedia.
IRATI workshops	Industry, Academia	The first IRATI workshop has been organized successfully. The second one is scheduled to take place at the end of the project, in which the outcomes of our research will be

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		presented and discussed.
Publications: Scientific papers and journal articles	Industry, Academia	Target well-known journals and conferences have been decided. We are currently in the process of writing a journal paper.
Target events	Industry, Academia	IRATI participated in one FIA Engineering Workshop, in which the project was presented. We will be aware for future FIA and FIRE events and Future Network & Mobile Summits.
Internal partner dissemination	Industry, Academia	Meetings within the partners organizations have been planned to ensure internal dissemination of the IRATI results.
PhD and MSc theses	Academia	Two PhD students and two MSc students are already working on RINA research topics.
External Advisory Board	Industry	The EAB members have been chosen to be industry players in the market IRATI is targeting to. Meetings with the EAB members have been planned to expose to them the results of the project and further discuss them.

Table 1: Envisioned IRATI dissemination activities