

Safe4RAIL2

D4.3 – Initial report and updated plan on Dissemination & Communication Activities

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Executive Summary

This document is dedicated to Safe4RAIL-2's dissemination and communication tasks including records of undertaken activities. Within WP4, two tasks are devoted to drawing attention to the project achievements and spreading its results as well as a separate task in place for exploiting the said results. Since project dissemination is a key activity for a successful project, a dedicated plan for this domain was defined, which is followed over the full duration of the project.

The dissemination plan, defined at early stage of Safe4RAIL-2, consists of three phases. During the first project period (M01-M15), the focus was on the phase 1 and 2, which is oriented on awareness creation and continuity of information flow. Over this course, 24 dissemination activities were reported. This includes ten participations in events including presentations, conferences, exhibitions as well as workshops and training activities. To keep the Safe4RAIL-2 community informed about the project and its results, a website (www.safe4rail.eu) was created and a social media channel utilized. Both communication channels are regularly updated and maintained. This document includes statistical information on website and social media usage, which demonstrates the efficiency of the approach.

The dissemination strategy is based on a common project identity, which materializes in a corporate design. Respective dissemination materials and numerous presentation media were created – ranging from written information to an animated video – which are listed and briefly described in this document. Besides that, the organization of a technical seminar on advanced architectures and components for next-generation TCMS was started, which will take place in M16.

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Chapter 1 Introduction

This deliverable provides an updated plan and initial report on the partners' **dissemination** and **communication** activities. It will be finalized until the project end with D4.3 "Final report on Dissemination & Communication activities". **Dissemination** and **communication** activities ensure the visibility and awareness of the project and support the widest adoption of its results among potential users. The Safe4RAIL-2 dissemination and communication plan prepares the way for successful exploitation by facilitating internal communication within the project from the outset. Dissemination and communication activities are actively pursued from the beginning to the end of the project – engaging continuously with both internal and external audiences. The activities have been clustered into three main phases, which is shown in the figure below.

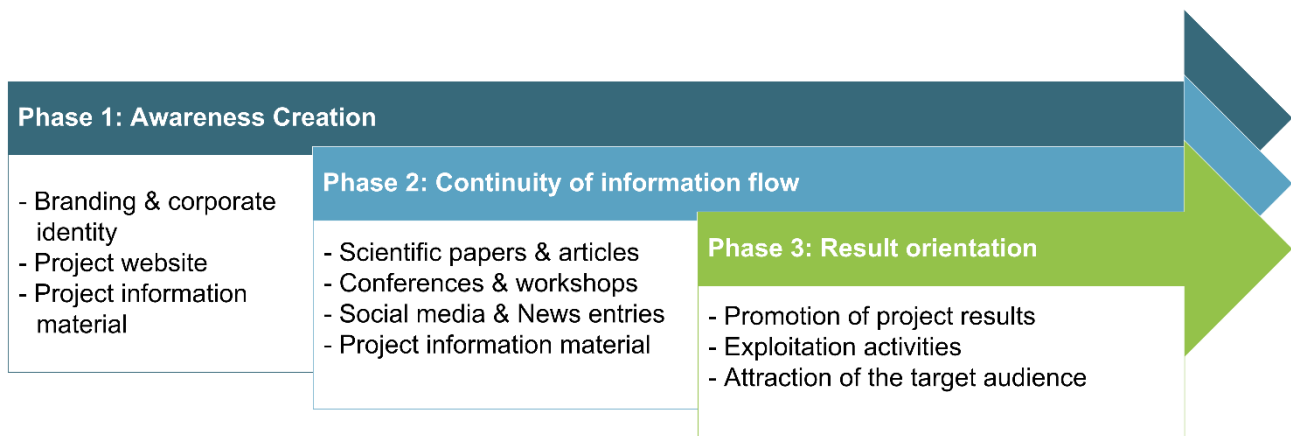


Figure 1: Dissemination and communication phases

The first phase is called "**awareness creation**" and consists of building up the Safe4RAIL-2 branding and corporate identity, as well as establishing the project website and additional project information material, like templates for documents as well as presentations. The Safe4RAIL-2 project has successfully passed this first phase.

In the second phase called "**continuity of information flow**", in which the project is now, scientific papers are written and submitted to conferences and journals as well as presentations at conferences and workshops are/will be given in order to further raise awareness among the scientific and industrial stakeholders. Furthermore, publications, whitepapers and certain deliverables will be published on the project website in order to keep interested parties informed about the latest progress. In addition, engaging posts on Twitter & LinkedIn as well as on the website constitute an important part of keeping the information flow upright and increase the interest of multiple audiences. Besides that, newsletters, press releases, poster, information about workshops and conferences, etc. are an integral part of this dissemination phase, allowing more interactive communication within and outside the consortium. There will be additional press releases/newsletters when significant milestones are reached or for specific project events.

In the third phase "**Result orientation**", dissemination will feed into **exploitation and standardisation**, which means using the results for commercial purposes or in public policymaking. There will be some ongoing dissemination activities after the project end in order to promote the project results. The main focus will be to exploit those project results and attract the target audience group.

At the beginning of the project, the consortium established an initial communication and dissemination plan, which will be stated and explained in more detail in the following chapters.

Chapter 2 Dissemination and Communication

Strategy

A clear communication and dissemination strategy is essential and a forerunner for the execution of a dissemination and communication plan. Therefore, the Safe4RAIL-2 project has set out a clear strategy for dissemination and communication (Figure 2). The strategy defines the audiences the project aims to target, and defining why such audiences should be targeted and by which means.

While talking about communication the goal is to highlight the benefits of the Safe4RAIL-2 project for society, e.g. by showing the public society and media the impact of our project on everyday lives. When it comes to dissemination the goal is to transfer knowledge and make project results available to an audience that may take an interest.

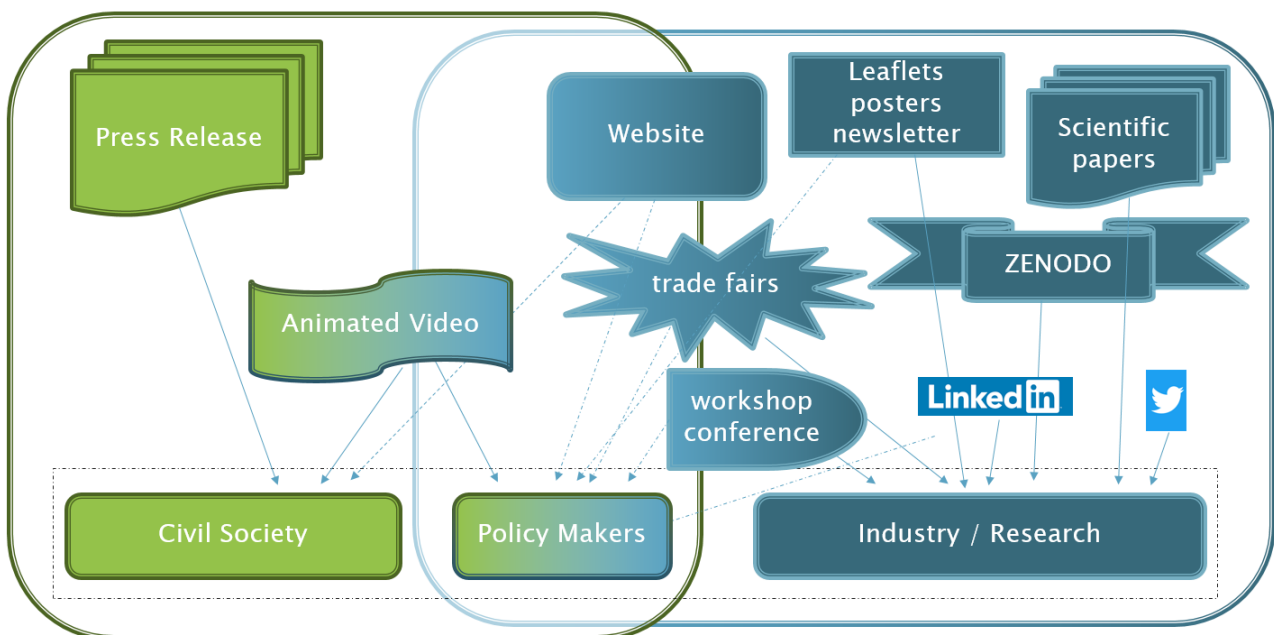


Figure 2: Safe4RAIL-2 dissemination and communication strategy

Within Safe4RAIL-2, four main audience groups can be defined:

For communication:

- **(A) Civil Society,**
- **(B) Policy Makers,**

For dissemination:

- **(B) Policy Makers and**
- **(C) Industry and**
- **(D) Research Community.**

The project results can be used specifically to reach different audiences, by using various channels from Figure 3. The channels and forms of their application are described in the following.

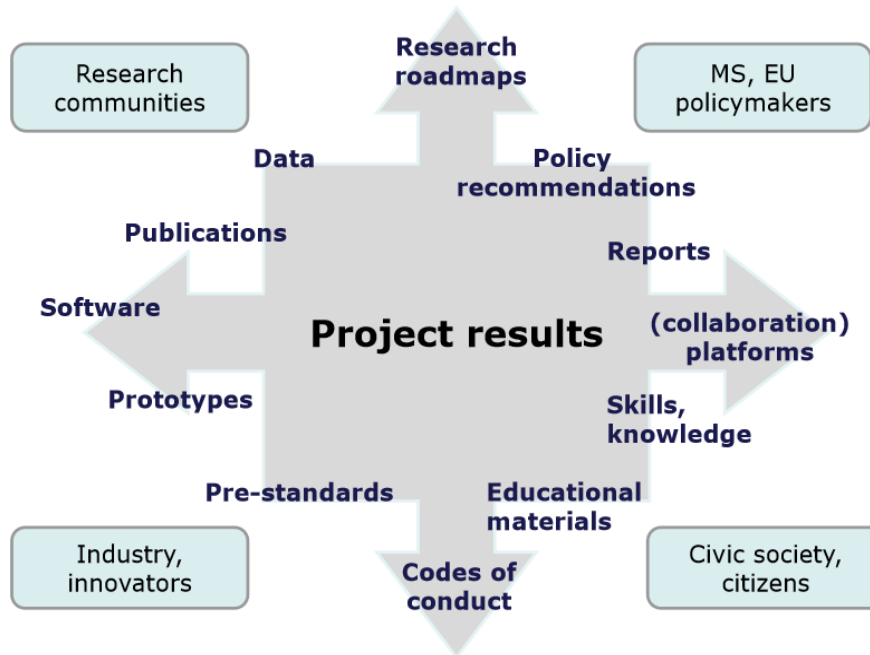


Figure 3: Safe4RAIL-2 targeted audiences and measures

2.1 Civil Society

Citizens are taxpayers and pay large amounts to the European Commission yearly. It is only fair that they expect to see that the resources they commit serve a meaningful purpose. Without funding from taxpayers, there would be no funding for H2020 projects. With different communication activities we show to the society the impact and benefits of the Safe4RAIL-2 project, and how they could profit from the project results in their everyday life.

Within the project, there are many means defined to reach the public. One of the main is the project website (www.safe4rail.eu), on which it is possible to find a compact, foldable, 4-pages leaflet (www.safe4rail.eu/news/press-news). Further channels that are emerging is the introductory video, which is available on the project website and Vimeo (<https://vimeo.com/329541048>). Also, the Safe4RAIL-2 Twitter (<https://twitter.com/SAFE4RAIL>) and LinkedIn (<https://www.linkedin.com/company/safe4rail-2>) account give insights to preliminary results of the EU funded R&I activities.

2.2 Policy Makers

It is important to bring the research and its outcome to policymakers in order to support them while fostering collaboration and innovation. There are several benefits in presenting the work and the results of the Safe4RAIL-2 project to policymakers.

First, it increases the visibility of our research and enhances the project partner's reputation. Further, it helps to gain understanding and support, also financially. Additionally, we attract potential end-users of the project results and by outlining the broader socio-economic and policy context of our project. Future policymaking will be positively influenced. The scientific evidence of Safe4RAIL-2 additionally support the grounds for European policymaking.

2.3 Industry

In order for the innovation developed within the Safe4RAIL-2 project to have any value, it is essential to show it and its applicability to industry needs. Within the industry, a large potential of stakeholders can be found which will eventually enhance the general exploitation of the innovation, thus also benefitting the global European economy.

The Safe4RAIL-2 project foresees several ways to reach the industry. Whereas the main channel is the attendance of trade fairs, the industry is also reached by attending conferences, workshops and further by publishing newsletters and keeping the website up to date. Furthermore, in the Safe4RAIL-2 Joint Advisory Board nine of its members work in the industry (*Huawei, Nokia, Marvell, Men, Luetze, Leroy Automation, Qualcomm, VDS Rail, Kontron*)

2.4 Research and standardisation communities

Reaching the research and standardisation communities is crucial to innovation within the European Union: in order to have a real impact in further research, and to help the standardisation path, it is essential to reach and gain the interest of the said communities.

Standardisation is an important aspect of the Safe4RAIL-2 project. A key strategic objective of the project is to contribute to standardization efforts at EU level within ISO/IEC.

In order to connect with the scientific community, the Safe4RAIL-2 project aims to be active on social media (Twitter and LinkedIn). Partners are also encouraged to share the project results with their peers and followers. The regular project newsletter, with the information on the project progresses, is made available on the project website, as well as on social media.

Moreover, Safe4RAIL-2's consortium members attend conferences, where the project's posters are presented and leaflets handed out. The main aim should be the dissemination at conferences of European significance at least. However, lectures can be further disseminated at national levels in national languages for border scope of impacts.

Chapter 3 Dissemination and Communication

Targets

During the proposal phase of the Safe4RAIL-2 project, a detailed communication and dissemination plan was set up and updated during the first months of the project lifetime. The communication and dissemination plan is stating different audiences, what the objective of reaching the audience would be and what the impact of reaching them will be. This plan can be found in deliverable D4.1 “Internal and external IT communication infrastructure and project website”¹.

In order to assess the effect of the dissemination and communication activities on the target audience, a number of Key Performance Indicators (KPI) have been selected, allowing to measure progress towards fixed goals for dissemination activities. These KPIs are repeatedly referenced in the document. The following table collects the selected KPI:

Table 1: Key performance indicators for dissemination and communication activities

| Dissemination activity/channel | KPI |
|-------------------------------------|---|
| Project website | <ul style="list-style-type: none">• Number of visits/page views• Number of unique visitors• Number of new and returning visitors |
| Newsletter/press release | <ul style="list-style-type: none">• Number of contacts• Number of downloads |
| Social Media | <ul style="list-style-type: none">• Number of postings• Number of follower/contacts• Engagement/impression rate |
| Scientific journals and conferences | <ul style="list-style-type: none">• Number of publications per year• Number of views per publication• Number of attendees• Number of citations• Feedback received |
| Presentation/workshops | <ul style="list-style-type: none">• Number of attendees• Number of events |

¹ <https://safe4rail.eu/downloads/deliverables/Safe4RAIL-2-D4.1-Internal-and-external-IT-Infrastructure-PU-M04.pdf>

Chapter 4 Dissemination and Communication Activities: Past and Planned

4.1 Phase 1: Awareness creation

The goal of the “awareness creation” phase was to build up the Safe4RAIL-2 branding and corporate identity, as well as to establish the website and other useful information material. The Safe4RAIL-2 consortium successfully finished this first phase. The planned activities for the first phase can be found in deliverable D4.1 “Internal and external IT communication infrastructure and project website”, section 2.1.

4.1.1 Past activities

Dissemination and communication are ongoing tasks within Safe4RAIL-2. Past activities which were already completed in the first awareness phase are summarised in the table below.

Table 2: Past dissemination and communication activities - Phase 1

| # | Type of activities | Main lead | Title | Date | Place | Type and goal of activity and target audience | Link to dissemination material (photos, blog entries...) | Countries addressed |
|---|--------------------|-----------|-----------------------------|------------|--------|---|---|---------------------|
| 1 | Other | TEC | Project Logo | 19/12/2018 | online | Logo represents the project corporate identity and is used for deliverables, publication, etc. | https://safe4rail.eu/ | International |
| 2 | Press release | TEC | Announcement Letter | 07/01/2019 | online | First press release of Safe4RAIL-2 in order to announce the official start of the project. <i>Target audience: (A)</i> | https://safe4rail.eu/downloads/Safe4RAIL-2-Announcement-Letter.pdf | International |
| 3 | Social Media | TEC | Safe4RAIL-2 Twitter account | 12/02/2019 | online | Safe4RAILs account re-used for Safe4RAIL-2 – switched: 12/2/2019 <i>Target audience: (A), (C), (D)</i> | https://twitter.com/SAFE4RAIL | International |
| 4 | Website | TEC | Project website | 12/02/2019 | online | website went online (release to public) <i>Target audience: (A), (B)</i> | https://safe4rail.eu/ | International |

| # | Type of activities | Main lead | Title | Date | Place | Type and goal of activity and target audience | Link to dissemination material (photos, blog entries...) | Countries addressed |
|---|--------------------|-----------|--|------------|--------|--|--|---------------------|
| 5 | Press release | IKL | IKERLAN lidera la investigación europea destinada a obtener trenes más seguros y mejorar la eficiencia del sistema ferroviario | 12/02/2019 | online | Announcement of Safe4RAIL-2 project in Spanish media. <i>Target audience: (A)</i> | https://www.diariovasco.com/alto-deba/arrasate/trenes-seguros-eficientes-20190215001435-ntvo.html https://www.elcorreo.com/economia/tu-economia/trenes-seguros-label-20190212105912-nt.html | National |
| 6 | Social Media | TEC | Safe4RAIL-2 LinkedIn account | 12/03/2019 | online | Safe4RAIL-2's LinkedIn account created <i>Target audience: (C), (D)</i> | www.linkedin.com/company/safe4rail-2 | International |
| 7 | Flyer | TEC | Project Leaflet | 25/03/2019 | online | The project leaflet gives an overview of the project and describes mission, motivation and concept of the project, as well as the included work packages. It is available on the project website. <i>Target audience: (B), (C), (D)</i> | https://safe4rail.eu/downloads/Safe4RAIL-2-Leaflet.pdf | International |
| 8 | Video/Film | TEC | Introductory Video to Safe4RAIL-2 | 19/04/2019 | online | An animated video should give an overview on Safe4RAIL-2's vision, mission and motivation <i>Target audience: (A), (B)</i> | https://vimeo.com/329541048 | International |

4.1.2 Highlights of Phase 1

As it can be seen in the table above, within the first phase of the project, various communication and dissemination activities were planned and successfully undertaken. The first phase, namely awareness creation, started with the creation of the corporate project identity. In this manner, the project logo and corresponding colour scheme were defined, which are used for all kinds of communication and dissemination activities in order to ensure recognisable visual identity. Further, the project announcement letter as well as brochure were created and made available for all project partners, in order to encourage partners to make their own internal announcements and disseminate the project. Moreover, several communication channels, such as a project website and social media (Twitter and LinkedIn) were established, which are constantly updated. Additionally, an animated video was produced in order to give a brief and coherent overview on the project's mission and motivation to the broad public society.

Since phase 1 “awareness creation” is focused on the branding and corporate identity of the project, no specific benchmark of KPIs were aimed at this stage. However, by means of the first press releases in this phase, we reached 253,092 persons (mainly audience group C) in consequence of the announcement of the project in Spanish media. Further communication channels like the website and Twitter account gained considerable interest, as it can be seen below in Phase 2 “continuity of information flow”, whereby these channels were investigated in detail.

Some of these communication channels and dissemination activities were already described in detail in D4.1 “Internal and external IT communication infrastructure and project website”. Resulting, we here just briefly list these actions.

4.1.2.1 Video

Partner TEC created an animated video to promote the Safe4RAIL-2 project and to bring the complex technology of the project nearer to the public and interested stakeholders. The video was broadcasted through several social media channels. Among others, the video is accessible via our project website: www.safe4rail.eu (alternatively via Vimeo: <https://vimeo.com/329541048>).



Figure 4: Animated video on Safe4RAIL-2 and TCMS technology

4.1.2.2 Project Website

The project website www.safe4rail.eu serves as a versatile communication tool, as it provides information to a worldwide audience. It provides a user-friendly and informative environment which functions as one of the most important dissemination channels, providing continuously updated information on the project, its activities and results. Furthermore, the website provides contact details and partners information as well. The core functionality as well as the structure of the project website was already described in detail in deliverable D4.1 “Internal and external IT communication infrastructure and project website”. To maximise the visibility of the project, all project partners are encouraged to promote the project and its news on their company websites and also link to the project website.

A statistical analysis with regards to website access has been created, which is briefly explained below. The following figures will give attention to the first project period, respectively to months M01-M15, starting from the 1st of October 2018 to the end of December 2019.

According to Google Analytics, the Safe4RAIL-2 project website has been visited 3,738 times by 2,871 (unique) visitors, while 11,209 pages were viewed during the first project period, from its launch until end of December 2019. The two graphical representations below (Figure 5 and Figure 6) provide an overview of the number of unique visitors and the total number of visited/viewed pages. The visitors, respectively the unique visitors are counted just for the first time of their website visit. The majority (83.9%) of the visitors represent new visitors, as depicted in Figure 7.

Unique Visitors: October 2018 – December 2019

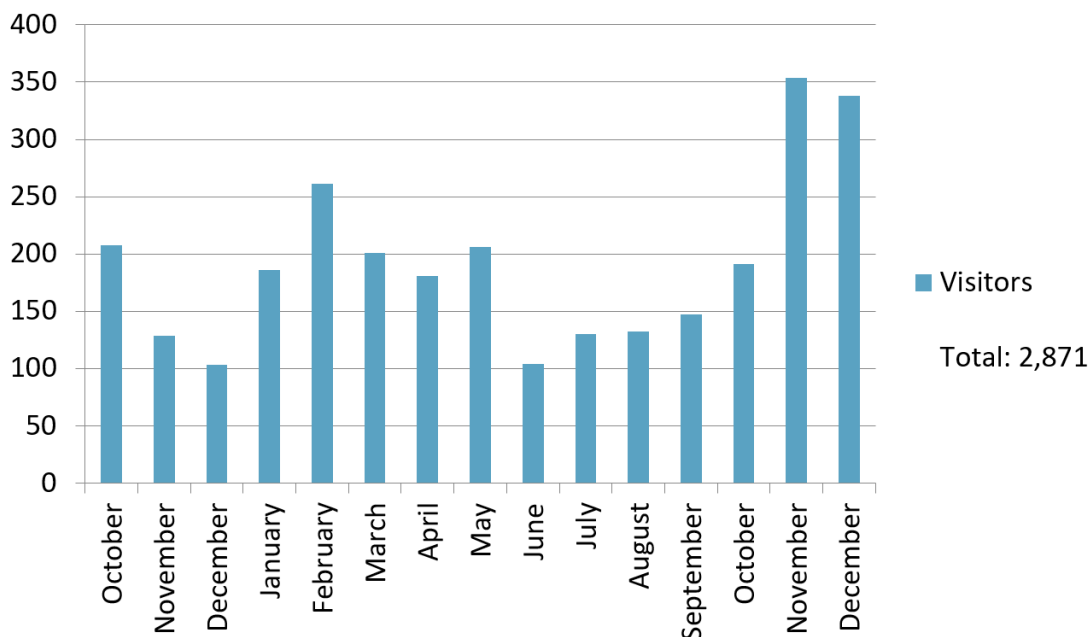


Figure 5: Website statistics - unique visitors (October 2018 – December 2019)

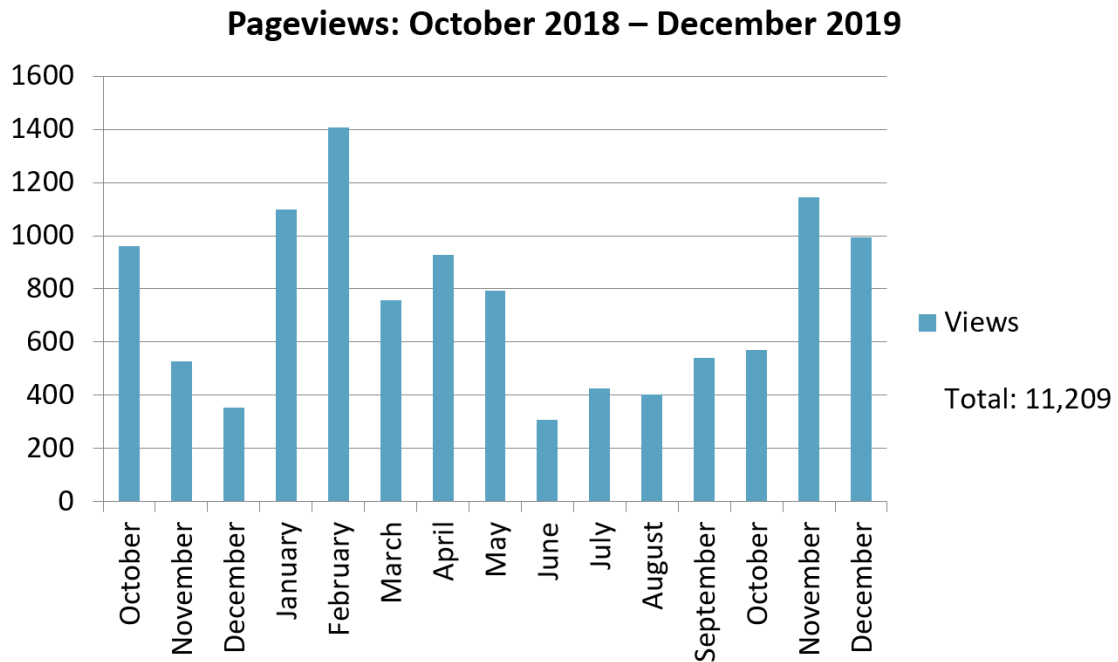


Figure 6: Website statistics – pageviews (October 2018 – December 2019)

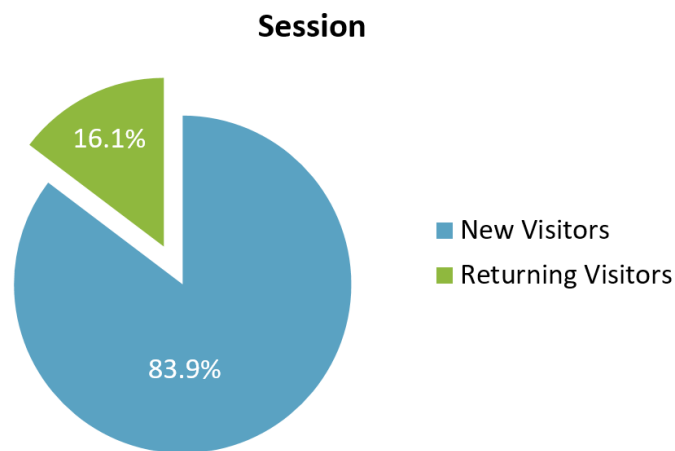


Figure 7: Website statistics - distribution of the type of visitors

The website statistics depicted in Figure 8 illustrates the geographical distribution of the visitor’s location. As a European research and innovation action project, Safe4RAIL-2 attracted a certain amount of interest within Europe (represented by 52.7% of the total visitors). However, it has to be highlighted that the project raised also a lot of interest in America (North and South of America and the Caribbean, 24.4%) as well as in Asia (21.4%). The remaining percentage is spread over Oceania, Africa and others (not classifiable).

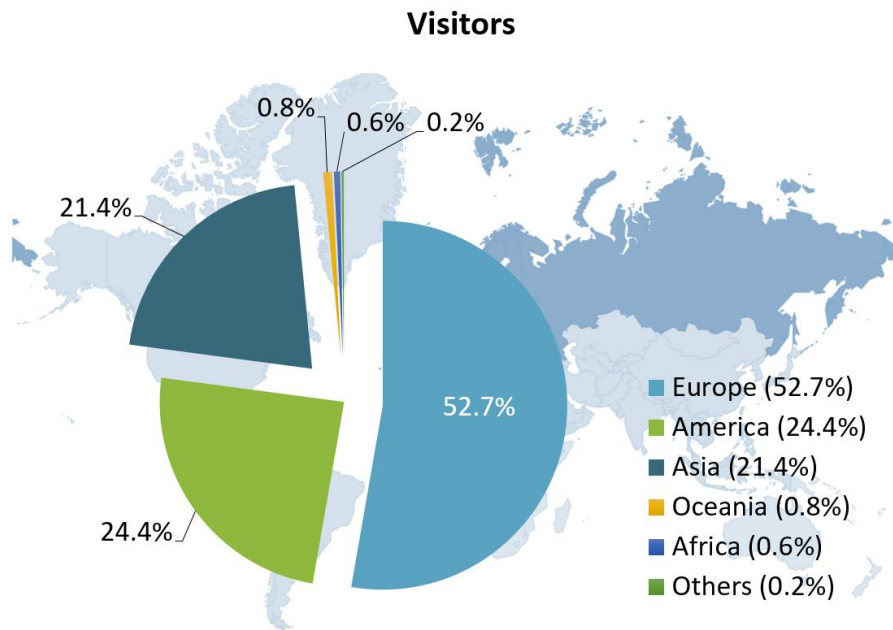


Figure 8: Website statistics - geographical distribution of visitor's location

4.2 Phase 2: Continuity of information flow

The goal of the “continuity of information flow” phase, which started after the first year of the project, respectively by M15, is to raise further awareness among our different target groups.

4.2.1 Past activities

The goal towards the broad public society, media as well as towards the policy makers and industry, is to communicate the benefits of our project for example by explaining the impact of our project on everyday lives. Furthermore, we foster to disseminate knowledge and results with the research community as well as with policy makers and the industry. Therefore, scientific papers and articles are written and submitted to conferences and journals, presentations at workshops and conferences are given. Project partners were attending several conferences and workshops to spread information about the project. Certain public deliverables are published on the project website. In addition to that frequent posts on social media channels are an important dissemination instrument to keep the information flow upright.

Table 3: Past dissemination and communication activities - Phase 2

| # | Type of activities | Main lead | Title | Date | Place | Type and goal activity and target audience | Link to dissemination material (photos, blog entries...) | Countries addressed |
|---|-----------------------------|-----------|---|------------|--------------------------|---|---|---------------------|
| 1 | Other | IKL | Radio Interview | 22/02/2019 | online | Interview with Project Coordinator Aitor Arriola about Safe4RAIL-2 on regional radio station Bizkaia Irratia. <i>Target audience: (A), (B)</i> | ----- | National |
| 2 | Participation to a Workshop | EUR | 10th ETSI ITS Workshop | 4-6/3/2019 | Sophia Antipolis, France | Discussion of the requirement of the Safe4RAIL-2 for RAIL ITS <i>Target audience: (B), (C), (D)</i> | https://www.etsi.org/events/1471-etsi-its-workshop-2019#pane-1/ | International |
| 3 | Press release | TEC | Safe4RAIL-2 Newsletter Issue 1 (April 2019) | 08/05/2019 | online | First Safe4RAIL-2 Newsletter with the focus on WP1 <i>Target audience: (B), (C), (D)</i> | https://safe4rail.eu/downloads/Safe4RAIL-2-Newsletter-Issue-1-April-2019.pdf | International |

| # | Type of activities | Main lead | Title | Date | Place | Type and goal activity and target audience | Link to dissemination material (photos, blog entries...) | Countries addressed |
|---|-----------------------------|-----------|--|---------------|------------------|--|---|---------------------|
| 4 | Exhibition | TEC | Dissemination of Safe4RAIL-2 at the Meet&Match in Villach/ Austria | 04/04/2019 | Villach, Austria | Provide information on and around Safe4RAIL-2 <i>Target audience: (A), (D)</i> | ----- | National |
| 5 | Exhibition | MOXA | Railtex Exhibition – Safe4RAIL-2 Leaflets dissemination and information to booth visitors. | 14-16/05/2019 | Birmingham, UK | Provide information on and around Safe4RAIL-2 <i>Target audience: (B), (C), (D)</i> | http://www.railtex.co.uk/2019/english/event/about-railtex/ | International |
| 6 | Participation to a Workshop | TTT | IEEE 802.1 TSN WG meeting (interim) | 20-24/05/2019 | Salt Lake City | TSN Standardization. <i>Target audience: (B), (C), (D)</i> | http://ieee802.org/3/interims/may19/index.html | International |
| 7 | Participation to a Workshop | TTT | IEEE 802.1 TSN WG meeting | 14-19/07/2019 | Vienna | TSN Standardization. <i>Target audience: (B), (C), (D)</i> | ----- | International |
| 8 | Press release | ETAS | Article at the Bosch Global Network on Safe4RAIL-2 project | 02/08/2019 | online | Describe the ETAS collaboration in Safe4RAIL-2 <i>Target audience: (A)</i> | http://bzo.bosch.com/bzo/en/article_page_69259.html | International |
| 9 | Participation to a Workshop | TTT | IEEE 802.1 TSN WG meeting | 16-20/09/2019 | Edinburgh, UK | TSN Standardization. <i>Target audience: (B), (C), (D)</i> | ----- | International |

| # | Type of activities | Main lead | Title | Date | Place | Type and goal activity and target audience | Link to dissemination material (photos, blog entries...) | Countries addressed |
|----|-------------------------------|-----------|---|---------------|--------------------------|--|---|---------------------|
| 10 | Publication | EUR | "5G Challenges for Wireless Communications for Railways" in IEEE 5G World Forum | 30/09/2019 | Dresden | Paper on Safe4RAIL-2/CONNECTA-2 wireless activities. <i>Target audience: (B), (C), (D)</i> | ----- | International |
| 11 | Participation to a Conference | IKL | IEEE 5G World Forum | 30/09/2019 | Dresden, Germany | Presentation of a joint paper between Safe4RAIL-2 and CONNECTA-2 on NG TCMS (WP2 activities) <i>Target audience: (B), (C), (D)</i> | https://site.ieee.org/wf-5g/ | International |
| 12 | Training | EUR | OAI 5G Training | 16/10/2019 | Sophia Antipolis, France | Training on the OAI 5G SDR platform as well as Mosaic5G service management platform; training on LTE V2X equipment <i>Target audience: (C), (D)</i> | ----- | International |
| 13 | Press release | TEC | Safe4RAIL-2 Newsletter Issue 2 (October 2019) | 17/10/2019 | online | Second Safe4RAIL-2 Newsletter with the focus on WP2, among others <i>Target audience: (B), (C), (D)</i> | https://safe4rail.eu/downloads/Safe4RAIL-2-Newsletter-Issue-2-October-2019.pdf | International |
| 14 | Participation to a Workshop | TTT | IEEE 802.1 TSN WG meeting | 10-15/11/2019 | Hawaii, USA | TSN Standardization. <i>Target audience: (B), (C), (D)</i> | ----- | International |
| 15 | Press release | ETAS | Safe4RAIL-2 article (page 16) in | 25/11/2019 | online / printed | Article in section "Developing vehicles of the future": new E/E architectures, powerful vehicle | https://www.etas.com/download-center-files/DLC_realtimes/RT_2019_2020_ | International |

| # | Type of activities | Main lead | Title | Date | Place | Type and goal activity and target audience | Link to dissemination material (photos, blog entries...) | Countries addressed |
|----|--------------------|-----------|----------------------------|---------------|--------------------|---|--|---------------------|
| | | | the ETAS RealTime magazine | | | computers, the AUTOSAR Adaptive standard and the RTA-VRTE platform software framework. <i>Target audience: (B), (C), (D)</i> | A4_en_komprimiert.pdf | |
| 16 | Exhibition | MOXA | SPS/IPC/ Drives | 26-29/11/2019 | Nuremberg, Germany | S4R-2 Leaflets dissemination and information to booth visitors. | ----- | International |

4.2.2 Planned activities

The following section presents dissemination and communication activities planned (after M15) until the project end identified by the project partners. The lists are regularly monitored and updated, so all the partners are aware of possible opportunities to disseminate, and each activity is aligned with the others.

All consortium partners are involved in the planning of newsletters and press releases and participate in the creation and dissemination of these materials. The administrative support TEC manages and continuously updates the LinkedIn and Twitter accounts to raise awareness about the project among the general public and to its own stakeholders. Project partners are also encouraging external persons to follow the project on Twitter and LinkedIn, and those having a social media account also promote the project with frequent activities. The consortium has planned a series of dissemination activities which will target the general public, and that will be carried out until the end of the Safe4RAIL-2 project.

Table 4: Planned dissemination and communication activities - Phase 2

| # | Type of activities | Main leader | Title | Date | Place | Type and goal of activity and target audience | Countries addressed |
|---|--|-------------|--|---------------|-------------------|--|---------------------|
| 1 | Organization and execution of an event | ALL | Technical Seminar on Advanced Architectures and Components for Next-Generation TCMS | 21/01/2020 | Brussels, Belgium | Inform key stakeholders proactively about the project results, discuss with stakeholders in an open context about evaluation and directions, and assure project impact. This event will be organized jointly with the CFM project, and S2R-CFM-IP2-01-2018, S2R-OC-IP2-01-2018 and S2R-CFM-CCA-01-2018 consortiums will be invited. <i>Target audience: (B), (C), (D)</i> | International |
| 2 | Press release | ETAS | Participation and representation of Safe4RAIL-2 (flyers and demo) at the Embedded World 2020 | 25-27/02/2020 | Nurnberg, Germany | <i>Target audience: (B), (C), (D)</i> | International |
| 3 | Exhibition | EUR | TRA 2020 | 27/04/2020 | Helsinki | Display Safe4RAIL-2 activities in NG TCMS in particular 3GPP V2X <i>Target audience: (B), (C), (D)</i> | International |
| 4 | Exhibition | IKL | TRA 2020 | 27/04/2020 | Helsinki | Oral Presentation of general paper on Safe4RAIL-2. | International |
| 5 | Other | EUR | LTE V2X Performance for WLTB | 06/2020 | to be defined | Present the investigation of the performance of the LTE V2X Ad Hoc for NG TCMS <i>Target audience: (C), (D)</i> | International |
| 6 | Other | EUR | Towards Wireless TSN with LTE V2X | 06/2020 | to be defined | Present the investigation of the challenges of LTE V2X for matching Wireless TSN <i>Target audience: (C), (D)</i> | International |
| 7 | Other | EUR | LTE V2X Mesh Architecture for Cellular Multi-Hop Communications | 06/2020 | to be defined | Propose and Evaluate the feasibility and performance of multi-hop cellular communications <i>Target audience: (C), (D)</i> | International |
| 8 | Participation to a conference | IKL, EUR | Participation in conferences and congresses (Scientific | Before M19 | to be defined | International conferences on reliability, safety and security of railway or railway communications and testing systems (e.g | International |

| # | Type of activities | Main leader | Title | Date | Place | Type and goal of activity and target audience | Countries addressed |
|----|-------------------------------|---------------------------------|---|---------------|------------------|---|---------------------|
| | | | community, industry, civil society, policy makers, media, investors, customers) | | | Nets4Trains workshop, World Congress on Railway Research 2019), to present initial results and to disseminate information about its impact and advantages to interested parties. <i>Target audience: (B), (C), (D)</i> | |
| 9 | Participation to a conference | TTT, WES, MOXA, ETAS | Presentation of ongoing activities on high-key industrial events | Before M19 | to be defined | Communication with Railway industry and railway operators (e.g. SafeTrans Industrial Day, Railtex, SIFER). Arising interest among industrial groups within the railway, automotive and automation functional safety sector. <i>Target audience: (B), (C), (D)</i> | International |
| 10 | Participation to a conference | LIEB, TTT, IKL, MOXA, WES, ETAS | Innotrans 2020 | 22-25/09/2020 | Berlin, Germany | Railway Industry Exhibition. <i>Target audience: (B), (C), (D)</i> | International |
| 11 | Press Release | ETAS | RealTimes Article to show the applicability of the AUTOSAR Adaptive Platform and RTA-VRTE for railway applications. | 11/2020 | online / printed | <i>Target audience: (B), (C), (D)</i> | International |
| 12 | Social Media | TEC, ALL | Social Media Marketing | Recurring | online | With the use of various social media accounts, we will increase the visibility and brand recognition by spreading Safe4RAIL-2 related content. Each blog post, tweet, image or link to publish Safe4RAIL-2 material is a chance for the community to react and this in turn could lead to new opportunities, insights and cooperation. <i>Target audience: (A), (C), (D)</i> | International |
| 13 | Participation to a conference | EUR, WES, MOXA, | Participation to Standardization Bodies | Before M31 | to be defined | Contributions of Safe4Rail-2: communication innovations to wireless standards (3GPP/ETSI, CEPT/ITU), IEC 61375 railway standards (IEC | International |

| # | Type of activities | Main leader | Title | Date | Place | Type and goal of activity and target audience | Countries addressed |
|----|--|-------------|---|------------|---------------|---|---------------------|
| | | TTT | | | | TC9 WG43), Time-Sensitive Networking (IEEE 802.1 Working Group). <i>Target audience: (B), (C), (D)</i> | |
| 14 | Organization and execution of an event | EUR, IKL | Organisation of a Workshop/Special Session at conference/congress | Before M19 | to be defined | Present the objectives and early results of Safe4Rail-2 as a whole. Visibility of the project to the community. Bring the topic outside the project. <i>Target audience: (B), (C), (D)</i> | International |

4.2.3 Highlights of Phase 2

During phase 2, the continuity of information flow, the Safe4RAIL-2 consortium has undertaken several participation to events, such as conferences, exhibitions and workshops as well as training activities. Further, the project was successfully disseminated in various press releases and by means of different communication channels as well as dedicated project newsletters were created. Below we are highlighting the gained interest on our social media channels and presenting the project newsletters, which were created so far.

We were able to reach the targeted audience by means of the above-listed and performed dissemination activities. This is confirmed by the number of listeners of the radio interview given by our project coordinator Aitor Arriola. The said interview was listened around 30,000 times. Further, our partner TEC represented Safe4RAIL-2 at an exhibition and provided information on and around Safe4RAIL-2 to around 600 attendees from the scientific and educational sector as well as around 60 attendees from the industry. In additional, further participations to relevant conferences helped a lot to attract interest on Safe4RAIL-2, such as the IEEE 5G World Forum, whereby partner IKL participated and reached more than 400 persons (main target audience A, B and D). Moreover, partner EUR held a training on OAI 5G focusing on the scientific and educational sector. Another participations to conferences, exhibitions, workshops, but also press releases and website articles were created by the consortium and helped overall to increase the awareness of the project and kept the information flow ongoing.

4.2.3.1 Social Media

Social media is a very powerful tool to communicate and disseminate information and to effectively let people know about the activities we carry out in our project in a brief form. That's why we created in phase 1 a Safe4RAIL-2 Twitter, as well as a LinkedIn account. Both accounts are updated on a regular basis, to schedule the postings and tweets, we have created a posting plan, which helps us to plan and organize upcoming content.

Twitter: Twitter, an online social networking service and micro blogging service, enables its users to send and read text-based messages of up to 280 characters, known as "tweets". Since the beginning of the project, there were 24 tweets made on the Safe4RAIL-2 Twitter page. Twitter is mainly used for communication activities, including the announcement of the project website, press releases, newsletter publications and different meetings. The Safe4RAIL-2 Twitter account is accessible via: <https://twitter.com/SAFE4RAIL>. During the first project period, we achieved 13,129 impressions in total on our tweets on the project's Twitter page, as shown in Figure 9.

Twitter: Impressions per Tweet

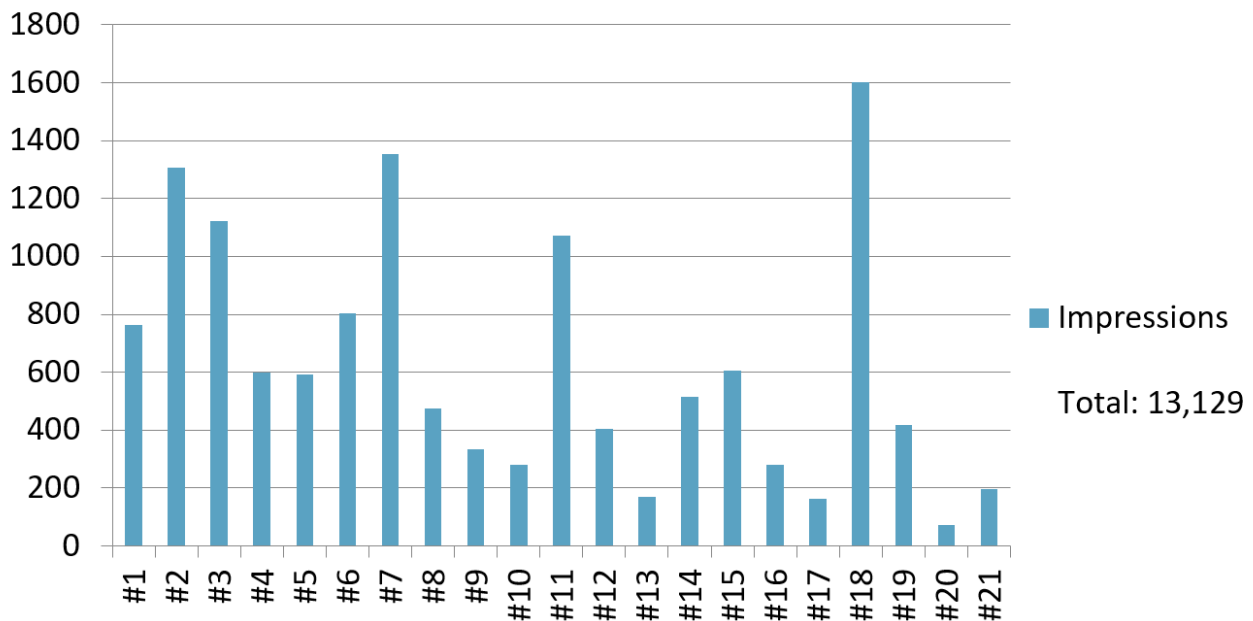


Figure 9: Impressions per Tweet on Twitter

LinkedIn: LinkedIn is a social networking site for people in professional occupations or simply a social network for business. The Safe4RAIL-2 project has a public account (set up as a company page), which can be accessed via: www.linkedin.com/company/safe4rail-2. Since the LinkedIn account is actively-used in phase 2 now, a detailed statistics can be provided in the final report only.

4.2.3.2 Newsletters

Newsletters are an efficient communication channel in order to provide news on the project progress and to discuss ongoing topics towards internal and external project partners, stakeholders and other interested bodies. Newsletters are amongst other tools part of the common dissemination strategy. The project newsletters are created in a six-month interval. Released newsletters are available on our website: <https://safe4rail.eu/news/press-news>.

- Newsletter Issue 1, April 2019: <https://safe4rail.eu/downloads/Safe4RAIL-2-Newsletter-Issue-1-April-2019.pdf>
- Newsletter Issue 2, October 2019: <https://safe4rail.eu/downloads/Safe4RAIL-2-Newsletter-Issue-2-October-2019.pdf>

While for the first issue of the newsletter we focused on Drive-by-Data, the second newsletter issue was dedicated towards the wireless TCMS technology, as seen below.

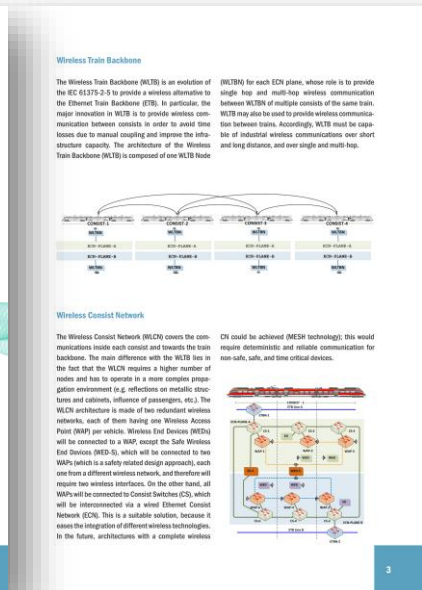


Figure 10: Safe4RAIL-2 Newsletter - Second Issue/October 2019 (Pages 1-3)

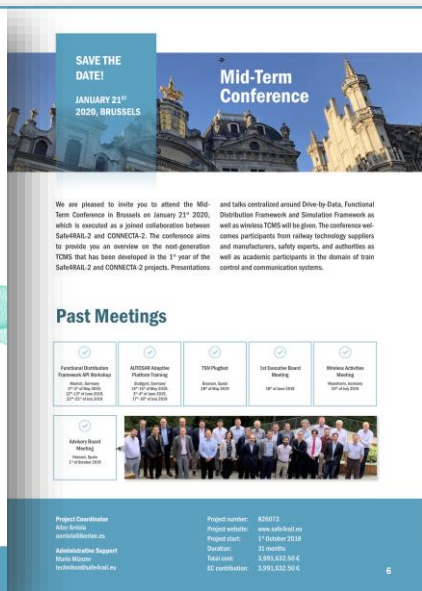
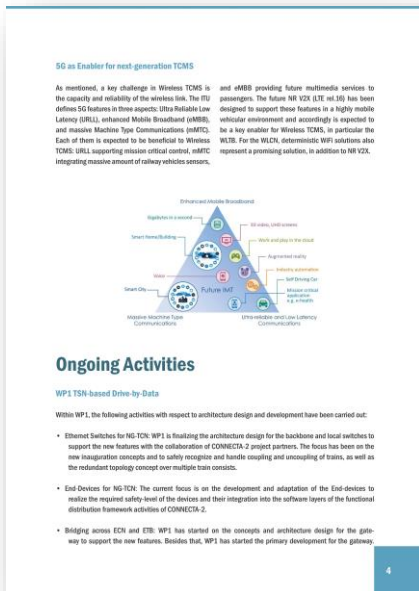


Figure 11: Safe4RAIL-2 Newsletter - Second Issue/October 2019 (Pages 4-6)

4.3 Phase 3: Result orientation

Safe4RAIL-2 will enter its third phase towards the end of the project. The result orientation phase consists of three main goals:

- Promotion of project results,
- Exploitation activities, and
- Attraction of the target group

The Safe4RAIL-2 consortium has currently the following plans for phase 3 (see table below).

Table 5: Planned dissemination and communication activities - Phase 3

| # | Type of activities | Main leader | Title | Date | Type and goal of activity and target audience | Countries addressed |
|---|-------------------------------|----------------|--|--------------------------------|---|---------------------|
| 1 | Participation to a Conference | MOXA, TTT, WES | Presentation of ongoing activities on high-key industrial events | Within phase 3 (to be defined) | Promotion of on-going Safe4RAIL-2 activities and technologies (e.g. InnoTrans, September 2020, Berlin, Transport Research Arena (TRA) in 2020). <i>Target audience: (B), (C), (D)</i> | International |
| 2 | Participation to a Conference | IKL, EUR | Presentation of results on conferences on wireless technologies | Within phase 3 (to be defined) | Results of wireless activities on conferences related to wireless technologies, such as: European Microwave Conference, International Conference on Intelligent Transport Systems Telecommunications (ITST), International Conference on Intelligent Transportation Systems (ITSC), Vehicular Technology Conference (VTC), and IEEE Conference on Intelligent Rail Transportation. <i>Target audience: (B), (C), (D)</i> | International |
| 3 | Participation to a Conference | IKL, EUR | Publication in high impact factor peer review journal | Within phase 3 (to be defined) | Final results of the project published in peer review journals (e.g. IEEE Transactions on Vehicular Technology, IEEE Transactions on Intelligent Transportation Systems). <i>Target audience: (B), (C), (D)</i> | International |
| 4 | Video/Film | TEC, IKL | Extended video including animation and professional video | M31, end of project | A professional video is beneficial to bring the project outcome nearer to the public, European Commission and Joint Undertaking. It can be easily shared and | International |

| # | Type of activities | Main leader | Title | Date | Type and goal of activity and target audience | Countries addressed |
|---|---|-------------|--|--------------------------------|--|---------------------|
| | | | showing project results | | conveys huge amounts of information in a short time. <i>Target audience: (A), (B)</i> | |
| 5 | Organization and execution of an event | ALL | Final Safe4RAIL-2 event (conference, seminar, or similar), presenting results from phase 3 | M31, end of project | Inform key stakeholders proactively about the project results, discuss with stakeholders in an open context about evaluation and directions, and assure project impact. This event will be organized jointly with the CFM project, and S2R-CFM-IP2-01-2018, S2R-OC-IP2-01-2018 and S2R-CFM-CCA-01-2018 consortiums will be invited. <i>Target audience: (B), (C), (D)</i> | International |
| 6 | Website | ETAS | Safe4RAIL-2 reference | Within phase 3 (to be defined) | Safe4RAIL-2 reference on the (sub)page of the RTA-VRTE AUTOSAR platform software framework for vehicle computer. <i>Target audience: (A), (B)</i> | International |
| 7 | Social Media | MOXA | Social media activities | Within phase 3 (to be defined) | Social Media posts about Safe4RAIL-2 activities, participation, and events. <i>Target audience: (A), (C), (D)</i> | International |
| 8 | Participation in activities organized jointly with other H2020 projects | EUR | 3GPP contribution for NR V2X and Railway Use Cases | Within phase 3 (to be defined) | provide the Safe4RAIL-2 requirements to 3GPP; propose/contribute to a WI on NG TCMS <i>Target audience: (B), (C), (D)</i> | International |

Chapter 5 Conclusion

Within Safe4RAIL-2 and its first project period, a large effort was devoted to dissemination and communication activities. Two tasks are devoted to dissemination of the project and its results. The target audiences, comprising civil society, policy makers, industry and research community, were addressed by a range of different communication channels. In particular, the project website, social media and related communications received considerable attention.

As reported, the project was disseminated through 24 activities in total. To go into detail, Safe4RAIL-2 was disseminated 14 times by means of press releases and related dissemination activities as well as presented in ten events including presentations, conferences, exhibitions as well as workshops and training activities by consortium members. In terms of numbers, our project website attracted a lot of interest during the first project period. To be more accurate, the website was visited almost by 2,871 unique visitors in total, which generated 11,209 pageviews. By means of further related press releases and website articles located on partner's websites helped a lot to gain the appropriate interest and increase the awareness. Specific dissemination materials like an animation video as well as a radio interview increased the publicity of Safe4RAIL-2 at the beginning of the project a lot. Social media was helpful for dissemination as well. By means of Twitter, our tweets generated more than 13,129 impressions. Thanks to dissemination - performed mostly by the commercial consortium members - the project's preliminary results were diffused targeting either potential stakeholders or the general public.

List of Abbreviations

Table 6: List of Abbreviations

| Abbreviation | Translation |
|--------------|--|
| EU | European Union |
| IEC | International Electrotechnical Commission |
| ISO | International Organization for Standardization |
| KPI | Key Performance Indicator |
| R&I | Research and Innovation |