OpenReq

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D8.1 Exploitation, Dissemination and Communication Plan

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Abstract: This document outlines the exploitation, dissemination and communication plan of the OpenReq project. OpenReq is an EU Horizon 2020 framework project that aims to provide better requirements engineering to organisations. The objective of the dissemination and communication activities is to make sure that the results of the OpenReq project are known and widely used. The project has a variety of target groups that it aims to reach. These include researchers, students, practitioners, open source communities, and the general public, not to forget the European Commission and the project-internal partners. Consequently, the message has to be adjusted to suit different needs. Several channels and activities are also needed, including publications, events, a website, social media, videos and hackathons. At the beginning of the project, the emphasis of activities is more on research and the project with its developments. As soon as the project has developed new products and services, they are communicated to wider audiences.

As required on the Consolidated Project Review Report received on October 1st, 2018, this Deliverable has been revised following the recommendations of the Reviewers and resubmitted again.



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1. Introduction

This document, Deliverable 8.1, describes the exploitation, dissemination and communication plan for the OpenReq project. Starting with an overall vision of the project, it includes the definition of objectives, responsibilities, target audiences, key messages, and activities needed to meet the goals of the project in this area. In addition, the document outlines how dissemination and communication activities will be measured. Finally, a rough timetable will be presented of the key developments the project that need attention.



Figure 1. The target groups of OpenReq represent different backgrounds and expectations. From the OpenReq project proposal

As required by the Consolidated Project Review Report received on October 1st, 2018, this Deliverable contains a revised and updated version of the document submitted on July 2017, following the recommendations of the Reviewers..



2. OpenReq vision

Motivation

Requirements Engineering (RE) is hard. As Turing Award winner Fred Brooks states:

"The hardest single part of building a software system is deciding precisely what to build. No other part of the conceptual work is as difficult as establishing the detailed technical requirements, including all the interfaces to people, to machines, and to other software systems. No other part of the work so cripples the resulting system if done wrong. No other part is more difficult to rectify later."

Brooks F, Kugler HJ. No silver bullet. April; 1987.

RE forms the basis for all products built, both software and otherwise. Software, however, has additional layers of complexity that surface when large systems are built. This includes features that are not always visible, hidden bugs, conformance to numerous standards, catering to individual users, etc. Additionally, bugs in complex software can lead to expensive failures, such as the Ariane5 rocket launch in 1996 where the overload of a simple sensor led to an explosion, destroying a payload worth ~400 million USD¹. The issue was traced to a re-use of old systems, an issue that requirements could have sorted out beforehand. For this reason, RE within all software products is particularly important to help manage and counteract these issues.

RE has received increased attention within the research community over the last 30 years, with conferences such as Requirements Engineering², Requirements Engineering: Foundations for Software Engineering³, and the International Conference on Software Engineering⁴. For practitioners, the software tools for RE have been increasing in number and features, as well as tools for managing stakeholders, traceability, and much more. Companies like Microsoft and IBM released products to assist with the whole spectrum of RE phases, and entire companies exist for the sole purpose of creating RE tools, such as Atlassian⁵. Additionally, standards boards such as the Institute of Electrical and Electronics Engineers (IEEE)⁶ and the International Requirements Engineering Board (IREB) [7] have released a number of official documents with the purpose of standardising the way in which RE is conducted.

Beyond research, industry, and standards boards, RE is also an important topic to the everyday user of software products. Nowadays, technology is opening new possibilities for RE that were not available 30 years ago. These include user-driven RE through crowdsourced feedback, hyper-customised product roll-outs through A/B testing, specialized software releases for niche markets, app stores that allow anyone with an idea to create and deliver an application to millions of users, software as a service, and continuous software deployment that enable new business models not anymore confined to the products' initial sale. With all of these

¹ <u>https://en.wikipedia.org/wiki/Cluster_(spacecraft)#Launch_failure</u>

² <u>http://requirements-engineering.org/</u>

³ <u>https://refsq.org/</u>

⁴ <u>http://www.icse-conferences.org/</u>

⁵ <u>https://www.atlassian.com/</u>

⁶ <u>https://www.ieee.org/</u>



advancements coming to users, they now have a much stronger say in what gets developed, and how. At the core of these advancements is the power of RE, as well as its difficulties.

Vision

OpenReq is our response to the growing pains of RE within the aforementioned contexts. OpenReq delivers four high-level functionalities, each of which breaks down into many individual algorithms and implementations. The four high-level implementations are "Requirements Intelligence," "Personal Recommendations for Stakeholders," "Group Decision Support," and "Knowledge and Dependency Management." Together, these form the technical base through which OpenReq delivers its functionality. Additionally, OpenReq will be delivering these features as open source software, thereby allowing a sustainable use and extension of the work done during the project to be used for non-profit endeavours. Other researchers, end-users, and interested RE tool builders will be able to use the output of the work done in OpenReq.

Software Requirements Intelligence

Today, it is common, if not expected, that software providers offer a form of feedback collection that allows their entire user-base to contribute their opinions. This feedback is often posted in public settings, such as forums or public support boards. However, regardless of how the company chooses to collect and display this feedback, public platforms such as Twitter, StackOverflow, and blogs will always exist to give people a place to ask questions, discuss issues, post guides, and express their concerns regarding a product. We wish to harness the information stored in these mostly informal settings to offer software developers the opportunity to respond and react to feedback. This is done through the scraping and mining of publicly-available information, analysis of that data, and display of the insights in a format that allows decisions to be made.

Personal Recommendations for Stakeholders

As software projects become more and more complex, so does the requirements and therefore the RE process. Although Requirements Engineers ultimately know best how to write, modify, and maintain requirements, this becomes less obvious as the set of requirements becomes very large, exponentially increasing potential dependencies, conflicts, and mistakes in how requirements are worded and framed. In order to create and maintain a healthy set of requirements (as well as a productive and fulfilling workflow), we are creating tools for stakeholders. These tools include suggestions on how to improve the quality of their requirements based on linguistic patterns, as well as suggestions that consider the needs and capabilities of individual stakeholders within the project.

Group Decision Support

Software development today involves many stakeholders including multiple groups of endusers, the development team, business managers, product owners, people impacted by the use of the product, etc. Each group of stakeholders has information to offer from their unique perspective, but that information must be presented in the right way, for the right reason. Group decision support algorithms are developed within OpenReq to help decide which opinion matters the most for a given context and what decision needs to be made by who. These algorithms consider factors such as experience, recommendations from other stakeholders, and many more.

Knowledge and Dependency Management

Beyond the creation of requirements, RE also involves maintaining requirements over time. Software projects can last many years, sometimes decades, and the requirements hold



information about why and when decisions occurred. Keeping accurate records of these decisions (and other artefacts) allows future project to take better decisions. This process includes requirements dependency management—understanding which requirements are related to others, and how. As requirements will change over time, change management is a necessary and often essential part of the industrial RE workflow. Understanding how requirements are interrelated makes change management much easier to handle, leading to less errors introduced during the process.

Open Source

OpenReq is committed to open-sourcing the tools, algorithms and processes developed. This has the explicit benefit of sharing our work with the non-profit community, as well as the implicit benefit of being transparent in the research we are conducting. Our goal is to build a community of researchers, practitioners, and interested developers that will take OpenReq beyond the project lifecycle. RE is an essential practice within the software industry and it will be here for many years to come. Our vision is that the open source community around OpenReq will sustain open-source solutions for RE for many years as well.

Implementation

OpenReq's underlying functionality is implemented as a number of microservices to decouple unnecessary dependencies that would otherwise exist. Users interested in a single piece of functionality simply find and utilise the associated microservice(s). However, deploying and integrating microservices can be an hurdle for some users. In such case, we also offer a completely packaged product, OpenReq Live. This web-based tool brings together features from each of the components mentioned above and provides an end-to-end requirements management experience. Finally, OpenReq sensible functionalities are integrated into existing development tools, such as Jira, Bugzilla, and Eclipse as well as Requirements Management tools, such as IBM Rational DOORS. Displayed here is an overview diagram (Fig 2)—the feature sets in blue boxes and the interaction of OpenReq Live in orange. Next to OpenReq Live, there are the four industrial partners who are working with us in the evaluation and improvement of the developed features.



Figure 2. OpenReq overview diagram



3. Objectives

The objective of the dissemination and communication activities is to make sure *that the results of the OpenReq project are known and widely used*. This means that the results will be used also outside of academia, in companies and by other audiences defined later in this paper. In more detail, the objectives of dissemination and communication activities are as follows:

- In the beginning of the project, the objective is to gain the attention of the audiences defined later in this document and to inform them about the project. At this point, the project can offer, for instance, reports (deliverables), scientific papers, conference presence, and news about the project and its development.
- As soon as the project has developed processes, methods, and new tools for requirements engineering, the objective is to gain increased attention from the target audiences, spread awareness about the products and, finally, get target groups to use it.



4. Responsibilities

Every OpenReq partner is responsible for helping in dissemination and communication activities. This means, for instance, participating in relevant conferences and producing material needed in communicating the project and its results to different audiences.

The dissemination and communications leader is responsible for making sure that the project releases communications on a regular basis. Work package leaders are responsible for ensuring that their work packages are fairly presented in the project communications. All formal communication with the EC goes through the project leader and coordinator.



5. Audiences

The audiences of the OpenReq project are:

- Project partners and the advisory board,
- European Commission,
- EC-funded projects and other organizations,
- Requirements and software engineering research communities,
- Communities of practice in requirements engineering and software engineering,
- Open source communities,
- Software and Requirements Engineering Students,
- The general public

First of all, the OpenReq partners need to ensure that their internal communication works. The partners need to communicate both to each other and to the advisory board. Moreover, the European Commission funding the project needs to be informed about the project and its products as outlined in the grant agreement.

EC-funded and other projects and organisations are one target group for dissemination and communication activities. OpenReq is a member of the Software Engineering for Services and Applications (SE4SA) Cluster—a group of 29 H2020-funded projects in different phases of execution—sharing information and experiences.

A major aspect of the project is to produce research results which are disseminated to the software and requirements engineering community. Research results are disseminated through presentations in conferences and article publications.

Moreover, dissemination and communication activities target the communities of practice around software and requirements engineering. This audience can be partially reached through research publications, but the majority of practitioners do not follow the latest research. Thus, the research results need to be re-packaged to a format that is more approachable for practitioners, such as blog posts and videos.

Open source communities form yet another target group. The communities of industrial partners will be addressed through vogella and the Qt Company.

The general public is also a target audience. The project website and some of the material created for the communities of practice can be used to inform the general public about the project and its results.



6. Messages

Although exact messages depend on context, our key messages deal with Project and Product.

The project. At the beginning of the project, when no products are ready, we inform the audiences about research results, the project, and its developments as follows:

- OpenReq provides new requirements management tools to software projects.
- The project seeks improvements in the areas of requirements identification, classification, and decision-making support.
- The improvements can be achieved through better processes, methods, and tools.
- The goal of OpenReq is to build an intelligent recommendation and decision support system for community-driven requirements engineering. The system shall recommend, prioritize, and visualize requirements.
- The OpenReq project gathers together both academic and industrial partners looking for the best ways to ease organizations requirements engineering activities. The project evaluates its innovation in a series of trials provided by the project industrial partners in the fields of telecom, transportation, and cross-platform open source software.
- The OpenReq project is funded by the European Union Horizon 2020 Research and Innovation programme.
- What is going on within the project: papers, news about conferences and meetings, blog posts about the research results and trials, etc.

The product. As soon as the product or products are ready, the attention shifts from the project to the product, which is interesting to a different audience.

- The OpenReq partners have developed products (microservices) that help in handling requirements.
- What new products and features the project has developed. When and how is the system ready and launched.



7. Dissemination & Communication Activities

The consortium has decided to implement a strategy for internal and external communication. The main task is to ask periodically (e.g., every two weeks) the partners to provide updates regarding project progress, to:

- update and manage the website,
- update and manage the social media accounts,
- produce promotional material,
- implement new communication and dissemination actions.

Brand Identity

The OpenReq brand identity ensures a common graphic line for all communication material produced by the consortium. It includes logos, icons, colours, and templates to be used in presentations. The document and presentation templates are available to the project members on the TULEAP⁷ system. A press kit containing the project logo is available on the project website to third parties covering OpenReq in the press or web..

Internal Communications

The mailing lists, managed by HITEC, are the backbone of internal communication. TULEAP also provides file sharing and wikis which are used for work management.

Plenary meetings are being organised to evaluate overall progress and achievements, coordinate project-related interactions among partners, assess progress against project plans, identifying and contemplating any major problems and deviations from the project schedule. Plenary meetings will take place every 4-6 months, and will be organised as 2-days meetings, with the meeting location rotating through the partners sites. The Project Manager will prepare and distribute appropriate minutes and action plans within one week after the meetings to the partners, and an agenda of the next meeting at least 10 working days prior.

Work package leaders will call intra-WP Meetings (physical or virtual) when specific needs arise to discuss and solve technical problems related to WP-specific tasks.

The OpenReq has selected an Advisory Board composed of renowned experts in the field of the project (see <u>https://openreq.eu/requirements-engineering/advisory-board/</u>). Apart from their steering role, the members of the Advisory Board have agreed to support us in dissemination activities through their networks whenever reasonable.

Communication with the EC and other projects

Review meetings will provide, together with deliverables and progress reports, the means to allow the EC to check and validate the project progress. As defined in the project plan, the project shall report to the European Commission on a regular basis. Reporting is included in Task 9.4 and associated deliverables.

Communications with other projects are handled by the partner having the contact, in consultation with the coordinator partner and informing the project partners.

⁷ TULEAP is the partners' internal information tool used in the project



Publications

The partners (especially University partners) of the OpenReq consortium will publish books, book chapters, journal articles and papers in conferences and workshops. Publications need to mention the OpenReq project and that the work has been supported from the H2020 European research framework. Links to the publications will be available on the project knowledge base (https://openreq.eu/knowledge-base/) whenever possible. Moreover, the public deliverables will be published on the website as soon as they have been accepted by the European Commission.

At the midterm of the project, we can already confirm that University partners are on their way to meet the high standards expected from them (see *Table 2 in Section 9*; for a detailed list of midterm publications, see Deliverable *D8.3 Communication-and-dissemination-activities-midterm*, already submitted and approved).

The projections for the second half of the project are shown in *Table 2, Section 9.* Partners' publications until the end of 2019 will address OpenReq topics at relevant conferences, workshops, and journals. Subject of course to subsequent circumstances and decisions, we present in *Annex 2* the list of what partners expect to publish at venues such as RE19, REJ, IEEE Software, JSS, ICSE, ICSME.

Some B.Sc., M.Sc., and PhD thesis are ongoing as part of the project (See *Table 2 in Section* 9)

Events

OpenReq partners will participate in a variety of events—conferences, workshops, seminars, and meetings. When a OpenReq-related paper presentation or poster is accepted to a conference or an event, it needs to mention the support received by the project. News about events, whether organized by OpenReq partners or other relevant players in the field of requirements engineering, are published on the OpenReq website.

Some events where partners initially plan to participate are:

- ICSE 2019 conference
- Open Data Studio (organized by HITeC)
- AffectRE 2019 workshop (to be submitted by HITEC to RE 2019)
- SEmotion 2019 workshop (organized by HITEC at ICSE 2019)
- RE 2019 conference
- SE 2019 conference
- ESEM 2019
- Web Intelligence
- IEA/AIE
- RecSyS
- IUI
- UMAP
- IJCAI
- Configuration workshop



- Profes Conference
- NLP4RE'19 (workshop organized by UPC)

Open call

To further support the dissemination and communication approach, the OpenReq project will employ an innovative and participative Open Call Procedure with built-in mechanisms for:

- Attracting a wide variety of participants from different application areas.
- Incentivizing those participants to excel and build outstanding OpenReq-enabled applications and connectors.

Start-ups and entrepreneurs will be invited to develop applications and perform evaluations for OpenReq, extend the envisioned pilots, and implement new use cases demonstrating the potential of OpenReq in the real-world applications in different domains. Moreover, the Open call participants outreach and capacity of performing dissemination actions is a factor that we will consider then making funding decision.

Information about the open call will be spread via the OpenReq website (<u>https://www.openreq.eu/opencall)</u>, social media channels, EU national contact points, mailings list, and by the partners to their relevant contacts.

Project Website

The website is used for sharing information on the project, news and other information. It contains the project participant descriptions and general information.

In addition, news, information about events and publications, deliverables, and blog posts are updated to the website regularly. Moreover, the trials with the industrial partners are made visible through the website. An important part of the website is the project Knowledge Base, which is a collection of knowledge about requirements engineering, decision-making support and other areas relevant to the project.

The project website is targeted to the communities of practice in the areas of software and requirements engineering, open source communities, and the general public. On the website, the research results published in the format of news and blogposts which are more approachable for these target groups.

As soon as the products and services are ready, they will be showcased appropriately through videos and demos. This material is targeted to communities of practice, the open source communities, and the general public. The should rise interest than news about the project and its developments.

Initially, the challenge is the lack of a product or products that these target groups could test and use. Therefore, the communication activities and the size of the audiences are expected to grow only towards the end of the project.

The contents of the website are optimised for the search engines (shorter sentences, liaison words, subtitles, keywords, ALT texts for pictures, internal and external links, etc.).

Social Media

The project has social media activity on Twitter and LinkedIn. Later on, once products are available, also YouTube will be used to publish videos.

The selected channels are used to reach the audiences presented in Table 1.



Service	Target audience	Content
Twitter	Research communities and students, communities of practice, open source communities, the general public	News and progress, eventually the products
LinkedIn	Communities of practice	Important new publications, conferences, and eventually the products
YouTube	Communities of practice, open source communities, the general public	Videos and demos

Table 1. Social media channels by use

The Twitter account is available at <u>https://twitter.com/openreqeu</u>. It is used as a tool to facilitate the dissemination of information among wider audiences—e.g., researchers, students, communities of practice, open source communities, and the general public.

Members of the OpenReq team participate actively in three LinkedIn groups mentioned below. The first two groups are administered by an OpenReq team member. LinkedIn is used as a tool for disseminating academic results and information to professional communities.

- Human Decision Making and Recommender Systems (https://www.linkedin.com/groups/8127898) – This group focuses on approaches for supporting effective and efficient human decision-making in different types of recommendation scenarios.
- Recommender Systems and Software Engineering (<u>https://www.linkedin.com/groups/13529962</u>) – Recommendation technologies play an increasingly important role in different application domains. Especially in the context of a variety of Software Engineering scenarios, these technologies can help to increase the quality of underlying processes and products.
- Requirements Engineering Specialist Group (<u>https://www.linkedin.com/groups/2662234</u>) – The RESG offers the opportunity for requirements engineering practitioners, researchers, educators and students to exchange experiences and new technologies through workshops, seminars, and tutorials on all aspects of requirements engineering.

The YouTube channel will be set up as soon as the project has demos and videos to offer to communities of practice, open source communities and the general public. Every partner is asked to produce a video/demo of their work. Videos can be trailers of trials and show how the OpenReq platform is used in the trials. They can include short interviews with users explaining the products and services.

Hackathons

Each of the academic OpenReq partners, possibly together with industrial partners, will organise at least one hackathon. The hackathons will target local university students, local companies, and developers' communities. It is possible to start organising hackathons as soon as some developments of the OpenReq platform has been achieved and the components are stable enough to be used by third-parties.



Mailing lists and Newsletter

OpenReq will also use academic partners' mailing lists to promote the Knowledge Base on the website and, more importantly, hackathons, videos, and demos. It is envisioned that the use of mailing lists begins as soon as first videos and demos of the products are ready and information about the hackathons available. Similarly, we will leverage the newsletters managed by the advisory board members (e.g. OW2) and the open source communities in which some of the industrial partners are invovled.

Open Source Community Events

The OpenReq industrial partners will promote the project to open source communities during their events. We will produce material promoting the OpenReq project as soon as the videos and demos are ready. For instance, vogella is organising the Eclipse community conference and disseminate the OpenReq results using the Eclipse Newsletter. Similarly, the Qt Company has two "Qt World Summit" meetings in 4Q2019 (Boston & Berlin) where it will be possible to showcase OpenReq tools.

Promotional Materials

The OpenReq will order promotional materials (for example, t-shirts, pens, and other merchandise shown in Appendix 3) to be used during the second half of the project, especially in hackathons and similar events. We will use the promotional materials to increase the awareness about the project and to share its ideas with others. Final decisions regarding merchandise will be taken before end of 2018.



8. Exploitation

At the project review, the Exploitation Plan included in D8.1 (submitted in July 2017) was judged as weak. Of course at that time, as in many other research projects when the results are still on the drawing board, it is difficult to go beyond exploitation generalities.

The revision of this deliverable at midterm provides the occasion to be more specific about Exploitation plans, both at Consortium and at individual partners' level.

However, following the project deliverables' schedule, a specific Exploitation deliverable (D8.4) has been also submitted at midterm. In D8.4, the OpenReq Exploitation strategies and plans are exposed in detail. So actually the contents of this Section could be a repetition of parts of the D8.4 document.

But D8.4 is a confidential document (open only to project partners and Commission services), while D8.1 is a public document. Therefore the solution we have adopted for this revised version of D8.1 is to include a summary of the plans described in D8.4 without harming their confidentiality character.

General Exploitation Strategy

The Open Source approach is at the core of the OpenReq project exploitation. The reason behind this exploitation strategy is based on the following facts:

Part of the research will be built on top of existing open source results, so it is fair to use the same strategy.

The Consortium expects to build a community around the project which will ensure, to some extent, the project development self-sustainability beyond the research project.

Open source is a valid business strategy for service-oriented companies participating in the consortium. We expect that the fact that OpenReq services can be successfully adopted by large Open Source communities, as is the case in our project with ECLIPSE (vogella) and Qt, can arise the interest in other open source communities, providing a multiplier effect. The main code and licence strategy is open source friendly. The whole code base will be open-sourced or open source developers can contribute to the project or just clone the project, adjust and deploy on their own servers. We also expect that the OpenReq Open Call just launched will contribute to this strategy and greatly facilitate the exploitation of results.

The first decision to implement this strategy has been to use for OpenReq the Eclipse Public License EPL 2, an open source software license from the Eclipse Foundation, because:

- It fulfils all requirements needed for the project. On the one hand the source code of OpenReq should be open source and on the other hand it should be possible for the partners to create commercial products based on OpenReq.
- EPL is a highly living license which is not only used in the products hosted by the Eclipse Foundation. Very common projects such as JUnit, Jetty, JRuby, Hudson also use EPL

There will be two kinds of complementary exploitation scenarios:

- The industrial partners (Qt, vogella, SIEMENS, WINDTRE, ENG) view the OpenReq platform as a key element for the development of their product and service strategy. The integration of OpenReq with their current and future products and services will mean competitive advantages and an improved service quality for their customers.
- For the academic partners (HITEC, TUGraz, UPC, UH), the knowledge generated by the OpenReq development will reinforce their research lines, will be integrated into their



teaching curricula and will be used to maintain their open source projects. But, on the other hand, these institutions have strong links with industry, so some commercial agreements can also be possible here. There are already some potential examples of two startups, one in Graz centred on the group decision support and one in Hamburg centred on social media/usage analytics. These plans might lead into spinoffs in the last period of the project.



9. Evaluation

The aim of dissemination, communication and exploitation activities is to make sure that *the results of the OpenReq project are known and widely used*. Generally speaking, there are metrics that can be used to measure dissemination, communication and exploitation *activity*, their *reach*, *engagement* of the audiences and, finally and most importantly, *impact* of the activities to people's attitudes and behaviors.

Some of the metrics below are presented with target values. Other metrics, while monitored during the project, are not presented with such values, as they would be difficult to estimate at this stage of the project. In the final report, however, they will be presented in more detail.

Dissemination and communication metrics

Level of paper	Initial project goal	Achieved M01-M18	Expected M18-M36	Updated project goal
Conference/workshop	28	11	24	35
Journal	13	3	10	13
BsC thesis		1	1	2
MsC thesis		1	1	2
PhD thesis		2	1	3

• Number of scientific publications (see Table 2 below, updated at midterm)

 Table 2. Publications, target numbers

- Number of events (activity)
 - Target values: 20 events attended, 5 events organized
- Number of news and blog posts (activity)
 - Target value: 25
- Website metrics (Google Analytics) (reach)
 - $\circ\,$ i.e. Target value for visits: average 300 visitors/per month in final year of project
- Duration of the visits, recurring visitors (Google Analytics) (reach)
- References to the project in other websites and publications (engagement)
- Social media metrics
 - Number of tweets (activity)
 - Followers on Twitter (Twitter Analytics) (reach, engagement)
 - Number of views and comments on YouTube (reach, engagement)
- Number of videos (activity)
 - Target value: 9
- Number of hackathons (activity)
 - Target value: 5 hackathons
- Number of hackathons participants (engagement)
- Number of open source community events where the project is presented (activity)



• Feedback from the open source community (engagement, impact)

For more about Google Analytics and Twitter Analytics, see:

- Google Analytics <u>https://www.google.com/analytics/</u>
- Twitter Analytics: <u>https://analytics.twitter.com</u>

Exploitation metrics

- Applications to the open call (engagement, impact)
- Registered users for OpenReq Live (engagement, impact)
- Active users for OpenReq Live (engagement, impact)
- Number of user activities for OpenReq Live (engagement, impact)
- Registered users for OpenReq services (engagement, impact)
- Active users for OpenReq services (engagement, impact)
- Number of user activities for OpenReq services (engagement, impact)
- GitHub activities
- Trial users of the products in the organizations of the industrial partners (engagement, impact)
- Feedback from the users (impact)
- ECLIPSE marketplace metrics
- Number of dedicated meetings with interested organizations (target: 8)



10. Timeframe

Communication at all stages of the project is important. People need to be informed about key developments so they will be able to make the most of it. Here, we list the key developments and a timeframe. These are the activities that will be emphasised during dissemination and communication.

- The launch of the project (January 2017)
- Advancements in research (during the entire project)
- Dissemination of the research results in papers and events (during the entire project)
- Most important conferences and events
- Trials
 - Siemens
 - WindTre
 - $\circ \quad \text{The Qt Company} \quad$
 - o vogella
- The midterm review (September 2018)
- Open call launch (October 2018)
- Product and demos (December 2018)
- Hackathons (Spring 2019)
- Open source community events (Spring 2019)
- Results of the open call (Summer 2019)
- Results of the entire project (December 2019)



Annex 1. Project Style Guide & Logo Usage

The project name should always be written as OpenReq.

The project logo (found on the TULEAP site in the "Evergreens" folder) needs to have at least 10 % whitespace around it. I.e. a logo that is 100 pixels wide, needs 10 pixels empty space on each side before other graphical or text elements.



And the icon of the project is this:



Figure 4. Project Icon

The logo can be used on all backgrounds, but please avoid low contrast situations. When the background does not provide sufficient contrast, the logo needs a base color underneath it. If a base colour is needed, white is preferred, but other calm colours can also be used.

The project preferred colour map is this:





Figure 5. Project colormap

The colour map draws inspiration from Mediterranean colours. It is warm and contains broken colours. There are several possibilities to extend the colour map, but ideally it should be used by itself. If additional colours are needed somewhere, please contact the communication and dissemination work package leader.

The project has templates on the TULEAP system available to project members for the following uses:

- Document template for official use
- Presentation template for OpenReq presentations



Annex 2. Expected publications till end of 2019

- Requirements quality improvement: a systematic mapping study
- Comparing simple techniques to Improve Requirements Quality
- Leveraging developers' interaction to improve issue quality: an empirical study at Qt
- An Investigation of open source requirements quality issues: a practitioner perspective
- Supporting RE decision using social media: an empirical study at large telco company
- Can social media replace user involvement in early RE phases?
- Recommending issues to the Eclipse project newcomers
- Enhancing issue trackers with social media feedback
- Needs and challenges in group-based RE
- Emotions as drivers for apps success
- Using delegated voting to prioritize issues: the case of Eclipse
- A Simple NLP-based Approach to Support Onboarding and Retention in Open Source Communities
- Automated Identification of Type-Specific Dependencies between Requirements
- Recommendation of Requirement Dependencies in Software Release Planning
- Towards Similarity-Aware constraint-Based Recommendation
- Socially-Aware Diagnosis for Constraint-Based Recommendation
- OpenReq Live towards intelligent preference acquisition interfaces for RE
- Liquid Democracy in the Context of MAUT-Based Preference Specification
- Content-Based vs. Collaborative Filtering Approach based on MAUT-Based Preference Specification
- Personalized Automatic Weight Learning for Open Source Projects
- Variability models
- Qt requirements management
- RE analyses
- Configuring Release Plans
- SLR recommender systems
- Journal extension of the paper presented in ESEM about the interviews carried out to gather the requirements for OpenReq
- SLR requirement patterns
- Evaluation of the similarity component at Qt
- Evaluation of the classification component at Siemens
- Requirements engineer roles in industrial settings
- Use of requirements elicitation techniques in industrial settings
- Use of requirements specification techniques in industrial settings
- Evaluation of the requirement patterns component





Annex 3. Ideas about promotional materials

Figure 6. Promotional materials (i)



Figure 7. Promotional materials (ii)





Figure 8. Promotional materials (iii)