

EFFECT PROJECT

Creating effects through
communication and engagement in
Future and Emerging Technologies

D3.3 Online, social and TV media indicators used to measure outreach and impacts

Authors: (YOU)

27 December 2017



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 737301.

Technical references

Project Acronym	EFFECT
Project Title	Creating effects through communication and engagement in Future and Emerging Technologies
Project Coordinator	Elisabeth Schmid youris.com (YOURIS) elisabeth.schmid@youris.com, alice.deferrari@youris.com
Project Duration	January 2017 -December 2018 (24 months)
Deliverable No.	D3.3
Dissemination level*	PU
Work Package	WP3 - Public communication and distribution
Task	T3.4 - Distribution
Lead beneficiary	YOU
Contributing beneficiary/ies	
Due date of deliverable	Month 12 - December 2017
Actual submission date	27 December 2017

PU = Public

PP = Restricted to other programme participants (including the Commission Services)

RE = Restricted to a group specified by the consortium (including the Commission Services)

CO = Confidential, only for members of the consortium (including the Commission Services)

v	Date	Beneficiary	Author
1.0 first draft	11.12.2017	YOU	Elisabeth Schmid
2.0 second draft	14.12.2017	YOU	Charlotte Michi, Giulio Mazzolo
3.0 third draft	21.12.2017	YOU	Giuliana Folco, Alessandra Barbieri
4.0 final review	22.12.2017	YOU	Elisabeth Schmid, Mario Martinoli



Disclaimer

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 737301.

The sole responsibility for the content of this report lies with the authors. It does not necessarily reflect the opinion of the European Union. The European Commission is not responsible for any use that may be made of the information contained therein.

Executive Summary

The objective of this document is to present the indicators that are used for the monitoring of the distribution of all the original contents produced and distributed by EFFECT and the measurement of outreach and impacts.

It must be taken into account that the definition of common indicators in communication activities, going beyond the mere calculation of outreach (both real and potential) but also focusing on the direct engagement of the users with their content or actions, is still under investigation. The current Community Engagement Index calculation developed by youris.com (as described in section 6.1.3) will be used for the first release of the Analysis of EFFECT Impacts (D5.1). youris.com is currently working on the definition of the perimeter for engagement to cover all most significant activities of online interactions. This perimeter will be used in the second and final release of the “Analysis of EFFECT Impacts” (D5.2).

Deliverable 3.3. is structured in five main chapters:

- The EFFECT content-centric approach, channels and communication formats
- The multi-channel distribution of EFFECT contents
- Dedicated EFFECT engagement activities
- The importance of monitoring and measuring communication and engagement aimed at generating impacts on society through EFFECT
- Quantitative and qualitative indicators to measure outreach, engagement and the effectiveness of the EFFECT strategy

1 Table of Content

Executive Summary	4
1 About EFFECT	6
2 The EFFECT content-centric approach	8
2.1 Communication channels	9
2.1.1 Website	9
2.1.2 Social Media	9
2.2 Communication formats	10
2.2.1 Editorial communication	10
3 Content distribution	13
3.1 Web distribution	13
3.2 Social Media Distribution	13
3.3 TV Distribution	13
4 Key engagement activities	15
4.1 FETFX Meet&Match and Brokerage events	15
4.2 Workshops	15
4.3 Webinars	15
4.4 European Researchers' night	15
5 Monitoring of communication and engagement impacts	17
6 Quantitative and qualitative indicators	18
6.1 Quantitative indicators	18
6.1.1 Outreach indicators to measure online communication activities	19
6.1.2 Engagement indicators to measure online interactions	19
6.1.3 Community engagement indicators to measure online interaction - The Community Engagement Index (CEI)	21
6.1.4 Indicators to measure TV outreach	21
6.2 Qualitative indicators	22
7 Conclusions and next steps	23

1 About EFFECT

EFFECT is a H2020 project funded under the FET Programme aiming at enhancing visibility and impact of FET research among a variety of actors (researchers, industry, policy makers, civil society organizations, citizens etc.) and to stimulate debate and collaboration among multiple stakeholders through dedicated community building and public engagement activities.

EFFECT aims at **four specific objectives**:

- Enhance knowledge transfer and raise visibility on FET in research & innovation ecosystems, marketplace and society
- Foster awareness on the innovation potential of FET funded research in the business community and among policy makers
- Support a collaborative research & innovation framework through a set of public engagement activities to increase acceptance and uptake of FET research and its outcomes
- Enhance communication strategies of high risk research

The EFFECT strategy is encompassing public communication and engagement in a comprehensive process. The selection of FET stories and contents is an overarching activity to bring the entire process into effect. Public communication is aimed at a general, broader public (which might obviously include a number of different target groups and stakeholders) while engagement activities are more focused on specific audiences and stakeholders thus requiring tailored actions. Impacts in terms of understanding and awareness are generated through different communication formats as part of an overall outreach media programme involving different channels. Acceptance and uptake are stimulated by engagement and participatory activities, organized through dedicated events and online social media animation and campaigns. To measure the impacts generated by the EFFECT communication and engagement strategy implementation a continuous monitoring process will enable the project to measure the effectiveness of its strategy and eventually introduce corrective actions through a scalable approach.

Many actors and citizens are not aware of the challenges connected to the transformation of FET Research into future benefits for society. Public awareness raising activities, focusing on how FET research can improve citizens' lives and direct engagement with key players highlighting EU scientific excellence, long-term innovation and competitiveness will aim at filling this knowledge gap.

EFFECT communication and engagement strategy is fully in line with the EU H2020 Key Action of Responsible Research and Innovation¹:

- Increasing societies' science literacy and ability to participate in democratic processes related to technological developments. This objective is covered by the EFFECT public communication strategy. The proposed public communication and engagement approach

¹ See: <http://ec.europa.eu/programmes/horizon2020/en/h2020-section/public-engagement-responsible-research-and-innovation>

will still be top-down however increased accessibility is provided through easy-to-understand communication formats and the use of diversified media channels, some of them (social media) offering the possibility to interact with the proposed contents. Storytelling based on research outcomes and potential market uptake for the benefit of society will stimulate interest and engagement for different audiences;

- Contributing to different perspectives on research design and outputs. Feedback from public events, networking and direct exchange (Meet & Match and brokerage events, workshops, direct exchange with FET research projects and EC services) will provide inputs to the FET research funding programme;
- Ensuring that research and innovation match societal needs. Direct engagement with stakeholders and investors (during the Meet & Match and brokerage events and workshops) and increased FET researchers' capacity building in public communication will support the identification of future research challenges to meet societal needs.

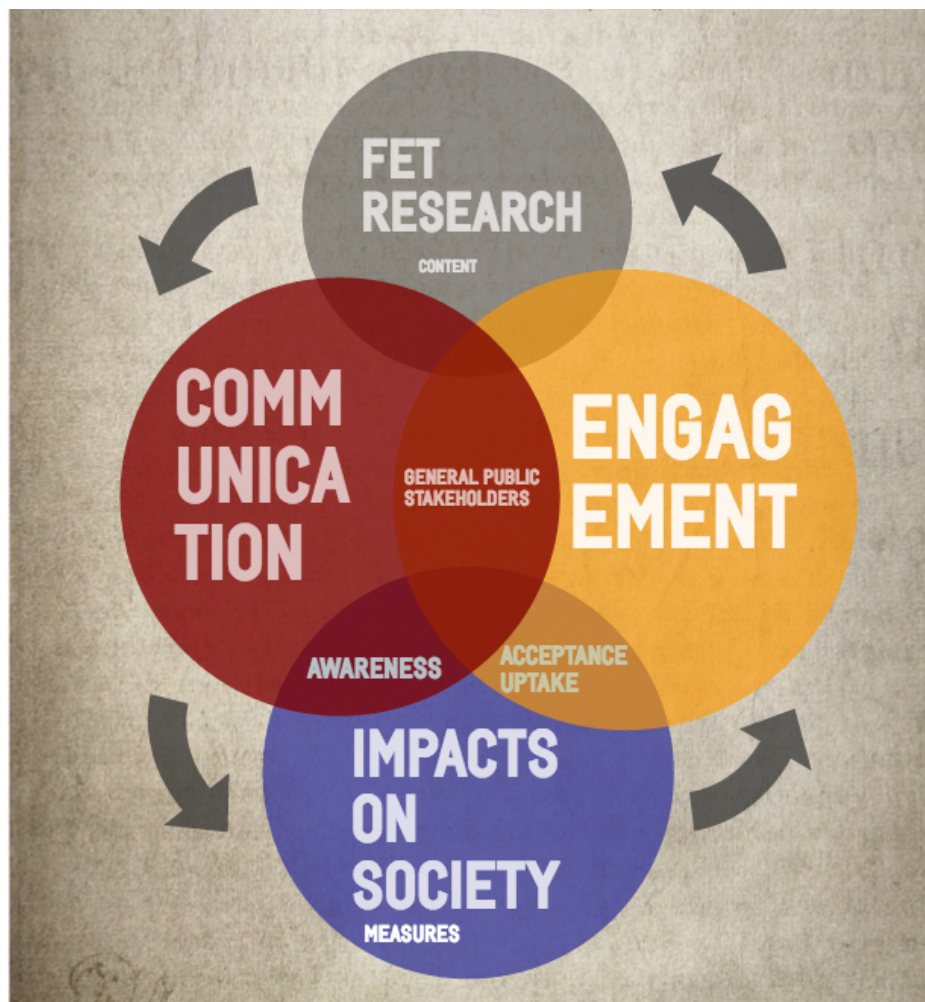


Figure 1 The EFFECT approach to Communication and Engagement

2 The EFFECT content-centric approach

EFFECT content-centric approach aims at identifying and selecting FET stories that are most interesting to be communicated towards different stakeholders, here including the general public, in videos, articles and interviews and to be used as a source of debate and participation. Contents are thus packaged according to the different audiences and distributed via multiple online and offline channels.



Figure 2 The EFFECT targets and solutions to increase their awareness and engagement

2.1 Communication channels

2.1.1 Website

The fetfx.eu platform is the project's main communication channel. Launched at the beginning of July 2017, it has been designed to:

- host the EFFECT editorial production illustrating FET research achievements on a non-technical level;
- support scientists with the non-scientific aspects of their work, i.e. public communication;
- promote FET-related networking activities and EFFECT events;
- provide a direct channel to subscribe to the EFFECT newsletter and access the social media channels.

As mentioned in the previous sections, fetfx.eu is mainly addressing: *i)* the general public, here including citizens who want to understand in an easy and engaging way how scientific research could shape future life and society and *ii)* researchers willing to explore investigation lines and networking opportunities beyond their narrow field, and searching for information on EU research funding programmes and on the related application procedure. Other important target groups are: *i)* policy makers searching for information on the benefits and impact of the FET initiative; and *ii)* investors and entrepreneurs willing to bring innovative technological developments to the market.

Given the major role played by the editorial production for the scope of EFFECT, special attention has been paid to enable an intuitive and broad exploration of the journalistic content on fetfx.eu. The pieces of content can be grouped by end users by following three different approaches: thematic areas, tags and FET projects.

1. The five thematic areas (categories) considered by EFFECT are outlined in the previous section. By selecting the category of interest, the user has direct access to all related products.
2. Tags are associated to each editorial product. By choosing one specific tag, the user is shown all marked products.
3. A short description of each FET research project related to at least one editorial product is available on fetfx.eu. The user can easily access the whole list of projects' descriptions. By selecting one specific project, all editorial products linked to that project are shown.

Besides original EFFECT editorial content, fetfx.eu hosts FET-related articles from other journalistic platforms as well. The products from external sources are mainly concentrated around the date of the platform's launch, i.e., when the EFFECT editorial plan was still under development.

2.1.2 Social Media

The EFFECT social media consist of a Twitter and YouTube account (at the time of the present deliverable). Other social networks (such as Facebook) will be considered as soon as a more consistent number of original news is produced.

Twitter

The EFFECT Twitter account is [@FETFX_EU](https://twitter.com/FETFX_EU).

The animation of the Twitter channel takes place on a daily basis and includes posts on original contents published on the fetfx.eu website as well as news from other FET projects and the EC Communication services. To increase engagement through visual items, Twitter cards have been produced and released on fixed days between April and July 2017: the FETFX cards with quotes from famous scientists published on Mondays (#FETFXquote #mondaymotivation), and the #imagineif cards - highlighting the impacts FET projects could have on our lives - published on Thursdays. Twitter is also used for live storytelling during events: promoting the event and increasing the visibility of the channel itself, attracting more followers and stimulating debate.

YouTube

A YouTube account hosts the EFFECT videos. Some EFFECT videos are also featured in the YouTube Playlist “Future & Emerging Technologies (FET)” created by the EC YouTube channel Digital Single Market.

2.2 Communication formats

2.2.1 Editorial communication

EFFECT editorials communication is represented four different formats: journalistic articles & interviews, news releases and short catchy news aimed at social media distribution.

Journalistic articles & interviews

Journalistic articles around different FET topics and stories as a result of the screening process (WP2) are produced and distributed according to the editorial calendar planned by youris.com Editorial Manager. Independent journalists write the articles according to the angles suggested by the results of the screening activity and validated by the Advisory Board. Articles provide a balanced view of each specific topic, taking into account the opinions of more experts in a concise and easy-to-understand format also about complex topics, without compromising professional and scientific standards.

The journalistic articles are also regularly published on the youris.com public communication portal on EU research and innovation, one of the primary public communication services and information sources on European science and technology covering different research domains.

News releases

News releases are produced to target defined stakeholders' groups beyond the broader public. They include policy makers, business communities, investors. The news releases are either newly produced or based on already existing public contents and reformulated according to a more easy-to-access style.

Videos

The **videos** produced as part of the public communication activities in EFFECT are selected from a range of possible video formats (web videos, video interviews, Video News Releases for TV distribution) to address different stakeholders and the general public through engaging and original new forms of visual story telling.

- Video News Releases for TV distribution

Short TV reportages in the form of Video News Releases (VNRs). Their storylines are developed around truly cutting-edge results in the FET domain, which have been implemented and proven as success stories with future benefits on society as a whole. The journalist's ability in finding out the most interesting angle is fundamental to stimulate interest of TV broadcasters and journalists who are ready to take up the video story and broadcast it through their channels provided that they consider it interesting enough for their TV watchers.

The VNR contents are presented in different formats:

- A 3-minutes edited teaser in English acting as short news on the subject. This short version is used the web and aims to provide TV broadcasters with an idea of the subject and highlight its potential story development.
- A language-independent short footage or b-roll (8 to 12 minutes duration) adequately supported by sheets, shot lists, suggested voiceover and other supporting information. The footage is stored on the youris.com mediacenter (a more than 10 year long video repository), where TV stations can download the video material - teaser and b-roll - so as to enable them to build their own edits according to their editorial needs and in their language.
- A short version to share on social media with subtitles in English, to enable the users to quickly look at the video and read the story during their social media navigation

This format (one short teasers plus footage) fully complies with the requirements of all TV broadcasters in Europe and worldwide, including the satellite distribution exchanges of the European Broadcasting Union.

- Web videos

Short web videos (max. 1:30 minutes each) for the web. They are produced and distributed to inform the public about a specific FET topic or to present the FET mission and scope in an engaging and original new form. A first web video "What is FET?" is already available.

Multiple styles can be chosen, even if graphic components play a key role: animations, infographics, real footage. Contents are simple, few and directly focused on key messages. They are intended to facilitate the information transfer of more complex contents to a broader audience. These videos are distributed via social media, the project website and other sector-related communication portals and platforms.

- Video interviews

Short video interviews (no longer than 1:00 - 1:30 minutes each) to FET researchers focus on specific topics of the FET EU research domains and key messages and statements on FET and its benefits. The interviewees are identified as the spokespersons of the FET community (tagged as "FET people" on the website)

News for social media

Both the editorial and video production is adapted for Social Media. This ensures a better fruition from the users and followers on the different channels and will also extend the "life-duration" of each piece of news, giving the chance to more people to come in contact in interact with it. For example, from a single article, different posts are produced, some of which will be accompanied by a graphic element, such as a card or picture; on the other hand, videos are shared from the Youtube channels but also exported in short GIFs, where suitable, so that users will be immediately engaged.

PageFlows

The produced audiovisual and written contents will all together be merged into new **multimedia** storytelling **formats** such as PageFlows, suitable for creating a interactive narration including different communication formats and providing the user with a new browsing experience.

E-magazine

Three special e-magazines will be produced aggregating different contents and formats. Videos, articles, events and other contents will be assembled in a magazine format and will reach directly the target groups. The e-magazines will be hosted on the website as well as on other FET-related platforms, Slideshare, ISSU etc. and widely promoted via social media.

3 Content distribution

Multichannel distribution of contents has to be considered as the driving factor to enhance awareness, generate impacts and foster public acceptance. Contents are not only hosted on the project communication channels (website and social media) but are also widely distributed so as to enable the users to access them through different sources. Distribution channels are selected according to the contents, formats and targets. Impacts are thus calculated on the outreach obtained on different sources and channels that have taken up the project contents and messages.

3.1 Web distribution

The distribution of the written contents (articles, interviews, news releases) videos (the teasers of the Video News Releases, video interviews, web videos) as well as multimedia aggregating contents (pageflows and e-magazine formats) is to be considered as a central activity of EFFECT.

- **Online information multipliers:** articles and interviews produced for EFFECT will be distributed through syndication agreements for republication on other reputed websites: information multipliers such as Eu Agenda, Cordis Wire, Alpha Galileo, Phys.org and World News. Articles and interviews, which are freely distributed, are usually taken up, either from these sources or directly from the youris.com portal, and published by a number of reputed on-line science news, magazines, blogs.
- **One-to-one distribution to online magazines** focusing on hi-tech and addressing a more general public, such as Wired, Futurism, Monocle.
- The www.youris.com portal, owned and managed by the coordinator youris.com, is a major integrated audiovisual and news platform about European science, innovation, policy and research for TV, web and social media. It represents a continuously updated research information portal that covers a large spectrum of H2020 related domains and has proven an excellent multiplier for content generated via other projects since it can count on a large basis of regular visitors and viewers. The youris.com portal also constitutes an additional on-line repository for the videos and journalistic articles developed in the framework of EFFECT. It represents a very well known brand in the scientific TV broadcasting domain as well as among online media. The already existing sub-section of the youris.com portal called Future Tech ([Future Tech](#)) in the Society area is dedicated to FET themes.

3.2 Social Media Distribution

Social Media are essential to achieve the objective of engaging wide user targets and maximize the outreach to multi-stakeholders' groups. The EFFECT social media strategy is implemented through:

- The exploitation of the official social media channels of the EFFECT project (Twitter and YouTube so far);
- The exploitation of already existing FET discussion groups, retweets of contents from FET_EU Twitter accounts, and targeted use of hashtags of these official accounts to generate referrals.
- The project partners' social media accounts (YOU, APRE and ZAB social media accounts on Twitter, Facebook and YouTube).

3.3 TV Distribution

Distribution of the Video News Releases to TV stations takes place as follows:

- Direct one-to-one distribution to more than 260 commissioning editors at European TV stations, managing news and scientific magazines. The youris.com network includes TV broadcasters, producers, commissioning editors, freelancers, press and media journalists for dissemination, selected in all EU countries.
- The satellite exchanges of the Eurovision Department of the European Broadcasting Union (EBU), which will participate to the EFFECT project as subcontractor. The Eurovision is by far the most important TV exchange in Europe and will act as the principal broadcasting multiplier for project's audiovisuals. Eurovision has a membership base of over 100 Members and Associate Members in over 80 Countries. The VNRs produced by EFFECT are also broadcast on the Eurovision World Feeds. The Eurovision department of the European Broadcasting Union (EBU) is based in Geneva, Switzerland. Since July 2005 youris.com is a member of the Global Eurovision Network and owns a proprietary operational code (BEYOUR).
- Downloads from the youris.com distribution booth www.yourismediacenter.com. The youris.com Mediacenter constitutes a major on-line distribution service for TV broadcasters. It contains all the TV reportages produced and distributed by youris.com over the past 5 years, and is accessible via registration. TV stations wishing to broadcast non-recent reportages, also at a distance of several months from their release make often use of this service. It constitutes the main permanent access service to the EFFECT A-rolls and B-rolls for all TV broadcasters.

4 Key engagement activities

According to the EFFECT workplan, a set of events, workshops and webinars are organized throughout the duration of the project with diverse goals and audiences. All events regardless of their nature represent an additional communication and engagement instrument, which requires both planning and appropriate communication and dissemination actions.

4.1 FETFX Meet&Match and Brokerage events

The annual *EFFECT Meet & Match events*, as part of the engagement activities, aim at fostering community building, enhancing visibility and highlighting the innovation potential that is hidden behind FET funded research and results.

By introducing themselves, the FET projects present their consortia, their project's activities as well as their main results in terms of innovation potential and research results ready for the market, whenever possible, to the business community (entrepreneurs, innovators, venture capitalists, chambers of commerce). The matchmaking activities are sought by the organization of Face-to-Face Meetings, in order to explore opportunities of collaboration, innovation potential brainstorming and foster the design and development of transformative research and innovation themes.

FET Innovation Launchpads are invited to foster collaborations and present their FET project results and open opportunities arising from the Innovation Launchpad CSA. Synergies also take place with FET2RIN Coordination and Support Action as well as with the European Commission, in the case these events can be organized in conjunction with major events organized by the EC.

Events are also promoted through different networks: IdealIST ICT NCP Network, Access4SME, NMP Team NCP Network, C-Energy 2020 NCP Network; Enterprise Europe Network; European Business Network.

4.2 Workshops

EFFECT will organize two workshops on "Open FET to innovative and responsible future scenarios". The main objective of the two workshops will be to investigate and promote the innovation potential resulting from on-going FET projects; identifying, whenever relevant, a potential interest from the European marketplace and discuss about policy actions to be implemented. One of the two workshops will take place at the European Parliament in March 2018 and will involve policy makers, the EFFECT Advisory Board, representatives of the current FET Advisory Group (FETAG) and other stakeholders.

4.3 Webinars

Targeting FET researchers who are implementing their projects' activities, EFFECT organizes webinars with the purpose to enhance their skills on effective communication and dissemination strategies and tools to be used to communicate FET research towards multiple audiences and channels.

4.4 European Researchers' night

EFFECT acts as facilitator for FET coordinators planning to organize public engagement activities involving citizens of different ages in their own organization, as winner of a European Researchers' Night call for proposal. The EFFECT activity establishes synergies and fosters the exploration of new ideas and concepts of public engagement, by inspiring the FET on-going and future

coordinators through a useful set of guidelines provided through the EFFECT Guide on Public Engagement. As part of EFFECT activity, the dissemination of the FET projects' participating with engagement activities during the European Researchers' Night are promoted and disseminated through dedicated pieces of news and social media interaction.

5 Monitoring of communication and engagement impacts

The measure of the impact of any communication and engagement action is based on the number of people that make use of or come across that communication and their interaction. Outreach data on online, social and TV channels, and indicators therefore constitute the principal instrument to measure the potential impact of the EFFECT project on its target audience.

Monitoring the efficacy of the distribution of contents (WP3) and engagement mechanisms (WP4) and assessing the overall success and impacts of the project (WP5) is a key activity of EFFECT as it provides a measure of the impacts generated through its communication and engagement efforts. The following impacts generate from the successful implementation of communication and engagement campaigns: through public communication accessible for all we can increase *awareness*, that combined with engagement can raise *social acceptance* of innovation. The latter, social acceptance, represents a necessary precondition of the *market uptake* of breakthrough scientific and technological results, as indicated in the figure below. The EFFECT Coordination and Support Action specifically focuses on the first two pillars of impacts.



Figure 3 The EFFECT targets and solutions to increase their awareness and engagement

Continuous monitoring enables EFFECT to measure the effectiveness of its communication and engagement strategy to regularly measure its performance, monitor key impacts and maximize its results, proposing corrective actions to improve performance if needed.

Measurement of impacts and outreach will be guaranteed by a consolidated monitoring methodology, involving the online, social and TV media channels and the engagement activities.

A set of indicators are used to measure the impacts of EFFECT communication and engagement activities.

6 Quantitative and qualitative indicators

To measure the effectiveness of the project strategy as well as to assess the impacts of communication and engagement activities on our target audiences, EFFECT leverages a series of quantitative and qualitative indicators.

Quantitative indicators have been selected to have some common characteristics that make them effective in assessing progress towards objectives. These indicators represent the performance metrics of the EFFECT project, and must be:

- **Measurable:** they can be represented numerically and analyzed over time to identify trends, best practices and pitfalls.
- **Easy-to-understand:** they can be used by different actors, to ensure exploitation of the resulting analysis.
- **Repeatable:** they can be used and collected in a consistent way every time it is needed.
- **Available:** sources are always accessible and available.
- **Timely:** they are made available every time a new communication or engagement effort is undertaken.
- **Insightful:** they provide knowledge around the effectiveness of the communication and engagement effort.
- **Reliable:** they are drawn from trusted sources in the online analytics world.

Experts consider a good metric to be also controllable, i.e. measuring something that is under the control of the process. In the case of communication and engagement, this is hardly possible, not to say impossible. As an example, the number of website visits, the number of attendees to an event or the number of social interactions help assessing the impact but they are not in the full control of a communication and engagement project. The number of written articles or the number of events organized by a project are a measure of its communication intensity, but they are not good indicators of effective impacts.

Considering the final objective is making an impact and measuring it, EFFECT adopts performance metrics that have all the characteristics above but are not fully controllable. EFFECT remains fully committed to increase “controllability”, by ensuring high-level quality of its publications and engagement efforts, by analyzing statistical variance of its work to identify best practices and pitfalls (authors, style, publication dates, content, events’ features, etc.) and by taking corrective actions if needed.

Qualitative indicators are also analyzed to complement the quantitative analysis and to consider the not-measurable aspects of the EFFECT value creation and impact on knowledge transfer and collaboration.

6.1 Quantitative indicators

Quantitative indicators draw from the monitoring of web-sites and social media accounts, according to three different approaches:

- **Direct monitoring,** by retrieving data on the web traffic (and views) for the EFFECT reportages and associated articles and interviews from the www.youris.com portal and platforms working in syndication with youris.com
- **Direct monitoring** of social media accounts managed by the project and the youris.com social media accounts (YouTube, Facebook and Twitter) through Twitter Analytics

- Indirect monitoring, by identifying the referrals made on EFFECT materials by other on-line and social web resources. A more sophisticated analysis of online users can be made possible by the use of dedicated state-of-the-art software tools such as Nuvi ® a real-time social intelligence software.

They include outreach indicators, to measure online communication activities, and engagement indicators to measure activities associated to EFFECT communication. Indicators to measure TV outreach are also provided. All sets of indicators are described below.

6.1.1 Outreach indicators to measure online communication activities

Outreach indicators assess the size of the audience of EFFECT messages, with the final aim of strengthening the impact on awareness. They are basic indicators that on their own do not provide a complete picture of EFFECT effectiveness, rather a starting point for further analysis.

The following table shows EFFECT outreach indicators and the tools used to collect the data:

OUTREACH INDICATORS	TOOLS
Total visits on FETFX website	Google Analytics
Unique visitors on FETFX website	
Total visits on youris.com	
Unique visitors on youris.com	
Twitter impressions on @FETFX_eu	Twitter Analytics
Twitter impressions on @YourIS_com	
Facebook viewers on www.facebook.com/youriscom/	Facebook Insights
Visualisations on FETFX YouTube account (if applicable)	YouTube counter
Visualisations on youris.com YouTube account (if applicable)	
Impressions on multipliers (EU Agenda, AlphaGalileo etc.)	Provided directly by the multipliers or, in a minor number of cases, estimates based on a solid number of parameters leveraging time series and historical data

Table 1 EFFECT outreach indicators

Definitions:

- Visits, impressions, visualisations: number of times a content has been seen online (different platforms use different terms to describe the same action)
- Visitors, viewers: number of people who got in contact with the content online

6.1.2 Engagement indicators to measure online interactions

Engagement indicators help understand the impact of EFFECT communication messages on target audiences with the aim of supporting acceptance (see Section 5). Engagement metrics are a measurement of ‘if’ and ‘how’ stakeholders engage with EFFECT through online interaction. They are a quite powerful tool to assess the effectiveness of communication.

NUVI® is the real-time social monitoring platform leveraged for this purpose and used by youris.com. Engagement indicators for EFFECT include total mentions on the web and on social media, as measured by NUVI®, and covering:

- Twitter
- WordPress
- Google+
- Blogs, News, RSS
- Tumblr
- Automattic
- Reddit
- VK
- Facebook
- Youtube

Mentions represent the number of times NUVI® finds any of the keywords related to the article (corresponding to title, subtitle, first sentence, URL or tweet) on the web pages and the social media it monitors.

Mentions are a partial view of engagement. For example, they cover just Tweets and Retweets for Twitter. Likes, Shares, Clicks are not included.

youris.com is currently working on the definition of the perimeter for engagement to cover all most significant activities of online interaction. The main features of Outreach and Engagement Indicators are described below:

	Measurable	Easy	Repeatable	Available /Timely	Insightful	Reliable	Note*
Visits/visitors on FETFX website and youris.com	***	***	***	***	**	***	Doesn't fully describe effectiveness
Visits on multipliers	**	***	***	***	**	**	Doesn't fully describe effectiveness. Some data are estimated.
Impressions on social	***	***	***	***	**	***	Doesn't fully describe effectiveness
Total mentions	***	***	***	***	***	***	Describe effectiveness especially if read together with outreach indicators

Scale: *** very much, ** medium, *little

Table 2 Outreach and Engagement Indicators' characteristics

6.1.3 Community engagement indicators to measure online interaction - The Community Engagement Index (CEI)

The mere number of web visitors and social media and interactions is not sufficiently significant to assess the evolution of acceptance towards innovation if not put into a broader context able to make all of these data comparable according to a unique measurement metric. The **Community Engagement Index (CEI)** helps to qualify, in a quantitative way, the actual engagement of people into the content delivered to the Internet and the social media by the EFFECT project. The CEI takes into account both the web outreach of a given content and the corresponding generated social media activity, merging them into a unique composite indicator (index) able to accurately represent the engagement of the EFFECT community into the topics treated by the project. In particular, the CEI is proportional to the number of mentions of a given content via social media (Twitter, Facebook, etc.) and the web, divided by the total visits of this content on the web (including multipliers). Low values of the CEI indicate little interest by the target audience, while high values of the CEI suggest high interest and engagement in that specific content.

6.1.4 Indicators to measure TV outreach

The indicators used to measure the results of the broadcasting and the distribution of EFFECT audiovisual productions to TV stations are provided through:

- Number of effective download of the video news release from Eurovision/EBU satellite exchange and the youris.com mediacenter
- Number of broadcasts that effectively took place

Tracking and monitoring takes place through:

- Reception of the Eurovision news and features exchanges downloading reports, delivered the day after each satellite transmission, on the actual downloads made by members TV stations. These reports contain the information about the TV stations actually downloading (and therefore possibly using) the TV reportages from the satellite exchanges.
- Direct consultation (via telephone and/or email) with the correspondents at TV stations who have downloaded the video footage from the youris.com mediacenter and the Eurovision. This activity often returns accurate information on the actual broadcasts, and provide also the edits of the broadcasts made.

Tracking of broadcastings of footage downloaded by the EBU exchanges is problematic, as it is not known to which program (news, magazines, etc.) the footage is going to be dispatched. Being done on a proactive basis (stations downloading from the EBU exchanges must execute a series of specific actions for receiving the satellite downstream and are informed two days in advance about content and subject of each VNR), it is highly likely that this material is going to be used for broadcasting. The EBU historical figures linked to the youris.com productions estimate that about 40% of TV channels downloading the footage available on their exchanges will use them in programming segments, now or in the future.

As a general rule, it must be stressed that it is not possible to track every single broadcasting at the European level. A current practice experienced in time is that many TV stations do keep the footage in their video repositories/archives for future, unpredictable usage. In addition, people at TV stations are very often unaware of the use made by the footage they receive.

In terms of TV audience, only estimates of the potential viewers who come across the video can be made. This depends on the audience of the TV channel as well as on the specific TV programme the video is released. As an example if the video is broadcast during the evening newscast its TV ratings can be very high (millions of people in some cases), if it is broadcast in dedicated science programmes TV audience might be lower, but it is very likely that in this case the video will reach the right target audiences interested in the topic, thus generating a higher impact not only in terms of awareness but also in terms of engagement and acceptance. TV audience share data on programmes are usually not provided by TV stations therefore only broad estimates can be done.

6.2 Qualitative indicators

Qualitative indicators are used to assess those areas that are not measurable and/or cannot easily be expressed numerically. They represent people's judgement, opinions or perceptions around a subject.

EFFECT qualitative indicators play an important role in promoting and understanding stakeholders' perspectives, fostering participation to the FET ecosystem. While quantitative indicators measure this participation, qualitative indicators describe the *quality* of the participation and experience of the different stakeholders, and enable actions aimed at improving sharing and collaboration.

To measure the engagement and interest via off-line communication and engagement, feedback is therefore collected from stakeholders' participants to EFFECT events via direct interviews of feedback forms.

In detail, the monitoring of participation of the activities organized as part of WP4 includes not only a numeric assessment but also a qualitative evaluation based on the feedback of the participants and direct engagement with the project debates and content. This activity guarantees an interaction between EFFECT and the actors involved in the communication to fine-tune the EFFECT communication tools. EFFECT is not only ensuring that stakeholders have access to the information but the information is shaped on their expectations.

The integration between outreach data, online engagement and qualitative stakeholders' feedback constitutes the basis for an integrated analysis of the impacts generated by the project activities.

7 Conclusions and next steps

The definition of common indicators in communication activities, going beyond the mere calculation of outreach (both real and potential) but also focusing on the direct engagement of the users with their content or actions, is still under investigation. Indicators to measure the effectiveness of a communication action and the impacts it generates on the public involve different parameters and variables measuring and analyzing engagement actions as well as sentiments (at a more sophisticated level), which need to be brought together to find a common denominator that can be used as a reference indicator. Studies involving social sciences and communication players at international level are still ongoing.

The current Community Engagement Index calculation developed by youris.com (as described in section 6.1.3) will be used for the first release of the Analysis of EFFECT Impacts (D5.1). youris.com is currently working on the definition of the perimeter for engagement to cover all most significant activities of online interactions. This perimeter will be used in the second release of the “Analysis of EFFECT Impacts” (D5.2).