

Dissemination and public engagement strategy paper

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Revision history

Date	Editor	Changes to the document
13.01.2017	Chiodelli, Luce	First version of the draft (structure)
14.02. 2017	Chiodelli, Luce	Editing draft after consensus on communication
10.03.2017	Chiodelli, Luce	Scope of the deliverable, Communication strategy
14.03.2017	Chiodelli, Luce	Communication channels – first pass of drafting
15.03.2017	Chiodelli, Luce	Plan for dissemination
20.03.2017	Chiodelli, Luce	Publication strategy
30.03.2017	Chiodelli, Luce	Final version of the draft consolidated
04.04.2017	Saïghi, Sylvain	Review
05.07.2017	Chiodelli, Luce	Draft edition (2 nd pass)
12.04.2017	Chiodelli, Luce	Final edition sent to the consortium for formal validation
21.04.2017	Saïghi, Sylvain	Review for quality assessment
10.07.2017	Chiodelli, Luce	New edition in accordance with the style chart
24.07.2017	Saïghi, Sylvain	Final review before submission

Context of production

This deliverable was initially due in March 2017. However, negotiations on ULPEC's *Consortium Agreement* delayed IBM Research Zurich's accession to the agreement to January, 18th 2017. For this reason, the ULPEC project could only effectively start from that date, as IBM Research's role is crucial to the development of the technology targeted by ULPEC.

This delay from the project start also consequently resulted in the kick-off meeting not taking place in January 2017 as foreseen in ULPEC's *Description of Work*, but on February 14th 2017, therefore slowing down the decision-making process towards a consensus for communication-related aspects.

Furthermore, the setup of communication and public engagement tools for ULPEC had also to take more time than we had hoped. Internal policies of the University of Bordeaux, as for any French public administration, require to place public bids for the purchase of external service. In this context, we had to interview a certain number of communication and graphic agencies, in order to choose and demonstrate that we picked of the best quality of service at the best price.

Finally, since we wished this deliverable to also serve as an internal document for the project, an additional time was necessary to enable all project partners to read, review and agree with its content.

Please note that due to delay in the drafting of a project style chart, the deadline set for this deliverable had to be rescheduled to July 2017. Indeed, this document had been edited while ULPEC's visual identity was still under construction and had to be finally updated in July 2017, upon delivery of the project's style chart.

Scope of the deliverable

The *7.1 - First ULPEC dissemination and public engagement strategy paper* deliverable is to be read in relation with the deliverable *8.2 - Project Management Guidelines*.

This document intends to describe the plans for dissemination activities and strategy for the ULPEC project. It shall not only be considered as a deliverable but also as an internal document, which defines important aspects of the project's communication and visibility strategy.

This first paper on dissemination and public engagement strategy aims to be used by the consortium as a roadmap summing up all the activities and resources, which were foreseen in ULPEC's *Description of Work* and validated in plenary meeting by the kick-off in Bordeaux, on February, 14th 2017.

Dissemination and communication activities in ULPEC also relate to the implementation and exploitation of the ULPEC project. All activities described within this document are designed in compliance with the Horizon 2020 regulations and the Annex I of ULPEC's Grant Agreement no. 732642.

Communicate, disseminate, engage: a strategy

Dissemination and public engagement in the ULPEC project is the subject of the Work Package 7. To achieve proper impact on stakeholders, to foster their interest and contribution to the project is a long-run task, which requires active and regular contribution at consortium level.

Although the work package for dissemination and engagement is led by the University of Bordeaux, assuming its coordinator's duty, all partners commit to actively participate to WP7 by providing content of interest for stakeholders and by assisting the University of Bordeaux to maintain satisfactory levels of activity on the ULPEC's communication channels.

Some participants to ULPEC gained throughout the years a solid experience in communication, targeting and engaging specialists as well as a large, non-expert audience. Their contribution to the activity and content edition on the communication channels of the project will be determinant for the impact of ULPEC on its key-targets and on society, at a larger scale.

Determine objectives, identify target audiences and key players

By responding to the Horizon 2020 call for proposals *Smart System Integration (ICT-03-2016)*, the ULPEC project aims to have an impact on society:

- by strengthening the European Union's industrial leadership on highly competitive sectors,
- by creating new market opportunities to address societal needs, and
- by fostering innovative companies, from industrial groups to SMEs.

However, it is essential for a consortium to grasp the idea that the impact of a project not only depends on the quality of the results, but also on the project's very capacity to display, promote and disseminate them.

Three kinds of impact objectives are to reach when disseminating the ULPEC project results:

- Foster investment and market exploitation of the project's results;
- Set up new regulations and standards in the field;
- Have a societal impact and contribute to the appropriation of new technologies by society.

Objective	Targets
Investment, exploitation	Investors, manufacturing industries, end-users, professional networks, funding agencies
Regulations, standards	Standardisation institutions and networks
Societal impact and interest	Scientific community, PhD students, policy-makers, society at large

Differentiate ULPEC's engagement strategies according to the influence of stakeholders

Therefore, to ensure that the project would reach its maximum impact, the ULPEC consortium had to consider its ambition, to anticipate the type of audiences it may attract and to sort them out, from key stakeholders to participants with partial or low level of interest in the project, from potential allies to potential challengers.

More precisely, ULPEC engages to disseminate and to share knowledge both at European and international level, fostering research on SSI, neuromorphic, materials and autonomous navigation systems. By contributing actively to European and international platforms and networks, the ULPEC project shall provide relevant knowledge to contribute to policy-making related to its research activities.

In its Description of Work¹, the ULPEC consortium displayed such an analysis of its potential audiences, their corresponding level of interest and influence.

Target groups		Influence	Interest	Strategy
<i>Potential facilitators or risks</i>	<ul style="list-style-type: none"> - Regulators & standardization bodies (national and international) - Competitors 	High	Low	Meet needs and increase interest or neutralize (risks)
<i>Key stakeholders</i>	<ul style="list-style-type: none"> - End-user industrial in autonomous navigation systems and industrial automation - Neuromorphic system applications: Recognition and Data mining - Suppliers / investors / policy-makers / relevant EU-platforms, space networks & clusters 	High	Low	Engage closely
<i>Potentially interested parties</i>	<ul style="list-style-type: none"> - Potential end users (industrial fields) General media - Passive citizens 	Low	High	Keep informed and increase interest
<i>Multipliers and wider target groups</i>	<ul style="list-style-type: none"> - Scientific communities in materials - microelectronics and neuromorphic engineering - Knowledge brokers & platforms - Related projects - Specialized media Interested citizens 	Low	High	Involve as needed to increase project impact

¹ Read ULPEC's Description of Work, sections 2.2 *Measures to maximise impact*, 2.2.1 *Dissemination and exploitation of results*, p. 25

Plan for dissemination and exploitation

Method

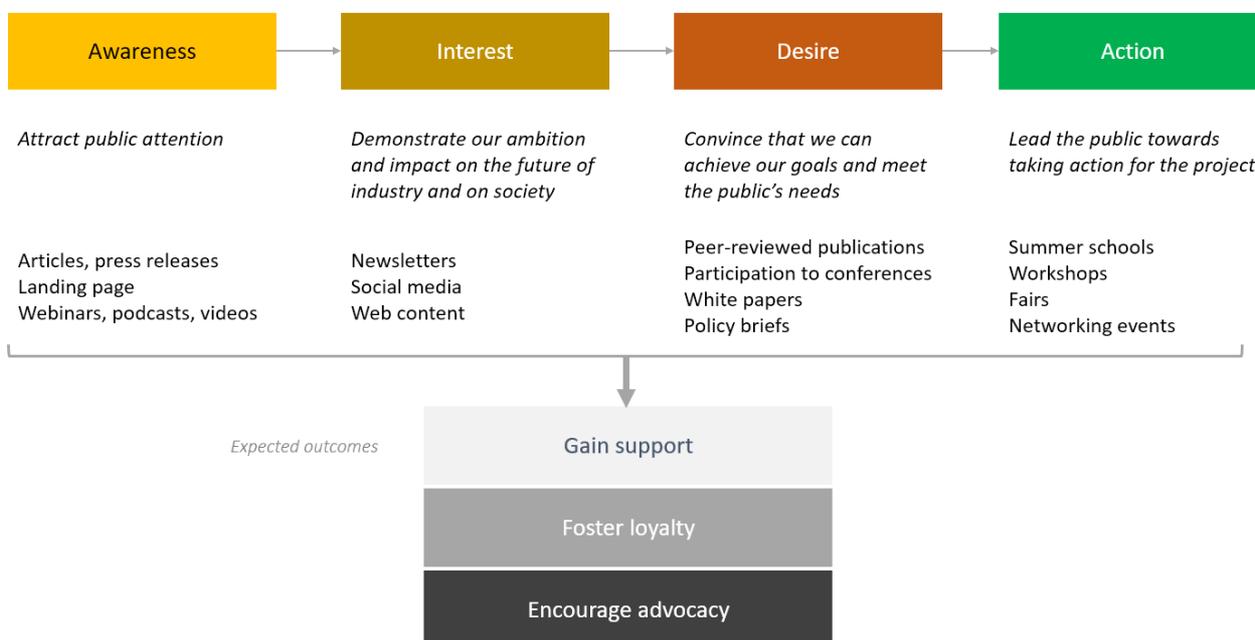
ULPEC’s communication strategy aims to be in line with the AIDA concept. Emerging in the 1980s, this concept is to guide our project towards efficient communication.

AIDA stands for *Awareness – Interest – Desire – Action*.

Concretely, we will make our best efforts to draw attention of the public through attractive visual and textual content. We foster interest by showcasing our ambition and challenges, we appeal to the public by sharing insights on the project life and quality content issued on the course of the project.

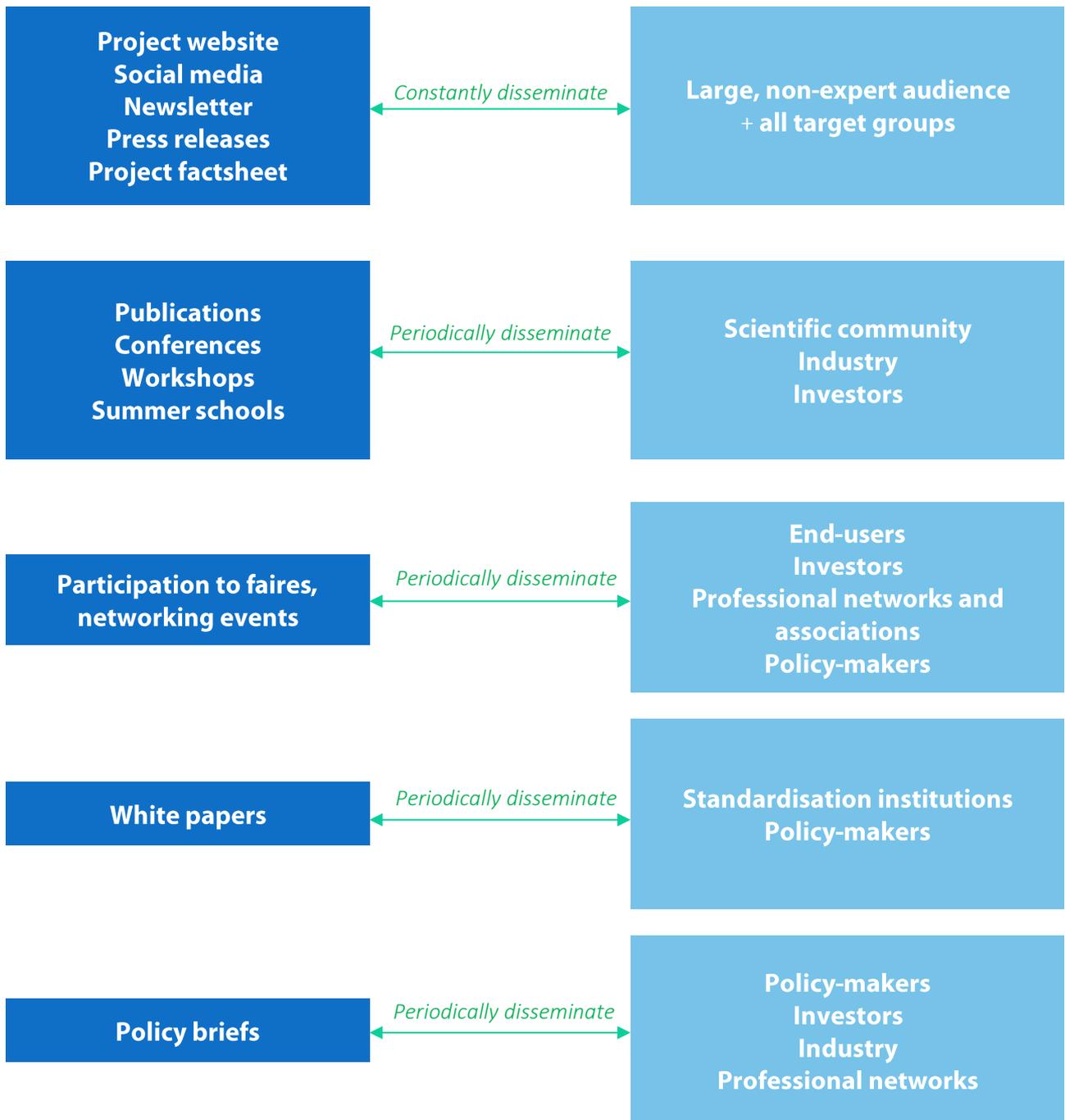
We initiate interaction with various stakeholders through several dissemination channels and activities. We hope that regular updates, interaction and exchange will participate to enrich our activities as well.

Project dissemination and communication strategy



The AIDA approach applied to the context of the ULPEC project.

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ULPEC's communication and dissemination activities, in relation to the various target audiences we identified.

General dissemination timeline

M1-M6

Relation to D7.1- D7.2.

Project Phase I: Raise awareness

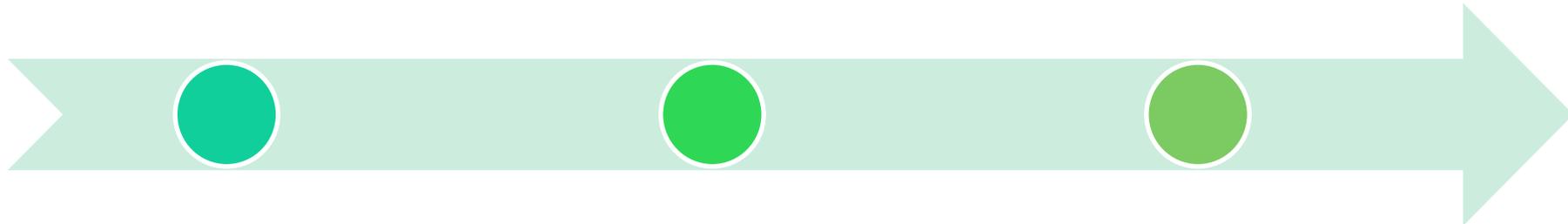
1. Give visibility: present the ULPEC consortium and project goals via website, social media, e-bulletins and at external conferences, symposiums
2. First Advisory Board meeting to establish knowledge exchange with industrial end-users

M30-M48

Relation to D7.4 – D7.5

Project Phase III: Pursue and expend

1. Continue Phase II (conferences, events, dissemination through project website, press, Advisory Board meetings)
2. Initiate stakeholder meetings with target areas beyond the transport sector



M6-M30

Relation to D7.3.

Project Phase II: Start presenting results

1. During external conferences, symposiums and fair trades and apply for special ULPEC sessions
2. On the project website, share extracts from listed deliverables when public content
3. Target high-ranking journals for publications
4. Send out press releases to trade journals and public technical magazines

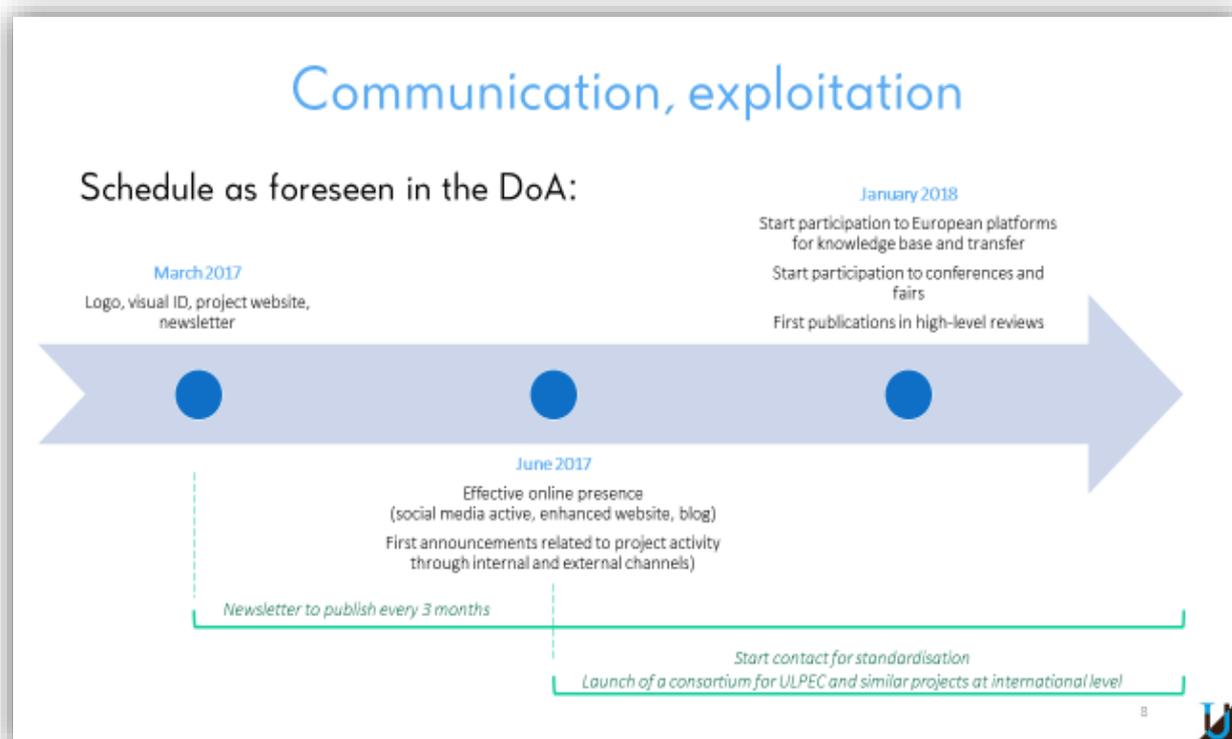
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Dissemination timeline for year 1

Accordingly with the engagements taken in ULPEC's Description of Work, the most important aspects of the dissemination work must be ready by Month 6 (June 2017) to ensure effective networking and start the promotion of the project.

Objective	Start date	Foreseen activities and achievements
Communication	Month 3 (March 2017)	Logo, visual identity and project website created
Communication	Month 3 (March 2017)	Newsletter : first publication
Communication	Month 6 (June 2017)	Effective online presence: active contribution to social media, enhanced website, first blog posts
Dissemination, knowledge exchange, policy-making	Month 6 (June 2017)	Create a platform to foster knowledge exchange between ULPEC and similar projects
Standardisation	Month 6 (June 2017)	Initiate contacts with CEN-CENELEC to collect information on standardization process



An excerpt from the presentation held by the University of Bordeaux by ULPEC's kick-off meeting, February 2017.

Events

Participation to conferences, seminars, fairs

As stated in ULPEC's Description of Work, dissemination activities will also take place on a regular basis through participation to seminars, high-ranking conferences, fairs and networking activities. All these activities are planned to start from the 2nd year of the project (2018), where conclusive evidence of results can be showcased at an international level.

Among the conferences targeted to highlight ULPEC's outputs are the *Smart Systems Integration – International Conference and Exhibition*, *SMART*, *IEEE conferences*, *AD:AM - Autonomous Drive : Advanced Mobility, Automotive Tech.AD*, *ARTEMIS events* *Industry driven device and integration conferences*. To these occasions, the consortium will aim to hold special sessions to put ULPEC's results and contributions in the spotlight.

In addition to dissemination activities targeting the scientific community, ULPEC will contribute actively to networking events, therefore promoting the project towards policy-makers, potential end-users and investors. ULPEC will participate on the one hand to fairs and events involving end-users - in the field of automobile industry and other fields of application (aeronautics, space, automobile industries) - and on the other hand, appealing to policy-makers, where ULPEC would be setting the mark for new standards.

Knowledge exchange will also take place through active contribution of ULPEC's partners to Smart System Integration communities and networks, such as *EPoSS*², *ARTEMIS*³ and *ECSEL JU*⁴, to name a few.

Organising summer schools, workshops

ULPEC's dissemination activities will also include training activities, organised by the consortium, to encourage public engagement and to foster interest from the scientific community, from PhD and master students to advanced researchers.

Training sessions will allow ULPEC partners involved in higher education and research institutes to contribute to the emergence of excellence curricula at a local level and highlight new research topics related to the project.

Therefore, training sessions, when promoted and disseminated properly, would be the starting point of a more general reflexion about excellent research and the build-up of knowledge and innovation communities⁵ between the HEI⁶ and research institutes participating to ULPEC, and the industry.

Publication strategy

The ULPEC project will publish its work within high-level peer-reviewed scientific journals, such as *Frontiers in neuromorphic engineering*, *IEEE journals*, *Nature*, *Science*, *Physics letter*, *Material letters*.

A list of publications will be available on ULPEC's website for consultation.

² <http://www.smart-systems-integration.org/public>

³ <https://artemis-ia.eu/>

⁴ <http://www.ecsel-ju.eu/web/index.php>

⁵ [Presentation of KICs on the European Institute of Innovation and Technology's website](#)

⁶ Higher Education Institutions

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Publications will also be regularly announced through ULPEC's newsletter, Twitter and Google+ accounts for dissemination and public emulation around ULPEC's research topics.

The history of publications and, when applicable, afferent press articles, will be tracked through the project management CMS, EMDesk, and the plan for dissemination and communication.

Upcoming publications, participation to conferences and other activities to promote the project or its research results will be regularly updated within the plan for dissemination, on the basis of the information recorded through internal work package leader reports and to the occasion of consortium meetings.

Publishing in compliance with Horizon 2020 Open Access requirements

ULPEC complies with the European Commission's policy towards open access to research results⁷, and commits to obligations related to open access in its Grant Agreement (read **Article 29.2** – *Open Access to scientific publication*):

Obligation to open access⁸:

“Beneficiaries must ensure open, free-of-charge access to the end-user to peer-reviewed scientific publications relating to their results. [...] Open access means ensuring that, at the very least, such publications can be read online, downloaded and printed — via a repository for scientific publications.”

Throughout the project, the ULPEC consortium will seek guidance and tools to guarantee open access to its research data, without being in contradiction with its long-term ambition to develop patentable technology. We will therefore rely on advice provided by :

- our Ethics Advisory Board,
- our National Contact Points,
- the [OpenAIRE platform](#), a long-time EU-funded project, which objectives and missions are to promote and support open research data. By regularly browsing the platform for training and guidance, ULPEC will collect information for good data management practices, the choice of the right data repository and advice on how to ensure open access to publications and research data.

Furthermore, all publications related to ULPEC will be made through **gold open access**, due to the publication strategy of the project, targeting high-ranking international reviews only.

Definition of gold open access⁹:

Gold open access (open-access publishing)

“Gold open access means that open access is provided immediately via the publisher when an article is published, i.e. where it is published in open access journals or in ‘hybrid’ journals combining subscription access and open access to individual articles. In gold open access, the payment of publication costs (article processing charges) is shifted from readers’ subscriptions to (generally one-off) payments by the author. Such author processing costs may be eligible (see Article 6.2.D.3) — if incurred before the end of the action.”

⁷ [European Commission's policy for Open Access \(Open Science\)](#) as described on the European Commission's Research and Innovation website.

⁸ [Article 29.2 – Open Access to scientific publication, Annotated Model of Grant Agreement, Version 2.2, 25 November 2016, p. 223](#)

⁹ [Article 29.2 – Open Access to scientific publication, Annotated Model of Grant Agreement, Version 2.2, 25 November 2016, p. 225](#)

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Gold open access will be made possible thanks to the resources allocated to ULPEC, which will allow our Article Processing Charges (APCs) to be reimbursed.

Article 29.3 – Open Data is not applicable to ULPEC, as specified in the project’s Grant Agreement.

Dissemination vs. protection of intellectual property

Throughout the ULPEC project, partners commit to engagements taken in ULPEC’s Description of Work to protect the intellectual property and the confidentiality of the results.

These engagements were: *“As IPR issues will have to be respected by all means, dissemination activities will be designed and implemented in close cooperation with the Chair of IPR. No dissemination of Foreground may take place before a decision is made regarding its role in the exploitation plan and the possible protection through IPR.”*¹⁰

ULPEC’s Consortium Agreement provides a more detailed procedure, which ensures sufficient delay for partners to inform the consortium of their publication and dissemination activities and to allow potential objection, when necessary.

Contribution to policy-making and knowledge exchange

Knowledge exchange

ULPEC aims to develop and lead knowledge exchange with other projects funded for Smart Systems Integration within the framework of Horizon 2020, therefore encouraging the development of a consortium of projects with international visibility.

Also, knowledge exchange would mean for ULPEC to be engaging with other high-quality projects and networks within and outside the borders of the European Union, to foster innovation in ULPEC’s research fields. ULPEC and other relevant projects would be ultimately joining forces for specific meetings as an innovation cluster.¹¹

First contacts will be made from the start of the project, through established relations of ULPEC consortium members, who are involved in other EU-funded research projects.

ULPEC will also rely on events and communication channels as made available by the European Commission (mailing-lists, networking or showcase events) to establish connections with other participants.

Finally, other contacts with the scientific community will be made through the consortium’s participation to dissemination activities, such as conferences, seminars and publications.

¹⁰ ULPEC’s Description of Work (Part B), sections 2.2 Measures to maximise impact, 2.2.1 Dissemination and exploitation of results, 2.2.1.2 Draft plan for the dissemination and exploitation of ULPEC’s results, p.25

¹¹ ULPEC’s Description of Work (Part B), sections 2.2 Measures to maximise impact, 2.2.1 Dissemination and exploitation of results, 2.2.1.2 Draft plan for the dissemination and exploitation of ULPEC’s results, p.30

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Policy-making

Policy-making is one of ULPEC's dissemination activities, which will be carried on under the University of Bordeaux' leadership, in close collaboration with the ULPEC consortium, the Ethics Advisory Board and the Innovation Team.

Although ULPEC's dissemination is a continuous task throughout the four years of the project, specific actions in WP7 – *Dissemination and Public Engagement* are dedicated to policy-making:

- Task 7.4 - *Network via conferences and fair trades,*
- Task 7.5 - *Knowledge and data transfer & inter-project knowledge exchange,*
- Task 7.6 - *Organise seminars for skill development/policy making,*
- Task 7.7 - *Provide a knowledge base for policy makers,*
- Task 7.8 - *Organise stakeholder engagement.*

Task 7.8 is the final achievement of ULPEC's dissemination plan and shall start from the second half of the project's timeframe.

Policy-making shall take various forms, from the participation of the ULPEC consortium to networking professional and inter-professional events and to innovation clusters in the field of automobile and autonomous transportation, space and aeronautics industry, to the draft of targeted reports, white papers, policy briefs, which shall contribute to the emergence of new policies regarding the use of autonomous systems and related citizens' security.

Through meeting other innovators as well as jurists and ethic advisors, we will be able to determine the context, which will frame the use of the technology developed by ULPEC.

Communicate and disseminate, standards and exploitation : a relation to WP6

The ULPEC project aims to ensure its exploitation by including one of its end-users (Bosch) among its contributors, as well as by targeting investors, industrial groups and other end-users through appropriate communication and dissemination activities.

Bosch directly influences the communication and dissemination strategy of the project through its contribution to the work package 6 *Industry Prospectives and Exploitation*, as well as ULPEC's Advisory Board.

The Advisory Board aims to bring together a panel of key stakeholders, who will provide guidance on the market exploitation and the long-term strategy and development of the project.

Their participation will also be determinant for ULPEC's dissemination and communication activities, as their external point of view on the project's image and visibility may either make the ULPEC consortium adjust its dissemination strategy or take it to the next level.

The exploitation strategy and process will be the subject of ULPEC's work package 6 – *Industry Prospectives and Exploitation*.

We will, however, give here a brief introduction to the standardisation context related to ULPEC, as it is to link with our plan for dissemination.

The Exploitation strategy - including standardisation - will be led by Bosch, being the end-user of ULPEC's technology, in close collaboration with the University of Bordeaux, the Pierre and Marie Curie University – Paris 6, Chronocam SAS, who will be involved in the standardisation process, and the Innovation team, which will provide guidance.

Why setting European standards? Elements of context from Regulation No 1025/2012

European standardisation objectives and context is described in the *Regulation No 1025/2012 of the European Parliament and of the Council of 25 October 2012 on European standardisation*¹², which replaces a series of Directives issued by the European Parliament between 1994 and 2009.

The importance of European standardisation and SMEs contributions to innovation and competitiveness, as it is described within ULPEC's Description of Work, echoes back to the objectives set within the *Regulation No 1025/2012*:

- Preamble, paragraph 3: *“European standardisation reinforces the global competitiveness of European industry especially when established in coordination with the international standardisation bodies, namely the International Organisation for Standardisation (ISO), the International Electrotechnical Commission (IEC) and the International Telecommunication Union (ITU).”*
- Preamble, paragraph 19: *“Standards can contribute to helping Union policy address the major societal challenges such as climate change, sustainable resource use, innovation, ageing population, integration of people with disabilities, consumer protection, workers’ safety and working conditions. By driving the development of European or international standards for goods and technologies in the expanding markets in those areas, the Union could create a competitive advantage for its enterprises and facilitate trade, in particular for SMEs, which account for a large part of European enterprises.”*
- Preamble, paragraph 20: *“Standards are important tools for the competitiveness of undertakings and especially SMEs, whose participation in the standardisation process is important for technological progress in the Union. Therefore it is necessary that the standardisation framework encourage SMEs to actively participate in and provide their innovative technology solutions to standardisation efforts.”*

New standards through ULPEC

Therefore, ULPEC will address the different European Standards Organisations (ESOs), such as the *European Committee for Electrotechnical Standardization (CENELEC)*¹³ and the *European Committee for Standardization (CEN)*¹⁴, in its process towards standardisation and exploitation of ULPEC's technology.

ESOs provide a platform for stakeholders in a specific area to come together and facilitate consensus at European level. Their mission is to support and enable the deployment of innovation, by enforcing the establishment of standards applicable to the European Union, therefore giving international recognition of the technology.

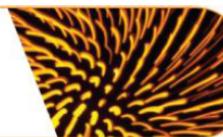
They will accompany research and development carried on throughout ULPEC by contributing to screening existing standards and searching for the needs of new standards, identifying the potential for standardisation of ULPEC's technology. The European Committee for Standardization (CEN) and the European Committee for Electrotechnical Standardization (CENELEC) often collaborate with each other towards the establishment of new standards, which is likely to be the case for the technology developed during the ULPEC project.

¹² [Regulation \(EU\) No 1025/2012 of the European Parliament and of the Council of 25 October 2012 on European standardisation](#)

¹³ <http://www.cenelec.eu/>

¹⁴ <https://www.cen.eu/Pages/default.aspx>

CEN & CENELEC Standardization : Sectors and Topics



CEN

Bio-based products
Chemicals
Construction
Food
Heating, Ventilation and Air Conditioning (HVAC)
Materials
Nanotechnologies
Pressure equipment
Services

CEN & CENELEC

Air and Space
Consumer products
Electric Vehicles
Energy and utilities
Health and safety
Healthcare
ICT
Machinery safety
Measurement
Medical equipment
Railways
Security and Defence
Smart Grids / Smart Meters
Transport and Packaging

CENELEC

Electrical engineering
Electromagnetic Compatibility (EMC)
Fibre-optic communications
Fuel Cells
Household Electrical Appliances
Solar (photovoltaic) electricity systems

Cross-sectoral issues

Accessibility | Environmental Protection | **Energy-efficiency (Eco-Design)**

Excerpt from a presentation of ESOs perimeter, held by CEN-CENELEC on the standardisation of technologies developed during Horizon 2020-funded projects. Potential standard categories related to ULPEC's technology are framed in red.

Contacts will be made from the first year of the project by the ULPEC consortium under Bosch's leadership to start collecting information on the different stages and committees involved in the standardisation process, as recommended by both CEN and CENELEC.

A plan for exploitation will be drafted by Bosch's business units, in close collaboration with ULPEC's Innovation Team, throughout the project. Further information on ULPEC's exploitation strategy will be detailed in the deliverable 6.6 - *Exploitation Road-Map and ULPEC follow-up strategy* written by Bosch, due at month 48.

Project communication

ULPEC's visual identity

Project logo

The project logo aims to resume ULPEC's technological integration of several high-end technologies, from materials through nanoelectronics and artificial intelligence to the finished project output, the camera.

The logo was discussed and prototyped collectively to the occasion of the kick-off meeting.

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The prototype, designed and selected by the kick-off meeting in Bordeaux, on February 2017:



The final version of the logo, with and without the project's acronym:

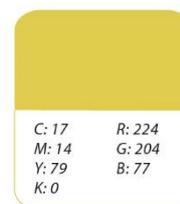
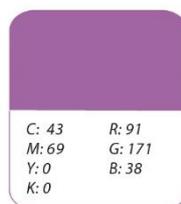
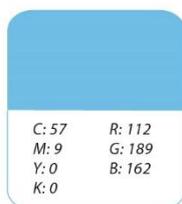
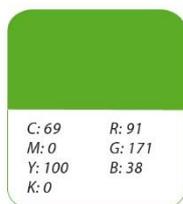


Upon giving the logo prototype a polish, a special attention was given in order to commit to its spirit and to demonstrate, in addition to the camera as the project output, of the integration of several cutting-edge research fields in electronics, computer science and physics.

Fonts and colour identity

To underline the project's ambition towards a new industrial and societal challenge, the Myriad Bold Pro font was our choice. It indeed induces the reader into perceiving the project as both serious and accessible, with an edgy attitude.

The pick of the green colour aims to remind the public of one of the core societal challenge ULPEC will address: the environmental impact of technology, through the perspective of energy consumption, as applied namely for autonomous cars.



Website

ULPEC's website (<http://www.ulpecproject.eu>) is its major instrument towards international visibility. It aims to present the context and objectives of the project, its contributors, inform about the project activity, publications and dissemination activities, public deliverables and events organised by the consortium.

More information about the project website will be disclosed in the deliverable 7.2 – *Project online presence*.

Social media

Nowadays, companies as well as public institutions invest most of their communication efforts into social media channels, such as Facebook, Twitter, and LinkedIn. This can be explained through the actual necessity to give access to information the simplest, quickest and cheapest way possible to the public. Also, social media tend to foster conversation and exchange at a more personal level than websites, encouraging proximity, adhesion and awareness.

Therefore, in addition to the website and blogs designed to promote visibility and public engagement for ULPEC, several social media have been launched:

- a **Twitter account** ([@ULPEC_H2020](#))¹⁵, which shall give the public a glimpse of ULPEC's current activity, namely when publishing articles, giving interviews, organising or participating to events, conferences;
- a **Google+ account and community** ([@ULPEC_H2020](#))¹⁶, which were set up namely to foster exchange with the large base of Artificial Intelligence researchers and followers on the platform;
- a **LinkedIn account** ([@ULPEC_H2020](#))¹⁷, which aims to promote the project's activities in relation with professional networks, policy-makers, end-users. This page shall help build a community of followers and stakeholders, which may also help recruitment, when necessary.

More information about the project's social media will be disclosed in the deliverable 7.2 – *Project online presence*, due in June 2017.

Newsletter

The newsletter aims to give readers an insight of the team's activity, and shall namely feature portraits of the team and of experts, special contributors to ULPEC. It will be updated every 3 months to give regular feedback on the project's activity.

ULPEC's newsletter will publish information about:

- the team's achievements,
- the team's success stories
- the team's publications,
- feedback from conferences, which involved or were organised by the ULPEC team,
- announcements of upcoming events

¹⁵ https://twitter.com/ULPEC_H2020

¹⁶ <https://plus.google.com/communities/111596475847356765242>

¹⁷ <https://www.linkedin.com/company-beta/11085051/>

The content of the newsletter will be edited by the University of Bordeaux, in close collaboration with the communication services of each partner within the consortium.

A mailing list will be created to allow ULPEC's followers to subscribe to the newsletter through *MailChimp*.

Partners' internal newsletters

News related to the activity during the ULPEC project will also be shared through each partner institution's newsletter and communication channels. The aim is to help followers of each ULPEC partner having a focus on the running activity, the achievements and upcoming events. By doing so, this shall foster scientific interest and involvement at local level, helping maximising the dissemination.

Press releases

ULPEC may also issue press releases and statements, to promote achievements during the project: they shall help give visibility to the project's results and raise awareness on major developments in the research field.

Consortium members can rely on their own press and communication offices to help address scientific and information press at national, European and international level. They will communicate to the whole consortium their participation to interviews, allowing the consortium to maximise the impact by spreading the news through the other communication channels (website, newsletter, internal newsletter, and social media).

Sharing ULPEC's news through newsletters, social media, and press releases shall not only help contribute to promote the research activity carried on during the ULPEC project, but also help indeed maximise the visibility of the European Union's actions towards supporting innovation, hopefully sparking off citizens' enthusiasm for science and innovative technologies. By disseminating at a local level, we hope to arouse local stakeholders' (researchers, students, policy-makers, citizens) interest for fostering and carrying on innovative projects on the one hand, and to help bring actions fostered by the European Union closer to the everyday life of European citizens.

Publications, as well as interviews and dissemination activities to the initiative of a partner must be duly noticed to the other members of the consortium, to protect all partners' interests, as stated in the **Article 29.1 Dissemination of results — open access — visibility of EU Funding** in the Annotated Model of Grant Agreement: *"When deciding on dissemination, the beneficiaries must also consider the other beneficiaries' legitimate interests."*

Project fact-sheet

A project factsheet for ULPEC will be designed to present the objectives, methods, partner institutions and communication channels to the public. This factsheet will be made available:

- through the ULPEC project website
- through the European Union's DG CNECT project platform¹⁸
- to the occasion of professional networking events, fairs and conferences

The document is to be disseminated to the attention of the scientific community, the press and the public at a larger scale.

¹⁸ <https://ec.europa.eu/digital-single-market/en/programme-and-projects/project-factsheets-innovation>

7.1 - First ULPEC dissemination and public engagement strategy paper



A copy of the project's fact-sheet is annexed to this deliverable and also stored for public access on the project website.

Project posters

Posters displaying ULPEC's achievements and research activities will be prepared throughout the project. They shall help share knowledge on the different technologies developed in ULPEC, to the occasion of conferences, workshops, seminars and networking events.

Visibility of the EU emblem and credits

Participants to the ULPEC project were all aware of the contractual engagement to display the EU emblem and project credits for any communication or dissemination activity related to the project, as foreseen in *Article 27.4* of ULPEC's Grant Agreement.

This engagement was reminded to the consortium to the occasion of the project's kick-off meeting in Bordeaux, in February 2017.

The slide is titled "Communication, target audiences" in a blue font. It contains the following text:

Display the EC emblem and credits
"This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 732642".

Specific for publications:
"This publication is receiving funding from the European Union's Horizon 2020 research innovation programme under grant agreement 732642 (ULPEC project)."

To appear on every publication, report, communication, demo, equipment related to the project (Art. 27.4 GA)

On the right side of the slide, there is a rectangular image of the European Union flag, which is a blue field with twelve yellow stars arranged in a circle. In the bottom right corner of the slide, there is a small number "5" and a logo consisting of a blue square with a white letter "U" inside.

Excerpt from the presentation held by ULPEC's kick-off meeting in Bordeaux

Annexes

Engagements for dissemination in Annex 1

List of deliverables (public dissemination level only)

Type	No	Lead	Deliverable type	Detail	Start	End
Deliverable	D7.1	UBx	Report	<i>First ULPEC dissemination and public engagement strategy paper</i>	Mar-17	Mar-17
Deliverable	D7.2	UBx	Website/patent/...	<i>Project online presence</i>	Jun-17	Jun-17
Deliverable	D7.3	UBx	Report	<i>Stakeholder engagement events and results' evaluation report #1</i>	Mar-19	Mar-19
Deliverable	D7.4	UBx	Report	<i>Policy briefs and strategy papers with recommendations for policy making</i>	Jun-19	Jun-19
Deliverable	D7.5	UBx	Website/patent/...	<i>Knowledge and data repository provided to the European SSI community and relevant stakeholder groups</i>	Nov-20	Nov-20
Deliverable	D7.6	UBx	Report	<i>Stakeholder engagement events and results' evaluation reports #2</i>	Dec-20	Dec-20

List of tasks

Type	No	Lead	Detail	Start	End
Task	T7.2	UBx and all partners	<i>Set up dissemination channels and material</i>	Jan-17	Mar-17
Task	T7.1	UBx and all partners	<i>Dissemination and communication plan/DCP</i>	Jan-17	Jun-17
Task	T7.4.2	UBx and all partners	<i>ULPEC conference in Bordeaux</i>	Dec-18	Dec-18
Task	T7.6	UBx and all partners	<i>Organise seminars for skill development/policy making</i>	Dec-18	Apr-20
Task	T7.3	UBx and all partners	<i>Manage content for 'Open Access' publications and supervise IPR activities and compliance with grant agreement</i>	Jan-17	Dec-20
Task	T7.4.1	UBx and all partners	<i>Network via conferences and fair trades</i>	Jan-17	Dec-20
Task	T7.5	UBx and all partners	<i>Knowledge and data transfer & inter-project knowledge exchange</i>	Jan-17	Dec-20
Task	T7.7	UBx and all partners	<i>Provide a knowledge base for policy makers</i>	Jan-17	Dec-20
Task	T7.8	UBx and all partners	<i>Organise stakeholder engagement</i>	Jan-17	Dec-20
Task	T7.4.3	UBx and all partners	<i>ULPEC conference - to be scheduled</i>	Dec-20	Dec-20

7.1 - First ULPEC dissemination and public engagement strategy paper



Plan for dissemination: work documents

ULPEC – a dissemination plan																
Lead	Collaborators	Target audience	Activity type	Activity detail	Est. start date	Est. Start month	Est. end date	Est. End month	Duration	Frequency?	Real start d	Real start mo	Real end date	Real end month	Real durati	
UBx	Consortium	Key stakeholders	Newsletter	achievements, reports from conferences, announcements of upcoming events (copies on the website)	01/02/2017	2	01/02/2017	2	1	every 3 months	01/06/2017	6	01/06/2017	6	1	
UBx	Consortium	End-users and investors	Website and blog	Present initial results for download, extracts from deliverables, an e-bulletin, in brochures and leaflets	01/02/2017	2	31/12/2020	48	47	update regularly	01/04/2017	4	01/07/2017	7	4	
UBx	Consortium	General media and audiences	Leaflets, brochures, posters	Details on the project and contact information will be produced (copies on the website)	01/02/2017	2	31/12/2020	48	47	update regularly	01/03/2017	3	01/06/2017	6	4	
UBx	Consortium	General media and audiences	Logo and graphic identity	logo, fonts, colours and templates for presentations and text documents.	01/02/2017	2	01/06/2017	6	5	once	01/03/2017	3	01/07/2017	7	5	
UBx	Consortium	General media and audiences Targeted at different groups (e.g. 'Scientific Community', 'Industries', 'Service Providers', 'Policy Makers' etc.)	Website and blog	Informative project website will be set up in month 1 of the project	01/02/2017	2	01/07/2017	7	6	once	01/03/2017	3	01/07/2017	7	5	
UBx	Consortium	Knowledge exchange and data transfer	Foster exchange for ULPEC and similar projects through meetings	Within this platform European project consortia from 'SSI' projects, but also from other, potentially 'adopting' research fields as well as consortia from abroad (e.g. from US, Japan, Canada, etc.) shall gather once a year to discuss the status in the field, identify mutual needs, develop recommendations (e.g. for policy makers) on related issues, and discuss how in a concerted effort, this industry can be brought further. A first meeting should take place during month 6 on the occasion of the project meeting	01/02/2017	2	01/12/2020	48	47	1 per year	01/07/2017	7	01/12/2020	48	42	
UBx	Consortium	Key stakeholders	Newsletter	achievements, reports from conferences, announcements of upcoming events (copies on the website)	01/05/2017	5	01/05/2017	5	1	every 3 months	01/07/2017	7	01/07/2017	7	1	
UBx	Consortium	End-users and investors	First Advisory Board meeting	Establishing knowledge exchange with industrial end-users	01/06/2017	6	01/06/2017	6	1	once	08/06/2017	6	08/06/2017	6	1	
UBx	Consortium	Knowledge base for policy-making	Policy-briefs	Knowledge and recommendations for innovative vision systems in automotive and traffic applications	01/06/2017	6	01/12/2020	48	43	update regularly	01/06/2017	6	01/12/2020	48	43	
UBx	Consortium	End-users and investors	Conferences, symposiums and fair trades	Present initial results, apply for special ULPEC sessions	01/06/2017	6	01/12/2020	48	43	update regularly	01/06/2017	6	01/12/2020	48	43	
UBx	Consortium	Knowledge base for policy-making	Policy-briefs	for international organisations, stakeholder platforms that involve policy makers, mass media and individuals with good contact to individual policy	01/06/2017	6	01/12/2020	48	43	update regularly	01/06/2017	6	01/12/2020	48	43	
UBx	Consortium	End-users and investors	Project stakeholder meeting	Initiate stakeholder meetings with target areas beyond the transport sector	01/06/2017	6	01/12/2020	48	43	1 per year	01/06/2017	6	01/12/2020	48	43	
UBx	Consortium	Training and skills development	Training seminar	Seminar for young scientists and professionals from the academic partners in applications and applied technologies (with the approval of the Advisory Board)	01/06/2017	6	01/12/2020	48	43	1 per year	01/06/2017	6	01/12/2020	48	43	
UBx	Consortium	End-users and investors	Press releases	to trade journals and public technical magazines (fields: automotive transport, additional fields will be identified)	01/06/2017	6	01/12/2020	48	43		01/06/2017	6	01/12/2020	48	43	
UBx	Bosch	Standardisation	Establish a process, consultation	Confer and seek advice from CEN - CENELEC	01/06/2017	6	01/12/2020	48	43		01/06/2017	6	01/12/2020	48	43	

Screenshot for ULPEC's internal plan for dissemination and communication (work copy)

First ULPEC dissemination and public engagement strategy paper



Dissemination schedule

Current month 3

Planned
% achieved
Actual (beyond plan)
% achieved (beyond plan)

WP	Activity type	Detail	Planned start mon	Planned duration	Real start mon	Real duration	Percentage achieved	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Con-18
WP7	Newsletter	achievements, reports from conferences, announcements of upcoming events (copies on the website)	2	1	6	1	0%																					
WP7	Website and blog	Present initial results for download, extracts from deliverables, an e-bulletin, in brochures and leaflets	2	47	4	4	0%																					
WP7	Leaflets, brochures, posters	Details on the project and contact information will be produced (copies on the website)	2	47	3	4	90%																					
WP7	Logo and graphic identity	logo, fonts, colours and templates for presentations and text documents.	2	5	3	5	90%																					
WP7	Website and blog	informative project website will be set up in month 1 of the project	2	6	3	5	90%																					
WP7	Foster exchange for ULPEC and similar projects through meetings	Within this platform European project consortia from 'SSI' projects, but also from other, potentially 'adopting' research fields as well as consortia from abroad (e.g. from US, Japan, Canada, etc.) shall gather once a year to discuss the status in the field, identify mutual needs, develop recommendations (e.g. for policy makers) on related issues, and discuss how in a concerted effort, this industry can be brought further. A first meeting should take place during month 6 on the occasion of the project meeting	2	47	7	42	20%																					
WP7	Newsletter	achievements, reports from conferences, announcements of upcoming events (copies on the website)	5	1	7	1	0%																					
WP7	First Advisory Board meeting	Establishing knowledge exchange with industrial end-users	6	1	6	1	0%																					
WP7	Policy-briefs	Knowledge and recommendations for innovative vision systems in automotive and traffic applications	6	43	6	43	0%																					
WP7	Conferences, symposiums and fair trades	Present initial results, apply for special ULPEC sessions	6	43	6	43	0%																					
WP7	Policy-briefs	for international organisations, stakeholder platforms that involve policy makers, mass media and individuals with good contact to individual policy	6	43	6	43	0%																					
WP7	Project stakeholder meeting	Initiate stakeholder meetings with target areas beyond the transport sector	6	43	6	43	0%																					
WP7	Training seminar	Seminar for young scientists and professionals from the academic partners in applications and applied technologies (with the approval of the Advisory Board)	6	43	6	43	0%																					
WP7	Press releases	to trade journals and public technical magazines (fields: automotive transport, additional fields will be identified)	6	43	6	43	0%																					
WP7	Establish a process, consultation	Confer and seek advice from CEN - CENELEC	6	43	6	43	0%																					
WP7	Focus groups and workshops on: Legal, regulatory and safety aspects of ULPEC and neuromorphic systems in traffic applications	Focus groups in ULPEC will be used to engage with selected key stakeholders on specific issues and will be set up as a response to a clearly identified need for in-depth discussion. Participants will be selected according to the topic and may involve industries, regulators and representatives from standardisation bodies, adopting fields, policy makers, or other stakeholders. The main aim of these activities will be to uncover the opinions of stakeholders for consideration in project plans, for example on potential future products, new standards or novel processes	6	43	6	43	0%																					
WP7	Training seminar	Seminar targeting young researchers, senior researchers and industrial	6	43	6	43	0%																					

Screenshot for ULPEC's internal plan for dissemination and communication (work copy)

ULPEC fact sheet

Ultra-Low Power Event-based Camera

The project

Contract number:	732642		
Key Action:	Research and Innovation Action – RIA H2020-ICT-2016-1 ICT-03-2016 : SSI - Smart System Integration		
Project coordinator and contact person:	Dr. Sylvain Saighi, Université de Bordeaux, France		
Project Partners :	Université de Bordeaux (UBx) - coordinator	France	Contact
	Chronocam SAS (Chronocam)	France	Contact
	IBM Research GmbH (IBM)	Switzerland	Contact
	Robert Bosch GmbH (Bosch)	Germany	Contact
	Universiteit Twente (UTwente)	The Netherlands	Contact
	Université Pierre et Marie Curie - Paris 6 (UPMC)	France	Contact
	Centre National de la Recherche Scientifique (CNRS)	France	Contact
Duration:	January 2017 – December 2020 (48 months)		
Budget:	EUR 4 862 256,25 = 3 876 396,25 granted to the consortium members within the EU + 985 860 for a beneficiary not receiving EU funding		
Project website:	http://www.ulpecproject.eu		
Keywords:	Micro (system) engineering, ferroelectric memristor, neuromorphic engineering, event-based camera		
Benefits:	The long term goal of ULPEC is to develop advanced vision applications with ultra-low power requirements and ultra-low latency. The output of the ULPEC project is a demonstrator connecting a neuromorphic event-based camera to a high speed ultra-low power consumption asynchronous visual data processing system (Spiking Neural Network with memristive synapses).		

Publishable summary

The long term goal of ULPEC is to develop advanced vision applications with ultra-low power requirements and ultra-low latency.

The output of the ULPEC project is a demonstrator connecting a neuromorphic event-based camera to a high speed ultra-low power consumption asynchronous visual data processing system (Spiking Neural Network with memristive synapses).

Although ULPEC device aims to reach TRL 4, it is a highly application-oriented project: prospective use cases will be studied and an application roadmap will be developed, by considering interoperability for an integration in "systems of systems" as well as the definition of upper power consumption limits depending on future application.

The project consortium therefore includes an industrial end-user (Bosch), which will more particularly investigate autonomous and computer assisted driving. Autonomous and computer assisted driving are indeed a major disruption in the transport and car manufacturing sector. Vision and recognition of traffic event must be computed with very low latency (to improve security) and low power (to accommodate the power limited environment in a car, such as power budget and heat dissipation).

Substantial impact on innovation capacity and creation of market opportunities is expected under the ULPEC project: four enterprises (two SMEs) participate to the project.

The ULPEC project is an opportunity for European companies such as TSST to increase the competitiveness and increase the global market share in manufacturing tools for complex oxide thin film synthesis.

Besides, a compact, low-power vision system based on the technology intended to be developed in this project would generate a distinct competitive advantage over conventional solutions and would clearly boost Chronocam market potential.

ULPEC is also an opportunity for SMEs to develop stronger collaboration with the industrial leaders involved in the project, such as IBM and Bosch.

Expected outcomes

The goal of ULPEC is to demonstrate a microsystem that is natively brain-inspired, connecting an event-based camera to a dedicated Spiking Neural Network enabled by memristive synapses. This high-speed, ultra-low power consumption asynchronous visual data processing system will then manipulate the sensor output end-to-end without changing its nature.

ULPEC targets TRL4, as required by the ICT-03-2016 call, thanks to the functional realization of embedded smart event-based camera. The system demonstrator aims to prove that the underlying technology is viable and can be used for traffic road events and other applications. Such a level of integration has never been demonstrated so far, and no commercial equivalent exists on the market.

The target use case for ULPEC technologies is the vision and recognition of traffic event (signs, obstacles like other cars, persons, etc.) which is part of the major disruption of autonomous and computer assisted driving in the transport and car manufacturing sector.

Beyond transportation, our long-term vision encompasses all advanced vision applications with ultra-low power requirements and ultra-low latency, as well as for data processing in hardware native neural network.

732642 — ULPEC
H2020-ICT-2016-1, ICT-03-2016 - SSI - Smart System Integration

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 732642