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SMart mobILity at the European land borders

SMILE

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Deliverable

D9.1. Marketing, Dissemination plan, and Dissemination material

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List of definitions & abbreviations

Abbreviation	Definition
BCP	Border Crossing Point
CA	Consortium Agreement
D & C	Dissemination & Communication
D & E	Dissemination and Exploitation
DM	Dissemination Manager
EC	European Commission
eID	Electronic Identification
EU	European Union
GA	Grant Agreement
GW	GateWay
I(C)T	Information (Communications) Technology
IoT	Internet of Things
IP	Internet Protocol
KPI	Key Performance Indicator
LEA	Law Enforcement Agency
MEP	Member of the European Parliament
OA	Open Access
PHP	PHP: Hypertext Preprocessor
QR	Quick Response
R & D	Research & Development
SME	Small and Medium-sized Enterprises
SMILE	SMart mobILity at the European land borders
SQL	Structured Query Language
ROI	Return On Investment
TRL	Technology Readiness Level
WP	Work Package

Executive Summary

A dissemination plan is an integral part of building awareness of the project's results and is a prerequisite for maximising the commercial potential of its exploitation. This dissemination and communication plan aims to place the groundwork for effective external communication of the SMILE Action and the prospective benefits for stakeholders at international level. The development of such a plan can help our consortium to focus our message and reach our target audiences as well as positively influence the effectiveness and simplicity of the communication modus operandi. This document is the first version of the D9.1 known as "Detailed Marketing, Dissemination plan, and Dissemination material" of SMILE Action which is part of Work Package 9 "Awareness raising and Exploitation Activities" and offers a systematic approach of understanding and conceptualizing the means and the ways of spreading information about who we are and what we are doing to a broad border security ecosystem, its related communities, and the general public. Initially, we unfold the theoretical framework around we build upon, referring to our objectives, messages, stakeholders, and timetable. Moving forward, we set up a number of tools and channels for an effective communication campaign, and then we conclude, defining an evaluation process, of the actions performed to ensure the efficacy and the vigour of the plan.

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1. Introduction

In recent years, the European Union has faced an unprecedented flow of people and goods at its external land borders, exerting considerable pressure on security control structures. Besides, many terrorist attacks at European cities have called for tighter control measures as to who is entering the European territory. At the level of land border control, it is not uncommon to see long queues, especially in high season, creating long and unpleasant delays for travellers. On top of that, border check procedures are increasingly costly, technologically outdated, and labour-intensive.

In a nutshell, SMILE Action proposes a novel concept of mobility that faces the challenges above-mentioned, by designing, implementing, and evaluating in a relevant environment (TRL6) a prototype management architecture for accurate verification, automated control, monitoring and optimisation of people flows in land border infrastructure. It will take advantage of the capabilities of smart portable devices in border control for secure and reliable authentication and will embody them as a part of a biometric multimodal verification process that augments/complements existing approaches. Furthermore, the idea of SMILE mobility is based on Private Cloud Infrastructure technologies that will communicate with remote handhelds through a secure gateway. The SMILE Action will target the land borders, so the proposed technological and operational framework to be developed will be ratified through pan-European demonstrations at two BCPs.

This deliverable D9.1, entitled Marketing, Dissemination Plan and Dissemination Material, aims to ensure that the activities and results of the project are widely disseminated among appropriate target communities at the right time, with proper methods, as well as identifying potential actors in the development, evaluation, adoption, and exploitation of results of the SMILE action, participating on a systematic and regular basis. In a general sense, communicating results is a major direct return action and an accountability factor to European public who financially support EU research activities. Knowledge on a broader perspective is valuable, and in this respect, the knowledge generated by the project must be communicated to different groups in the most appropriate way.

In the first step, we delineate the methodology used to define the strategy. In this context, we are developing our objectives and scope, ambition and key messages that will be dispersed, the role of each partner in this process, the targeted audiences identified and a detailed timetable. Secondly, we extensively describe the selected dissemination and communication tools and channels, adjusted accordingly per audience and message. Thirdly, we provide a detailed action plan for communication and dissemination activities, making findings and end products visible. Finally, a series of steps and rigorous criteria are defined to the proper evaluation and monitoring the activities described in this plan.

2. Methodology

2.1 Key concepts

In a general context communication is a process in which information is exchanged between different parts via a common system of symbols, signs, or behaviours [1]. At this stage, it would

be useful to provide a precise definition of *"communication"* and *"dissemination"* based on the terminology of the European Commission to avoid any misinterpretations likely to create barriers to a productive D & C activity from now on.

According to the EC participant portal web site:

i) **Communication** is *"a strategically planned process that starts at the outset of the action and continues throughout its entire lifetime, aimed at promoting the action and its results. It requires strategic and targeted measures for communicating about (i) the action and (ii) its results to a multitude of audiences, including the media and the public and possibly engaging in a two-way exchange"* [[2]]. It is noted from the same source that it has to reach society as a whole and demonstrate how EU funding contributes to addressing social challenges;

ii) **Dissemination** *"means to make the results of a project public by any appropriate means other than protecting or exploiting them, e.g. scientific publications"* [[2]]. In this sense, the transfer of knowledge and results is addressed to people who can make the best use of it, while maximising the impact of research, allowing more extensive spreading of results than initially planned.

Table 1 Communication versus Dissemination

	Communication	**Dissemination**
What	About project & results	About results
To whom	Multiple audiences (including media and public)	Direct users of the results (e.g. peers, industry, commercial actors, organisations, policy-makers)
Why	Inform & be in touch with society, explain the benefits of the research	Make it possible to adopt and use the results
Defined at	GA art. 38.1	GA art. 29

2.2 Communication model

The SMILE communication model is mostly based on Lasswell's model [3], which is described as a linear one-way model and considered to be one of the most influential for mass communication. This model consists of five components (also known as the 5W model) which are the questions to be asked to maintain a functional communication process. According to this, there is a convenient way for a communication act answering the following: who says what, in which channel, to whom, and with what effect.

Table 2 Lasswell's formula with corresponding fields of the communication process and research[3]

Components	**Meaning**	**Analysis**

Who	Communicator/sender/ source of the message	Control analysis
Says what	Content of message	Content analysis
In which channel	Medium / media	Media analysis
To whom	Receiver/audience of the message	Audience analysis
With what effect	Feedback from the receiver to the sender/assessment	Feedback analysis

The SMILE's Action D & C plan will be based on a five-step methodology detailed below, which is precisely tailored to the unique needs of an R & D project. Our approach essentially answers why, what, to whom and how to communicate and disseminate.

2.2.1 Strategy and objectives

It is widely accepted among research community that high visibility and the promotion of active interaction with key stakeholders are elements of verifiability that will allow both the software and the hardware industry to take stock why it is worth investing funds to boost the further development of this innovation action. In other words, it is vital to have the highest possible impact on those outsides of the Action's consortium through the realisation of the following:

i) exploit Action's outcomes in the most effective way;
ii) disseminate the knowledge and information generated by the Action to all interest organisations;
iii) reuse and reproduce elements of excellence in other projects, so as to become a point of reference and to promote further developments in the field and beyond;
iv) reach decision makers to help improve future policies;
v) highlight the benefits to be gained by the outcomes of the Action on society (services, employment, economy).

In particular, the following communication objectives are formed namely:

i) outline the overall dissemination strategy;
ii) design the procedures and standards to be followed for the communication of Action's objectives and outputs;
iii) provide guidelines for the material organisation;
iv) establish a standard procedure to declare new knowledge provided by each consortium member;
v) organise projects events and collaborate with stakeholders;

vi) align the D & C strategy with the exploitation plan with a view to contributing to the development of the SMILE technology exploitation potential;

(i) seek collaboration and synergies with other projects and organisations to further enhance existing endeavours;

(ii) continuously review and evaluate the effectiveness and means of the plan.

2.2.2 Ambition and key messages

Today, several theories are suggesting that vision is a fundamental prerequisite for both the internal and external performance of an organisation. Also, it has been shown that effective communication of vision affects the degree of venture growth. In essence, it is more likely that it will affect performance if stakeholders and partners are aware of it and understand it [[4]]. The same applies to SMILE Action, which we aspire to shape an ideal and unique picture of the future European land border control.

Vision is our objectives, and this could be converted into the content we want to communicate. This content must be relevant and valuable to attract, acquire and engage a clearly defined target audience with a view to provoking a desirable customer action. Hence, the aim from now on is to produce and distribute informative content addressed to the targeted buyers – investors to make them better informed about the solution we propose. For this purpose, we are developing messages in an understandable language that will follow the project's progress from the start to the end of its life, and will, therefore, be periodically reviewed to meet market's needs and trends, as well as segmentation.

According to the above, our long-term goal is to offer a set of affordable and easy-to-install modules to support the needs of the EU's land border infrastructure. We envisage a land border crossing point that could provide a comprehensive solution, convenient for both travellers and border guards, based on the use of the biometrics we already use in our everyday life through our smartphones. A solution that exploits a blend of the best existing technologies and innovations in the areas of encryption and cloud computing, which combined will provide an unhindered flow of people, robust border checks as well as improved data privacy and security.

The overall key messages are:

i) Our solution **aims to improve the quality of services at land borders** by providing travellers with fast lanes and online information on border traffic that travellers can consult at any time to plan their travels better;

ii) SMILE will help **improve trans-boundary movements**, making this process more automated without jeopardising security. To this end, a combination of multi-modal biometrics is foreseen, the possible use of eID cards during the registration process and possible additional checks, if necessary;

iii) SMILE envisages the provision of the essential infrastructure and mobility at the local level, an innovative common technical mobile framework that **will facilitate the flow of travellers between countries** while ensuring high levels of end-user convenience, privacy, robust performance, and verification;

iv) By developing the SMILE framework, **we intend to provide an advanced prototype implementation** demonstrating the feasibility of initiatives such as the EC's "Smart Borders Initiative" aimed at new technologies to simplify life for foreigners frequently travelling to the EU and better monitor of third-country nationals crossing the borders;

v) SMILE action will **facilitate the fight against illegal migration and organised crime**. Criminals will struggle to circumvent multimodal biometrics. In addition, consideration will be given to interconnection with European national databases that store travel visa information as well as interconnection with databases that list people involved in criminal activities;

vi) SMILE will dramatically **improve crossing times**, thus reducing congestion at border crossing-points, especially during the peak season (e.g. holidays, and so forth) and consequently reduce fuel consumption and related CO_2 and NO_x emissions.

vii) We are **enhancing European expertise in the cross-border domain and developing key enabling technologies** for the next generation cross-border gates. We use the knowledge gained from previous projects in eID documents' interoperability, biometrics and mobile applications and further enhance it;

viii) Through SMILE Action, **cooperation between the various European countries in cross-border security is enhanced**. Partners with diverse expertise will work together to shorten the path to next generation's land borders;

ix) SMILE **links legacy systems to the next-generation cross-border checkpoints**, enabling the use of biometrics and smartphones;

x) SMILE generates cutting-edge solutions for smart borders using a combination of biometrics, web applications, and eID cards with a particular emphasis on mobile users, which **will drive revenue growth for solution providers** as they will deliver value-added products targeting security and safety;

xi) SMILE will use its results to boost the competitiveness of EU industry (in relation to the proposed technologies) and will, therefore, **contribute to the creation of new jobs** (according to the project exploitation plans), while ensuring the citizens' rights are fully respected in accordance with the relevant national and European legislation;

xii) SMILE will **promote the enrichment of standards** relating to the concept of pre-registration data verification as well as to the deployment of innovative mobile equipment to the border guards and controllers.

In addition to the key messages, particular emphasis will be placed on news communication regarding project's results and events promotions and results. The news will include achievements and results (such as the SMILE platform, lessons learned, user guidelines), based on its proof of concept, and personalised experiences that will illustrate the impact of the action and endow a human dimension which will facilitate end-user's acceptance.

2.2.3 Communication contributors

EULAMBIA is responsible for the Work Package 9, as well as for its monitoring during the project. On the other hand, as the consortium consists of a well-balanced group of industrial companies, SME's, research institutes and LEA's, each partner will use its means to contribute in the communication and dissemination activities. Partners' involvement is important for two

reasons. In the first place, they are potential users of SMILE Action's outputs, and at the same time, they would act as an influencing factor, being major market players in various sectors and a built-in canal for the diffusion of the project and its results to other users. This endogenous way of spreading the word can include presentations on workshops or seminars, articles in partners' internal newsletter and publications, relevant site and social media reports, and general promotion of SMILE Action in their business contacts. Hence, it is imperative to keep all partners well-informed about communication planning and related activities and urge them to distribute this flow of information actively. For all these reasons, each partner will develop its dissemination plan as follows:

CERTH: The Centre for Research and Technology-Hellas (CERTH) is the only research centre in Northern Greece and one of the largest in the country, and it was founded in 2000. It is a legal entity governed by private law with non-profit status, supervised by the General Secretariat for Research and Technology (GSRT) of the Greek Ministry of Education and Religious Affairs. CERTH has important scientific and technological achievements in many areas including Energy, Environment, Industry, Mechatronics, Information & Communication, Transportation & Sustainable Mobility, Health, Agro-biotechnology, Smart farming, Safety & Security, as well as several cross-disciplinary scientific areas.

In 2008, CERTH was among the first Greek research organisations to undersign and accept the principles of the Charter and Code for researchers while at the same time CERTH's representatives were members of the Greek delegation at the Steering Group for Human Resources and Mobility (SG HRM). Its latest achievement in the field of human resources is the "HR EXCELLENCE IN RESEARCH" logo awarded by the EC in April 2012 as a proof that CERTH is committed to offering the best possible working conditions, regardless the socioeconomic environment, and at the same time works towards the realisation of the European Research Area (Innovation Union, Commitment #4).

The Information Technologies Institute (ITI) was founded in 1998 as a non-profit organisation under the auspices of the General Secretariat for Research and Technology of the Greek Ministry of Development, with its head office located in Thessaloniki, Greece. Since 10/03/2000 it is a founding member of the Centre for Research and Technology Hellas (CERTH) also supervised by the General Secretariat for Research and Technology (GSRT).

CERTH/ITI is one of the leading Institutions of Greece in the fields of Informatics, Telematics and Telecommunications, with long experience in numerous European and national R&D projects. It is active in a large number of research domains such as Security and Surveillance, Image and Signal Processing, Computer & Cognitive Vision, Human-Computer Interaction, Virtual and Augmented Reality, Multimedia, Database and Information Systems and Social Media Analysis.

CERTH/ITI has participated in more than 175 research projects funded by the European Commission (FP5, FP6, FP7 and H2020) and more than 100 research projects funded by Greek National Research Programmes and Consulting Subcontracts with the Private Sector (Industry). The last three years, the Information Technologies Institute has attracted an income of more than 25.5 M€ from National and European competitive R&D projects. For the last ten years, the publication record of ITI includes more than 270 scientific publications in international

journals, more than 600 publications in conferences and 100 books and book chapters. These works have been cited in more than 6.500 times.

Planned Dissemination Activities: CERTH, as the project's coordinator, will participate in various events, conferences, workshops, exhibitions etc., to present the project and its purpose and results.

It will also contribute to the creation of dissemination material created within the project, such as newsletters, posters, brochures etc.

With its role as a technical partner, will also target scientific publications in international and national conferences and/or journals.

Fraunhofer: Fraunhofer FOKUS, a research organization, is very much keen on contributing to the information and communication technologies within the visibility of this project. To that extent, Fraunhofer FOKUS has actively disseminated the SMILE project internally in order to look for potential synergies between the different departments. Subsequently, in the course of the project, it would like to disseminate the project results as well as SMILE knowledge through scientific papers as well as industrial and scientific conferences. Furthermore, Participation in SMILE enables Fraunhofer with an opportunity to exploit technologies focused on homeland security and big data analytics events.

TEIC: TEIC as a Higher Educational Institute, aims at continuously enhancing and keeping the up-to-date level of knowledge offered in its courses. The results obtained via FORTIKA will be exploited by TEIC for exposing its graduate engineers and researchers in state-of-the-art areas of Border Security, by offering them theoretical know-how as well as practical and in-hands experimentation tools to be developed within the framework of SMILE.

MSc courses will be enhanced with tutoring on the specific concepts, and extensions on the related aspects will be offered for PhDs. TEIC also puts extreme value in its collaboration via SMILE with other research, civil-sector and industrial partners, since this is the only way to be promptly acquainted with upcoming standards and major imminent technical and scientific breakthroughs. Finally, TEIC will open up all technical parts to the open source community in order to increase the impact and dissemination level of the SMILE project.

FINT: Future Intelligence Ltd is a start-up SME company specializing in Information & Communication Technologies (ICT). It aims at providing high-demanded solutions and business services covering a number of activities such as wireless communications, networking and IoT & cloud computing. At the same time, it offers consulting services to other businesses and organizations which are willing to use IT and telecommunications as a lever in order to enhance their productivity and operation procedures.

The company's main goal is to contribute to scientific research on the fields mentioned above by pitching in with other players in order to produce innovative and original products or services.

Planned Dissemination Activities: FINT based on its profile is planning the following dissemination activities:

International Conferences and Journals

- Contribution to the preparation of papers targeting international conferences and journals.
- Other publications will be determined based on research outcomes after the end of the project's first year.

Exhibitions related to SMILE Technology

- Participation in at least two exhibitions of SMILE project including poster, presentation or by exploiting another type (e.g. video) of dissemination material.

Online dissemination materials

- Contribution in the production of the SMILE newsletters
- Contribution in posting articles related to SMILE activities and technology to social media (e.g. LinkedIn, Twitter)

Multimedia files

- Demo of the SMILE smart GW.

SIVECO: SIVECO Romania is the leading Romanian software house and one of the most successful regional leaders in e-Learning, e-Agriculture, eCustoms, eGovernment and eBusiness from Central and Eastern Europe.

The company develops and exports software products and high value-added consultancy projects to countries within the European Community, The Middle East, North Africa and the CIS area.

During this project, our main contribution is in Work Package 5. In this task SIVECO Romania will lead the system development.

For this project SIVECO Romania will follow the plan presented below:

Table 3 SIVECO's planned dissemination events

	Planned dissemination events	Local/External	Description	Owner
1	*technical meetings, teleconferences*	Local	organizing technical meetings, teleconferences for the Consortium partners using the collaborative platform of SIVECO	SIVECO Romania and all partners of the Consortium

| 2 | *external webinars* | External | organizing webinars for the interested stakeholders | SIVECO Romania and all partners of the Consortium |

Table 4 SIVECO's dissemination channels & tools

#	Dissemination tool	Description	Owner	Type (e.g. video, poster, technical papers, press releases, pages on websites)
1	*web pages*	developing web pages dedicated to promoting *the results* of the SMILE project	SIVECO Romania	pages on websites
2	*technical papers*	presentation of *the technical/ technological approach* of the SMILE project	SIVECO Romania	technical papers
3	*journal articles*	presenting *the innovative aspects of the technical solution* (ex. Engineering and Technology field)	SIVECO Romania FINT IDEMIA	publications
4	*project presentation and the main SIVECO's contribution to this project*	presenting our contribution through a brochure	SIVECO Romania	leaflet

NTNU: NTNU is Norway's university for higher education in technology and natural sciences. In addition, the university has a wide range of courses in social sciences, humanities, aesthetics, medicine, teacher education, architecture and arts. NTNU has nine faculties and 55 institutes and more than 100 laboratories. The university employs approximately 5360 academic staff and has 40 000 students.

NTNU also has a Technology Transfer Office, which up to date, received 1000 ideas, 395 patent applications, and led to 57 spinoffs and handled 54 license agreements (https://www.ntnutto.no/). This Technology Transfer Office will help us disseminate our results in progress and final results. In addition, through the academic work of our post-doctoral students and the faculty involved, we will publish our work at credible conferences and journals.

IDEMIA: IDEMIA is a large industry and a key player in government security solution. IDEMIA offer a wide range of products, services and solutions for border forces integrating Identity verification (through the use of biometrics) and Identity management. IDEMIA will disseminate the project's results through its wide network of customers worldwide composed of policymakers, border police, ministries, governmental organisations, technical partners and so forth.

Besides, IDEMIA is present on a large number of international exhibitions and conferences which make it a perfect means of dissemination for SMILE's achievements.

Finally, IDEMIA established a high number of partnerships within the scientific community (universities, research institutes and so on) either through EU projects or bilateral agreements. IDEMIA will plan to share public knowledge and results with this community.

eGovCD: eGovCD is an SME focusing on R&D within the field of IT innovations for the public sector, IT consolidation, process management and cloud services with a focus on security and compliance with GDPR. In the SMILE project, eGovCD is mainly developing an EU-conform eID-module, which could be a standalone system or a part of the larger SMILE platform. We are sure that the SMILE project results and developments will ensure a further go-to-market-opportunity for eGovCD with the eID-module as a component for larger architectures. Therefore, eGovCD has a huge interest of communication on the SMILE project, because we believe that only through regular communication and information on appropriate channels, the necessary perception of the relevant actors in the target market can be achieved. For this reason, eGovCD will place the SMILE project in existing networks (online and offline), at relevant German conferences and network meetings as well as in bilateral discussions with experts and customers in this field. Furthermore, we will publish articles and news feeds on our own website to generate constant communication on the SMILE project results as well as on the eID-module development.

TEC: TEC's major contribution to the project is tailoring their homomorphic encryption module to BCPs to enable privacy-preserving data computation for biometric data and other sensitive data. This involves developing novel signal processing algorithms, redesigning state-of-the-art machine learning techniques used for privacy-preserving biometric enrolment and verification, implementation (in Java), testing and tuning over the last two years of the SMILE project. The output of these activities will be disseminated to relevant audience and stakeholders if they are not violating the IPRs' of TEC and SMILE consortium. Some of its planned activities are listed below:

Source code: TEC will develop their module using Java programming language and make the source code available to research community through online repository such as Bitbucket.

Encrypted database: TEC will produce the simulated database and the corresponding encrypted database and make them available to the research community (via online along with our approach). The aim of this activity is to engage with cybersecurity community who can use both the datasets to verify the robustness of our solution.

<u>Scientific publication (conference paper)</u>: TEC will publish a short research paper in one of the reputed conferences listed in Annex III. The camera-ready version of the paper will also be disseminated through social media such as ResearchGate and LinkedIn to make a quick impact.

<u>Journal paper</u>: TEC will also attempt to submit a full publication containing algorithms, proofs, new results along with the source code in reputable journal towards the end of the project.

EULAMBIA: EULAMBIA, as an SME directed towards global markets, has a great deal of interest and willingness to lead this work package to exploit the awareness and visibility of the project. The members of EULAMBIA have collaborated on similar projects in the past and are well-adapted to the dissemination processes by participating as speakers at conferences, workshops and symposia.

EULAMBIA believes that the information resulting from the events organised by the project will provide a firm basis for the company in the related industry and service sectors, so EULAMBIA is very interested in the results of the SMILE Action. To this end, EULAMBIA intends to play an active role in this process through the conduction of interviews and participation in workshops organised by SMILE. The interviews and the workshops that will be held throughout the project will serve as a communication channel to understand how these sectors perceive the adoption of photonic-based security solutions and to what extent this adoption can be spread.

Besides, EULAMBIA plans to publish at least one paper in a peer-reviewed scientific journal and present at least one in an international conference on the topic of physical unclonable functions based on photonic technologies;

SPP: The Protection and Guard Service (SPP) is a state body with functions in the field of national security, specialized in providing protection for the Romanian dignitaries, the foreign dignitaries during their stay in Romania, and their families, within its legal competence. It also provides guard for the headquarters and residences of the above-mentioned dignitaries in accordance with the decisions of the Supreme Council of National Defence.

SPP will actively promote the project objectives, technologies, innovations and results to the E.N.P.P.F (European Network for Protection of Public Figures) and A.P.P.S (Association of Personal Protection Services) meetings, during the meeting with other national and international LEAs, during EU and international workshops, conferences and tradeshows. As the SPP personnel participating in this project is very involved in the academic activities, publication in top-tier scientific journals and conferences, including those specialised in law, policing, security, computer vision, is also envisioned as a dissemination activity.

RBP: The Romanian Border Police is one of SMILE's end-user partners and is the only specialized state institution with responsibility for the surveillance and control of the state border crossing.

For the visibility of the SMILE project Romanian Border Police will post articles on the official website of the institution, on the Facebook page and on the "Frontiera" Magazine, a magazine designated to promote the image of the institution. RBP is interested in the SMILE Action because is make border police work much easier and much safer.

HNP: HNP is an end-user organization, responsible for border checks at a national level. In SMILE Project, The Hungarian National Police is acting as an end-user, contribute with Statement of Needs, key role in test scenario development and providing test sites.

With other end-user partners, the HNP will deploy and validate the proposed secure and reliable ecosystem in two use cases (Romania and Bulgaria), in which the adaptation of SMILE framework to focused applications will be performed.

For HNP, dissemination of the project aims, challenges and results are also quite important to promote. Therefore, HNP will prepare submissions to conferences as it did already (e.g. successful dissemination-presentation at CONNECT:ID 2018 in Washington D.C., USA).

Moreover, HNP is also open to participating in interviews as well as newsletters for the purpose of dissemination and also take steps to promote the action on the official website of the Hungarian National Police.

CDBP: Chief Directorate Border Police (CDBP) is one of the chief directorates within the Ministry of Interior. It is a national specialised structure with protective, preventive and investigative functions. Its main purpose is to perform border control and protection of the state borders of the Republic of Bulgaria. The human and technical resources dedicated to border control are conditioned by the intensity and profile of travellers' flow, assessment of threats and risk analysis. The Bulgarian Border Police deploys adequate infrastructure, equipment and modern technical devices in its efforts to combat illegal migration, trafficking in human beings and cross-border crime.

Regarding the above mentioned and having in mind that one of the pilot tests under SMILE project will be on the Bulgarian BCP, CDBP will raise the awareness of the project and its added value to wide target groups (travellers, relevant institutions, our partners, etc.). So, we are sure that SMILE project will ensure and give innovation in the procedures done at the BCPs to become more effective and smoothly for the crossing of the passengers and their family members.

CDBP as an end user in this project will promote the action and its results as well as any activity related to the project, including meetings, presentations, publishing on CDBP website, etc. This will include information about the SMILE project and major results.

The results of the project mentioned above will be also promoted when we participate in other conferences, meetings and cooperate under other projects funded by the H2020 program.

2.2.4 Key stakeholders

Target audience mapping is an inherent part of the SMILE communication and dissemination plan to make the most of the take-up potential and ensure that the communication messages are tailored to reach the intended users or prospective clients through carefully selected channels and tools.

Groups identified for external communication activities cover a wide range of stakeholders in the defence and border security ecosystem. These have been broken down into distinct categories as shown in the following table:

Table 5 Key stakeholders identified as the target audience for SMILE Action

Border Control Sector	End-Users	Facilitators
• Technology providers • Scientific community • Defence Industry • Non-Profit organisation	• Border authorities • Facility managers • System operators • Commercial customers • Stakeholders at the pilot sites • Travelers • General Public	• EU Institutions (EC, European Science Foundation, MEPs) • Related EU-funded projects • National public authorities (ministry and regional councils, federal regulation authorities, industrial committees) • Standardization bodies • Organizations and EU alliances in topics addressed by SMILE Action • European technology platforms and respective clusters • Public agencies and environmental organisations

Finally, SMILE, instead of looking exclusively for the target market touch-points, plans to leverage third-party experts, known as "influencers", to maximise the impact of the content, as well as to spread it in a part of the time needed related to regular dissemination channels. To this end, we will identify forward-thinking pioneers in the areas of identity management, security and cybersecurity, with years of experience in their field and reliable advice on security systems and devices. This list will include people ranging from individual entrepreneurs to the best-known academics, members of relevant agencies/bodies, and technology gurus covering both the public and private sectors as well as non-governmental organisations. With influential marketing being a new hot trend in recent years [5], we look forward to its full exploitation before it becomes the norm resulting the close of the arbitrage.

2.2.5 Roadmap of activities

Timing is considered to be a critical factor for an effective communication approach. Depending on the project phase, time will determine the content of the messages that will be diffused

as well as the distribution channels and more importantly the targeted audiences. At the initial stage of the project, a great effort will be made to agree on the communication strategy and future activities and, above all, to create the necessary initial awareness in the markets related to the Action's objectives and scope. The second phase is characterised as a commercialisation phase of the project aimed at creating a more targeted awareness of SMILE technologies for key players and potential users. Hence, as the scientific output increases, the dissemination activities will shift to a bottom-up approach (communication targeted primarily to scientific community) with more technical information flow to conferences, workshops and scientific journals spreading the technological benefits of our solution to the target market. The final, business strategy phase will aim at maximising market's and industry's awareness regarding SMILE platform primary through demonstration/application actions, thus ensuring its sustainability and full exploitation. Even so, all produced material will be equally communicated in a comprehensible way to non-experts and the general public in order to facilitate the broader adoption of the SMILE solution.
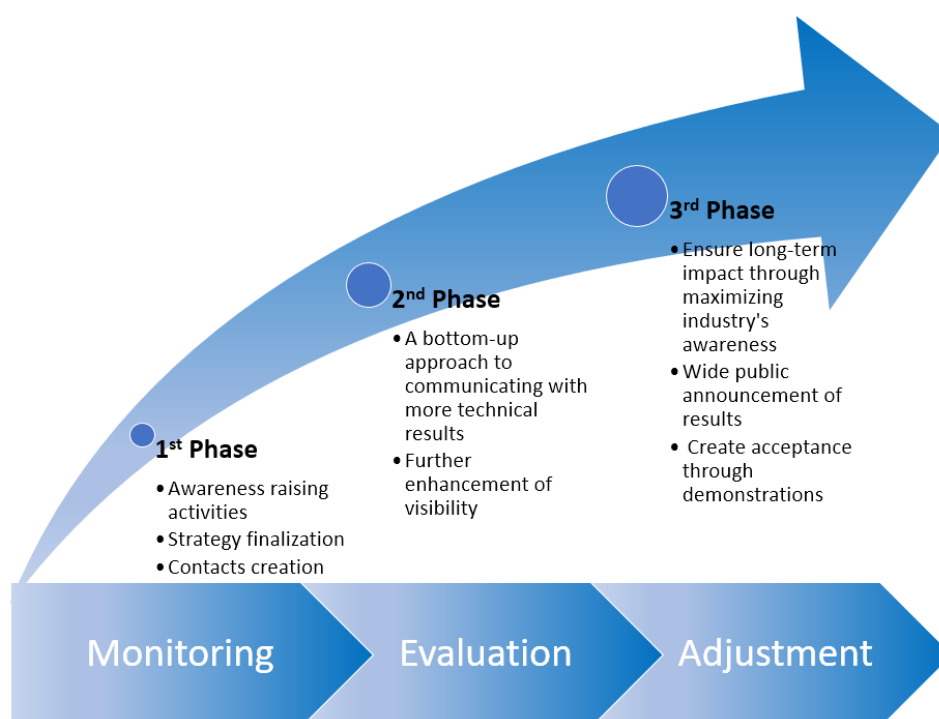
3rd Phase
• Ensure long-term impact through maximizing industry's awareness
• Wide public announcement of results
• Create acceptance through demonstrations

2nd Phase
• A bottom-up approach to communicating with more technical results
• Further enhancement of visibility

1st Phase
• Awareness raising activities
• Strategy finalization
• Contacts creation

Monitoring   Evaluation   Adjustment

Figure 1 Dissemination & Communication Roadmap

3. Communication and Dissemination tools

3.1 Visual identity

The primary purpose of a logo is to raise awareness about a brand and to build a beneficial product image, thus constituting a valuable corporate asset. Logos are indeed efficient tools contributing to identifying, in this case, what services the project has to offer, as well as to differentiate it from other projects. In order to be successful, a logo should comply with the following rules: a) be recognisable; b) create consensual meaning in the targeted market, and c) produce a positive effect [[6]]. With these in mind and in order to add value to our solution and consortium image, contributing at the same time to the strategic vision, we designed a

logo which tries to capture the ambition, mission and objectives of the SMILE Action. To this end, we decided to integrate three essential elements of the SMILE architecture: fast lanes, biometrics and mobile devices as a cohesive word-picture-brand. Due to its importance, the logo creation started right after day one, using GIMP Open Source raster graphics editor. This logo will be used in all products derived from partners' effort, ranging from deliverables to documents, presentations, brochures, website, giveaways and so on.

Figure 2 different Versions of SMILE Action logo

3.2 Project's brochure

The main objective of the project brochure is to explain its purpose and services to a particular group or the general public, to answer possible questions about our consortium, and to guide the reader how to find out more about our Action and solution more specifically. With the intention to keep the content simple, concise and clear, we introduced the challenges, our ambition, and the main idea of the SMILE solution. Furthermore, we mentioned our objectives, the tools we will use to achieve them and the expected outcomes. Finally, it includes the website and social media addresses via QR codes, provides essential information about the SMILE partnership as well as partners' logos.

A second version of the brochure will be published in the second year of the project, containing updated content, with a summary of the preliminary results and an improved layout to make it more appealing. A final version is also foreseen at the end of the project. The brochure will be printed in at least 500 copies and will be shared at each event/conference/exhibition SMILE partners attend in. To advance this effort, we will distribute it electronically through the website and social media. Moreover, it could also be translated into other languages if a partner so requests after delivering the brochure templates.

Figure 3 SMILE Action brochure page 1

Figure 4 SMILE Action brochure page 2

3.3 Poster and roll-up banners

Posters are a very effective method of presenting this kind of research because it allows the display of information hence be much more memorable than an oral presentation. To achieve its purpose, it must balance the content and outline. A successfully designed poster can act as a source of information, conversation initiator, creator of networking opportunities, advertising, and a summary of the work done. As for layout and design, EULAMBIA has created a poster that strives to be simple and pleasant to the eye, with the text having an easy-to-read, uninterrupted and consistent look without simultaneously overloading it. In terms of content, it unravels the project's motivation and objectives, transmits the central message in a way that is understandable without a verbal explanation and includes information about the con-

sortium and its partners. Roll-up banners will be designed with more or less the same princi-ples and project style. More focused posters or banners are also foreseen in case of specialised events or activities.

The SMILE poster will also be published three times during the project, moving from its ap-proach and objectives to second's year achievements and finally to its technical results and demonstration activities. Posters could also be translated into languages other than English by partners participating in local events.

Figure 5 First version of SMILE Action poster

3.4 Electronic newsletters

E-newsletters are considered a handy tool that will help our project staying top-of-mind while showcasing partners' research and industry expertise. Its primary purpose is to build a healthy lasting relationship with our e-mail subscribers, informing them of progress and results, pro-ject-related news, training opportunities, interviews, dates and details on projects activities and events. It will be prepared and submitted every six months using various channels and recipients. At an early stage, it will target the general public to increase the visibility and awareness, while at next period it will mainly aim at the research community in the field of security. In exceptional cases, compendious and more audience targeted messages, in a spe-cific aspect of project activity, will be sent through a recipients list that has already been cre-ated and continuously updated by partner connections. Subscription to the newsletter is open to everyone through the SMILE Action special section on the web page and RSS feed.

3.5 Press releases and articles

Press releases will act as a formal, official announcement to targeted members of the media regarding SMILE's major achievements, milestones reached, outcomes and significant cooperation or synergies made with outside bodies. They will be published at a carefully chosen strategic time and will address specific press contacts that will be included in the aforementioned contact repository. All of these will also be available on the SMILE Action web page. All other media articles that can take the form of internal or external posts on websites, blog entries, and social media posts will be actively pursued during the lifetime of the project. The central contact person for external dissemination and communication activities will be the DM; therefore, full name and contact info will be mentioned in any document is considered to be relevant.

3.6 Project reports

A prominent form of dissemination, which is often overlooked, is the publication of the project's deliverables. Throughout SMILE project's lifetime, we will produce 31 freely accessible official deliverables. All of these are characterized as publicly available reports in the "result" area of the project site, in order to bring together the top accomplishments of the Action and spread this valuable knowledge to our target groups.

3.7 Video material

Video material is recently in high demand, and when it comes with analytics, it is considered as a very attractive tool that SMILE Action plans to take full advantage of using it. In fact, video content is known to be the one with the best ROI regarding marketing purposes. Moreover, as CICSO claims [7] worldwide, IP video traffic will be 82% of the total internet traffic by 2021, making video production something worth investing in. Hence in order to capitalise this market trend, a short project film (three to five minutes) will be created one year to six months before the end of the Action, to present it in such a clear and down-to-earth way that it will be easily comprehensible and digestible.

3.8 Communication versus Dissemination tools

Some tools are intended to be used for communication purposes, and others will be mainly used for dissemination purposes. These will be separated as shown below.

Table 6 Communication & dissemination tools

Tools	Communication	Dissemination
Visual identity	☐	
Brochure (not specific/ thematic)	☐	☐
Poster & banner (not specific/targeted)	☐	☐

E-Newsletters (generalist/specialized)	▢	▢
Press releases & articles (generalist/topic specific)	▢	▢
Reports		▢
Videos	▢	

4. Communication and Dissemination channels

4.1 Online channels

4.1.1 Website

The project website is considered as the dominant channel of communication and dissemination of its goals, progress, activities, news, and results in order to address border security community, policy makers, end-users and the general public. More importantly, it consists its main impression to the world, so it is designed to be attractive and intuitive while being easy to navigate on bearing in mind directions set out in the EU Project Websites – Best Practice Guidelines.

The SMILE Action website is accessible at http://smile-h2020.eu/smile/ and is online since month two. It has been developed by EULAMBIA and is hosted by CERTH. To build this site, we used WordPress v.4.8 which is an open-source Content Management System (CMS) based on PHP and MySQL. More than 27.5% of the top 10 million sites have been using WordPress since February 2017, and it is reportedly the most popular website management or blogging system in use on the Web, supporting more than 60 million websites. Besides, special attention has been paid to making the SMILE website as smartphone/tablet-friendly as possible to create a pleasing mobile web experience to the user while staying aligned with the project identity.

In overall, the website was constructed to achieve the following objectives:

i)   provide a summary of the Action's goals, ambition, and innovations;
ii) give access to public deliverables, abstracts of confidential deliverables/publications, or articles about intermediate project results;
iii) act as an open repository for communication and dissemination material such as newsletters, press releases, brochures, posters, presentations and other official protect templates;
iv) promote each of the partners raising their visibility;
v) announce the latest news and events concerning the project;
vi) attract external stakeholders for potential collaborations;
vii)act as a gateway to other EU related projects and security organisations.

Apart from the goals mentioned above, the site is structured in the following sections on the homepage:

viii)   **Home**: it describes in few lines the Action's summary, ambition and objectives. It makes acknowledgement of EU funding contribution accompanied by the relevant EU and

Horizon 2020 logos. Links with social media accounts are also provided, as well as an e-form for the newsletter subscription;

ix) **Partners**: This section provides a short description of the partners along with their geographical distribution while providing a link to their sites;

x) **Project**: These pages describe the challenges we are facing, the definition of the methodology followed and the expected results and impacts in order to help the broader scientific community as well as the general public to understand the importance of the project. We also mention the Action's structure, and we report related links with similar projects, clusters and initiatives;

xi) **Results**: In this part, an opportunity will be given to those interested to access research and technical reports from partners, public deliverables and short summaries of private. Access to partner presentations will also be provided;

xii) **News & Events**: On this page, we record past and future events or activities, such as conferences, workshops, exhibitions and special sessions, while providing access to information material like press releases and newsletters;

xiii)   **Contact**: Finally, this section makes possible for anyone to contact specific people from SMILE consortium, leaving their comments or relevant feedback.

Figure 6 SMILE website home-page screenshot

Figure 7 SMILE website partners section screenshot

The website will constantly be updated and enriched with new content as the project evolves. Search Engine Optimization techniques will be used alongside with site analytics to improve its overall efficiency as a concomitant of the desirable higher ranking. Finally, with a view to retain and further increase the impact of the project, the page will be maintained for at least one year after the end of the program.

4.1.2 Social media

Nowadays, in the new social media driven environment designated by customer connectivity and interactivity, companies and organisations are striving to use them as a part of their marketing and brand building activities [8]. SMILE Action, like any other conventional firm/business, will use these communication channels to forge relationships with existing and potential stakeholders and form communities that will interactively work together to identify challenges in the border security area and unfold novel solutions to alleviate them. In this spirit, we will implement a social media campaign that creates the necessary awareness, communicates project's activities, outcomes and expected impacts, and encourages the general public to add value to this interaction by creating content that will lead to a domino of desirable peer-to-peer interactions [9].

Twitter

Twitter is a micro-blogging communication channel allowing to send brief messages up to 280 characters that can include links with a variety of web content, images or videos. SMILE has created early on a dedicated Twitter account as a direct communication canal to reach the general public. Both technical and general information (especially in the form of info-graphic material) will be shared. Part of the activity will be the quest for relevant project's or organisations to approach with the ultimate aim to promote collaborative activities and synergies. SMILE Twitter account, as every other created, will also interact with each partner's account to relay messages, raising visibility and credibility for all consortium members. The activity of

the SMILE Action profile will be continuously monitored through analytics tools, evaluating and adjusting our presence accordingly there.

Figure 8 The SMILE Twitter account accessible at https://twitter.com/smile_h2020

Table 7 Twitter hashtags which are used to increase SMILE's high visibility

Hashtags to use	
Border security & sectoral	**General**
#Authentication	#EC
#Biometrics	#EU
#Borders	#EUFunding
#BorderManagement	#FRONTEX
#BorderSecurity	#H2020
#Cloud	#ICT
#CyberSecurity	#Interoperability
#FaceRecognition	#Irreguralmigration
#HomomorphicEncryption	#MigrartionEU
#Identity	#OpenAccess
#LandBorders	#SecurityUnion
#Multimodal	#SME
#PhotonicPUF	

#Security	
#SmartBorders	

LinkedIn

LinkedIn has largely been established in the common understanding as a place for job hunters or growing a professional network. Nevertheless, it is also giving the opportunity to an organisation nurture its public image on a universal scale, generate new business opportunities, engage with followers, and tell a story to grow the business. The SMILE Action company page will act as a platform to diffuse shareable content beneficial to our audience, introduce the services we have developed, show why and how we are different from other projects or competitors, check how other relevant border management applications are emerging, to find people that could contribute one way or another in our research, and improve our ranking in search engines. Particular attention will be given to the integration between the different social media channels by providing links to each other, assisting to the viral spread of the project. To further reinforce SMILE in audience mind and make us more reputable and trustworthy we will also provide connection to our site.

Figure 9 The SMILE LinkedIn company page accessible at https://www.linkedin.com/company/smile-smart-mobility-at-the-european-land-borders/

YouTube

A YouTube channel will be available at a later stage, containing not only supplementary infographic material but also other videos that will be taken during pilots, demonstrations, live webinars, events organised by the project or any other activity to promote the Action in the most effective way.

4.1.3 External channels

In addition to using our collective and individual channels and media, we will actively seek to diffuse any news, outcomes, or activities on a variety of external websites/social networks of different organisations, projects, and relevant content media. Over and above that, we will strenuously look for an additional external hype through television, radio, and print coverage to multiply the impact of our communication strategy. A list of these external channels has already been set up by EULAMBIA, organised by topic and will be further enriched by all partners in the consortium.

Table 8 Indicative list of external channels will be used for Dissemination & Communication reasons

Title	Website
Security	
European Organisation for Security	http://www.eos-eu.com/
Homeland security	http://www.homeland-sec.de/en/
International Border Management and Technologies Association	http://www.ibmata.org/
International Security Industry Organisation	https://www.intsi.org/
Security Document World	http://www.securitydocumentworld.com/
Security Informed	https://www.securityinformed.com/
Security Solutions Watch	http://securitysolutionswatch.com/
World Security Index	http://www.worldsecurity-index.com/
World Security Report	https://issuu.com/torch-mktg/docs/wsrjanfeb17
Biometrics & ID	
Biometrie-online	https://www.biometrie-online.net/
Biometric Update	https://www.biometricupdate.com/
European Association for Biometrics	https://www.eab.org/
Find Biometrics	https://findbiometrics.com/
ID & Security Document News	https://www.reconnaissance.net/secure-doc-ument-news/
Mobile ID World	https://mobileidworld.com/
Planet Biometrics	http://www.planetbiometrics.com/
EU	

CORDIS news	http://cordis.europa.eu /news/home_en.html
CORDIS Wire	http://cordis.europa.eu /wire/
Horizon Magazine	https://horizon-magazine.eu/
Research*eu	https://cordis.europa.eu/research-eu/home_en.html
H2020 Projects	
ABC4EU	http://abc4eu.com/
Aries	http://aries-project.eu/
BODEGA	http://bodega-project.eu/
iBorderCtrl	https://www.iborderctrl.eu/
PROTECT	http://projectprotect.eu/
SpeechXrays	http://www.speechxrays.eu/

4.2 Offline channels

4.2.1 Project events

The events of the SMILE program will arise from the need to disseminate the results of the Action's scientific and technical work packages. These will not only contribute to the dissemination of the knowledge to the relevant stakeholders but also get valuable feedback, create the opportunities for constructive discussions and foster the generation of creative ideas.

Workshops: Thanks to the understanding of the entities that may have an interest or an influence on the Action's activities, progress, and outcomes, SMILE will invite key players from Europe and beyond to presentation/feedback sessions, to provide the project with their visions and scientific approaches. We will organize at least three such events with an emphasis on specific thematic issues (such as border security, biometrics for identity applications, data analysis, communication architectures), with the aim of spreading awareness to international and regional actors, transferring skills generated on, and ultimately being an active member of a community of problem solvers in this domain. All the materials produced by these workshops, such as minutes of meetings, participants list, press reports and closing points, will be published later in a detailed, carefully edited report.

Training sessions: SMILE Action will contribute to the advanced vocational training of researchers and other key staff, like data security application developers, software engineers,

research managers, and end-users through hackathons (at least one during M26-M30 after initial execution of the trials in WP7) and meet-ups in order to make sure that the emerging market for the cyber-security will be benefited and aware of SMILE advantages, usability and how it works. In SMILE, the training of the advanced knowledge produced by the project is foreseen to be provided by and for the staff working on the project. The overall objective is to enable new users to experiment with the solutions and provide their feedback.

In addition, an online session that will consist of online webinars and offline training material for self-paced learning will be carried out at the later stages of the project. All these efforts are to develop a more industrial proliferation in order to exploit and adopt SMILE solutions and finally to provide a software development kit to support SMEs and end users to integrate and utilise their solutions.

Closing event: EULAMBIA, together with the entire consortium, will also contribute to the promotion of SMILE Action with a public event open to the public in the European Parliament, which will present the results and outcomes of the project to policymakers with the mind to bring SMILE results in higher TRL and closer into commercialisation. This will be a vital opportunity to promote SMILE at its completion and present the final results to a recognised audience of the European institutions. At this final conference, we will focus on interactive and engaging sessions, fostering communication through roundtables, demonstrations and match-making meetings, avoiding long monologues and gobbledygook. More specific measures to be taken to organise the above should be drawn closer to the date of the event.

4.2.2 External events

Every year, the project will participate in a major forum or trade fair in the field of biometric technologies and border control management (e.g. FRONTEX Conference on Biometric Technology for Border Control, Annual Border Security Expo & Conference), as well as in related events organised by pertinent exhibitions. In parallel, the consortium partners will also present the SMILE solution at conferences or workshops, which will be held alongside plenary sessions where possible to reduce travel costs and promote cooperation between all partners and participants. Besides, SMILE will also be represented at cluster events or thematic workshops under the auspices of the EC. The presentation of project's results in events like these it is of the utmost importance regarding dissemination purposes due to the participation of scientists and industry experts. Thus, they will aim to present the latest achievements and recently developed prototypes, with the view of attracting commercial interest to the SMILE solution as a whole or subsystems from security systems providers, complementary component manufacturers or public entities. Therefore, the respective events have carefully been selected and displayed in Annex III. This list will be updated ad hoc according to the needs of the Action.

4.2.3 Scientific publications

All academic, technical and industrial partners, as a unit or as a group of partners, will publish and present scientific accomplishments that have been achieved during the project in specialised magazines and high-impact scientific journals (peer-reviewed or not). This is a beneficial

way to disseminate high-value results and to draw the attention of various actors, such as scientific associates, researchers or technicians. A list of targeted journals, as set out in Annex IV, has already been compiled and will regularly be reassessed to meet the dissemination needs of SMILE Action.

As stated in article 29.1 of the Annotated Model Grant Agreement, all partners intend to disseminate its outcomes "*must give prior notice to other beneficiaries for at least 45 days, unless otherwise agreed, together with sufficient information on the results to be disseminated. Any other beneficiary may raise objections unless otherwise agreed 30 days after the receipt of the notification if it can demonstrate that its legitimate interests are significantly affected in relation to the results or the background. In such cases, dissemination cannot take place unless appropriate measures are taken to safeguard these legitimate interests*" [[10]].

SMILE will endeavour to make results generated be published in scientific journals with free of charge open access, based on the OA gold method to ensure our presence in some of the most prestigious journals in the disciplines of biometrics, mobile computing, communication and security sciences. Occasionally, the partners will follow the OA green method. In this case, each partner should make the work available by archiving it in a repository (after or in parallel with publication), which may be central, institutional or topic related. The version of the paper to be submitted will be a final, peer-reviewed, pre-publication, machine-readable copy. No charges are foreseen, but at the same time, an embargo period may apply depending on the publishers self-archiving policy. Nevertheless, authors must establish the open access character of the work within six months of the publication and also provide open access through the repository to the bibliographic metadata of the respective publication.

Finally, unless the Agency requests or agrees otherwise or is impossible, any dissemination of the results (in any form, including electronics) must demonstrate the EU emblem and include the following text: *"This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 740931"* [[10]]. Last, any dissemination of the results must indicate that it only reflects the view of the creator and that the Agency is not responsible for any use of the information contained therein.

4.2.4 Synergies with related projects and organisations

As a part of the effort to amplify our dissemination strategy SMILE will seek for collaborations and synergies with other programs and organisations to further strengthen existing efforts and together shape the future vision of the sector. The first step in this direction will be the capitalising on partners' involvement and contacts in other national, European, and international projects. Particular attention will be paid to the participation of our project in European research and innovation clusters on secure societies, identity, privacy and cloud computing, as they have already been developed. Some of the projects that have previously been identified and targeted can be found in Table 6, but this does not mean that this search will not be continuous.

The objective of these synergies will be: (i) to avoid unnecessary replication of work; (ii) to create long-term research collaborations; (iii) to connect with different communities that are otherwise difficult to reach; (iv) to increase visibility and maximize impact of the SMILE Action;

v) to create scale economies and research agglomeration externalities; (vi) to share knowledge and technical challenges came up with; (vii) foster participation to SMILE.

The types of cooperation that could be implemented are: (i) exchange of non-confidential deliverables; (ii) joint organization of events; (iii) common invitations or applications to participate in conferences or workshops; (iv) reference or logo inclusion on project material; (v) exchange of non-proprietary information obtained during pilots.

4.3 Communication versus Dissemination channels

Some channels will be mainly used for communication purposes, some for dissemination purposes, while others will be multi-use. These are separated as shown below.

Table 9 Communication & dissemination channels.

Channels	Communication	Dissemination
SMILE website (general information/output pages)	▢	▢
Social media	▢	
External channels (general/topic specific)	▢	▢
Mailing list (general/segmented)	▢	▢
Project events (workshops, training sessions, webinars)		▢
External events (exhibitions/conferences/workshops)	▢	▢
Publications		▢
Synergies – clusters		▢

5. Evaluation and monitoring of the activities

The SMILE communication plan outlined above will be evaluated on a regular basis throughout its duration in terms of efficiency and effectiveness as a whole, as well as of the individual quality of the specific actions. For that reason, we have set a series of key performance indicators to assess the impact of the dissemination and communication activities fulfilled by the SMILE Action partnership. These will be redefined accordingly, both in quantity and quality, and will be further enriched. While monitoring will be permanent, the evaluation will be done annually mainly through the official WP9 deliverable "Report on Dissemination Activities, Public Participation and Awareness".

Table 10 SMILE Action Key Performance Indicators.

Tools	Measures	KPI
Brochure	Number of copies distributed	500

Newsletter	Number of newsletters published	6
Press releases	Number of press releases published	At least three throughout project's duration
Video	Number of videos created	At least 1
Channels	**Measures**	**KPI**
Website	Number of visitors/year	400
Social media	Number of followers	Twitter: 100/year; LinkedIn: 80/year
Scientific publications	Number of publications/year	At least three publications at average
External events	Number of participation/year	At least three participations
Events	Number of events organised	At least three throughout project's duration
Training sessions	Number of sessions organised	At least three throughout project's duration

6. Conclusions

The primary objective of this document was to establish a communication and dissemination strategy framework for SMILE Action to develop a better understanding of our aspirations, goals and solutions, to enhance the visibility of the partners among targeted communities and to build positive attitudes to the general public. The proposed strategy, closely aligned with our business plan, was carefully designed to disperse information about project activities and to disseminate its results across the value chain of technology providers, the scientific community, end users, public bodies and international organisations.

Within this document, a systematic effort was made to identify stakeholders, define a timetable for action, select a set of powerful tools, and choose the communications channels that are used for conveying the project's message to each of the targeted audience. In addition, in order to amplify our work, we describe a series of activities, such as conferences, workshops and collaborations with other organisations. Our basic idea is that the corresponding tools and channels to be used should include not only traditional, well-known approaches but also novel and up to date practices in the marketing domain.

This document will be used as a tool for members of the consortium and the European Commission to ensure that dissemination activities are carried out in a timely and sufficient manner to maximise the effectiveness of dissemination for all the different groups who could benefit from the knowledge created within.

This present is considered a living document, meaning that the strategy will be evaluated on a regular basis according to specific success criteria as have been appointed in a previous chapter. When necessary, the strategy will be adapted to meet project needs better and take advantage of the latest opportunities offered in the future. Any adjustment decision will be made jointly by all partners through special WP9 teleconferencing meetings or regular plenary meetings.

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Annex I – SMILE Dissemination & communication timeline

Objective	Month 12	Month 24	Month 36
Create project identity and branding	Finalize logo design & colour scheme	Revise branding & identity as required from partners	Revise branding & identity as required from partners
Design communication and dissemination stuff	Create stuff including brochures, posters, banners and other	Update the materials according to the project's feedback. Create versions in other languages, where possible, with project partners.	Update the materials. Request permission to distribute stuff during additional events
Create SMILE Action website	Get the website live, including information about the consortium members and SMILE's function	Update the site with portal information.	Restructure the site UI to make it friendlier to find relevant information; Upload more appealing content
Implement an effective social media strategy	Twitter: 100 followers/ 200 tweets; LinkedIn: 80 followers/ 50 updates	Twitter: 200 followers/ 400 tweets; LinkedIn: 160 followers/ 100 updates; Promote the project profile on already active forums for European projects.	Twitter: 300 followers/ 600 tweets; LinkedIn: 240 followers/ 150 updates; YouTube: 3 videos/ 1500 views; Make more appealing posts
Networking events and workshops	Attend up to 3 relevant networking events/workshops addressing target & end users	Attend/host up to 5 relevant networking events/workshops	Attend/host up to 5 relevant networking events/workshops
Create positive coverage from the media and release publications	2 newsletters; 2-5 publications; 2-5 external articles	2 newsletters; 4-8 publications; 5-10 external articles	2 newsletters; 5-10 publications; 10-15 external articles
Cluster with relevant projects & initiatives	Group with one relevant project or global initiative, including other security projects	Group with two relevant project, cluster or organisations	Group with three relevant project, cluster or organisations

Annex II – SMILE Dissemination & communication summary chart

Communication & Dissemination tools & channels	KPI	Core target stakeholders		
		Border Control	End-users	Facilitators
Project documentation / material				
Brochure	1 initial version + update	X	X	X
Poster	1 initial version + update	O	X	O
Banner	1 initial version + update	X	O	X
Video	1 initial version + update	X	X	X
Project publications				
Newsletter	2 per year	X	X	O
Articles & proceedings	3 per year on average	O	X	O
Project deliverables	Check the deliverable list	X	X	X
Press releases	1 per year	X	X	X
Online presence				
Project website	Monthly updated	X	X	X
Related websites	10+	Depending on the website		
Twitter	At least 1 tweet / 3 days	X	X	X
LinkedIn	At least 1 tweet / week	X	X	X
Events				
Presentations & feedback sessions	1 per year	X	O	O
Training sessions	Three throughout project's lifetime	O	X	O
External events	30 +	Depending on specific event		

(Caption: X → main target; O → secondary target)

Annex III – List of relevant conferences / events

Conference	Date	Link
12th International Event for Homeland Security & Civil Defence – The Global Security Ecosystem.	10/29/2018	https://www.milipolqatar.com/

13th IEEE International Conference on Automatic Face And Gesture Recognition (FG 2018)	5/15/2018	https://fg2018.cse.sc.edu/
13th Security Document Summit (SDS)	10/17/2018	http://en.sds-china.com.cn/
14th International Conference on Wireless and Mobile Computing, Networking and Communications.	10/15/2018	http://www.wimob.org/wimob2018/
1st International Workshop on Research & Innovation for Secure Societies - RISS 2018	6/14/2018	http://www.comms.ro/workshops.html
9th IEEE International Conference on Biometrics: Theory, Applications, and Systems (BTAS 2018)	4/25/2018	https://www.isi.edu/events/btas2018/home
9th international Conference on Intelligent Systems 2018	10/22/2018	https://waset.org/conference/2018/02/kuala-lumpur/ICSST
BIOSIG 2018: 17th International Conference of the Biometrics Special Interest Group	9/26/2018	http://fg-biosig.gi.de/biosig-2018.html
Border Management & Technologies Summit 2018	5/16/2018	http://www.ibmata.org/events/border-management-technologies-summit-16-17-may-2018/
Border Security	2/12/2019	https://www.smi-online.co.uk/defence/europe/border-security
Border Security Expo	2/6/2019	http://www.bordersecurityexpo.com/
Connect ID: An exploration of physical & digital identity in the 21st century	4/30/2018	http://www.connectidexpo.com/
CSST 2018: 20th International Conference on Security Science and Technology	8/6/2018	https://waset.org/conference/2018/08/amsterdam/ICSST
Defence & Security International Exhibition	6/11/2018	http://www.eurosatory.com/?lang=en
EAB Research Projects Conference (EAB-RPC) 2018	9/24/2018	https://www.eab.org/events/program/151?ts=1524738453886
FRONTEX - Industry day - Biometrics on the move 2018	4/25/2018	http://btn.frontex.europa.eu/events/industry-day-biometrics-move-2018

ICBEA 2018 – 2nd International Conference on Biometric Engineering and Applications	5/15/2018	http://www.icbea.org/
ICBS 2018: 20th International Conference on Border Security	11/8/2018	https://waset.org/conference/2018/11/paris/ICBS
IFSEC International	6/19/2018	https://www.ifsec.events/international/
International Conference on Information Technology and Communications Security	11/8/2018	http://www.secitc.eu/
International trade fair for secure communications	11/27/2018	https://www.pmrexpo.de/en/pmrexpo/
Public and Corporate Security International Exhibition	4/10/2018	http://www.laadsecurity.com.br/en/home
SCTX – Security & Counter Terror Expo	3/5/2019	https://www.counterterrorexpo.com/
SDW Government and citizen identity solutions	6/25/2018	http://www.sdwexpo.com/
Sicherheits Expo Munchen	6/27/2018	https://www.sicherheitsexpo.de/
Smarter Border management	n/a	https://smarterborders.iqpc.co.uk/ts=1524662413509
The 14th IEEE International Conference on Automatic Face and Gesture Recognition (FG 2019)	5/14/2019	http://fg2019.org/
The National Security & Resilience Conference	n/a	http://www.nsr-conference.co.uk/
World Border Security Congress	3/19/2019	http://world-border-congress.com/

Annex IV – List of relevant journals

Journal	Impact factor	Link
IEEE Transactions on Information Forensics and Security	4.332	https://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=10206
IEEE Security & Privacy	1.382	https://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=8013

IEEE Transactions on Mobile Computing	3.882	https://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=7755
Wireless Communications and Mobile Computing	1.899	https://onlinelibrary.wiley.com/journal/15308677
Computers & Security The International Source of Innovation for the Information Security and IT Audit Professional	2.849	https://www.journals.elsevier.com/computers-and-security
International Journal of Biometrics	1.82	http://www.inderscience.com/jhome.php?jcode=ijbm
IEEE Transactions on Communications	4.058	https://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=26
EURASIP Journal on Advances in Signal Processing	1.961	https://asp-eurasipjournals.springeropen.com/
Security Dialogue	2.690	https://uk.sagepub.com/en-gb/eur/journal/security-dialogue#aims-and-scope
IET Biometrics	1.382	https://ieeexplore.ieee.org/xpl/aboutJournal.jsp?punumber=6072579#AimsScope
Journal of Systems and Software	2.444	https://www.journals.elsevier.com/journal-of-systems-and-software
IEEE Access	3.244	https://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=6287639
IEEE Transactions on Circuits and Systems for Video Technology	3.559	https://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=76