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D6.3: FMI Ecosystem Engagement Strategy and Plan

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Monique Calisti, Adriano Galati, Alessandra Scicchitano, (Martel);
Dirk Trossen (IDE);
Michael Boniface (IT Innovation Centre)

FLAME will establish and grow a sustainable Future Media Internet (FMI) ecosystem to ensure broad socio-economic impact creation through a comprehensive and well-articulated engagement strategy and plan based on a rich set of dedicated activities.

This document describes the core strategy and plan, as defined in the first months of the project activity, which ensures a comprehensive and effective approach for the creation and growth of the FMI ecosystem by supporting FLAME partners in their promotional and outreach activities.

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EXECUTIVE SUMMARY

FLAME will establish and grow a sustainable Future Media Internet (FMI) ecosystem to ensure broad socio-economic impact creation through comprehensive and well-articulated set of dedicated tools and activities.

Within FLAME, work package 6, is dedicated to “Future Media Community Engagement and Impact” and aims to establish and sustain the growth of the FMI Ecosystem, through engagement of stakeholders for broad socio-economic impact creation of FLAME. The objectives are specifically to:

- ➔ Ensure broad visibility of FLAME by disseminating and communicating results to all target stakeholders.
- ➔ Reach, stimulate and engage relevant stakeholders for participation in FLAME’s ecosystem and adoption of FLAME’s approach via dedicated community building instruments and activities.
- ➔ Support the establishment of the FMI ecosystem around FLAME and ensure liaisons with related initiatives (e.g. 5G-PPP, NEM, Creative Hubs, NGI, etc.) to foster its sustainable growth.
- ➔ Support SMEs and start-ups through a set of dedicated activities aimed at accelerating business value creation.
- ➔ Align FLAME efforts to relevant standards and open source initiatives, fostering contribution to them as appropriate and relevant to planned exploitation or project’s outcomes.

This document describes the core strategy and plan, as defined in the first months of the project activity, which the FLAME partners are following to ensure a comprehensive and effective approach for the stimulation of the FMI ecosystem.

After a presentation of the FMI ecosystem core traits, including a characterization of the FLAME value proposition and target stakeholders, this document presents the set of means and actions that we have implemented and plan to implement ranging from stakeholder engagement to community building, including targeted communication, preparation of promotional material, participation to and organisation of events, and specifically engagement of third-party organisations, through open calls and unfunded experiments.

This document, which will evolve in line with the development of the overall project work and activities in close collaboration with all other FLAME work packages, is written primarily as a guide for the FLAME project partners and for key stakeholders in the Future Media Internet ecosystem to have a clearer understanding of the intended engagement and promotional activities.

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ABBREVIATIONS

| | |
|--------------|---|
| CDT | Centre for Doctoral Training |
| CTN | Comité Técnico de Normalización |
| DoA | Description of Action |
| DWG | Dissemination Working Group |
| EaaS | Experimentation-as-a-Service |
| EIB | Experimentation Impact Board |
| EPSRC | Engineering and Physical Sciences Research Council |
| ETSI | European Telecommunications Standards Institute |
| FLAME | Facility for Large-scale Adaptive Media Experimentation |
| FMI | Future Media Internet |
| ICN | Information-Centric Networks |
| ICNRG | Information-Centric Networking Research Group |
| ICT | Information and Communication Technology |
| IETF | Internet Engineering Task Force |
| IOS | International Organization for Standardization |
| IoT | Internet of Things |
| IRTF | Internet Research Task Force |
| ITU | International Telecommunication Union |
| MEC | Multi-access Edge Computing |
| NFV | Network Function Virtualization |
| NGI | Next Generation Internet |
| NIST | National Institute of Standards and Technology |
| OTT | Over-The-Top |
| PIML | Personalized, Interactive, Mobile and Localized |
| QoS | Quality of Service |
| RC | Release Candidate |

| | |
|---------------|---|
| RoR | Rate of Return |
| SDN | Software Defined Networks |
| SDO | Standards Developing Organization |
| SFC | Service Function Chaining |
| SFC WG | Service Function Chaining Working Group |

1 THE FUTURE MEDIA INTERNET ECOSYSTEM

1.1 INTRODUCTION

The demand for multimedia internet services continues to grow exponentially, driving the dominant role of the Future Media Internet (FMI) into the next generation of media and service delivery systems. Consumers are increasingly watching audio-visual content through on-demand online services (e.g. Netflix, BBC iPlayer) whilst new multimedia applications are driving production and consumption patterns towards greater personalisation, mobility, rich dynamic interactivity, (ultra) high definition and immersive media content. Content Providers, Service Providers and Network Operators face the challenge of delivering an enhanced Quality of Experience (QoE) for the users by fulfilling Quality of Service (QoS) requirements whilst maintaining profits and sustainable investments.

FLAME's goal is to establish *an FMI ecosystem based on the Experimentation-as-a-Service (EaaS) paradigm that supports urban-scale experimentation of novel FMI products and services* using real-life adaptive experimental infrastructures encompassing not only the compute and storage facilities but also the underlying software-enabled communication infrastructure. At the heart of the ecosystem will be a new adaptive content delivery platform which combines Network Function Virtualisation (NFV) and Software Defined Networking (SDN) technologies to efficiently deliver on-demand media whilst supporting the development and large-scale adoption of new forms of interactive media.

FLAME's offering aims to support a whole community of media and ICT stakeholders from industry, SMEs and research, whilst connecting to related initiatives and projects. This requires, from the beginning of the project, a clear understanding of how to effectively reach and engage the target stakeholders. They can contribute to validate, refine, enrich and transform the FLAME offering according to the needs and opportunities that can vary with respect to the different types of stakeholders and their technological or vertical focus.

Only through a clear and well-articulated strategy and action plan it will be possible to create an FMI ecosystem that is vibrant, growing and sustainable. The approach needs to harmonise and synchronise engagement of target stakeholders with FLAME activities and their outcomes. At the start of the project there are strategic and operational aspects which are evolving and will mature as technical activities progress. However, the FLAME work plan outlines clear starting points for the FMI ecosystem that can contribute defining an initial FMI engagement strategy and plan. In addition, all partners are aware of the importance of converging to a strong and well-orchestrated action plan, especially in view of pushing FLAME outcomes towards relevant stakeholders.

The FMI engagement and marketing strategy and plan will evolve and will integrate changes in order to minimize risks, maximise reach and impact, account for progress on the technical and exploitation activities, and account for the lessons learned via engagement activities including validation experiments and those conducted by 3rd parties as part of FLAME open calls.

In order to define an effective engagement and marketing strategy, a preliminary work is to answer some core questions that will help characterizing the fundamental traits of the FMI ecosystem, refine the FLAME offering and formulate its value proposition, identify and prioritise the target stakeholders, understand when and which specific engagement measure can/should be triggered and by whom.



1.2 TOWARDS A SUSTAINABLE FMI ECOSYSTEM

The Future Media Internet will be driven by evolving existing over-the-top (OTT) solutions towards a stronger integration with emerging programmable communication and computing infrastructures to address consumer demand for personalised, interactive, mobile and localised (PIML) media experiences. In this context, the creation of trusted platforms that bring together technology, creative sectors and consumers for the development of pioneering media applications and services is crucial to drive European innovation and competitiveness.

FLAME aims to establish an FMI ecosystem based on the Experimentation-as-a-Service (EaaS) paradigm that supports large-scale experimentation of novel FMI products and services using real-life adaptive experimental infrastructures encompassing not only the compute and storage facilities but also the underlying software-enabled communication infrastructure.

FLAME will offer a highly flexible platform for media service delivery, experimentation tools to observe and control what runs on the platform, an FMI knowledgebase to incrementally capture system behaviour, consultants providing know-how in FMI experiment design and city environments to engage users in urban scale trials.

The FMI ecosystem is expected to comprise the creative industries (broadcast, gaming, etc.) and ICT industries (telcos, services) responsible for online distribution, broadcast, communication, and distribution of digital content. Through acceleration methodologies and an advanced experimentation platform (surrogate service management, adaptive service routing, experimental media service chains and experimentation toolbox), FLAME will allow industry, SMEs and start-ups to conduct experiments in real-life experimental infrastructures and gain insight into the performance, acceptance and viability of solutions.

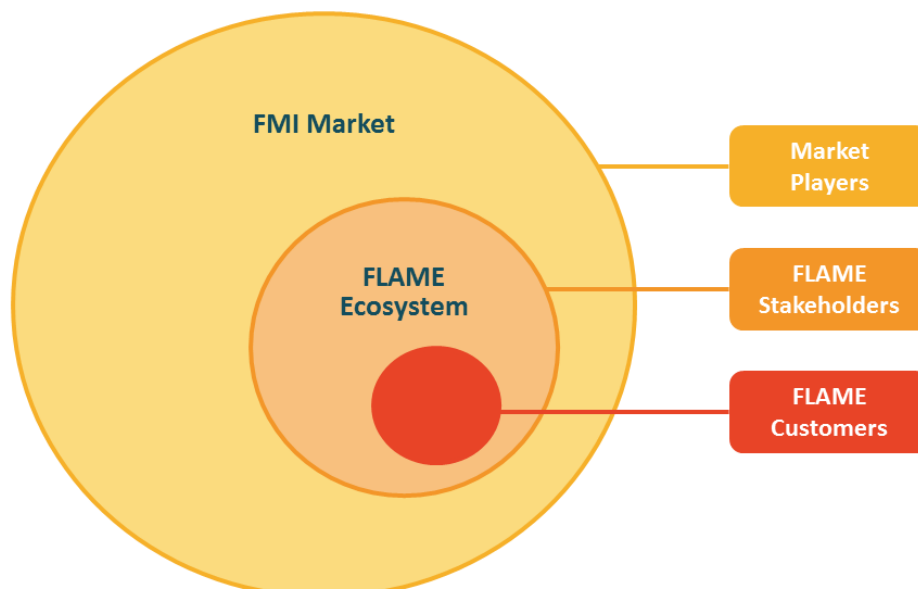


Figure 1. FLAME's positioning in the FMI market.

FLAME's innovation potential will be maximised by establishing FLAME Trailblazers (starting from Bristol and Barcelona that are directly involved as partners into the FLAME project) to show the way

for FLAME Replicators across Europe using a replication process based on best practice sustainability, governance, and engagement models, and infrastructure standards and specifications.

Moreover, as discussed in Section 4, through a comprehensive 3rd party investment strategy FLAME will create a vibrant FMI ecosystem that adds significant value to the Next Generation Internet experimentation efforts and puts in place measures for long term sustainability.

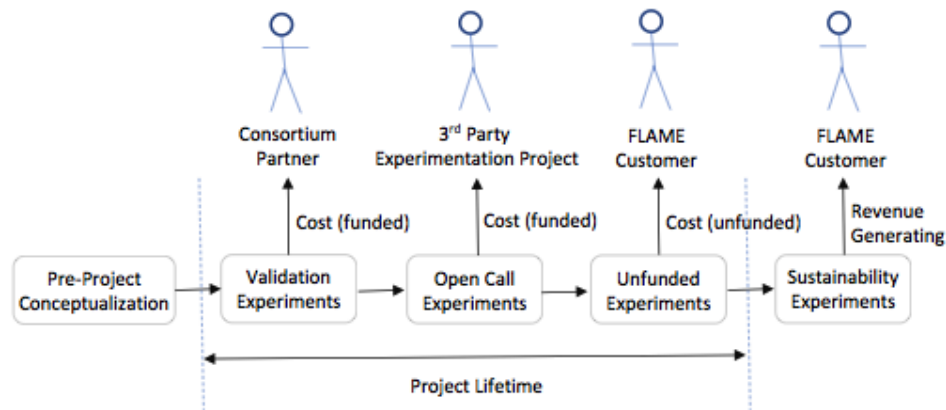


Figure 2: FLAME operational phase

1.2.1 Supporting a sustainable ecosystem

FLAME considers the over-arching experimentation customer relationship strategy as FLAME transitions through distinct operational phases on its route to sustainability (see diagram in Figure 2). Each phase has a distinct financial model that influences the governance and decision making of the experimentation infrastructure, and importantly the relationship with customers as shown below.

FLAME will manage the transition between the different phases as a key factor in the success of the project. The **pre-project conceptualisation** defined concepts and the approach and got buy in from stakeholders: infrastructure and other asset providers and initial investors. The **validation experiments** phase validates the concept and approach resulting in an operational facility for 3rd party experimentation projects. The **open call experiments** phase, through 3rd party experimentation projects, executes experiments funded by the project which receives in return insights into how to improve the FLAME offering.

The **unfunded experiments** phase allows FLAME customers to execute experiments which are not funded by the project. Therefore, they must pay their own costs to access services according to an agreement beyond the scope of the project. In this case, experiments are governed by EaaS terms and conditions, and IPR must be governed by an appropriate license. Further legal agreements may be necessary to attribute rights, responsibilities and legal liability. It allows the project to understand the legal and operational requirements needed for post project sustainability. Moreover, unfunded experiments provide test cases for simulating future business models including costs and revenues. Examples of strategies include open access, unfunded open calls, and invitations to strategic industrial sponsors.

Finally, **Sustainability Experiments** phase is concerned with the post-project viability and continuous operation after initial public funding. At this stage, we expect a sustainability model being in place which outlines the operation of experiments without dedicated FLAME public funding supporting

those. Nonetheless, continued public funding is likely to play a role in these post-project experiments, such as through extended 5G efforts (such as through 5GPPP call 3 funding or through national funding in large countries such as the UK or Germany). Also, FLAME will explore the role of SDOs in the utilization of facilities provided by the FLAME platform. For instance, sustainability models could include the conduct of ETSI proof-of-concepts at scale or IETF plug-fests.



FLAME exploitation and sustainability aspects will be addressed by a dedicated work package, namely work package 2. There are dedicated tasks and planned deliverables in the pipeline. In this document, at this stage of the project, we anticipate some high-level and preliminary aspects that relate to the foundation of the FMI ecosystem in a durable and solid manner as described in this section.

1.2.2 Experimentation and cascade funding as essential to sustainability of the FMI ecosystem

In order to meet this ambitious vision, to attract newcomers to FLAME and engage them in the adoption of the project concepts, outcomes, tools and technologies, a comprehensive and well-articulated set of communication and marketing activities have been planned (as presented in more details in Section 3), relying on a step-based approach, see Figure 3.

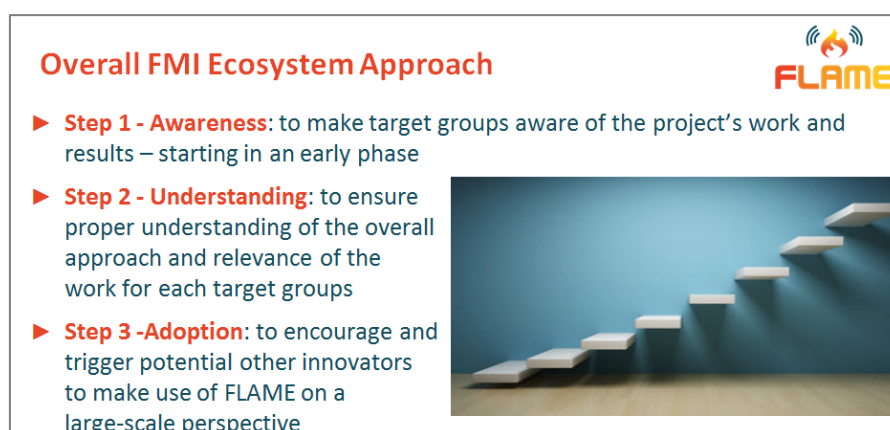


Figure 3: A step-based approach to build the FMI ecosystem

An essential part of the engagement strategy is the **experimentation investments through 3rd party projects** both the ones involving Open Calls (cascade funding) and the unfunded experiments (as detailed in Section 4.4). FLAME will invest more than two million Euro in experimentation-related financial support to third parties contributing to the creation and growth of a European FMI ecosystem embracing all relevant stakeholders and players in various creative industry sectors (TV, radio, gaming, publishing, advertising) and related sectors (smart city, education, healthcare, etc.).

The investment strategy will be targeted to ensure funding is distributed between different ecosystem stakeholders at key periods in the project lifecycle in ways to increase the socio-economic impact of the project. The investment strategy will be driven by priorities defined by the **FLAME Experimentation Impact Board (EIB)**.

The **EIB** is responsible for identifying FMI vision, strategy and reviewing experimentation progress, ensuring FLAME's priorities reflect areas with potential for significant socio-economic impact. The EIB

will be formally activated at project month 7 (July 2017) and will play a key role for the overall FMI ecosystem set up, growth and sustainability. The EIB includes the Project Coordinator, the Technical Manager, the Project Manager, the 3rd Party Project Manager, **Consortium Partners from Industry** and **External Advisors** (see Table 1). The EIB will meet bi-annually through virtual board meetings. The **External Advisors** are representatives from key stakeholders from the FMI ecosystem responsible for steering FLAME's vision, strategy and priorities.

Table 1: Consortium Partners from Industry and External Advisors in the EIB.

| Member | Affiliation | Role | FMI Priorities |
|-------------------------------|--|---|--|
| Mike Matton | VRT (consortium) | Senior researcher at leading European public broadcaster | Broadcast industry challenges and opportunities |
| Bob Sumner | DRZ (consortium) | Associate Director, Disney Research Zurich | Film and Gaming industry challenges |
| Josep Matrat | ATOS (consortium) | Market Manager of Telecom, Media and IT services | Media Services Industry challenges and opportunities, link to initiatives such as 5G PPP and NEM |
| Ingrid Willems | Creative Ring (external advisor) | Co-Founder of European non-for-profit organisation, building bridges between actors within creative hubs (in Eindhoven, Gent, Brussels, Aarhus, Barcelona, Tampere) (http://www.creativering.eu/) | Advise on FLAME Replication, sustainability, governance and engagement models |
| Pierre-Yves Danet | Orange (external advisor) | Head of European collaborative Research at Orange Labs and Chair of ETNO's Research and Innovation Working Group | Telecommunications industry operator challenges and opportunities |
| Jean-Dominique Meunier | Technicolor (external advisor) | NEM Chairman and Executive Director | European Networked Media and Creativity industry challenges and opportunities |
| Robert Sanders | European Business and Innovation Centre Network (external advisor) | Head of International Projects, www.europeanace.eu , www.acecreative.eu | Advise on FLAME Replication, sustainability, governance and engagement models; Strategies for engagement with SME networks |
| Michael De Wolf | DweSam (external advisor) | Chief Executive Officer | Broadcast industry challenges and opportunities |

1.3 THE FLAME OFFERING AND VALUE PROPOSITION

FLAME is implementing a set of impact creation activities that will contribute to the success of the project within the **telecommunications sector**, the **media sector**, and beyond. It will specifically facilitate **business value creation for an FMI ecosystem**, including **creative industries** exploiting advanced networking technologies and ICT players offering innovative applications. This has a huge potential for socio-economic impact when considering that with almost 1 million enterprises, the creative industry sector represents nearly 4.5% of the total European business economy and employs over 3.2 million people [1]. In this perspective, the FLAME facilities offer new possibilities to stimulate

the growth of European creative industries as a driver for productivity and a source of innovation in products and services development.

As outlined in the project's Description of Action (DoA) FLAME aims to develop a flexible service delivery platform supporting personalised, interactive, mobile and localised media services. In order to drive the adoption of the FLAME platform, the project will establish a new transformative ecosystem that benefits consumers, media service providers, content providers, vendors and network operators for a range of traditional and novel media scenarios. FLAME will utilize open call funding to attract innovators as well as drive replication of the FLAME platform beyond the initial deployment in Bristol and Barcelona.

As a starting point for our engagement strategy and plan, the initial work in WP2 has expanded on our vision in the DoA by identifying concrete key offerings provided by FLAME and its partners.

- ➔ **Technologies:** the specific innovative capabilities of the FLAME platform have been initially described in deliverable D3.1 entitled "FMI Vision, Use Cases and Scenarios", realized by a set of underlying technologies that is at the heart of the FLAME offering in this space. Given the experimental capabilities that the FLAME platform will expose, *we see a strong value proposition for technology evaluation at scale, enabling testing for interoperability and scalability of these technologies and those built specifically on top.*
- ➔ **Experimentation environment:** the experimental capabilities of the platform, aiming for repeatable experiments of a system-under-test, strengthens not only the specific offering at the technology level (see above) but also provides strong system-level testing capabilities for any experimenter in need for such system view. The target range of experimenters for this offering ranges from individual technology providers to media service providers and operators of such FLAME-enabled facilities. This strengthens the value of technology evaluation through a system-level capability as well as provides system experimentation capabilities for showcasing, user acceptance testing and others.
- ➔ **Knowledgebase and analytics:** the real-life data obtained from system level experiments and the capability of the FLAME platform to extract data from many levels of the platform drives the creation of a rich knowledge base over which to execute a rich set of analytics. This in itself constitutes a strong offering that FLAME can provide over the lifetime of the operations. *The value here is derived through real-life insights into operational as well as user-level data with such value being delivered to a wide range of experimenters that include technology and media service providers, venue as well as platform operators but possibly also regulators.*
- ➔ **Consulting services and training:** developing and operating a platform such as FLAME provides deep operational insights that are value in themselves. Particularly in conjunction with the replication aim of the FLAME project, i.e., the establishment of other FLAME sites beyond the initial ones in Bristol and Barcelona, consulting and training services become a possibly strong offering of FLAME. *Value here lies in training material as well as specialist consulting services that are provided to replicators as well as experimenters alike for the utilization of the offerings outlined above.*
- ➔ **Funding:** FLAME provides initial funding in its DoA for the seeding of experiments that not only highlight the capabilities of the FLAME platform but also seed the FMI ecosystem in which FLAME is embedded. According to the DoA, our initial customers are those innovative SMEs, both established as well as early phase, that see benefit in the capabilities of the FLAME platform. Other customers include operators and venue providers for possible replicators, which FLAME plans to initially fund. *Apart from the value through this project-provided funding, we*

however also see the possibility to attract 3rd party funding, both public as well as private, as a crucial offering that FLAME provides through its key partners at the academic and entrepreneurial level.

For each of these offerings that we have identified so far, the activities in WP6 will develop concrete engagement tools that will maximize the value created and allow to engage with the identified target customers as well as those stakeholders that are needed to drive our offerings into these target customers. For this, WP6 will continue to collaborate with the activities in WP2, specifically those in T2.1 (market analysis) and T2.3 (business plan development) in order to adjust any engagement activities accordingly. The tools presented in Section 2 of this deliverable provide an overview of those currently aligned with our preliminary findings in WP2.



In summary, the benefits of experimentally-driven development of FMI solutions using advanced virtualised and reconfigurable infrastructures are **the core value proposition** around which the FLAME marketing and promotional efforts are being organised. This shall serve **to attract newcomers to FLAME and to the FMI ecosystem** who perceive value in joining the FMI ecosystem by:

- ➔ Adopting FLAME concepts and technologies for improved media content delivery and increase audience experience and engagement.
- ➔ Deploying the FLAME platform to run experiments.
- ➔ Getting funding through the Open Calls.
- ➔ Establishing contact with other players in the FMI ecosystem.

1.4 TARGET STAKEHOLDERS FOR ENGAGEMENT

The identification of the FLAME offering and value in Section 1.3 is the crucial first step to identify the target stakeholders to engage with, as presented in this section. WP2 is currently undergoing a market analysis that, among other things, includes the identification of these key stakeholders. We here present a brief overview of our current findings as they shape the engagement strategy at this point. A more detailed description can be found in the upcoming deliverable D2.1 at M6, including a wider overview of the FMI market and the FMI ecosystem; we refer the reader to this upcoming deliverable for gaining more understanding on where we see FLAME fits in terms of ecosystem as well as positioning our offering in the overall FMI market.

As a first step to shape our engagement strategy, we define two cross-cutting stakeholder groups of relevance to engagement within the context of the FLAME offering, as presented in Section 1.3, namely target customers and facilitators. The former group consists of those stakeholders of the FMI ecosystem that would directly benefit from the value provided by each of our offerings. This benefit can be in *economic* (e.g., better positioning in the overall market and therefore increased revenue) or *social* form (e.g., acceptance of new services for better living spaces).

Facilitators are stakeholders that foster, enable or in any way influence (positively or negatively) the value capturing through target customers. For instance, certain areas of technology can be influenced by policymakers, e.g. through radio spectrum policy, that could potentially have a strong impact on a particular FLAME offering and therefore on the value capturing process.





It is key to the FLAME engagement strategy that we aim at suitably engaging with target customers and facilitators to support our objective of creating a sustainable FLAME offering, particularly beyond public funding.

With this view on two key stakeholder groups in mind, Table 2 below presents mapping as currently identified in WP2.

Table 2: Mapping of FLAME Offerings onto Stakeholder Groups.

| FLAME Offering | Target Customers | Facilitators |
|---------------------------------------|---|--|
| Technologies | Media service providers, Operators, Technology providers | SDOs (ETSI MEC, IETF, ETSI NFV, DASHIF, 3GPP SA4 & SA2) Regulators (national & European) Industry initiatives (5GPPP, 5G Americas) |
| Experiment Environment | Media service providers, Platform providers, Venue providers, Operators, Technology providers, Research innovators | SDOs Regulators (national & European) Industry initiatives (5GPPP, 5G Americas) |
| Knowledge base & Analytics | Media service providers, Operators, Technology providers, Regulators (policymakers), Research innovators | Regulators (national & European) Industry initiatives (5GPPP, 5G Americas) |
| Consultancy & Training | Media service providers, Operators, Municipalities, Venue providers | SDOs Regulators (national & European) |
| Funding | Media service providers, Technology providers, Municipalities, Venue providers, Research innovators | Funding agencies (national & European) |

Although we can recognize that various market players appear as target customers and/or facilitators in relation to several FLAME offerings, their role as stakeholder relevant to the FLAME offering in which they were identified is specific and needs therefore a tailored approach to engagement. For instance, engaging with a technology provider in the context of the experiment environment is likely going to differ from engaging in the context of consulting services.

The work in WP6 will continue to develop such specific engagement actions based on these groupings as their future work. In the meantime, we provide a coarse clustering of stakeholders along various characteristics that we have already identified as likely being important for the overall impact creation as well as for the formulation for specific engagement strategies for those groups. The first cluster represents the various innovation actors in Table 2 (such as media service providers, technology providers, etc.), while the second cluster focusses on key facilitators that we have identified. Table 3

shows these clusters in different shading and the primary engagement that we have identified thus far for these groups.

In Section 2, we elaborate on the specific engagement strategy and the identified methods for engaging with the communities and stakeholders identified so far.

Table 3: Stakeholder groups identified for engagement.

| Target Group | Benefits to FLAME | Primary engagement |
|--|--|--|
| European SMEs and Hubs | Demand for the platform; validation of concept and approach; new products and services; socio-economic impact of results | 3rd party projects; VRT Sand-box incubation programme; Affiliations with Creative Ring, Ace Creative/EBN, EIT Digital community; Connection to Set Squared, and Pervasive Media Studios |
| Industry Players | In addition to those for SMEs and hubs, additionally align FLAME experimentation strategy with industries priorities; Platform seeding strategy based on marquee players; High impact pilots and success stories | Core consortium vertical experiments (VRT, DRZ); 3rd party funding for experimentation; Participation in the Experimentation Impact Board. Bristol Leads to BBC and Opposable Games via BIO stakeholders |
| Research and innovator Actors | Elaboration of FLAME Replication processes; Long term sustainability of FLAME experimentation | Core consortium FLAME Trailblazing infrastructures; 3rd part funding for FLAME Replicators. Connection to the University of Bristol, SetSquared tech incubator, Pervasive Media studios |
| Industry Initiatives, e.g., 5GPPP | Contribute to the common purpose of FMI ecosystem; Reuse of methodologies, tools and technologies; Promotion of results | Future Internet Researchers and Innovators, FLAME partners' 5GPPP projects, 5G(PPP) events. |
| SDOs | De-risk technology investments for all stakeholders; Increase sustainability of solutions; Increase acceptance of FLAME Replication process | Core consortium partner contributions to relevant bodies |
| Society, Local Authorities and Citizens | Public/private investment in FLAME Replicator locations; Increased social impact; Citizen participation in experiments | FLAME Replication process; Connection to Bcnlab, IMI Smart Lab, EuroCities, Bristol Tech District, Knowledge West Media Centre, Bristol City Council |
| Regulators | De-risk technology investments for all stakeholders; Increase sustainability of solutions; Increase acceptance of FLAME Replication process | Engagement workshops, national initiatives engagements, such as through UK National Infrastructure Committee |
| General Press and Media | Broad coverage and promotion of results | FLAME as well as partner press releases; Media content (videos, etc.), proposed routes via BIO leads (Bristol Media), technical press articles |

2 THE FLAME ENGAGEMENT STRATEGY

The overall FLAME engagement strategy aims to:

- ➔ Incrementally increase utilisation of the FLAME platform over the lifetime of the project.
- ➔ Progressively invest in utilisation of the platform by industry, SMEs and entrepreneurs in accordance with the expected value creation.
- ➔ Shift emphasis from large scale industry towards innovative SMEs and entrepreneurs throughout the lifetime of the project as the platform matures.
- ➔ Execute 23 experiments by target stakeholders (media service providers, ISPs, vendors etc.) covering a range of sectors, content types and FMI scenarios.
- ➔ Expand the platform deployment towards three further FLAME Replicators.
- ➔ Gather top-notch players via the 3rd party open call mechanisms.
- ➔ Create mechanisms that can help the FMI ecosystem to sustain beyond the FLAME lifetime.

2.1 A COMPREHENSIVE APPROACH

The engagement will be achieved through a comprehensive and well-articulated plan, which accounts for the overall project objectives, for the individual strategies and plans of the FLAME partners and which is empowered via a rich set of dissemination, communication and marketing tools and activities, in addition to the dedicated 3rd party engagement strategy and plan, see Figure 4.

In concrete terms, this relies upon efforts across all project activities that embrace:

- ➔ Coordinated marketing and communication efforts across the whole consortium and extended by individual partner efforts in line with their exploitation plans.
- ➔ Organisation of dedicated co-creative workshops to analyse user requirements in relation to the Platform Engineering for an FMI Experimentation Platform work package.
- ➔ 3rd Party engagement strategy and plan under the lead of the FMI Experimentation and Infrastructure Replication work package.

In our increasingly connected society, the role of marketing and communication at the service of innovation and more specifically innovation acceptance, adoption and impact is crucial. We have at our disposal a growing palette of digital communication and marketing means that build on top of more traditional ones. To be successful, the increased options offered by non-verbal and almost real-time channels and tools, must be properly combined and orchestrated through a qualified, competent and creative approach. The FLAME consortium believes in the power of experiences, because regardless of their form, great experiences can connect people and instil in them a truly unforgettable feeling that FLAME will strive to create and convey. Simply put, experiences build relationships and relationships build understanding, stimulate creativity and extend reach and impact.



Figure 4: A comprehensive approach of the FLAME engagement strategy.

Especially when it comes to promotion of innovative technologies among diverse target groups, it is necessary to elaborate on how marketing and communication can help in **creating awareness, facilitating understanding, stimulating acceptance** and **triggering engagement** by adapting not only the message, but also the deployed communication means to the specific audience.

With this in mind, FLAME's marketing and communication activities will:

- ➔ Ensure broad visibility of the project work and disseminate its results to the Future Internet community and beyond with a view to the uptake of FLAME's offering by innovative players in the Future Media landscape.
- ➔ Reach, stimulate and engage a critical mass of relevant stakeholders in the adoption and experimentation of the FLAME platform in accordance with the 3rd party investment strategy (such as the increasing engagement of innovative SMEs during the lifetime of the project).
- ➔ Support the establishment of a Future Media Community around FLAME and ensure liaisons with related initiatives and projects both within the Next Generation Internet context and beyond (for instance in the Creative Industries, Media and Content domains) that will contribute to growing and sustaining such a community.
- ➔ Facilitate exploitation of FLAME's outcomes and promote the development of innovative solutions based on FLAME by Future Media SMEs and start-ups through a set of dedicated activities aimed at accelerating business value creation through the FLAME platform.
- ➔ Align FLAME's efforts to relevant standards and open source initiatives, fostering contribution to them as appropriate and relevant to planned exploitation or project outcomes, especially in relation to establishing FLAME Replicators.

2.2 SELECTED COMMUNICATION AND MARKETING TOOLS

The set of envisaged community building and dissemination activities reflects the nature of the FLAME project itself by trying to diversify and differentiate communication means and messages so as to adapt to and meet the multi-faceted composition of the target communities, while stimulating impact creation in several ways.

- ➔ The FLAME identity toolkit which provides a distinctive brand identity and which has been created and delivered through a logo, guidelines, and templates for presentations and deliverables.
- ➔ FLAME web-site: a modern, fresh and fully functional web-site, which represents the entry door for all the interested stakeholders at www.ict-flame.eu.
- ➔ Social media presence: ensuring the FLAME presence in major related blogs and social communication channels such as Twitter, YouTube and LinkedIn to promote the project's activities and results (including the organisation of events and Open Calls) as a means to engage a high number of stakeholders to the FMI ecosystem.
- ➔ Electronic e-newsletters: a twice-yearly newsletter to be broadly distributed via all FLAME channels and FLAME partners' networks.
- ➔ Technical blog corner: a blog has been created to publish news regarding FLAME project activities and results, as well as related topics. The page will show our regular expert blogs on FMI relevant aspects, technologies, trends and more in order to actively engage with the FMI stakeholders beyond our own project results. Contributions from all of the partners will be provided as the project progresses.
- ➔ Scientific publications: to raise awareness and build credibility about R&D outcomes through publications in conferences and journals targeting the ICT (Future Internet) and FMI research communities.
- ➔ Miscellaneous dissemination material including press releases, flyers, presentations, posters and videos to be broadly disseminated and promoted especially in coordination with specific events and Open Calls advertisement.
- ➔ Participation in relevant events both scientific and business-oriented, with demos, flyers, publications and/or presentations. A shared events calendar is helping partners to coordinate on this front so as to optimize resources and maximise the impact. Plans include:
 - FLAME at selected future Startup Weekend¹
 - FLAME at Startup Bootcamp²
- ➔ Organisation of events to promote FLAME's offering and outcomes and engaging into the FMI ecosystem the various target stakeholders. Different types of events are planned:
 - FLAME Media Hackathons coupled with FLAME training (2 events led by WP6)
 - FLAME co-creative / user requirements workshops (2 events led by WP3)
 - FLAME outreach / community building workshops (1 per year led by WP6)

¹ <https://startupweekend.org>

² www.startupbootcamp.org

- ➔ Media and press presence: pursue appearances in local, national and international press and TV. In doing so, the aim is to ensure promotion through existing EC media services, channels and tools, such as the Digital Agenda/Digital Single Market mailing lists, web pages, Twitter and Facebook profiles
- ➔ Liaisons with related projects are planned to be exploited in a twofold way. First as a way to echo and amplify our communication efforts, second as a way to more effectively reach target stakeholders.
- ➔ Specific engagement measures for the various identified initiatives and projects FLAME is connected to are described in the following section.



This set of artefacts will be refined and enriched according to the projects' progress. As of today, as detailed in Section 3, WP6 has already delivered the **FLAME Identity Toolkit**, the **FLAME web site**, which is regularly maintained with relevant news and information, the **FLAME Twitter channel**, which is regularly animated, a first **FLAME flyer**, and a **short paper that has been accepted for the EuCNC 2017 posters session**.

2.3 TARGETED LIAISONS AND OUTREACH MEASURES

To build the Future Media Internet ecosystem, FLAME is starting from a solid and vast network of contacts the partners have within several related initiatives that can facilitate reaching the target groups of stakeholders. These target groups and the primary engagement that has been identified were already presented in Table 3.

At this stage, some of the liaisons (as listed below) are more mature than others. However, the overall aim is to explore all connections listed below in order to assess their concrete relevance and prioritize which of them will be core to our FMI engagement plans.

Related EC initiatives / EC projects

- ➔ **The 5G PPP initiative** aims at creating the next generation of communication networks and services, rethinking the seamless integration of mobile and fixed network infrastructures. The 5G PPP is planned in three phases. The first wave of nineteen research and innovation projects was launched working on fundamental research of future networks. One of the innovation working strands addresses the software networks evolution (SDN/NFV). The second phase, which will start in summer 2017, will continue with the network research by putting the emphasis on two dimensions; i) the inclusion of vertical industries requirements in the research (Media and Entertainment, Automotive, eHealth and Manufacturing) and ii) the establishment of experimentation strategy to settle large scale trials with the vertical sector in a pre-competitive scenario. FLAME is the timely and essential piece to inject into the 5G experimentation on advance media services over virtualised networks, providing a 5G-ready experimentation ground for activities surrounding the 5G PPP phase 2 and upcoming phase 3 efforts in large-scale experimentation by 2018, ready for the open call experimentation within FLAME but also ready for attracting 5G-focussed experiments in the media and smart infrastructure space. We will aim to explore how the fixed infrastructure can be optimised to support high mobility scenarios by ensuring that content and services are optimally positioned in the network to deliver the required QoE. The FLAME platform and testbeds will become the entry point for experimenters to test advanced media services over software-defined networks

and will become the home for media research as a crucial economic sector to support the evolution of networks.

Primary stakeholders: network operators.

Primary target groups: industry.

Measures to engage the 5G PPP community

- **Participate in 5G / 5G PPP-driven events to promote and demo our work** either via dedicated sessions, workshops, presentations and publications. Events on the radar include: **EuCNC**³, the **5G Global**⁴ events, and the **Wireless Broadband Congress**⁵.
 - **Follow the 5G PPP social media presence and channels** to echo and amplify our news. Martel is managing the 5G PPP media channels via the ongoing EURO-5G CSA.
 - **Plan for common workshops / events with related projects and invite 5G PPP representatives to our planned events.**
 - **Foster liaisons with the Networld2020 SME Working Group** (Martel is member) as a specific channel and context to promote FLAME and specifically Open Calls dedicated to SMEs.
 - **Participate in the monthly 5G PPP COMMS conference calls.** The 5G PPP COMMS group gathers dissemination and communication representatives from all ongoing 5G PPP projects. Regular conference calls take place as a way to coordinate on efforts across the whole community.
 - **Capitalize on FLAME partners' participation in related 5G PPP projects.**
- ➔ **FIRE:** The Future Internet Research and Experimentation (<https://www.ict-fire.eu/>) is an initiative launched with the goal of offering cutting edge test facilities that could not be accessible otherwise by many European researchers and innovators. At the heart of the overall initiative there are projects establishing hubs for technology innovation in key areas, e.g. advanced networking, 5G / SDN, IoT, data, cloud infrastructures, and their use within a wide range of diverse business and application domains, e.g. smart city, healthcare, marine, land and air applications. FLAME is indeed a project that was conceived within the context of FIRE to specifically provide large-scale experimentation of personalised, interactive, mobile and localised media experiments. Even though in the meantime the FIRE initiative has ended, the community of players investigating and experimentally validating highly innovative and disruptive approaches and ideas for next generation networking and service paradigms at a lower cost, in a more rapid way, still exist and operates now across three different units within DG Connect. Most of the former FIRE projects have moved to Unit E1, like FLAME, some other moved to the IoT E4 Unit and some are with the Next Generation Internet, NGI, E3 Unit. Despite this diaspora, the value of large-scale experimentation efforts remains central to enable

³ www.eucnc.eu

⁴ www.5g-ppp.eu

⁵ www.wirelessglobalcongress.com

innovation in several ICT domains, if not all, and the good news is that the FIRE community continues to actively coordinate on marketing and communication efforts via the monthly conference call meetings run by the FIRE Dissemination Working Group (DWG).

Primary stakeholders: (experimentation) platform and infrastructure providers.

Primary target groups: research.

Measures to engage the large-scale experimentation community

- **Participate to monthly FIRE DWG conference call** as a channel to communicate and advertise FLAME outcomes, events, open calls, etc. and identify possible synergies.
 - **Follow the FIRE social media presence and channels** to echo and amplify our news. Martel is managing the FIRE media channels via the ongoing FIRE STUDY project.
 - **Coordinate with the Fed4FIRE+ project on common activities** that might be of relevance to promote and stimulate FLAME experimental facilities deployment. Several FLAME partners are also involved in Fed4FIRE+.
 - **Plan for contributions and participation in upcoming Fed4FIRE+ Engineering Conferences** (FEC - <https://www.fec1.fed4fire.eu/about>). The next edition is planned early October 2017 in Volos, Greece.
- ➔ **NGI: The Next Generation Internet** initiative was launched last September with the ambition to shape the Internet of the future as a powerful, open, data-driven, user-centric, interoperable platform ecosystem. The Internet as we know it today is a critical infrastructure composed of communication services and end-user applications transforming all aspects of our lives. Recent advances in technology and the inexorable shift towards everything connected are creating a data-driven society where productivity, knowledge, and experience are dependent on increasingly open, dynamic, interdependent and complex networked systems. The challenge for the NGI is to design and build enabling technologies, implement and deploy systems, to create opportunities considering increasing uncertainties and emergent systemic behaviours where humans and machines seamlessly cooperate. While born recently, the NGI community is growing around a number of activities (consultations, workshops, funding) that several FLAME partners are directly involved in and that will be exploited to promote FLAME and grow the FMI ecosystem.

Primary stakeholders: service providers.

Primary target groups: SMEs, Entrepreneurs, Hubs.

Measures to engage the Next Generation Internet community

- **Publish via NGI Futurium web site relevant news and follow the NGI social media presence and channels** to echo and amplify our news. Martel is managing the NGI Futurium web area and NGI media channels via the ongoing HUB4NGI CSA and IT Innovation is also a key player in guiding strategic road mapping for NGI.
- **Plan for common workshops / events with related projects / initiatives and invite NGI experts to our planned events** as relevant to promote FLAME and grow the FMI ecosystem.

- **Capitalize on FLAME partner participation in related NGI projects**, such as HUB4NGI and Fed4FIRE+ in view of Open Calls promotion.
- ➔ **NEM:** The New European Media Initiative⁶ (New European Media Initiative) was established as one of the European Technology Platform under the Seventh Framework Programme, aiming at fostering the convergence between consumer electronics, broadcasting and telecoms in order to develop the emerging business sector of networked and electronic media. In order to respond to new needs and requirements of the Horizon 2020 programme, the NEM initiative enlarged its focus towards creative industries and changed its name from Networked an Electronic Media Initiative to New European Media, dealing with Connected, Converging and Interactive Media & Creative Industries, driving the future of digital experience, which is of direct relevant to the overall FLAME vision and planned work. The capability to effectively liaise via NEM with European innovators and researchers within the Media and Content Industries domains will be key to grow and sustain the overall FMI ecosystem. Several FLAME players are actively involved in the NEM with IT Innovation being a steering committee member and this will facilitate effective synergies.

Primary stakeholders: media service providers.

Primary target groups: industry.

Measures to engage the NEM community

- **Follow the NEM social media presence and channels** to echo and amplify our news, especially in view of gathering participants to our events and Open Calls.
 - **Plan for common workshops / events with related projects / initiatives and invite NEM experts to our planned events** as relevant to promote FLAME and grow the FMI ecosystem.
 - **Target the 2017 NEM Summit edition** (details not yet available, but most likely to be held in November) as major opportunity to advertise the first FLAME Open Call.
- ➔ **FIWARE.** In the past years, the EC and major Industry players established a public private partnership to steer the development of Internet-based services in Europe: the Future Internet Public Private Partnership (FI-PPP). The result of the FI-PPP initiative was FIWARE, www.fiware.org, an innovative Internet-based platform that recently was embraced by the FIWARE Foundation to ensure its business growth and future sustainability as Open Source community. The FIWARE initiative gathers engaged entrepreneurs, Start-ups / SMEs and students as primary actors to validate and steer the technology. As such it has been one of the most innovative programmes ever endorsed by the EC. FIWARE, besides providing potentially interesting technological grounds relevant to FLAME, showed the importance of Open and Community approaches (still with the needed industrial commitments) in the development of future technologies that can shape the future of Europe. It also showed how such technology, if early adopted into Start-ups and SMEs, can act as accelerators of their businesses.

Primary stakeholders: service providers.

⁶ www.nem-initiative.org

Primary target groups: industry and SMEs.

Measures to engage the FIWARE community

- **Follow the FIWARE social media presence and channels** to echo and amplify our news. Notice several FLAME partners are key players within the overall FIWARE community and FIWARE Foundation.
- **Foster for participation to FIWARE-driven events**, such as the FIWARE Summit, the FIWARE Open Day, the Open FIWARE Camps, as opportunities to advertise our work and specifically reach innovative SMEs and Start-ups.
- **Advertise FLAME and reach a high number of innovative SMEs and Start-ups** via the dedicated FIWARE Communication platform (<https://fiwarecommunity.mobilize.io/>).

National and international R&D / business initiatives / Standardisation bodies

- ➔ Outreach and liaisons to relevant national and international R&D initiatives will also be pursued via collaboration with External Advisors members of the FLAME EIB (see Section 1.2).
- ➔ Both Disney Research Zurich and the ETH Game Technology Center are members of Virtual Switzerland (<http://virtualswitzerland.org>), a Swiss National Thematic Network for Virtual Environments Interaction and Simulation, funded by the Swiss Federal Council's Commission for Technology and Innovation. Virtual Switzerland aims to spark ideas and foster synergies to grasp the full extent of virtual, augmented, and mixed realities. It means bringing together the academic and economic spheres around immersive technologies and linking R&D experts in Swiss universities with those in thriving companies, thereby promoting private as well as academic research laboratories or incubators. Disney Research Zurich and ETH Zurich will connect to the Virtual Switzerland network as a means to explore the potential for FLAME developments at the Swiss national level, and use these connections as the foundation for international collaboration.
- ➔ A number of technologies in the FLAME platform utilize standard developments from relevant SDOs. A number of FLAME partners, such as IDE and ATOS, are highly active in a number of those SDOs. Generally, the adoption of key FLAME technologies and components is seen as being enabled through standardization in the appropriate SDO. As specific examples, we highlight:
 - IETF: FLAME is currently utilizing concepts on Service Function Chaining (SFC) and aims to provide FLAME use cases into the relevant SFC WG in the IETF. FLAME is also likely to extend orchestration solutions with direct impact on ongoing IETF work in the NFVRG. Furthermore, the routing solution utilized in FLAME is currently being positioned for injection into the IETF. Beyond these already identified efforts, FLAME will actively monitor activities in the IETF for possible contributions.
 - ETSI MEC [4]: A number of use cases in the recently finished ETSI MEC Phase 1 are of direct relevance to FLAME, while FLAME provides a number of solutions of possible relevance to ETSI MEC Phase (starting April 2017). FLAME will actively work with key partners to inject solutions into ETSI MEC for standardization as well as investigate key technology coming from ETSI MEC for possible relevance in FLAME.
 - ETSI NFV [3]: With orchestration being a key aspect in the FLAME platform, contributions are expected regarding the infrastructure provisioning that FLAME experimentation will

outline in its orchestration specifications. We expect to work with key partners to provide these specifications as extensions to solutions currently provided by ETSI MEC (such as TOSCA) as well as utilize emerging efforts from this forum.

- 3GPP: The service architecture group 2 (SA2) is currently finalizing its Phase 1 on control and data plane architecture for 5G. FLAME provides a number of technology components relevant to this environment due to the SDN basis of the FLAME platform. We expect to work with key partners to bring such components and solutions to the upcoming Phase 2 and 3 of 3GPP standardization to ensure adoption of these solutions.
 - Other SDOs, ETSI NGP Industry Steering Groups [5], IRTF NFV Research Group [6], IETF Service Function Chaining Working Group [7].
- ➔ As part of the engagement strategy of FLAME participating in international events where content creators, media distributors and even representatives of cities gather looking for new business opportunities provides a very valuable opportunity. The characteristic of these types of events is their focus on the market, which gives the chance for innovative solutions to show their commercial value. This could be leveraged by FLAME in two ways. On one hand, such events can be used to meet different communities related to the media environment and find possible adopters of FLAME, learning from them what their expectations and business perspectives are and extracting relevant requirements to cover them. On the other hand, thanks to these events bringing the attention of different potential stakeholders, FLAME can be exposed not only as a pure research project but as a potential product in the creative and media industry. A number of such events are the following:
- Online Marketing Expo (OMExpo): is the most important digital marketing trade show and congress in Spain, Portugal and Latin America. With 9 years of experience, it is where the Online Marketing companies gather with managers and highly qualified and professional attendees to set the latest trends and show the best and most interesting offers.
 - CeBIT: CeBIT is the world's largest and most international computer expo, usually considered a barometer of the state of the art in information technology. It is organized by Deutsche Messe AG. The past edition held more than seven million business talks.
 - PICNIC: PICNIC is a leading European platform for innovation and creativity. Its main functionality is to act as an incubator and accelerator for game changing ideas, concepts, products and services that will cover business, social and environmental challenges by applying technology in a creative way.
 - International Broadcasting Convention (IBC): considered the largest event for Broadcasters in Europe and the second most relevant in the world, IBC is the premier annual event for professionals engaged in the creation, management and delivery of entertainment and news content worldwide.
 - Product Design Innovation (PD+I): PD+I is seen as one of the world's top industrial design events bringing together well-known brands, design leaders from Europe, North America and Asia and luminaries from the worlds of advertising, management consulting and finance.
 - SmartCityExpo World Congress: is an international Smart City event where cities, companies, entrepreneurs, start-ups, research centres, initiatives and solutions participate

to showcase their latest developments, real solutions and products to increase the strength of cities, to identify business opportunities, to establish partnerships and contribute to enacting common policies.

2.4 EMBRACING PARTNER EFFORTS AND CONTRIBUTIONS

One of the challenges is that the platform by itself has little value for the initial users. Therefore, to overcome the “ghost town” problem, FLAME must mutually bait both platform producers and consumers together so that they attract each other.

Initially, **Media Service Providers** that produce value will bring along their customers. High quality marquee players such as VRT, DRZ, and NXW, whose “off-platform” reputation attracts consumers, will launch the FLAME platform. Due to the existing strong relationships between consumers and producers of content, such marquee players are especially suitable for the FLAME platform which needs adoption by producers to be successful. FLAME will only be successful if sufficient **Media Service Providers and Content Providers** are attracted to use the platform.

Consumer contributions will then follow. FLAME’s experimentation strategy considers the changing nature of participation on the Internet. **FLAME supports a range of scenarios that consider the changing nature of content production and consumption.** An initial set of vertical sectors have been selected to demonstrate and show platform innovations to ensure fast growth in platform users such as **participatory media in radio broadcast** (VRT), **gaming** (ETH), **transmedia storytelling** (DRZ) and **localised broadcast** (NXW).

These scenarios engage consumers in ways that allow them to play an active role in story creation and storytelling changing the way consumers’ access and interact with media, with brands, and with each other. This leads to potential new services for **ISPs** or **Telco Vendors** offering access to FLAME media services in a way similar to a high-performance iCloud service for people on the move.

Engagement and marketing strategies and plans used by our marquee players as well as other key partners are presented in the following sections.

2.4.1 VRT engagement and marketing strategy and plan

Strategy. The engagement and marketing strategy of VRT consists of different elements, all of which can be made to value for the development of the FLAME ecosystem. First of all, VRT, as the public broadcaster of Flanders, has many connections with different Flemish cities and organisations. VRT has five radio stations and four television stations, which are all connected to different segments of the Flemish society. Through its regional radio stations (located in the cities of Kortrijk, Ghent, Antwerp, Leuven and Hasselt), VRT is well connected and visible at this local level. It is our aim to connect with these cities, institutions and organisations to achieve our goals in FLAME.

Moreover, VRT is well connected to other European broadcasters via the EBU, from which it is a member. The Innovation department of VRT also participates in several European FP7/H2020 projects. Through these projects, links with Flemish research institutions (such as IMEC) are also present. Due to this, VRT is well connected to the research and innovation landscape across Europe.

Planned activities. The aim of VRT Innovation is well aligned with the FLAME objectives: to make media innovation (including smart cities) visible to a wide community in Flanders and beyond. VRT is also participating in quite a lot of events on the local level. The radio stations for example are present at many (music) festivals. The sports channel (Sporza) captures and broadcasts live sports events (such

as cycling) throughout the year. This creates very strong links between VRT and the different event organisers. Next to this, VRT also organises quite a few own events (e.g. the yearly charity event Music for Life), during which different stakeholders (including cities across Flanders) are involved. This accounts for a lot of in-house knowledge on how to organise large scale events, as well as contacts with event organisers.

Therefore, the overall aim for VRT is to create an ecosystem for smart cities, with the stakeholders listed above, where media has his purpose and use cases. VRT will incorporate wherever possible each of the above identified links within its engagement and marketing strategy.

2.4.2 DRZ engagement and marketing strategy and plan

Strategy. Through the FLAME partnership, DRZ will advance its overall mission to drive value for The Walt Disney Company by delivering scientific and technological innovation Company-wide. Our world-class research talent invents and transfers the most compelling technologies enabling the Company to differentiate its content, services, and products. Disney Research combines the best of academia and industry, by doing both basic and application-driven research. We utilize publication as a principal mechanism for quality control and encourage engagement with the global research community. Our research applications and technology are experienced by millions of people. We honour Walt Disney's legacy by deploying our innovations on a global scale.

The marketing strategy of DRZ is aligned with the needs of FLAME, which is to demonstrate the value of city-wide storytelling enabled by FLAME infrastructure. We aim to develop prototypes, which are evaluated through user tests to explore the potential value of our technology. Our results will be disseminated through publications and technology demonstrations, which will help to attract OTT media service providers and content providers to the FLAME platform.

Planned activities. The engagement plan of DRZ is guided by our mission as described above. Our activities include the development of technologies that leverage unique capabilities offered by FLAME to deliver a city-wide storytelling experience. We will conduct experiment trials to validate the technology as well as to validate the user experience in real, urban environments. The results not only guide further refinement of our technology, but will also be presented in scientific venues through publications and technology demonstrations. We leverage the review process of leading conferences to ensure that we produce high quality results of relevance to the greater community. The visibility of these results will demonstrate the value of FLAME methodologies and capabilities and generate success stories for global promotion.

2.4.3 NXW engagement and marketing strategy and plan

Strategy. Through participation in FLAME, NXW R&D team will give impulse to the company strategy and plans for evolving their core successful product lines in the residential market (Symphony) towards Smart Cities. FLAME experiments on Personal Media Mobility will unleash the concept of "My screen follows me" service to the city-wide areas, with a demonstrator planned in Barcelona, one of the more vibrant and innovative cities in Europe. The idea is to implement and extend to the personal media entertainment a concept somehow pioneered by Nintendo in 2016-Q4 with Nintendo Switch in the gaming area. With the work in FLAME NXW expects, at first, to be in the position to show their Symphony product to a real and large Smart City community, being also capable to expand the Symphony market from luxury villas and motor-yachts to Smart City platform operators and broadcasters. The expected market impact for the engineering of the FLAME use case is the next 2–3 years from the completion of project activities, once the proper market opportunities in large Smart Resorts and Smart Cities are expected to be consolidated at scale and an advanced product like the one envisaged well received.

Planned activities. The engagement plan of NXW mainly consist of leveraging FLAME-sponsored events to showcase the “My screen follows me” service (i.e. project workshops at international events and meetings with stakeholders involved in the use case demonstration, possibly sponsored by the Smart City municipalities). Also, with Barcelona being the main use case location, NXW plans to use the great attraction of a worldwide event in the city like the Mobile World Congress to run a use case demonstration and product exhibition. Outside the project-driven activities, NXW will also use results from the use case demonstration in FLAME to contact the current Symphony customers and propose them a service upgrade.

2.4.4 ETH engagement and marketing strategy and plan

Strategy. While participating in FLAME, ETH Zurich pursues its overall mission in education, research, and industry outreach. As one of the world’s top Universities, ETH Zurich measures itself against the highest recognised international standards and promotes science and scientific activity for their own sakes, as well as for their importance to the near and distant context: the city and canton of Zurich, Switzerland, Europe, the world. The ETH Zurich consciously directs its activities to the needs of human beings, nature, and society. It is aware that knowledge and skills must be grounded in a fundamentally open and dynamic attitude if they are to be truly useful in practical life and capable of growth.

Planned activities. While developing FLAME’s city-wide gaming technology, ETH Zurich will engage with users to playtest and evaluate components and game prototypes in an iterative fashion. Such playtesting sessions allow it to comprehensively understand the value of the technology. Scientific publications constitute the core of our research and connect it to the public domain. Moreover, ETH Zurich exhibits and demonstrates technology prototypes at international conferences, workshops, and public events.

ETH Zurich plans to engage with the public through scientific publications and demonstrating research technology prototypes to research and public communities. The thorough review processes of prominent conferences ensure that our results are of high quality with high relevance to the research community. ETH Zurich’s activities include the development of FLAME’s city-wide gaming technology, incorporating student projects, conducting user trials as playtesting sessions, as well as exhibiting prototypes at international conferences, workshops, and public events. Such demonstrations create visibility for FLAME methodologies and capabilities and generate success stories for global promotion.

2.4.5 IDE engagement and marketing strategy and plan

Strategy. Through the FLAME project, IDE will inject innovative routing and service-level solutions into the overall FLAME platform, providing a large-scale showcase for the capabilities that these solutions provide. With this, FLAME will provide the necessary reduction to practise that will drive the possible adoption of these technologies. Apart from the replication of FLAME in other sites, IDE sees the adoption in SDOs as crucial at the level of the platform they are operating. For this, IDE will utilize effective means of marketing and technical reduction to practise in working prototypes.

Planned activities. For the realization of our aforementioned strategy, IDE will utilize its presence in key SDOs such as IETF, ETSI and 3GPP to drive standardization efforts in the various areas. We will support these activities through active publication, both at research but also at technical marketing level. Specifically, IDE will likely release news as press releases. We will also utilize our usual presence at major trade shows, most notably the Mobile World Congress, to disseminate and engage with potential partners at a global level.

2.4.6 ITINNOV engagement and marketing strategy and plan

Strategy. As coordinator, ITINNOV is responsible for maintaining FLAME's overall vision and ensuring that the project delivers its expected impact. ITINNOV strategy therefore aims to engage all FMI ecosystem stakeholders in FLAME's concepts, activities and outcomes in ways that clearly community the benefits of engagement. To achieve this goal, ITINNOV engage stakeholders in relevant initiatives such as NEM, FIRE and DIN. ITINNOV's research and innovation activities in experimental methodologies, tools and services supporting exploration and analysis of QoS and QoE in multi-stakeholder systems will be used to engage research communities in advances in the state-of-the-art and innovative companies aiming to understand performance and socio-economic impact of technologies. Specifically, ITINNOV will target conferences such as International Conference on Testbeds and Research Infrastructures for the Development of Networks & Communities. The experience in QoS and QoE evaluation is documented in publications in leading journals in the Computer Science community such as Computer Networks, IEEE Software, and IEEE Transactions on Software Engineering, as well as relevant peer-reviewed conferences, such as IEEE ICSE and CSCW. Finally, when the story is big enough ITINNOV will promote outcomes through press-release and major TV such as BBC Click and BBC news (for example, <http://www.bbc.co.uk/news/technology-31145807>) reaching audiences of 100's millions globally.

Planned activities.

- ➔ **FIRE:** ITINNOV is at the heart of the FIRE initiative having participated significantly (including member of the FIRE Board) in the programme since 2010 with ongoing projects (e.g. FIESTA, FIREStudy, FED4FIRE+) in addition to FLAME. ITINNOV plans to maintain the relationship with the FIRE through participation in community events and workshops especially in relation to the EaaS approach.
- ➔ **NGI:** ITINNOV is a leading player driving the Next Generation Initiative through white paper publications, expert consultations and community workshops. FLAME's human-centric media approach, the advancement of software-defined infrastructures and the innovative ecosystem engagement activities with SMEs and Entrepreneurs is directly aligned with the NGI strategy. ITINNOV will use concepts and results to help steer future NGI work programmes and the uptake of FLAME results within the emerging programme.
- ➔ **NEM:** ITINNOV is a long-standing member of the NEM Steering Board. ITINNOV will ensure that NEM strategy considers FLAME's strategy and vision for the Future Media Internet by contributions to white papers, direct communication at steering board meetings and paper presentations and NEM events.
- ➔ **Publications:** ITINNOV plans to champion research results through publications in relevant channels as described above. ITINNOV led a paper accepted for EUCNC2017 "Experimentation-as-a-Service Methodology for Building Urban-Scale Media Ecosystems" following an earlier paper presented at the NEM Submit 2016 "Tackling user-centric media demands through adaptable software defined infrastructures".
- ➔ **Press Release:** ITINNOV plans to promote stories of public and industrial interest through press releases. ITINNOV published a 1st press release on 14th Feb 2017 announcing the project kick off (<http://www.ecs.soton.ac.uk/news/4995>) and will continue to seek stories that can raise awareness of and engagement with FLAME.

2.4.7 Barcelona Infrastructure (IMI and i2CAT) engagement and marketing strategy and plan

Strategy. i2CAT and IMI aim to support heterogeneous Future Media Internet (FMI) experiments through the Barcelona test-bed. Initially leveraging on the experimentation within the FLAME consortium, the Barcelona test-bed will add to its capabilities and characteristics. Feedback provided by the FLAME experimenters during the usage of the infrastructure will be used to continuously adapt the test-bed to their needs. In this way, the expected extension of the infrastructure is driven by the real-life usage and feedback for further extensions and fine-tuning of equipment and features provided. Besides that, the information obtained on the experiments carried out in this phase can be used later to attract future experimenters out of the FLAME consortium.

Planned activities. Via the open calls in the project, i2CAT and IMI will facilitate open access to their test-bed to a number of interested external experimenters, e.g. SMEs working on the FMI. Reputation is expected to increase through improving the services offered to the external experimenters. Based on it, and with the help of FLAME dissemination activities, the outreach with external experimenters, SMEs and other businesses shall grow. This, in turn, will allow for further future collaborations and/or technology transfer across organizations. i2CAT and IMI plan to organize activities and events in the framework of the Barcelona Smart City Expo World Congress and the Mobile World Congress, which will help to give visibility to the open call participants and to the FLAME experimental testbed. Barcelona partners will identify national stakeholders, such as the Spanish Ministry of Economy, Industry and Competitiveness, and will meet with them in order to explore possibilities to exploit the project results. Furthermore, IMI will disseminate the results of the project among their contacts at CTN⁷, ITU⁸, ISO⁹, NIST¹⁰, Wireless Broadband Alliance¹¹ and relevant city associations. Finally, i2CAT and IMI will explore possible synergies and collaborations with existent 5G PPP projects and initiatives.

2.4.8 ATOS engagement and marketing strategy and plan

Strategy. Through the participation in FLAME, ATOS will strength its expertise in new networking paradigms, such as virtualisation of network functionalities, experimentation as a service and software-defined networks, which are strategic research areas for the concrete market of ATOS Research & Innovation that is participating in FLAME. The development of media services is another key element of the ATOS strategy since ATOS is a world leader in the provision of IT and media services, including major events, such as the Olympic Games. In this sense, the experience gained by ATOS in the project will allow to enrich the overall knowledge of the company and the value proposition that the company offers to its clients.

Planned activities. To carry out this engagement and marketing strategy, ATOS has planned two kinds of activities. On the one hand, ATOS will participate in conferences, workshops and exhibitions to present the advancements achieved in FLAME by means of the new network paradigms and FLAME specific technological advantages. For this purpose, ATOS has identified a set of key events where stakeholders could participate, after analysing the companies and institutions that could be interested

⁷ www.en.aenor.es

⁸ www.itu.int

⁹ www.iso.org

¹⁰ www.nist.gov

¹¹ www.wballiance.com

in FLAME use. On the other hand, ATOS will utilise the internal channels and events of the company to create awareness about the exploitability of the project results.

2.4.9 BIO engagement and marketing strategy and plan

Strategy. BIO will provide the test-bed environment in Bristol to host FLAME's FMI platform. The city-wide test-bed will provide expansive opportunities for experimentation. The 144 core fibre ring which makes up part of the test-bed has four host node partners, Watershed, Engine Shed, @Bristol (science museum) and the High Performance Network Labs at University of Bristol. These are BIO's primary stakeholders along with Bristol City Council. This ecosystem of stakeholders each bring with them access to a broad range of organizational links within the broadcasting, media and digital media space, along with communities and citizens. BIO will focus its engagement and marketing with this wider network to respond to the open calls. Keeping the experimentation focused around Bristol needs, working with consortia expertise and the successful experimenters to develop solutions on the FMI platform. BIO will in partnership with FLAME consortia members, mentor and support the experimenters.

Planned activities. To engage the stakeholders outlined above we aim to run a number workshops to ascertain the needs of experimenters. This would involve social media, PR, blogs and emails to engage a wider group and inform about the open calls to gain interest about applications. Attendance and engagement at international conferences and smart city events is important throughout the project. The BIO team and stakeholders attend internationally as panellists, speakers and exhibitors and will engage and disseminate information about the open calls on FLAME platform.

2.4.10 University of Bristol engagement and marketing strategy and plan

Strategy: UNIVBRIS will support local Future Media Internet (FMI) experiments in collaboration with Bristol Is Open to maximise the engagement, dissemination and impact opportunities. UNIVBRIS will provide a platform for research collaboration, training, education and cross-disciplinary interactions for FLAME. This will be supported by University Research Institutes [9] and University's Public Engagement [10]. UNIVBRIS will also leverage communication channels and events through regional University Alliance and existing project networks. In addition to UNIVBRIS channels, we will work in close collaboration with BIO who will support this by extending our communication network via the BIO Partnership Strategy Board, local ecosystem and BIO commercial partnerships. Collectively, through these channels, we will build an array of information and outreach activities targeting academics, and researchers that could benefit from the platform.

UNIVBRIS will provide in depth training opportunities on the local FLAME platform via the EPSRC Centre for Doctoral Training in Communications [11] and existing outreach events providing FLAME platform demonstrations and "hands-on" opportunities. We will also host a FLAME Media Hackathons in collaboration with Bristol Is Open, aimed at providing training and skill development. UNIVBRIS will also develop and contribute to academic publications and conference presentations.

Planned activities

- ➔ Organisation of two summer schools (2018 and 2019) to provide in depth training opportunities on the local FLAME platform via the EPSRC Centre for Doctoral Training (CDT) in Communications [11].
- ➔ Hosting FLAME Media Hackathons in collaboration with Bristol Is Open, supported by the University's Jean Golding Institute, which is a multi-disciplinary in research institute supporting cutting-edge research in the field of applied data science.

- ➔ Development of news articles and press release to disseminate information regarding all activities hosted at Bristol.
- ➔ Publication and conference presentations.
- ➔ Development and dissemination of training materials will encourage engagement with the FLAME platform.

2.4.11 Martel Innovate engagement strategy and plan

Strategy. The Martel Media department is leading the dissemination and communication activities within FLAME taking responsibility for driving them in an effective way from the very beginning of the project. This is strategic for Martel Media as it provides the opportunity to consolidate and enhance its experience and expertise in the area of creative, participatory and social media technologies, tools and solutions. By driving the FLAME's community building and stakeholders' engagement activities through organization of promotional events, management of the project's web site and social media channels, creation of promotional material in various forms and ensuring participation to selected conferences, Martel Media will strongly contribute to the success and impact of the overall project's work. Moreover, Martel is playing a central role in the engagement of 3rd party organisations into the FMI ecosystem via the planned open calls.

Planned activities. Martel, as leader of the overall marketing and communication activities within FLAME, has planned a rich set of activities (several of which have been activated as of the very beginning of the project) that should help promoting the FLAME work and outcomes, while ensuring the creation of the FMI ecosystem. The major planned activities include:

- ➔ FLAME web site design and management.
- ➔ FLAME social media animation and 6-monthly newsletter creation and distribution.
- ➔ Promotion material creation and distribution (slides, posters, flyers, videos).
- ➔ Organisation of 3 outreach/community building workshops.
- ➔ Liaisons and communication towards related communities Martel is actively engaged in. This includes:
 - 5G PPP /Networld2020
 - Future Internet Experimentation Research
 - Next Generation Internet
 - New European Media
 - FIWARE
 - Collective Awareness and Sustainability for Social Innovation

Martel's planned engagement and marketing activities in FLAME will be leveraged through a number of related innovation projects and promotional frameworks Martel is involved in, giving the

opportunity to reach a broad audience and ensure effective establishment and sustainable growth of the FMI Community.

3 THE FLAME ENGAGEMENT MACHINE IN ACTION

FLAME aims to offer an EaaS model to players from the creative industries, internet industries and beyond. Through the development of a platform seeding strategy, FLAME intends to create demand for services for the FMI ecosystem. The strategy is designed to grow the FLAME FMI ecosystem throughout the project in accordance with market positioning, infrastructure sustainability models and platform exploitation. The investment strategy will form a fundamental part of the platform seeding strategy.

FLAME will initially validate the platform within key vertical areas (TV, Radio, Gaming, etc.) with key industrial partners (DRZ, VRT) to demonstrate the value of FLAME methodologies and capabilities and to generate global success stories for promotion. Different engagement models for business of varying levels of maturity such as industry (DRZ, VRT), SMEs (NXW) and applied research organisations (ETH, and i2CAT) will be validated. Such initial activities will provide further technical and engagement knowledge which help set up 3rd party engagement for successive pioneering experimentation projects also supported through open calls. As for the engagement activities for SMEs, entrepreneurs and start-ups, they are foreseen for the final year (PM25-PM36) when the FLAME platform is mature and in line with the 3rd open call for projects.

FLAME's approach is to put marketing, communication and dissemination at the service of the engagement activities. To this purpose, dedicated measures have been implemented from the very beginning of the project and are being refined according to the partner needs, to the feedback from the broad community and the overall promotional opportunities as they arise. In doing so, FLAME follows a phased approach to better focus and organise the planned activities in relation to progress and maturity of the outcomes of the other work packages. The three main phases are described in more details in the remaining of this section: for each phase focused and targeted actions will be pursued.

The complete list of the deliverables planned in the work-packages for “FMI Experimentation and Infrastructure Replication” and “Future Media Community Engagement and Impact” is presented in Table 4 and Table 6, while the major milestones are reported in Table 5 and Table 7, respectively.

Table 4: List of FMI Experimentation and Infrastructure Replication deliverables.

| Deliverable number | Deliverable Title | Type | Diss level | Due date |
|--------------------|---|------|------------|----------|
| D5.1 | FLAME Replication Process v1 | R | PU | M12 |
| D5.2 | Large-Scale FMI Experiment Design in Broadcast, Gaming and Transmedia | R | PU | M14 |
| D5.3 | Open Call Evaluation Report v1 | R | CO | M17 |
| D5.4 | Open Call Evaluation Report v2 | R | CO | M21 |
| D5.5 | Insights from Broadcast, Gaming and Transmedia Experiments | R | PU | M24 |
| D5.6 | FLAME Ecosystem Operation Reports v1 | R | CO | M24 |
| D5.7 | Open Call Evaluation Report v3 | R | CO | M29 |
| D5.8 | FLAME Replication Process v2 | R | PU | M30 |
| D5.9 | FLAME Ecosystem Operation Reports v2 | R | CO | M36 |

Table 5: List of FMI Experimentation and Infrastructure Replication milestones.

| Milestone number | Milestone Title | Due date |
|------------------|--|----------|
| MS6 | Validation experiments designed, OC1 launched | M14 |
| MS8 | OC1 3rd party experimentation and replication projects start, 1st FLAME Replicator available for experimentation | M18 |
| M13 | OC2 3rd party projects start, 3rd party replicator providers available | M24 |
| M17 | OC3 3rd party projects start | M30 |

Table 6: List of Future Media Community Engagement and Impact deliverables.

| Deliverable number | Deliverable Title | Type | Diss level | Due date |
|--------------------|--|------|------------|----------|
| D6.1 | FLAME Brand Identity Toolkit | R | PU | M02 |
| D6.2 | FLAME Project web site | R | PU | M03 |
| D6.3 | FMI Ecosystem Engagement Strategy and Plan | R | PU | M04 |
| D6.4 | FMI Engagement Report and Updated Plan v1 | R | PU | M12 |
| D6.5 | Getting started for SMEs and Entrepreneurs | R | PU | M14 |
| D6.6 | FMI Engagement Report and Updated Plan v2 | R | PU | M24 |
| D6.7 | FMI Engagement Report and Updated Plan v3 | R | PU | M36 |

Table 7: List of Future Media Community Engagement and Impact milestones.

| Milestone number | Milestone Title | Due date |
|------------------|---|----------|
| MS2 | FLAME branded and launched and promoted through primary stakeholders channels | M03 |
| MS7 | Open Call promotional strategy, actions and material launched on all stakeholder channels | M14 |
| MS14 | Start-up weekends, boot camps and hackathons planned | M24 |

3.1 PHASE 1: STAKEHOLDER AWARENESS [M01, M06]

The FMI market is a complex and demanding playground in terms of quality and type of communication and marketing actions required to attract and engage target stakeholders. To ensure success, the FLAME project has been equipped with modern and innovative communication tools, which are presented in this section, to develop engagement strategies in line with the expectations of FMI players.

Main goal:

During Phase 1, which covers the first 6 months of the project, FLAME aims to **create awareness among the target stakeholders** and the general audience, while laying down the foundation for the overall FMI engagement Strategy and Plan as described in this deliverable.

Notice that awareness creation as such will continue to be pursued also beyond month 6 throughout the whole project duration as an essential aspect that is part of the overall promotional and marketing activities.

Measures:

In order to create awareness in a convincing and effective manner and inform the R&D community, the market, and all target stakeholders, specific measures have been put in place or are being set.

Already in place

- ✓ A fresh, appealing and distinctive brand identity has been defined and delivered in the form of the **FLAME Identity Toolkit** (see deliverable **D6.1 FLAME Brand Identity Toolkit**) during the first month. The FLAME Identity Toolkit includes the FLAME logo, branding guidelines and templates for presentations and deliverables.
- ✓ A modern, fresh and fully functional **web site** (see deliverable **6.2 FLAME Project Web Site**), which represents the main entry door for all the interested stakeholders at www.ict-flame.eu. The web site, which has been already operational from the first month of the project, is a live meeting point for the whole Internet community and general audience. It is continuously enriched via information, material and outcomes of the project and it links to the FLAME social channels.
- ✓ **FLAME Twitter profile - @ICT_FLAME** - increasingly Twitter is being adopted as a major communication vehicle to reach a broad audience. A distinctive and fresh profile has been created and is regularly animated. Activity will intensify later during the project in line with participation and organisation of planned events, Open Calls, available outcomes, publications, etc. As of today, the FLAME profile has about 70 followers, 127 Tweets and 4,242 impressions have been generated.
- ✓ **FLAME presentation flyer**: distribution of the first FLAME flyer, which presents the core information about FLAME and its principles (see Appendix 7), both electronically and physically, has already started in month 2. The flyer, which is available on the FLAME web site, anticipates the Open Calls initiative for 3rd party organizations to join the FMI ecosystem. The flyer has been physically distributed in Barcelona during the Mobile World Congress 2017 at the exhibition booths of Inter Digital and i2CAT and in Ghent at the Fed4FIRE+ Engineering Conference, FEC 1, which was held 14-16 March 2017.
- ✓ **FLAME presence at major events**: event participation is essential to ensure broad visibility of the project and disseminate its results. In February, two FLAME scenarios have been presented and demonstrated at the Mobile World Congress (27th of February - 2nd of March 2017) by InterDigital giving broad visibility to a large audience of players in the wireless and communication networks arena. Note that this year more than 108,000 participants attended the MWC, with professionals from 208 countries, including approximately 3,500 members of the international press and media.

- ✓ **Creating and maintaining a calendar of relevant events:** in order to coordinate across the consortium on planned event participation and presentation of the FLAME work a calendar with relevant events as identified by the partners has been created and is constantly updated. This shall also help in identifying in the future the events that FLAME might want to co-locate planned workshops, hackathons, etc.
- ✓ **VRT video:** VRT has been working on a promotional video about participation of VRT in FLAME that will be broadly promoted via all VRT channels and echoed.
- ✓ **A comprehensive and well-structured FMI engagement strategy and plan** as described in this deliverable. The strategy and plan as conceived and developed so far will obviously be adapted as appropriate in view of ensuring to dynamically respond to concrete changes that might occur within the overall FMI ecosystem and specific opportunities that might emerge.

Ongoing work

- ➔ **FLAME presentation poster:** a short paper "*Experimentation-as-a-Service Methodology for Building Urban-Scale Media Ecosystems*" has been submitted to the EuCNC 2017 conference, which will be held in June in Oulu (Finland). The paper, co-authored by IT Innovation, Inter Digital and Nextworks has been accepted for the poster session. The FLAME poster is currently under preparation. When ready it will be also distributed in an electronic version via the web site.
- ➔ **FLAME slides-based presentation:** a slide-based presentation that has been put together by IT Innovation in the first months of the project's activity is being refined with contribution from FLAME partners, including formatting and graphical improvements. The presentation should be made available by the end of month 5 via the project's web site and should serve all partners in presenting the core principles behind FLAME in a standard way.
- ➔ **FLAME brochure:** a more extended version of the first FLAME flyer is being prepared in order to provide more details about the FLAME offering and its benefits for prioritised target stakeholders. The brochure should be ready for electronic and physical distribution during month 6 - the plan is to distribute it at the IoT Week (6th-9th June, Geneva, Switzerland), at EuCNC 2017 (12th-15th June, Oulu, Finland) and at Net Futures 2017 (28th-29th June, Brussels, Belgium).
- ➔ **e-Newsletter:** A six-monthly newsletter to be broadly distributed via all FLAME channels and FLAME's partner networks will be put together by the end of month 6. It will collect relevant news about technical progress, reporting on event participation, announcing highlights coming from the various work packages and advertising the FMI ecosystem engagement opportunities.
- ➔ **Establishing liaisons:** An ongoing activity pursued in several ways by all FLAME partners is the establishment of liaisons to related projects and initiatives, as indicated in Section 2.3. In these first months of the project, WP6 has ensured participation to the monthly 5G PPP COMMS conference calls and to the FIRE DWG conference calls.
 - The 5G PPP COMMS group gathers dissemination and communication representatives from all ongoing 5G PPP projects.
 - The FIRE Dissemination Working Group gathers dissemination and communication representatives from all ongoing "former" FIRE projects.

Regular conference calls take place as a way to coordinate efforts across the whole community and maximize impact creation effect. These channels are being exploited in order to promote and grow the overall FMI ecosystem creation and growth.

- ➔ **Technical blog:** FLAME will also animate a dedicated blog (that is hosted in the FLAME web site) by gathering input all across the various work packages under the lead of the Technical Manager. The main idea is to create a lively forum to increase visibility over the project's progress and gather feedback.
- ➔ **Organisation of the FLAME co-creative / user requirements workshops** led by WP3, before the end of June in Bristol.
- ➔ **Planning event participation – up to month 6:**
 - Wireless Broadband Congress 2017 (8th-11th May, London, UK): FLAME flyers will be distributed and the municipality of Barcelona will have a dedicated session (9th May, 14:30-15:15h) dedicated to present various smart cities services that are being developed in Barcelona, some of which based on FLAME.
 - IoT Week 2017 (6th-9th June, Geneva, Switzerland): FLAME flyers will be distributed and some partners will attend various sessions that are directly relevant to the project's work – augmented reality, smart mobility, smart cities and services.
 - EuCNC 2017 (12th-15th June, Oulu, Finland): the accepted FLAME poster paper will be presented, FLAME flyers will be distributed and several partners will attend. This is a major event to reach the 5G PPP players and network Telco operators.

Table 8 shows a Gantt chart of the main measures with respect to project months in phase 1.

Table 8: Gantt chart of phase 1.

| Project months | 1 | 2 | 3 | 4 | 5 | 6 |
|------------------------------|---|---|---|---|---|---|
| Measures | | | | | | |
| FLAME Identity Toolkit | | | | | | |
| Web site | | | | | | |
| Twitter channel | | | | | | |
| Flyer | | | | | | |
| Presentations to events | | | | | | |
| Calendar of events | | | | | | |
| Video | | | | | | |
| Engagement strategy and plan | | | | | | |
| Poster presentation | | | | | | |
| Slide-based presentation | | | | | | |
| Brochure | | | | | | |
| e-Newsletter | | | | | | |
| Liaisons | | | | | | |
| Technical blog | | | | | | |
| Organization of workshops | | | | | | |
| Participation to events | | | | | | |

3.2 PHASE 2: STAKEHOLDER ENGAGEMENT [M07, M12]

The second phase will start in July 2017 and will mark a transition towards more specific stakeholder engagement activities, supported specifically by tasks on “Accelerating SME engagement in the FMI Ecosystem” and “3rd Party Ecosystem Investment Strategy, Management and Ethics”.

Main goal:

During Phase 2, which goes from M07 to M12, FLAME aims to establish the FMI ecosystem by engaging stakeholders into the adoption of initial FLAME outcomes and concepts.

Specific focus will be given to target key players in the market, to generate demand for the FLAME technologies and services, create potential synergies and collaboration opportunities both within the FMI ecosystem and related initiatives and advertise the first FLAME Open Call to be launched in spring 2018.

Measures

In order to reach and engage in a convincing and durable manner the prioritised stakeholders, a number of dedicated activities will be pursued via a combination of WP6 and WP5 activities.

- ➔ **Activation of the Experimentation Impact Board** planning for a first meeting (that can be held remotely), in order to present to the external advisors the overall FLAME objectives, work and offering and gather feedback on how to refine the value proposition and better reach the target stakeholders. Interaction with external advisors will also help at refining the 3rd party ecosystem investment strategy and in identifying innovative SMEs to be engaged.
- ➔ **A second Experimentation Impact Board** meeting will then be scheduled towards the end of 2017, in order to discuss in more details the first open call and organise support via the communication and marketing channels of the various companies the EIB members belong to for broad advert campaigns.
- ➔ **Participation to events**, as of today, the main events that are targeted for the second part of 2017 and that are relevant to engage stakeholders and promoting the first FLAME open call are listed (notice that this list might be enriched later on according to upcoming opportunities). Flyers will be distributed, when possible demos and/or presentations will be given and informative sessions might be proposed.
 - **FEC 2, Fed4FIRE+ Engineering Conference 2**, (Beginning of October, Volos, Greece).
 - **NEM Summit 2017** (typically in November, but exact location and dates unknown).
 - **Smart Cities Expo World** (14-16 November, Barcelona, Spain).
 - **ICT Proposers’ Day 2017** (9-10 November, Budapest, Hungary).
- ➔ **Organisation of the 1st FLAME outreach/community building workshop**. The plan is to co-locate this workshop either with the NEM Summit or with the ICT Proposer’s Day. Depending on the dates for these major events and availability of the FLAME partners, more details will be discussed by the beginning of September 2017.

- ➔ **Activate dedicated SME engagement activities.** All contacts and liaisons established to related project and initiatives, as well as involvement of the External Advisors will be activated so that we reach a high number of possible participants to the FMI ecosystem and FLAME dedicated SMEs' Open Calls. A dedicated database and mailing list will be created also thanks to the contacts generated by participating/organising events.
- ➔ **Preparation of promo material in various forms for promoting the first FLAME Open Call.** This will include a dedicated brochure and a slides-set.
- ➔ **A video** will also be produced, most probably only after the 1st FLAME outreach/community building workshop where we will shoot parts of the video. This video will be created mainly with the purpose to present the stakeholders' engagement activities that have been conducted until that point and to facilitate the adoption of initial FLAME outcomes and concepts.
- ➔ **Updates of the project web site, animation of the blog and social channels** on a regular basis and 2nd edition of the FLAME newsletter will occur by the end of December 2017.
- ➔ **Input into standardization activities can be found in Section 2.3.** As concrete efforts, IDE has already presented a draft to the IETF ICNRG on 'deployment options for ICN' during the recent Chicago IETF meeting. Said draft outlines the need for standardization effort in the space of the routing solution that the FLAME platform realizes. IDE is currently investigating the contribution of the FLAME platform service function chains as use cases into the SFC WG of the IETF. Furthermore, IDE has already presented FLAME related efforts at the start of the ETSI MEC Phase 2, calling for standard interfaces in a number of FLAME relevant areas, including service routing, orchestration and surrogate management.
- ➔ Preparation and release of **D5.4.1 "FMI Engagement Report and Updated Plan"** at month 12.

Table 9 presents the Gantt chart of the main measures with respect to project months in phase 2.

Table 9: Gantt chart of phase 2.

| Project months | 7 | 8 | 9 | 10 | 11 | 12 |
|--|---|---|---|----|----|----|
| Measures | | | | | | |
| Activation of the EIB | | | | | | |
| Second EIB meeting | | | | | | |
| Participation to events | | | | | | |
| 1st FLAME community building workshop | | | | | | |
| SMEs engagement activities | | | | | | |
| Open call promotion material preparation | | | | | | |
| 1 st video | | | | | | |
| Updates: web site, blog, social channel | | | | | | |
| 2 nd e-Newsletter | | | | | | |
| Input into standardization activities | | | | | | |
| Preparation and release of D5.4.1 | | | | | | |

3.3 PHASE 3: SUSTAINABLE ECOSYSTEM AND PUBLIC OUTREACH [M13-M36]

Phase 3 will start in January 2018 and will mark a transition towards the creation of the FMI ecosystem as a sustainable and larger community that will be able to use, validate and exploit the FLAME outcomes and create impact at various levels both in a scientific and socio-economic perspective.

Goals

The main goal is to actively grow the FLAME ecosystem engaging all target stakeholders in the creative and collaborative development of novel FMI solutions and FLAME Replicator locations.

FLAME will embark on a comprehensive 3rd party experimentation project programme through a series of open calls expanding the range of vertical areas to include OTT media service providers, ISPs, telco vendors and other parts of the creative industries. Besides, three FLAME replication projects will be funded to increase capacity and supply in some European cities. In addition, FLAME is open to strategic partners willing to use FLAME for their projects funded with their own resources.

Measures

Throughout Phase 3, a rich set of communication and dissemination measures will be pursued, including regular **animation of the FLAME media channels, updates and extensions of the FLAME web site** as appropriate, **bi-yearly e-newsletter publication, creation and updates of promo material** to support all targeted marketing activities.

More detailed plans about year 2 and year 3 will be presented in deliverables updating this plan, which will be submitted at M24 and M36, respectively.

- ➔ **Tutorials and webinars** organisation in view of the planned open calls to advertise them and inform potential applicants about the OC focus and objectives, participation conditions and rules. UNIVBRIS will provide in depth training opportunities on the local FLAME platform via the EPSRC CDT in Communications [11]. The centre offers an environment for students to undertake world-leading research, providing an advanced training network for the communication community, developing skilled and entrepreneurial engineers needed to underpin the future of the industry. In addition to training postgraduates via the CDT, UNIVBRIS will also aim to provide educational opportunities to undergraduate students, providing access to the local FLAME platform for their final year projects.
- ➔ UNIVBRIS will also provide educational and training opportunities via the organisation of two summer schools (2018 & 2019) around specific identified topics, attracting participants from both UK and Europe. The summer school will aim to target forty participants per event. Training material will be disseminated along with a press release. UNIVBRIS also participates in a number of outreach activities for local schools during the summer months, the FLAME platform will provide demonstrations and "hands-on" opportunities to inspire future engineers.
- ➔ **Scientific publications** to high-level conferences and journals such as G-PPP at the mobile world congress 2017, IEEE ICC 2018, IEEE Network, IEEE Transactions on Communications, IEEE Communication magazine, EuCNC 2018, IEEE Globecom 2018, Global 5G Event 2017, ACM Siggraph, ACM Siggraph Asia, ACM Transactions On Graphics (TOG), Game Developers Conference (GDC), Eurographics (EG), ACM SIGCHI Conference on Human Factors in Computing Systems (ACM CHI), ACM SIGCHI Annual Symposium on Computer-Human Interaction in Play (CHI PLAY), International Conference on Interactive Digital Storytelling (ICIDS), AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment (AIIDE), Intelligent Narrative Technologies (INT), ACM SIGGRAPH Symposium on Interactive 3D Graphics and Games (I3D).
- ➔ **Input into standardization activities can be found in Section 2.3.** During this later stage of the project, we expect concrete activities in the service routing, the orchestration as well as media service management area with target SDOs being the IETF, ETSI MEC as well as ETSI NFV.

- ➔ **Promotion of the 3rd Party Activities** in close collaboration with WP4. As detailed in Section 4, the 3rd party investment, involving open calls and unfunded experiments, is an essential part of the FLAME strategy to grow an exciting, creative and vibrant FMI ecosystem. **Advertising campaigns** will be organised and promotional material will be prepared so as to ensure broad reach of target stakeholders. The **marketing activities** will exploit a variety of media and traditional press channels, in addition to dedicated webinars and presentations either made available electronically or given at events the partners will attend. All liaisons and related projects and initiatives the FLAME partners have reach to, see Section 2.3, will be fully exploited.
- ➔ **Organisation of events** – notice that co-location with other major conferences and workshop will always be considered as a way to maximize the reach and gather a high number of participants.
 - **FLAME Media Hackathons** will be held in collaboration with UNIVBRIS, I2CAT and other FLAME Replicators to promote the usage and experimentation of FLAME technology in developer communities. FLAME plans to host 3 of these events with the goal to raise interests in different local developer communities. Hackathons will last 48 hours and will be preceded by FLAME training where developers will be able to get insights on FLAME platform offering. FLAME will provide prizes in hardware or participation to key events to the best prototypes.
 - FLAME outreach/community building workshops: one in year 2 and one in year 3 will be organised to engage stakeholders into adoption and deployment of the FLAME concepts, technologies and platform. Timing of these events will be synchronised with the planned launch of the Open Calls, typically about one month before each call is opened and with major conferences/events to co-locate with. This will allow creation of an informed audience of potential third parties participants, but also contribute to broad dissemination of project results to foster uptake. Typically FLAME partners will serve as main presenters (demonstrations will also be organised especially in order to provide details on the latest technical progress of the project), but will also aim at inviting one or two selected experts from the EIB and dedicate part of the event to an interactive session giving the opportunity to the participants to play an active role in round table discussions guided by the FLAME leaders.
- ➔ Participation in relevant events will provide an opportunity to give demonstrations and presentations about FLAME progress, offering and funding opportunities. A refined list of which events will be attended by FLAME will be provided at the end of each year in the planned deliverables D5.4.2 and D5.4.3. As of today, we can anticipate that during year 3, the plan is to ensure presence of FLAME at selected future:
 - Startup Weekend (<https://startupweekend.org/>)
 - Startup Bootcamp (<https://www.startupbootcamp.org/>)

Table 10: Gantt chart of phase 3.

| Project months | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 |
|--|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Measures | | | | | | | | | | | | | | | | | | | | | | | | |
| Tutorials and webinars | | | | | | | | | | | | | | | | | | | | | | | | |
| Scientific publications | | | | | | | | | | | | | | | | | | | | | | | | |
| Standardization activities | | | | | | | | | | | | | | | | | | | | | | | | |
| Promotion 3 rd Party Activities | | | | | | | | | | | | | | | | | | | | | | | | |
| Organisation of events | | | | | | | | | | | | | | | | | | | | | | | | |
| Participation to events | | | | | | | | | | | | | | | | | | | | | | | | |

4 ENGAGING THIRD PARTY ORGANISATIONS INTO THE FMI ECOSYSTEM

The 3rd party investment, involving open calls and unfunded experiments, is an essential part of the FLAME strategy to grow an exciting, creative and vibrant FMI ecosystem. Through engagement activities towards 3rd parties, FLAME plans to attract different stakeholder groups like SMEs and entrepreneurs with the aim of running a variety of experiments that directly relate to the FMI vision. The different use cases and scenarios describing the FMI vision as of today can be found in the deliverable D3.1 *FMI Vision, Use Cases and Scenarios* release at project month 3.

The ultimate goal of the 3rd party engagement strategy is to create demand from the FMI ecosystem for Experimentation as a Service (EaaS). The creation of this demand would enable the transition from experiments funded by the project to customers willing to pay for experimentation services. In order to achieve this goal, **after validation experiments have been performed by the responsible partners**, FLAME will launch **a series of Open Calls to expand the range of vertical areas so to include ISPs, telco vendors and other parts of the creative industries**. The 3rd party engagement activities will also aim to attract strategic partners willing to use FLAME for experiments funded from their own resources.

Considering that the experiments will involve people, prior to the beginning of 3rd party engagement, different actions will be taken to identify ethics issues related to the protection of data and the protection of the privacy of the users during these activities. Identification of the issues prior to the experiments will provide the essential knowledge to assure that the security of such data, exposed or collected during the experiments, follows both the European and the national legislation. The Ethics Management Board (EMB) responsible for ensuring ethical issues are appropriately handled. Within the FLAME Management Structure, the EMB which includes the Ethics Manager, Project Coordinator, Project Manager, 3rd Party Project Manager and other partners as needed, will ensure that experiments are conducted in consideration of ethical requirements and adhere to legal and ethical obligations, while overseeing the application of the ethical management strategy of the consortium.

4.1 THIRD PARTY INVESTMENT APPROACH

Two types of projects are planned in the 3rd party engagement strategy and will be pursued during the lifetime of the project: **Experimentation** and **Replication** projects.

Experimentation projects will enable different experiments to run on the platform to validate and increase the FLAME offering, while **replication projects** will reproduce the FLAME infrastructure in other cities across Europe using a replication process based on best practice sustainability, engagement models, and infrastructure standards and specifications.

Both types of projects aim at validating the FLAME concept and approach to improve and extend the FLAME offering and at the same time, to allow a **smooth transition towards commercialization of the platform itself**. The transition will **follow a business model that will ensure the sustainability of FLAME infrastructures** beyond the initial public funding (this will be covered by WP2).

At this stage, the FLAME partners are developing a workable platform for large-scale experimentation of FMI services. The platform will be fully integrated with broadcasting supporting high mobility scenarios and use of software-defined and cloud-like network infrastructure. The plan is to open the platform, via open calls and unfunded experiments, to tens of experiment runs per annum and gain insight into the performance, acceptance and viability of solutions.

Following the list of stakeholders presented in Table 3 where the groups for engagement have been identified, the 3rd party investment approach will primarily target the following:

- ➔ **Industries** such as the multimedia and creative industries, investment industry as well as technology providers. The aim is to formulate business models that are deemed suitable for a long-term sustainability with a drive to commercialization.
- ➔ **SMEs/Start-ups.** R&D Small Medium Enterprises technologically involved in the field of multimedia. Via 3rd party engagement FLAME will ensure that the expectations of SMEs are aligned with the FLAME's offer.
- ➔ **FLAME replicators.** Research and innovator actors which will be supported in the planning process creating the plans and visions for a city and in the replication of the FLAME platform itself.

The experimentation strategy followed by FLAME is based on the relationship between facility maturity and the business maturity of the target groups. This is due to the fact that the Rate of Return (RoR) for large industry, SMEs and start-ups are different. For example, the RoR for SMEs/entrepreneurs is shorter than Industry and Universities. Based on this knowledge, FLAME will engage the target groups at different times in the lifecycle of the project and as the maturity of the platform increases, the number of SMEs/Individuals experiments will also increase.

Engaging 3rd parties at different times will allow FLAME to:

- ➔ Incrementally increase utilisation of the platform over the lifetime of the project and progressively invest in utilisation of the platform by industry, SMEs and entrepreneurs in accordance with the expected value creation;
- ➔ Shift emphasis from large scale industry towards innovative SMEs and entrepreneurs throughout the life-time of the project as the platform matures;
- ➔ Execute at least 23 experiments from OTT media service providers, ISPs and Vendors covering a range of sectors, content types and FMI scenarios;
- ➔ Expand the platform deployment towards at least three further FLAME Replicators.

4.2 THIRD PARTY ACTIVITIES PROMOTION

To allow stakeholders within the target groups to discover the innovation potential for players within the FMI ecosystem offered by the FLAME infrastructure, the dissemination and communication work organized and conducted before and during the engagement activities will play a fundamental role in the success of the Open Calls themselves.

A critical mass of relevant stakeholders can be reached via web, media and press channels, publications, liaisons, demos, presentations, participation to standardisation groups, distribution of promo material in various forms (including newsletters, posters, videos, etc.) and specific promotional events/sessions/webinars organized by the project. All these activities will be properly timed and activated. Specific promotional channels include:

- ➔ FLAME web site and social media

- ➔ 5G PPP COMMS monthly conference calls, mailing list and news item into 5G PPP portal
- ➔ FIRE DWG monthly conference calls, mailing list and news item into the FIRE portal
- ➔ Echo via NGI, FIWARE, AIOTI, IoT Forum, NEM, CAPS communication and media channels
- ➔ Communication and media channels of whole FLAME partners
- ➔ Communication and media channels that the external Expert Advisor will activate
- ➔ Advertising via F6S channels. F6S is the largest social network for start-ups in the world. With over 1.8 million profiles for the start-up/ SME community and more than 695,000 start-ups. F6S can be used for creating effective recruitment campaigns, for targeting SMEs/start-ups and for disseminating funding opportunities, including Open Calls, to a very broad audience.

The attractiveness of the FLAME offering will have to be properly advertised by translating the value proposition in specific terms and messages that can be understood by the target stakeholders. The main challenge will be to reach the stakeholders where they are and speak their language. Besides professional communication and marketing support this implies an in-depth understanding of the market players and researchers we are aiming to engage into the FMI ecosystem, which WP2 will lead.

In order to create awareness about the 3rd party opportunities to join FLAME and the FMI ecosystem, dissemination and communication activities have already started anticipating the investment that is planned: a page on the FLAME website advertising the open calls opportunity has already been published (<https://www.ict-flame.eu/open-calls/>) and promoted via Twitter, flyers referring to the open calls have been and will be distributed at various events.

Moreover, participation to Startup Weekends in Europe, as well as the FLAME Media Startup Bootcamp and the FLAME Media Hackathons will represent opportunities to bring the attention of the Multimedia world and not only to the open calls.

All the events organized by FLAME will be timely arranged so to support a wider advertisement of the 3rd party engagement activities.

4.3 OPEN CALLS

At the time of writing this document, the 3rd party investment strategy via open calls is still in an early stage of implementation. The overall approach will be re-defined in the second half of year 1 of the project when the work of the EIB will start. The EIB will strategically provide input and define priorities to ensure that funding is distributed between different ecosystem stakeholders at key periods in the project lifecycle (see section 1.2.2).

As already explained in Section 4.1, FLAME will engage the target groups at different times based on the technical maturity of the platform. Three rounds of open calls will be organized in accordance with the overall project strategy on a 6-month basis. Each round will target groups in relation to stakeholder roles and the project priorities.

The financial investment that FLAME has committed in order to support third parties aims at contributing to the creation and growth of a European FMI ecosystem embracing all relevant stakeholders in various creative industry sectors like TV, radio, gaming, publishing, and related sectors like smart city and education.

The rounds of open calls are planned as so:

- ➔ **Call 1** announced **in April 2018**. It targets core infrastructures with beta platform:
 - **FLAME Replicators** (duration 18 Months): replication of FLAME at another location providing capacity for experimentation from at least October 2018.
 - **Industry Trials** (duration 12 Months): technologies with large scale and significant sectorial impact on beta platform.
 - **SME Trials** (duration 6 Months): innovative OTT media technologies, ISPs and Vendors.
- ➔ **Call 2** announced **in October 2018**. It targets core infrastructures with beta platform.
 - **SME Trials** (duration 6 Months): innovative OTT media technologies, ISPs and Vendors.
- ➔ **Call 3** announced **in April 2019**. It targets core infrastructures and FLAME Replicators using RC Platform.
 - **Industry Trials** (duration 6 Months): technologies with large scale and significant sectorial impact.
 - **SME Trials** (duration 6 Months): innovative OTT media technologies, ISPs and Vendors.
 - **Start-up Trials** (duration 6 Months): innovative OTT media technologies.

The timeline of the FLAME open calls is shown in Figure 5.

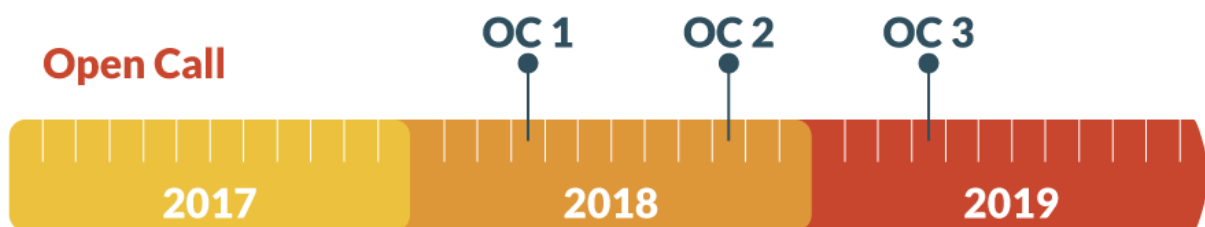


Figure 5: Timeline of FLAME open calls

At least 23 experiments are expected to be run via Open calls. 3 of these will be European cities committing to replicate the FLAME experimental infrastructure on their locations. These stakeholders will be provided with detailed replication guidelines and processes that will help them setting up the FLAME infrastructure. The guidelines and processes will be written based on the gained experience in Bristol and Barcelona, the two initial FLAME trailblazers. In particular, a first replication of the FLAME experimental infrastructure will be performed in Barcelona by i2CAT and IMI, providing communication and processing elements to run trials in a real city environment. The infrastructure will be a hybrid wired/wireless converged SDN/NFV experimentation testbed able to host targeted scenarios and use cases defined in the framework of the FLAME project. The outcome of the primer deployment of the Barcelona testbed will demonstrate and validate the benefits, feasibility and sustainability of the FLAME approach and will be used to engage stakeholders (municipalities and infrastructure providers) as future replicators.

4.3.1 Open call experiment monitoring, mentoring and support

The FLAME project will leverage on its partners' previous experiences in providing experimentation as a service to maximise experimenters' experience and guarantee successful trials. Key aspects to this approach are monitoring, mentoring and support models. While monitoring will focus on keeping track of technical magnitudes, mentoring will focus on assisting the experimenter and maximising its experience out of using the FLAME platform.

In more detail, the support model for experimenters will be based on a 2-tier structure. Depending on best practices and previous experiences, the FLAME project partners may decide to extend the model to maximise experience. The tier-1 support layer, or 'Basic Support', will provide the experimenter with the basic environment within the platform, the tools and the documentation to set up and run experiments. It will also provide reference material to allow the experimenter to troubleshoot common known problems in using the platform. The tier-2 support layer, or 'Enhanced Support', will provide the experimenter with enhanced support activities to tackle those situations not covered by the self-assistance document base in the Basic Support. Moreover, the enhanced support will include activities to co-design, co-set up and co-monitor the experiments, along with the open call awardee.

The tier-1 support level will pursue the following objectives:

- ➔ **Availability of the facility.** Make the facility and its resources available through the FLAME platform.
- ➔ **Remote access.** Provide the means and tools to remotely access the platform, so that the time required to be physically hosted in the pilot city is reduced.
- ➔ **Platform guidelines and documentation.** Prepare and supply usage guidelines and relevant material and documents to help the experimenter run its experiment.
- ➔ **Self-assistance** (FAQ and troubleshooting guidelines). Provide a knowledge base of known issues, problems or situations to help the experimenter self-diagnose and troubleshoot common and known situations.
- ➔ **Basic communications.** Provide relevant communication channels between the experimenters and the experimentation facilities providers.

The tier-2 support level will focus on the following:

- ➔ **All objectives provided by the Basic Support.**
- ➔ **Collaborative design of the experiment** (technical consultancy). A partner or a set of them within the FLAME consortium will assist the experimenter in co-designing the experiment with those aspects difficult to sort out by the experimenter (deployment constraints, interaction with 3rd parties affecting the experiment, etc.)
- ➔ **Collaborative run of the experiment** (technical consultancy). As in point 2 above, but applies to running the experiment itself. For example, enabling a protected resource for the experiment, access to municipality premises, etc.
- ➔ **Active problem solving** (during run time if possible) using monitoring. Live troubleshooting of any issues, even during running time of the experiment, will be offered. This support item will be specified per project and experiment instance.

➔ **Enhanced communications.**

In terms of mentoring, each 3rd party experiment will be assigned a mentor within the FLAME partners. The mentor will be responsible for those activities that will provide the experimenter with a successful experience, regardless of the results of the experiment. To that extent, the mentors will work to:

- ➔ understand the needs of the experimenter;
- ➔ assist with technical requirements definition for the platform when required;
- ➔ make recommendations to WP3 for upgrades on the technical architecture;
- ➔ amend the facility to run the experiments;
- ➔ coach or chaperon the experimenter during execution of the experiment;
- ➔ facilitate communications between the project partners and the experimenter;
- ➔ identify and manage potential conflicts;
- ➔ follow-up on the experiment results compared to the original objectives.

4.4 UNFUNDED EXPERIMENTS

Together with open calls which will be regularly funded by the project, the 3rd party engagement activities will implement steps to attract strategic partners willing to pay from their own resources to run experiments on the FLAME platform.

Unfunded experiments are the last step in the timeline towards commercialization (see Figure 2). As explained at the beginning of this chapter, the end goal of the 3rd party engagement strategy is to create demand for services that would allow the transition from experiments funded through 3rd party projects and open calls to customers willing to pay for experimentation services.

In order to make the phase of unfunded experiments successful, FLAME must:

- ➔ Initially validate the platform within key vertical areas (TV, Radio, Gaming, etc.) with key industrial partners (DRZ, VRT) first and via open calls after to generate global success stories for promotion.
- ➔ Validate different business models that will ensure the sustainability of FLAME infrastructures beyond the initial public funding.

At least five experiments will be selected. These experiments will provide test cases for simulating future business models.

5 CONCLUSIONS AND NEXT STEPS

FLAME will establish and grow a sustainable Future Media Internet, FMI, ecosystem to ensure broad socio-economic impact creation through a comprehensive and well-articulated engagement strategy and plan based on a rich set of dedicated activities.

This document describes the core strategy and plan, as defined in the first months of the project activity, the FLAME partners are following to ensure a comprehensive and effective approach for the creation and growth of the FMI ecosystem by supporting project partners in their promotional and outreach activities.

Plans and activities will adapt according to the progress and opportunities as they will arise. An up-to-date view on strategy and plan will be provided at the end of the first reporting period so as to effectively reflect any new direction FLAME might undertake to ensure effective engagement of a large ecosystem.

6 REFERENCES

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7 APPENDIX A – THE FIRST FLAME FLYER



Figure 6: The FLAME flyer (front)



Figure 7: The FLAME flyer (back)