



FIREWORKS



FIREworks

D3.2 FIRE Office Services

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Abstract

FIRE (Future Internet and Research and Experimentation) is best value to the European taxpayers when securing its sustainability. With sustainability it is meant to ensure availability of the built infrastructure, services, easy accessibility to them and hence maximum usage. FIRE landscape is heterogeneous and operations to the date dependant on sporadic and insecure project funding. FIREworks is to work on the dilemma and firstly discussion on the strategy level has been pursued to tackle the challenge. On the other hand a common nominator, originating from the actors of the field, is promoted to host the FIRE aside from research and development activities carried out by the individual projects. This deliverable discusses the services needed to be offered by such an organisation that hosts the FIRE initiative.

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Executive summary

FIRE is a 55 million euro investment only in its first phase within FP7. The roots are longer in FP6 projects that created the network and built prototypes, not to mention various national initiatives setting up experimental facilities as well. Surely FIRE is best value to the European taxpayers when securing its sustainability, the maximum return on investment in its usage and further development beyond sporadic project life-times. However, FIRE landscape is heterogeneous and operations to the date dependant on fragmented project funding. It is impossible to create a steady demand for facilities financing the maintenance and evolving offerings of FIRE, if the guarantee of the facilities existing on day X in the first place cannot be given. FIREworks is to work on this dilemma and firstly discussion on the strategy level has been pursued to tackle the challenge. On the other hand a common nominator, originating from the actors of the field, is promoted to host the FIRE aside from research and development activities carried out by the individual projects. This deliverable discusses the services needed to be offered by such an organisation that hosts the FIRE initiative.

National Research and Education Network (NREN) infrastructures should be linked to FIRE, but also benchmarked properly, as they have established and are successfully running a sustainable European-wide infrastructure from very heterogeneous sources.

FIRE Office services are the practical outcome of the whole extensive discussion on FIRE Initiative and its sustainability, what support and services does the community need in order to fulfil its mission. This document claims that the core of these services is providing matching 1) Expertise, 2) Information, and 3) Funding possibilities on FIRE field within its stakeholders and potential customers. Having an updated repository and access to this above-mentioned data requires both commitment from the field, but also dedicated resources to maintain it.

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1 Definitions

FIRE Core Group	The group of representatives, constituted in accordance with Art. III.1.1. [1] hereof and primarily composed of representatives of the Original FIRE Parties
FIRE Facility	The collection of experimentation and testing resources brought together by FIRE Parties and FIRE Participants into a cross-national, heterogeneous, modular experimental facility
FIRE Initiative	An entity to perform activities related to future Internet research and experimentation, in particular enhancing the development of cross-national, heterogeneous and modular experimental facility including platforms and testing environments to be supported by a broad range of partners
FIRE Office	The FIRE Core Group shall install a permanent Office directed by a Director of the FIRE Office. The Office will ensure the day-to-day administration and follow-up of the Initiative, according to Art. III 4. [1]
FIRE Organisation	The organisational structure of FIRE, including all the bodies as described in Art. III of the FIRE Initiative Agreement [1]
FIRE Party	European ICT industry, or academic representative having a common interest in an economically sustainable experimental facility and accessing the FIRE Initiative Agreement in accordance with the provisions of Article IV [1]
FIRE Participant	FIRE Participants are the parties to the FIRE Initiative Agreement and companies or research institutes or universities, explicitly named in the Project contracts of FIRE Projects, having acceded the FIRE Initiative Agreement by signing the Declaration of Accession according to Art. IV, or having accepted the FIRE rules and regulations (which for the avoidance of doubt include the relevant provisions of this FIRE Initiative Agreement as well as any further provisions applicable thereto) by signing a Declaration of Acceptance according to Article VI [1]
FIRE Strategy Group	The FIRE Core Group may install from time to time and for a limited duration FIRE Strategy Groups which have delegated responsibilities and which shall execute specific tasks and responsibilities
FIRE Support Group	The FIRE Core Group may install a permanent FIRE Support Group which has delegated responsibilities and which shall execute specific tasks and responsibilities

1 Motivation

FIREworks as a support action works by getting right people together, stimulating and facilitating discussion a) within the community, b) with the stakeholder groups, and c) with international counterparts of the field. The outcome of FIREworks in its both objectives, 1. FIRE Strategy, and 2. FIRE Community, needs to be sustainable. FIREworks has taken an initiative to propose a model for an entity building on the legacy of FIREworks after the project life-time, supporting FIRE community. This entity model is still work in progress, requirements and constraints under discussion. The initial thoughts on the topic are aligned in the D3.1 Draft Governance Rules for FIRE Initiative [1], but the model and plans are likely to crystallise in the coming months as D2.10 Draft Concept and Architecture of the FIRE Experimental Facility also matures.

Sustainability

Sustaining the operation of a testbed of advanced technologies beyond the duration of a research project has proven very difficult to achieve in the past. This is unfortunate, not only because of the loss of a wealth of experience; but also because it shows that the business models behind the design of the testbed were fundamentally flawed. Ensuring that the testbeds can be maintained and exploited also beyond the lifetime of projects (whenever it makes sense) is a key issue for the FIRE activities, as well as finding mechanisms to ensure that results from past and current projects can be effectively exchanged and compared.

In the long term, the experimental facility must become a sustainable research infrastructure for the Future Internet serving both industry and academia in their Future Internet related research. The limited availability of testbeds for the duration of the projects under which they were provided, must be overcome. Future projects already at proposal stage must be able to rely on being able to use the facility as a research infrastructure as they today rely on GEANT. Therefore support is needed for:

- making the testbeds and federated testbeds that constitute the FIRE facility sustainable beyond the project duration of individual testbed activities, thereby making the experimental facility a reliable research infrastructure for Future Internet research in Europe;
- managing and operating the whole of FIRE experimental facilities;
- fostering the strong inborn link between the research and facility development, and that way ensuring the experimental facilities being up-to-date and maximally utilised;
- provisioning some dedicated resources for the core of the infrastructure.

Promotion and policy

FIRE Initiative pushes sharing best practices by enabling and catalysing exchange of information and successful processes within FIRE. At it's best it could combine social networking type of sharing and volunteering to goal-driven corporate thinking, extracting the best of both. The power of diversity and learning from the collectively gathered pool of knowledge is to be leveraged to the next stage for sustainable mutual benefit. This requires in principle three things, which form the pillars for FIRE Initiative. The three pillars are matching expertise, information and funding resources. This means that appropriate measures need to be established for serving these needs and finding the resources in question promptly, correctly and equally for all members. That is, information on

- FIRE infrastructures and services
 - Scope
 - Practices
 - Actors
- Projects, finished and running

- Events, happenings
- New cooperation possibilities
- Funding calls and possibilities

This information on FIRE potential needs to be orchestrated and supported for the common multilateral benefit. That means in practice, sharing knowledge, affecting policies (internal and external to the Initiative), and negotiating actors to cooperate the optimal and most effective way.

FIRE has well achieved creating name and visibility, recruiting forces to promote FIRE concept. Policymaking has and will be influenced on national, European and global level to foster and enable accessibility, sustainability, effective development of FIRE activities. Funding mechanisms vary greatly on different scopes of activities and are challenging to match the different needs of different FIRE elements. Yet synergies can be found based on other criteria as well, and cross-federation activities will also play a role in the future when more and more attention on multi-disciplinary and systemic approach will be paid.

2 FIRE Initiative

FIRE Initiative offers a forum to collaborate, innovate and share knowledge in order to foster the development of Future Internet research and experimentation, be it technology, infrastructure or services to be provided or used by the FIRE community.

The development and progress in Internet technology, infrastructure and services have been led by the research community since the very beginning of the Internet. Today, that community is still the main driver of the further development of the Internet. However, industry puts research findings in action and creates the value enabling further development. In Europe, this leading role is made possible by the collaboration of network engineers and managers from all over the region, FIRE Initiative has a mission to facilitate and support this prospering dialogue.

FIRE Initiative is first and foremost a collaborative organisation. Its core business is to bring together actors of the field, such as researchers, managers, technical specialists and other people in the future internet research and experimentation community with their counterparts from other countries in Europe and other continents, mobilising the expertise and experience of hundreds of professionals in the FI area at large.

FIRE Initiative's Objectives

The overall objectives of FIRE Initiative are summarised in a quote from the FIRE Initiative Statutes:

“The FIRE Initiative will concentrate on comprehensive testing and experimentation on a large scale, which is a unique requirement of the future Internet research. The role and the added value of FIRE can be identified in the deployment and operation of large-scale testing and experimental facilities that enable the trial and evaluation of protocols, concepts, technologies, services and system solutions. FIRE Initiative is to promote and participate in the development of a high quality international information and telecommunications infrastructure for the benefit of Information Society.”

FIRE Initiative's Core Activities

FIRE Initiative has four core pillars of activities:

- Providing an environment for fostering new initiatives in the European future internet research and experimentation community.
- Supporting joint European work in developing, evaluating, testing, integrating and promoting new networking, middleware and application technologies through the FIRE Initiative Technical Programme.
- Organising conferences, workshops and seminars for the exchange of information in the European research networking community, and pursuing knowledge transfer to less advanced networking organisations.
- Promoting members' interests by representing the common interests and opinions of the membership contacts with governments, funding bodies, industry and other organisations.

FIRE Initiative's Executive Bodies

It appears that in order to become a credible sustainable entity, FIRE Initiative might need to get organised as an organisation. Furthermore, it have been developed the idea of the FIRE Organisation to have as executive the FIRE Core Group, the FIRE Support Group, the FIRE Strategy Group and the FIRE Office. The scope and functions of these bodies can be found at D3.1 Draft Governance Rules for FIRE Initiative [1].

Generally, scope and purpose of the FIRE Organisation is to stimulate, organise and co-ordinate testing and experimentation work within the goals of the FIRE Initiative executed by FIRE Participants. The FIRE Organisation is a non-profit making organisation.

3 FIRE Office Services

Sustainable organisation needs a permanent office. The FIRE Core Group shall install a permanent Office directed by a Director of the FIRE Office. The Office will ensure the day-to-day administration and follow-up of the Initiative, according to Art. III 4 [1].

The FIRE Organisation provides its members with services aligned with the three Pillars: Expertise, Information and Management support. FIRE Office is proposed to collect in an organised manner

- Members to the annual assembly deciding on
 - Organisational matters (electing executive bodies, FIRE Core Group, the FIRE Support Group, the FIRE Strategy Group)
 - Activities
 - Workshops, info days, demos
 - Finance
- Information on different levels (mentioned above), for different needed scope and with different reach and pace
 - Static (repositories, posts)
 - Dynamic (news, newsletters, calls)
- Management support for individual projects
- Resources to orchestrate the offerings and satisfy all the above mentioned needs

The FIRE Office will consist of a team of experts on which the FIRE Director will have managerial responsibility. The FIRE Office will have the following tasks and responsibilities:

1. Office

- Common contact and entry point for FIRE Facilities, information on them and their offerings, help in finding right resources be it expertise or testing services,
- General administration of the FIRE Initiative,
- Accounting and billing of participation fees in accordance with Article VII in [1] hereof,
- Payment of FIRE Office costs, FIRE Office personnel according to the budget plan,
- Admission and control of the rules for participation to the Initiative,
- Interface for all FIRE Participant, organisation of a Initiative database,
- Monitoring of Projects, assisted by the FIRE Support Group, under FIRE Core Group responsibility,
- Information and communication to the FIRE Participants,
- Communication to the outside and interface with the EC on general issues, following instructions of the FIRE Core Group,
- Support and assistance to all other executive bodies in the FIRE Organisation (such as preparation for the official meetings, including agendas, invitations, minutes of the meetings and financial status reports, organising elections of executive bodies,
- Other official, specifically requested tasks issued by Organisation or its bodies on secretarial services. This could include tasks such as specific queries asked during a specific timeframe, but also to prepare certain documentation in preparation for a meeting and / or FIRE workshop or other official FIRE meeting,

2. Events

- Hosting official meetings (General Assembly, bodies)

- Providing support for meetings, workshops and exhibitions at other venues (e.g. venue preparation, production of badges and proceedings etc., excluding travel and material costs) to a reasonable extent, i.e. in the capability of resources allocated to the Office
- Organising the collection of participation fees for workshops and conferences when needed
- Organising on-site registration desk for workshops and conferences (travels not included)
- Facilitating different brainstorming sessions, e.g. Research Café or Knowledge safari formats

3. Maintenance of information repositories

- Maintaining up-to-date information on FIRE facilities, FIRE partners, their projects, project results, and events at the agreed forum/fora (e.g. FIRE portal, FIRE website, Wiki etc.).
- Maintaining up-to-date mailing lists of FIRE partners, executives and representatives

4. Communication

- When needed, roughly quarter-annual, electronic newsletter will be compiled and edited for FIRE partners' attention
- Website hosting with site set-up and technical support of the domain

5. Sustainability

- Business models towards self-sustainability: The sustainability of the FIRE facility is in the interest of all the stakeholders. It ensures that the investment in FIRE is secured and that the experiments can be repeated over a large length of time. Ideally the core infrastructure and basic offerings of the facility will be self-sustainable, that is to say that maintenance and basic services don't require constant cash injection from the European Commission or national governments to remain operational. This is obviously beneficial in that this money can be invested elsewhere. In addition it motivates efficient management and a user-focused approach. However, research needs public funding, and on the other hand stimulating and enabling small and young businesses to evolve call for favourable incubation conditions. An encouraging PPP model is most likely a solution for effectively managed dynamic and up-to-date facility that serves academy and different-sized business alike.
- FIRE Office studies different opportunities and develops mechanisms to contribute FIRE Organisation sustainability benefiting members in the long term. An important asset in this is enabling vivid exchange of ideas and fostering cooperation within the network, as well as making widely known the results of the members' efforts.

4 Conclusions

FIRE is a 55 million euro investment only in its first phase within FP7, roughly 70 million euro more in the second round. The roots are longer in FP6 projects that created the network and built prototypes, not to mention various national initiatives setting up experimental facilities as well. Surely FIRE is best value to the European taxpayers when securing its sustainability, the maximum return on investment in its usage and further development beyond sporadic project life-times. FIRE landscape is heterogeneous and operations to the date dependant on fragmented project funding. It is impossible to create a steady demand for facilities financing the maintenance and evolving offerings of FIRE, if the guarantee of the facilities existing on day X in the first place cannot be given. This deliverable discusses the services needed to be offered by such an organisation that hosts the FIRE initiative enabling its sustainability and accessibility to the resources that FIRE facilities offer.

FIRE has already well achieved creating name and visibility, recruiting forces to promote FIRE concept. Policymaking has and will be influenced on national, European and global level to foster and enable accessibility, sustainability, effective development of FIRE activities. Funding mechanisms vary greatly on different scopes of activities and are challenging to match the different needs of different FIRE elements. Yet synergies can be found based on other criteria as well, and cross-federation activities will also play a role in the future when more and more attention will be paid on multi-disciplinary and systemic approach.

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References

- [1] D3.1 Draft Governance Rules for FIRE Initiative