IST-6th Framework Programme (EOI.FP6.2002)

Expression of Interest

(Priority 1.1.2 - Information Society Technology)

LAFIS - LAying the Foundations for the Information Society (Integrated Project)

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1 Description

Free Software – sometimes also referred to as "Libre software" or "Open Source Software" ¹ – is best defined by the following four freedoms:

- 1. freedom: The freedom to run the program, for any purpose.
- 2. freedom: The freedom to study how the program works, and adapt it to your needs. Access to the source code is a precondition for this.
- 3. freedom: The freedom to redistribute copies.
- 4. freedom: The freedom to improve the program, and release your improvements to the public, so that the whole community benefits. Access to the source code is a precondition for this.

Free Software provides a new concept, a new discipline as a stable basis for the information age and the knowledge economy. Its working principles are changing the IT sector towards a more stable, lasting and sustainable approach with higher dynamics and increased efficiency.

Any region adopting Free Software on a larger basis can benefit in terms of

- Greater independence from foreign interests
- Increased sustainability
- Freedom from foreign mono- and oligopolies

¹For reasons that can be found online at http://fsfeurope.org/documents/whyfs.en.html, this document will use Free Software as the preferred term.

1 DESCRIPTION 1.1 Rationale

- Alternative hard- and software possibilities
- Strengthened domestic market and local industries
- Better cooperation between research and economy
- Encouraged transdisciplinary research
- Better protection of civil rights

For a more detailed explanation, please see the "Recommendation of the Free Software Foundation Europe (FSF Europe) and supporting parties for the Proposal for a Decision of the European Parliament and of the Council concerning the rules for the participation of undertakings, research centres and universities and for the dissemination of research results for the implementation of the European Community framework programme 2002–2006" of April 30th, 2002, ² in which the FSF Europe with support of about 50 European companies, research institutes and associations explains in more detail why and how Free Software offers these advantages.

1.1 Rationale

Software is the lifeblood, medium and fundament of the information society and knowledge economy. Therefore, providing and furthering the strongest and most durable infrastructure has to be a goal of any region willing to participate in the information age.

Because of its significant advantages, it is obvious that the first region to adopt and support Free Software on a larger scale can profit enormously and get a head-start into the information society.

Other regions are beginning to get ready to capitalize on these advantages, as – for instance – the recent activities in Peru have shown. ³

Europe, however, is given a uniquely favorable position to become the global leader in the Information Economy due to its vibrant Free Software community. It has already begun taking small steps in this direction within the 5th Framework Programme that should be built upon **now**.

LAFIS intends to promote an Integrated Project to solve problems and close gaps which are present or will arise in Free Software development and production. In doing so, it will complete the infrastructure needed for global mass adpotion of Free Software in Europe by end-users, companies, governmental institutions etc.

Through this, LAFIS will lay the foundations for a European information society.

²Online at http://fsfeurope.org/documents/fp6/.

 $^{^3}$ For reference, please see the letter by the Peruvian Congressman Villanueva. Mirrored in several places like http://pimientolinux.com/peru2ms/.

1 DESCRIPTION 1.2 Objectives

1.1.1 Issues with integration of Free Software into FP6

Although the 6th Framework Programme and Europe in general would profit immensely from the mass-adoption of Free Software, the current structure of the FP6 makes it difficult to provide adequate support for Free Software. There are several reasons for this that we would like to bring into the FP6 thought process.

First of all, Free Software is not limited to a single domain or thematic area, its positive effects transcend research disciplines, markets, society.

The Free Software paradigm changes the workings and rules of software towards a climate that rewards cooperative efforts and stronger integration. This sort of climate change, although very obvious, is hard to quantify.

The paradigms are shifted away from a supply-driven IT industry towards a demand-driven model. In other words: The user truly becomes a determining factor. Therefore the direction of important Free Software projects is often hard to predict. Demand may overrule the ideas of supply and give the project a new direction. This very positive effect – some people go as far as calling it "collateral use" – makes Free Software harder to predict.

Another difficulty poses the definition of a "researcher." The classical "researcher" in IT would probably be a developer, but every other participant (interface designers, usability testers and so on) in a software project could likewise and reasonably argue to be seen as a "researcher."

Free Software follows an enabling paradigm. It empowers people, companies, organizations, governments. This means that the quantification of a "researcher" is even less solid. The best way might be to differentiate by dedication and amount of contribution.

And last but not least: Players in the Free Software field can currently not be judged by their finances. Competence, not money is the most important capital of Free Software players today. Although this is likely to change with a greater adoption of Free Software, it is a problem we face in relation with the FP6.

The "Funding by size" paradigm is one that is likely to fail for Free Software, because in the current situation it would usually further the least competent parties.

These problems should be addressed and discussed to find a solution that will allow Europe to capitalize on the advantages of Free Software in the best and most efficient way.

1.2 Objectives

The objectives of LAFIS are finding and completing powerful solutions for fundamental technical and technological problems, fill strategically important gaps in Free Software and to promote it along with the ethical principles that underlie its production towards mass adoption in every information technology field as the preferrable solution.

Some current gaps, needs and problems are:

- 1. Create and extend complete Free Software support of thematic areas; for instance:
 - Multimedia
 - Secure Email
 - Small/medium/large size company automation; including CRM, ERP, Workflow-Management.
- 2. Where applicable: Create "Drop-In-Solutions" for these areas.
- 3. Extend usability through creation of
 - More and better documentation.
 - Better, easier, more intuitive and user-friendly documentation tools.
 - Better, more complete databases of Free Software applications and supported hardware.
 - Usability schemes and ergonomy studies.
- 4. Extended hardware support.
- 5. Maintenance of crucial "orphaned" applications.⁴
- 6. Development, maintenance and support of Free, patent unencumbered formats and protocols.
- 7. Identification and solution of other problems and needs that may arise.
- 8. Comment: Anything else that you feel should be in here?

LAFIS main objective is to find global and optimal solutions to such problems, this way fostering the mass adoption of Free Software by single users, companies and institutions. This implies also the organisation of sub-projects concerning dissemination, training and demonstration events.

1.3 General approach to achieve the objectives

LAFIS approaches the objectives by assembling a consortium of the most knowledgeable and strongest European players in the Free Software field to coordinate

1. multiple sub-projects devoted to research and development in the fields touched by the problems listed in section 1.2; these projects will be designed and scheduled in time to achieve the most efficient and productive development sequence.

⁴ "Orphaned" applications are Free Software programs which have been abandoned, for various reasons, by their maintainer(s). Some of them are key elements and their maintenance can be considered a crucial strategic necessity.

- 2. a common development, announcement and advertising ground for all sub-projects mentioned in 1.
- 3. the organisation of dissemination, training and demonstration events to promote and show Free Software in the appropriate contexts and facilitate its adoption.
- 4. the maintenance of a European platform for coordination and cooperation in the objectives described above.
- 5. Comment: Anything else that you feel should be in here?

The purpose of this approach is to give the European Free Software community an active and efficient way of getting involved in essential solutions to current problems of strategic interest.

2 Need and Relevance

Software has not only become a seminal economic and cultural property, it also provides the grounds upon which the information society and economy will be built.

Those who depend on foreign interests to uphold their own economy, communication, education and research will most likely not become key players in the information age. Becoming and remaining independent from foreign hardware and software oligopolies is a crucial step towards a sustainable and lasting approach.

As laid out in the recommendation referenced on page 2 in section 1, Free Software offers protection from foreign and internal hardware and software monopolies, encourages freedom of markets, protects privacy and therefore trust in information technologies, furthers research and education and empowers all Europeans to become active participants in the information society.

Through LAFIS, Europe will not only gain the necessary foundations for the desired knowledge economy, it will also make a leap towards becoming the global leader and region of competence for these technologies.

3 Scale of Ambition and Critical Mass

The main objective of LAFIS is to find optimal answers for the needs arising out of the shift towards a knowledge society as described in section 1.2. Many of these solutions have not yet been found, nor can they be found in the current development trend of Free Software. Finding them requires fundamented research and development, which would best be done within a the organization of an integrated project of the size and partnership as outlined in the 6th EC Framework Programme. As such, the ambitions of LAFIS are:

- 1. push the technical solutions in Free Software beyond the final threshold to allow addressing any problem with the advantages of Free Software. Achieving this result would bring enormous benefits in terms of
 - a) macro-economic benefit: most of the economics related to software (which are nowadays lead by countries outside the EC) would turn back into European Countries, with an increase of investments and jobs in Europe;
 - b) macro-economic benefit: currently, the whole European IT industry is utterly dependent on foreign oligopolies that can shut down parts or all of the European IT industry should this seem politically or economically useful. Free Software will eliminate this dependency;
 - c) economic benefit: the efficiency of the economic model of Free Software would provide societies with a greater wealth of services at a fraction of the total costs involved today;
 - d) economic benefit: because of the freedoms granted, Free Software is the most secure IT investment possible today. Bringing companies security in their IT investments will allow them to invest more heavily in other areas;
 - e) social benefit: Free Software secures the capability of every European citizen to participate and get active in the information society;
 - f) social benefit: through its principles of cooperation, transparency and ethics, Free Software helps creating an overall computer-literacy that will benefit a climate of democracy and cooperation;
 - g) social benefit: a shift towards Free Software would raise consciousness for the issues raised by the information age.
- 2. give Europe a head-start into and leadership in the information society; as stated elsewhere, Europe is in a uniquely favorable position to achive this position: an Integrated Project like LAFIS seems like the best way of building the foundations for this role.
- 3. Comment: More ambitions here?

More details can be found in the recommendation referenced on page 2 in section 1.

4 Integration

The objectives stated in section 1.2 on page 3 will best be reached through the following activities:

- 1. horizontal and interdisciplinary research (research and development will be conducted in parallel on several aspects, leading to synergetic effects and communication exchange between several sub-projects)
- 2. creation of template solutions for special industries

- 3. dissemination and training activities (including specialised and non-specialised training)
- 4. demonstration activities to show Free Software in action in different contexts, in particular in large companies and institutions
- 5. global coordination and management of these activities

In order to reach these objectives and to set up these activities, a consortium of the most knowledgeable and most experienced Free Software players in Europe will be constituted, including

• Free Software Foundation Europe (FSF Europe)

Founded in 2001, the FSF Europe makes up the global Free Software Foundation network together with its sister organizations, the Free Software Foundation North America and the Free Software Foundation India.

The FSF was originally founded in 1985, which makes it the most experienced organization in the field. It maintains the most widely accepted definition of Free Software and is responsible for the GNU General Public License (GPL), the license under which more than 50% of all Free Software is being released.

Examples for recent activities of the FSF Europe are participation in the expert workshop of the UK "Commission on Intellectual Propery Rights" and partnership in the EU project "AGNULA" (IST-2001-34879). More information available at http://fsfeurope.org.

• Alcove, Paris, France

Premier European company providing professional Free Software services since 1996. More information available at http://www.alcove.com

• Alcove Germany, Bonn, Germany NEED DESCRIPTION HERE. More information available at http://www.alcove.com/de/

• Associação Nacional para o Software Livre (ANSOL), Portugal

Free Software association furthering Free Software in Portugal. More information available at http://www.ansol.org

• Centro Tempo Reale, Firenze Italy

A center devoted to music research, production and education. Coordinator of the AGNULA project IST-2001-34879 http://www.agnula.org. More information available at http://www.centrotemporeale.it

• LinuxTag e.V., Germany

Free Software association furthering Free Software through conferences and exhibitions like LinuxTag, the largest and most important exhibition and conference in Europe, which covers Free Software and GNU/Linux. More information available at http://www.linuxtag.org/

• Prosa Progettazione Sviluppo Aperto S.r.l., Padova, Italy

A totally Free Software based company whose mission is to realize products and services to promote GNU/Linux an other Free Software usage in professional and enterprise environment. More information available at http://www.prosa.it

• Verein zur Förderung Freier Software (FFS), Austria

Free Software association furthering Free Software in Austria. More information available at http://www.ffs.or.at

• Verein zur Förderung Informationen und Software e.V. (ffis), Germany Free Software association furthering Free Software and information in Germany. Founded in 1999 ffis supports developer meetings, exhibition and conferences, tutorials, workshops and software development. More information available at http://www.ffis.de/

• VIPS Lab, Verona, Italy

The VIPS Lab. is devoted to research in computer vision, pattern recognition, image and sound processing, and it fosters free software use and development in these fields. It coordinates the SOb project IST-2000-25287 (http://www.soundobject.org), and it is involved in the ARROV project (http://arrov.disi.unige.it/) as well as in other national research and industrial projects. The VIPS Lab. organized the COST-G6 Conference on Digital Audio Effects in 2000. More information available at http://vips.sci.univr.it

• Comment: Who else?

Comment: These are some partners I would like to see (could imagine seeing) in the project with some sample descriptions of the partners. Neither is the complete/final, nor is there "official" confirmation for the participation of this partner. People from these companies/organizations/institutes: Please rewrite your description appropriately, these are just ideas. Also please let me know whether you want to participate. :)

• Association Pour la Promotion et la Recherche en Informatique Libre (APRIL), Paris, France

Free Software association furthering Free Software in France. More information available at http://www.april.org

• Associazione Software Libero (AsSoLi)

Free Software association furthering Free Software in Italy. More information available at http://www.softwarelibero.it

• Association Electronique Libre (AEL), Brussels, Belgium

Free Software association furthering Free Software in Beligum. More information available at http://www.ael.be

• Association For Free Software (AFFS), UK

Free Software association furthering Free Software in the UK. More information available at http://www.affs.org.uk

• Comment: Should Alcove Germany also be on the list as a separate entity?

• Easter-Eggs, Paris, France

Company based entirely on Free Software. Focused on GNU/Linux support and solutions. More information available at http://www.easter-eggs.com

• Förderverein für eine Freie Informationelle Infrastruktur e.V. (FFII), Munich, Germany

Association furthering Free Software infrastructure in Germany. More information available at http://www.ffii.org

• g10 Code GmbH, Düsseldorf, Germany

A company based entirely on Free Software. Focused on cryptography, privacy and security. Home of the "GNU Privacy Guard" (GnuPG), the only supported implementation of the OpenPGP standard. Has experience working for the German government. More information available at http://www.g10code.de

• Intevation GmbH, Osnabrück, Germany

A company based entirely on Free Software. Focused on strategic Free Software consultation, project coordination and Geographical Information Systems (GIS). Publisher of the "FreeGIS" CD and a global leader in the field of Free Software GIS systems. Has experience working for the German government. More information available at http://www.intevation.de

• Lolix SA, Paris, France

A company based entirely on Free Software. Running the Free Software developer job-market "Lolix." More information available at http://www.lolix.com

• Luminas Internet Applications Ltd, UK

A company based entirely (?) on Free Software. Focused on providing internet solutions. More information available at http://www.luminas.co.uk

• MandrakeSoft S.A., Paris, France

One of the premier GNU/Linux distributors. More information available at http://www.mandrakesoft.com

• Nevrax SA, Paris, France

A company based entirely on Free Software. Focused on creating the next generation of massively multi-user persistent worlds. Aiming to build the finest platform for digital environments. More information available at http://www.nevrax.com

• Organization for Free Software in Education and Teaching (Ofset), France Globally active Free Software organization promoting the use of Free Software in the educational area. More information available at http://www.ofset.org

• Prosa, Srl, Padova, Italy

A company based entirely on Free Software. Focused on GNU/Linux other Free Software solutions. More information available at http://www.prosa.it

- [wearlab]@TZi, Bremen, Germany
 Part of the TZi (Technologie-Zentrum Informatik / Center for Computing Technologies)
 of the University of Bremen, Bremen, Germany. One of the global leaders in Free Software mobile computing solutions. More information available at http://www.wearlab.de
- Comment: I will have forgotten more than one, but WHO?
- Comment: What about the SuSE and possibly one or two of the European Red Hat branches?
- Comment: There are a few more I can think of that are run by people that understand Free Software and would clearly listen to us, but their business models sometimes are not as clean as we would like them to be. The question is: Do we want them in or not? There are arguments for both...