OASiS

Open the Access to Life Science Infrastructures for SMEs

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Deliverable 2.2
List and Mapping of 10 former initiatives

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Authors	Denis Tregoat (Photonics Bretagne)
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Description	This deliverable presents a list of 10 former initiatives and compares the main objectives to those of OASIS.

SEVENTH FRAMEWORK PROGRAMME

This OASIS project in funded by the European Union under the Information and Communication technologies (ICT) theme of the 7th Framework Programme.

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1. Introduction

The objective of the present action is to capitalize on running or completed EC funded projects by engaging connection with outer partners. Exchange of useful information such as relevant databases is also expected.

2. List of 10 former initiatives

10 initiatives (Table 1) have been selected with respect to various criteria (location, covered geographical area, type, main objectives, status, etc.). All of them have been financed by EC funds at least in their launching phase.

Acronym	Type of initiative	Status
ActPhast	IP - Access CenTre for PHotonics innovAtion Solutions and Technology support	Running
Photonics4Life	NoE - European Network of Excellence for Biophotonics	Running
CoWin	CSA - Support action dedicated to smart miniaturized systems	Ended
Aspice	CSA - Action to Support Photonic Innovation Clusters	Running
EATRIS	CSA - European Infrastructure for Translational Medecine	Running
Biophotonics Plus	CSA - Joint initiative of participating countries	Running
ShareBiotech	INTERREG IVB - Life Science Technological Core Facilities	Ended
France-Bioimaging	Large-scale National Research Infrastructure - Part of Euro-Bio imaging ESFRI	Running
Biogenouest	Trans-regional French Core Facility Network	Running
NAIVI	Regional Network for Advanced In Vivo Imaging	Running

TABLE 1 - SELECTION OF 10 FORMER INITIATIVES

IP: Integrated Project
NoE: Network of Excellence
CSA: Coordination and Support Action
ESFRI: European Strategy Forum on Research Infrastructures

Although 2 projects are now completed, they are still active thanks to the networks that have been created during their funded initial phase, i.e. regional organizations such as BioGenOuest for ShareBiotech or private national agencies such as Yole Development for CoWin (see contact on websites via the links attached on their acronym in Table 1).

3. Mapping of 10 former initiatives

3.1. Geographical aspect

Acronym	Regions / States covered	Contact (location)
ActPhast	Europe	Hugo Thienpont (VUB, Brussels)
Photonics4Life	Europe	Juergen Popp, Thomas Mayerhoefer (IPHT Jena)
CoWin	Europe	Geraldine Andrieux (Yole Dvt, Paris)
Aspice	Europe	Anke Lohmann (KTN, Horsham)
EATRIS	Europe	Giovanni Migliaccio (Amsterdam)
Biophotonics Plus	Catalonia, Flanders, Germany, Israël, Latvia, Tuscany, UK	Katharina Flaig (VDI Düsseldorf)
ShareBiotech	France, Portugal, Ireland, Spain	Celine Queron (CRITT Santé Rennes)
France-Bioimaging	France	Charles Kervrann (INRIA) Marc Tramier (MRic)
Biogenouest	West France (Bretagne, Pays de Loire)	Jocelyne Le Seyec (CRITT Santé)
NAIVI	Marseille	Hervé Rigneault (Aix Marseille University)

TABLE 2 – LOCATION AND COVERED AREAS OF THE 10 SELECTED INITIATIVES

70% of the selected initiatives are covering the EC either totally or partially (%). National and regional initiatives concern France exclusively for convenience with respect to proximity. Contact persons from the 10 initiatives have also been identified for further interaction with OASIS partners.

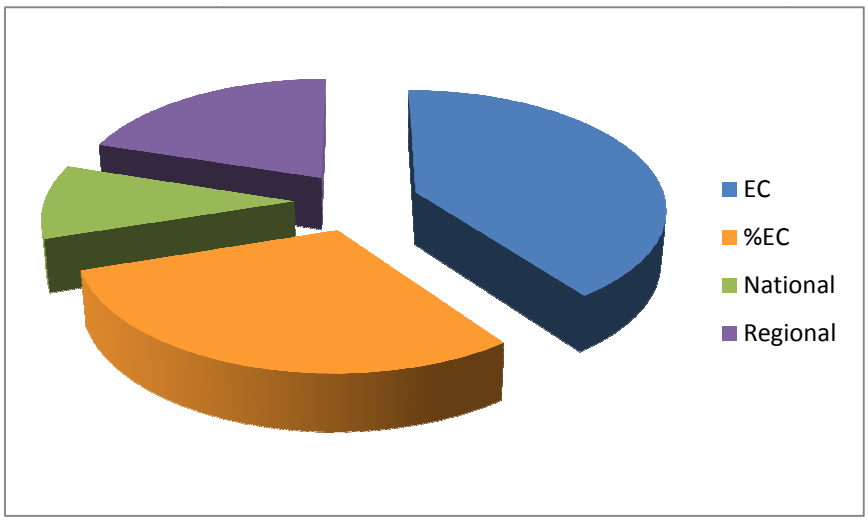

FIGURE 2 – GEOGRAPHICAL REPARTITION OF THE COVERING AREAS OF SELECTED INITIATIVES

3.2. Benchmarking

Acronym	Main objectives
ActPhast	To support and accelerate the innovation capacity of European SMEs by providing them with direct access to the expertise and state-of-the-art facilities of Europe's leading photonics research centres, enabling companies to exploit the tremendous commercial potential of applied photonics.
Photonics4Life	To establish a European platform on Biophotonics for both academia and industry and to provide a coherent and interdisciplinary framework for research in the strongly fragmented field of Biophotonics in Europe.
CoWin	To turn R&D projects into commercial success by leveraging the value of R&D projects in smart systems and facilitating interaction between public and private investment.
Aspice	To develop a reference guide of good practices and support cooperation and collaboration between relevant stakeholders. Particular emphasis will be given in profiling and leveraging the value/supply chains in two societal challenges, namely 'Healthcare in an Aging Society' and 'Safety and security for Europe's citizens'.
EATRIS	To take translation of scientific discoveries into medical products more effective to improve human health and quality of life. To support them in developing their biomedical discoveries for novel preventive, diagnostic or therapeutic products up to clinical proof of concept.
Biophotonics Plus	To stimulate and fund R&D projects which will translate existing biophotonic technology and methods into appliances and put them into clinical, medical or industrial practice.
ShareBiotech	To strengthen the biotechnology sector within the Atlantic Area. It also aims to develop knowledge transfer between companies and research centres.
France-Bioimaging	To deploy a distributed biological imaging infrastructure in a coordinated and harmonized manner. French part of Euro-BioImaging.
Biogenouest	To promote education and research for the economic development in the fields of Marine biology, Agriculture/Food-processing, Human health and Bioinformatics.
NAIVI	To gather all modern bioimaging techniques, including advanced innovations in Magnetic Resonance Imaging (MRI), nuclear medicine and nuclear physics, optics/biophotonics, MagnetoEncephaloGraphy (MEG) and many areas of image-guided therapy (e.g. gamma knife).

TABLE 3 – MAIN OBJECTIVES OF THE 10 SELECTED INITIATIVES

ActPhast (Access to Micro-Optics Expertise, Services and Technologies) is an on-going FP7 Coordination and support action targeting at providing companies with timely, cost-effective, investment-free access to micro-optics expertise, services and technologies. The access of predominantly SMEs to leading edge technology and knowledge provided by the ACTPHAST partners is realized by them through focused collaborations in so called user projects and through hands-on training of industry staff in highly advanced laboratories of the ACTPHAST research institutions. As such ACTPHAST intends to be a major driving force to sustainably support European industry in keeping a leading position in micro-optic and micro-photonic

enhanced products, thus strengthening the competitiveness of Europe and creating new jobs.

Comment: ActPhast is not strongly involved in Biophotonics. Contact has been taken with H. Thienpont and the principle of a collaboration with OASIS is acted.

Action: Meeting with H. Thienpont.

Photonics4Life is a European platform on Biophotonics emerging from the Photonics21 platform. Its objectives are to define a European strategy in Biophotonics, increase cooperation in Biophotonics R&D, coordinate national funding activities and make decision makers aware of the impact of Biophotonics for Europe with respect to future societal challenges. The project is no more funded by EC but the network is still running.

Comment: Photonics4Life is strongly involved in Biophotonics, but does not focus on SMEs needs. The cartography of Biophotonics facilities may be useful for the OASIS project, contact has been taken in that way with J. Popp.

Action: Meeting with T. Mayerhoefer or J. Popp.

CoWin was designed to optimize the value creation from FP6 and FP7 research projects results, in the field of MicroNanoBio Systems and to strengthen European Competitiveness in smart system. A broad range of competencies has been developed through collaborations of world-class research teams within FP programs, but commercialisation remains a difficult task. CoWin's mission was to facilitate the take-up of advanced technologies in previous FP projects.

Comment: CoWin is not exclusively dedicated to Photonics technologies. The project is ended.

Action: Contact G. Andrieux (Yole Development).

ASPICE is a FP7 project promoting international cooperation among photonic clusters. It describes the value chain in both Healthcare and Security and Defence markets in Europe to allow development of business and technological collaboration in these areas.

Comment: ASPICE is exclusively dedicated to Photonics technologies and SMEs needs within clusters. A first contact with A. Lohmann allows to get a cartography of EC clusters involved in healthcare and photonics.

Action: Exploitation of the Aspice cartography and exchange with Aspice partners about the reference guide of good practices once established.

EATRIS (European Advanced Translational Research Infrastructure in Medicine) is a key infrastructure helping to turn biomedical research into useful therapies.

EATRIS is the first research infrastructure in the Biological and Medical Sciences to receive the so-called ERIC status ('European Research Infrastructure Consortium'), a legal status

created specifically for the setting up of joint research facilities at a European level. EATRIS is building links with users from academia, the public sector and industry, creating a strong consortium of translational centres across Europe. Some sixty prominent academic institutions, which include leading biomedical translational research institutes, are part of the EATRIS initiative. Members of EATRIS-ERIC are the Czech Republic, Denmark, Estonia, Italy, the Netherlands and Finland. France and Spain also participate as observers

Comment: EATRIS is not strongly involved in Biophotonics.

Action: Contact G. Migliaccio.

Biophotonics Plus aims to consolidate the respective funding activities in the participating countries and regions and to achieve the best possible exploitation of the resources and the innovative potential of European industry and science. This is achieved through a joint call primarily focusing on Biophotonics methods and applications that are translatable into products on the short term. On the one hand, already existing Biophotonics technology is further developed, refined and combined to the stage of pre-commercial demonstrators which should easily be convertible to commercial products. On the other hand, seed funding is provided to promising application-oriented approaches at an early stage of the value chain.

Comment: Biophotonics Plus objective is close to the OASIS one, but with a different approach, i.e. a joint call procedure.

Action: Identification of a contact person.

ShareBiotech project aimed to make the access to technological core facilities easier for researchers and companies – in particular SMEs – working in the fields of human health, nutrition, agriculture/food-processing, cosmetics, marine biology and environment. It has allowed SMEs of the participating regions to overcome barriers related to the access to technologies, funding and market specificities in the partner countries. These SMEs were granted to initiate collaborations within the partner countries. Incentives may cover travel expenses, expert advice, technological service offers or "small" collaborative projects.

Comment: ShareBiotech does not focus on photonics technologies but the market sectors and objectives are close to the OASIS one. The project is ended and a mapping of Biotech facilities in 4 EC regions is now available.

Action: Contact a local partner to learn about existing facilities and best practices.

Other projects like **France-Bioimaging** (part of Euro-Bioimaging) organize the transfer of knowledge and the collaboration mainly at the R&D level between academic platforms and large scale facilities. They will be solicited in OASIS project to enlarge the analysis in the interaction SME/ facilities and to work on the dissemination of tools and services designed under OASIS Work packages.

Comment: France-Bioimaging is a well-structured network of public platforms with services opened to SME's. Some platforms might be in the scope of OASIS.

Action: Identification of eligible facilities and meeting with the coordinator of the project.

Biogenouest is a regional (west France) network of life science facilities. Research programs are undertaken in the fields of Marine biology, Agrifood, Human health, and Bioinformatics. Biogenouest coordinates 31 technological facilities in both the Bretagne and Pays de la Loire regions and stimulates the emergence of strategic projects for higher education and research, as well as for the economic development in related fields.

Comment: Biogenouest is a well-structured network of public platforms connected to hospitals and offering services to SME's. The principle of a close collaboration with OASIS is accepted.

Action: Identification of eligible facilities.

NAIVI is adjacent to very performing clinical departments of radiology and nuclear medicine and benefits from a multidisciplinary network of over 20 research laboratories working in the field of in vivo imaging. NAIVI is the Marseille node of France Life Imaging (FLI), the national infrastructure for multimodal in vivo imaging, which is connected to Euro-Bioimaging. It coordinates the research activities in multimodal in vivo imaging conducted in the Marseille/South East of France area.

Comment: NAIVI structuration is on-going and some facilities are in the scope of OASIS.

Action: Identification of eligible facilities.

The 10 selected initiatives may be divided in 4 types of operations:

- Long-term (technology roadmap)
- Middle-term (economic perspective)
- Short term (business perspective)
- Very short term (technology transfer perspective)

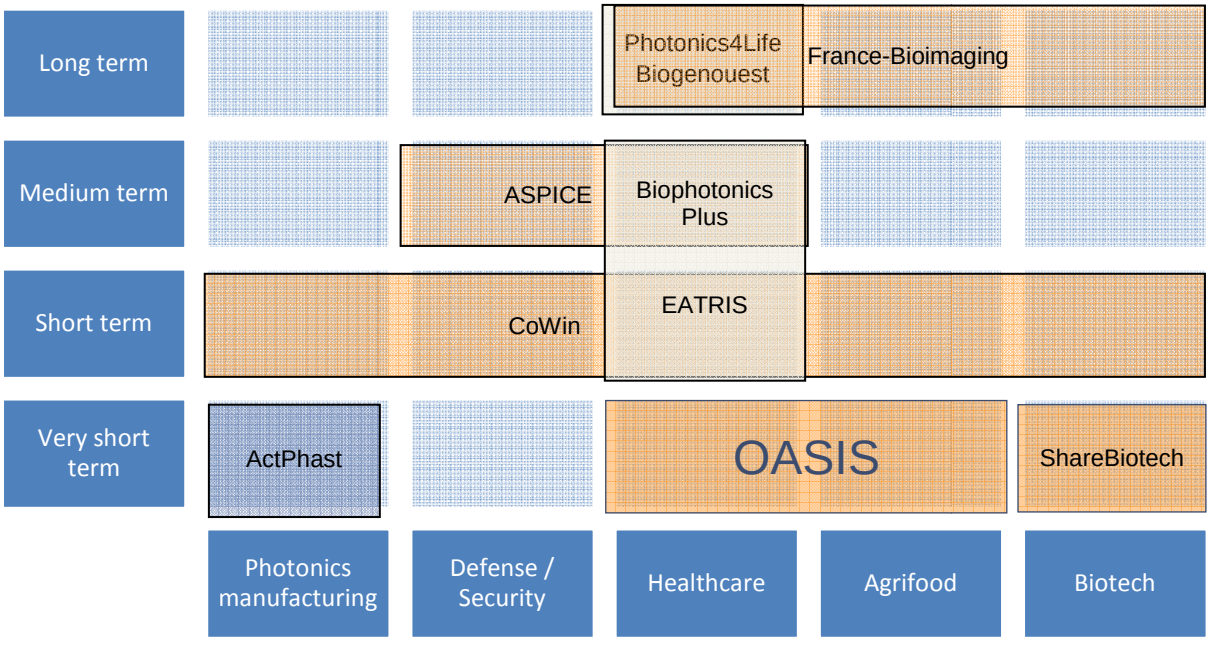

FIGURE 3 - OASIS POSITIONING COMPARED TO OBJECTIVES OF 10 SIMILAR INITIATIVES