



# IST SSA PROJECT FP6-2004-IST-5-34359

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Project full title: Network European Software and Services

Initiative - Support Office Team

# **FINAL ACTIVITY REPORT**

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## **Table of Contents**

F	INAL	ACTIVITY REPORT	1
1	E	recutive summary	4
2	Ва	ackground of the NESSI initiative	6
	2.1	Mission	6
	2.2	Scope	6
	2.3	Target users / sectors in business and society	7
	2.4	Overall benefits for business and society	7
	2.5	Positioning in a global context	8
	2.6	Contribution to standardization and interoperability issues	8
	2.7	Business scenarios	9
3	NI	ESSI-SOFT ROLE AND ACTIONS	10
	3.1	Advances	10
	3.2	Summary of NESSI-Soft achievements	11
4	Tł	ne NESSI Holistic Model	13
5	NI	ESSI-Soft's detailed achievements	15
	5.1	Presentation	15
	5.2	Refining NESSI's vision and strategy	15
	5.3	NEXOF & NESSI Strategic Projects	17
	5.4	The role of NEXOF-RA	18
	5.5	Adoption	19
	5.	5.1 Adoption strategy	19
	5.	5.2 Adoption strategy implementation	
	5.6	Disseminating NESSI	
	5.7	Fostering participation in NESSI through WGs or committees	22
	5.8	NESSI – an organised platform with structured governance	24
		8.1 Overview	
_		8.2 NESSI Office – The central NESSI support organisation	
6	LI	st of NESSI-Soft partners and members	27



	6.1	Membership	27
	6.2	Partnership	28
7	Tł	ne way forward	29
8	A۱	vailability of results	32
9	C	onclusion	33
Α	cron	vms	34

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## 1 EXECUTIVE SUMMARY

Now that the Internet has become a commodity for professional and everyday life, businesses and citizens aspire to access ICT-based services in a more seamless, natural fashion. Target sectors range from public health, government and educational services to energy, transport, skills and mass services to individual users.

This demand defines a new global system, in which every electronic medium will support the provision of services. This creates the need for an open, service-oriented approach, with the Internet as its underlying infrastructure and designed to meet the expectations of a service-oriented economy.

Europe aims to play a major role in this shift towards an Internet of Services. The Network European Software and Services Initiative (NESSI) was launched in September 2005 to support this shared vision, with the mission of developing a strategy for software and services driven by a common European research agenda.

Three years on, NESSI is promoted by 22 industrial and academic partners and a community of 500 members from 300 organisations.

NESSI represents a major advance: for the first time ever, industry and academia have joined forces to define a common service-oriented strategy and a target deliverable – NEXOF, the NESSI Open Service Framework.

From its initial vision, NESSI has achieved major results:

- drawing-up of a NESSI Strategic Research Agenda;
- definition of NEXOF: the NESSI Open Service Framework;
- design of the contribution process to gather the widest possible support;
- definition of application scenarios;
- focused workgroups on services, technology or applications



The NESSI-Support Office Team (NESSI Soft) played a major role in supporting NESSI during its foundation years from April 2006 to March 2008.

NESSI-Soft notably achieved the following:

- refining and Implementing NESSI's vision
- linking with national NESSI platforms across Europe
- creating NESSI events disseminating NESSI information through websites, newsletters or conferences
- moving beyond NESSI
- fostering participation to NESSI

As it supported the early phases of NESSI, NESSI-Soft remained extremely focused on ensuring that NESSI's works would meet the expectations of target sectors in business and society, while protecting existing investments and leveraging existing standards.

NESSI-Soft supported the establishment of collaboration between NESSI and other European technology platforms such as eMobility and Network Electronic and Media (NEM).

Since it considers interoperability a major goal for the future Internet of Services, NESSI promotes or extends the use of existing standards through the NESSI Standard committee. Its policy is only to promote a new standard when existing ones do not meet requirements.

The target users of the NESSI Open Service Framework, NEXOF, include software and application developers, systems integrators, technology and service providers, and private and public end-users, as NESSI foresees the emergence of new applications born of the exchanges between currently disconnected areas.

NESSI aims to establish a next wave of services in a global context, which will give service providers of all sizes the capability to launch new services more quickly. By using NEXOF-compliant infrastructures, NESSI backs public and private corporate users and increases their independence from a single provider, thus protecting their investments.



NESSI-Soft put the NESSI initiative on track for further development. NESSI is now set with the vision, the organisation, the research challenges and the ultimate objectives.

## 2 BACKGROUND OF THE NESSI INITIATIVE

#### 2.1 Mission

NESSI's mission is to develop a visionary strategy for software and services driven by a common European research agenda, where innovation and business are strengthened by:

- providing Europe's industry and public sector with efficient services and software infrastructures to improve flexibility, interoperability and quality;
- mastering complex software systems and their provision as serviceoriented utilities;
- establishing the technological basis, strategies and deployment policies to speed up the dynamics of the services eco-system;
- developing novel technologies, strategies and deployment policies that foster openness, through the increased adoption of open standards and open-source software as well as the provision of open services;
- fostering safety, security and the well-being of citizens by means of new societal applications, enhanced efficiency of industry and administrations, and competitive jobs, hence transforming the European economy into a knowledge-based economy and enabling the European software and IT services industry to attain a stronger global position. NESSI operates in the context of a wide continuum of information and communication technologies, and intends to collaborate closely with other global research initiatives.

# 2.2 Scope

Over the next decade, every electronic device will incorporate interaction capabilities supporting the provision of services to both devices and people within continuously changing scenarios, addressing specific business needs and situations in a continuum which defines a new global system.

This new system is no longer purely computer-based, nor is it focused mainly on exchanging information. On the contrary, ICT will increasingly play a role in



dynamically supporting the operations of businesses and the everyday life of citizens in a seamless, natural fashion.

Key properties underlying this evolution include openness, scalability, dynamism, proactiveness, uncoordinated governance and the absence of central control, and limited predictability. This evolution is reflected in the move to distribute solutions not as single software environments but as services – an evolution in which Europe aims to play a major role in order to move towards an Internet of Services.

# 2.3 Target users / sectors in business and society

NESSI's ultimate goal is to enable the next wave of services, by providing a new service framework – the NESSI Open Service Framework (NEXOF). It is aimed at freeing service developers and integrators from constraints linked to identification, security, interoperability, quality, privacy, etc.

Target sectors range from public health, government and educational services to energy, transport, skills and mass services to individual users. Beyond the transformation of existing domains, NESSI foresees the emergence of new applications born of the exchanges between currently disconnected areas.

Therefore, target users of NEXOF include software and application developers, systems integrators, technology and service providers, as well as private and public end users.

NESSI - enabling the next wave of services for

- ✓ service and software developers
- ✓ system integrators
- ✓ end users
- ✓ private corporations
- ✓ public administrations

# 2.4 Overall benefits for business and society

Service providers, whether SMEs or large organisations, will benefit from a faster time to market for new services through service infrastructures that offer industrial-grade quality.

For public and private corporate users, the availability of NEXOF-compliant infrastructures will provide a guarantee of current and future interoperability and



independence from a single provider with backing from the industrial community as a whole. In other words, *protecting their investments*.

NESSI – enabling the next wave of services to ensure

- ✓ faster time to market
- ✓ protection of mid- and long-term investment
- √ independence from a single provider
- √increased competitiveness of the European software and services economy

## 2.5 Positioning in a global context

At a general level, the question is not whether the delivery of software is shifting towards a service-oriented model, but rather *how* and *when* this evolution can be brought about so as to guarantee quality of service, ubiquitous operation and continuous availability. The services evolution relies on the Internet as an underlying infrastructure and needs the Future Internet to be in line with the requirements of a service-oriented economy.

New alliances between the traditional IT industry, telecommunication companies, mobile service providers, media corporations, suppliers of consumer electronics and search engine companies will drive the deployment of the Future Internet, to enable

- service platforms and front ends
- virtualized service delivery and real-time multimedia
- technology-independent standards for interoperability
- end-to-end solutions for instant, context-aware, personalized service creation

# 2.6 Contribution to standardization and interoperability issues

In an era of services, interoperability is the major goal – ensuring that services designed by different parties can blend seamlessly to create the environment that best fits user needs. Interoperability is a major reason why the industrial partners of NESSI teamed up; it is the central theme in the definition of NEXOF.



To achieve interoperability, NESSI relies on standards. NESSI's approach is to adopt existing standards and, when needed, adapt them to gear them more closely to their intended use. When, and only when, existing or evolving standards do not fulfil the required needs will NESSI promote a new one.

NESSI – enabling the next wave of *interoperable* services through

- ✓ existing standards
- ✓ extended standards

#### 2.7 Business scenarios

In NESSI's vision, the service approach coupled with service infrastructures such as NEXOF helps overcome existing limitations linked to incompatible databases, remote access to private information, security and privacy issues that hinder exchange of information, etc. The scenarios of the future take the service level beyond single corporations or administrations and open the door to end user personalization.



## 3 NESSI-SOFT ROLE AND ACTIONS

It is with this shared vision that the NESSI European Technology Platform was launched in September 2005. Three years on, NESSI is promoted by 22 industrial and academic partners and a community of 500 members from 300 organisations.

From its initial vision, NESSI has achieved major results:

- drawing-up of a NESSI Strategic Research Agenda;
- NEXOF concept: the NESSI Open Service Framework;
- identification of strategic projects and the design of the NEXOF contribution process to gather the widest possible support with a view to delivery;
- definition of application scenarios;
- organisation of working groups on service adoption, technology or applications.

The NESSI-SOFT FP6 Support Action supported the creation of the NESSI ETP, in collaboration with the NESSI bodies (Steering committee, Board, SRA Committee and Communication Committee).

#### 3.1 Advances

From 2006 to 2008, NESSI-Soft supported NESSI's goals and ambitions and contributed to:

- refining NESSI's vision and defining NEXOF and the NESSI movie on future scenarios.
- implementing the NESSI vision through the creation of Strategic projects
- linking with national NESSI platforms across Europe
- creating NESSI events
- moving beyond NESSI to reach out to the services community in the context of the Future Internet. In 2008, NESSI teamed up with four major ICT ETPs (eMobility, EPoSS, ISI and NEM) to propose ServiceWave, a new series of conferences designed as the meeting place for industry



- and academia. ServiceWave is also put together in collaboration with ICSOC, the International Conference on Service-Oriented Computing.
- fostering participation in NESSI through 14 active working groups: 10 technology-focused working groups, 2 adoption working groups dedicated to the SME community and to Open Source, and 2 application working groups on health and i-Government.
- disseminating NESSI over the past two years, NESSI has participated in over 160 events. Through its quarterly newsletter and an active information website, NESSI issues information not only to its 500 members but also to 1,300 active contacts.

# 3.2 Summary of NESSI-Soft achievements

#### **NESSI-Soft has**

- At content level
  - o delivered the NESSI Strategic Research Agenda;
  - defined NEXOF the NESSI Open Service Framework;
  - o initiated the NESSI research structure and strategic projects;
  - o defined user scenarios and the user strategy;
- At community level
  - established the NESSI Office;
  - o managed the open membership process;
  - o supported the creation of 15 working groups and committees;
- At visibility level
  - o organised 3 major NESSI events;
  - o participated in 160 events;
  - o created the NESSI Scenarios movie and the 2007 Interactive DVD;
  - o distributed 7 newsletters and 10 information flyers;
  - o implemented web and wiki support.

These achievements are described in detail in section 5 of this document.



The "contributing to NESSI" logo was devised during this period, highlighting how the NESSI ETP aims to build on a service community that is

- √involved
- **√**interested
- ✓ participative
- ✓ ready to deliver



Read on to find out more about how NESSI-Soft contributed to NESSI.



#### 4 THE NESSI HOLISTIC MODEL

From its initial mission and vision, NESSI identified major research challenges to be addressed in order to move closer to creating the "Internet of Services". These are:

- interaction with the service, which is: permanent (always available), seamless (available via all modes of communication), transparent (hiding the details of the technology), trustworthy (confidence that the service can be relied upon), and adaptable across a wide range of applications.
- management of services in a world that is open, dynamic and without centralised governance, and behaves in an unpredictable manner. This includes all aspects of lifecycle management: operational management, service design, service development and deployment, and service delivery assurance.

To succeed fully, technology research cannot be performed without a clear understanding of developments in the applications serving business needs in real contexts. European social challenges that attract major research and development efforts are health and government, but other sectors such as transport and mobility or energy efficiency show that the list can easily be extended and that service technologies are indeed fundamentally impacting many areas. NESSI SRA's recommendation is:

 to address these challenges in a multi-faceted way through technology research, development and integration as well as research on holistic service systems and their influence factors, research on the user perspective and, finally, explorative large-scale and long-term test-bed activities that will drive a new quality of European services enabled by ICT.

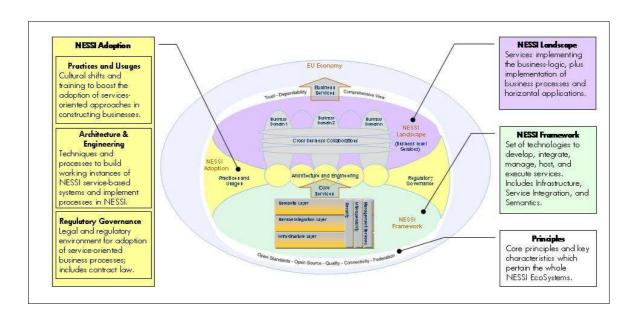
Transforming the Internet into services requires more than technology; this challenge can only be met using a balanced approach addressing simultaneously all angles of this transformation. NESSI models this transformation from a holistic viewpoint, in the context of an all-inclusive ecosystem in which the new economic models are developed. This viewpoint highlights the following areas:

- NESSI Framework ("NESSI Core"): software, ICT Architectures and ICT Infrastructures where data evolve into knowledge, and which helps humans coordinate the execution of complex tasks. This focuses on facilitating a cost-effective provision and seamless composition of services, supporting pervasive and ubiquitous application scenarios.
- NESSI Adoption ("The Art of NESSI"): socio-economic, human capital, public policy, and scientific foundations of the transformation to a European



- services economy, tightly coupled with the technology engineered in the NESSI Framework.
- NESSI Landscape ("Powered by NESSI"): business services and business processes implemented and deployed using the technology defined in the NESSI Framework, leveraging the socio-economic models defined in the NESSI Adoption.

#### **NESSI Holistic View**





## 5 NESSI-SOFT'S DETAILED ACHIEVEMENTS

#### 5.1 Presentation

Throughout the project lifetime, NESSI-Soft's partners supported NESSI in its goal of implementing the initial vision using a tool that was new for most of us: a European Technology Platform.

The achievements accomplished over the lifetime of NESSI-Soft are encouraging in terms of the effectiveness of the ETP model. These include

- definition of the overall strategy: why are the partners collaborating, what is the overall need, what are the benefits of contribution for industry and academia interest to contribute? Refer to the NESSI vision
- SRA formulation: what are we going to deliver, why, and to what extent?
   Refer to the NESSI SRA volumes
- SRA implementation: how are we going to deliver the SRA proposal? Refer
  to the NESSI Open Service Framework NEXOF description and the
  NESSI research structure.
- NESSI Adoption: what are we going to do to ensure that NESSI's approach
  is adopted by a majority of ICT stakeholders and for the benefit of users?
  How do we support collaboration across Europe and beyond? Refer to the
  user strategy, the SME and Open Source adoption activities, and the links
  established with national NESSI platforms

Activities are performed by NESSI Committees and Working groups and supported by the NESSI-Soft Partners and the NESSI Office.

# 5.2 Refining NESSI's vision and strategy

NESSI's overall strategy was defined by the Board and the steering committees. Position papers on research and the European software industry were also issued under their umbrella:

- Strategic orientation: ERA position paper,
- ETP position paper on Future Internet,
- European Software Strategy.

All these papers based their content on the three volumes of the NESSI Strategic Research Agenda, the definition of NEXOF and the NESSI movie on future scenarios.



These activities in turn were performed as a direct result of the NESSI Community, during the lifetime of NESSI-Soft and with its complete support.

Implementing and deploying the NESSI vision

The most important focus of NESSI is the delivery of NEXOF, the NESSI Open Service Framework. The framework includes many different areas, which are defined in the successive volumes of the SRA, with

- the NEXOF concept
- the research structure
- project ideas
- project collaboration

Research projects will contribute to NESSI strategy implementation, with the following already existing as of June 2008:

- 6 NESSI Strategic Projects: EzWeb, Master, NEXOF-RA, Reservoir, SOA4ALL, SLA@SOI.
- 3 NESSI Compliant Projects: TAS3, Compas, PrimeLife2.
- 3 Support Actions: NESSI-Soft, NESSI-Grid, NESSI-2010
- 1 Network of Excellence: S-Cube (outside NESSI but has established close cooperation)

The research structure that NESSI defined gives the research projects a clear framework:

	Role	Output	Recommended Consortia
Strategic Projects (NSP)	Main innovation: ensure coherence of NESSI Reference architecture in specific or crosscutting areas with advances in the state of the art  Critical to the success of NESSI	Major contributions to NEXOF conforming to the principles of open source and open standards  Active support for the operation of the NESSI Working Group structure	Partner leadership and commitment Working Group members
Compliant	Designed to cover a wide scope while minimizing risks  Designed in compliance	Selection from one of	No recommendation
Projects	with the NESSI vision and Strategic Research	the following (optional	



(NCtP)	Agenda	and not obligatory):	
	Compliance is self-assessed by the consortium using a proposed check-list available on the website.  NESSI does not intervene in the completion of the proposed check-list, which is left to the sole responsibility of each consortium, company or research institute.	Contribution to NEXOF (if included, should be compliant with rules of open source, open standards) Contribution to a commercial implementation of NEXOF Validation / demonstration of NEXOF implementation in a	
		focused application area	

#### NESSI-Soft

- contributed to the definition of the NESSI research structure
- ensured its dissemination
- maintained a link with the project communication representatives to ensure the information flow

# 5.3 NEXOF & NESSI Strategic Projects

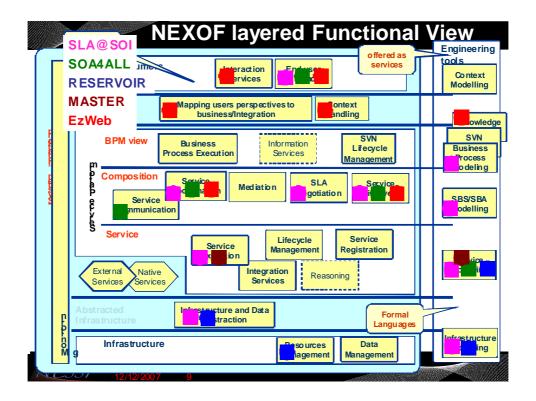
The NEXOF Framework is built using an open contribution model, managed in 2008 and 2009 by NEXOF-RA, an FP7 IP project.

Contributions come from many sources including the NESSI Strategic Projects, which deliver key elements of NEXOF. In this context, the most important technology areas are: trust, security and dependability; service-oriented infrastructure and SLA management framework; semantic web services, context management, front-end access and service composition.

NESSI's vision is being implemented through the creation of strategic projects that address research areas identified by the NESSI SRA;



## **Project contribution map: the NEXOF Functional View**



#### 5.4 The role of NEXOF-RA

Beyond the initial role played by NESSI-Soft, the operational collaboration between NESSI Strategic and Compliant projects will be managed and coordinated by NEXOF-RA, the NESSI Strategic Project dedicated to defining and delivering the NEXOF Reference Architecture.

NEXOF, NESSI's Open Service Framework, is an integrated, consistent and coherent set of technologies and associated methods and tools intended to:

- provide Europe's industry and public sector with efficient services and software infrastructures to improve flexibility, interoperability and quality;
- master complex software systems and their provision as service-oriented utilities;



- establish the technological basis, strategies and deployment policies to speed up the dynamics of the services ecosystem;
- develop novel technologies, strategies and deployment policies that foster openness, through the increased adoption of open standards and open source software as well as the provision of open services;
- foster safety, security and the well-being of citizens by means of new societal applications, enhanced efficiency of industry and administrations, and competitive jobs.

The overall ambition of the NEXOF project is to deliver a coherent and consistent open service framework, ranging from the infrastructure to the interfaces with the end users, leveraging research in the area of service-based systems to consolidate and trigger innovation in service-oriented economies. Moreover, NEXOF will be domain-independent and backed up by a sound methodology and tools to be properly instantiated into a broad range of application domains by a number of end-user communities (including large, medium and small enterprises) on different technologies.

NEXOF-RA, the NEXOF reference architecture, is the first phase of this strategic and challenging project. It aims to define an open framework reference architecture fostering and organising collaboration between Strategic or Compliant NESSI projects.

The deployment strategy is based on the setting up of a pan-European infrastructure network linking different laboratories, to test and validate compliance with NEXOF on one hand and deploy and validate NEXOF through scenarios on the other hand. This proposal is not currently being implemented but will be worked on in the coming two years.

# 5.5 Adoption

From the start, NESSI's vision included adoption as a major activity. It was clearly introduced in the NESSI holistic model, and NESSI-Soft has supported adoption activities throughout its lifetime.

The adoption strategy first identified the pillars, then moved on to implementation.

## 5.5.1 Adoption strategy

The "Adoption strategy" pillars include:

- drawing up scenarios that lead from research to innovation and setting up user communities in key application domains
- aligning European and national research programmes to gain critical mass and speed, avoiding duplication while creating synergies
- promoting standards



- reinforcing participation and adoption in the ICT industry by involving SMEs and open source software communities
- developing synergies with other ICT industry domains such as telecommunication networks, mobility, multimedia and content, to find common ground for innovation

#### 5.5.2 Adoption strategy implementation

Throughout its lifetime, NESSI-Soft supported the adoption strategy through:

- the definition of scenarios in 2006, leading on to the "NESSI Scenarios of the Future" movie released in February 2007,
- the user strategy development initiated in 2007,
- the ICT ETPs joint activities initiated in 2006 and reinforced in 2008
- the ongoing links set up with national NESSIs and other service-related platforms

In addition to this direct support, committees and working groups have been and will continue to be set up in order to implement the strategy, including:

- Standardisation Committee (2007) and Open Source Working Group (2008), focusing on standardisation and including a very lively community of software developers in Europe. Standardisation tasks were included in the NEXOF-RA NESSI Strategic Project.
- SME Working Group, to ensure that SMEs benefit from the research results as quickly as possible in order to reduce the innovation time to market. SME tasks were included in the new NESSI 2010 support action and in the NEXOF-RA NESSI Strategic Project.
- application domains working groups iGovernment and eHealth to ensure that NESSI activities are geared to market needs.

The ETP ICTs collaboration includes:

- meetings in 2006 and 2007 with eMobility, EPoSS, ISI and NEM
- creation of two working groups: one WG defining a common vision for Future Internet, and another analysing the possibility of creating a common JTI on the topic of Future Internet in 2008
- joint information booth and session proposed at ICT 2008
- Future Internet session during the 2008 ServiceWave conference that is being organised in cooperation with all ETPs (December 2008)
- participation in Future Internet Assembly activities



 initial plan to define common research proposals for Call 4 and Call 5 under FP7

Collaboration with national platforms includes:

- the creation of seven National NESSI platforms with a structure and vision similar to those of NESSI in Bulgaria, Hungary, Norway, the Netherlands, Poland, Slovenia and Spain. New national platforms are being set up in countries including Italy
- many of the national actors participating in these national platforms are also part of NESSI, which facilitates the exchange of information
- NESSI documents are being distributed to all these national platforms and adopted as reference documents for them. For example, the Jacquard Program is the Dutch national pendant of NESSI. This ICT Innovation Platform structure has been created in the Netherlands, modelled on the ETP set-up.
- NESSI GA 2007 incorporated a session on national and international collaboration, where national platforms presented their latest advances.

In the subsequent phases, depending on the outcomes of the NESSI Strategic Plan, NESSI partners intend to expand their efforts towards:

- European regional and national research clusters as well as international cooperation
- other application domains such as energy, transport, manufacturing, mega services over the Internet, etc.

# 5.6 Disseminating NESSI

The dissemination and communication activities achieved significant results. All communication activities were implemented with the support of NESSI-Soft.

Starting from a communication and dissemination strategy approved annually by the NESSI Steering Committee, NESSI-Soft supported NESSI in:

- organising major NESSI events, including:
  - inauguration of NESSI Office and launch of NESSI movies on scenarios of the future
  - NESSI 2006 General Assembly on 8<sup>th</sup> June 2006. This was an important step in enlarging partnership and launching the creation of Horizontal Working Groups (technology)



- NESSI 2007 General Assembly on 11<sup>th</sup> and 12<sup>th</sup> December 2007, which gave a clear view of NESSI strategy and implementation
- advertising the SRA and the supporting NESSI research organisation / open contribution model
- supporting the organisation of the Future Internet Assembly promoted by the European Commission through meetings and events such as the Bled conference of April 2008. At this event, NESSI ran an information booth and co-organised a working session dedicated to services
- participating in more than 160 events over two years
- designing and publishing quarterly newsletters and providing an active information website. NESSI issues information not only to its 500 members but also to 1,300 active contacts
- designing and publishing six NESSI Strategic and Compliant Projects posters (EzWeb, NESSI-2010, NEXOF-RA, Primelife, Reservoir, SLA@SOI)

During 2008, NESSI will participate actively in the ICT conference in Lyon as well as launching a new series of conferences focused on services. The first one, ServiceWave 2008, will take place in Madrid from 10<sup>th</sup> to 13<sup>th</sup> December 2008, immediately after the Future Internet Assembly event organised by the European Commission at the same venue on 9<sup>th</sup> and in the morning of 10<sup>th</sup> December 2008.

ServiceWave is organised by NESSI in collaboration with four major ICT ETPs (eMobility, EPoSS, ISI and NEM) to propose a new series of conferences intended to be a forum for industry and academia.

ServiceWave is also put together in collaboration with ICSOC, the International Conference on Service Oriented Computing.

To reach out to the services community in the context of the Future Internet, ServiceWave 2008 will include a scientific track, industrial panels, common ETP sessions on Future Internet and working meetings.

NESSI-Soft supported the creation of ServiceWave, a task that is continued by the new NESSI-2010 support action.

# 5.7 Fostering participation in NESSI through WGs or committees

The NESSI community participates actively in the implementation of NESSI's vision through committees and working groups, which belong to one of the following categories:



## Extensions of the Steering Committee

- SRA Committee
- Future Internet Committee
- Strategy & Communication Committee

#### Vertical (application domains) area

- eHealth Working Group
- iGovernment Working Group

#### Adoption area

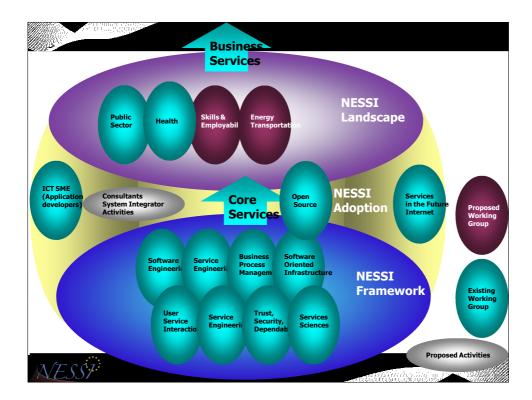
- SME Working group
- Open Source Working Group
- Standardization Committee
- Future Internet Committee

## Horizontal Area (NESSI framework)

- Service-Oriented Infrastructure
- Service Engineering
- Software Engineering
- Business Process Management
- User Service Interaction
- Semantic Technology
- Trust, Security and Dependability
- Services Sciences



#### **Working Groups map**



All committee and working group activities were supported by NESSI-Soft in terms of launch, creation of their manifestoes, communication & dissemination, and external visibility during events.

# 5.8 NESSI – an organised platform with structured governance

#### 5.8.1 Overview

**NESSI**, the Networked European Software and Services Initiative was launched in September 2005 by 13 companies and enlarged to 22 partners and 300 members in the first quarter of 2008.

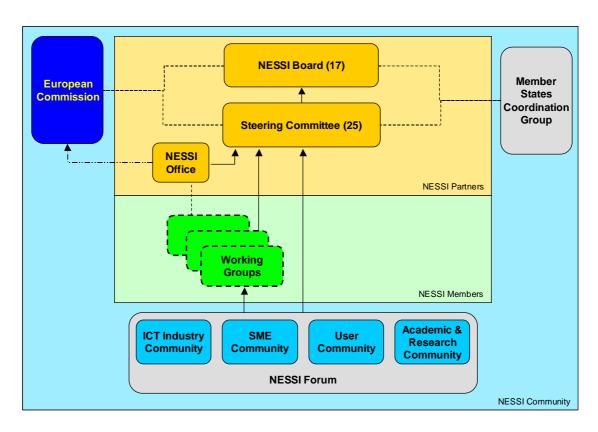
NESSI is led by industrial partners and aims to **unite all stakeholders** from research and industry around the creation of the NESSI Framework.

In this context, NESSI-Soft

- provided NESSI with the necessary organizational, administrative and secretarial support,
- actively assisted NESSI in the implementation of its mission and the achievement of its goals,



- o created the NESSI Office support structure,
- o drew up the NESSI funding model.



To manage the ETP, NESSI's partners set up a board, a steering committee and a comprehensive governance model. Partners also created the NESSI Office, whose goals are to provide NESSI with administrative, logistics, secretarial and organisational support.

NESSI is driven by the NESSI Board, which is the highest-level committee; it meets twice a year.

Platform operations are further refined by the NESSI Steering Committee, which meets every four to six weeks. In addition, specific committees (SRA, Future Internet, Standardisation, and Strategy & Communication) focus on specific topics in close collaboration with the NESSI Steering Committee.

## 5.8.2 NESSI Office – The central NESSI support organisation

The NESSI Office was set up in Brussels and has been operating since July 2006. The NESSI Office provides a central point for supporting and informing all NESSI members and interested parties. It covers the entire NESSI initiative,



and handles many activities that are keys to coordinating and sustaining the momentum of the NESSI communities and include:

- providing central, updated and timely information to all, using and providing websites, mailing list robots and wikis
- managing the membership and partnership process: handling the membership process using an end-to-end procedure
- supporting the committees and working groups: coordinating the information flow between NESSI entities, working groups, committees and the different on-going research areas
- supporting the Board and Steering Committee: preparing background information to the NESSI Board and Steering Committee to enable them to take well-informed decisions
- contributing to communication tasks: organising NESSI events, participating in external events, supporting design, printing flyers, etc.
- providing logistics services (hosting of meetings, IT services)

The NESSI Office offers a whole range of services that are defined according to available resources provided by NESSI-Soft and NESSI partners and follow instructions given by the Board. Since 2006, the Office has been assessed using the results of a probe, Key Performance Indicators and, for the final report, a critical analysis of the budget.

IT services are provided through a website, mailing lists and a wiki.



#### **6 LIST OF NESSI-SOFT PARTNERS AND MEMBERS**

# 6.1 Membership

In March 2008, 500 individuals from 296 member organisations were contributing to NESSI:

Registered Member organisations	295
Pending Registration	1

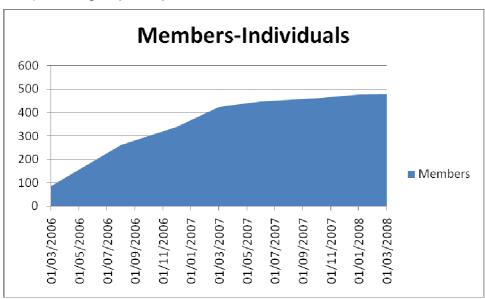
ICT	61
SME	66
Academics	156
Users	12

Membership increased sharply in 2006 and the beginning of 2007, and has increased continuously but steadily since then.

The list of NESSI member organisations is given on the website and regularly updated at <a href="http://www.nessi-">http://www.nessi-</a>

europe.eu/Nessi/Aboutus/Members/MembersList/tabid/165/Default.aspx.

It is also interesting to chart the increase in the number of individuals (500 in 2008) wishing to participate in NESSI.





# 6.2 Partnership

The list of NESSI Partner companies and organisations is available on the website:

http://www.nessi-europe.eu/Nessi/Aboutus/Partners/PartnersList/tabid/161/Default.aspx

NESSI currently has 22 partners. No major changes have occurred recently. A new Steering Committee Chair will be elected by the end of 2008.

Ways to encourage more academics to participate in the Steering Committee are still being analysed.

Alcatel-Lucent		
Atos Origin SAE		
British Telecom		
Engineering Ingegneria Informatica		
Fraunhofer Institute for Algorithms and Scientific Computing		
Hewlett Packard		
OW2		
IBM		
Lero		
LogicaCMG Plc.		
Mo.M.A Modelli Matematici e Applicazioni		
Nokia		
RODAN SYSTEMS S.A.		
SAP		
Siemens		
Software AG		
Sun Microsystems		
Telecom Italia		
Telefónica Investigación y Desarrollo S.A.U.		
THALES		
TIE		
Universidad Politécnica de Madrid		



#### 7 THE WAY FORWARD

Although NESSI-Soft provided key support to NESSI, NESSI does not end with NESSI-Soft. The platform has defined its major steps for the coming years. These activities will be supported

- a) by the industrial partners
- b) through the NESSI-2010 and NESSI-Grid support actions
- c) through the NESSI Strategic Projects
- d) through any contributing project, as defined by the open contribution model

The major steps for NESSI over the coming years are as follows:

- a) drawing-up and delivery of NEXOF and management of the open contribution model;
- b) investigation of the barriers to adoption in terms of services, at the legal, infrastructure and systemic levels;
- c) creation of additional scenarios to validate NEXOF through real-life approaches;
- d) actual linkage with user communities, specifically in the areas of iGovernment and health, with analysis of additional areas such as energy, transport, skills and learning;
- e) collaboration with the other ICT ETPs.

More specifically, activities already identified for 2008 and 2009 include:

- the Future Internet Initiative
  - NESSI ETP is working with ICT ETPs eMobility, EPoSS, ISI and NEM to define a common research agenda and proposal for implementation of the Future Internet. The 5 ETPs and, in a second phase, interested companies will analyse the possibility of creating a JTI as a tool to build critical mass and work on meeting this challenge.
  - NESSI projects are involved in the Future Internet Assembly and cooperate with projects from different technical domains. NESSI will continue to work, as much as possible, in a coordinated way through NEXOF-RA to enhance collaboration in delivering the NESSI Service Open Framework.



- SRA preparation. This will be planned with respect to the outcomes of NEXOF and the emergence of new approaches such as Future Internet Initiatives.
- SRA implementation:
  - o collaboration between projects under the NEXOF-RA plan
  - collaboration between FP7-Challenge 1.2 projects and Future Internet Assembly projects
  - gap analysis and new research opportunities to create Strategic Projects for FP7 – Calls 4 and 5
  - execution of NESSI Strategic projects
- ETP organisation and logistics
  - o finalise the funding model for 2008 and 2009
  - support the creation of a legal entity which will take over the NESSI Office
  - create a funding model applicable to the new set of NESSI projects that should start in 2010 and 2011
- Adoption Strategy
  - User Strategy implementation
  - Future Internet strategy implementation
  - SMEs involvement in FP7 Calls 4 and 5
  - o cooperation with member states and national platforms
  - o international cooperation
  - Open Source Community involvement

#### Dissemination

- o continue to build up NESSI's image and role
- create the new ServiceWave service conference to be held for the first time in December 2008 in collaboration with ETPs eMobility, EPoSS, ISI and NEM, Networks of Excellence CoreGrid and S-Cube, Support Actions EIFFEL, 4NEM and NESSI 2010, IEEE and ICSOC.

NESSI-Soft put the NESSI initiative on track for further development. NESSI is now set with the vision, the organisation, the research challenges and the ultimate objectives. To successfully and efficiently continue the NESSI initiative, NESSI Partners will take advantage of lessons learnt during the 24 months of NESSI-SOFT mainly on SRA endorsement by NESSI stakeholders, working



group performance monitoring, attraction of SMEs and users from target sectors. The NESSI Office will continue through a different legal structure.



## 8 AVAILABILITY OF RESULTS

- All public documents are available on the NESSI website. This includes the SRA volumes, Holistic Model flyers, newsletters, presentations delivered at NESSI events, etc.
- The two NESSI DVDs are available on request from the NESSI Office (NESSI Movie and Interactive NESSI 2007 GA).
- Printed copies of the NESSI flyers and newsletters are available on request from the NESSI Office (not all newsletters are printed).



#### 9 CONCLUSION

NESSI-Soft supported NESSI during a period in which:

- ✓ it grew from 13 partners to 500 members and 22 partners
- ✓ it set up fully-fledged governance
- ✓it organised the NESSI Community through 15 working groups and committees
- ✓ it defined its key delivery, NEXOF: the NESSI Open Service Framework
- ✓ it created the new service conferences: ServiceWave

NESSI has the vision, the organisation, the research challenges and the ultimate result – watch NESSI develop.



www.servicewave.eu





www.nessi-europe.eu



# **ACRONYMS**

The 8 ETPs which have been created in the area of IST are:

NESSI	Networked European Software and Services Initiative
ARTEMIS	Embedded Computing Systems
EMobility	Mobile and Wireless Communications
ENIAC	European Nanoelectronics Initiative Advisory Council
EPoSS	European Technology Platform on Smart Systems Integration
EUROP is about	Robotics
ISI	Integral Satcom Initiative
NEM	Networked and Electronic Media

	Other important acronyms are
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CA	Coordination Action
CIP	Competitive and Innovation Programme
СР	Collaborative Project – (also know as a STREP)
CSA	Coordination and supporting activities
DG	Directorate General
DoW	Description of Work
ETP	European Technology Platform
FP6	Sixth Framework Programme of the European Commission
FP7	Seventh Framework Programme of the European Commission
ICT	Information & Communication Technologies
IP	(Large Scale) Integrated Projects
IST	Information Society Technologies



JTI	Joint Technology Initiative
	57
MS	Member States
NCtP	NESSI Compliant Project
NESSI SRA	NESSI Strategic Research Agenda
NEXOF	NESSI Open Service Framework
NEXOF-RA	NESSI Open Service Framework Reference Architecture
NoE	Network of Excellence
NP	NESSI Project
NSP	NESSI Strategic Project
OW2	Open Source Community initiated through the merger of ObjectWeb and OrientedWare
РО	Project Officer
SAAS	Software As A Service
SOA	Service Oriented Architecture
SSA	Special Support Action
STREP	Specific Target Research Project
WP	Work programme
WP	Work Packages
WP	Work Package