



KIS-PIMS

" Knowledge Intensive Services for the Planning, Installation, Maintenance, and Scrapping (PIMS) services of renewable energy production systems "

Grant Agreement	ENTR/CIP/07/C/N04S00-7		
Start date	2008-02-01	End date	2011-01-31

D2.2 - SPECIFICATION OF THE KIS-PIMS SUPPORT PACKAGE

Revision [V1]	Organization	Date & Visa	Due date of the Deliverable
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Revision	Date	Changes description
Draft	2009-02-12	First issue
V1	2009-03-12	Integration of the Partners' review contributions

Project co-funded by the European Commission within the Competitiveness and Innovation Programme		
Dissemination Level		
PU	Public	X
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The KIS-PIMS project is funded by the European Commission, Directorate General for Enterprises and Innovation, under the Competitiveness and Innovation Programme 'CIP' programme. It aims to develop Knowledge Intensive Services 'KIS' in the field of renewable energy production systems.

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EXECUTIVE SUMMARY

This report details the functional requirements of tools needed to implement appropriately the KIS-PIMS support scheme specified in Deliverable D2.1.

These functional requirements for dedicated or existing tools are detailed by Step of the support scheme:

- **Step I:** *Quick access to external innovation expertise to better shape a project proposition before meeting potential investors with a higher probability of success,*
- **Step II:** *Access to public funds to support RTD activities when required,*
- **Step III:** *Access to private funds to reach the commercial market.*

For each Step, tools will be designed and packaged in Deliverable D3.2 based on the expected functionalities described in the present report. They will be ranked by Step in the overall KIS-PIMS approach. Some will enable diagnosis of the existing enterprise and project, whereas others aim to help the upgrade of the proposition up to make it ready for presentation to public and/or private investors.

GLOSSARY

“**EC**” stands for the European Commission.

“**KIS**” stands for Knowledge Intensive Services. It is meant services involving science-based and technology-based innovations, process and business model innovations.

“**PIMS**” stands for Planning, Installation, Maintenance and Scrapping services.

“**RES**” stands for Renewable Energy Sources. Main technologies under scrutiny during the KIS-PIMS project are solar, biomass, wind, small hydraulic and geothermal, without excluding the other ones.

“**RET**” stands for Renewable Energy Technologies. It is meant the technologies that enable the conversion of RES into usable energy (electricity, heat, cold), and optionally by-products.

“**RTD**” stands for Research and Technical Development and designate the related activities.

“**SME**” stands for Small and Medium size Enterprise, as defined by the European Commission (see http://ec.europa.eu/research/sme-techweb/pdf/sme-definition_en.pdf).

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1. INTRODUCTION

This report is Deliverable D2.2 of the KIS-PIMS project. It aims at specifying the tools that will be needed to implement the support scheme specified within Deliverable D2.1, in view of guaranteeing a high quality level of the KIS-PIMS support services to SMEs.

It starts with the recall of the needs identified to enable the implementation of the KIS-PIMS support scheme. Then these needs are converted into functional requirements for dedicated or existing tools by Step of the Support Scheme:

- **Step I:** *Quick access to external innovation expertise to better shape a project proposition before meeting potential investors with a higher probability of success,*
- **Step II:** *Access to public funds to support RTD activities when required,*
- **Step III:** *Access to private funds to reach the market.*

This report was prepared under the lead of TECHNOFI and includes contributions from most of the Partners who participated to the workshops: LEV, OSEO, ADEME, MOTIVA, CAPENERGIES, DERBI, TENERRDIS, ADVANSIS and MH.

2. NEED OF A TOOLBOX TO IMPLEMENT THE KIS-PIMS SUPPORT SCHEME

Deliverable D1.4 pinpoints the barriers that still slow down the development of good innovative ideas of services in the RE sector. In the headlines, the following barriers can be recalled for their relevance against needs of tools.

- A. An idea is good when the value proposition and the related business model promise profits for all the stakeholders in the short to medium term (3 to 10 years in the RE sector depending on the application). Business models are often insufficiently consolidated against value propositions whichever:
- Technical
 - IPR
 - Commercial
 - Managerial
 - Financial
- ➔ *A risk assessment tool is needed to assess the inherent risks of an innovation project as proposed by asking key questions.*
- B. There is still mismatch between invention (idea to prototype) and innovation (new market application). Innovation management methodologies propose a holistic approach of this hazardous process, which convert an initial idea into a market application, within a strategic framework whilst mastering the risks.
- ➔ *The use of an innovation management tool is strongly advised to ensure appropriate control of this complex process by the SME Managers. It should address the following issues:*
- *building a clear strategy and sharing it with the collaborators,*
 - *building an enterprise culture which confers to all the employees the feeling of belonging to the global project,*
 - *controlling the innovation process itself when implementing new projects,*
 - *assessing the strength and weaknesses of the internal support service to project developments,*
 - *measuring the efficiency of the innovations.*

- C. SMEs face difficulties to access public or private financing, especially in the service sector where technology is not always a must, but where innovation can be in the business model itself for instance.
- Public: Public support aims generally at supporting the first steps of an idea conversion into good or service. There exist multiple schemes. SMEs lack visibility in the jungle of possible support mechanisms. Innovation intermediaries have to play the role of guiding SMEs towards the most appropriate sources according to the nature of their project and their degree of maturity, should it require partnership building or not.
 - ➔ *Clusters and Agencies must become the reference points of SMEs to be oriented towards the most relevant funding sources, depending on the project nature and status.*
 - Private: in the later stages of the innovation process, when the concept viability has been demonstrated, SMEs can meet investors like Business Angels, Venture Capitalists or banks to obtain the final support to reach the market. Investors judge a new business plan according to criteria which, very often, are not the same as those perceived by the entrepreneurs. At first they rarely perceive the same business risks. The negotiation process involves a joint risk appraisal of the business model (whether technical, commercial, financial or human risks): it leads to an optimisation of the fund allocation between equity, loan and possible subsidies. Thus, when investors decide to join the incorporation agreement, the attractiveness of the business model will have been optimised. It may also happen that there is poor connection with the right investors: each investor will have specific criteria to value projects based upon the business sector they are in (bio-technology, information technologies etc.) and the funds they have to manage on behalf of upstream investment organisations (e.g. banks, insurance companies, large industrial groups). One of the key forms of support provided by the platform is the facility to find the right investor (or group of investors) willing to enter a “due diligence” process.
 - ➔ *It must be eased to appraise investor readiness of an SME, both with a diagnosis tool and with a tool enabling financial projection of the project. Clusters, Agencies and other innovation experts must be able to drive SMEs towards the most appropriate investor profiles depending on the risk and the project maturity.*
- D. Intellectual Property in service SMEs is often intangible. Moreover, in relation to their limited financial means, they will privilege informal ways of protecting

their knowledge and know-how (like secrecy, publication, encryption, compartmenting of tasks, etc...) than formal (legal) protections (patents, Trade Marks, Copyrights). Therefore, they can be stolen of their ideas if any form of leakage intervenes in the critical innovation phase (idea to market).

➔ *Recipes for appropriate IPR protections will bring useful drivers to better protection of service SMEs' knowledge and know-how.*

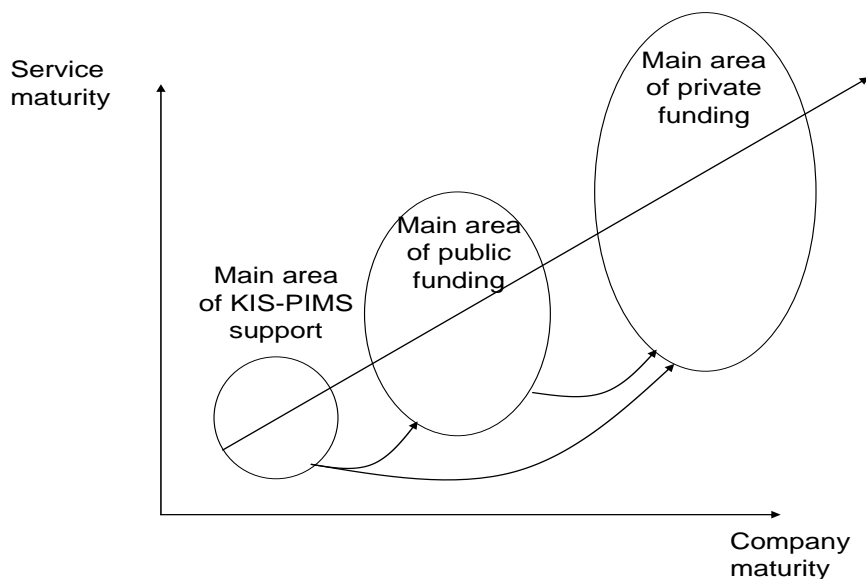
E. When services are backed to technology, there is a need to find appropriate technology provider or developers. SMEs lack understanding of what research centres (public or private) can bring to them.

➔ *Clusters and Agencies must play a significant role in building partnerships. Quick access to the required competence must be rendered possible.*

3. SPECIFICATION OF THE SUPPORT PACKAGE

As described in Deliverables D1.5 and D2.1, the proposed support scheme for the SMEs fitting the KIS-PIMS scope is three steps, inspired from the American SBIR:

- **Step I:** *Quick access to external innovation expertise to better shape a project proposition before meeting potential investors with a higher probability of success,*
- **Step II:** *Access to public funds to support RTD activities when required,*
- **Step III:** *Access to private funds to reach the commercial market.*



The first Step is presented as the main KIS-PIMS area, since it is where the innovation voucher brings its added value. However KIS-PIMS ambitions to succeed in making the supported SMEs enter the next Step, whichever step II or Step III according to the project maturity and needs.

The three Steps of the overall KIS-PIMS support scheme require the minimum functionalities listed hereafter, which will guide the design of appropriate tools.

3.1. Tools for Step I

For Step I, the following requirements have been identified:

- FI.1. To allow for collecting the SME projects
- FI.2. To allow for selecting the projects relevant to the KIS-PIMS innovation voucher
- FI.3. To allow for assessing the project risks:
 - o Technical,
 - o Protection of exploitation,
 - o Managerial,
 - o Commercial,
 - o Financial.
- FI.4. To allow for evaluating innovation management capability of the Managing team
- FI.5. To allow for evaluating the competition surrounding the proposed projects.
- FI.6. To provide a European market projection of the proposed projects.
- FI.7. To help building a financially viable project.
- FI.8. To grant access to external expertise in view of lowering the identified project risks
- FI.9. To define a minimum standard reporting for all the innovation intermediaries likely to deliver expertise within the innovation voucher scheme.
- FI.10. To allow for training new innovation intermediaries at performing the level of expertise required to benefit from the innovation voucher.
- FI.11. To allow for validating the quality level of expertise provided to SMEs by newly accredited innovation intermediaries.

FI.12. To promote the most promising SMEs on the KIS Innovation Platform.

3.2. Tools for Step II

For Step II, the following requirements have been identified:

- FII.1. To propose a summary of the potentially accessible financial instruments, at both European and National levels, which enable research and development of the technologies supporting the innovative service.
- FII.2. To trigger a RTD project preparation.

3.3. Tools for Step III

For Step III, the following requirements have been identified:

- FIII.1. To assess the private investor readiness of the SME.
- FIII.2. To evaluate the competences of the managerial team of the proposing enterprise.
- FIII.3. To coach entrepreneurs at convincing private investors to accelerate the company's commercial development.
- FIII.4. To open access to investor networks.

4. CONCLUSIONS

For each Step of the KIS-PIMS support scheme, tools are needed to enable appropriate implementation. These tools will be designed and packaged in Deliverable D3.2 based on the expected functionalities described in the present report. They will be ranked by Step in the overall KIS-PIMS approach. Some will enable diagnosis of the existing enterprise and project, whereas others aim to upgrade the proposition up to make it ready for presentation to public and/or private investors.