

	EUROPEAN COMMISSION RESEARCH AND INNOVATION DG	Review Report
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Project No: 262892

Project Acronym: ENDORSE

Project Full Name: ENDORSE (ENergy DOWNstReam SERVICES) -
Providing energy components for GMES

Review Report

Period covered: from 01/01/2011 to 31/10/2011

Date of preparation: 25/11/2011

Start date of project: 01/01/2011

Date of submission (SESAM): 24/01/2012

Duration: 36

Project coordinator name:

Dr. Lucien WALD

Project coordinator organisation name:
ASSOCIATION POUR LA RECHERCHE ET LE
DEVELOPPEMENT DES METHODES ET
PROCESSUS INDUSTRIELS - ARMINES

Version: 1

Review Report

General Information

Grant Agreement number:	262892
Project acronym:	ENDORSE
Project title:	ENDORSE (ENergy DOWnstReam SERVICES) - Providing energy components for GMES
Funding Scheme:	FP7-CP
Project starting date:	01/01/2011
Project duration:	36
Name of the scientific representative of the project's coordinator and organisation:	
Period covered - from:	01/01/2011
Period covered - to:	31/10/2011
Date of review meeting (if applicable):	15/12/2011
Report type:	Individual
Reviewer	Javier DOMINGUEZ

1. Overall Assessment

a. Executive summary: Comments, in particular highlighting the scientific/technical achievements of the project, its contribution to the State of the Art and its impact:

The development of the project responds broadly to the issues raised by the DoW. Some of the contributions, in the form of deliverables, have a great significance and shall be published in scientific journals. Additionally, it has also been made quality contributions to conferences and scientific meetings, helping to spread the capabilities of the consortium and representing technology as well as the possibilities of utilization of services within the scope of GMES. Also of note is the development of the website, which has great potential to become a valuable tool for project management and for the dissemination of relevant scientific-technological issues useful for improve down stream services of GMES. Another important aspect of the project is the realization of internal meetings, which, as I observed during my stay in Paris, have served to unite the group and highlight both the capabilities and objectives of ENDORSE. Two issues related to the work packages, are equally remarkable: first, the work done on user requirements and included in WP2. This WP is very relevant and has advanced aspects of standardization, innovation, etc ... The other issue is the development of models and algorithms, such as a very useful SG2 and innovation for solar energy utilization. The new model for measuring temperature at the height of the photovoltaic module is also judged as having a high added-value. In summary, the project is developed according to plan (assuming that the annual report has been required to submit before the end of the period) and deviations are controlled, the group is cohesive and the management of the project and in particular the different work packages, is appropriate.

Progress

Good progress (the project has achieved most of its objectives and technical goals for the period with relatively minor deviations)

b. Overall recommendations (e.g. on overall modifications, corrective actions at WP level, or re-tuning the objectives to optimise the impact or keep up with the State of the Art, or for other reasons, like best use of resources, re-focusing...).

The project is developing in a satisfactory way for the first year. Congratulations to the coordinator and to the whole consortium. The deviations described in the “periodic report” appear to be justified and under control. The information provided by the Coordinator during the review meeting in Paris confirms this. The first goals of this period have been effectiveness in management, specification of products, environmental modelling and awareness of the project. I would like to stay informed on the project in the future, because there will be very interesting results for the both communities: space and energy. In the side of "future users", related with WP2, and especially with D2.1, several questions have been carried out in a correct way (i.e. “the capability to refine info suiting specific needs and the possibility to access a “one-stop-shop” to satisfy needs that would have normally required accessing multiple sources” or methods for benchmarking). The task developed in this WP will be very useful in the next years. Some problems related with human resources have been reported. The project shouldn't to be too dependent of the people. A good cohesion of the partners and the consortium is very recommendable in order to prevent these aspects. The importance of the tools and services that will be developed should imply, in my opinion a projection outside of Europe too, because a lot of these could be very important for developing countries. In this sense, several actions and contacts have been done in a correct path. Finally, a greater use of internet tools for dissemination could be convenient (i.e webinar, social & scientific networks...), as well as a greater presence in events related.

2. Objectives and Workplan

a. Have the objectives for the period been achieved? In particular, has the project as a whole been making satisfactory progress in relation to the Description of Work (Annex I to the grant agreement)?

Yes

Comments

Considering that the period evaluated does not cover the full first year, the project has progressed in a satisfactory way. The objectives and the workplan have been developed according with the description in the DoW, as indicated in the First Progress Report and observed in the review meeting. The management of ARMINES is a key factor in this development.

b. Has each work package (WP) been making satisfactory progress in relation to the Description of Work (Annex I of the grant agreement)?	Partially
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Comments

Activities en WP 5 and 6 started earlier than planned. There have been some delays in the WP 4 and 5 due to the extension of tasks in WP2. This extension has been necessary to improve the tasks and a product (S3) and involves the commitment of several partners for more time than expected. The deviation is not negative for the project and will improve the overall development of it.

c. Have planned milestones and deliverables been achieved for the reporting period?	Partially
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Comments

Some delays with deliverables have a minor character and don't imply a problem to the project.

Deliverables						
WP no.	Del. no.	Version	Deliverable name	Reviewed Yes/No	Status	Comment
2	1	1.0	Prime-users requirements for products and assessment protocol	Yes	Accepted	
2	2	0.0	Prime-users requirements for pre-market services and assessment protocol	No		
3	1	1.0	A library for computing the relative position of the Sun and the Earth	Yes	Accepted	
3	2	1.0	Report on the harmonization and qualification of meteorological data	Yes	Accepted	
3	3	0.0	Assessment of air temperature at 2-m height	No		
3	4	0.0	Post-processing of surface solar irradiance	No		
3	5	0.0	Methods for data fusion	No		
3	6	0.0	Report on the interface to GMES Core Services - 1st version	No		
3	7	0.0	Report on the interface to GMES Core Services - Final version	No		
5	1	0.0	Summary of the assessment of products by users	No		
5	2	0.0	Summary of the assessment of pre-market services by users	No		
7	2	0.0	Report on users workshops	No		
8	1	0.0	"Towards the market" report	No		
9	1	1.0	Web site of the project	Yes	Accepted	
9	2	0.0	Report on the activities for scientific dissemination and results attained	No		
9	3	0.0	CD comprising the publications made (communications, articles)	No		

WP no.	Del. no.	Version	Deliverable name	Reviewed Yes/No	Status	Comment
101	1	1.0	Roadmap of milestones and deliverables for monitoring	Yes	Accepted	Based on the ENDORSE' web page is a useful tool for monitoring the development of the Project.
101	2	1.0	Briefing on the ENDORSE project (v1)	Yes	Accepted	In order to facilitate the evaluation, please insert a copy in the right site of the web page.
101	3	0.0	Briefing on the ENDORSE project. Final version	No		
102	2	0.0	Contractual Annual Report Period 1	No		
102	3	0.0	Contractual Annual Report Period 2	No		
102	4	0.0	Contractual Annual Report Period 3+Final	No		
401	1	0.0	Report on the product S1 "Local atlas for Provence"	No		
402	1	0.0	Report on the product S2 "Design CSPS"	No		
403	1	0.0	Report on methods for improvement of service S3 "Irradiance forecasts for electricity production"	No		
404	1	0.0	Report on the product S4 "TMY"	No		
405	1	0.0	Report on the product S5 "CSP-GIS" for Morocco	No		
406	1	0.0	Report on the product W1 "Wind AEO"	No		
407	1	0.0	Report on the product E1 "Load balancing"	No		
408	1	0.0	Report on the product B1 "Mapping biomass potential"	No		
409	1	0.0	Report on the product B2 "certification of sustainable bioenergy use"	No		
410	1	0.0	Report on the product D1 "lighting energy savings"	No		

WP no.	Del. no.	Version	Deliverable name	Reviewed Yes/No	Status	Comment
601	1	0.0	Report on the pre-market service S1 "Local atlas generation"	No		
601	2	0.0	Service S1 "Local atlas generation" and final version of product	No		
602	1	0.0	Report on the pre-market service S2 "Design CSPPS"	No		
602	2	0.0	Service S2 "Design CSPPS" and final version of product	No		
603	1	0.0	Report on the integration of improvements into the existing service S3 "Irradiance forecasts"	No		
603	2	0.0	Improvements of the existing service S3 "Irradiance forecasts for electricity production"	No		
604	1	0.0	Report on the pre-market service S4 "TMY generation"	No		
604	2	0.0	Service S4 "TMY generation" and final version of product	No		
605	1	0.0	Report on the pre-market service S5 "CSP-GIS"	No		
605	2	0.0	Service S5 "CSP-GIS" and final version of product	No		
606	1	0.0	Report on the pre-market service W1 "Wind AEO"	No		
606	2	0.0	Service W1 "Wind AEO" and final version of product	No		
607	1	0.0	Report on the pre-market service E1 "Load balancing"	No		
607	2	0.0	Service E1 "Load balancing" and final version of product	No		
608	1	0.0	Report on the pre-market service B1 "Mapping biomass potential"	No		
608	2	0.0	Service B1 "Mapping biomass potential" and final version of	No		

WP no.	Del. no.	Version	Deliverable name	Reviewed Yes/No	Status	Comment
			product			
609	1	0.0	Report on the pre-market service B2 "Certification of sustainable bioenergy use"	No		
609	2	0.0	Service B2 "Certification of sustainable bioenergy use" and final version of product	No		
610	1	0.0	Report on the pre-market service D1 "Daylighting energy savings"	No		
610	2	0.0	Service D1 "Daylighting energy savings" and final version of product	No		

d. Are the objectives for the coming period(s) i) still relevant and ii) still achievable within the time and resources available to the project?

d.i) still relevant? Yes

d.ii) still achievable? Yes

Comments

The objectives of the project for the next year are still relevant and achievable. Modifications and deviations done in the first period shall imply an improve in the flux of the project in the future and in the consortium learning
The first objectives for 2012, showed in the review meeting, are consolidate management, research in products and product assessment. Research activity will be “short but intensive”. “Improve quality” of products (S1, S2, S4, D1, E1) is important for this period too.

3. Resources

a. To the best of your estimate, have resources used, i.e. personnel resources and other major cost items, been (i) utilised for achieving the progress, (ii) in a manner consistent with the principle of economy, efficiency and effectiveness. Note that both aspects (i) and (ii) have to be covered in the answer.

a.i) utilised for achieving progress Yes

a.ii) in a manner consistent with the principle of economy, efficiency and effectiveness Yes

Comments

In my opinion, the human and financial resources have been used in an appropriate manner. Some small deviations have already been outlined in previous sections and have no significance for the progress of the project. Some clarifications requested at the review meeting were done satisfactorily.

b. Comments on large deviations with respect to the planned resources (if applicable)

No applicable.

4. Implementation of the Project

a. Has the project management been performed as required? Yes

Comments

The project management has been performed in an adequate way from an academic and administrative-financial point of view.

b. Has the collaboration between the beneficiaries been effective? Yes

Comments

The collaboration between the beneficiaries has been effective. As indicated before, one of the goals achieved in this period has been the creation of the awareness of the project and the cohesion between the partners.

c. Do you identify evidence of underperforming beneficiaries, lack of commitment or change of interest of any beneficiaries? Yes

Comments

There is not evidence of underperforming or lack of commitment in beneficiaries. Obviously, it is impossible that all the partners, users and people implied in the project have the same grade of commitment, but considering the whole, these aspects have been achieved in a very good way.

5. Use and Dissemination of Foreground

a. Is there evidence that the project has/will produce significant scientific, technical, commercial, social, or environmental impacts? Yes

Comments

The aim of ENDORSE is to provide to the scientific community, business and society in general, products related with remote EO. The first year of the project has served to put the basis on which this strategy of dissemination has to be developed, while the project has also obtained its first results. Of note is the document D2.1, and the work in the areas of harmonization and standardization. All these project outputs, and others produced in the project, have a high potential impact.

a.1. Is there an impact on participating SMEs? Yes

Comments

A target sector are SMEs. Developing requirements are addressed largely to these businesses, as well as public institutions.

a.2. Is there an exploitation potential for the participating SMEs? Yes

Comments

See the comment in a.1.

b. Is the plan for the use of foreground, including any update, appropriate? Namely, please comment on the plan for the exploitation and use of foreground for the consortium as a whole, or for individual beneficiary or groups of beneficiaries and its progress to date. Yes

Comments

The whole project is focused in these aspects. In the review period, important actions have been developed in this sense. Special relevance, as I have commented before, has the tasks developed in WP2. The continuation of D2.1 in D2.2 is very important and the consortium should work hard to successfully complete this deliverable

c. Have the beneficiaries disseminated project results and information adequately (publications, conferences...)? Yes

Comments

As indicated before dissemination tasks have an important role in ENDORSE. During this first reporting period, several actions related with scientific communications, conferences, web and others have been developed. An additional effort in this area could be expected for the next years, according with the development of new algorithms and tools.

d. Potential information that should be disseminated to

Policy makers:

Capacities of the Consortium, as well as of the technology and data in order to improve the public

management.

The scientific community:

All the related with algorithms is very important. The new method for measuring the temperature is very important. The work on harmonization of data and scales.

The general public:

Dissemination of technology and capacities as well as environmental affections.

A specific group of end users:

There is well described in D2.1. Attention to this path is very convenient.

e. Are potential users and other stakeholders (outside the consortium) suitably involved (if applicable)?

Yes

Comments

During and after the Project, a strategy to involve new users and stakeholders should be done. ENDORSE is working in this area with limited, but high quality, results by the moment.

f. Is the consortium interacting in a satisfactory manner with other related Framework Programme projects or other Research and Development national/international programmes, standardisation bodies?

Yes

Comments

The consortium is interacting with several programmes and institutions, including: GMES, GEO, and ESA and funded via FP7, ESA and COST actions.

GMES: Beneficiaries of ENDORSE have direct links with the MACC, Geoland2, and Safer, which are respectively projects related to the Atmospheric Monitoring, the Land Monitoring and the Emergency Management. Additionally, ENDORSE contributes to GMES since the project ENDORSE aims at stimulating the development of operational services by demonstrating pre-market services with documented conditions of sustainability, and at enhancing existing services and documenting the value of the new GMES core capabilities. GMES advertises ENDORSE in its Web site.

Exchange with GEO Secretariat. ENDORSE could contribute to "making Energy one of the successful SBA (Societal Benefit Area) particularly in developing countries and Africa where energy matters are of great challenge".

The technological exchange with GEOSS is made in AIP (architecture implementation pilot). Participating to the AIPs brings technological skills in aspects recommended by GEOSS, discovery of resources, description of resources (metadata), resources (web map service, web processing service), data sharing principle, and how to assemble them. I.e., the algorithm on solar position, developed in WP3, is being developed as a GEOSS-compliant WPS and will be described using the metadata INSPIRE/ISO19119 for discovery and exploitation. Armines creates awareness of the GEOSS best practices in the ENDORSE Consortium. ENDORSE is noted as one of the FP7 activities that could contribute to GEOSS and specifically to GEOSS Task EN-07-01: Management of Energy Sources and Task EN-07-03: Energy Policy Planning.

Exchanges with other EC-co-funded projects (FP7): The DG-INFSo-co-funded GENESIS project (Generic European sustainable information space for environment) has developed a series of Web technologies for constituting collaborative information networks integrating existing systems.

Armines has tested a toolbox developed by the Italian company Intecs in the framework of the GEOSS pilot AIP-3 (2010). This toolbox has been used to create the web processing service (WPS) on the sun position in the sky (WP 3), and will be used further for other WPS in ENDORSE.

Reciprocally, feedback on the use of this toolbox is provided to GENESIS. The project EnerGEO is co-funded by DG-RTD Environment. It has developed a GEOSS-compliant catalogue service for the

Web dedicated to energy. This CSW permits to describe resources using INSPIRE-compliant metadata, exposing such services for discovery as this catalogue is harvested by the GEOSS crawler and others. The Web services to be developed in ENDORSE will be declared in this catalogue. Conversely, ENDORSE will provide feedback on the use of this catalogue for declaration of service.

Exchange with ESA: The GMES Masters innovation encourages European researchers and entrepreneurs to develop market-focused applications from data gathered through the EU-led GMES programme. The web site (<http://www.gmes-masters.com>) provides a few examples of services. ENDORSE is the only example under the topic "climate change".

Exchange with COST actions: The service ENDORSE E1 "load balancing" has been discussed in the action COST #ES-1002 WIRE (weather intelligence for renewable energies). This action aims at addressing the scientific challenges that would make the provision of best weather information possible for forecasting the energy of wind and solar power plants for the next minutes up to several days ahead. In the framework of this action, a European workshop has been organized by MINES ParisTech. During the poster session, Mines ParisTech and Transvalor presented the SoDa Service and the HelioClim databases. This was an opportunity to show how the ENDORSE project will contribute to the improvement of several on-going SoDa services and the development of new services for the solar radiation Community.

6. Other Issues

a. Have policy-related and/or regulatory issues been properly handled (if applicable)?	Not Applicable
Comments	
b. Have ethical issues been appropriately handled (if applicable)?	Not Applicable
Comments	
c. Have safety issues been properly handled (if applicable)?	Not Applicable
Comments	
d. Has progress on Gender Equality Actions been satisfactory (if applicable for this reporting period)?	Not Applicable
Comments	

7. Flag the Project - Not related to the 'certified as correct'

Flag(s) for the project	No
Comments	

Attachments	ENDORSE LOGO and WB PAGE.pdf
Name	
Date	

This declaration was visaed electronically by Javier DOMINGUEZ (ECAS user name ndominjv) on 24/01/2012