

SUMMARY

OF THE
THIRD PROGRESS
REPORT

JUNE 2013



Summary of the Third Progress Report

The present document is a summary of the Third Progress Report (12 months deliverable) of Elios 2, Pilot Project launched by the European Commission and entitled: "Facilitating access to insurance by self-employed builders and small building firms so as to stimulate innovation and the promotion of eco-technologies in the European Union".

The document provides a briefing of the work done so far, but we invite the reader to consult the full version on the Elios website www.elios-ec.eu in order to have a more complete presentation.

I. WORK PACKAGE 1

1. Work Programme

One of the main tasks of WP1 is the development of "an inventory of quality/conformity marks in all EU-27 countries used in construction markets for products, processes, works, technical equipment and professional qualifications together with an appraisal of the level of impartiality of the procedures that are used to deliver the quality marks" (excerpt from the call for tenders)

The answer of the ELIOS 2 project is the development of an on-line directory of quality signs in construction.

2. Work carried out so far

2.1 Quality signs directory structure

The structure of the directory, described in deliverable D1.1, was presented during forum 3 (2013 January 24) and validated as such. Formal comments from the Commission concerning compatibility and complementarity issues of quality signs with CE marking were taken into account in the final D1.1 version (March 2013).

2.2 Specifications of the on-line directory

Specifications based on deliverable D1.1 are being written. The main characteristics of the planned Elios 2 IT environment were communicated to the IT department in charge of the Europa web environment. This department agreed with the proposed technical IT choices.

Meanwhile, the preparation of the core of the specifications is being prepared. The use of the directory by four categories of users has been anticipated. The following table describes the rights allocated to each category:

| User | belongs to | allocated rights |
|---------------|------------|--|
| Administrator | Elios team | Full rights except creation of quality sign record |



| Manager | Quality sign provider | Management of information concerning his own organism: |
|-------------|--------------------------|---|
| Contributor | | Creation of quality sign record |
| User | Elios public | Look at quality sign records Process information: looking for, comparing, printing |

The following figure is a preview of a data capture screen (quality sign identification section) used by a manager or a contributor.



3. Next steps

- Development of the web directory according to the validated specifications in the validated IT environment.
- Acceptance phase (tests by a selected panel),
- Creation of invitation lists from membership directory of organisations dealing with quality signs in construction
- Sending of invitations to fill in web questionnaires on quality signs

Whilst the directory is becoming an autonomous action, WP1 members start addressing compatibility and complementarity issues of quality signs with CE marking as well as other WP1 subjects presented in 1.1.



II. WORK PACKAGE 2

1. Work programme

As a reminder, the overall objective of work package 2 (WP2) is to develop an EU-wide knowledge base on quality indicators and building pathology, that could support (re)insurers in their risk appraisal of new innovative technologies, especially eco-technologies.

2. Work carried out so far

The main focus of the WP2 activities from mid December 2012 to the beginning of May 2013 was to prepare the draft specifications for the EU pathology knowledge base for eco-technologies, including setting up models for the organisation of this database.

2.1. Functionalities of the tool to be developed

From previous consultations with insurers, the required functionalities of the tool to be developed are:

- **1.** A knowledge base, with pathology records, that provides qualitative technical information on the pathology of eco-technologies (without any statistical data disclosure of claims).
- 2. A 'Warning procedure' (or hazard notification procedure), where interlocutors in each country can report issues/defects.
- 3. An overview of quality signs for eco-technologies.

We have called this tool: 'Eco-technologies Quality European Observatory (EQEO).

2.2 Specifications for the 'pathology database'

The European knowledge-base consists of a database, where pathology data (compiled from various sources) are stored (a file with records), and a program for the input- and output interfaces. In order to be compatible with demands by the European Commission, the program should be a 'free access' program.

Each pathology record consists of a number of fields. Typical input fields are:

- Source for the description of the pathology case;
- Identification of the construction work or the country/countries where the defect/failure has occurred.
- > Type of eco-technology (material/product/system) that was involved in the defect/failure
- Description of the defect/failure
- Quality signs related to the defect/failure for the product/material/system in place at time of construction
- Lessons learned



2.3 Specifications for the 'warning procedure'

Regarding the warning procedure, the idea is being able to gather and communicate the existing information. A very simple database structure is proposed:

- Name of the organisation / person who is doing the warning;
- Description of the eco-technology for which the warning is given;
- Description of the warning;
- Indication of the risk:
 - there is a clear and immediate risk for health and safety;
 - there is a clear and immediate risk for severe economic damages (one such case may lead to significant direct or indirect damages);
 - at this moment there is no clear and immediate risk for health and safety and/or severe economic damages, but maybe in future with widespread use.
- Possibility to add attachments.

2.4 Specifications for overview of quality signs for eco-technologies

This part of the EQEO is an extract from the quality signs directory to be developed within WP1, related to eco-technologies.

2.5 Organisation of the pilot database during Elios 2

The set-up and organisation of a possible future EEQO of course very much depends on the outcome of the pilot database tool that we have to develop within Elios 2. For this pilot version we propose a organisation structure as sketched in Figure 2.1.

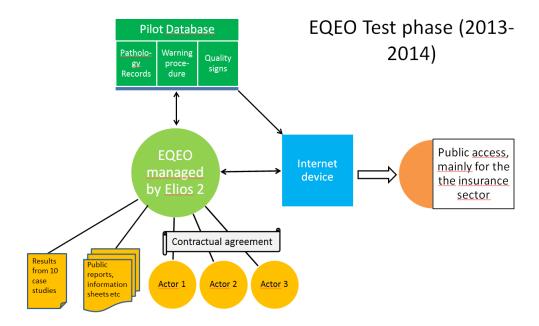


Figure 2.1: Proposed organisation structure of the EQEO test phase (2013-2014).

The database will be composed of three parts, corresponding to three functionalities of the EQEO system, described above:

- 1. Pathology Records (assessment a posteriori): recording of the known/existing claims or information on defects/failures (and their causes and consequences);
- **2.** Warning procedure data: early warnings on defective products/technologies/systems or claims under examination;
- 3. Quality Signs (assessment a priori): an extract from the quality signs directory (WP1).

From our point of view, the role of EQEO is not to develop its own analysis of the different risks, but rather to gather, select and manage existing data. Our objective is to organize an exchange and a dissemination of data essentially held at a national level by national actors, or known from public reports, Defects Information sheets and other papers. Of course, also the results from the questionnaire survey for the 10 eco-technologies (executed in 2012) will be exploited for populating the database.

In order to be efficient, the scope of this pilot database has to be limited. We have to focus our attention on some selected eco-technologies (10 being the absolute maximum).

For the national actors, we have identified Agence Qualité de Construction (France) and the Danish Building Defects Fund as potential interested parties to be involved during the test phase. For the collaboration with these partners a draft contractual agreement will be prepared, to demonstrate what the partners can expect.

2.6. Framework for the operation of a pathology database after Elios 2

How could a pathology database in practice be made operational? Work package 2 realizes that, in order that the tool to be developed will function *after the Elios 2 project*, there is need for a database, but also for procedures and a business model that would allow for collecting objective data (based on site inspections, or from other sources), expert evaluation of gathered data and dissemination of information.

Such a business model has not been established. Existing models are being studied by WP2 to see whether these would allow a similar exercise at European level.

An organisation such as ENBRI (European Network of Building Research Institutes), could play a role in this, and work in collaboration with national institutes like AQC (France) and the Danish Building Defects Fund (Denmark).

3. Next steps

The following months, the following activities are planned:

- Continuation of the data collection by means of the questionnaire, especially in France and Belgium.
- Consultation of the CIB W086 working group on building pathology during the CIB World Congress in Brisbane, May 2013, and consultation of ENBRI, to know their view on the collection and dissemination of pathology data at a European level.
- Selection of the eco-technologies for populating the pathology database.
- Further exploring the information needs by insurers for the EQEO, in collaboration with WP3.
- Finalisation of the specifications for the EQEO, validations of the specifications, and defining the informatics requirements for the development of the database.



III. WORK PACKAGE 3

1. Work Programme

As a reminder, the overall aim of work package 3 (WP3) is to analyse the conditions for a greater mutual recognition of the construction insurance regimes and to identify the criteria and modalities for the development of insurance schemes that could support cross border services and the cover of building sustainability performances.

2. Work carried out so far

We decided to present each deliverable development as the work progresses.

This is especially true for the first deliverable, the update of the mapping, which should give the state of the art in insurance at the end of the project.

2.1 Introduction

Information is gathered through three different channels:

a) Insurance Europe

After the first presentation of the Elios 2 project made to the federations the 19 September 2012, we presented our questionnaire during the general assembly meeting of Insurance Europe to the insurance federations representatives, the 8 March 2013. It was later sent by Insurance Europe to all the federations with their own national regime description (made in Elios 1) to check if it still reflects reality and also to retrieve additional information, notably on market volumes or insurance requirements.

First answers were gathered but the process is not complete and should continue during forthcoming months.

Apart from the questionnaire, general answers about existing national "points of single contact" were given during the general assembly (see D3.1.6).

b) Allianz

As a subcontractor, Allianz's main task is to update the mapping gathering information from its own internal network of branches on local markets. The information to collect includes the update of Elios 1 information but also to extend it to more insurance market realities.

In order to do so, the definitive version of the questionnaire was sent to Allianz European branches.

With a good return rate of 14 filled questionnaires out of 17 sent, first conclusions could be drawn for this third progress report in the deliverable 3.1 - Update of the mapping of insurance regimes.

c) Hannover Re

As leader of WP3 Hannover Re is in charge of retrieving information from the insurance companies through two channels:

A first update of the existing Elios 1 mapping was made in the previous progress report, using our internal network of construction reinsurance underwriters. This channel is currently also used to disseminate the questionnaire, notably to Scandinavian insurers.

Several meetings have been carried out with insurers active on the French, Spanish and UK market.

Regarding the energy performance guaranties specifically, we participated in January to a conference organized by the FFB, and also visited in February the Green Office Meudon, the first major French positive energy building, developed by Bouygues Immobilier.

Regarding more general regulation framework we contacted and obtained answers from:

- European Insurance and Occupational Pensions Authority (EIOPA)
- European Commission DG Market

Work carried out by other subcontractors, include:

a) APAVE

APAVE made a questionnaire. Even though the rate of return is not satisfactory at the moment, first results could be drawn out.

b) SBI

The following work was undertaken:

- Overview of construction regimes and business systems and theories on transition paths.
- Three to four qualitative case studies representing archetypical (construction) regimes will be conducted as a part of the horizontal analysis. The analysis will be based on the following countries: France, UK, Denmark and the Czech Republic. Thus the number of case studies of insurance regimes and transition paths will be limited to one example representing each of the distinct construction regimes identified.
- A work plan and proposal for the execution of the vertical analysis. This will highlight the methodological approach as well as data sources applied.
- Drafting of preliminary conclusions form the study for discussion and verification in the project group.

2.2 Preliminary Observations

2.2.1 Update of the mapping of insurance regimes

Based on the information gathered during the Elios 1 pilot project mapping, this study will first update the information about the current different regimes in force in the EU-27.

In the second phase, we will extend this pure update of the legal framework made in Elios 1 to market considerations with the help of a questionnaire (preliminary version presented in appendix).

2.2.2 Financial mechanisms for protection of investors' interest

Based on the first results of our exchanges with insurers, this task involves the following processes to be carried out in parallel with the mapping update:

- a) Identification of the different existing financial instruments aimed in the protection of construction works, notably other than insurance. This covers a wide range of public and private steering instruments such as insurance schemes, regulation, subsidy schemes, etc.
- b) We will outline the specific hurdles existing in the insurance of construction innovation and how the industry has handled innovation in the past by means of a case study. This technology could be "structural sealant glazing" (SSG) now widely used in curtain walls.

2.2.3 Information needs about construction insurance

This third study will present the construction insurance underwriting process in general, highlighting its specific information needs. Notably, it will try to clarify the risk assessment principles and the role of the Technical Inspection Service in this process.

2.2.4 State of the art insurances schemes and transition paths

Applying a socio-technical approach, this study tries to describe and compare on different levels the different existing national organizational schemes in the construction industry. It should notably overview the different roles of insurance inside the global quality chain in the construction industry.

2.2.5 Conditions for greater mutual recognition of construction insurances regimes

This task will constitute an analysis of the conditions for a greater mutual recognition of construction insurance regimes, and the development of a set of guidelines for a policy formulation.

2.2.6 Recommendations for policy formulation

This analysis will provide recommendations for policy formulation stimulating good practices and insurance solutions.

3. Next steps

The shortcoming foreseen actions for the different members of WP3's team are:

a) Insurance Europe

Depending on the rate of return of completed questionnaires by the insurers across Europe, Insurance Europe may have to do some follow-up by the federations.

b) Allianz

Allianz should continue to gather answers to the questionnaire coming from the different channels, update the corresponding mapping, and further develop its assessment of construction insurance situations across Europe (deliverable 3.1).

c) Hannover Re

- In order to retrieve information all over EU, the validated questionnaire will be sent to the local insurers in order to extend the description made for each country.
- ➤ Different meetings are foreseen with the following insurers AVIVA, AXA CS, EIFER, Generali, HDI Gerling, SMABTP and VHV. Also the following reinsurers will be contacted considering their global activity: Munich Re and SCOR.

Regarding the financial protection mechanisms other than insurance, we identified Energy Performance as being the only guarantee that can really benefit from such a system.

d) APAVE

APAVE will further explain how technical control helps to improve the quality of construction. The analysis should also stress the contribution of the Controller of the relevance of the evaluation and risk control processes it takes part in.

e) SBI

The following work will be done:

- Improvement of the analysis toward insurance schemes.
- Deepening of the vertical analysis in connection with the policy convergence discussion.
- f) NHBC

In order to extend the WP3.2.6's "example of historical assessment of innovation by insurance", which deals with Structural Sealant Glazing (SSG) technology, NHBC will recover information on Great Britain's experience.

IV. WORK PACKAGE 4

1. Work Programme

The overall aim of WP4 is to provide policy consultation for the European Commission on the goal of the project and to disseminate the results of the project. More specifically, this work package has the following two objectives:

- To assist the Commission services for the setting up and functioning of a forum composed by representatives from the construction and the (re)insurance sector, Member States and Commission services to ensure guidance of the pilot project and a dialogue with stakeholders.
- To disseminate the results of the pilot project to practitioners, representatives of the construction and (re)insurance sectors, the research community and policy makers in the European Union.

2. Work carried out so far

According to the overall work plan, the deliverables of the third six month period include:

✓ D4.4: Forum meeting 3

✓ D4.11: Newsletter 3

✓ D4.22: Update and revise the Elios 2website.

2.1 Forum meetings (Deliverables D4.4)

A bit ahead of schedule, the Forum has already had its third meeting during the second six months of the project period (deliverable D4.4). The fourth Forum meeting (deliverable D4.5) is in preparation and will be held on the 11th of June 2013, which is one month ahead of schedule.

The work in this six month period has included drafting the minutes from the third Forum meeting and preparing invitations and working documents for the fourth Forum meeting.

The discussion of selected WP2 themes at Forum Meeting 3 focused on the following:

- Theme 1) The role of building pathology (and quality signs) for risk assessment by insurers during the underwriting process of innovative building products.
- Theme 2) Analysis of the needs and criteria from insurers for the format (structure) of the EU-wide database on pathology indicators of eco-technologies.
- Theme 3) Conditions and modalities to gather, exploit and disseminate relevant data and information to all parties concerned as well as the maintenance and the exploitation of the database after the termination of the pilot project

The outcomes and conclusions obtained from the debate on themes have been included in the respective work package.

2.2 Newsletter (Deliverable D4.11)

The third task of WP4 is to prepare seven newsletters – one following each of the forum meetings. The third newsletter (deliverable D4.11) was prepared during the spring 2013 and issued in May 2013.

2.3 Website (Deliverable D4.22)

Deliverable D4.22 is to update and revise the Elios 2 website. A revision of the website has been implemented, which includes a more focused main page with reference only to Elios2 and not Elios1 as well as using English as the main entrance language. Updates of relevant news have been added to the website.

3. Next steps

In the next six month period WP4 will focus on the sixth milestone of WP4, namely the execution of Forum Meeting 5 (month 25) in January 2014. At the fifth Forum Meeting, a cross-cutting debate on directory on marks, indicators and schemes will be staged.

The deliverables of the fifth six month period (month 19-24) include:

- D4.5: Forum meeting 4. The Forum meeting will be executed on the 11th of June 2013 and the minutes will count as the first deliverable of the next six month period.
- D4.6: Forum meeting 5. Although the Forum meeting is not due until month 25, the preparation of the meeting will be a central activity in the coming period. A draft of the agenda will be prepared in November 2013 for final approval by the European Commission by the end of November and for distribution to Forum members in the first half of December 2013.
- D4.12: Newsletter 4. The next newsletter will be prepared during September for publication in October.
- D4.17 News article 1. The first news for a construction/insurance professional or trade journal will be prepared.
- D4.19 Press release 1. The first press release from the project will be prepared.
- D4.22: Update and revise Elios 2 website. The Elios 2 website will be continuously updated during the coming six month period.

V. WORK PACKAGE 5

1. Work Programme

1.1 Introduction

The objective of WP 5 is to ensure coherence between the activities of the different Work Package teams and the associated bodies in order to achieve a timely delivery of defined tasks within the Work Packages.

1.2 A remark about the financial protection requirements and the regulatory framework

As mentioned in the previous progress report, a new issue is to be addressed within the Work Programme.

During our meetings with several stakeholders, it has become apparent that the questions of the conditions, rules and information needed when an insurer acts in the framework of the Freedom to Provide Services, have to be addressed.

To discuss this matter, a preparatory meeting will be planned soon with Lukas Bortel of DG Internal Market and Services.

1.3 EQEO and the quality signs directory

The development of a pathology database for eco-technologies, which will be called EQEO (Eco-technologies Quality European Observatory), is one of the major tasks of WP2.

As a result of the close interaction between the different work packages, an objective of WP5, this database will contain a part dedicated to quality signs.

This part of the database will be set up in strong link with the directory of WP1. This link will make it possible to compare the 'a priori' and 'a priori' assessment of the concerned quality sign.

The objective of WP 5 is to ensure coherence between the activities of the different Work Package teams and the associated bodies in order to achieve a timely delivery of defined tasks within the Work Packages.

2. Work carried out so far

In the Elios 1 study, the advisory and steering work was limited given the limited number of partners, whereas the Elios 2 study has needed a bigger input in terms of organization to ensure coherence between the different work packages.

To reach this objective and in order to encourage the exchange of information between the numerous partners, different meetings between the work packages have taken place:

17-07-2012 : meeting HANNOVER RE-MAF-CSTB 28-08-2012 : meeting CAPEB-HANNOVER-RE-CSTB

30-08-2012 : meeting ARCADIS, CSTB, BBRI, SBi, NHBC

19-09-2012: meeting Insurance Europe: CEA, CSTB, HANNOVER-RE, ARCADIS

23-10-2012 : meeting ARCADIS-HANNOVER RE — CSTB

12-02-2013: meeting ARCADIS, CSTB, SBi, NHBC

20-03-2013: meeting Insurance Europe: HANNOVER RE - CEA

02-05-2013 meeting ARCADIS-BBRI-CSTB

It can now be reported that the project is on track. For an overview of the work carried out so far by the different WPs, we refer to their contributions above.

Given that the WP5 deliverables span the entire duration of the project, excluding those related to the progress reports for which there is a deliverable every six months, it is not simple to give a status update at any given moment.

In general it can be said that over the past six months, the general administration of the project has been handled and the necessary initiatives taken in such a way that the work programme and the project agenda were respected.

The Commission receives regular updates on the progress of the project and attends the Elios project meetings (Steering Group Committee 8/04/2013 and Forum preparation meeting 17/05/2013).

The general public is informed of the progress made through the newsletter and the website which is being updated in collaboration with WP4.

Furthermore, a second meeting was held with Insurance Europe in Brussels (20/03/2013) following the meeting of September 2012. The Elios team was represented by the leaders of WP3 and WP5.

An overview of the work done so far has been given at this occasion and the questionnaire of WP3 was presented. This questionnaire was later sent by Insurance Europe to all the federations. The work of gathering the answers is under progress as mentioned above in the WP3 contribution.

The Scientific Committee is also receiving updates on the project as well as all the documents (progress reports, deliverables, etc) thereby enabling them to establish recommendations in terms of the work accomplished and in order to formulate their observations on the future orientation that the Elios 2 project should take.

A first meeting between the WP leaders and the scientific committee was scheduled to take place in May 2013 at CEA's office but had to be postponed for organisatory reasons. The meeting will be planned later this year. The Commission will obviously be invited to participate in this meeting.

At the moment, preparations are being carried out in collaboration with WP4 and the Commission for the next Forum Meeting held the 11^{th} of June 2013. A preparation meeting was held the 17^{th} of May 2013.

Finally, as pilot of the Elios project, WP5 is studying the possibility of recruiting new partners in order to reinforce the team, most particularly for the Pathology and quality signs database.

3. Next steps

Over the next six-month period, WP5 will continue to monitor the smooth running of the project. In particular, the focus will be on executing Forum Meeting 5, organizing a meeting for the Scientific Committee and drafting Progress Report 4.