Introduction by CEA

The whole team at elios2 would like to welcome you to our third newsletter. As you will see below, the possible outcomes of the Pilot Project are becoming clearer as the team make significant progress.

Since the last newsletter, the 3rd Forum Meeting for elios2 took place on the 24th January 2013. This forum was mainly focused on Work Package 2 (WP2), which addresses pathology and we discussed the development of a database on building pathology “to support (re)insurers in their risk appraisal of new innovative technologies” especially eco-technologies.

We are currently working to create a pilot database entitled Eco-technologies Quality European Observatory (EQEO), which could make extensive information available on some eco-technologies, their existing quality signs and pathology records. If this project is adopted, a hazard notification procedure may also be implemented as part of this work. Our objective is to make the EQEO operational from 2014.

The minutes of the 3rd Forum Meeting, as well as the last Progress Report, will soon be made available on our website: www.elios-ec.eu

The forthcoming Forum Meeting will take place on the 11th June, details of which will follow. It will focus on Work Package 3 (WP3) which addresses insurance schemes and you will find below an outline of the delicate and complex issue of Energy Performance Insurance.

WP3 will also address, amongst other topics:

- The update of the mapping of the 27 liability and insurance regimes issued by elios1
- The scope for insurers to provide services across EU-27

I hope you find this newsletter interesting and we as always appreciate any comments you may have.

Jean Roussel
On behalf of the elios2 partners
CEO of Centre d’Etudes d’Assurances
Work Package 1: Quality

The value of quality signs in the Construction industry

A quality sign refers to characteristics of a construction product or a construction system. It can also refer to competences of a construction stakeholder or to some characteristics of a whole building. The added value of these quality signs concerning these four categories of subjects is to provide information for each party involved in a construction project to assess the trust and confidence they can have in a product or a system, in the competences of a designer, a contractor or in the characteristics of a building.

Quality signs are some among many other forms of information used for this kind of assessment. Financial and economic data are also used as well as any information considered relevant by the concerned stakeholder. The use of these quality signs by insurers is a key question addressed by the elios2 project.

Progress on the Directory of Quality Signs

The work carried out so far by WP1 partners has been to analyse the delivery processes of quality signs concerning these four subjects. A common data structure was proposed to describe these processes. This proposal was presented during the elios2 forum meeting. The specifications of the web-based directory are being elaborated from the data structure below. After validation of the specifications by the European Commission, the directory will be made accessible to quality signs providers. Members of the UEaTC and EOTA associations will be targeted first before extending the panel to other providers.

Jean-Luc Salagnac
Centre Scientifique et Technique du Bâtiment

Main elements of the quality signs directory data structure

<table>
<thead>
<tr>
<th>Identification</th>
<th>Scope</th>
<th>Organisation of the scheme</th>
<th>Other key information</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Name</td>
<td>• Subject</td>
<td>Element 1: origin of specifications</td>
<td>• Use of quality signs by insurers</td>
</tr>
<tr>
<td>• Logo</td>
<td>• Description</td>
<td>Element 2: person in charge of the comparison</td>
<td>• Other uses of quality signs</td>
</tr>
<tr>
<td>• Scheme Owner</td>
<td>• Scheme Owner</td>
<td>Element 3: Initial comparison and follow up surveillance</td>
<td>• Availability of information</td>
</tr>
<tr>
<td>• Scheme Operator(s)</td>
<td></td>
<td>Element 3: Initial surveillance and audit/control</td>
<td>• Accreditation of the certification body</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Indicators of use: number of signs, …</td>
</tr>
</tbody>
</table>
Work Package 2: Eco-technologies Quality European Observatory (EQEO):

**Purpose of the pathology observatory**

The purpose of the pathology observatory is to support insurers in their risk assessment of eco-technologies. Being able to make a reliable forecast of the failure of the technologies is essential in assessing risk, pricing possible cover and providing a guarantee. The problem is, however, that new innovative technologies or construction products do not yet have an extensive claim history and statistical data.

**Program of requirements for the pathology observatory**

Preliminary results of discussions with insurers indicate that the industry would be interested in a tool with the following functionalities:

1. Quality Signs: there should be a connection with the quality signs directory, allowing a link between a priori and a posteriori assessments
2. Pathology record: an exchange of qualitative technical information on systems’ failures and pathology (without any statistical data disclosure)
3. A hazard notification procedure where interlocutors in each country can report issues/defects

The pilot knowledge base, in which these three functionalities could be combined, will be supported by an internet web-application. Preferably, the exchange of information between a few key actors at a national level will be organised within the framework of a contractual agreement.

*See the figure at the top of this page.*

The partners of WP2 are currently defining the specifications for the future website and the input-output interface of the pilot database. Also, a proposal for the contractual agreement to assemble interested partners is currently being drafted.

**Henk Vermande**  
Arcadis
Work Package 3: Energy Performance Insurance

Demand for financial protection of energy efficiency is rapidly growing as governments increase their efforts to reduce the energy consumption of buildings. Whether it is through “Energy Savings Insurance” (ESI) of rehabilitation projects or guarantee of “Energy Performance Contracts” (EPC) on new buildings, it appears that the risk has not been successfully transferred to insurers in Europe.

This situation is due to various factors, mainly the difficulty for the insurer to assess their risk, particularly around higher energy consumption of the building than was expected at the design stage. While design methods use simplified theoretical models to appraise the expected performance, the insured performance embraces real life complexity, including all specificities of the built construction and its environment.

Another factor is the existence of variables that are independent from the building, such as the behaviour of the user. This is especially the case for single family dwelling where habits have a great impact on energy consumption. We can also notice the importance of equipment maintenance as an independent variable. Even worse in the assessment process, an adverse effect can be observed on users when they know that a guarantee is provided.

Insurers also face operational problems such as the measurement of the energy performance, or the means to identify, thus rectify, the causes of excessive consumption.

Consequently, the existing guarantees are usually carried out on office buildings, where design takes into consideration detailed operational conditions and where behaviour is more predictable. Energy performance insurance now faces the challenge of covering housing.

Thomas Dunand
Hannover RE

Contact

Michel VAN DROGENBROEK, CEA
Email: mva@cea-belgium.be
Notarisstraat 66 Rue du Tabellion
Brussels 1050 BRUXELLES
Tel: +32 (0) 2 761 94 00
Fax: +32 (0) 2 761 94 01

Edited by Joani Reid and Kim Haugbølle