Elios 2 : The new challenging project

Our team would like to welcome you to the first newsletter for the Elios 2 project.

Elios 2 is a pilot project adopted by the European Parliament and the European Commission to elaborate on some recommendations of a previous feasibility study about construction insurance (Elios).

This is the first of seven newsletters which you and other interested parties will receive over the course of this three year new project, with the goal of providing updates as to the progress made by the task-force.

Background

In the framework of the Lead Market Initiative, CEA (Centre d’Etudes d’Assurances) and CSTB (Centre Scientifique et Technique du Bâtiment) were appointed by the European Commission to deliver Elios 1, a feasibility study about construction insurance and sustainability. This first pilot project was 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 core work of Elios 1 was to know how an EU-wide framework could be created which would promote insurance schemes in order to encourage the upwards trend in innovative and sustainable solutions for construction projects and the adoption of responsible management practices in the construction sector, in particular for small and medium enterprises.

The full report, delivered in April 2010, can be found on our website: http://www.elios-ec.eu

The final recommendation of Elios 1 was the creation of a European Agency for construction insurance, with some specific missions that could constitute a road map of the actions to undertake.

Mrs Estelle Grelier (pictured left), MEP who was particularly interested in Elios 1, proposed to the European Parliament in 2011 to adopt a budget line for a new Pilot project.

Elios 2

The new pilot project that started early 2012, will take a more practical approach after the expertise already gathered and delivered by Elios 1. The goal of Elios 2 is to obtain visible results in terms of deliverables.

The team, which was selected following the call tender issued by the European Commission is:  

- Denmark SB/AAU
- United Kingdom NHBC
- Netherlands ARCADIS
- Belgium BRRI
- France CEA
- France Alten
- Germany Hannover Re
- France Allianz (EU)
- France APAVE
- Czech Republic TZUS
- France CSTB
composed of the partners of the first Elios study (CEA and CSTB) but now also includes new additions (Hannover Re, Arcadis, SBI, NHBC, Apave, BBRI, TZUS and Alten). Our team largely represents the different European cultures and combines various fields of expertise as well as complementary skill sets (see graphic above).

This new pilot project, which is to last 3 years, largely follows the recommendations made by the first Elios study, even if the idea of creating a European Agency is still in prospect, has been postponed for a moment.
The operational phase will have the task of accomplishing the 4 following missions:

- To analyse the impact of **quality/conformity marks** on construction markets and the (re)insurance sector as well as developing a EU directory on quality marks;
- To develop an EU-wide knowledge base on quality indicators in construction and **building pathology** that could support (re)insurance in risk appraisal;
- To propose concrete actions for the deployment of **insurance schemes** that could handle cross border services and cover building sustainability performances;
- To assist the Commission in setting up and organizing a **forum** composed of the representatives from the construction and the (re)insurance sectors, of the member states and of the Commission for the implementation of the pilot project.

This newsletter gives an overview of the detailed work which is being undertaken by each of the Work Packages. All partners involved in Elios 2 take a fully collaborative approach to the work and as such we would fully welcome any comments, suggestions or feedback you may have. Please feel free to contact our Technical Director, Victoria Cliatchko **vcl@cea-belgium.be** who is coordinating the work of each of the Work Packages.

The advanced information is available on the website **www.elios-ec.eu**.

Thank you for your interest and involvement in Elios 2.

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

Quality/Conformity Signs in the Construction Sector

There is a common perception that the construction sector is competitive on price but not on timeliness or compliance with specifications. Projects are frequently delivered without respecting the expected requirements and this often leads to widespread dissatisfaction among both private and public clients.

Construction is a project-based industry, not a mass-production industry and as such the construction supply-chain involves many economic actors: clients, architects, technical designers, contractors, product suppliers, advisers, controllers mostly employed on a project for a relatively short period of time, typically a couple of years. During this short period, the majority of these actors will work together temporarily on project-specific tasks, having never previously worked together and likely never to work together again. Furthermore, these relationships are also characterised by asymmetry of information, whereby one party has far more detailed information than the other.

In such a context signs are a way to build confidence between actors. They help identify those in the construction supply chain who have relevant experience and a good track record, as well as reliable products, works or technical equipment. The identification and adequate interpretation of these signs contribute to the quality of the construction project as a whole.

The EU-27 countries have developed their own set of construction-related signs according to their local contexts and therefore the corresponding quantity of information is huge. For example, one single product may show several marks logos.

Elios 2 will analyse the added value, the credibility and the mutual recognition of quality and conformity signs used in the construction such as labels, certificates and technical assessments.

Work Package 1’s overall objective is to facilitate the understanding of this complex situation. The main tool to be developed to achieve this will be a European directory of such signs. This directory will not just be a simple list but plans to produce added-value information reflecting the above nuances between countries.

The aim is that the user of this directory will find information concerning the level of objectivity with which signs are awarded. This may be involvement of a third party, independent technical organisation, public administration body, the scope of application of the sign and its limitations, the level of accessibility to being awarded the sign to name just a few.

To reach its targets and to provide impartial and reliable information on these threats of these signs, WP1 intends to:

- Highlight the variety of the usage and added value of these signs in the EU-27 countries so as to allow a better understanding of similarities and differences between local approaches;
- Reduce information asymmetry between EU construction producers (any actor developing goods and services) and users (home owners, investors, authorities etc) taking into account the increasing regulatory role of the (re)insurance sector in the assessment of risks;
• Help identify compatibility and complementary issues with the CE marking;
• Assess the impact of the quality and conformity signs on the competitiveness of the construction industry and on the practices of the insurance sector;
• Make this information accessible on Internet.

A glossary of terms is being developed in order to avoid misunderstandings in such a specialised domain.

Work Package 2

Indicators on Building Quality and Pathology

As a result of Elios I pilot project, it was concluded that insurers need reliable data on ‘building pathology’ relating to the installation and use of eco-technologies for the purpose of risk assessment.

‘Pathology’ meaning ‘study of disease’, derived from the Greek word pathos (disease) and logia (study) is the study and diagnosis of building defects and damages of a building. Building pathology provides detailed knowledge of how buildings are constructed, used, occupied and maintained, and the various mechanisms by which their structural, material and environmental conditions can be affected.

In Elios 2 an EU-wide pilot database with information on quality indicators and building pathology for eco-technologies will be composed. Some of the typical risks and questions asked of eco-technologies and sustainable products could be:

• Fire risk of sustainable materials (for example the use of straw);
• Is there a good inspection regime for solar panels;
• The risk of extra load and collapse of a green roof because of buffering of rainwater on vegetation roofs.

The delivery of this Work Package will be conducted by a team of experts from the following organisations:

SBi/AAU (Denmark), BBRI (Belgium), NHBC (UK), Technical University of Delft (Netherlands), and ARCADIS (Netherlands).

At the time of writing of this newsletter, the following activities have been performed:

• Review of literature / information sources on building pathology;
• Definition of (indicators for) ‘building quality’ and the relationship between building quality, construction risks, insurance and pathology;
• In depth meeting with the project team;
• Contacting insurance organisations, building control bodies etc to discuss assistance for setting up the pilot database, the data requirements, and the information.
Work Package 3

Insurance Regimes

The overall objective of WP3 is to analyse the conditions for a greater mutual recognition of the construction insurances regimes and to identify criteria for the development of insurance schemes that could support cross border services and the cover of building sustainability performances. The analysis of conditions for a greater mutual recognition of the construction insurances regimes will be conducted in six main tasks, divided in a first group of three parallel studies and carried out in order to support the following three analyses.

1. Update of the mapping of insurance regimes in the EU-27

Based on the information gathered during the ELIOS I pilot project mapping, the assessment will have to:

- Update the information about the current different regimes in force;
- Survey the existing tax incentives and more generally the regulatory framework regarding incentives for sustainable construction.

2. Financial mechanisms for sustainability and protection of investor interests

In parallel with the first objective, this task involves the following processes:

- Identification of the different existing financial instruments aimed to protect construction works;
- Historical assessment of innovation in construction insurance and comparison with existing innovation insurance schemes in other fields;
- An outline of the specific hurdles existing in the insurance of construction innovation.

3. Information needs about construction insurance

This task will identify the main technical information needs in the construction risk underwriting process for the different Construction Works categories.

In coordination with WP1, this study should overview the relevancy of the “quality marks” in regard to the risk assessment made by the technical inspector or (re)insurer.

The three analyses are:

1. State of the art of insurance schemes in the EU-27 and transition paths

An overall objective of the project is to achieve concerted change on construction insurance regimes and sustainable innovation in Europe.

Through a socio-technical approach the analysis, will clarify existing transition pathways and burdens toward cross border services and cover of building sustainability performances.
2. Conditions for greater mutual recognition of construction insurance 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 policy formulation.

The analysis will focus specifically on the following issues:

- Analysis of the impacts of national strategies toward “sustainable goals” on construction insurance and the interactions with the financial protection mechanisms;
- Formulation of general financial protection requirements and regulatory framework influence in order to support the sustainable development;
- Conditions for handling incompatibility of national insurance regimes.

3. Recommendations for policy formulation stimulating good practices and insurance solutions

Based primarily on the previous overview of the “information needs of insurance”, we will examine how the pilot project can support insurance and find solutions to overcome the incompatibilities between insurance regimes by the mean of useful information diffusion.

Other than Hannover Re, our team is composed of:

- **Allianz**, as a construction insurer;
- **Apave**, as a technical controller;
- **SBI/AAU**, as a building research institute.

Forum Meeting Notice

The Elios 2 Forum brings together all interested parties to discuss the progress of the project and exchange information and ideas. The next Forum meeting will be held on Wednesday, 13 June 2012 at the European Commission in Brussels.

If you would like to attend please contact Victoria Cliatchko at CEA: **vcl@cea-belgium.be**

Contact the publisher of the Newsletter, Kim Haugbølle, **khh@sbi.aau.dk**