



Cluster "LIFETIME"

Cluster "LIFETIME" consists of five EU Growth programme projects, with objective to integrate the knowledge of partners of these projects for advancing the work and results of all projects, and to produce an integrated and generic "European Guide for Lifetime Design and Management of Civil Infrastructures and Buildings"

Project: INVESTIMMO

Coordinator:

CSTB Centre Scientifique et Technique du Bâtiment, France. Dr. Dominique Caccavelli, caccavelli@cstb.fr

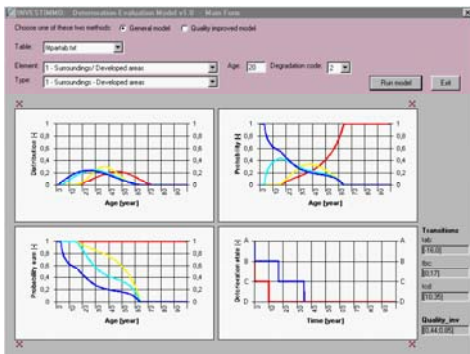
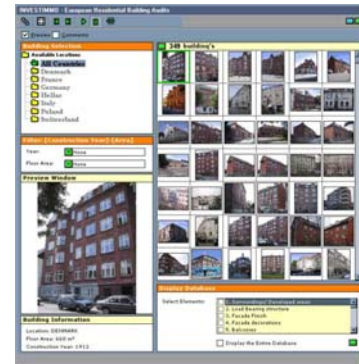
The main objective of the **INVESTIMMO** project consisted of developing a multicriteria analysis tool to help decision-makers to establish strategic asset management plans tailored to residential buildings and scheduled over the short term (annual plan) and over the medium term (multi-year plan). Among others, this tool enables:

- ➔ the development of the real estate holding to be adapted according to the corporate business objectives, integrating in particular future requirements;
- ➔ the implementation of strategic asset management plans in the form of actionable recommendations: demolition-construction, demolition alone, construction, purchase, sale to individuals, extensive requalification, refurbishment, and maintenance;
- ➔ the development of investment budget planning strategies for the maintenance and the refurbishment of the real estate holding.

During the full course of the project, the main achievements have been:

1) the performance of 350 residential building surveys, distributed in the seven participating countries (Greece, Italy, Switzerland, Germany, France, Poland and Denmark). These surveys were used to analyze the influence of various factors on the building deterioration process.

2) the edition of an Handbook of Guidelines on Building's Deterioration. Objective of this Handbook is to present a set of user friendly guidelines for expanding the life span of the building's elements separately, and of the building's as a whole. The Handbook is intended for architects and engineers, building managers and owners, as well as building occupants. A multimedia version of this Handbook has also been developed and is available on a CD-ROM.



3) the development of a predictive model describing the deterioration process of 49 building elements. Probability curves have been built using data collected on the 350 surveyed buildings.

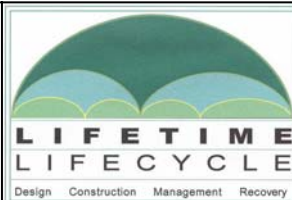
4) the elaboration of a simulation tool assessing the evolution of refurbishment costs of building elements in the next 10-15 years for different building maintenance scenarii, based on the deterioration model.

5) a Code of Good Practice describing all criteria playing a role in asset management (technical, social, environmental and financial aspects).

The **final product** of this project is a computer-based software giving assistance to decision makers to establish strategic asset management plans tailored to residential buildings. The package includes a multimedia user interface, an on-line user manual and a program documentation.

Cluster "LIFETIME" coordinating organisations:

- VTT Technical Research Centre of Finland, FI (coordinator of the cluster: Prof. Dr. Asko Sarja, asko.sarja@vtt.fi)
- Taylor Woodrow Construction Ltd, UK
- CSTB Centre Scientifique et Technique du Bâtiment, FR
- Imperial College of Science, Technology and Medicine, UK
- Universität Essen, DE



Cluster "LIFETIME" projects:

- LIFECON (Coordinator VTT, Finland)
- EUROLIFEFORM (Coordinator Taylor Woodrow, United Kingdom)
- INVESTIMMO (Coordinator CSTB, France)
- LICYMIN (Coordinator ICSTM, United Kingdom)
- CONLIFE (Coordinator Universität Essen, Germany)