

Objectives

SUREURO will create practical working models as part of a decision-making system where all actors concerned in a refurbishment process will be part of decisions and evaluations. The models also mean that all relevant elements, shown in computer applications, must be taken into consideration in planning and decision.

State of the art

In the Member States of the European Union there are about 80 000 residential areas and approximately 56 million flats that were built after 1950. A specific problem is the large industrial post-war housing estates in Central and Eastern Europe.

At the moment there is a low level of integration of refurbishment strategies with sustainability and not enough participation of tenants. Many refurbishments are only focussed on technical issues and initial costs. Life Cycle Costs (LCC) aspects are not yet included in a few places in the world where there is a consumer oriented renovation process. The CIB TG26 gives examples. Important participants of CIB TG26 are involved in SUREURO.

There is also no integration

- Improved quality of refurbished buildings and sustainable performance at reasonable costs.
- Flexible fit-out systems available to fulfil the individual consumer requirements;
- Of the management aspects with the technical process from initiation to maintenance and control;
- Between technical systems at the housing level with the technical systems at the neighbourhood level.

Many products exist with sustainable properties (most for new buildings) but this is not integrated in consistent building and refurbishment strategy.

Partners 5th Framework Sustainable Refurbishment Europe SUREURO EVK4-CT-1999-0008

Kalmarhem Ltd, Sweden	TNO, Holland
NCC AB, Sweden	Logirep, France
Vatten & Samhällsteknik, Sweden	CSTB, France
AKB Housing Association, Denmark	Delphis, France
By og Byg, Denmark	wbg Marzahn mbH, Germany
Byfornyelse Danmark, Denmark	IRS, Germany
Finnish Real Estate Federation, Finland	Sandwell MBC, England
VTT Building and Transport, Finland	BRE, England
Renova Oy, Finland	Blomstrand Consulting, Sweden
Motiva Oy, Finland	LUWOG, Germany
wonenCentraal, Holland	Institut Wohnen und Umwelt, Germany

History



In reality, SUREURO passed midterm almost two years ago. Finding methods and systems for sustainable refurbishment for the European housing market was a natural step for the small housing company Kalmarhem since they successfully carried out sustainable refurbishment in one of their residential areas.

Kalmarhem's objective was to carry out a refurbishment with reasonable consideration for energy savings, reasonable improvements of the environment at the same cost and within the same period as a normal refurbishment. A third and most important criteria was to give the tenants insight, information and influence on the process – before, during and after the

refurbishment.

At the same time as "Inspektoren", the residential area in Kalmar was in the middle of the refurbishment process; the 5th Framework lay on the desks of the European Union Council and the Parliament for a first survey and preparation. This was 1999.

Milestones

We have delivered in DoW promised Milestones and deliverables. In the Midterm report we give a short summary in the Executive Summary and the full contents of the Milestones on the web-based CD.

Milestone at 3 months: Conceptual model

The Milestone 1 as a whole was delivered on time, on CD as well as on our intranet for internal use. The conceptual model delivered is still one of our major structures in the process.

Milestone at 6 months: State of Art

Executive summary state of the art per country

The process in project SUREURO is in full progress. The International State of the Art is one important part of Milestone 2 after six months running.

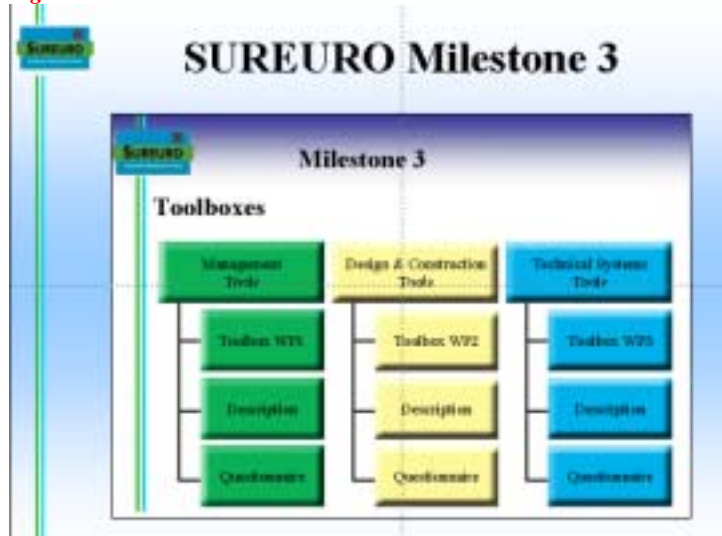
Every national group – Sweden, Denmark, Finland, the Netherlands, England, Germany and France – has also delivered their National State of the Art.

These reports – together with the International State of the Art – are presented on our website. They are displayed in the public part on the site for everyone interested in the area to read and study. That is part of our dissemination.

M3 - Milestone at 12 months: Toolboxes with models and guidelines ready in concept

The Work Package teams 1, 2 and 3 each developed a toolbox dealing with the issues within its work package. The toolbox has at this early stage the following structure:

Figure no 1: Milestone 3: SUREURO Toolboxes



M4 - Milestone at 18 months: Evaluation of the SUREURO toolbox

The housing companies evaluated the SUREURO after receiving the CD with Milestone 4 information. The work has been split up into three parts dealing with the management toolbox of Work Package 1, the design toolbox of Work Package 2, and the technical solutions of Work Package 3.

Deliverables

We have delivered almost everything that was promised. The few discrepancies are explained in the respective Work Package reports.

Organisation

The organisation of this large project is, for natural reasons, structured so that a number of project groups – here called Work Packages – will perform clearly defined tasks within strictly planned time schedules, policies and quality frameworks.

Besides the project management part, 6 work packages have been defined to organise the work in this big project.

- **WP0** Project Management
- **WP1** Strategic Management for the housing companies
- **WP2** Building Process and design and construct tools
- **WP3** Technical solutions for sustainable building
- **WP4** Seven National Demonstration Projects
- **WP5** Two demonstration projects in Czech and Italy
- **WP6** Knowledge and Information System

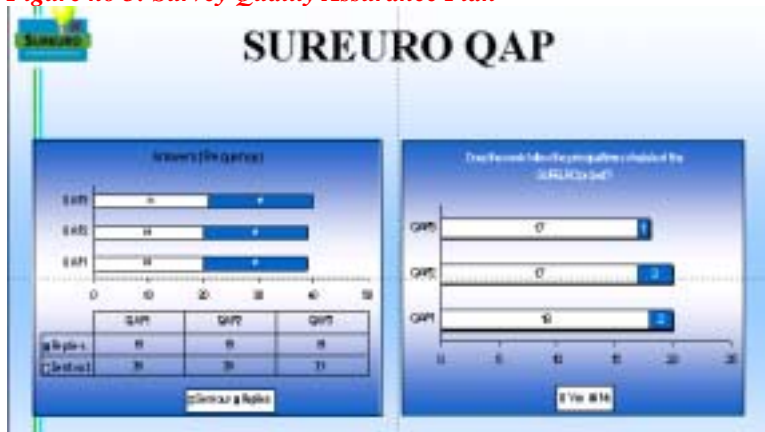
Figure no 2: SUREURO Organisation



Quality Assurance Plan - QAP

The Quality Assurance Plan is built up in main accordance to ISO/DIS 9001:2000 and was processed inside the project and delivered with the First Year Report. The actors are delivering QAP twice a year.

Figure no 3: Survey Quality Assurance Plan



Communication

Communication for the project has been organized round the project web site www.sureuro.org. To the outside world the public web site will be used for explaining the work and giving some of the results.

Figure no 4: SUREURO Internal web



Knowledge transfer and process

The models and tools, which will be developed and later on exploited, must also be tested so that they will become practicable and manageable tools to be used by housing companies, construction companies, designers, architects, craft workers, technical consultants, local authorities and similar players in the sustainable refurbishment process. This will be carried out under the command of the housing companies (Kalmarhem Ltd in Sweden, Housing Association AKB in Denmark, Finnish Real Estate Federation in Finland, Logirep in France, LUWOGÉ in Germany, wonenCentraal in Holland and Sandwell SMBC in England), which will complete sustainable refurbishment projects in their respective areas. Local experts are connected to each project.

The more formal way to present the ongoing knowledge exchange, testing and implementation is presented in the picture to the left.

Figure no 5: SUREURO Knowledge exchange



A number of Knowledge Exchange Teams (KETs) have been established in order to develop, test and implement the different management tools we are developing. In all seven countries there are national teams working in co-operation with the housing companies inside the respective pilots. All together more than 50 organisation (municipalities, technical consultants, constructors, national researchers, housing organisations, national institutes etc) are involved. This gives SUREURO unique "extra" competences in the project. It also means that we have a large scale of dissemination on national level in seven member states.

The housing companies evaluated the SUREURO after receiving the CD with Milestone 4 information. The work has been split up into three parts dealing with the management toolbox of Work Package 1, the design toolbox of Work Package 2, and the technical solutions of Work Package 3.

We will now begin the second test and implementation process with a Sustainable game within the seven pilots, in order to create awareness of the importance of using sustainable basic ideas running a housing Company and dealing with specific refurbishment projects. The sustainability issues will be built up around the SUREURO Conceptual Process Model (CPM) and the SUREURO Sustainable Quality Identification (SQI).

Tenant participation

Tenants from all seven countries are participating in the national pilot projects.

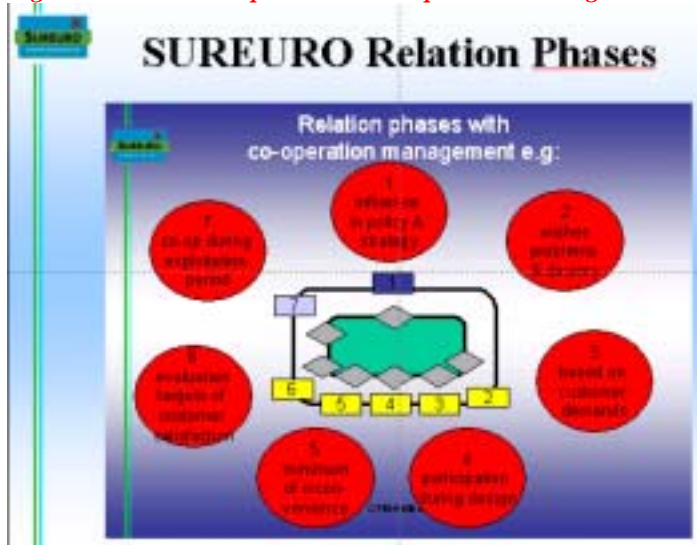
The partners in the project SUREURO are well aware that a sustainable process in housing areas cannot exist without the involvement of the people living in the houses – the tenants.

It is of special importance that the tenants are involved in all stages during the SUREURO project.

Especially in the management process – processed in Work Package 1 - the tenants are an important part. We are developing a special tool for this purpose

Co-operation is a part of all the Work Package1–3 key topics and are an interplay between – and within – three partners; the housing company, the tenants and the surrounding society. There are four levels of Co-operation; information, consultation, participation and Co-management. There are differences in national and Housing Companies context and it's due to differences concerning national regulations and established practice, experience, knowledge etc. About 50 tools have been listed, classified and evaluated. Knowledge Exchange Teams have been organised.

Figure no 6: Relation phases with cooperation management

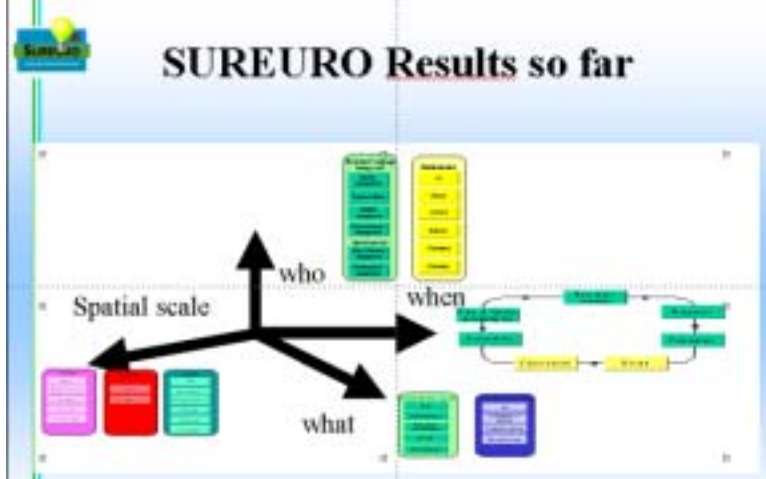


Results so far

Tools:

In the implementation phase of the project the tools will be related to the different phases in the National Projects and the levels of decision-making. In the development phase of this SUREURO project there is a distinction in the three Work Package teams and the information system package Work Package 6.

Figure no 7: SUREURO results so far



Work Package 1: Tools for the general and project managers of the housing company to provide them with instruments for sustainable decision making, in setting their strategic goals and running their refurbishment projects.

Work Package 2: Tools for the professionals, assisting the housing company managers during the refurbishment process, to make it possible to improve their work and to provide them with instruments integrating the sustainability issues.

Work Package 3: Tools and knowledge about sustainability technologies for housing managers and professionals in all stages of their strategic decision-making and refurbishment process

Work Package 6: A tool developed in Work Package 6 is the simulation model.

SUREURO List of tools

1. Environmental building management and maintenance (EBMAM)	10. ExamplesBox
2. Information Strategy	11. Checklists
3. KuluNet	12. Evaluation
4. Long term Maintenance System	13. Setting targets
5. Move In	14. Follow Up
6. Sustainable Process Management	15. Possible solutions
7. Sustainable Residential Investment Analysis Method (SRIA)	16. Sustainable Quality Identification (SQI)
8. Sustainable Strategic Portfolio Management Method (SSM)	17. Status Survey
9. Comprehensive tenants involvement process	18. Technical Support system toolbox

Measurement

The first measurements are finalised and give us a satisfying starting point. It is important to state that the different housing organisations have different priorities in their policies and targets.

In reports from the seven national pilots there are descriptions of the different targets, methods organisation and one concerning measurements.

Next step in the measurement process is the reactions and involvement from the tenants – see chapter.

At the end of the project some pilots can give their final achieved results– for example Inspektoren in Sweden. In their report – pilot Work Package 4.1 – you can see how far they have been able to reach the set targets.

Dissemination

The SUREURO process with its toolbox and tools will be published on our public web site, and also give for free use to thinkable users, selected professional people in housing related areas, for feedback.

We are continuously presenting our method, tools and toolboxes at our seminars. The national organisations – one per country – are free to use the material and to give it to other housing organisation or other parties.

During our testing in Italy and the Republic of Czech, as well as during our conference in Warsaw 2002, the results from SUREURO will be presented. We will, in other words, have maximum spread of our tools, tool-boxes and other instrument in order to help the ongoing process of improving the environment and saving energy.

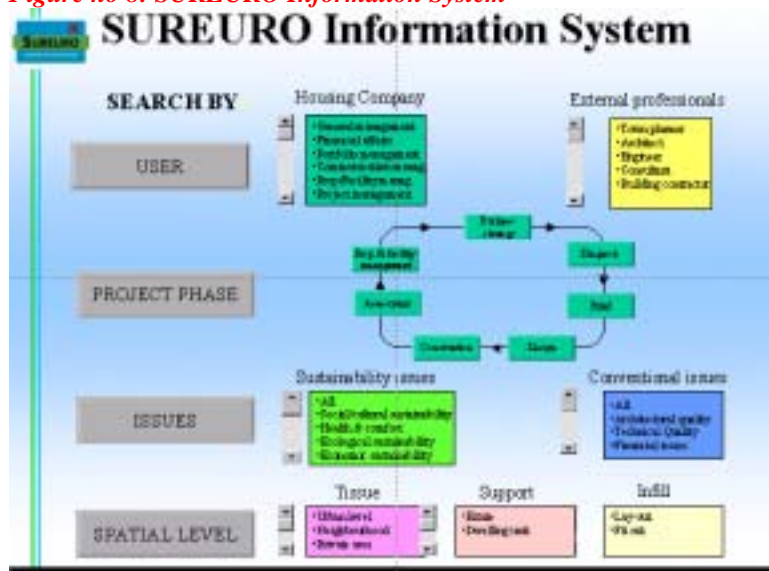
However, in order to achieve a sustainable result and achieve targets to energy saving and improvements in the environment the users will need qualified support and training. It will, of course, also be used as a pushing instrument for the coming exploitation company – SUREURO Management Consulting Group (SMCG).

Information system

The framework for navigating and retrieving information from the system was defined, the main options being searches along 4 axes:

- Process stage
- User (housing company or external professionals);
- Sustainability issue (a defined set) and,
- Spatial level (refurbishment operations in the neighbourhood, in the housing estate and inside a dwelling).

Figure no 8: SUREURO Information System



Exploitation

We are forming a company during the coming months, to offer the management teams of the housing companies in Europe a problem solving capacity of how to run a housing company in a sustainable, profitable way based on the total SUREURO know-how. (“The McKinsey of the European housing company market”) This business idea is based on the judgement that there is a demand for this type of consulting activity in Europe, and that there seems to be no such commercial activity available today. The basis for the consulting is to find the sustainable profitability for the housing company.

SMCG is based on the unique competence in the SUREURO network, facing all aspects of running a profitable housing business in the long term (sustainable).

Obstacles

In the SUREURO project we have so far experienced two obstacles worth mentioning.

1. Contract and advanced payment

Extract from letter from Coordinator to Commissioner Busquin in May 2000:

We delivered our application on 14 June 1999, after 1½ year’s preparation work. The application received 92% score from the evaluation. We signed the contract on 26 January 2000 and were promised the return of

the contract by February 2000 at the latest. We got a fixed starting date, 1 March, included in the contract. We have started the project in full force with a Kick-off with 80 participants from seven countries at the end of March.

...

The clock is ticking, agreed man-months used, journeys made, seminars within the WP:s running as well as subcontractors work. We are strictly following the agreements we have with the CEC. We will deliver Milestone 1 at the end of May.

At the moment we are using our own resources – funds, personnel etc”.

We managed to keep the project running and at the same time fighting to get our contract and advanced money.

2. Change of German partner

One of the principle contractors WBG Marzahn mbH (partner 16) was, due to financing and structural problems, forced to leave the SUREURO-project.

The main reason was not only their financial situation, but also that the company was unable to continue their refurbishment process. That gave as an effect that they could not fulfil the tasks in SUREURO.

In this situation we decided that it was important to continue the project with a German partner. We chose to involve a new housing company as principle contractor: LUWOGЕ Wohnungsunternehmen der BASF GmbH, as Partner 21. LUWOGЕ took over the demanded missions for the rest of the project. The company have great experience in sustainable refurbishment and their own research capacity through their mother company – BASF.

If go – The process after Midterm

We will continue the process as stated in Description of Work (DoW). We will deliver practical working models as part of a decision-making system where all actors concerned in a refurbishment process will be part of decisions and evaluations.

The coming Milestones are:

M5 - Milestone at 30 months

When the toolboxes have been tested in all National Pilots (WP4) the toolboxes have been adjusted to a final version. The result is presented on Internet on our home page.

M6 - Milestone at 36 months

When the toolboxes are ready in concept and some of the experiences from testing in different National Pilots have been achieved the planning and running of two projects in other European countries will start. At this time we also intend to arrange a seminar for countries outside the EU, e.g. the countries within Eastern Europe. The result is presented on Internet on our home page.

M7 – Milestone at 48 months

A final and total report is ready. It will consist of a verbal description of the progress within the work packages and several toolboxes useful for different actors involved in a refurbishment process. The toolboxes shall be practical and built up in data media with matrices and guidelines. There is also a protocol (RMPP) and a training manual to guide the implementation of the protocol.

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