Grant agreement no. EIE/06/068/S12.448123

SuRE-FIT

Sustainable Roof Extension Retrofit for High-Rise Social Housing in Europe

Intelligent Energy – Europe (IEE)
Key action: VKA2 (SAVE)

THE MAIN SuRE-FIT RESULTS
Publishable result-oriented report

Period covered: from 1 February 2008 to 31 March 2009

Start date of the action: 1 January 2007
Duration: 24 months (27 months after extension)
End date of the action: 31 March 2009

Project coordinator: Ton Damen
DEMO B.V.
ton@demobv.nl
+31 15 750 2520

Project website Sure-fit.org
# Table of Contents

1. To the Reader ......................................................................................................................... 3
2. Basic Data about SuRE-FIT ....................................................................................................... 4
3. Executive Summary ................................................................................................................... 5
   1.1 Achievement ...................................................................................................................... 5
   1.2 Aim .................................................................................................................................... 5
   1.3 Results ............................................................................................................................... 5
   1.4 Follow-up actions .............................................................................................................. 7
   1.5 Review of the expected impact of the SuRE-FIT project .................................................. 7
   1.6 SuRE-FIT website hosting ................................................................................................. 7
4. Conclusion and Recommendations ............................................................................................ 8
   4.1 Conclusion ......................................................................................................................... 8
   4.2 Recommendations ............................................................................................................ 8
5. Our Work .................................................................................................................................. 9
   5.1 Introduction of workpackages ........................................................................................... 9
   5.2 WP 2. Survey of best practices .......................................................................................... 9
   5.3 WP 3. Knowledge exchange ............................................................................................. 10
   5.4 WP 4. Development of process models and implementation guidelines ....................... 12
   5.5 Overview of deliverables produced in the SuRE-FIT project .......................................... 14
6. The SuRE-FIT Website ............................................................................................................ 16
   6.1 The different websites ...................................................................................................... 16
   6.2 Public dissemination website .......................................................................................... 16
   6.3 National SuRE-FIT websites .......................................................................................... 17
   6.4 Overview of downloads ................................................................................................. 19
ANNEX: Example of National SuRE-FIT Publication ............................................................... 24
To the Reader

This report describes the results of the EU-research project SuRE-FIT. It is meant for key
decision makers operating in our main targetgroups, e.g. housing companies,
municipalities, architects, contrators and occupants involved in the management and
modernisation of older multi-family houses in Europe. The aim is to stimulate the
application of the SuRE-FIT concept in renovating and updating these houses in a
sustainable, cost-efficient and energy-saving way.

This report is not the main instrument to reach our target groups. The main instruments are:

- Our project website (Sure-fit.org), at which all information in different scales of
detail can be found. Especially the project galleries show the concept and its
benefits in a practical way. Summary information SuRE-FIT in the national
languages is available on the different national SuRE-FIT websites

- The national reports and brochures that partners made to disseminate their results,
but above all to appoach the target groups in their respective countries for further
communication on SuRE-FIT and its implementation.

- Presentation, lectures and SuRE-FIT courses support the dissemination of the
information available on the project website and in the national reports and
brochures. Face-to-face contact with interested parties is till the best way to focus
attention on the SuRE-FIT concept and the benefits of its implementation.

Please contact one of the participants if you are interested to hear more about SuRE-FIT,
would like a presentation of training course, or consider using the SuRE-FIT concept for
the modernisation of your own building or building stock (see table with contact persons).

<table>
<thead>
<tr>
<th>Short name</th>
<th>Participant</th>
<th>Family name</th>
<th>First name</th>
<th>Telephone No*</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEMO</td>
<td>DEMO Consultants</td>
<td>Dassen</td>
<td>Ton</td>
<td>+31 15 7592699</td>
<td><a href="mailto:ton@demolby.nl">ton@demolby.nl</a></td>
</tr>
<tr>
<td>VKEA</td>
<td>VKEA Archive</td>
<td>Vleex</td>
<td>Event</td>
<td>+31 13 8688370</td>
<td><a href="mailto:vleex@vleex.nl">vleex@vleex.nl</a></td>
</tr>
<tr>
<td>VHA</td>
<td>Van Hoogmoed Architecture</td>
<td>Van Hoogmoed</td>
<td>Peter</td>
<td>+31 13 4663507</td>
<td><a href="mailto:peter@vanhoogmoed-architecten.nl">peter@vanhoogmoed-architecten.nl</a></td>
</tr>
<tr>
<td>CEN</td>
<td>CENERGA GMBH</td>
<td>May Ing. Petersson</td>
<td>Peter</td>
<td>+45 44569059</td>
<td><a href="mailto:peter@cenerga.dk">peter@cenerga.dk</a></td>
</tr>
<tr>
<td>ETN</td>
<td>Kubin Bygning &amp;anlægsmotor A/S</td>
<td>Juliane</td>
<td>Juliane</td>
<td>+46 50320535</td>
<td><a href="mailto:juliane@kubin.dk">juliane@kubin.dk</a></td>
</tr>
<tr>
<td>VEL</td>
<td>VEIL A/S</td>
<td>D. Sc. Fincher</td>
<td>Ariane</td>
<td>+45 4464761</td>
<td><a href="mailto:ariane.dysark@vela.com">ariane.dysark@vela.com</a></td>
</tr>
<tr>
<td>INU</td>
<td>Institut für Soziales und Umweltrecht: Gleit</td>
<td>Ing.</td>
<td>Rainer</td>
<td>+45 4151 230437</td>
<td><a href="mailto:rainer@i-su.de">rainer@i-su.de</a></td>
</tr>
<tr>
<td>LUV</td>
<td>LUVOGGE GmbH</td>
<td>Rainering</td>
<td>Frank</td>
<td>+49 6151 30451</td>
<td><a href="mailto:frank@ruengohe.gmbh.com">frank@ruengohe.gmbh.com</a></td>
</tr>
<tr>
<td>BRT</td>
<td>Baufirma Baurfelschaf</td>
<td>Baurfelschaf</td>
<td>Luigi</td>
<td>+49 3237 933655</td>
<td>luigi.baurfelschaf.de</td>
</tr>
<tr>
<td>IAA</td>
<td>Istituto Architetti Associati</td>
<td>Di Giulio</td>
<td>Roberto</td>
<td>+39 95 244041</td>
<td>roberto@di giulio.it</td>
</tr>
<tr>
<td>ERF</td>
<td>Comune di Firenze</td>
<td>Melotti</td>
<td>Roberto</td>
<td>+39 55 9393719</td>
<td><a href="mailto:mattemeli@comune.f">mattemeli@comune.f</a> it</td>
</tr>
<tr>
<td>CVA</td>
<td>Caixa Nord – Ambulatorio – Nordic I</td>
<td>Christen</td>
<td>Christen</td>
<td>+46 31 282864</td>
<td><a href="mailto:christen@caixa.dk">christen@caixa.dk</a></td>
</tr>
</tbody>
</table>
| APO        | Apotheke Parzinger S.A. | Parzinger | Jean-Michel | +31 1 0644006 | jean-michel.parzinger@apotheke.parzinger.s.a.
| STU        | STU-K, s. c. | Stukenbrok | Tosca     | +39 0722 314620 | tosca@tu-stu.de |
| PLN        | Polnied Sp. z o.o. | Polnied | Boris     | +49 0722 317228 | borus@polnied.pl |
| STB        | Subsidiaire technics universite | Kolumian | Kolumian  | +49 0722 3759724 | kolumian@subsidiaire.universtite.de |
## 2 Basic Data about SuRE-FIT

<table>
<thead>
<tr>
<th><strong>Program area:</strong></th>
<th>Buildings</th>
</tr>
</thead>
</table>
| **Coordinator:**   | Ton Damen, DEMO Consultants, the Netherlands  
                      Email: ton@demobv.nl  
                      Tel: +31 (15) 7502520 |
| **Partners:**      | - Comune di Firenze Ufficio Edilizia Residenziale Pubblica, Italy  
                      - VELUX A/S, Denmark  
                      - Perigee S.A., France  
                      - Institut Wohnen und Umwelt GmbH (IWU), Germany  
                      - LUWOGE GmbH, Das Wohnungsunternehmen der BASF, Germany  
                      - Cenergia Energy Consultants (Cenergia), Denmark  
                      - Kuben Byfornyelse Danmark A/S, Denmark  
                      - Bauform Baugesellschaft mbH, Germany  
                      - Christer Nordström Arkitektkontor AB, Sweden  
                      - STU-K, a.s. (STK), Czech Republic  
                      - Ipostudio Architetti Associati, Italy  
                      - Pol Ned Sp z o.o., Poland  
                      - Slovenska technicka univerzita, Slovakia  
                      - Storimans Wijffels van Hoogmoed architecten BV, Netherlands  
                      - W/E Adviseurs, Netherlands |
| **Website:**       | http://www.sure-fit.eu |
| **Benefits:**      | Improvements of existing buildings by better energy performance and new financial resources through roof-top extension |
| **Keywords:**      | Rooftop extension; energy saving; post-war housing renewal |
| **Duration:**      | 01/01/2007 - 31/03/2009 |
| **Budget:**        | € 1 594 575 (EU contribution: 50%) |
| **Contractnr:**    | EISAV/EIE/06/068/2006 |
3 Executive Summary

1.1 Achievement

The SuRE-Fit project generates energy savings and financial benefits by combining the existing cutting edge technologies and best practices of roof top extension retrofit for multi-family social housing and by developing process models and tailor-made guidelines for broader implementing of this innovative solution.

1.2 Aim

The objectives of the SuRE-Fit project are:

- Show the advantages, available technologies and best practices of roof top extension for the modernisation of multi-family housing and develop process models and tailor-made guidelines for implementation of this innovative solution.
- Disseminate the knowledge and promote the application of the SuRE-FIT concept

The main activities within SuRE-Fit are:

- Survey of best practices of sustainable roof-top extension retrofits for energy efficiency in high-rise social housing.
- Knowledge collection and development of sustainable roof-top extension retrofit through case studies and design projects. The scope of work includes the analysis of existing cases and the making of conceptual design for potential new roof-top extension retrofit pilot projects.
- Knowledge dissemination in Europe and implementation through showcases (project galleries), process models and implementation guidelines.

1.3 Results

- Roof top exploitation has recently been discovered as a cost effective way to combine new exploitation with energy conservation. Financial analysis within SuRE-FIT proves that roof-top exploitation increases the value of the building and improve the economy for the house owner. The Swedish partner has started development of light weight pre-fab roof top units with "passive house standard" in cooperation with Swedish manufacturers of prefabricated buildings.
- The SuRE-FIT Pilot Project Westerpark (the Netherlands) was motivated to preserve prefabricated flats, built after the Second World War, despite the poor technical and functional condition. The urban structure is highly appreciated and there is a strong social neighbourhood identification by the existing tenants. The SuRE-FIT-concept made it possible to enlarge the dwellings by keeping the same numbers, and to improve the technical and functional condition. The performance of the refurbished houses are comparable with new building standards, building costs are slightly lower, and cost-in-use are comparable with new building. SuRE-FIT shows the possibility to preserve this cultural heritage in an financially and sustainable approved manner.
- The SuRE-FIT Pilot Project Kassel Wohnstadt (Germany) project proves the high potential to apply the SuRE-FIT concept to make it possible for elderly people to stay in their own house and environment. The concept of rooftop extension is used to integrated health services in existing neighbourhoods. The concept makes it
possible to keep the existing urban and building structures, while at the same time adding floor space for new functions and improving the energy and functional performance.

- New financial resources through additional roof-top dwellings. Large scale attempt of social housing refurbishment for energy efficiency requires major financial resources. The SuRE-FIT action proved energy neutral, flexible roof-top extension retrofit to be a viable solution, both technologically and financially, and combining social, ecologic and economic advantages. The SuRE-Fit concept creates new dwelling units to the existing social housing block, increasing the number or size of dwellings by approximately 20%. The added floor space solves a major problem for housing companies and local authorities: the financing of ambitious sustainable refurbishment. Post-war urban residential areas are attractive to starters and elderly people. They are located near the city centre and the level of public transport is good. Parks and commercial and public facilities are available.

- Benefits at area level. Although the direct impetus for roof top extension is often improvement of the existing building, mayor advantages are within reach at area level. As the SuRE-FIT analyses and pilot projects prove roof-top extension provides more and/or bigger dwellings with a minimum of negative environmental impact (waste production, demolition of existing urban and social structure). Improvement of existing buildings gives the whole area a boost with new facilities and services.

- The SuRE-Fit potential study showed that a total number of 13.7 million dwellings belong to the maximum theoretical potential of SuRE-Fit. This is very substantial and - being about 6% of the EU housing stock - well worth the development of the concept. The potential annual energy savings are estimated at 120000 GWh in the potential study.

![Bar chart showing energy potential savings across different regions and dwelling types](Image)

- % Multi-family: 39% West-Eur, 49% Nordic, 46% South-Eur, 14% GB & Ireland, 47% Central-Eur, 67% North East Eu.
- % Low-rise: 33% West-Eur, 40% Nordic, 36% South-Eur, 13% GB & Ireland, 32% Central-Eur, 53% North East Eu.
- % Max.Potential: 6% West-Eur, 8% Nordic, 5% South-Eur, 2% GB & Ireland, 6% Central-Eur, 6% North East Eu.
1.4 Follow-up actions
- Ongoing dissemination through websites, publications, workshops, courses and training by consortium members (all)
- Development of SuRE-FIT projects by consortium members (CAN, VEL, APO, BfB, IAA, STU, VHA)
- Consultancy activities aimed at municipalities and housing associations (APO, IWU, DEMO)
- Education at academic level (Universities in Bratislava, Delft, Eindhoven, Ferrara)

1.5 Review of the expected impact of the SuRE-FIT project
- At the short term (1-2 years) the action has proved the potential and the feasibility of the SuRE-FIT projects in financial, technical, organisational terms and energy aims.
- At the short term a broad audience will be familiar with the SuRE-FIT concept.
- At the short term the advantages of an integral approach combining energy measures with maintenance and modernisation activities and rooftop extension will be promoted.
- At the medium term (3-5 years) the action will result in an increased number of projects according to the SuRE-FIT concept.
- At the medium term the knowledge about the contents and the advantages of the SuRE-FIT concept will be common knowledge within the circle of professionals dealing with the existing housing stock.
- At the medium term the number of SuRE-FIT projects will increase substantial (estimated factor 2-3).
- At the long term (.5 years) the SURE-FIT concept will be common practice, although integrated with other innovative and advanced methods for modernisation and energy saving in the existing housing stock.
- At the long term the potential energy savings as calculated in the action will be realised, although in combination with other advanced technologies and taking into account that part of the existing stock will be replaced by new building.
- The SuRE-FIT concept developed will keep its relevance and applicability for a long period as long as we have existing multifamily houses in Europe that need energy improvement and modernisation.

1.6 SuRE-FIT website hosting
The SuRE-FIT website will be hosted, maintained and served by DEMO, the SuRE-FIT project leader till at least July, 2011.
4 Conclusion and Recommendations

4.1 Conclusion

About the SuRE-FIT-concept.
The SuRE-FIT-concept proved to be a valuable concept to improve existing post-war multi-family housing. Proof was given by an inventory and analysis of existing cases, by analyses based on statistics and cost calculations and by the development of pilot cases. The project galleries at the SuRE-FIT website, process model and design guidelines are – together with the other deliverables - practical instruments to stimulate implementation of the SuRE-FIT concept on a broader scale.

About the Sure-FIT potential.
There is a high potential to apply the SuRE-FIT concept to integrate health services into housing provisions, making it possible for elderly people to stay in their own house and environment. Although the direct impetus for roof top extension is often improvement of the existing building, mayor advantages are within reach at area level. Improvement of existing buildings gives the whole area a boost with new facilities and services. SuRE-FIT shows the possibility to preserve the cultural heritage offered by post ware housing areas in an financially and sustainable attractive manner.

4.2 Recommendations

If you want more information:
go to the SuRE-FIT website (Sure-fit.org) where you can read and download all results.
If you want more information on the SuRE-FIT concept in your own country:
look at the national website (see international website for link) and/or download the national report, brochure, presentations.
If you have specific questions:
contact one of the SuRE-Fit contact persons (see table in chapter 1 Message to the Reader) and make a personal appointment.
If you want to inform your employees, colleagues, stakeholders about SuRE-FIT:
contact one of the SuRE-FIT contact persons and ask for a lecture, presentation or training course.
5 Our Work

5.1 Introduction of workpackages

The main work within SuRE-Fit was done in three work packages:
- Survey of best practices of sustainable roof-top extension retrofits for energy efficiency in high-rise social housing.
- Knowledge exchange and consolidation of sustainable roof-top extension retrofit through case studies and design projects. The scope of work includes the analysis of existing cases and the making of conceptual design for potential new roof-top extension retrofit pilot projects.
- Knowledge dissemination in Europe and implementation through showcases (project galleries), process models and implementation guidelines.

5.2 WP 2. Survey of best practices

Objectives
- SURE-FIT EU potential study
- State of the art knowledge and experience of roof top extension retrofit for energy efficiency in social housing
- State of the art technology and tools for roof top extension retrofit
- SURE-FIT DO and DON'T overview

Achievements
- Selection of relevant EU statistics; the result of the SuRE-FIT EU potential study, presented as Deliverable 4, including a strategic review of state of the art in new and candidate countries and the potential for roof top apartments in each country.
- Fact sheets of national best practices in Europe (presentation of state of the art design possibilities; building process methodology, supply chain and housing policy aspects; clients and tenants perspectives and roles; architectural, engineering and urban design aspects; and social aspects), presented as Deliverable 5.
- Report of achieved roof-top extension benefits and barriers, and how to overcome them (SURE-FIT DO and DON'T overview; draft SuRE-FIT guidelines), presented as Deliverable 6.
- Selected project gallery (show case of the characteristics of the cases analyzed), presented as Deliverable 7.
- The results are reported in two reports; deliverables 5 to 7 were combined in one report. The project gallery is available on the SuRE-FIT website. All reports/deliverables are available as downloads on the SuRE-FIT website.

The final results and reports of WP2 were used for the design work in WP3. In WP2 the idea of roof top extension is schematically put into three concepts: "Contrast", "Extend" and "Integrate". These classification was the basis for the designs in WP3.
The main work in WP2 was done by the WP-leader WEA with input of the other partner who filled a questionnaire and provided documentation on existing roof-top projects in their respective countries. The work in WP2 in combination with WP 3.2 resulted to the interesting extra study of comparing the environmental impact of the SURE-FIT roof top extension actions with new buildings. Therefore WEA made an adjustment on the Dutch calculation model GPR Gebouw. With that adjustment the model is suitable for calculations on buildings in other countries then The Netherlands. From all case studies in WP 3.2 a calculation of the environmental impact was made. Also the life time CO2 emission is calculated for new buildings and related to the refurbishment with roof top extension.

5.3 WP 3. Knowledge exchange

WP 3.1. Knowledge exchange; design aspects

Objectives
Knowledge exchange and consolidation of sustainable roof-top extension retrofit through studies of existing cases in the design phase and the development of design proposals for potential projects in Europe, resulting in:
- Effective knowledge interactions in the expert workgroup on architectural, engineering, and installation systems
- Final design guidelines
- Final project gallery

Achievements
WP 3.1. analysed the existing cases, reported in WP 2 and developed on that basis conceptual designs for potential new roof-top extension retrofit projects. These results were used to improve the design guidelines and inputs for the development of virtual rooftop designs as examples. The main aim of these cases was to present feasible and experienced solutions to overcome technical barriers, for example the solution for thermal performance of lightweight construction in Mediterranean countries.
All design documentation (like photos, plans, VR pictures, target analysis, etc.) were put in a retrieval matrix, that is available on the SuRE-FIT website.

All deliverables are available as report and can be downloaded from the SuRE-FIT website. The project gallery is presented in the format of a matrix in which the documentation of each project is grouped into thematic aspects. The matrix is available on the SuRE-FIT website and can be used to retrieve the desired information per project and per thematic aspect.

The main work in WP 3.1. was done by the WP-leader IAA with major inputs of the design partners.
WP 3.2. Knowledge exchange; legal, financial and institutional aspects

Objectives
Knowledge exchange and consolidation of sustainable roof-top extension retrofit through studies of existing cases in the design phase and the development of proposals for potential projects in Europe, resulting in:
- Effective knowledge interactions in the expert workgroup on legal, financial and institutional issues.
- Guidelines regarding financial and institutional issues.

Achievements
The work in WP 3.2. was concentrated on the identification of relevant examples of good practice of roof top extension retrofit and the development of guidelines regarding legal, financial and institutional aspects of rooftop retrofit.
All deliverables are available as report and can be downloaded from the SuRE-FIT website.

The main work in WP 3.1. was done by the WP-leader IWU who developed a questionnaire to collect information on legal, financial and institutional issues from the SuRE-FIT partners and other involved respondents.

Results regarding financial aspects. Most SuRE-Fit projects evaluated as pilot projects followed the patterns of investment planning that are current practice of housing companies. Though SuRE-Fit is an innovative “exciting” way of raising money for both roof extension and refurbishment of existing buildings, the financing of the majority of projects follows conventional ways. Housing companies of the kind as those involved in the projects in France, Italy and the Netherlands are used to combine any public subsidised credit instruments.

Two projects are contrasting to that practise which are the German and the Danish ones. The German project can be seen as a result of the SuRE-Fit project, as it was designed to convince a German housing company to join in a co-operative investment, which is to be financed by private money only. The basic idea is to create on top of a residential building facilities for the elderly which seem to be urgently needed in the area with an aging population of low incomes. The basic idea of SuRE-Fit has initiated the concept. Irrespective of the further implementation of the project it surely has opened the way for a different regard on the company’s housing stock.
Similar but with the focus on enlarging the housing stock itself is the Danish concept that also is financed with a large share of owner’s equity adding also a small amount of EU subsidy to it. SuRE-Fit gave a viable push to the project.

Results regarding institutional aspects. Regarding the co-operation of the various stakeholders of the relative Pilot projects SuRE-Fit as an EU funded R&D project supported strongly (though ideally) those partners that were in favour of SuRE-Fit. This may lead to copy the concept more easily for future projects of the same design. This may hopefully be the case in the Netherlands. The optimal combination of stakeholders, however, was the case of the municipality of Florence and of Ipostudio Architetti.
Associati, who jointly were partners of SuRE-Fit thus integrating the promotion of SuRE-Fit in the administration which is near to the political decision making bodies. Though elaborated as a “virtual” project, the Italian pilot project has very good chances for implementation because of this setting. This allowed also for the conference in Florence which was an excellent opportunity to present the SuRE-Fit concept to the various stakeholders of the City that are engaged in the housing market and its relative fields of action.

**Results regarding legal aspects.** It has been pointed out referring to aspects of the methods of evaluation applied, that failing projects fail early without leaving tracks. So there may be more substantial obstacles in practice than could be identified by the analysis of the SuRE-Fit project. It can be assumed, however, that it is more likely that local government or authorities will not intervene in a way to prevent the construction of additional housing in areas where there is a strong demand for affordable housing. Investors in housing normally verify if projects can be implemented without great obstacles. So from the experience of the pilot projects – as well as of other ones – no demand for a general change of legal regulations can be derived. Also problems that were obvious in the Dutch case, referring to the demand of parking lots to be implemented, are rather general problems that occasionally occur but are not SuRE-Fit specific.

### 5.4 WP 4. Development of process models and implementation guidelines

**Objectives**
- Process model development
- Training and seminar preparation
- Website launching and maintenance
- Knowledge dissemination in the academic and professional fields

**Achievements**
The work in WP 4.1. was concentrated on knowledge dissemination and implementation through process models, road maps, and guidelines. The process model provides inputs to housing companies and architects on the decision making process for roof-top extension retrofit. The dissemination of the project results and potential impacts includes an inventory and selection of suitable tools for improvements. All deliverables are available as report and can be downloaded from the SuRE-FIT website.

The work in WP 3.2. was jointly done by WP-leader CAN, and partners IAA (guidelines, part of D19) and DEMO (D18: website design and coordination, and D20: professional training courses).

The dissemination and implementation have a general and local component. The general component was the design of a SuRE-FIT website as a retrieval instrument for all documents and instruments. This includes the project gallery, the design guidelines and all working documents. The local component consists of developed national websites in
the national language for all participating countries, a training course in the national language, a national SuRE-FIT brochure and several workshops, presentations and publications on national and regional level.

During the project, all participating countries have presented, produced and distributed a national brochure and a poster (A3 format). The national brochures and posters are individually designed to local conditions, describing local projects and facts which are interesting to the local public.

Partner CNA has developed a process model and implementation guidelines for roof top extension projects including:
- Description of the building process
- Implementation guideline step-by-step, describing the activities needed, actors involved and tools used during the different stages in the design process.
- For each step – questions to be answered and decisions to be taken
In addition, a "Sure-FIT toolbox" was developed with references to the different deliverables produced during the project.

Based on the format developed by partner DEMO and content provided by the WP-leaders, all participating countries have produced a national training course, individually designed to local conditions, describing local projects and facts which are interesting to the local public. At the moment at least one professional training course has been organised in each of the participating countries. In some countries, like the Netherlands a series of courses is already held. The training courses will continue after the project.

A large number of presentations have been held in both international and national conferences and seminars:
- Germany – several lectures have been held in Europe and Asia. The project is published in the German architectural magazine “DBZ”.
- France – several lectures are held; articles have been published in “Management Immobilier”.
- Italy – more than 2 international conferences held; one conference planned. Publications in four different professional magazines. Television interview.
- The Netherlands – training courses and presentations on a regular basis since 2008, including site visits. Publications in newsletters, professional magazines and newspapers. Project coverage on regional television.
- Sweden – two presentation at international conferences; one planned, several national lectures held, two articles in scientific magazines.
- Slovakia – presentations at six international and national conferences, two articles in national scientific magazines
### 5.5 Overview of deliverables produced in the SuRE-FIT project

<table>
<thead>
<tr>
<th>Deliv.</th>
<th>WP</th>
<th>Deliverable name</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>1</td>
<td>Follow-up of contractual agreements, financial statements</td>
<td>Not available; confidential</td>
</tr>
<tr>
<td>D2</td>
<td>1</td>
<td>Internal and external communication plan</td>
<td>Not available; confidential</td>
</tr>
<tr>
<td>D3</td>
<td>1</td>
<td>Periodic and final reports</td>
<td>In general confidential and not available, with the exception of this report, the dissemination plan and the Sure-FIT fact sheet</td>
</tr>
<tr>
<td>D4</td>
<td>2</td>
<td>Selection of relevant EU statistics</td>
<td>Available; can be downloaded from the SuRE-FIT website at <a href="http://www.sure-fit.org">www.sure-fit.org</a></td>
</tr>
<tr>
<td>D5</td>
<td>2</td>
<td>Scan report of national best practices</td>
<td>Available; can be downloaded from the SuRE-FIT website at <a href="http://www.sure-fit.org">www.sure-fit.org</a> (combined with D6 and D7)</td>
</tr>
<tr>
<td>D6</td>
<td>2</td>
<td>Report of achieved roof-top extension benefits</td>
<td>Available; can be downloaded from the SuRE-FIT website at <a href="http://www.sure-fit.org">www.sure-fit.org</a> (combined with D5 and D7)</td>
</tr>
<tr>
<td>D7</td>
<td>2</td>
<td>Selected projects gallery</td>
<td>Available; can be downloaded from the SuRE-FIT website at <a href="http://www.sure-fit.org">www.sure-fit.org</a> (combined with D5 and D6)</td>
</tr>
<tr>
<td>D8</td>
<td>3</td>
<td>Analysis report of the existing projects of roof-top extension retrofit</td>
<td>Available; can be downloaded from the SuRE-FIT website at <a href="http://www.sure-fit.org">www.sure-fit.org</a></td>
</tr>
<tr>
<td>D9</td>
<td>3</td>
<td>Analysis report of potential buildings for pilot projects of roof-top extension retrofit in other countries</td>
<td>Available; can be downloaded from the SuRE-FIT website at <a href="http://www.sure-fit.org">www.sure-fit.org</a></td>
</tr>
<tr>
<td>D10</td>
<td>3</td>
<td>Detailed programme of requirements and proposed design solutions</td>
<td>Available; can be downloaded from the SuRE-FIT website at <a href="http://www.sure-fit.org">www.sure-fit.org</a></td>
</tr>
<tr>
<td>D11</td>
<td>3</td>
<td>Detailed financial estimation and tailor-made financial schemes and instruments</td>
<td>Available; can be downloaded from the SuRE-FIT website at <a href="http://www.sure-fit.org">www.sure-fit.org</a></td>
</tr>
<tr>
<td>D12</td>
<td>3</td>
<td>Review of local regulations and organisations and developed local institutional structures</td>
<td>Available; can be downloaded from the SuRE-FIT website at <a href="http://www.sure-fit.org">www.sure-fit.org</a></td>
</tr>
<tr>
<td>D13</td>
<td>3</td>
<td>Presentation of conceptual design including scaled models and VR simulations</td>
<td>Available; can be downloaded from the SuRE-FIT website at <a href="http://www.sure-fit.org">www.sure-fit.org</a> Report D13 is focussed on the sustainability analysis of the design project. The conceptual designs itself are presented in a web based retrieval matrix (see D16/17).</td>
</tr>
<tr>
<td>D14</td>
<td>3</td>
<td>Demonstration of innovative project development, planning, logistic/supply-chain, management and financial/marketing approach</td>
<td>Available; can be downloaded from the SuRE-FIT website at <a href="http://www.sure-fit.org">www.sure-fit.org</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td><strong>D15</strong></td>
<td>3</td>
<td>Panel discussion on current achievements and future contributions by the local institutions</td>
<td>Realised according to work programme and initial objectives. Several bilateral discussions were held, the outcome was discussed with experts in the SuRE-FIT Florence Conference. No report available</td>
</tr>
<tr>
<td><strong>D16</strong></td>
<td>3</td>
<td>Final design guidelines and project gallery</td>
<td>Available; can be downloaded from the SuRE-FIT website at <a href="http://www.sure-fit.org">www.sure-fit.org</a></td>
</tr>
<tr>
<td><strong>D17</strong></td>
<td>4a</td>
<td>Public website and intranet containing database, presentations, and reports</td>
<td>See <a href="http://www.sure-fit.org">www.sure-fit.org</a></td>
</tr>
<tr>
<td><strong>D18</strong></td>
<td>4a</td>
<td>Brochures and posters of the research subjects and achievements</td>
<td>Available; can be downloaded from the SuRE-FIT website at <a href="http://www.sure-fit.org">www.sure-fit.org</a></td>
</tr>
<tr>
<td><strong>D19</strong></td>
<td>4a</td>
<td>Tailor-made process models and implementation guidelines of sustainable roof-top extension retrofit</td>
<td>Available; can be downloaded from the SuRE-FIT website at <a href="http://www.sure-fit.org">www.sure-fit.org</a></td>
</tr>
<tr>
<td><strong>D20</strong></td>
<td>4a</td>
<td>National professional training courses on implementation guidelines</td>
<td>Available; can be downloaded from the SuRE-FIT website at <a href="http://www.sure-fit.org">www.sure-fit.org</a></td>
</tr>
<tr>
<td><strong>D21</strong></td>
<td>4a</td>
<td>Publications in scientific and professional journals and television exposure</td>
<td>Available; can be downloaded from the SuRE-FIT website at <a href="http://www.sure-fit.org">www.sure-fit.org</a></td>
</tr>
<tr>
<td><strong>D22</strong></td>
<td>4b</td>
<td>Inputs to the IEA in the quality and form specified</td>
<td>Realised according to work programme and initial objectives. No report available</td>
</tr>
<tr>
<td><strong>D23</strong></td>
<td>4b</td>
<td>Project presentations presented at information and dissemination events</td>
<td>Available; can be downloaded from the SuRE-FIT website at <a href="http://www.sure-fit.org">www.sure-fit.org</a></td>
</tr>
<tr>
<td><strong>D24</strong></td>
<td>4b</td>
<td>Inputs to common presentation material related to IEE actions</td>
<td>Realised according to work programme and initial objectives. No report available.</td>
</tr>
</tbody>
</table>
6 The SuRE-FIT Website

6.1 The different websites
During the project we have established three websites:
1. Projectmanagement site (www.sure-fit.org). This site was used for communication within the consortium and is no longer in the air.
2. Public dissemination site (www.sure-fit.eu). The results of SuRE-FIT are available on this site, which will be in the air for at least another two years.
3. National sites (xxx.sure-fit.eu). These sites contain a summary of the SuRE-FIT results in the national language. The national sites will be updated on a regular basis with news about the implementation of SuRE-FIT at national level.

The websites were and are hosted and managed by DEMO in professional datacenters in the Netherlands

6.2 Public dissemination website
Most important website for the dissemination of the deliverables and being a deliverable (D17) itself, is the public website www.sure-fit.eu..

The dissemination website is a public site with the purpose of disseminating as much information as possible to interested persons. The desgin is made in such a way that the website is easy accessible. It contains information about the project (factsheets, summary, targetgroups etc.), its background (IFD, RTE, RES-technology), the partners of the research consortium, the results (project gallery, statistics, guidelines, brochures, presentations), several downloads and the entries for the national sites.

The SuRE-Fit website contains two project galleries: one with state-of-the-art examples (resulting from WP2) and one with case study examples (resulting from WP3). To search for WP3 case studies a matrix is used as a retrieval mechanism: on the horizontal axis, the six projects (in the heading , the partner, the country and the project name) and on the vertical axis information about the project in eleven standardised categories can be found.

By clicking on cell or an entire categorie one filters the available documents and the resulting subset of relevant documents is shown.

All documents are in PDF format and can be viewed or downloaded by the users.
### The retrieval matrix

#### 6.3 National SuRE-FIT websites

National SuRE-FIT websites are produced according to the working programme in each of the participating countries. The first part contains summarized common information explaining about the SuRE-FIT philosophy, concept, project description and project results. The second part contains country specific information. The aim is that the results of the implementation of the SuRE-FIT concept will be documented on the national websites.

**Overview of national websites and responsible partners**

<table>
<thead>
<tr>
<th>Country</th>
<th>Language</th>
<th>Responsible partner(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Netherlands</td>
<td>Dutch</td>
<td>DEMO/VHA/WEA</td>
</tr>
<tr>
<td>Germany</td>
<td>German</td>
<td>BfB/IWU/LUW</td>
</tr>
<tr>
<td>Denmark</td>
<td>Danish</td>
<td>BYG/Cenergia/VEL</td>
</tr>
<tr>
<td>Italy</td>
<td>Italian</td>
<td>IAA/ERP</td>
</tr>
<tr>
<td>Sweden</td>
<td>Swedish</td>
<td>CAN</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Czech</td>
<td>STK</td>
</tr>
<tr>
<td>France</td>
<td>French</td>
<td>APO</td>
</tr>
<tr>
<td>Poland</td>
<td>Polish</td>
<td>PLN</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>Slovak</td>
<td>STB</td>
</tr>
</tbody>
</table>

The relation between the websites in the three categories is shown in the picture overleaf.
6.4 Overview of downloads

The following documents are available for the public as PDF-downloads from the SuRE-FIT website:

|-- SuRE-FIT Final Documentation

|-- Brochures and Posters

|-- International Posters and Brochures
|-- WP4_D18_Sure-fit_Brochure_Print.pdf
|-- WP4_D18_Sure-fit_Brochure_Xerox.pdf
|-- WP4_D18_Sure-fit_Poster_Print.pdf
|-- WP4_D18_Sure-fit_Poster_Xerox.pdf

|-- National Posters and Brochures
|-- Brochure_France.pdf
|-- Brochure_Italy.pdf
|-- Brochure_Netherlands.pdf
|-- Brochure_Sweden.pdf
|-- Brochure_VeluX_Russia.pdf
|-- Poster_Denmark.pdf
|-- Poster_France.pdf
|-- Poster_Italy.pdf

|-- Deliverables

|-- Deliverables WP2

|-- Deliverables WP2
|-- D4 - SuRE-FIT Potential Study.pdf
|-- D5-D6-D7 Results of Best Practices Survey.pdf

|-- Appendices WP2
|-- Czech Republic_D5_D6_D7.pdf
|-- D4a - Potential Study EU housing statistics.pdf
|-- D4b - Appendix - Response Potential Study.pdf
|-- D5 - Appendix - Description Case Studies.pdf
|-- D5 - Appendix - Fact Sheets.pdf
|-- D5 - Appendix - SuRE-Fit Questionnaire.pdf
|-- WEA - Introduction GPR performance tool.pdf
|-- WEA GPR analysis results.pdf

|-- Deliverables WP3

|-- Deliverables WP3
|-- D10 - Analysis of requirements and design solutions - overview.pdf
|-- D13 - Conceptual Designs - overview.pdf
|-- D14 - Results of the GPR Analyses.pdf
| |-- Deliverables WP4
|   ||-- Deliverables WP4
|   |   | |-- D18 - Brochures and Posters.pdf
|   |   | |-- D18 - Dissemination report.pdf
|   |   | |-- D20 - Dissemination report.pdf
|   |   | |-- D20 - Professional Training Courses.pdf
|   |   | |-- D21 - Dissemination report.pdf
|   |   | |-- D3 - Communication and Dissemination Plan.pdf
|   | |-- Appendices WP4
|   |   | |-- D19a - Toolbox Implementation.pdf
|   |   | |-- D19b - Implementation Report Partners.pdf
|   |   | |-- WP4_dissemination plan Netherlands.pdf
|   |   | |-- WP4_dissemination_plan_Italy.pdf

|-- Final Report
| |-- SuRE FIT_Final Report.pdf
| |-- SuRE FIT_Results of the project.pdf
| |-- SuREToFit_Results of the project_Appendix.pdf
| |-- SuRE_Fit Project Factsheet.pdf
| |-- SuRE_Fit Project Slides.pdf

|-- Presentations
| |-- Presentation Doerfer_architects.pdf
| |-- Presentation Legal, Financial and Institutional Aspects.pdf
| |-- Presentation Ludwigshafen meeting_3L.pdf
| |-- Presentation Marco Sala.pdf
| |-- Presentation Paris meeting.PER.pdf
| |-- Presentation Process Model Implementation Guidelines.pdf
| |-- Presentation Soltag concept.pdf
| |-- Presentation Sure-fit toolbox.pdf
| |-- Presentation TSB_consulting_engineers.pdf
| |-- Presentation von_Feilitzsch_Baufoesche_architects.pdf
| |-- Presentation WESTERPARK.pdf
| |-- Presentation WESTERPARK_ENG_FLORENCE 081205.pdf

|-- Training Course
| |-- training_Introduction_ENG.pdf
| |-- training_Introduction_ENG_Theoretical Foundation.pdf
| |-- training_WP2_ENG_Best Practices.pdf
| |-- training_WP3_1_ENG Resume.pdf
| |-- training_WP3_1_ENG_0-1.pdf
| |-- training_WP3_1_ENG_2.pdf
| |-- training_WP3_1_ENG_3.pdf

Report on the Results of SuRE-FIT_EIE/06/068/S12.448123
ANNEX: Example of National SuRE-FIT Publication

The SuRE-FIT consortium has chosen for an active dissemination policy with presentations, workshops and training courses presented by the consortium partners and focussed on the different target groups in each of the participating countries.

Also national posters, brochures and publications play an important role in the dissemination policy. As an example we have attached as annex the Dutch/English publication on the Dutch case study:

Sustainable revitalisation of Westerpark (Tilburg, the Netherlands) by building on top.