

## European Learning Partnership for Professional Training in SBB

### SUMMARY:

The results of the first SB Leonardo project need to be extended and developed, and it is necessary to incorporate the build and training techniques of new partners, to **produce clear guidelines on best practice techniques and details, and incorporate these into a European ECVET training programme for delivery throughout Europe.**

The **detailed topics of the 10 developed units** will each need **session plans** with a corresponding breakdown of **knowledge, skills and competences** to be met and each topic needs supporting **info, exercise and technical sheets.**

**The target group is building professionals, craftspeople and trainers**

### MOTIVATION:

- There is unanimous agreement amongst leading SB practitioners in Europe that it is important to deepen and extend the very useful work and results of this first Leonardo SB project, especially with regard to the Europe wide training programme and the need to develop detailed session plans for the 10 units, precisely detailing the knowledge, skills and competences to be met, together with providing information, exercise and technical sheets for the training programme, to be drawn from the collective best practice experience of the partner countries, and to be made freely available throughout Europe.

- Developing the **SB training programme according to the European ECVET credit system** is an opportunity to create accredited training on transparent and comparable levels across Europe. This will implement better and more European access to the local experience of the different members, therefore creating opportunities for new jobs in SB-building techniques all over Europe.

- **Sharing information, knowledge, experience and best practice with new partners**, who are young, newly established SB organisations in Europe, also gives them the possibility to develop an ECVET based programme from the outset, to be able to adopt best practice build and training from an early stage.

- Working together with the new partners will also give us **feedback about how we can support newly interested people, organisations, countries in their development and learning process** and how this process can be improved. This interaction will not only have a positive effect on the development of SB techniques and knowledge for the new members, but for all involved members.

- It is very timely to develop this project as there is a growing awareness of the **importance and impact of new technology in building with environmentally friendly, sustainable, thermally efficient and natural materials** – such as strawbale, lime, clay and wood.

- A **best building practice (BBP) model** that freely shares the detail of the most important European SB building techniques will open new perspectives in the field of eco design and build for architects, engineers and craftspeople. It is imperative that the most fully sustainable, effective, appropriate options are available for common use, and this requires sharing technical detail of best practice.

- **Developing Best Building Practice and incorporating this into a professional training may facilitate regulatory approval for SBB across Europe.**

-The resulting **BBP and SB-building training programmes can be actively used by the partner organisations to support local architects and training and building organisations** to evaluate design options for Straw Bale building, as well as offering a high quality and partner approved training programme.

-The **partner organisations can invite local / national vocational training institutions to implement the SB training programme**, for this to be adapted and incorporated into their existing national vocational qualification frameworks.

## OBJECTIVES:

1. **Establishing a European SB training programme based on the ECVET system of credit points** for 10 units, divided into (sub)topics each with detailed session plans and supporting documents
2. **Detailing the main SBB techniques in Europe as Best Building Practice**
3. Making **high quality training accessible and transportable to craftspeople** all over Europe
4. **Facilitating a sustainable, renewable, energy saving solution** to energy and climate change in construction material choice.
5. The resulting **BBP models and the training programme can be used to support local and national strawbale building development**. The training programme will be supported by BBP, and can be incorporated into individual national partner vocational training and qualification frameworks.
6. **Projected outcomes of this project are likely to be an application for a "transfer of innovation project"** for the implementation of both project results, eg through the translation of the SB training programme and modelled BBP into the national languages, and possibly a Mobilities project to pilot the trainings across and within Europe.

## APPROACH:

### 1 To develop & establish the SB training programme:

- developing session plans including content, teaching methods and supporting materials such as info, exercise, technical sheets, appropriate tools, and safe tools use, H&S and teaching materials
- defining the required skills, knowledge and competences to be achieved
- integrating the results of the BBP into the content of the units and topics of the SB training programme

### 2 To detail SBB techniques:

We will travel to the partner countries to visit specific SB houses and building sites that demonstrate best examples of the different SB techniques, and will record, collect, discuss and analyse the methods and building science.

**3 The ECVET training programme will enable each partner country to organise and implement the developed SB training programme**, will be able to offer this Europe wide, and will increase European co-operation in the field of SBB-education.

No.	Approx. date	Description
1	June-July 2013	A detailed outline of a European SB training programme based on ECVET credit system
2	after each meeting	Detailed and extended descriptions of about 6 to 10 SBB techniques, to incorporate developed visual aides as 2D and 3D drawings, pictures, illustrations.
3	May 2013	Summarised feedback of (external) participants of a pilot training session, organised during meeting 7 in Belgium
4	June-July 2013	The sharing of downloadable results with the SB community on the European web site <a href="http://www.strawbale-net.eu">www.strawbale-net.eu</a>
5	June-July 2013	The sharing of downloadable results on the web sites of the participating national SB organisations

## **EUROPEAN ADDED VALUE**

We are creating opportunities for crafts people to improve/upgrade their existing skills to the level of a SB builder with an accepted level of specific knowledge, skills and competences, that will be recognised Europe wide.

- Experience of individual methods is different for each country, and the ECVET credit system makes it possible through participation at different training institutions all over Europe to collect the different training units (eg: the loadbearing unit can be taken in the UK because of their accepted expertise in this topic)
- The ECVET SB training programme will improve the mobility of SB people (architects, crafts people, self builders and trainers) across Europe
- An overview of collected European BBP and a European SB training programme could be the base for developing European regulations and certifications in relation to SB in the future within Europe, and assist its ease of development.
- The agreed knowledge collected in the Best Building Practice models will offer clear options on the methods of building with straw by the EU partners, which will enable the transfer and exchange of skills, technology and experience among the partner countries and possibly also among the other EU countries. The resulting overview will also exist as a platform for continuing this exchange afterwards.
- The in-depth survey of the European SB-building techniques will also give a better overview of areas that need more detailed research and testing, which will be of value to future students, researchers and the universities and built environment colleges of Europe.
- This new Leonardo partnership brings the experienced members of the SB Leonardo project 1, that have generally been active longer in the SB world, together with several new younger SB organisations, who will benefit enormously from their combined experience and knowledge. It represents the need for growth within the EU for co-operation and exchange in the field of SBB.
- The dissemination and sharing of collected information will be made available to support other SB organisations in other European countries, who at the moment do not directly participate.

## **IMPACT**

- Growth of knowledge about SB in general and on BBP in particular, which will create a structure that can be added to in the future with appropriate updates.
- More professionalism regarding SB knowledge and skills will lead to more experienced and skilled trainers, able to educate and support the development of SBB techniques.
- A growing quality of information will lead to better access for interested clients, local authorities, built environment professionals and SB builders.
- More quality-assurance of SB building for both professionals and clients.
- More job creation in the national SB organisations and for building professionals.
- As SBB techniques are easily accessible to all, more work possibilities will be created for women on european building sites, as well as minority and hard to access groups.
- More understanding of the different European cultural backgrounds and national building traditions of different techniques.
- With a better understanding of our cultural diversity and our similarities, we can create better cooperation on a trans-european level.
- Recognition of the cultural heritage of each partner country and the revival of the use of traditional building techniques and materials in the context of SB building.
- Intensively working together in a project will lift all partners to a higher level of expertise on SB; such collaborative working will positively influence the development of the partner organisations themselves, and will create a solid foundation for on-going exchange and networking. It will offer opportunity to other european countries for faster development in the field of SB building.

## RELEVANCE TOWARDS OBJECTIVES OF THE PROGRAM

BBP will demonstrate for designers and builders how to choose and implement best practice SB-techniques. The training programme, based on this BBP, offers comparable information to training organisations. The ECVET programme in combination with the BBP creates the best opportunity for the exchange of knowledge, skills and people within the European community;

- The exchange of knowledge in different (international) SB-techniques will lead to higher quality and a wider range of national/regional SB education and workshop-programmes as well as improving the level of support and consultancy offered to professionals and companies.
- The combined outcomes of the training programme and the BBP models will address existing barriers to the implementation of quality low and zero carbon, energy efficient, affordable, low embodied energy buildings of local, natural materials.

## INTEGRATION INTO ONGOING ACTIVITIES

Almost all of the partners within their in-country SB organisations have experience of delivering education/courses/workshops/training about SB, so they will not only bring their own shared experience to the project, but they will **learn new methods and content to implement into their own national courses**

- the participating countries can take advantage of the **technical details and evaluation systems developed by the BBP as well as knowledge gained from visiting best practice building sites and SB houses during the meetings** - in this way they can refine, incorporate and update their own national SB techniques appropriate to their local environment
- **during the process of the Leonardo project the partners can give presentations about their own national SB organisation's work** in their own country, showing results of the ongoing activities and sharing gained knowledge - **these presentations can be organised to include architects, engineers, trainers, craftspeople, self builders and local authorities responsible for building permissions**
- the **participating organisations can adapt and incorporate the results of the partnership project within their own strawbale training systems and within their own national vocational training qualification systems**. Both elements of the partnership project results will offer a good evaluation tool for each partner country for the improvement and development of their own SBB techniques or SB training programme;
- Various other initiatives exist in different partner countries regarding different aspects of SBB, and through the networking established in this project, the information exchange can flow in both directions.

### In the participating organisations:

- by implementing all or relevant aspects of the Leonardo training program into existing national SB training activities.
- It will improve the dynamic of exchange and best practice development of SB building techniques, and the SB training activities of each partner country.
- The organisations can share the results of the collected technical detail and best practice SBB techniques with their own in-country architects and project developers.
- The organisations can plan, promote and develop mobility opportunities for training participants from other European countries by offering comparable training units under the ECVET system.
- The results (pdf documents) of this project will be placed online, on the web sites of the participating organisations and on the European web site [www.strawnet-eu](http://www.strawnet-eu) .
- the **participants can present the results in national conferences / gatherings/ meetings** of the SB community.

## **DISSIMINATION AND USE OF RESULTS**

### **In the local communities:**

- The local vocational education organisations (built environment) can participate by integrating the results in their training programmes.
- It is an opportunity to create new jobs in SBB as trainers, consultants, architects, engineers and crafts people and through such job creation and upskilling, the partners will spread the results of this Leonardo project in their local community.
- The promotion, demonstration and implementation of more sustainable construction techniques will have a positive impact on the local environment (and therefore on the local community) through demonstrating viable alternative solutions like SB-building.
- Individuals from each SB organisation will be personally upskilled and motivated and more likely to promote SB technologies and methods
- business opportunities for the local agricultural sector can be created for the production of appropriately dense straw bales as sustainable construction material
- Dissemination of the project results will be via the partner websites, press release emails to target groups, via existing networks and presentations by the partners at trade fairs, conferences etc.

### **In the wider lifelong learning community:**

- This project may add extra value to adult education offering access to information, knowledge and skills for lifelong learning;
- on biannual ESBG European gatherings & conferences/meetings with SB organisations across Europe - we will spread/exchange/share the results, benefits & opportunities created through this project.

## **FOLLOWING POINTS SHOULD BE CHECKED REGULARLY**

### **EVALUATION DURING AND AFTER PARTNERSHIP**

During the **first meeting** (kick-off meeting) we will draw up a **detailed timetable for work/tasks** and we can use this timetable during the project to evaluate the progress of aims; the co-ordinator will assist in facilitating progress on tasks set

- we will **begin every Leonardo meeting with assessing the present state of progress** with the agreed action plans
- we will **end every Leonardo meeting with an agreed list of tasks** for every working group
- we will organise **Skype telephone conferences between meetings**, for both individual working groups and, when appropriate, for the whole partnership about the tasks and the progress of work. *Where possible, the dates for these conferences are set in advance.*
- the **co-ordinator will undertake quality control of the process** and will keep an updated **overview on the dynamics and progress of all working groups**
- The **backup co-ordinators will play an active role in supporting the co-ordinator** where needed.
- we will use **one mobility as an exercise to pilot a training session of the SB training programme** with external and partner participants, to assist in evaluating the content and pedagogical methods and to collect general feedback to incorporate into further developing the training
- writing the **interim report** for Leonardo will build in the opportunity for group reflection on the aims and results of our work and will give us a chance to review and adjust, if necessary;
- **every national SB partner country will remain directly involved with the vocational training institutions in their country** delivering the ECVET SB training program (it is likely that one of the training institutions within each country will be the SB organisation itself), to ensure quality control of the SB training programme.

## **DISTRIBUTION OF TASKS**

Active involvement of all partners will involve **rotation of partnership meetings within partner countries**

Partner countries will select **examples of best practice buildings for demonstration and comparison** at their in-country meeting

Smaller **work groups involved in developing specific pieces of work** will be created - the development of the SB training program and the SBB techniques will be the main tasks

**Agreed action plans for the different work groups** will be kept updated in which all the participating countries will have equal responsibility to meet

**Telephone conferences between meetings** will be regularly set up for each working group between partnership meeting dates.

The **co-ordinating partner will manage the overall activities** by ensuring clear agendas and tasks are established and kept updated. **FASBA and Strobouw Nederland** will assist the co-ordinating partner.

**In the initial meeting we will plan the timetable and the tasks for the participating work groups.**

**Hosting partners of the work meetings with clear defined main topics will be**

**Amazonails (RESET)** ( loadbearing / training experience)

**ASBN** (commercial pre-fabrication)

Edilpaglia (hybrid systems) **no EU support**

**Les Compailleurs** (infill & interim report)

MSE (renovation and wrapping) **no EU support**

**FASBA** (experience in testing / infill and prefabrication)

Casa Calida (post and beam & **pilot training session** of SB training programm) **no EU support**

Univ. Lusófona (water resistant lime renders & final report) **no EU support**

**Slovakia ?**

**Netherlands ?**

**Spain ?**

## **COOPERATION AND COMMUNICATION**

All partners already have good experience with effective communication systems and we will use these during the Leonardo project.

### **Tools of communication:**

- to communicate we will use a (**Yahoo**) emailing group with direct access for every partner
- to collect, share and work with documents, we will use an online software program (e.g. TeamDrive / **Dropbox**) - one of the members will take responsibility for co-ordinating this element of the project at the first meeting
- we will make regular **online meetings/conferences** (using **Skype** or GoToMeeting) to have direct communication between the work group meetings - these dates will be set during the meetings and as appropriate.

### **Ways of co-operation:**

- during the Leonardo meetings the partners will work in several nationally mixed working groups with different topics
- the expertise / special qualities and skills of the partners will be applied for the benefit of all
- the co-ordinator (Belgium) will manage the overall co-operation: organising meetings together with the host country, maintaining the networking system and communication channels , ensuring

that all agreed objectives and results are achieved as specified in the application, managing and facilitating group processes during and between main meetings, ensuring effective working relationships and good in-country meeting programmes

- as well as participating in the general project, Germany and Netherlands partners will support the co-ordinator role

- the tasks for the work groups will be divided amongst the members equally

- the existing national documents and information will be provided and shared amongst the partners

**Inside the participating organisations:**

- support for the representatives in their work (e.g. collecting information, discussing details, facilitating questionnaires, etc)

- discussing and evaluating the outcome of each meeting to identify support needed, and to facilitate effective contributions to the project

- giving information about the progress, and promoting the results via their national network and coordinating the feedback, where needed, for the benefit of improving all aspects of the partnership