Dear all,
this is PIRATE project’s last newsletter! We’ve sailed a long way since our preparatory meeting in November 2011.
The ECVET Earth building new units of learning outcomes for loadbearing earthen structures will be available by the end of the month. The new Memorandum of Understanding Learn•Earth has been released too. All the tools, resources and guidelines will be gathered on a new website free for download in a few weeks: ecvetearth.hypotheses.org. The PIRATE website pirate.earthbuilding.eu will continue to exist and partners’ websites and social media continue to display up-to-date information about course and assessment offers.

Our network is growing, as are our skills of cooperation, of building with earth and of teaching and assessing. We have grown in understanding of our European cultures be it in building, heritage, or vocational and higher education. We started addressing the levels of competence for site management and will certainly deepen these aspects in the future, as well as more work in describing earth building competence for architects and engineers. And we are keen to integrate the earth and wood techniques, like wattle and daub, light clay or any other innovative techniques combining insulation materials with clay.

Last but not least, on the PIRATE boat we have come closer on a human level, shared our ideals and awareness about each one’s place on this planet and in its evolution, hands in mud and open hearted. We have come to this journey’s end - but new horizons are calling! Earth will be our common language again.

With gratitude for having been your captain
Lydie

PIRATE captain on a scottish turf wall built during Clayfest 2015
OVERALL 3 MEETING

Overall 3 was the last plenary PIRATE meeting held from 18th until 20th June 2015 in Verden (Aller) in Germany. BiWeNa, Partner P19, organized and hosted it and it was attended by over 30 participants (18 organisations) from 8 countries, as well as colleagues from other countries working closely with some of the partners. Meetings took place in eco-center Verden, where BiWeNa is located and where a 5-storey straw bale building has just been completed.

The first day of the meeting was devoted to presenting the results of previous works, with special emphasis on plans for national strategies of certification in the coming period and after completion of project. The afternoon was devoted to preparation for „Public Day”, to which were invited all interested individuals and organizations from Germany, France and surrounding countries. Participants were divided into thematic groups and preparing concepts for tomorrow’s visit.

The day of open doors started with the morning conference: Sissy Hein (hostess and organizer) first greeted us, then Lydie Didier, project leader, presented the ideas and goals of the PIRATE project, after which Irmela Fromme (Lehmhauswerk) showed modern earthen architecture in Germany. Karin Küßner was talking about ECVET system and after Lydie Didier, Rowland Keable and Ivana Zabickova presented the certification process in France, the UK and the Czech Republic. Final presentation was about „Amaco” (www.amaco.org) project prepared by Gian Franco Norriega.

In the afternoon, visitors could get more information on different topics: mobility of participants, higher education, and assessment of learning outcomes, content of units, tools, the memorandum of understanding between partners, Amaco project and so on. Formal part was followed by a guided tour at the Eco Centre in Verden and exhibition in NZNB, and by an evening trip to Bremen.

Third day continued with regular topics: from the financial statements, through the results of completed works in working packages, to all the other activities that need to be done before the end of the project. Participants were divided into working groups, where each group was developing one of the remaining tasks. After dinner, we met again to gather impressions the Public day, both positive and negative sides and see what all could be improved.

Last day was about remaining tasks, memorandum of understanding between partners, protection of rights and documents, and about future cooperation, participation in the upcoming events and PIRATE presentation of the results of the project on some important events, such as Terra 2016.

Although it was often hard and with a lot of work and effort, it was an honor to spend three years among those people. We still have three months of work and a lot of great things to be produced and translate together!

ÖKOZENTRUM IN VERDEN ALLER

PIRATE last meeting was held in eco center Verden (Aller), on the site of the former artillery barracks in Lindhooper street. In the same complex, there is also a Norddeutsches Zentrum für Nachhaltiges Bauen (NZNB: http://www.nznb.de/), North German center for sustainable construction, where a 5-storey straw bale building has just been completed.

Some parts of the center have been modified since then, using CSEB blocks. straw bales and other techniques of building with natural materials. „Hall 57” is the former depot of tanks and military vehicles, given by the city of Verden to the eco center for use, after which it was renovated and completely redesigned. There are several conference rooms that can provide practical trainings, including materials such as earth, straw bale and internal insulation. BiWeNa and FASBA are giving trainings in its hangar, where you can have the opportunity to see several straw bale walls with different finishes, some of which are entered in the German DIN standards.

On the ground floor and in the basement there is an exhibition, which depict various aspects of sustainable building and eco-friendly materials. There are many tests and experiments that can be seen, felt or touched in this space. And there is a demonstration of „blower door” test, which identifies where all occurring thermal bridges in a house and how they prevent this to happen, especially around power, but also in other places. The building is heated by a combination of solar air absorbers, ice storage and heat pumps.

In the ground floor, there are examples of constructive details applied in the building itself and layers of its clay plasters and lime renders.

The goal of the center is to become a “hub” for sustainable construction of northern Germany, and a regional economic plan is, primarily, to protect jobs in the eco-building, as well as to expand them. Hope we can follow their example all over Europe.
NEW MEMORANDUM OF UNDERSTANDING

LearnEarth

Its 2nd edition was issued on July 7th 2015.

This MoU (Memorandum of Understanding) is intended to be an agreement between organisations offering education, training and/or assessment in the earth building sector.

The partners agree on the requirements for outcome based education and training, and for assessing earth building learning outcomes, as defined during the following EU Projects:


This memorandum replaces the MoU LearnWithClay, which was originally signed by 10 founding organisations in 2009 and has since expanded to 13 members from different EU countries: UK, SK, IT, FR, DE, CZ.

The Memorandum covers the old and the new units of learning outcomes. The learning outcomes are transferable between the partner organisations and the awarded LearnEarth certificates will be recognised by all partner organisations.

The partners have defined rules and procedures to both integrate new partners and to dismiss existing partners if necessary.

The MoU and its annexes and the work of the members will be evaluated and reviewed at least once within a four year period. The work of the Partnership will be evaluated and reviewed at least once within a four year period.

The memorandum and its annexes will be available by the end of 2015 on the following webpages:
http://ecvetearth.hypotheses.org
http://pirate.greenbuildingtraining.eu
and on the partners websites.

FUTURE EVENTS AND ACTIVITIES

IN SPAIN

1. BARRO Y BIRRA / MUD & BEER

ESTEPA is happy to announce the launch of this new program. Why this marriage, you may wonder? You haven’t yet visited our place in Castilla; we are literally surrounded by cereal, which straw is our raw material for adobe and light clay... yet the grain -so important for the rest of living creatures- we have been discarding it up till know. But it’s over. Now we’ll build, bake in our double chamber oven, and brew our own beer. Then you will be able to take it with you for sharing at home.

Our beer trainer is in one of the brewers of Cerveza BARBUDA, self-managed from malt to mugs without intermediation, well known in Madrid warm evenings. Our mud trainer, Maria Brown. Local festivities in Paredes de Nava take place simultaneously, so a good picture of unusual beachless Spain will be a plus. As always group arrangements exist and families, kids or pets are welcome.

2. ECVET Earth Building T4T - Training for Trainers

WHAT - A 2 days Training in Spanish addressing Earth building training providers across Spain willing to fully understand PIRATE and ECVET. There will be theoretical and practical sessions covering the whole Units content and Assessment Issues.

WHERE and WHEN - On September 27-29, at ESTEPA’s Casas del Rey in Paredes de Nava, linked to a diverse set of earthbuilding activities organized by several organisations based in the region of Tierra de Campos:-workshops on building and renovation, sustainability fair, conference.

3. Autumn ECVET Earth Building Workshop, dates to be decided

4. ESTEPA is disseminating PIRATE by publishing in THREE CONTINENTS before the end of 2015:
- XII CIATTI, University of Valladolid, Cuenca de Campos, Spain, 26 - 27 September (in press)
- The International Congress on Earth Architecture in North Africa, Cadi Ayyad University. Marrakech, University of / Morocco, 6 - 9 October (in press)

5. and participating in a FAIR before the end of PIRATE project:
- II INNOVA+TIERRA, Cuenca de Campos, Spain, 26 - 27 September

IN CZECH REPUBLIC

SHS will continue its work! Main tasks are:

- Continuing in the field of education in Earthen Architecture:
- Results of the 2 projects, PIRATE and New partners for ECVET
- Earth Building, will be used for VET trainees. SHS offers all the ECVET Earth building units for levels 3 and 4. Next courses are in September and October and exams in October 2015 (see www.hlina.info).
- SHS intends to actively participate in teaching and testing of the new qualifications Earth builder (mason, plasterer and decorator) in framework of the National qualifications system.

In the next years SHS will deepen cooperation with vocational schools and university students:
- International cooperation on next projects in the field of Earthen Architecture.
- Continuing in the organizing international conferences Healthy Houses.
- Continuing in the organizing National earth builders meetings.
- Continuing in the organizing seminars Earth sharing Consultation, individual help to earth.
- Creating new information sources.

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CLAYFEST! 2015

Clayfest was a week of activities 8-13.6.2015 in Errol Village Hall, Errol in Scotland. The event comprised a total of 60 events including:

- 4 days of practical training workshops in 8 different earth building techniques
- a landscape art project
- an international 1-day symposium on turf construction
- an international 1-day conference on earth building culture
- tours of earth buildings in the local area
- a public day of events

People attending Clayfest included: 100 people attending workshops, 103 people attending conference, 240 members of the public attending the events.

People from more than 18 countries attended: Scotland, England, Eire, France, Germany, Spain, Portugal, Cyprus, Slovakia, Poland, the Netherlands, Sweden, Iceland, USA, Brazil, Argentina, Botswana and Malawi.

Attendees had a broad range including homeowners, self-builders, mainstream and specialist contractors, surveyors, architects, engineers, archaeologists, trainers, academics, children, special needs groups and the general public.

Pirate Project Dissemination: There were numerous levels of dissemination about the Pirate earth training project at Clayfest, including:

- Pirate posters on the venue foyer walls throughout the event
- Pirate leaflets on the information desk throughout the event
- Pirate fliers given to all conference attendees (103) in delegate packs
- Pirate project included in presentation on developing European training by TM during the Turf Symposium on 11.6.2015 attended by 45 people
- A meeting specifically to discuss European trade collaboration attended by 18 people including representatives from France, Germany, Slovakia, Iceland, UK, Ireland, Netherlands, Spain, Cyprus, Sweden
- A meeting between EBUKI and Africa Vision Malawi and Volunteer Aid International to discuss partnership projects in Malawi.

Did We Achieve Our Aims?

There were several specific aims in organising Clayfest:

1. To train people in earth building, giving the opportunity to people to learn new skills and gain a practical understanding of the materials. This was achieved with a larger amount of training delivered and nearly all places filled. This shows there is a good demand if courses are well organised.

2. Reaching a Diverse Audience. We wanted to try out reaching as many different people as possible in as many ways as possible.

3. Engaging the Community. We vested the event in a village to support the community’s knowledge and valuing of their earth building culture.

4. Highlighting Scottish Vernacular Culture to promote an understanding of our earth traditions.

5. Developing Training Skills to develop capacity.

6. Fostering EBUKI Membership and capacity

7. Fostering a Scottish EBUKI group to focus on local issues of earth building

8. Fostering International Networks to promote our earth building culture and foster future projects.

9. Not to Lose Money. EBUKI has negligible financial reserves and could not afford to lose money.

We succeeded in making a small profit which will go towards future activities.
**TERRA 2016 OUTLOOK**

Terra 2016 is the twelfth in a series of international events organised since 1972, bringing together academics, professionals and experts, and a broad audience gathering around earthen architectures.

The congress is organised under the aegis of the ISCEAH Committee of ICOMOS international, in the framework of the UNESCO World Heritage Earthen Architecture Programme (WHEAP).

The 2016 edition will focus mainly on issues dealing with sustainable development, particularly in urban areas.

This event will gather more than 800 participants from the fields of heritage conservation, archeology, architecture and urban planning, engineering, social sciences, as well as fields related to local sustainable development and crisis intervention.

**THEMES**

1. Heritage inventories and studies
2. Heritage conservation and management
3. Local culture and development
4. Research, experimentation, innovation
5. New dynamics
6. Knowledge transfer and capacity building

**KEY DATES AND DEADLINES**

- **Call for papers**
  - **October 10, 2014**
  - **February 10, 2015**

- **Deadline for submission of papers**
  - **October 10, 2015**

- **Deadline to benefit from reduced rates**
  - **March 10, 2016**

- **Deadline for registration of authors**
  - **May 10, 2016**
PORTUGAL WORKSHOP REPORT

First Portuguese rammed earth ECVET assessment, 28-30 July

Portugal is rich in historic and contemporary rammed earth buildings. Now, for the first time in Portugal, the rammed earth competence of construction professionals could be assessed. In the framework of PIRATE project, the Faculty of Sciences and Technology of NOVA University of Lisbon (FCT/UNL) and Centro da Terra Association (CdT- Portuguese National Earth Building Association) have organised a workshop with exam sessions.

CdT helped with the preparation and implementation of the assessment as CdT experts brought their support and experience to the university. Traditional rammed earth formworks have been transported from CEDAC Terra to Catarica Campos of FCT/UNL.

A short training course has been organised previous to the exam, to give equal information to all participants.

The assessment was based on the new ECVET Earthbuilding Units of learning outcomes "Formwork for rammed earth" and "Build rammed earth" and their criteria and indicators for assessment on Level 3 of the European Qualification Framework, as developed in PIRATE project. In this course units F (Formworks) and B/Br (Building rammed earth) were assessed. According to the ECVET Earth building principles, the assessment had a practical, a written and an oral part.

Several target groups participated in the assessment workshop:

- The organisers – Paulina Faria from FCT UNL and CdT, Miguel Rocha from CdT and CEDAC Terra, Mª Idália Gomes from Polytechnic Institute of Lisbon and CdT, Filipa Falcão from CdT and Catarina Pereira from CdT. Architect Miguel Rocha, paulina Faria and Mª Idália Gomes were the trainers.
- Four building professionals with actual or previous building experience as masons with common building materials (without earth building experience), went to training and assessment. One is actually mason and three had mason experience but are now civil engineers. Three were born in Portugal and one in Cape Verde Island of S. Vicente.
- Four building professionals with earth building experience went to training and assessment. The four of them have now their one building companies, one is an overseer and one is an architect and a trainer.

Some professionals assisted parts of the course and assessment to be acquainted with PIRATE units of learning outcomes and ECVET – two architects Alina Jerónimo and Paulo Carneiro.

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the type of soil for building – it had a very low amount of clay and the decision of the trainers was to use 6% of air lime; with a soil like this all the trainees felt the necessity of having a training on units M (materials mix) in a near future.

Outputs:

For FCT UNL and CdT it was very important to have the available F and B/Br units and criteria of PIRATE for level 3 ready to be used (although in a preliminary version); they have been used in Portuguese as all the trainees spoke Portuguese. The English version was used by the German Observers.

Written and practice exams were prepared in Portuguese and English version, so they could be answered by the trainees but also followed by the German assessors. It was also very important to have all the other assessment and evaluation sheets (for trainees, trainers and observers), some of them of MoU, in English; the Portuguese translation was added and English/Portuguese documents are now available.

All the trainees achieved a positive assessment: at least 50% in all the exams of the units. And the results of the two groups were quite close to each other. The major difference was in terms of the organization the group with previous rammed earth experience showed, in the practice exam. But they also committed some mistakes, as well as the group without earth building experience. For that reason the conclusions of the Trainers, the Observers and the Trainees concluded that the short training course and all the assessment was appropriated and can be applied for both these type of groups. Nevertheless some improvements can be achieve for future actions, namely in terms of organization of some parts:

- trainees referred the period of the training - some of them find it appropriate but some would like (as the trainers) to have some more time in a next opportunity.
- the type of soil for building – it had a very low amount of clay and the decision of the trainers was to use 6% of air lime; with a soil like this all the trainees felt the necessity of having a training on units M (materials mix) in a near future.

Although all the trainees succeeded in all the exams, in the written exam two trainees (one of each group) had quite big problems, compared to all the others, on understanding the questions and being able to provide understandable answers. Although they succeeded (they had at least 50%), in the other exams they had higher grades and shown to have the competences to build rammed earth. They both have had very short scholarship; they left school very young to have a job. So maybe an alternative written exam should be prepared next time, maybe with more multiple-choice questions then the one that we have prepared.

At the end of the course and assessment everybody seemed happy, although very tired, and all (trainees, trainers, assessors, observers and organizers) agreed to have learned quite a lot with each other.

The organizers do not know yet the remarks of the Assessors from MoU but we are willing that they liked our work, as we liked their help throughout all the training and assessment.
The last stop was the biggest "clay heap" of Cyprus - Skouriotissa copper mine. The day was crowned with the visit to an earth builder in Falsau, who founded together with Maria the umbrella clay organization in Cyprus.

The second stop on our trip was the small mountain village Fikardou in the Troodos Mountains. The place was deserted by its inhabitants and is now a holiday and a museum village. The houses are lovingly restored and are under preservation order.

On day 4 we participated in the EARTH GEODOMO BUILDING FESTIVAL 2015 in which our work was fully integrated. True to its practical approach, Geodomo Earth Building Workshop was performed on the campus of Cyprus University.

We offered several workshops to visitors: testing raw material, clay plaster, rammed earth, plaster technologies, earth masonry, adobe production. All the participants involved showed from the first until the last minute a high degree of interest and asked many questions and always wanted to do it by themselves.
Some thoughts by Paul Talbot from www.bridgestoeurope.com and www.dieberater.com

• What are the benefits at the end of the funding cycle?
• What can the project bring to the organisation?
• Unless the organisational goals are integrated into the project, there is no intrinsic organisational or economic reason or motivation for an organisation to plan beyond pragmatism.
• If projects are reliant on individuals, what happens when they leave when the project is over?
• Need to encourage the involvement of non-project operational staff in EU-funded projects.

Some reflections by Dietmar Schäfer, teacher at Berufliches Schulzentrum Leipziger Land

Two EU projects (PIRATE and New members for ECVET Earth Building) were successfully completed. So now the question is what to do with the results? For me it was clear in advance that there will be an additional training with the content of the projects on BSZ Leipziger Land, in order to make our training offer even more attractive. For the vocational preparatory year there will be a great input for ecological building issues in training in the two professional orientations: construction and color technology. The new units of learning outcomes will be implemented and we will continue with the good experience in the training and assessment of clay plaster too.

What does this mean for our trainers? They continue to teach according to the national program which has been adapted to integrate green building. For the trainees, the new training will expand their educational opportunities. They can obtain an additional certification (ECVET earth building certificates) and also to have a better chance in the labor market. Teacher already have the willingness to do so, in the students is has to be stimulated. A success at the end of the school year would be for both sides the best reward of the training.

The Association Centro da Terra pays homage to one of its most important members - Teresa Beirão - as a contribution throughout her work for earth architecture in Portugal and to the Association.

Teresa Beirão was a pioneer in contemporary earth architecture and a major player in the revival of earth construction in Portugal, from the mid 90s. Teresa left us but her work speaks for itself and her memory will always remain very much alive in the example that pointed us. This exhibition is now touring Portugal, hosted by associations and other entities motivated to disclose the earthen architecture in Portugal. Some examples as the followings can be seen:
PIRATE aims to create learning outcomes units (http://ec.europa.eu/education/lifelong-learning-policy/doc/ecf/note4_en.pdf), which define skills, knowledge and competence a skilled or professional in the construction sector needs to build earthen walls. Each unit can be assessed at different levels according to the type of job and can be linked with credit points. Three groups (WG) are developing the matrix of ECVET units: Two concentrate on craftspeople of European qualification levels 3 (mason) and 4 (foreman), the third focuses on levels 5 (clerk of works) and 6 (site manager).