For this fourth edition of our PIRATE project newsletter, we opened our pages to other current or recently finished European projects in the field of earth construction. They are all connected to our common goal, which is to introduce earth as a building material into mainstream and certified education and training. Through the projects’ activities and results, our community of practice grows:
- more and more trainers are able to teach clay plaster and assess earth building competences;
- more and more people of different horizons are given the opportunity of life long learning in natural building techniques;
- more and more crafts people are able to produce and apply earthen materials and to correctly maintain and repair existing earthen buildings.

There are, of course, already connections between the PIRATE partners and all the other organisations involved in the other projects, which allows us to start testing our products straight away outside of the PIRATE projects framework, as you can see in the calendar of up-coming activities at the end of this newsletter.

But first I invite you to discover the activities, results and partners of the 3 following projects:
- Northern Clay plaster (2012-2014)
- Natural plastering and finishing (2012-2014)
- New partners for ECVET earth building (2013-2015): during PIRATE Overall 2, this project was nick named Moby Dick...

Also, as usual on PIRATE issues: your can read about our second overall project meeting which took place in Spain and our first test exam addressing rammed earth competence which was organised in France.

Last but not least we invite higher education teachers to participate in our survey about teaching contents and specific modules addressing clay and earth in engineering and architecture courses: PIRATE project already addresses EQF levels 5 and 6 (up to Bachelor) and we hope to extend the competence matrix to level 7! Therefore we are interested to know about initiatives and the actors in this area: some are well known and pioneers, but there are many new things emerging worthy to be shared, I’m sure.

Whishing you lots of energy for all your plans in 2015

Lydie Didier, PIRATE project coordinator

http://pirate.earthbuilding.eu
Northern Clay Plaster Project NCPP
Leonardo da Vinci project 2012-2014

Clay Plaster training material has been brought to ESTONIA, FINLAND and SWEDEN in the “Northern Clay Plaster Project, Professional Qualification for Working with Natural and Sustainable Building Materials”, shortly NCPP. NCPP project is coordinated by TTS, a research and vocational institute in Finland.

Contact person is project manager Marja Salmenmäki, marja.salmenmaki@tts.fi, Tel. +358 40 9005157. Project started 1.10.2012 and goes on until 31.12.2014.

Partners:
TTS             Työtehoseura ry (Work Efficiency Institute)                FI   www.tts.fi
FAL e.V.                    European School for Earthbuilding        DE   www.earthbuilding.eu
Craft Laboratory University of Gothenburg, Hantverkslaboratoriet SE   www.craftlab.gu.se
Eesti Maailmikool Estonian University of Life Sciences EE   www.emu.ee
Luomura ry.  The Centre for Ecological Construction        FI   www.luomura.com
Saviukumaja OÜ Natural building company                          EE  www.saviukumaja.ee

Using earth or clay as building material has a long tradition in these countries, but in the last 50 years, the focus on modernism and technology has interrupted this local know-how. Currently, no professional qualification materials for clay plaster exist in these countries.

In the NCPP project the Estonian, Finnish and Swedish partners aim to bring chosen modules of the training material produced in the 2002-2005 project Modern Earth Building for promoting regional development into the professional qualification schemes of their countries.

NCPP training modules have been tested in these countries in different pilot training courses and workshops. If need be, the training material will also been adapted to suit the northern climate and building traditions.

The Northern Clay Plaster project will add Estonia, Finland and Sweden to those EU-countries, where it is possible to take ECVET Earth Building examinations and collect qualifications in small accessible units of learning outcomes at various levels, across Europe. The aim is for these examinations to count towards existing vocational qualifications in the countries of the European Union.

Project website: www.northernclay.eu
New Partners for ECVET Earthbuilding
Leonardo da Vinci project 2013-3015, nicknamed Moby Dick

The project idea, already been introduced in Pirate Newsletter 1, is to deepen cooperation between the partners involved, improving skills in training and assessment providers. So we regret very much that not all partners who applied for funding to join the partnership project were successful: Earth building organisations and training providers from Estonia, Finland, Italy and Portugal did not succeed and the Swedish partners unfortunately had to withdraw due to staff shortage. In the case of ANAB, the Italian association for ecological architecture, already a member of the LearnWithClay Memorandum, the lack of funding is particularly hard, unfortunately we have not yet found any means to cooperate and exchange experience with Italy.

The Partnership project New Members for ECVET Earth Building gathers 9 partners coming from 8 European countries: Cyprus, Czech Republic, France, Germany, Poland, Slovakia, Spain, United Kingdom.

We started with a Kick off meeting hosted by the FAL e.V. October 2013 in Wangelin/Germany. There the partners participated and evaluated an ECVET Earth Building exam Unit 1 - Preparing Clay Plaster - level 4. As far as we know this has been the first time an ECVET exam for this unit and level has taken place. Additionally we tested the new assessment files and checklists, worked out within the previous project LearnWithClay Partnership 2010-2012 and published in ECVET Earth Building Handbook Part IV, Guide for Assessment Organisers.

While experiencing an ECVET exam either playing a part of an examinee, of an assessor or an observer, we could intensely benefit from each others’ experience. Both old and new partners learned for the first time or improved their competences, to prepare, organise and assess learning outcomes according to the ECVET principles and thus described as skills, knowledge and competence.

Up till now, partners have meet in bilateral meetings or in overall meetings as in Brno/Czech Republic in April 2014 and in Palencia/Spain in June 2014 together with PIRATE project partners.

We are currently developing an online database to document ECVET Earth Building exams. At the overall meeting in Brno we designed a new memorandum of understanding to replace the existing one, to incorporate the new units of learning outcomes on earth bricklaying, rammed earth and cob developed in PIRATE. We are working on procedures for entering and leaving the Memorandum.

The project also offers learners and trainees possibilities to take part in training and assessment of ECVET Earth Building learning units abroad. A group of 3 trainees in dual vocational training from BSZ Leipziger Land/Germany have visited Batipole/France and took part in ECVET exam Unit 2 - applying clay plaster - level 2. The German trainees performed the practical and oral exam at Batipole in France, while they took the written exam on their return to Germany at BSZ Leipziger Land. This procedure was not a planned project part, but was due to methods and procedures, the result however proved the flexibility of the system of ECVET earth building exams. Nevertheless this combination was successful due to good cooperation and existing mutual trust between the partners.

In September 2014 a Spanish group of 5 learners and trainers participated in a training and exam of clay plaster unit 1 and 2, level 2 at BSZ Leipziger Land/Germany, resulting in awarded ECVET Earth Building certificates. By participating in the training and the exam the Spanish partner ESTEPA was introduced in the general ECVET principles and the rules and procedures as described in the ECVET Earth Building handbook.

Contact:
European School of Earth Building / FAL e.V.
National ECVET Earth Building Contact Point
Uta Herz
herz@earthbuilding.eu
The story of the project “Natural Plastering and Finishing” goes back to 2011, when Wojciech Owczarzak, director of VERNUM, attended the training for trainers at FAL’s European School for earth building in Wangelin (Germany), thanks to a Grundtvig mobility funding. That was the moment when FAL was looking for partners in Poland.

The Polish company VERNUM initiated the project “Natural Plastering and Finishing”, to promote vocational learning of individuals in the Earth Building sector, an innovative idea in the Polish training market. Up to 2012, the only possibility in Poland to learn about clay was during small workshops on building sites, driven by Poles or foreigners. There were also trainings conducted by producers of ready made clay plasters. Workshops for professionals were also available abroad, but the costs were high.

The main aim of the project is to foster returning to the labour market of unemployed people (men and women: aged 50-64 and disabled people aged 15-64) thanks to new skills in clay plastering and interior design. The new training curriculum leads to a new qualification. The project has been fully financed by the European Union from the European Social Fund.

The project “Natural Plastering and Finishing” is based on the teaching materials that have created in the project Leonardo “Clay Plaster” (2002-2005, German qualification ‘Designer for clay plaster’ EQF Level 4 certified by the Chamber of Crafts in Schwerin).

Introductory film about plasters and clay plaster training (26 minutes)
http://lernpunktlehm.de/wp3/?page_id=690

Beside VERNUM there are 2 other Polish project partners: the association of Ecodevelopment Agro-Group and the association Wandering Architects. The fourth partner is FAL e.V. from Germany, the leader of many other projects in the field of earthbuilding.

In the period September 2012 - March 2013, we have analysed the whole curriculum created in “Clay Plaster” and also the assessment standards of the project “LernWithClay/ LernLehm”.

In June 2013 we had an opportunity to test our new polish teaching program, We organised training for trainers – 1st time in Poland, led by two German specialists from FAL: Piet Karlstedt (module 1) and Irmela Fromme (module 2).
In January and February 2014 we organised dissemination of our project. Several meetings and taking part in educational and building fairs. It was an opportunity to pass to the Polish market the information: “The clay plasters are here – you can use them – and we’re the place were you can learn about it”.

From June to September 2013 we did several test trainings for unemployed people from all over Poland. Very fresh trainers (with a bit more experienced architects and plasterers) were training unemployed people in different units. They succeeded – nine of twenty-nine beneficiaries found a job in the field of clay plasters!

During October and November 2013 we finished the final form of the products of the project: paper and DVD.

In the future we will continue to train new trainers and unemployed people all over Poland. In addition, Vernum takes part in different international initiatives concerning earth building.

contact: Wojciech OWCZARZAK, PhD, project coordinator
Tel. + 48 504 680 503

Web page of the Project Natural Plastering and Finishing: www.naturalnetynkowanie.pl

Film from national television about our trainings:
http://www.youtube.com/watch?v=2qkC6c5cqVrU
Survey on ECTS for earth in higher education

1. What for?

The PIRATE working group “SUPERV” studies the possibilities to integrate earth training into higher education level (EQF levels 5 and 6). In order to draw up an inventory of the current situation, we have created a survey whose objectives are to list institutions that deal with earth as a building material in their teaching and to specify the number of hours and of ECTS points (European Credits Transfer System) corresponding to these specific courses on earth construction, on EQF levels 5 to 8.

2. What is it?

This survey is a chart with the following columns:

- Institution name (ex. University xy)
- EQF level (ex. Bachelor = 6, Master = 7)
- Name and year of diploma (ex. Bachelor Civil Engineering 1)
- Unit or module or subject (ex. Soil mechanics, Sustainable building, …)
- Title of the course (or part of the course, eventually title of lessons)
- Number of hours of lectures or workshops
- Number of hours of personal work
- Mandatory or optional
- Number of ECTS (tell whether they are specific for the earth part of the training or if you calculated them)
- Contact data/ link

The survey can be filled in in your national language, yet for us it is useful to have French, English or German translations.

For the moment, we have collected answers from France and Portugal: 34 courses with earth content have been identified (11 courses from 9 institutions in France and 23 courses from 8 institutions in Portugal). It appears that, except for the DSA at CRAterre (France), “earth construction” only concerns parts of some courses and no specific ECTS are dedicated to it.

3. Call for contributions

This survey must go on…. And, we need your help! If you work in higher education, please send us data according to the above list of headings. Any information, even partial, will help us to go ahead. Feel free to fill this chart even if the number of hours dedicated to earth is small or if there is no specific ECTS dedicated to this teaching. Add columns if you need. Moreover, do not hesitate to give us the contact of colleagues from other institutions that offer such courses or to forward the survey directly, whatever the European country!

By autumn 2015, we will send the complete results of the survey to each participant.

You may either send your chart to Jean-Emmanuel Aubert (leader of WG Superv, University of Toulouse, France): jean-emmanuel.aubert@univ-tlse3.fr or use the on-line chart: https://docs.google.com/spreadsheets/d/1IkDC8wpmhTb9ckz4dL2jEYVuvyRZGu0W1eOMdSoE0lc/edit?usp=sharing

Thank you in advance for your cooperation!
OVERALL MEETING 2

Venue: Colegio de Arquitectos of Castilla y León, Palencia (ES)
Date: 8-11 of July 2014
Organizer: ESTEPA (P14)
Participating countries: Czech Republic (SHS), Cyprus (Between the Lines), France (Batipole, CRAterre, ENSAG, AsTerre, Compagnons, LMDC), Germany (BSZ LL, DVL, FAL, LBW, LUAS, Misereor), Portugal (FCT-UNK, CdT), Serbia (Kuca), Slovakia (ArTUR, Hoblina), Spain (estepa), UK (EBUK)

After 7 big transnational work group meetings (MONO 1 and 2, BRICK 1 and 2, SUPERV 1 and 2, MONO TEST) and many national and smaller meetings between the partners, this was the first time that all partners met again during the Overall 2 (mid-term) meeting in July 2014 in Spain. We were joined by fellow earth workers from a partnership project who took an active part in the discussions: Batipole, Between the lines and Hoblina.

Being hosted by the Chamber of Architects witnesses the growing support to Earth building.

Day 1, after a short introduction, we all went outside the building to show how big this project is and how many countries, partners and associates are involve in it, by simply making small groups per country, per project, per thematic working groups etc.

After that, we started by comments of EU commission on our interim report and improvements we need to make in future, especially about overall dissemination and exploitation strategy. Then, there was an explanation about all financial aspects and issues of the project.

When this was done, we started reviewing our work packages (WP) and the results achieved: we discussed our key actors directory (WP2) and the drafts matrix (WP3) was presented by group leaders (MONO, BRICK and SUPERV). In the afternoon, we worked in 8 groups on different WP topics. At 6pm we had a public presentation of our project at the Provincial Archeological Museum of Palencia.

Second day, we continued working in groups and then each group presented their work and there was a discussion about it. In the afternoon, we had 8 national presentations, where each country presented their dissemination plan.

Third day, there were several topics and several groups working on them: ECVET, DACUM, Memorandum of Understanding, exploitation procedure (IPR), certificates database, mobility and credit transfer, copyright. We also worked in groups on different topics of WP6: public website content, leaflet, booklet, fairs & conferences, video clips, newsletters 3 and 4, glossary and picture sharing.

In the afternoon, many decisions were made about how to continue working and sharing tasks between partners. We also found some time to discuss about topics that were not on the list, but we found important.

We did a meeting evaluation all together and concluded this meeting by putting on the wall all the future projects, video conferences, future events and opportunities to work.

On Friday, we had a really nice visit of earth architecture of this region: first we’ve seen a rammed earth wall restoration, and then we visited an adobe and compressed earth blocs factory and two pigeon houses (one restored, the other one in process of restoration) in Amayuelas de Arriba. We finished our journey in front of the ecological community housing in Amayuelas de Abajo.

Some of the partners stayed for the adobe workshop 12th -15th July, organized by ESTEPA in their headquarters in Paredes de Nava.
PIRATE gets a refreshed public website!

PIRATE website has evolved to allow all content to be translated in 8 languages, English, French, German, Serbian versions are completely translated, and it’s getting done for the other languages: Portuguese, Czech, Spanish, Slovak).

It’s possible to translate it into other languages: if you’re interested to become a translator, contact the webmasters!

Earth construction is a field of growing interest and activities. To keep an eye on what’s happening outside our partnership, this reviewed website now includes links to worldwide websites and social networks dealing with earth construction. If you have a regularly updated profile (such as facebook, pinterrest, google+) or website with rss feed, you can make your news part of PIRATE platform by sending us your address.

Sharing and commenting what’s being done in PIRATE and about training with earth also becomes easier with the new blog: you’ll find the last posts on PIRATE homepage (pirate.greenbuildingtraining.eu). Open comments makes it easier to exchange with us and the world.

These evolutions of the website are the first step towards an open platform for sharing PIRATE results with all who are interested in earth building training: learners, craftspeople, trainers, training organisations, and certifying bodies. It will keep changing until the end of the project to make more informations available in an easier way.

We hope you'll enjoy visiting and sharing with us at pirate.greenbuildingtraining.eu!
MONO Test meeting 1 workgroup

Venue: afpa Saint Etienne, France
Date: 10-13 June 2014
Organizer: AFPA (P4)
Participating countries: France (CRAterre, ENSAG, afpa, Compagnons), Germany (FAL, Lehmbauwerk, Misereor), UK (EBUK), Portugal (FCT-UNL, CdT)

What is MONO Test?
Proposal of criteria and indicators were prepared before the meeting and used as a basis, together with the proposal also made for BRICK units. AFPA organisers set up a fake exam session with 7 learners in “historic buildings masonry” based on that proposal. Three rammed earth walls built during the first day gave a great opportunity to share about evaluation practices and to try to apply some of the criteria and indicators. More than a real exam session, it provided an experimentation grounds that helped understanding each other and make clear the scope of evaluation criteria and indicators for skills. These exchanges were completed during a day’s visit outside Saint Etienne, in Saint Just saint Rambert, where we completed the criteria and indicators for all MONO units with an additional transversal set.

Objectives
The meeting aimed at discussing what are the core criteria that will be used to evaluate a candidate during a monolithic earthen walls masonry exam.

Issues discussed
The framework already used for clay plaster’s validation (coming from previous Leonardo da Vinci projects) was accepted as a good base to build upon. It proposes to evaluate knowledge, skills and competencies to go through 3 exams: written, practical and oral. This first test meeting focused on the practical session, where skills are evaluated. Defining which skills are required at each concerned level (EQF 3&4) is required to evaluate as well as to organise the session.

Results
Although the way to organize the exam was discussed to try to find out a way that would help assessing all skills needed, it was decided that the aim of the work was not to give rules on how to evaluate. Indeed, many different exam situations are implemented by the different partners who were attending the meeting and what came out is that it’s not possible to define rules for the organisation of the exam sessions that would fit with all different practices. As all skills can’t be evaluated during a practical exam, some will have to be evaluated through Q&A, during oral exam.
Upcoming events

1- Next national and transnational PIRATE meetings in 2015

23 January - CZ Certification Committee (national conference II) organised by P17-SHS. Introduce results of work made in PIRATE project, dissemination of this project, ECVET in Czech Republic, discuss future in earthen architecture to support creation of new norms and standards, connected research activities.

20 January - UK Certification Committee organised by P13-EBUK at CITB, to review the National Occupation Standards and qualification units for earth construction.

26-28 February - BRICK TEST meeting in Böhlen, hosted by P9-BSZ.

17-18 April - DE Second national MONO meeting, Weimar. Partners P8-DVL, P10-LBW and P19-BiWeNa and other rammed earth craftsmen from Germany. Present the results of workgroup MONO levels 3+4, discuss content and aim of the first rammed earth workshop with ECVET exam planned for July 2015 at FAL.

May - RS Second Serbian Certification Committee (national conference II), organised by P18-Kuca Kuvarkuca, to introduce results of our work and their possible implementation.

15-20 June - OVERALL 3 in Verden, hosted by P19-BiWeNa

2- Other clay events in 2015, by PIRATE partners

These 2015 public activities (trainings and conferences) are not financed by PIRATE budget but are nevertheless opportunities to test the new ECVET earth building units content and assessment criteria. They are also opportunities to invite other partners to share experience, work in groups, finish tasks.

15-17 January / U1 - Clay plaster mortars + earthen floors / SK / P16 ArTUR
Clay plaster + clay floor course + examShare information about Pirate, dissemination

17 January / Meeting of earth builders of Slovakia, establishing Slovak network / SK / P16 ArTUR
Introduce results of work made in PIRATE project, dissemination of this project. Introduction of final draft of Technical Normative Information discussed for earth building in SK, discussions about earth builders craftspeople’s future.

30-31 January / Course on Clay-lime plasters / SK / P16 ArTUR

5-7 February / U2 - Apply Clay plaster / SK / P16 ArTUR
Clay plaster course + exam Share information about Pirate, dissemination

14 February / U6 - The business of clay plasters / CZ / P17 SHS
Clay plaster course

February / Conferences Building with Earth, Association “Terras Dentro” / PT / Others + Centro da Terra + P15
Discuss about earth building

23-25 February / Course on clay brick masonry / DE / P9 BSZ
Gather trainees from different horizons including mobility form France, to prepare the BRICK test exam

12 March / Conference on ECVET Earth building and training possibilities (Moby Dick activity) / DE / P7 + Moby Dick partners + Chamber of crafts Schwerin
Inform trainers, Training providers and potential trainees about ECVET Earth building and clay plaster training possibilities

Spring / Rammed earth units M + B assessment / PT / P15 + Centro da Terra
Test rammed earth units + criteria, get feedback from trainees

19-21 March / U3 - maintenance and repair / SK / P16 ArTUR
Clay plaster course + exam Share information about Pirate, dissemination

16-18 March / PATOREBB 2015 – 5ª Conference on Pathology and Building Rehabilitation / PT / Others
Paper presentation about the influence of aggregate particle size on hygrothermal properties of earth mortar plasters (P15) Disseminate and discuss earth building

25-28 March / Exhibiting at the building fair in Bratislava, practical workshops, presentations / SK / P16 ArTUR
Introduce results of work made in PIRATE project, dissemination of this project
Upcoming events

27-29 March / U1 - Preparing clay plaster / CZ / P17 SHS
Clay plaster course 8-12 April Rammed earth training + assessment (Moby Dick activity) SKP16 ArTUR Test Unit R with criteria

13-30 April / Certified course with exam “Fachkraft Lehmbau” / DE / P8 DVL
Try to use PIRATE results for assessment

16-19 April / Exhibiting at the building fair in Nitra, practical workshops, presentations / SK / P16 ArTUR
Introduce results of work made in PIRATE project, dissemination of this project

17-19 April / U2 - Application of clay plaster / CZ / P17 SHS
Clay plaster course

24 April / Seminar for Planners / DE / P8 DVL

27-29 April / ICNF2015 – 2nd International Conference on Natural Fibres, From Nature to Market / PT / Others
Provisional paper on the influence of fibres on earth plasters (P15) Disseminate and discuss earth building

27-30 April / Clay plaster training and ECVET Exam, U2, level 2 (Moby Dick activity) / DE / P7 FAL
Get feedback from trainees

24-26 April / Brick course / CZ / P17 SHS
Production on building site and walls bricklaying

14-15 May / International conference Healthy houses / SK / CZ P16 ArTUR + P17 SHS
Present results 8-10 May U3 – Surface treatments, maintenance and repair of clay plasters CZP17 SHS Clay plaster course

22-24 May / U4 – Interior design with clay plaster / CZ / P17 SHS
Clay plaster course

22 - 24 May / Rammed earth course / CZ / P17 SHS
Preparing of earth mix, construction of small piece of rammed earth wall

23 - 25 May / U4+U5 - Design and ornaments / SK / P16 ArTUR
Clay plaster course + exam Share information about Pirate, dissemination

25-29 May / Festival Grains d’Isère / FR / P2 + others
International workshops and conferences

4-5 June / U5 – Decorative elements with clay plaster / CZ / P17 SHS
Clay plaster course

4-5 June / Workshop - building wall by historical technology clay mound / CZ / P17 SHS
Construction of a piece of earthen wall made by this old technology

5-7 June / Repairs, reconstructions of earthen buildings and historical technologies / CZ / P17 SHS
Course about repairs of old earthen buildings – walls and the other earthen elements

Workshops: Cob building (Feile Butler); Clay plaster (Adam & Katy Weisman); Mudwall conservation (Becky Little); Rammed Earth (Rowland Keable); Turf building (Bill&Athena Steen, Arizona)

29 June-3 July / Adobe training + exam (Moby Dick activity) / CY / P14 Estepa + BtL Cyprus
Test brick units + criteria for B-Build with Adobe bricks and P-Production

13-17 July / Rammed earth course + assessment / DE / P7 FAL + P10 LBW
Test rammed earth units + criteria, get feedback from trainees, trainers and assessors

17-18 July / European Earth building Day, Photo exhibition Clay museum / DE / P7 FAL + P10 LBW
Theme: Rammed Earth Constructions – Training for Sustainability. European Exchange, meetings, presentations

18-22 August / Coloured clay plaster course + ECVET exam Unit 4, level 2 / DE / P7 FAL
Get feedback from Trainees

Autumn 2015 / Training for trainers about our ECVET tools / FR / P1 + P3 AsTerre + P4
Get feedback from trainers and assessors

8-10 September / CONPAT 2015 - XIII Congresso Latino-Americano de Patologia da Construção / PT / Others
Provisional papers on: “Reed cob” masonry building system (P15). Disseminate and discuss earth building

8-10 October / Creativity and Experiments in earth building, Unit M exam, level 4 / DE / P7 FAL
Get feedback from trainers, trainees and assessors

Note: All courses prepared in Czech Republic are in Czech language. Assessments for these courses will be made at autumn (October 2015)
PIRATE aims to create learning outcomes units (http://ec.europa.eu/education/lifelong-learning-policy/doc/eqf/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 work 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).

COMING SOON
OUR PROJECT LEAFLET PRESENTING
THE NEW UNITS OF LEARNING OUTCOMES
DEVELOPED IN PIRATE PROJECT