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Applying European market leadership to river basin networks and spreading of innovation on water ICT models, tools and data.

> Deliverable D 7.3 E-learning platform

> > Version 1.1

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1. Introduction

According to the DOW this work package has to deal with the creation of multimedia products, tutorials and participative e-learning platforms and the development of activities aimed to facilitate and increase the use of the marketplace.

It will also consider the possibility to conduct competitions and youth involvement measures. The specific objectives of this WP are:

- To promote multi-directional learning among the project partners, entities and actors.
- To raise awareness and promote a bottom-up approach within the business community and market actors for identifying opportunities and supporting their implementation processes.
- To improve the interactions between the user and practitioner community, the society and ICT business WaterInnEU and market community.

The WP includes 5 different tasks and 3 deliverables. The planning is the following:

Task	WP	WP	Task	Month															Ĭ.	7									
ř	<u> </u>	> ;=		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Star	End
7	1		Raw material production															х	х				Х	х					
7	2	ρū	Multimedia products																Х	Х	Х				Х	Х	Х		
7	3	learning	Tutorials																Х	х	х				Х	Х	Х	15	24
7	4	E-lea	Skills exchange and mentoring															х	х	х								10	
7	5		Competitions and youth involvement																					Х	Х	Х	х		

This report concern the description of the deliverable "D 7.3 E-learning platform" to be submitted at month 18th.

This deliverable describes the way the e-learning platform was structured and developed. This deliverable in then constituted by this report and by the e-learning platform software.



2. Task 7.2 E-learning structure

2.1. **Design process**

As mentioned in the WP7 description, Open Educational Resources (OER) were analysed in order to design the e-learning material for WaterInnEU. For this last activity different platform were analysed and the reference selected was Coursera.org. Coursera is educational technology company that offers massive open online courses, and it is probably the biggest and fastest growing company offering these services in an innovative way. Coursera offers all its courses "accessible for free" some courses have the option to pay a fee to join the "Signature Track". It is structure in a very simple and clean way mostly based on short e-learning, which provide videos with supporting materials for participants that intend to have a deeper understating of the different subjects.

The features selected for the WaterInnEU eLearning platform and its design were presented and discussed with the consortium in several meetings including January 2016 in Berlin and monthly teleconferences. In addition, some choices about the level of integration with the Marketplace platform were made. The results are presented in the following paragraphs.

2.2. Recommendations for implementation into the Marketplace

Different level of integration with the Marketplace platform were analysed. The options proposed to the consortium were the following:

- Two platforms
- Hybrid solution: Iframe + users shared
- Full integration as Drupal module

The initial design of the WP was thought in order to have an independent platform based on an existing software (WordPress). The second option analysed with the consortium was to have a light integration, meaning to implement the platform as foreseen in first option but using an iFrame, so that the difference between the two platforms should have been transparent for users. The third option foresaw a total integration, also technological, between the Marketplace platform and the e-learning platform. This, in agreement with the consortium, was the choice taken. This choice implied a reshuffling of the resources internally in Randbee in order to be able to develop the e-learning module, and re-directing

more resources to the IT development from the tutorials and courses development. The elearning module is under development in the same technology used for the Marketplace platform, Drupal, its final version is foreseen for month 24, but draft version will be issued before in order to have feedback from consortium, partners and to proceed with the testing and bugs fixing.

2.3. The e-learning module

As mentioned the e-learning module will be developed in full integration with the marketplace platform as a Drupal module through the following phases:

- 1. Independent development of the e-learning module
- 2. Testing and bug fixing in a clean environment
- 3. Integration of the tested module in the marketplace platform
- 4. Compatibilities testing
- 5. Testing and bug fixing

The identified objectives for the e-learning module are the following:

- Supporting the third parties providers:
 - giving them the possibility of creating e-learning courses to promote their products
 - Understanding market opportunities
 - Market introduction
- Supporting users
 - Project planning
 - Identifies products and opportunities

These initial objectives have been then integrated in the overall service offering designed by the consortium for the marketplace (WP4).

Based on these objectives and on the analysis exposed in previous paragraphs a list of draft functionalities have been identified. In the following report (month 24) the definitive list of functionalities will be presented.

The e-learning section of the platform will be organised in different section as presented in the following figures.



Figure 1: the draft mock-up of the main page with the explanation of the course selected



Figure 2: the draft mock-up of the **lectures** list page

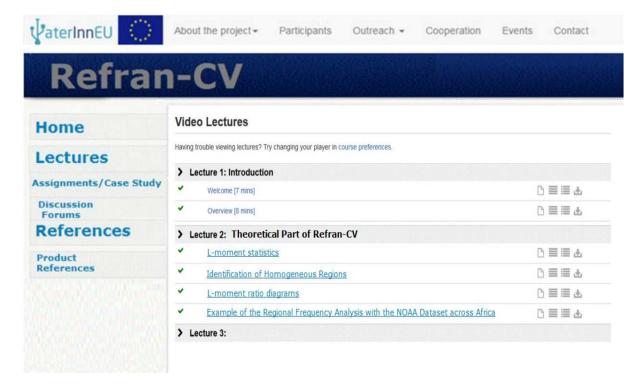


Figure 3: the draft mock-up of the references page for the lectures to analyse in deep the product including some theoretical background.

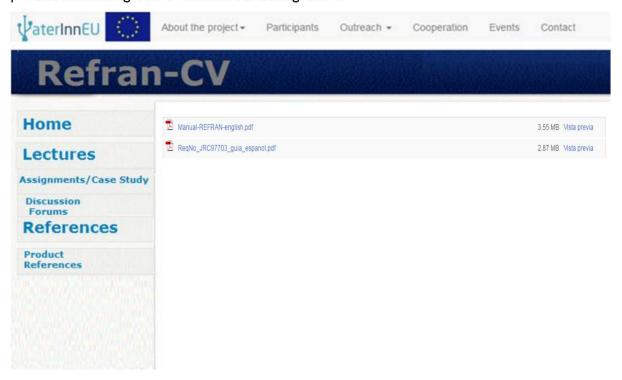
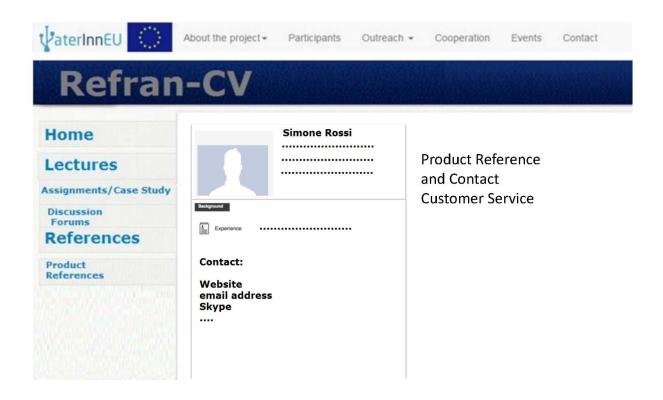


Figure 4: the draft mock-up of the product reference page





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Figure 5: the users could also receive a "state of accomplishment"



The final version of the e-learning platform can be found at: https://marketplace.waterinneu.org/en/e-learning. This e-learning platform provides the following courses: AquaSurvey, GUIDOS (GIS and Classification Tool), REFRAN (Processing Time Series of Meteorological Stations Data) and WEISS (Water Emission Inventory planning Support System).

3. ANNEXE 1: List of functionalities – short overview

Functionalities for course administrators:

- Create e-learning courses as content:
 - content
 - Webform
 - Create "learning verification" content:
 - Quiz
 - Multiple Answer questions
 - Yes/No questions
 - Open Answer questions
 - Associate created question to course
 - Poll
 - Configure course access based on time or other conditions such as object start, completion, grades
- Define different credit types to learner profiles and courses
- Course Administration
 - Control enrolling into, taking, and restricting access to courses.
 - Reporting
 - Check the state of a single learner in relation to a course.
 - Certificates
 - Course comes with certificate which awards a PDF Certificate on course completion

Functionalities for final users:

- Check courses offer
- Check/give rating/comments for courses
- Enrol (signup) into a course
- Check state in relation to a course
- Take course/quiz/poll
- Answer to questions



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- Receive certificate of attendance
- Facebook/linkedin/twitter sharing