

## European Commission Executive Agency for Small and Medium-sized Enterprises

Intelligent Energy Europe Contract Number IEE/12/696/SI2.644740

## **CH4LLENGE**

Addressing Key Challenges of Sustainable Urban Mobility Planning

# D6.2 Report on CH4LLENGE's online learning courses

Deliverable	D6.2 Report on CH4LLENGE's online learning courses
Work Package	WP6 Training and exchange
Dissemination level	Public
Author	Susanne Böhler-Baedeker and Miriam Lindenau (Rupprecht Consult)
Submission date	20 March 2016
Status	Final
Project start date and duration	21 March 2013, 36 months



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## **1** CH4LLENGE's online learning in brief

As part of the SUMP Kits, five online courses were created that were targeted at representatives of Follower Cities, mobility practitioners interested in the four challenges as well as students and young professionals. RC developed a "SUMP Basics" course offering an overview of the SUMP concept, presenting case examples and encouraging knowledge transfer through exercises for learners. Furthermore, one course for each challenge was created by SUMP Kit authors Rupprecht Consult (on participation; and Ghent case study course by City of Ghent), POLIS and West Yorkshire Combined Authority (WYCA) (on institutional cooperation) and University of Leeds (on measure selection as well as monitoring and evaluation). The courses are hosted on the e-learning platform Mobility Academy<sup>1</sup> and will remain there as a legacy of the project. They are integrated into a wider learning environment and linked e.g. to the SUMP Self-Assessment Tool.

By the end of the project action more than 140 learners had registered for the five courses.

### 2 Introduction to online learning

Online learning, commonly also referred to as e-learning, uses digital technologies for the purpose of training. Various definitions have evolved in the past decade when online learning became increasingly popular and more learner-friendly. The American Society for Training and Development (ASTD) developed a definition that suits CH4LLENGE best:

"E-learning refers to anything delivered, enabled, or mediated by electronic technology for the explicit purpose of learning. This definition excludes things that might fit under the title 'distance learning', but are non-electronic (such as books and paper-based correspondence). It is broader than, but includes, online learning, Web-based learning, and computer-based training. E-learning includes both one-way and two-way learning exchanges, as well as learner-to-learner interaction (as occurs in learning communities)." (ASTD, 2001)

Online learning sees the learner in the centre of teaching, which is a significant difference to traditional class room teaching where the instructor is at the heart of the course. The overall challenge of online learning is to not just put traditional training offers online but to develop content that has an added value if it is created and available on the web.

Teaching and learning has moved away from class room teaching to a mix of learning formats also called "blended learning" or "hybrid learning" including, for example, online learning, (online) coaching, online research and class room teaching. Also CH4LLENGE takes a blended learning approach by offering a mix of SUMP workshops, national training seminars, online learning courses and non-electronic self-study material (handbooks, brochures, etc.).

Finally, online learning can make better use of material (documents, videos, podcasts, websites, etc.) that is already available on the internet.

## **3** CH4LLENGE's online learning concept and structure

This chapter describes the aims of the CH4LLENGE online courses. It addresses learning resources, target groups and objectives as well as structure and content development.

<sup>&</sup>lt;sup>1</sup> www.mobility-academy.eu

#### **3.1** Online learning resources

In order to generate a knowledge base on e-learning and decide what formats are most suitable for CH4LLENGE, research on existing e-learning platforms and previous e-learning experiences was carried. The following projects and activities were identified and analysed for providing valuable input for the development of the CH4LLENGE online learning programme:

- Transport Learning (http://transportlearning.net) Training on sustainable urban transport policies and measures
- PRESTO Promoting cycling for everyone as daily transport mode
- SUTP Sustainable Urban Transport Project (<u>http://www.sutp.org/e-learning</u>)
- Massive open online courses (MOOCs) on Coursera learning platform (<u>https://www.coursera.org/</u>)

#### **3.2 CH4LLENGE online course target groups**

The following CH4LLENGE online course target groups were identified:

- Representatives of the Follower Cities
- Any transport planner interested in any of the four challenges
- Young professionals that would like to learn more about SUMP and/or any of the four challenges
- CH4LLENGE University participants that would like to follow-up on the university content

#### 3.3 CH4LLENGE online learning objectives

The following specific objectives for the CH4LLENGE online learning have been formulated. The learner will

- be able to explain the SUMP concept and its benefits, and to differentiate between traditional transport planning and sustainable urban mobility planning
- gain comprehensive and structured knowledge about the procedural elements of the SUMP cycle
- be able to illustrate the impacts a SUMP can have on the transport situation, environment as well as quality of life and how SUMP and its measure packages contribute to a city's or region's overall sustainability
- be able to reflect on existing SUMPs and evaluate how they compare to the key characteristics a SUMP should comply with
- be able to translate the cycle idea to the own local planning situation
- gain comprehensive overview and understanding of common barriers for each of the challenges
- have received profound knowledge about approaches and solutions taken-up by local authorities on the basis of case studies

In addition, participants will be encouraged to engage with and get to know their fellow course participants and create valuable connections.



#### 3.4 CH4LLENGE course structure and formats

#### **SUMP Basics course**

The SUMP Basics course addresses how integrated planning and the development and implementation of Sustainable Urban Mobility Plans can contribute to solving urban transport problems and achieving more sustainable mobility in cities and regions. The course provides an indepth presentation of the SUMP concept. It looks at what makes SUMPs different from traditional transportation plans, and why they are valuable for a city, illustrates the main characteristics of a SUMP and explains the SUMP process. In three comprehensive units, the SUMP preparation cycle is presented, complemented by various case studies, practical tips and recent findings from research. The course consists of a total of seven units and 19 modules.

Link to the SUMP Basics course: https://www.mobility-academy.eu/course/view.php?id=52

#### The four challenge courses

Each online learning course focuses on one challenge (participation, institutional cooperation, measure identification, monitoring and evaluation). The courses consist of six to eight units, each incorporating up to four modules. All courses start with a Welcome module explaining the project and online learning background and providing information on pre-knowledge, language, interaction and online class participation. A short introductory module about the course topic, i.e. the challenge, follows in order to motivate the learner to continue the course.

All courses provide a background and context unit, incorporating a module on the SUMP concept – a short version of the SUMP Basics course, encouraging the learner to take the full course and prepare him/her for the challenge course – and a further module presenting the relation between the challenge and sustainable urban mobility planning. The subsequent units concentrate on topic-specific content. The content and structure of these units and modules have been developed based on the individual characteristics of the challenge. All courses end with a Conclusions unit in which course content and key messages are reviewed, lessons learned presented and further resources for learners outlined.

Link to the Participation course: <u>https://www.mobility-academy.eu/course/view.php?id=53</u> Link to the Cooperation course: <u>https://www.mobility-academy.eu/course/view.php?id=54</u> Link to the Measure Selection course: <u>https://www.mobility-academy.eu/course/view.php?id=55</u> Link to the M &E course: <u>https://www.mobility-academy.eu/course/view.php?id=55</u>

#### **Online course participation**

Once learners complete a unit, they are asked to do an exercise. These are usually homework tasks to submit on the 'News forum'. Providing learners with clear, focusing questions to answer for themselves helps them to better understand how to move forward in their own city. Unit tasks probe for people's insights, ideas and opinions, beyond just asking for information or a 'yes'/'no' response. The homework tasks means to encourage knowledge sharing and discussion between participants.

#### **Statement of Accomplishment**

A Statement of Accomplishment is awarded to participants who have completed all of the assigned tasks in this course. If learners wish to receive an electronic certificate, they notify CH4LLENGE





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#### **Course moderation**

Communication and interaction between the course moderator and participants (and between participants themselves) happened in the News Forum during a four-week period for each course. Moderation tasks covered facilitating discussions in the News Forum, responding to interesting points in the News Forum and tying it back to related examples or issues within the course topic as well as giving general guidance for participants. Due to low levels of interaction and low responsiveness of learners (see Chapter 5), course moderation was carried out to a smaller extent than initially expected.



#### Figure 1: CH4LLENGE Online Learning – flow chart

Input for the online courses has been developed throughout the project with the help of material and knowledge generated in the context of different project events like the SUMP Challenge workshops, CH4LLENGE Universities and national seminars. Support partners have provided input based on their long-lasting experience with SUMP and city partner provided local case examples. The SUMP Basics course integrated different resources available for the topic (e.g. available on Eltis). Course authors developed their courses in spring 2015. All courses were fully updated in spring 2016 when the manuals were completed as this provided additional, fresh input for the courses.

#### Promotion

The CH4LLENGE online courses were promoted on the CH4LLENGE website, the Eltis website, in newsletters and at training events (e.g. CH4LLENGE Universities, National Seminars).



## 4 Technical set up and organisation

The following objectives were formulated as key requirements for ensuring user-friendliness of CH4LLENGE's online learning programme. CH4LLENGE-learners should

- choose when to start e-learning courses and should learn at their own pace
- prioritise their training needs by choosing one or several of the four challenge online courses
- have opportunities for interaction with other local planners and mobility experts, for example, through a discussion forum

#### The online learning platform

CH4LLENGE's online learning programme is part of the overall online learning platform "Mobility Academy".<sup>2</sup> Interested mobility practitioners are able to take the courses through a hassle-free self-registration process.<sup>3</sup>

In January 2014, e-learning coordinator Rupprecht Consult carried out an extensive assessment exercise of learning platforms. Six different platforms and providers were analyses against several criteria (intuitive design, navigation, administration, registration, course creation, compatibility of module packages, communication and community actions etc.). "Moodle" was finally chosen as the most advantageous platform. Moodle is an open source online learning platform. It provides educators, administrators and learners with a single integrated system which can be used anytime, anywhere, on any device. An IT company gave support in setting up the platform, finally called Mobility Academy.

While the first courses were directly set up and authored in Moodle, it was then decided to use the authoring tool "Articulate Storyline", which allowed more targeted, visually attractive and dynamic content development. The Storyline modules are embedded into the Moodle platform; the two tools are fully integrated and complement each other.

<sup>&</sup>lt;sup>2</sup> Rupprecht Consult provides access to CH4LLENGE's five online learning courses on the Mobility Academy

<sup>&</sup>lt;sup>3</sup> Rupprecht Consult will extend the SUMP section of the Mobility Academy in the future Horizon 2020 "SUMPs-Up" project, which will integrate CH4LLENGE courses into its online learning activities and complement these with further SUMP resources





Figure 2: Screenshot from CH4LLENGE online learning entry page on the Mobility Academy



Figure 3: Screenshots of CH4LLENGE training modules

Rupprecht Consult coordinated e-learning activities including the selection and set-up of the learning platform, concept development, preparation of templates and guidance for authors, converting input from authors into the compatible e-learning format as well as user registration and management. FGM-AMOR contributed their experiences during the concept development phase.

## **5** Assessment of CH4LLENGE online learning

A total of 148 project-external course participants were trained in the online SUMP learning environment comprising the "SUMP Basics" online course as well as the four dedicated courses for the challenges. The online learning courses were especially popular among students and young professionals. About a quarter of participants indicated that they are university students or in a junior/ assistant position.

Online learning activities turned out to be more challenging. Online courses were run before other kit elements, e.g. the manuals, were drafted. When online course content was generated, the project seemed to be in a too early stage for systemically presenting content and results on the four challenges. Therefore, the participation and cooperation courses were updated by the end of the project when the corresponding manuals had been drafted. A second challenge was the active involvement of learners. Despite various communication efforts of course moderators, learners participated in a rather passive manner. This may have to do with the target group of transport planners, who often have very limited time and capacities available for additional activities. Students, in contrast, were the more active course participants as they usually have more time available to further develop their skills.





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