

# Guidelines for first pilot questionnaires

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In order to gain statistical insight into potential target groups of ENEX and their capacity to profit from the training course and to identify the contents of the training course, we will distribute two surveys for the trainees attending the first pilot course, one pre-course questionnaire and one satisfaction questionnaire at the end of the pilot.

## Pre-course questionnaire

The main goal of the pre-course questionnaire is to gather personal data for general statistical purposes. This questionnaire will be an online form to be filled by the trainees after their registration for the pilot course. In the case that a trainee fails to fill her/his form by the first day of the pilot course, a paper version will be made available on that day.

This survey will be based on the selection of closed-ended questions based on lists (e.g. “what formal education did you receive?”, where multiple items may be selected) or on categories (e.g. male/female, year group, where one option only is selected).

The first part of the questionnaire will ask about personal data, i.e. sex, age and affiliation.

The second part will focus on the formal training and the professional experience of the trainees.

## Post-course satisfaction questionnaire

The objectives of the post-course questionnaire are to audit the contents of the pilot course and to correlate the background of the trainees with their ability to profit from the pilot course, with the twofold intent to identify the background that shall be recommended in the description of the training course and the criteria to enable the candidates of the training course to access the assessment procedure for certain units without attending the relevant classes.

At the end of the first pilot course, trainees will be asked to fill a satisfaction questionnaire in anonymous paper form, before they are rewarded with a certificate of attendance.

The first part of the post-course questionnaire will focus on the academic background and the professional experience of the trainees. The first question will assess the formal training with a closed-ended question with 16 options with six linked to as many open fields, where more than one option can be selected as shown in the following example.

Question 1

Do you have an academic degree in...				
	Yes, a bachelor degree	Yes, a master degree	Yes, a PhD degree	No
... chemical, physical or materials sciences?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
... other scientific or technical disciplines?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Please specify	.....	.....	.....	
... economics or finance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
... other disciplines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Please specify	.....	.....	.....	

The second question will focus on the professional experience with a closed-ended question with eight options with two linked to as many open fields, where more than one option can be selected as shown in the following example.

Question 2

Do you have professional experience in...		
	Yes	No
... synthesis, characterization or exploitation of nanotechnology-based materials?	<input type="checkbox"/>	<input type="checkbox"/>
... other fields that relate to nanotechnology	<input type="checkbox"/>	<input type="checkbox"/>
Please specify	.....	
... economics or finance?	<input type="checkbox"/>	<input type="checkbox"/>
... other fields that relate to economics or finance?	<input type="checkbox"/>	<input type="checkbox"/>
Please specify	.....	

The second part of the questionnaire will confront the contents of the pilot course to the expectations of the trainees.

A list of topics will be worked out from the pilot course, which are listed as topic 1, 2... n in the following examples. The goal of this survey is the assessment of these topics in terms of relevance and weight and the definition of the background that is recommended in order to begin the training course and of the conditions that may be considered to enable the candidates of the training course to access the assessment procedure for certain units without attending the relevant classes.

In detail, trainees will be asked to rate the quality of the pilot course by using Likert-type scale questions for the relevance and the relative weight of each topic, as shown in the following examples.

Question 3

How do you rate the relevance of...					
	Very relevant	Quite relevant	Neutral	Quite irrelevant	Very irrelevant
... topic 1?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
... topic 2?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
... topic n?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 4

How do you rate the relative weight of...					
	Definitely too large	Too large	OK	Too small	Definitely too small
... topic 1?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
... topic 2?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
... topic n?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The last question will be used in combination with the first two to identify the background that is recommended in order to begin the training course, which will be stated in its synopsis, and the criteria that may be used to enable the candidates of the training course to access the assessment procedure for certain units without attending the relevant classes. The hypothesis that the ENEX course may be ideal for candidates with a background in physical, chemical or materials science, who wish to integrate their prior knowledge and to gain additional insight into economics and finance. Conversely, a background in economics and finance is uncritical.

This hypothesis will be tested by a question on the effectiveness of each topic, which will be devised as a multiple choice question with one option linked to an open field, which will serve to understand whether and why trainees rate some topics as ineffective. Should the reason for a poor valuation be an insufficient background, this information will be elaborated in the synopsis of the training course. Conversely, should a poor evaluation be ascribed to a prior knowledge that was broader and deeper than the contents of the pilot course, this input may be worked out to enable the candidates of the training course to access the assessment procedure for certain units without attending the relevant classes.

An example is shown in the following table.

Question 5

Did the training course improve your knowledge in...						
	Yes	Not much, because my prior knowledge was already quite thorough	No, because my prior knowledge was already very thorough	Not much, because my background was hardly sufficient	No, because my background was insufficient	No, for another reason, which is...
... topic 1?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	...
... topic 2?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	...
... topic n?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	...

The satisfaction questionnaire will end with an open question for tips and comments, with an emphasis on contents that were not included in the pilot course and that the trainees would have expected.