

Fuel Cell Electric Buses Commercialisation Study

Introduction to Self-Assessment Questionnaire

1. Objectives

The overall objective of the questionnaire is to assess the level of preparedness and commitment for large-scale fuel cell bus integration into the bus fleets at individual participating locations of the bus commercialisation study. Thereby, it also provides orientation and a pathway for successful fuel cell bus deployment as it covers the main aspects to be considered in a structured and systematic way. This way, it also supports cities and regions in their respective planning.

The self-assessment questionnaire is the first pillar of the assessment methodology of the study. It shall identify the 5 – 10 most advanced locations to start large-scale fuel cell bus roll-out in the timeframe 2017 – 2020 (Tier 1 locations). It will be complemented by a ranking which compares individual city-level business cases on pre-defined criteria; one of these will be the overall self-assessment score measuring the level of preparedness of the individual locations.

Assessment approach

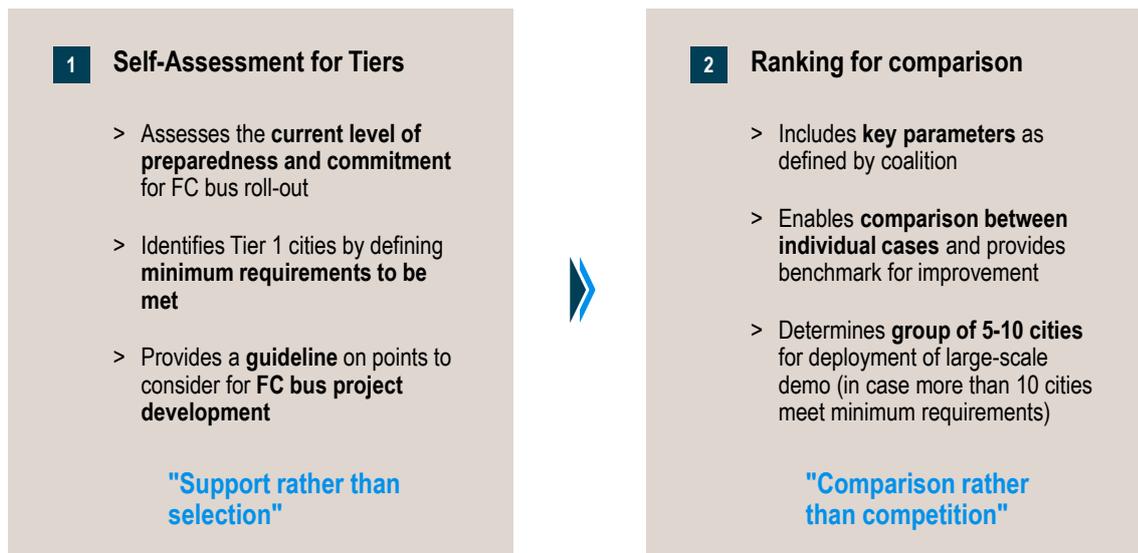


Figure 1: Overview assessment methodology approach

2. Structure

The self-assessment questionnaire is structured along the main phases and eight most important categories to consider during preparations of fuel cell bus deployment:

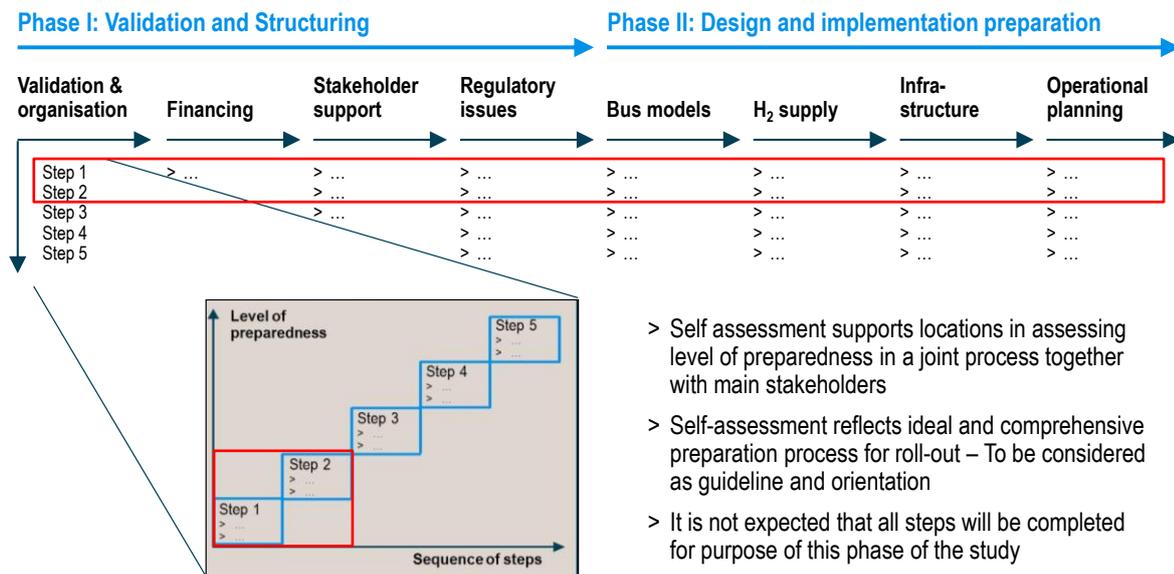


Figure 2: Overview questionnaire structure

Each category is structured along a number of subsequent steps that need to be run through in order to prepare for FC bus roll-out. Within each category, a set of minimum requirements is defined (marked by red frame) which need to be fulfilled in order to qualify as being a Tier 1 location. All other locations which do not completely meet the minimum requirements will be regarded as Tier 2 cities which will benefit from experiences made by pioneering locations and be supported in order to further develop their FC bus deployment plans.

For each of these steps, a number of statements is defined which shall be validated by the respective location representatives (see detailed description below).

The structure of the questionnaire does not prescribe a certain mandatory sequence of the steps to be run through, but rather indicates an ideal preparation process. The actual process at individual locations might differ and can be arranged according to local requirements. Thereby, later phases might be addressed before earlier ones and later steps of a category before earlier ones.

The self-assessment will be carried out completely at the sole responsibility of the city/operator without any external validation and shall serve mainly as a tool for developing a clear view on their respective levels of preparedness internally.

3. Instructions to complete the questionnaire

The questionnaire shall be filled in in a joint effort of different stakeholders at the participating locations - not all statements can probably be validated by one person alone, although one coordinator for filling out the questionnaire should be appointed. For the purpose of this project, the respective coalition member of each location will be regarded as having the main responsibility for filling out the questionnaire and collecting all required information from the different parties. Some cooperation and coordination between municipality, public transport authority (PTA), bus operator and other relevant stakeholders will be necessary in order to provide all required answers. For this reason, the statements are not formulated in a way that they address one specific stakeholder type – they are rather addressed at all involved parties at one location. A high-level executive summary of the purpose of this self-assessment is provided as an additional document which can be used for board meetings or discussions with local government representatives etc.

The questionnaire is being provided in the format of an Excel template that all Working Group 1 members will receive. The document is divided in ten worksheets with the following contents:

1. "Cover": Please provide name of city and respective contact person
2. "Assessment result": Provides an overview of the assessment result after you have given all answers on the following sheets
3. Question sheets 1-8: Include all questions that shall be answered.

Each question/statement will need to be validated according to three answer options which simply need to be chosen from the dropdown list – more elaborate answers are not required, however, comments can be provided where deemed necessary:

The three options are:

"Fully agreed": All necessary steps undertaken, no further action needed
"Partly agreed": Work has been started, but is not yet finished
"Not agreed": No action taken so far

Based on the answers provided, an assessment score will automatically be calculated in the tool according to the following pointing system:

"Fully agreed": 2 points
"Partly agreed ": 1 point
"Not agreed ": 0 points

In case a question might not be applicable to the local conditions at specific locations, please indicate this in the comment boxes provided; we will adjust the final score respectively after the questionnaire has been submitted to the Roland Berger team.

The total score will be calculated for each individual category and overall for all categories. Additionally, it will be automatically indicated on the "Assessment result" sheet if the minimum requirements have been fulfilled for each category.

Questions can always be directed to the Roland Berger Team. Clarification of problems will either be undertaken during working group calls or on a bilateral basis.

4. Submission

Final deadline for submission of the completed questionnaire is **August 15, 2014**. In case you wish to submit your answers in an unchangeable format, you can print the provided excel template as a PDF after having filled it and send it back to us. Please indicate on the first sheet ("cover") your city's name as well as the main responsible contact person for filling out the questionnaire.

The Roland Berger team is always available to assist you in filling in the questionnaire and giving advice on how to interpret the questions according to your local conditions. Please refer to Simon Lange (simon.lange@rolandberger.com, +49 160 744 2965) in case of questions.

In case you foresee difficulties in submitting the questionnaire until mid of August, please let us know in due time so that we can arrange accordingly.