



ELIPTIC User Forum Survey London

Business cases for integrating electric mobility

Welcome to the ELIPTIC User Forum survey in preparation for our meeting in London on 8-9 November 2016. Please note completion of this survey is a required part of your participation in the User Forum and take the time you need to complete it carefully. It creates an excellent opportunity to learn from each other's experience and knowledge.

The survey must be completed by 26 October 2016 so that we have time to process the results before we meet.

Survey rules:

- The survey results will be presented in London during the User Forum meeting.
- Results of the survey will be aggregated; individual data will be kept confidential.
- Each member of the ELIPTIC User Forum is to complete the survey, irrespective of their participation to the London meeting.
- If you have more than one representative of your organisation attending the User Forum, please combine efforts and submit only ONE survey per User Forum member organisation.

For further information, please contact Yannick Bousse, yannick.bousse@uitp.org

Business cases for integrating electric mobility in ELIPTIC

The overall aim of ELIPTIC is to show how costs and energy can be saved by electrifying public transport and optimising the use of existing infrastructure and rolling stock by connecting traditionally separated domains and developing innovative use concepts and business cases for them.

Business cases for implementation will be developed for the 20 ELIPTIC use cases, including guidelines and comprehensive business models (e.g. public-private partnerships; start-up incentives or pre-commercial support). These business cases will consider commercial as well as societal costs and benefits, both financial and non-financial (e.g. noise, pollution).

ELIPTIC defines a business case as a successful transition of a use case, feasibility study or demonstration to a state with convincing positive financial, technical, and functional feasibility and usefulness.

For each ELIPTIC use case, the local stakeholders will compile detailed descriptions of the technical system and outline their related goals. Goals could include plans to procure (further) (electric) buses, assessment of the possibility of integrating existing vehicles or charging infrastructure into operation, vehicle circulation planning or the extension of the catenary system, etc. Price indications will be obtained and options evaluated. Cost functions will be derived using specific parameters to assess the costs depending on load profiles. The duration of each step in the implementation process will be estimated (time planning) and different funding options will be evaluated. The assessment of data and the costs of the realisation will serve as the basis for a business case. This assessment will be supported by:

- the industry partners, who will bring in their experience (e.g. in market development, prices etc.) to review the use case in terms of technology feasibility/validation and the business case
- exchange with other electromobility projects.

Where applicable, simulations will be performed to calculate and evaluate the total cost of ownership/lifecycle costs of different scenarios, including relevant technical and financial aspects. The simulations will be supported by cost-benefit and SWOT analyses.

To refine these business models, the ELIPTIC project seeks feedback from the User Forum on the following questions.



ELIPTIC LONDON USER FORUM

1. Name of your organisation.

Open text box

2. Has your organisation developed a business case for optimising/introducing electric public transport.
- Yes
 - No
 - Currently working on it

If responded “yes” or “currently working on it” in Q2, skip logic to Q3, 4 and 5. If “no” skip to Q6.

3. Please describe the specific activity, use case or project for which a business case has been developed.

Open text box

4. Please describe your organisation’s business case e.g. background of the project, expected business benefits, options considered (with reasons to reject or carry forward each option), expected costs of the project, expected risks, etc.).

Open text box

5. What is or was the main purpose and target group of developing the business case. (e.g. city authority for investment decision, CEO of a PT operator comparing technological solutions, support for policy making, preparing funding decisions etc.)

Open text box

6. Please tick the boxes to indicate the weighting you would give to each criteria in a business case (with 1 being the lowest and 5 the highest).

		1	2	3	4	5
Financial	Initial and maintenance costs of components (vehicles, infrastructure, storage systems etc.)					
	Initial and maintenance costs of required components (batteries, charging infrastructure etc.)					
	Expected price/costs development for all relevant components					
Operational	Overall availability/reliability					
	Integration into existing schedules/operation					
Political	Political objectives/plans/restrictions					
Ecological	Improvement of air quality					
	Reduction of noise					
	Climate protection					

Other criteria and give each a weighting. Also feel free to add other comments.

7. Rank the importance of the cost factors listed below for the formulation of a business case.

	Not important at all	Somewhat important	Very important	Cannot do without	Our threshold has already been reached	Not applicable
The price of electric buses to fall beyond a certain threshold						
Driving range reaches a certain threshold						
Availability of charging infrastructure reaches a certain threshold						
The price of charging infrastructure to fall beyond a certain threshold						
Standardisation of charging systems						
The price of electric bus batteries to fall beyond a certain threshold						
The cost of facilities required to accommodate batteries (e.g. the separation of diesel and electric vehicles)						
The lifetime of batteries reaches a certain threshold						

Please add any other factors that you think belong in this list and indicate their level of importance.

8. Rank according to their importance the tools needed to formulate a business case.

	Not important at all	Somewh at important	Very important	Cannot do without
Impact assessment (environmental, economy, etc.)				
Simulation tools				
Cost-benefit study				
Clear legal framework e.g. ability to install charging infrastructure on public/private ground, etc.				

Please add any other tools that you use or you think belong in this list and indicate their level of importance.

9. Which of the tools in the previous question do you currently have (or have access to)?

Open text box

10. Any further comments not yet covered?

Open text box



THANK YOU FOR COMPLETING THE SURVEY

We look forward to meeting you in London and to discussing the results.

For further information, please contact Yannick Bousse, yannick.bousse@uitp.org