FINAL REPORT MARKET CONSULTATION

Charge management and Vehicle monitoring

Versie 1.0 datum: 3-3-2022

Introduction

On December 25, 2021, GVB Exploitatie B.V. (hereinafter: GVB) published a market consultation on TenderNed and TED for a charge management system (hereinafter: CMS) and a vehicle data platform (hereinafter: VDP). On 17 January 2022, GVB held an online presentation on these topics, attended by various market parties. Various parties have asked questions in response to the market consultation document and the online presentation. In response to these questions, an information memorandum was issued on 25 January 2022.

As a result of the market consultation, GVB received answers from seven (combinations of) parties to the questions posed in the market consultation document. The answers were clear and enriching. We would like to thank you very much for your input. Until now we have not (yet) had discussions with market parties about the answers to the questions, because the answers provided sufficient information for the decisions that have to be taken in the short term.

General results

In this final report no representation is made per answered question. In this report, GVB limits itself to general findings and lessons learned in outline. In this way, GVB provides openness in the intended follow-up steps, without providing information that may be commercially sensitive.

Functionalities CMS and VDP

GVB has seen that market parties can offer the functionalities that GVB intends to request. A number of functionalities can be offered as a standard product. Some functionalities, such as linking to the planning system, still need to be developed by some parties.

CMS and VDP separately or jointly tender

An important conclusion that the core team of this tender draws on the basis of the answers to the questions is that there is hardly any synergy in the joint tendering of the CMS and the VDP. Of course, both systems have the same goal in mind, which is the efficient operation of electric buses. However, no necessary mutual communication takes place between the two systems. They both provide input to the GVB planning system, but they can be seen as separate processes.

The above conclusions mean that it is not wise to tender the CMS and the VDP jointly. If this were already chosen, then this could be done on the basis of two separate lots within one tender. But GVB also sees few advantages in a tender with two lots, except that only one tender procedure has to be completed. The number of market parties that can independently offer a CMS and a VDP is small. Two groups of competitors would then arise within one tender. In addition, any delay within a lot of this tender could mean a delay for the entire tender. The CMS is the most urgent in the short term. The VDP can also be put out to tender at a later date, or developed together with partners within GVB.

Based on the findings of the market consultation, GVB intends to first prepare a tender for a CMS. The manner in which the VDP will be established will be decided in the second half of this calendar year.

CMS & Energy management

All participants show an understanding of the potential use of smart charging to provide ancillary services. However, track-record with redispatch and/or FCR does not appear to be broadly present across all participants. Nonetheless GVB is intending to include redispatch (for the purpose of congestion management) within the scope of the tender for the CMS to ensure the solution is future proof. During the procedure GVB will therefore devote particular attention to communication between the congestion service provider (CSP), CMS and planning system (Hastus). Efficient communication is paramount to be operate in short term markets such as GOPACS and intraday associated to congestion management.

FCR, be it through load management or through V2G, shall be excluded from the scope of the tender. Within the market for a CMS, the experience appears to be limited. On top of that, FCR does not appear to suit the operational process of GVB well.

There are varying responses related to Load shifting. Some participants are not aware of issues in vehicle programming that currently impede load shifting (wake up by charger) in PT vehicles. Others suggest a “work around”, GVB shall review the impact of the “work around” on energy consumption as well as long term guarantee of electronics in the vehicles. Depending on the outcome of the review, GVB can decide to exclude functional requirements for load shifting from the scope of the tender.

Finally, participants show varying product offer in terms of providing a CMS that can respond real-time to other facilities (work shop, offices, station) connected to the same connection to the grid. Some participants are able to include real time measurements that are communicated through m-bus in the operation of the CMS. Others prefer to rely on heuristics or third party Scada systems. Based on this feedback, GVB shall revaluate whether or not the ability to process real time mod-bus measurements ought to be included in the scope of the Tender.

Next Steps

GVB has already started preparations for a tender for a CMS and expects to publish this tender on TenderNed before the summer. The planning of this tender will be shared upon publication.

In addition, GVB will make a decision in the second half of this calendar year whether and how a VDP will be purchased.

Finally

As you have been able to read, your answers to our questions have led to good insights. We would like to thank you very much for that. With this final report we hope to have shared with you the most important lessons for GVB for the moment.