

ICT Solutions to Support EV Deployment

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
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Numerous studies and projects have proven that the electric vehicle can offer value and services that go beyond its function as a means of transportation. The value and services can, for instance, be the reduction of charging costs, adherence to grid constraints, or adjustment of charging behavior to renewable energy production. If these possibilities are considered and supported by information and communication technologies (ICT) in due time, a large potential can be exploited.

Specifically, the protocols and technologies spanning the open system interconnection stack need to support the various utilization concepts for EVs and be harmonized to obtain interoperability among numerous electric vehicle (EV) and electric vehicle supply equipment from original equipment manufacturers.

This chapter describes contemporary Smart Grid communication methods in terms of requirements and specific solutions and relates them to relevant standardization work and projects within the area.

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