PRIME+

PRIME protocol has been known as traditional narrow band PLC communication layer protocol. All of the PRIME deployments, from their application layer perspective, were using DLMS/COSEM protocol (IEC 62056). Each company implementing PRIME solution as its communication channel, had the freedom to implement any Data Model (Companion Profile), based on standard DLMS/COSEM protocol.

Nowadays, PRIME Alliance decided to support its members by creating a generic DLMS profile called PRIME+. The aim of this decision was to simplify the processes of creating DLMS/COSEM profiles, which could be complicated without deep technical knowledge of IEC 62056 standard. Thanks to PRIME+, a Utility does not need to have its own DLMS companion.

Functionalities and regulations can be different not only on the country level, but also on the customer/Utility level and must have their mapping in the profile. PRIME Alliance took this into account and prepared a special tool, which lets the User to create, the User’s own, dedicated profile adapted to the needs.

PRIME+ Profile creation
PRIME Alliance offers to its members a special questionnaire, which consists of a series of questions to be answered by the customer / Utility without the need for deep technical experience of DLMS/COSEM protocol. In this way, based on these set of answers, the User will obtain a ready PRIME+ Companion Profile with a defined list of parameters, reflecting the company’s business strategy and requirements for low voltage area.

PRIME+ Interoperability
To achieve true end to end interoperability beyond the communications layers, data level interoperability must also exist. This means that the different devices in the smart metering architecture must store the data with the same structure and communicate it in a standard manner, regardless of the manufacturer. One additional challenge of electric meters’ data is that requirements differ from country to country or company to company. On one hand, they differ because each country regulator or company establishes different levels of quality, different storage needs, different levels of cybersecurity, etc. On the other hand, the DLMS/COSEM standard itself leaves several aspects open to end user specification.

PRIME Alliance knows the difficulties of a good implementation of the DLMS / COSEM protocol and that is why it has promoted the PRIME+ Companion Profile, usable by all utilities, with the aim of helping utilities to have their own Companion Standard, easily and reliably.

PRIME+ Test Book and Certification
PRIME Alliance has released a generic test book, which consists of defined use cases to certify all the functionalities specified in PRIME+ Data Model. Taking into account that different Users can have different profiles, certification process together with the Test Book will be adapted to match and certify given profiles.

PRIME+ Summary
PRIME+ is aimed at many different Users like companies delivering electricity, smart metering manufacturers and governments, which can have a great advantage of predefined User Profiles based on PRIME+ Companion Profile. This profile will guarantee the suitability with the requirements of the user while assuring the advantages of having a standard, open solution and interoperability and interchangeability among different manufacturer solutions.

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