



OPENADR PROGRESS IN EUROPE

INTERNATIONAL

IEC - International support for the OpenADR standard was first advanced by the action of the International Electrotechnical Commission (IEC), which approved the OpenADR 2.0 Profile Specification as <u>IEC 62746-10-1</u> in 2018. OpenADR 3.0 has been formally introduced to the IEC stakeholders this year to begin the process of adding it to the standards framework. A mapping exercise if already completed and creating a bridge to other CIM systems is proposed as an additional tie in.

CENELEC - SAREF4ENER facilitates the integration of energy-related data (e.g., energy usage, generation, or storage) with systems that are OpenADR-compliant. Devices modeled in SAREF can receive and act upon OpenADR signals for optimizing energy use.

European Commission – The Delta Ontology refers to OpenADR. The OpenADR DELTA Repository CIM implements the requirements specified in the OpenADR standard to exchange information between different DELTA sub-components and the DELTA Repository.

>>https://ec.europa.eu/research/participants/documents/downloadPublic?documentIds=080166e 5c3ae9956&appId=PPGMS

European Commission, DG CONNECT/E4 – References the usage of OpenADR >> https://digital-strategy.ec.europa.eu/en/policies/next-generation-internet-things

GERMANY

SPIRIT-E is a project aiming to accelerate the electrification of the transport sector with battery electric trucks (BET), their bidirectional integration and a reservable shared usage of private charging infrastructure. Funded by the German Federal Ministry for Economic Affairs and Climate Action, participants include MAN Truck and Bus, TENNET and Volkswagen. Technical details are still missing but OpenADR is in the mix.

>> https://spirit-e.de

DKE – The DKE working group AK 353.0.401C (UG3) is working on a comprehensive standards framework for EV charging. The framework also includes OpenADR. >> https://www.dke.de/de/arbeitsfelder/mobility

UNITED KINGDOM

PAS-1878 – The U.K. Department of Energy Security and Net Zero in 2021 published standards for energy smart appliances that incorporates the OpenADR standard.

>>https://www.openadr.org/index.php?option=com_content&view=article&id=195:bsi-includes-openadr-2-0-standard&catid=21:press-releases&Itemid=121

NETHERLANDS

DSOs like Alliander and others are strongly considering standardizing OpenADR 3.0 for DSO to Charge Point Operator communications. The initiative is spearheaded by trade associations and led by companies like Elaad

SWEDEN AND NORDIC COUNTRIES

Energiföretagen Sverige – The industry recommendation for Conditional Grid Connections aims to describe an industry recommendation for IT communication between Distribution System Operators (DSO) and customers with conditional grid connections in Sweden. The document also describes the industry-wide evaluation process that forms the basis of the recommendation. As an appendix, experiences from a Proof-Of-Concept implementation of the proposed OpenADR protocol are described to give those organizations that want to integrate their systems insights on how that might work in practice.

>> https://www.energiforetagen.se/4a9818/globalassets/dokument/elnat/industry-recommendation-conditional-grid-connections-ver-1.0.pdf

INDUSTRY CONSORTIA

EEBUS - The EEBUS initiative describes a communication interface that enables energy management relevant devices in buildings to connect and interact with each other and with grid and market operators. A recent white paper details secure capacity & tariff management and building control provided by both OpenADR and EEBUS together can enhance energy management. >> https://openadr.memberclicks.net/assets/20211208-OpenADR-EEBUS-White-Paper-v1.0.pdf

OCCP - The Open ChargePoint Protocol is the consensus industry standards for communicating commercial information to networks of charging stations. OpenADR and OCCP have published an interoperable approach for implementing OCCP controlled chargers with OpenADR. >> https://www.openadr.org/assets/using%20openadr%20with%20ocpp.pdf

S2 – S2 is a communication standard <u>for</u> energy flexibility in homes and buildings. S2 is designed to work together with established protocols like KNX, ModBus, OCPP and OpenADR. >> https://s2standard.org

EDDIE – The European Distributed Data Infrastructure for Energy is a data space project for residential flexibility management. This project will demonstrate a first pan-European implementation of the newest OpenADR 3.0 version.

>> https://eddie.energy/