

## EVCS GCP v1.0 Release Notes

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## 1. EVCS GCP v1.0

REFERENCE	Тітіе	DESCRIPTION
0-a:7.2	Vehicle user connects vehicle to EVCS	The vehicle user connects electrically the vehicle to the EVCS.
		The EV receives initial charge rate information from the EVCS.
		The limit is provided by the EVCS to the EV, and is based upon information on the physical limitations of the charger and the current grid state of loading.
		The maximum current authorized will avoid premises overload and/or provide peak shaving.
		The shared value is used only during the initial start-up phase
1-a1:7.4	Dynamic power (Overload prevention) - steady state	The EVCS is operating powered from a large scale generation via the Smart Electricity Meter (EM).
		The EVCS receives data from the EM to ensure that it is not responsible for overloading the supply point, from the physical limitation and/or the contractual limitation point of view. The EVCS is allowed to increase the charging rate when the conditions allow it.
		The EM shares periodically (5-15 seconds) the measured power, measured current, maximum power, maximum current and the safety margins, for 1 or 3 phases depending on installation.
		Data are authenticated and encrypted, and are communicated via the local port of the EVCS (H1, H2, P1, optical, etc.)
		The EVCS is responsible for calculating the demand margin and adjusting its point of operation
1-a2:7.5	Dynamic Power Limitation to avoid premises overload - meter detects network issue	The EVCS is operating powered from a large scale generation via the Smart Electricity Meter (EM).
		The EM is a source or relay of data regarding the network conditions.
		The EM monitors the network conditions for over-under voltage, current overload, etc for 1 or 3 phases, and sets the allowable current to 0 when one of the conditions are exceeded. The EM pushes this information to the EVCS when the threshold is exceeded.
		The monitored values and the boundary conditions are defined in a script table, and can be defined case by case.
		Data are authenticated and encrypted, and are communicated via the local port of the EVCS (H1, H2, P1, optical, etc.)
		The EVCS is responsible for setting the drawn power down to zero upon push notification from EM.





REFERENCE	Тітіе	DESCRIPTION
1-b:7.5	Dynamic power limitation (peak shaving)	The EVCS is operating powered from a large scale generation via the Smart Electricity Meter (EM).
		In order to manage local network and generation constraint, the EM provides data to the EVCS to reduce loading.
		The EM is in receipt of information from the HES, including: distribution network live and anticipated constraints. The next 24 hours-worth of data is used to provide the limit power available to the EVCS by modifying the data available in the UC1-a.1 push using an activity calendar and updated scripts.
		In the event of a network constraint, the EM receives an instruction from the HES regarding available power and modifies parameters related to the possible power value and sends an update to the EVCS.
		Data are authenticated and encrypted, and are communicated via the local port of the EVCS (H1, H2, P1, optical, etc.)
		The EVCS determines its charging policy in terms of time and power draw.

