eMIP Protocol

Protocol Description

GIREVE
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eMIP Protocol Version Reference

Version	Description	Date
0.7.4	First official release of the eMIP protocol	2015-05-27

eMIP Protocol Description History

Version	Description	Date
1.0.1	First official release of the document	2015-05-27

1.0.2	Additions:
	• Webservices
	    o eMIP_(To|From)IOP_SetSessionActionRequest
	    o eMIP_(To|From)IOP_SetSessionEventReport
	Corrections:
	• Examples
		2016-02-09

1.0.3	Corrections: • The meter for energy has Wh (and not kWh) as main unit • The field "parameter" in authorisation mechanism was not described in this doc Improvements: • requestStatus values rules, and value intervals • meter values in examples	2016-11-11
1.0.4	Additions: • SDD and DDD messages	2017-02-11
1.0.5	Formal corrections and examples addition	2017-03-10
1.0.6	Formal corrections Improvements: • Integration of WS "eMIP_ToIOP_DeleteAllAuthenticationData" • Integration of all requestStatus supported by IOP	2018-03-15
1.0.7	Improvements: • Update SessionEventNature list • Update meterTypeId list • Update requestStatus supported by IOP	2018-04-30
1.0.8	Improvements: • EVCI data completion • Integration of ConnectorMode data type • Integration of MaxVoltageValue data type	2018-07-27
1.0.9	Formal corrections Improvements: • Update MeterIdType list • Update requestStatus returned	2018-12-28
1.0.10	Formal corrections Improvements: • Integration of Booking webservices	2019-05-01

		• Integration of Clearing webservices	
1.0.11	Improvements: • Update MeterTypeId list • Add ISO Currency reference • Update Amperage list • Update requestStatus returned		2019-07-23
1.0.12	Application of the new GIREVE graphic style Formal corrections Improvements : • Update ConnectorType list • Update EVCI data list		2020-01-15
1.0.13	Improvements • ConnectorType field added in ToIOP_SetChargeDetailRecord • LOV ConnectorTypeFootprint added • New request status added in ToIOP_SetServiceAuthorisation • AuthenticationModeValue updated		2020-06-03
1.0.14	Improvements • Remove "ownerOperator – GireveId" (1271) and "ownerOperator – eMI3Id" (1272) in EVCI data description • Add "ownerOperator name" (1273) in EVCI data description • Add "EVSE electric current type" (3063) in EVCI data description • Update ConnectorType list • "MaxAmperageValue" becomes a value instead of a LOV. (See 7.18 MaxAmperageValue)		2020-12-03

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>
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2 Introduction

2.1 Scope

The **eMobility Interoperation Protocol**, called **eMIP**, is provided by **GIREVE** as part of his main business objective: "open access to vehicle charging stations". In this current version, eMIP targets two goals:

- Enabling roaming of charging services by providing a charge authorisation and a data clearing house API.
- Providing access to a comprehensive charging point database.

This document describes the eMIP protocol. This protocol is based on exchange of web services. Therefore, after an overview of the system environment required for eMIP, this document will focus on use cases, and on the description of web service messages and data types.

B2B contract establishment and security aspects are out of the scope of this document.

2.2 Definitions and Abbreviations

Word	Meaning
Charging Connector	A Charging Connector is an interface to deliver electricity.
Charging Point	A Charging Point, synonym of EVSE, is the energy supply element. An electrical vehicle can connect to a point on one of its connector. A Charging Point may have several Charging Connectors but only one vehicle could be charged at a time on a Charging Point.
Charging Pool	A Charging Pool is a location where charging infrastructure elements can be found. A Charging Pool may contain several Charging Stations.
Charging Station	A Charging Station is a physical element, visible for the users, on which Charging Points are available. The Charging Station is also the "Human-Machine Interface" (HMI) between the charge infrastructure and the end users.
CPO	Charge Point Operator See 3.2.2 Charge Point Operator (CPO)
Data Aggregator	See 3.2.4 Data Aggregator
eMA	eMobility Account eMA is an up-to-date synonym for EVCO (which is deprecated) An eMA is a contract between a customer and an eMSP.
eMAId	eMobility Account Identifier An eMAId identifies an eMA. eMA is an up-to-date synonym for EVCO (which is deprecated) For eMI³ EVCOID see 7.33.3 eMAId
eMIP	eMobility Interoperation Protocol
eMI³	eMobility ITC Interoperability Innovation Group The eMI³ is an open group of significant actors from the global Electric Vehicles market who joined forces to harmonize the ICT data definitions, formats, interfaces, and exchange mechanisms in order to enable a common language among all ICT platforms for Electric Vehicles.
eMSP	eMobility Services Provider See 3.2.3 eMobility Services Provider (eMSP)
EV	Electric Vehicle
EVCI	Electric Vehicle Charge Infrastructure Or in French: *Infrastucture de Recharge de Véhicule Électrique* (IRVE) According to eMI³definition, the charge infrastructures are supposed to be organized in 4 hierarchical levels: Pool, Station, Point and Connector. • A Charging Pool ("*Zone*" in French) is a location where we can find charging infrastructure elements. The main attributes of a Pool

	describe "location" information (address, geo-coordinates …) and operators' information (owner, technical operator …). A Pool may contain several Stations. • A Charging Station ("*Borne*" in French) is a physical element, visible for the users, on which we find Points. The Station is also the "Human-Machine Interface" (HMI) between the charge infrastructure and the end users. Its main attributes are related to HMI (badge reader, languages …). A Station may contain several Points. • A Charging Point, synonym of EVSE, is the energy supply element. One vehicle can be connected to a Point. Its main attributes are related to energy supply (Voltage, AC/DC, mode, maximum power …). A Point may have several Connectors. Only one is active at a time. • A Charging Connector is an interface to deliver electricity. See IRVE.
EVCO	Electric Vehicle Contract EVCO is a deprecated synonym for EMA An EVCO is a contract between a customer and an eMSP.
EVCOID	Electric Vehicle Contract Identifier An EVCOID identifies an EVCO. EVCO is a deprecated synonym for EMA For eMI³ EVCOID see 7.33.3 eMAId
EVSE	Electric Vehicle Supply Equipment EVSE is a synonym of Charging Point.
EVSEID	Electric Vehicle Supply Equipment Identifier An EVSEID identifies a Charging Point.
GIREVE	*Groupement pour l'Itinérance des Recharges Électriques de Véhicules* Or in English: Grouping to promote Roaming when Recharging Electric Vehicles See 3.2.1 GIREVE
GIREVE's eMobility Services Platform	The GIREVE's eMobility Services Platform is said GIREVE's Platform or Inter-operation Platform (IoP).
HTTP	Hypertext Transfer Protocol HTTP is an application protocol for information systems.
IoP	Inter-operation Platform. This term is generic and may cover any inter-operation platform. But, in the current document Iop is for the GIREVE 's Platform

	In eMIP, the IoP is the GIREVE's Platform.
Regex	Regular expression A Regex is a sequence of characters that forms a search pattern, for example to check the matching of a string to a given format.
RPC	*Référentiel des Points de Charge* Or in English: Charge Points Repository, Reference database of charging Points for electric Cars The RPC is a DataAggregator The RPC is a system, built around a database that contains Electric Vehicles Charge Infrastructure (EVCI) descriptions. It is accessible and manageable through eMIP via a web service API. The RPC is the GIREVE's DataAggregator
SOAP	Simple Object Access protocol SOAP is a communication protocol for exchanging structured information as web services in computer networks. It uses the XML format.
Transaction	The word "Transaction" is used for a Client-Server unique exchange, go and back. In eMIP, based on SOAP web services, a "Transaction" represents the request call and its response reception.
W3C	World Wide Web Consortium The W3C is the main international standards organization for the World Wide Web.
WSDL	Web Service Definition Language Technical description of functionality that is offered by a SOAP web service. It uses the XML format.
XML	eXtensible Markup Language XML is a textual data format. This format is used to describe web services as WSDL, and to exchange web services.
XSD	An XML Schema, or XSD, describes the structure of an XML document. The format of XSD document is XML.

2.3 References

Standard	Description
ISO 639-1	The ISO 639-1 standard defines codes of languages with 2 letters. http://www.loc.gov/standards/iso639-2/php/English_list.php
ISO 3166-1	The ISO 3166-1 standard defines codes mainly for the names of countries. • ISO 3166-1 alpha 2, used in eMIP, identifies names of countries via 2 letters • ISO 3166-1 alpha 3, identifies names of countries via 3 letters • ISO 3166-1 numeric, identifies names of countries via 3 digits

	https://www.iso.org/obp/ui/#search
ISO 3166-2	The ISO 3166-2 standard defines codes for identifying the names of principal subdivisions (e.g. provinces or states) of countries. http://www.iso.org/iso/home/standards/country_codes.htm#2012_iso3166-2
ISO 8601	The ISO 8601 standard covers the exchange of data and time-related data. https://www.iso.org/obp/ui/#iso:std:iso:8601:ed-3:v1:en
DIN SPEC 91286:2011	Electric mobility - Schemes of identifiers for e-Roaming – ContractID and Electric Vehicle Supply Equipment ID Mainly used in Germany
RFC 2119	The RFC 2119 defines key words for use in RFCs (and in any specification document by extension) to indicate requirement levels. https://www.ietf.org/rfc/rfc2119.txt
UTF-8	Universal Character Set – 8 bit UTF-8 is a character encoding format capable of encoding all characters. http://www.unicode.org/versions/Unicode6.0.0/
WGS84	World Geodetic System 1984 The WGS84 is a standard coordinate frame which is used to represent geo coordinates. It is used by the GPS system as reference coordinate system. http://en.wikipedia.org/wiki/World_Geodetic_System
ISO 4217	The ISO 4217 standard defines codes for currencies. https://en.wikipedia.org/wiki/ISO_4217

2.4 Conventions

2.4.1 Key word meanings

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT",
"RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119.

2.4.2 Message Names

Message names in eMIP are following a naming convention to help a quick understanding of each message direction and meaning. Every message names are following this Regex pattern:

eMIP_(To|From)IoP_(Set|Get)?(.*)

Each part of this pattern can be detailed as below:

- Prefix "eMIP": all message names are prefixed by "eMIP"
- Message direction
  - "ToIoP"   : message sent by a Communication Partner **to** the Inter-operation Platform (IoP)
  - "FromIoP": message sent **by** the Inter-operation Platform (IoP) to a Communication Partner
- Message meaning
  - "Set": prefix used to indicate the creation or the update of an element
  - "Get": prefix used to indicate the action of retrieving an element
  - The rest of the message name details its meaning

Example: *eMIP_ToIoP_SetEVSEAvailabilityStatus*

This message belongs to the "eMobility Inter-operation Protocol" ("eMIP"), is sent by a Communication Partner to the GIREVE'sPlatform ("ToIoP"), and is called "SetEVSEAvailabilityStatus". This message will create or update the availability status of an EVSE.

2.4.3 Message Directions

In eMIP, each message has a direction. It is sent by some actor to another one. To simplify reading, when messages are listed in a table, the message direction is displayed in the first column as below:

Actor 1→Actor 2	**Message 1 name**
	Message 1 description
	Message 2 name
	Message 2 description
Actor 2 → Actor 1	**Message 3 name**
	Message 3 description

2.4.4 Mandatory / Optional

Parameters or attributes in eMIP messages can be either mandatory or optional. In this document:

- "M" as to be interpreted as "Mandatory"
- "O" as to be interpreted as "Optional"

3 eMobility Interoperation Environment

3.1 Global Overview

The eMIP protocol defines web service interfaces between several actors. To simplify the understanding, these actors have been divided into several roles (GIREVE's Platform, CPO, eMSP, Data Aggregator), even if one actor may perform several roles.

All these roles are depicted in the Figure 1 below and detailed in the paragraph 3.2 Roles and Actors.
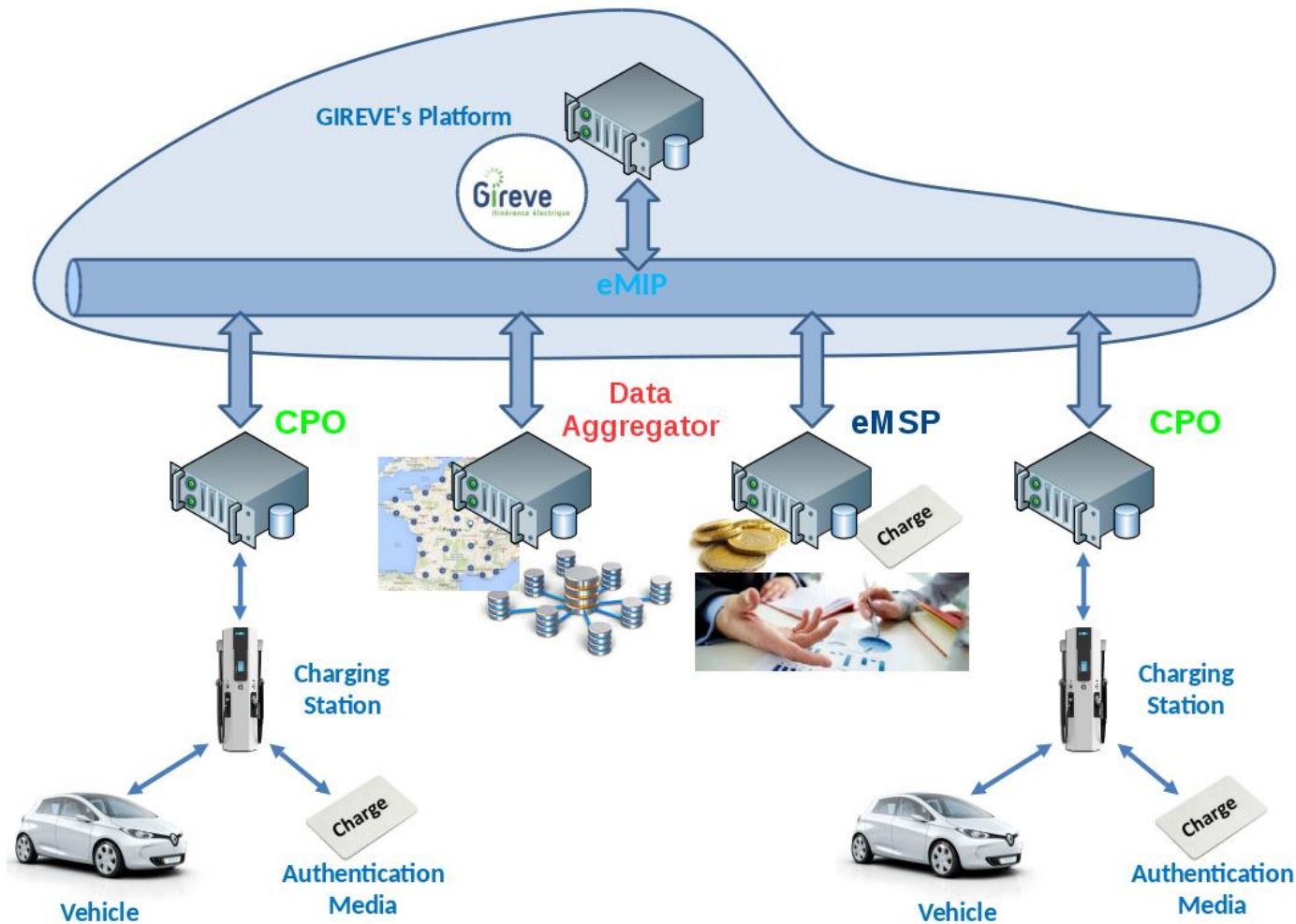
Figure 1: Global Overview of the eMIP Environment

The GIREVE's Platform, as an IoP, implements a HTTP server providing the eMIP SOAP interfaces for CPOs and eMSPs. CPO and eMSP systems are clients of this server. These services are prefixed by "eMIP_ToIOP_".

The GIREVE's Platform also implements a HTTP client for the rest of eMIP SOAP interfaces. The server part shall be implemented by CPO and eMSP systems and is used for some use cases in eMIP. These services are prefixed by "eMIP_FromIOP_".

3.2 Roles and Actors

3.2.1 GIREVE

In eMIP, GIREVE is an eMobility services "inter-operator". The GIREVE's eMobility Services Platform, the GIREVE's IoP (which is named IOP in the current document), provides technical and functional means to intermediate services between different actors of the system.

3.2.2 Charge Point Operator (CPO)

A Charge Point Operator (CPO) provides charging services thanks to its charging infrastructure (charging pools, charging stations, charging points, charging connectors and their management system) to EV-Users, who have a contract with an eMobility Services Provider.

A CPO shall have a valid "Subscription contract to GIREVE's Platform" to be authorised to connect its system to the GIREVE's Platform.

Notice: CPO is a role in eMIP. An actor may have several roles.

3.2.3 eMobility Services Provider (eMSP)

An eMobility Services Provider (eMSP) provides EV-users with various services useful for the eMobility. This can be EV recharge services, electric vehicle rental, Car-Sharing services, navigation services, etc. An eMSP has a B2C relationship with these "final customer".

An eMSP shall have a valid "Subscription contract to GIREVE's Platform" to be authorised to connect its system to the GIREVE's Platform.

To provide services like recharge services, search and localization of EVSE, an eMSP shall be in a contractual B2B relationship with CPOs. The contract can apply on all services of the eMSP or in only part of it.

Notice: eMSP is a role in eMIP. An actor may have several roles.

3.2.4 Data Aggregator

A Data Aggregator is a system that manages EVCI data in a given area and which can be requested by an inter-operation Platform, to get this data.

Example: the RPC is a Data Aggregator operated by GIREVE.

3.2.5 Communication Partner

A Communication Partner is a system actor which is <u>technically</u> connected to the GIREVE's Platform and exchanges messages with it. A Communication Partner is a client in the client/server model, and may also be a server depending on the use cases.

Example: a CPO system or an eMSP system, connected to GIREVE's Platform, is a Communication Partner.

3.2.6 Operator

An Operator is the system actor which is <u>functionally</u> connected to the GIREVE's Platform and exchanges messages with it. This is a business role that owns a "Subscription contract to GIREVE's Platform" with GIREVE.

An Operator manages at least one Communication Partner, and potentially several, which is/are technically connected to the GIREVE's Platform.

The separation between the two roles "Operator" and "Communication Partner" is mainly important when an Operator manages several Communication Partners. This notion allows distinguishing between all the Communication Partners of an Operator.

Example: a CPO or an eMSP is an Operator. A CPO system is the Communication Partner of the CPO.

3.3 Operator Systems Prerequisites

3.3.1 Contractual Prerequisite

An Operator shall have a valid "Subscription contract to GIREVE's Platform", to access the GIREVE's IOP Platform services.

Nevertheless, this contract is not a prerequisite for establishing the connection between its system and GIREVE's IOP Platform. A "**Technical connection order form**" is sufficient to enter with GIREVE in the "Implementation Project", which is described in a specific document.

3.3.2 Technical Prerequisite

eMIP interfaces are defined as SOAP 1.2 web services. Therefore, the technical description of the interfaces is represented by WSDL files which complete this document.

All eMIP messages exchanged shall use UTF-8 character encoding.

All web services are synchronous.

All "FromIoP" web service calls shall answer within 5 seconds. Any call from GIREVE's Platform to a Communication Partner that will not answer within 5 seconds, will be considered as an error.

All web services shall be exchanged on a secured HTTPS network layer only. Each eMIP client shall have a certificate that ensures IoP with the right authentication of the caller. This certificate shall be created by GIREVE's IoP technical team.

3.4 Message Structure

3.4.1 XML Schema Data Types

The W3C organism has defined several generic data types that can be used to describe XML messages. It is possible to define other data types by describing them in a XSD document.

A data type is defined by a name (e.g. string, int, date, time, dateTime, etc.) and a namespace (e.g. xsd, iopfind, etc.). The namespace is always defined in the XML file and point to a link where the definition of each data type name can be found. For W3C generic data types, the link is an URL to the XSD schema defining them, which is "http://www.w3.org/2001/XMLSchema". For a custom data type, the link is the location of the XSD document.

These data types are used in the WSDL documents that describe the web service messages. Therefore, at the beginning of a WSDL file, all namespaces are defined and point to generic and custom XSD documents.

In this eMIP Protocol Description document, W3C generic data types are prefixed with the namespace "xsd". Therefore "xsd:string" means "This value is a string as defined by the W3C".

Custom data types are also used in eMIP as it is generally done for SOAP APIs. All requests and responses are defined as data types, as well as complex information of the communication API. These custom data types are using different namespaces that all starts with "iop". E.g. "iopfind" for data types related to EVSE Searching. The location of XSD documents describing these custom data types are always mentioned in the WSDL file.

3.4.2 Unbounded

In this document, as in XSD document, "unbounded" means that the related parameter is a list, without any limit in the number of element.

3.4.3 SOAP Structure

A SOAP message is divided into a SOAP header and a SOAP body as described by the WSDL files.

For a request, the SOAP Body contains the request data.

For a response, the SOAP Body either contains the response data, or a SOAP Fault element in case of error. This exception mechanism through SOAP Fault element allows notifying the requestor about application level issues.

3.4.4 Application Header

In eMIP, each SOAP body of a request or a response is starting with the same attributes. These attributes can be grouped as an XML custom data type respectively called "Request Application Header" and "Response Application Header". All request data types inherit from "Request Application Header" and all response data types inherit from the "Response Application Header" data type.

These data types are described below.

Request Application Header

Attribute name		Type	Description
transactionId	O	xsd:string See Transaction Id	Id of the current transaction for traceability A transaction is a request / response exchange
partnerIdType	M	xsd:string	Type of the partner id
partnerId	M	xsd:string See 7.32 XXXIdType (for EVCI elements)	Id of the partner
operatorIdType	M	xsd:string	Type of the operator id
operatorId	M	xsd:string See 7.32 XXXIdType (for EVCI elements)	Id of the operator

Response Application Header

Attribute name		Type	Description
transactionId	M	xsd:string See Transaction Id	Id of the current transaction for traceability A transaction is a request / response exchange
requestStatus	M	xsd:int	Status of the request requestStatus < 10000 → OK requestStatus ≥10000 → KO

Transaction Id

The field "transactionId", representing the id of the current request / response exchange, is available in all requests and responses of eMIP web services. It is used for traceability of the exchanges: the IoP stores it with all exchange traces, and the Communication Partner shall do the same.

There are two main use cases related to this transaction id:

- The transaction id is computed by the client (within the meaning of client in "client-server communication")
- The transaction id is computed by the IoP system

The first one is the main use case, always followed by the IoP and that all Communication Partners should support. A transaction id is a very important data for traceability and maintainability.

The second use case only applies when a Communication Partner can't generate a transaction id.

Transaction id computed by the client

Before to sends a request, the client (within the meaning of client in "client-server communication") computes a unique identifier for the transaction. This transaction id shall be unique for him.

The client fills the "transactionId" field of the request with this id and sends it to the server. Once the server receives the request, it can store relevant information and link them to this transaction id, and then send back a response with the same transaction id.

When the IoP is the client, it will always compute and fill a unique "transactionId" field.

When the IoP is the server, it will always send back the "transactionId" field.

Transaction id computed by the IoP server

If ever a client didn't provide a "transactionId" field in a request, the IoP will always generate a unique identifier, store relevant information and link them to this transaction id, and then send back a response with this new transaction id.

3.4.5 Response Codes

The HTTP and SOAP layers provide information about the status of a transaction.

- First, the HTTP layer notifies of the success or failure of the communication via a HTTP Status Code.
  - See 7.16 HTTP Status Code.
- Then, the SOAP layer notifies about the success or failure of the application operation. In case of failure, a SOAP Fault exception is returned with a SOAP Fault Code instead of the expected Response element.
  - See 7.30 SOAP Fault Code

4 eMobility Interoperation Use Cases

4.1 Use case 1 – Data Upload

4.1.1 Use Case Description

The GIREVE's platform provides "Data Upload" services in order to allow **CPOs** to send notifications about the number, the characteristics and the current status of their EVCI elements. The CPO's systems are connected to their EVCI elements, collect information about them and manage them. Through these "Data Upload" services, as depicted in Figure 2, they are able to upload this information to the Platform:

- When the EVCI deployment configuration has changed: add or remove an EVCI in the RPC database, update the information of an existing EVCI in the RPC database. This is a "**Static Data Upload**" because this information describes a CPO's EVCI deployment configuration and won't change very often.
- When an existing EVCI availability status is updated. This is a "Dynamic Data Upload" because this information represents the dynamic state of the CPO's EVCI elements and will change quite often.

"Data Upload" services also allow CPOs to retrieve data from the GIREVE platform.
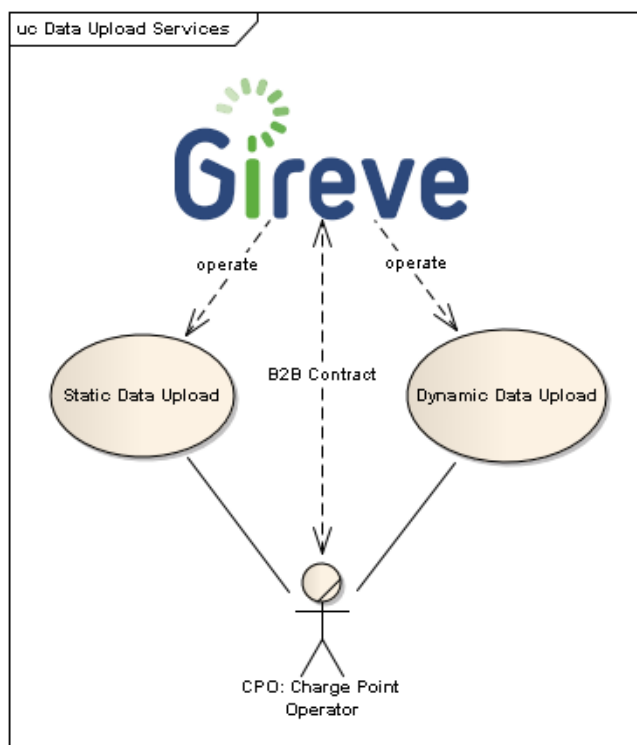
Figure 2: Data Upload Services

4.1.2 Web Service Description

Static Data Upload

The "Static Data Upload" services are a set of four web services, one per EVCI type. These services share the same structure, but each of them requires a set of data specific to the related EVCI type.

<table>
<tr><td rowspan="8">CPO→Platform</td><td>eMIP_ToIOP_SetChargingPoolStaticData</td></tr>
<tr><td>To set the attributes of a Charging Pool: id, location, opening days and hours, number of parking places and charging stations, related charging station ids, operators, power distributors, the current availability status...
See 6.1 DataField List for a Charging Pool for a detailed list of attributes</td></tr>
<tr><td>eMIP_ToIOP_SetChargingStationStaticData</td></tr>
<tr><td>To set the attributes of a Charging Station: id, location, tariff information, capability (bookable, language supported, communicating), related charging point ids, the current availability status...
See 6.2 DataField List for a Charging Station for a detailed list of attributes</td></tr>
<tr><td>eMIP_ToIOP_SetEVSEStaticData</td></tr>
<tr><td>To set the attributes of a Charging Point: id, maximum available power, meter type, related charging connector ids, current availability status, the current busy status...
See 6.3 DataField List for a Charging Point for a detailed list of attributes</td></tr>
<tr><td>eMIP_ToIOP_SetChargingConnectorStaticData</td></tr>
<tr><td>To set the attributes of a Charging Connector: id, connector type, maximum amperage power and voltage, the current availability status...
See 6.4 DataField List for a Charging Connector for a detailed list of attributes</td></tr>
</table>

There is also a set of four web services to retrieve data, one per EVCI type. These services share the same structure, but each of them requires a set of data specific to the related EVCI type.

<table>
<tr><td rowspan="3">CPO→Platform</td><td>eMIP_ToIOP_GetChargingPoolStaticData</td></tr>
<tr><td>To get the attributes of a Charging Pool: id, location, opening days and hours, number of parking places and charging stations, related charging station ids, operators, power distributors, the current availability status...
See 6.1 DataField List for a Charging Pool for a detailed list of attributes</td></tr>
<tr><td>eMIP_ToIOP_GetChargingStationStaticData</td></tr>
</table>

To get the attributes of a Charging Station: id, location, tariff information, capability (bookable, language supported, communicating), related charging point ids, the current availability status...   See 6.2 DataField List for a Charging Station for a detailed list of attributes
eMIP_ToIOP_GetEVSEStaticData
To get the attributes of a Charging Point: id, maximum available power, meter type, related charging connector ids, current availability status the current busy status...   See 6.3 DataField List for a Charging Point for a detailed list of attributes
eMIP_ToIOP_GetChargingConnectorStaticData
To get the attributes of a Charging Connector: id, connector type, maximum amperage power and voltage, the current availability status...   See 6.4 DataField List for a Charging Connector for a detailed list of attributes

Dynamic Data Upload

The "Dynamic Data Upload" services are a set of five web services, one per EVCI types and one more for the Charging Point busy status. These services share the same structure, but each of them requires a set of data specific to the related EVCI type.

	eMIP_ToIOP_SetChargingPoolAvailabilityStatus
	To set the attributes of a **Charging Pool**: id and the current availability status.
	eMIP_ToIOP_SetChargingStationAvailabilityStatus
	To set the attributes of a **Charging Station**: id and the current availability status.
CPO→	**eMIP_ToIOP_SetEVSEAvailabilityStatus**
Platform	To set the attributes of a **Charging Point**: id and the current availability status.
	eMIP_ToIOP_SetEVSEBusyStatus
	To set the attributes of a **Charging Point**: id and the current busy status.
	eMIP_ToIOP_SetConnectorAvailabilityStatus
	To set the attributes of a Charging Connector: id and the current availability status.

There is also a set of six web services to retrieve data, one per EVCI type and two more for the Charging Point busy status. These services share the same structure, but each of them requires a set of data specific to the related EVCI type.

	eMIP_ToIOP_GetChargingPoolAvailabilityStatus
CPO→Platform	To get the attributes of a Charging Pool: current availability status.
	eMIP_ToIOP_GetChargingStationAvailabilityStatus

To get the attributes of a Charging Station: the current availability status.
eMIP_ToIOP_GetEVSEAvailabilityStatus
To get the attributes of a Charging Point: the current availability status.
eMIP_ToIOP_GetEVSEBusyStatus
To get the attributes of a Charging Point: the current busy status.
eMIP_ToIOP_GetEVSESyntheticStatus
To get the attributes of a Charging Point: the current availability, busy and usabilitystatus. The usability status aggregates charging pool, station and point availability status and the charging point busy status.
eMIP_ToIOP_GetChargingConnectorAvailabilityStatus
To get the attributes of a Charging Connector: the current availability status.

4.1.3 System Behaviour Description

Static Data Upload

When processing a "Data Upload" service received from a CPO, the GIREVE's Platform check the validity of the partner's contract, and eventually update the RPC. As depicted in the Figure 3, the CPO will receive a response once the RPC has been updated.
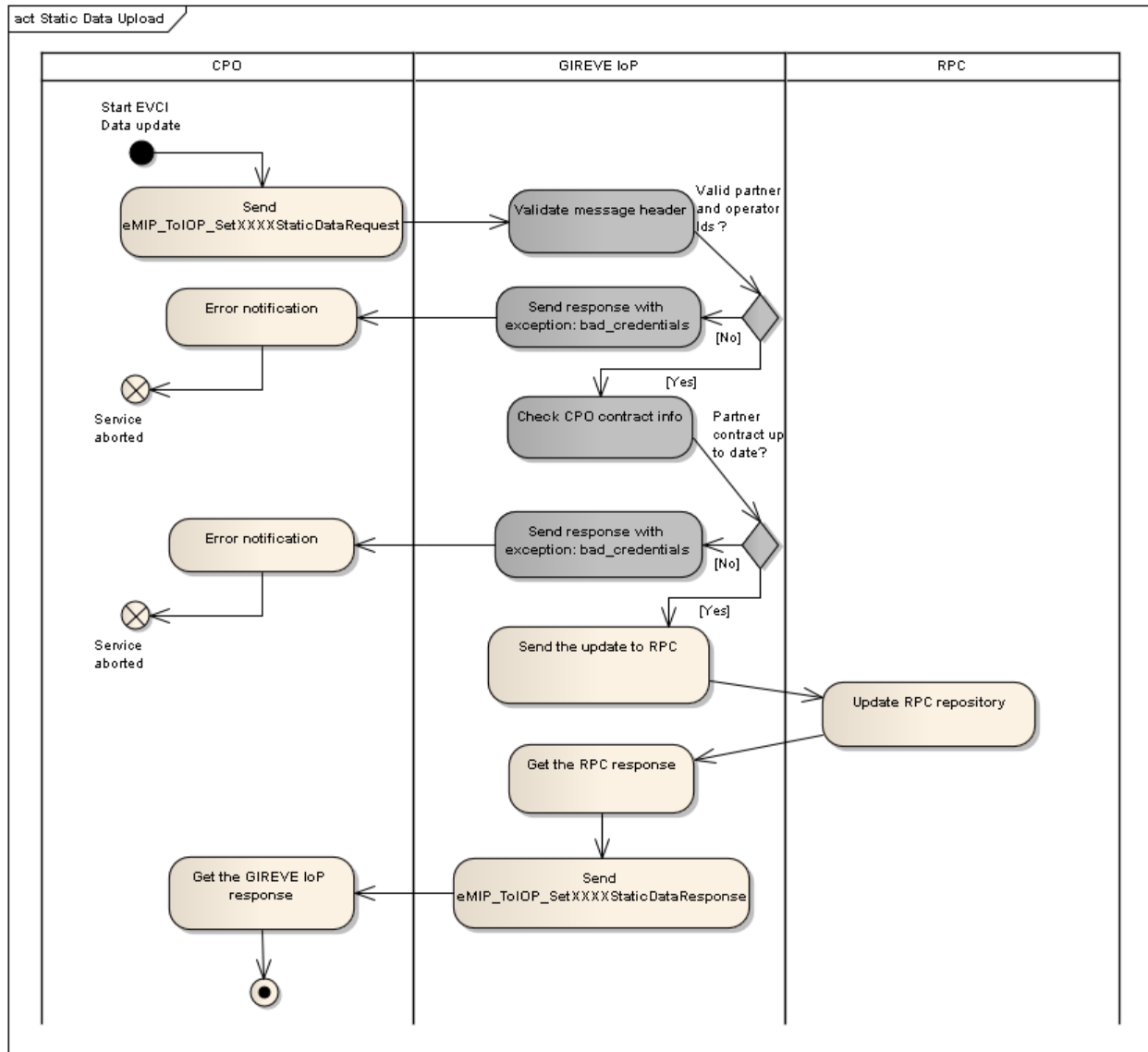
Figure 3: Processing of a Static Data Upload request

Dynamic Data Upload

When processing a "Dynamic Data Upload" (DDU) service received from a CPO, the GIREVE's Platform will check the validity of the partner's contract, and eventually update its local database. As depicted in the Figure 4, the CPO will receive a response once the local database has been updated.
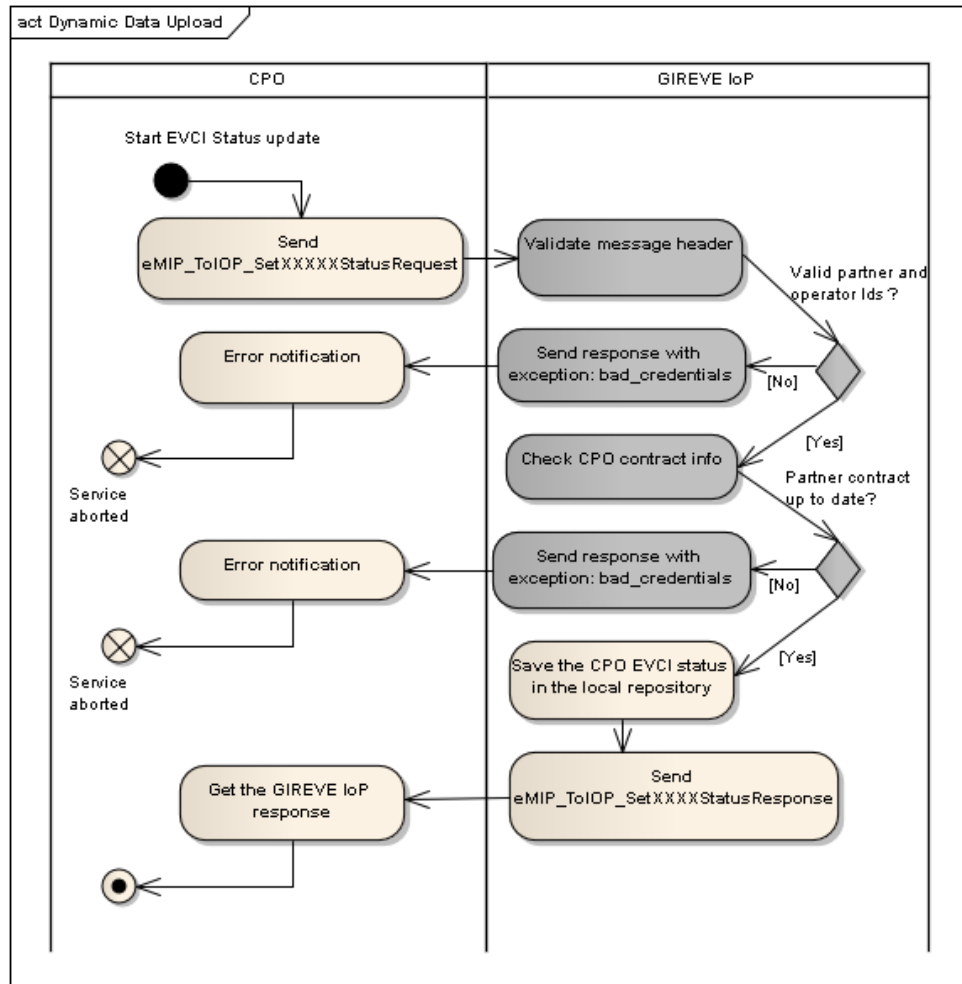
Figure 4: Processing of a Dynamic Data Upload request

4.2 Use case 2 – Data Download

4.2.1 Use Case Description

The GIREVE's Platform offers **"Data Download" services** in order to allow **eMSP** to retrieve information about the EVCI elements.

As for "Data Upload" services, the GIREVE's Platform provides "Static Data Download" (SDD) services to access the EVCI description data, and "Dynamic Data Upload" (DDD) services to access the dynamic state of EVCI elements.
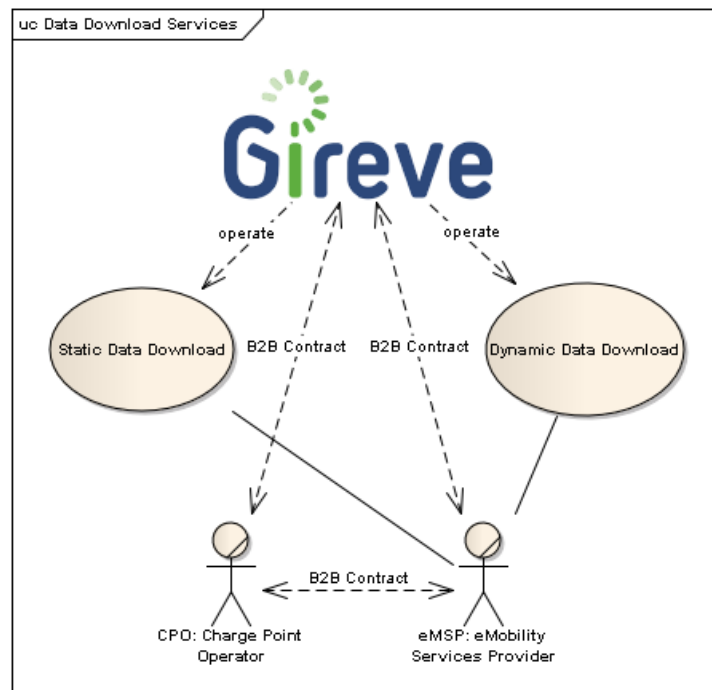
Figure 5: Data Download Services

4.2.2 Web Service Description

Static-Change, Dynamic-Change

In the following pages of this doc,

- "Static-Change" stands for a change of at least one of the static attributes of an EVSE or its Charging-station or Charging-pool, or one of its Charging-connectors,
- "Dynamic-Change" stands for a change of at least one of the dynamic attributes (availabilityStatus, busyStatus) of an EVSE or its Charging-station or Charging-pool, or one of its Charging-connectors

Static Data Download

The "Static Data Download" (SDD) services are provided as five web services: four provided by the GIREVE's Platform and one by the eMSP system.

Based on this web services set, the eMSP has 2 main ways to get static data

- Pull mode: The eMSP will periodically request the GIREVE's Platform to get the Static-Changes that occurred since the last call
- Push mode: After the eMSP activates the push mode, the GIREVE's Platform will push each Static-Change it will detect, immediately after its detection.

For sure, an initialisation phase in necessary. The GIREVE's Platform provides the eMIP_ToIOP_GetEVSEData_FullList web service for that reason.

eMSP→ Platform	**eMIP_ToIOP_GetEVSEData_FullList**
	Using this web service, the eMSP can get the full list of EVSE descriptions. • Full list means, all the EVSE managed by the CPOs with which the eMSP has a roaming agreement • For each EVSE, the WebService will return a set of attributes defined in the "EVSEAttribute" datatype.
	eMIP_ToIOP_GetEVSEStaticDataChanges
	Using this web service, the eMSP can get the list of EVSE Static-Changes that occurred in a given time interval. • A EVSE Static-Change is a set of data that contains change-event attributes (date, time …) and the new EVSE description • For each EVSE, the WebService will return a set of attributes defined in the "EVSEAttribute" datatype. • The eMSP will get all and only the Static-Changes related to EVSEs managed by the CPOs with which the eMSP has a roaming agreement
	eMIP_ToIOP_ActivateEVSEStaticDataChangesFlow
	Using this web service, the eMSP will activate the push mechanism. From the moment it activates, it will receive push messages (cf eMIP_FromIOP_SetEVSEStaticDataChange web-service)
	eMIP_ToIOP_DeActivateEVSEStaticDataChangesFlow
	Using this web service, the eMSP will **de**activate the push mechanism. From the moment it deactivates, it will not receive any more push messages.
Platform → eMSP	**eMIP_FromIOP_SetEVSEStaticDataChange**
	The GIREVE's Platform can use this request to push the notification of an EVSE Static-Change to an eMSP which has previously activated the push mechanism. • A EVSE Static-Change is a set of data that contains change-event attributes (date, time …) and the new EVSE description • For each EVSE, the WebService will send a set of attributes defined in the "EVSEAttribute" datatype. • The eMSP will get all and only the Static-Changes related to EVSEs managed by the CPOs with which the eMSP has a roaming agreement

eMIP Protocol: **Static** Data Changes – **Delta** modes

Static – Dynamic
Same flows
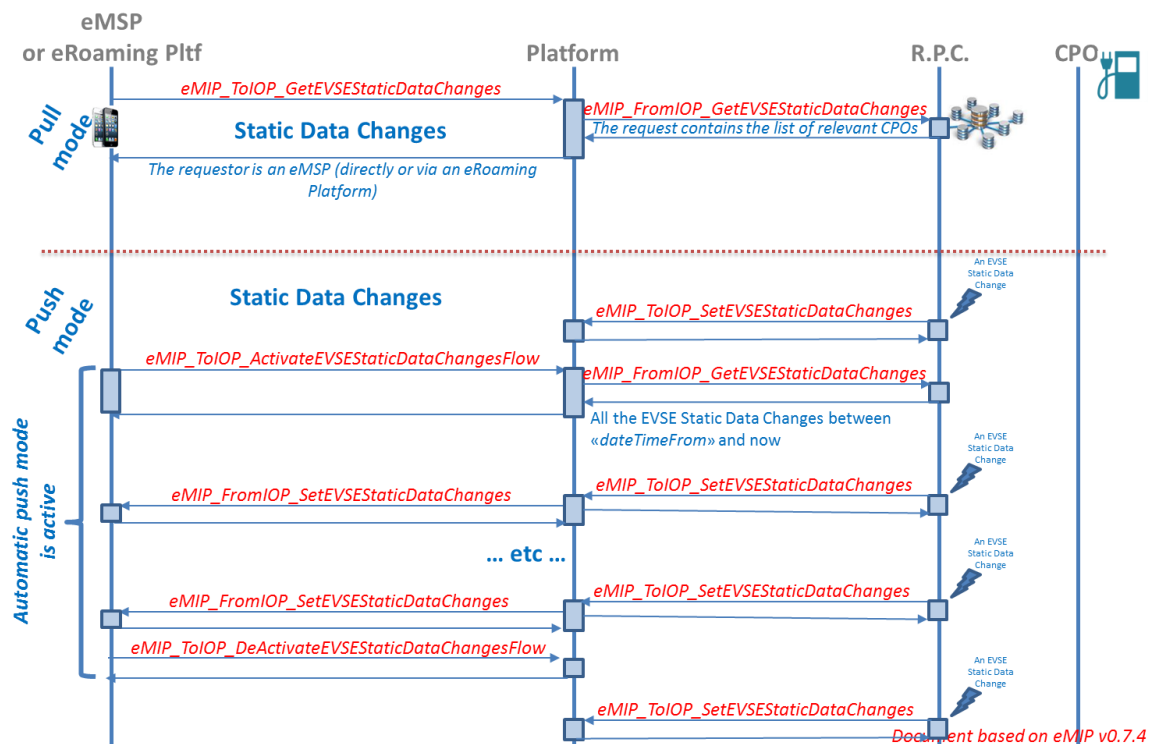
Figure 6: Static Data Download Services

Dynamic Data Download

The "Dynamic Data Download" (DDD) services are provided as four web services: three provided by the GIREVE's Platform and one by the eMSP system.

Based on this web services set, the eMSP has 2 main ways to get dynamic data

- Pull mode: The eMSP will periodically request the GIREVE's Platform to get the Dynamic-Changes that occurred since the last call
- Push mode: After the eMSP activates the push mode, the GIREVE's Platform will push each Dynamic-Change it will detect, immediately after its detection.

For sure, an initialisation phase in necessary. The GIREVE's Platform provides the eMIP_ToIOP_GetEVSEData_FullList web service for that reason. This web service is described in the previous chapter.

	eMIP_ToIOP_GetEVSEData_FullList
	See previous chapter
eMSP→ Platform	**eMIP_ToIOP_GetEVSEDynamicDataChanges**
	Using this web service, the eMSP can get the list of EVSE Dynamic-Changes that occurred in a given time interval. • A EVSE Dynamic-Change is a set of data that contains change-event attributes (date, time …) and the new EVSE description • For each EVSE, the WebService will return a set of attributes defined in the "EVSEDynamicData" datatype. • The eMSP will get all and only the Dynamic-Changes related to EVSEs managed by the CPOs with which the eMSP has a roaming agreement
	eMIP_ToIOP_ActivateEVSEDynamicDataChangesFlow
	Using this web service, the eMSP will activate the push mechanism. From the moment it activates, it will receive push messages (cf eMIP_FromIOP_SetEVSEDynamicDataChange web-service)
	eMIP_ToIOP_DeActivateEVSEDynamicDataChangesFlow
	Using this web service, the eMSP will **de**activate the push mechanism. From the moment it deactivates, it will **not** receive any more push messages.
Platform → eMSP	**eMIP_FromIOP_SetEVSEDynamicDataChange**
	The GIREVE's Platform can use this request to push the notification of an EVSE Dynamic-Change to an eMSP which has previously activated the push mechanism. • A EVSE Dynamic-Change is a set of data that contains change-event attributes (date, time …) and the new EVSE description • For each EVSE, the WebService will send a set of attributes defined in the "EVSEDynamicData" datatype. • The eMSP will get all and only the Dynamic-Changes related to EVSEs managed by the CPOs with which the eMSP has a roaming agreement

Figure 7: Dynamic Data Download

4.3 Use case 3 – Charge Point Finder

4.3.1 Use case description

The GIREVE's Platform offers a "Charge Point Finder" service to eMSP. This service allows retrieving a list of EVSE located in a given area and fulfilling a set of criteria. As depicted in Figure 8, the resulting EVSE information is provided by the GIREVE's RPC database, and by any other Data Aggregator database connected to the GIREVE's Platform that may match the current request.
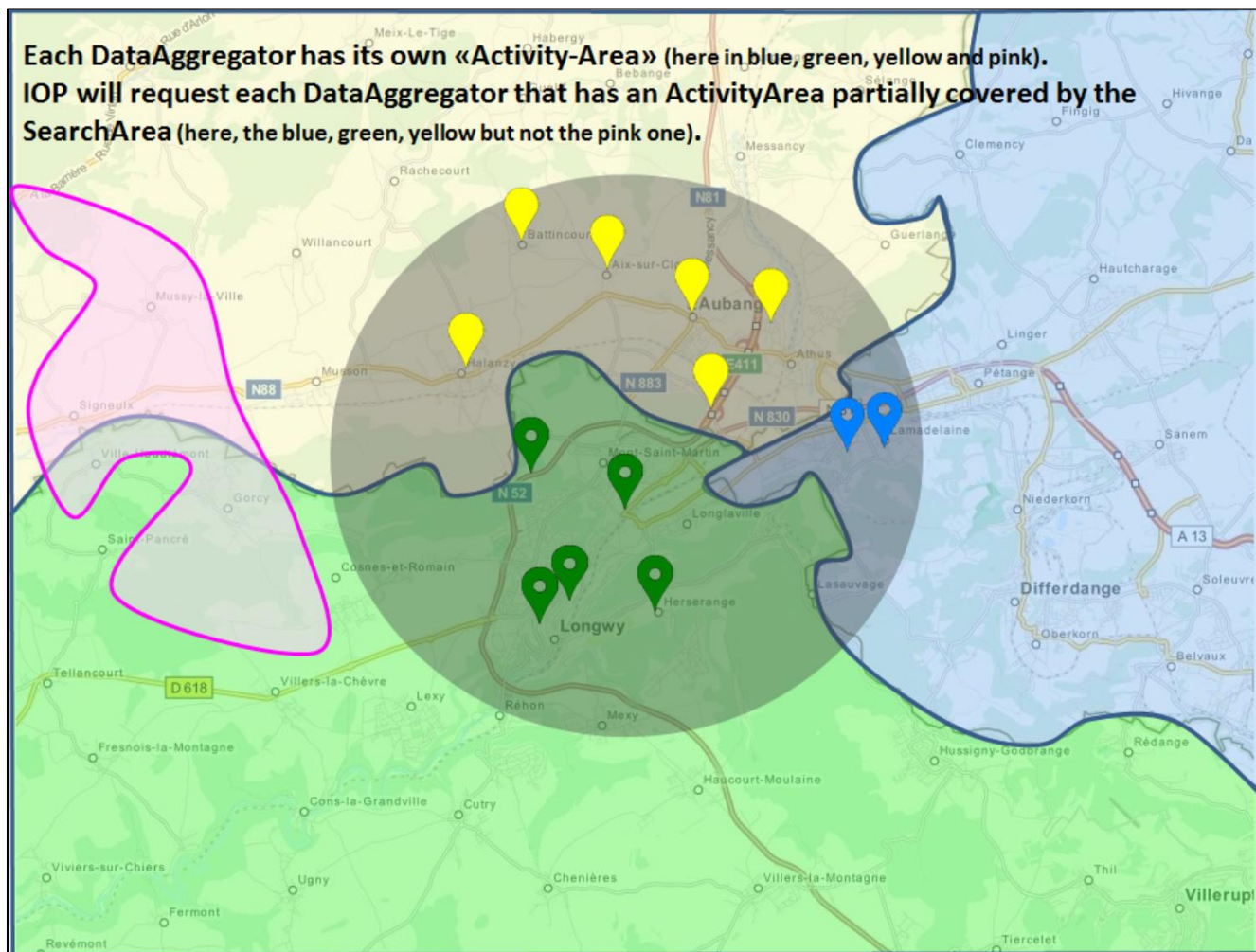
Figure 8: Charge Point Finder - RPC and Data Aggregators

Hence, an eMSP can provide, to its end-users, the list of EVSE near their location and matching their needs.
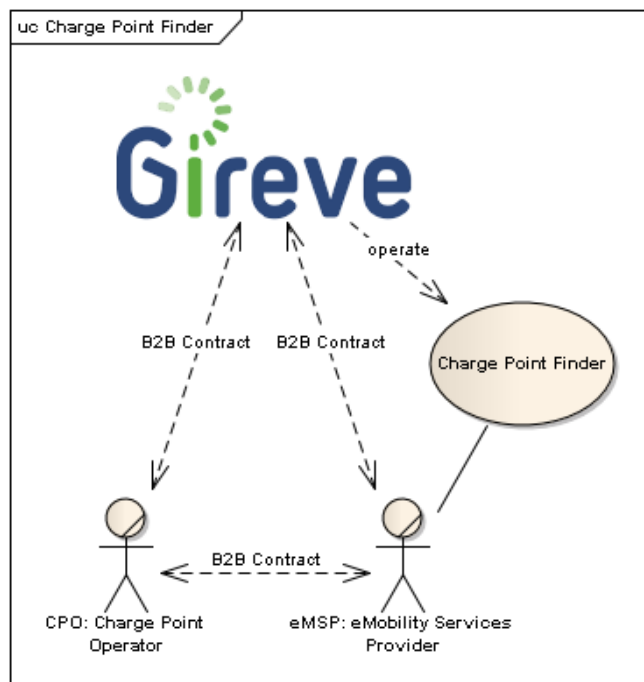
Figure 9: Charge Point Finder Service

4.3.2 Web Service Description

The "Charge Point Finder" (CSF) services are provided as two web services: one provided by the GIREVE's Platform and the other by any Data Aggregator system.

The eMSP systems are only interested in the first web service: eMIP_ToIOP_SearchEVSE.

eMSP→ Platform	**eMIP_ToIOP_SearchEVSE**
	The eMSP can search for EVSEs given: • a location area, • a list of attribute values that the searched EVSE fulfil ○ e.g. EVSEMaxPower("3") >= "7" kW, • the language of the resulting EVSE information, • and the maximum number of EVSE information to retrieve.
Platform → Data Aggregator	**eMIP_FromIOP_SearchEVSE**
	The GIREVE's Platform can use this request to search for EVSEs in a Data Aggregator database given: • a location area, • a list of attribute values that the searched EVSE fulfil ○ e.g. EVSEMaxPower("3") >= "7" kW, • the language of the resulting EVSE information, • and the maximum number of EVSE information to retrieve.

4.3.3 System Behaviour Description

When processing a "Charge Point Finder" (CSF) request received from an eMSP, the GIREVE's Platform will check the validity of the partner's contract, and build its response by querying the RPC and/or one or more Data Aggregators likely to manage EVSE in the specified location as depicted in Figure 10. All duplicates will be removed by the GIREVE's Platform.
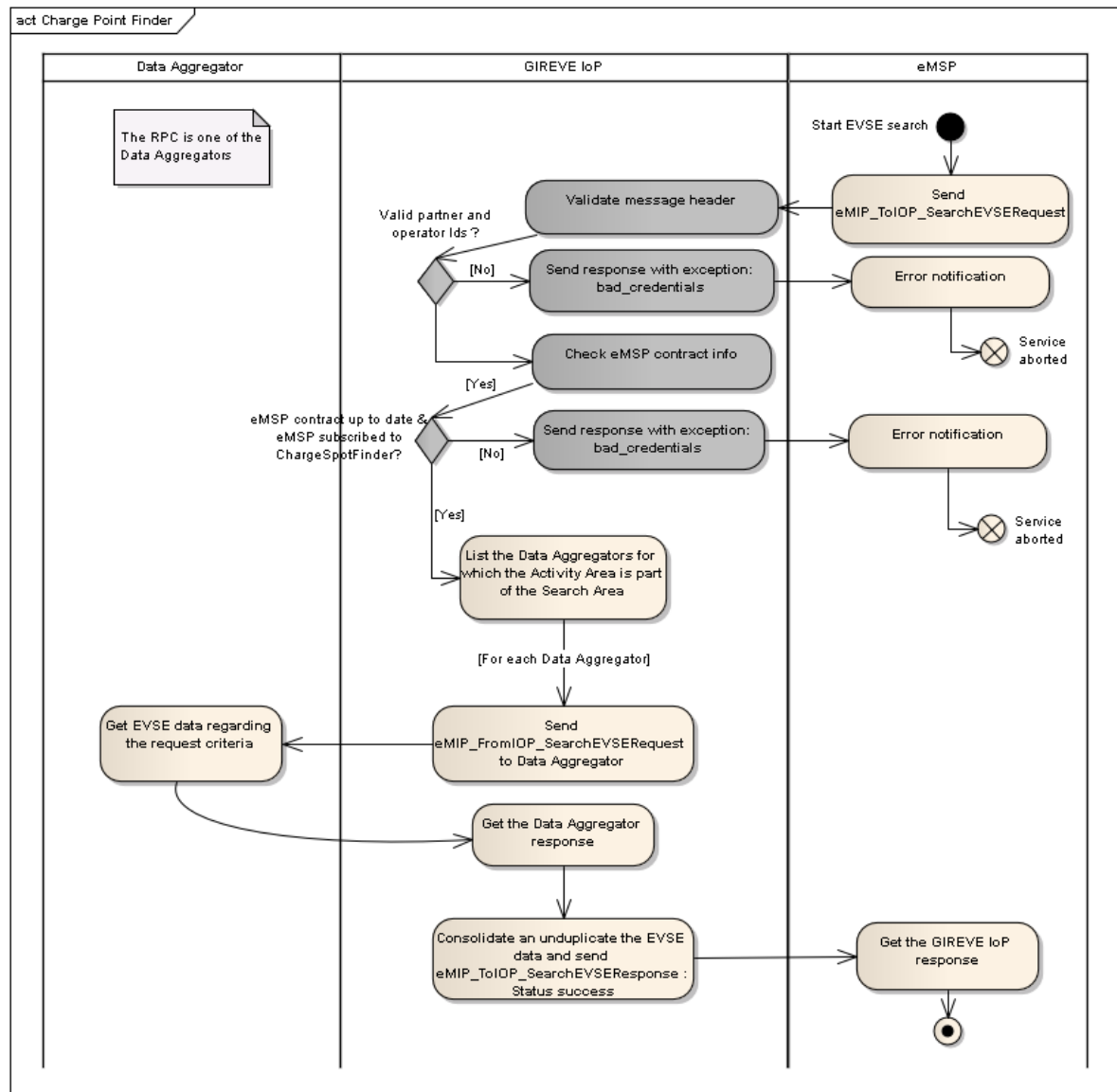
Figure 10: Processing of a Charge Point Finder request

4.4 Use case 4 – Roaming

4.4.1 Use Case Description

The GIREVE's Platform enables **charge roaming** use cases between several CPOs and eMSPs by providing data clearing house features and authorisation mechanisms to allow an end-user to charge its vehicle independently of the current **CPO** or end-user's **eMSP**.
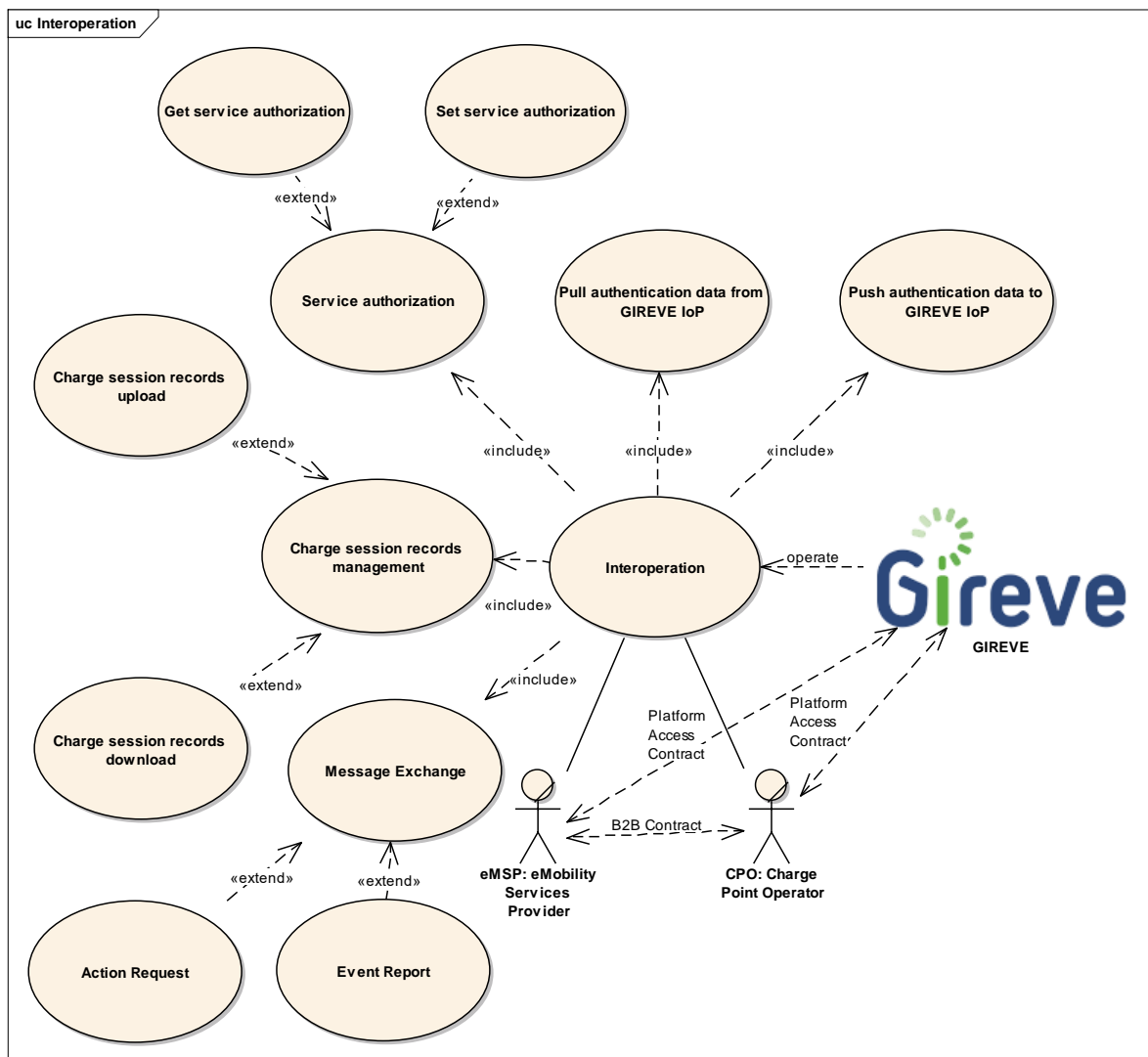
Figure 11 : Roaming Services

Authorisation Services

Hence the charge service roaming is mainly based on the "Authorisation" process, the "Roaming" services offer several means to authenticate and authorise an end-user to charge:

- Synchronous Authorisation (which is the main and nominal process)
  - Authorisation Request
    - Once an end-user authenticates himself to a Charging Point (e.g. RFiD badge, etc.), if the CPO cannot locally authenticate the user, an individual authorisation request is sent by the CPO to the eMSP through the GIREVE's Platform,
    - The CPO will then deliver or not, to the end-user, the requested service (the re-charge) according to the received response.
  - Remote Authorisation
    - An eMSP pushes an authorisation for a given Charging Point to the CPO through the GIREVE's Platform,
    - The CPO will then deliver or not, to the related end-user, the requested service (the re-charge).
    - Several scenarios may trigger this use case. The main one is an end-user asking to start or stop a charging process via an eMSP Application (e.g. smartphone). To identify the concerned Charging Point, a QRCode may be displayed on it.
- Asynchronous Authorisation: Authentication Data Exchange
  - An eMSP sends to the GIREVE's Platform a list of authorised subscribers.
  - The GIREVE's Platform generates a list of authorised subscribers per CPO, by concatenating the relevant eMSP's lists (relevant means here, eMSPs that have a roaming contract with this CPO), and sending these lists to CPOs.
  - Once an end-user authenticates himself to a Charging Point (e.g. RFiD badge, etc.), the CPO will check the availability of the user in its local authorised subscribers list,
  - The CPO will then deliver or not the charge to the end-user.
- Asynchronous Authentication Data Exchange & Synchronous Authorisation
  - An eMSP sends to the GIREVE's Platform a list of authorised customers.
  - Once an end-user authenticates himself to a Charging Point, the CPO will check the authorisation of this end-user through the GIREVE's Platform by sending an authorisation request. The GIREVE's platform checks if at least one eMSP, having a roaming contract with this CPO, authorise the related subscriber to charge and then send the authorisation response to the CPO.
  - The CPO will then deliver or not, to the end-user, the charge according to the received response.

Figure 12: Authorisation Services

The choice between these use cases depends on the behaviour of the CPO System, and on the GIREVE's Platform configuration for each eMSP.

The CPO system can have an asynchronous behaviour (asynchronous "Authentication Data Exchange" use case), and/or a synchronous one ("

Asynchronous Authentication Data Exchange & Synchronous Authorisation" use case, synchronous "Authorisation Request" use case).

When the CPO system has a synchronous behaviour, the use case to apply will depend on the GIREVE's Platform configuration for the concerned eMSP, which can be:

Synchronous First: start by using the synchronous "Authorisation Request" use case, but try the

- Asynchronous Authentication Data Exchange & Synchronous Authorisation" use case if the eMSP does not reply.

Asynchronous First: start by using the

- Asynchronous Authentication Data Exchange & Synchronous Authorisation" use case, but if no data is available, try with a synchronous "Authorisation Request" use case.

Asynchronous Only: always use the "

- Asynchronous Authentication Data Exchange & Synchronous Authorisation" use case.

Message Exchange

The "Roaming" services also provide the capability to exchange some messages between CPOs and eMSPs during the charging session.

- Event Exchange
  The CPO system can report an event to the eMSP system during the charging session.

- Action Exchange
  The eMSP system can request an action to the CPO system during the charging session.

eMIP Protocol: Action request & Event report

🟡 **Store & Forward**
⭐ **Mandatory Implementation**
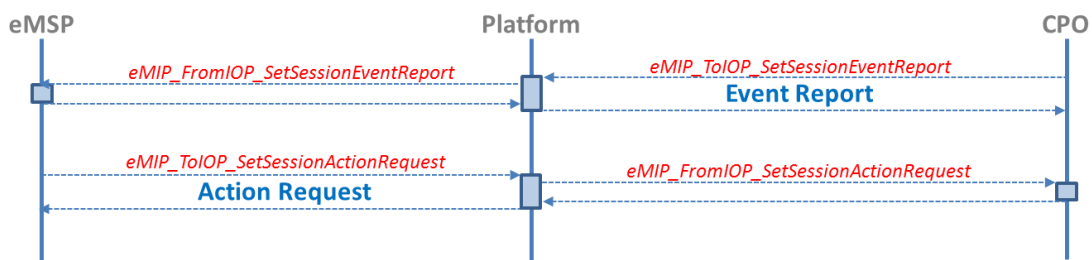
Figure 13: Action request & Event report Services

Charging Session Record (Charge detail Record – CDR) Exchange Service for Data Clearing House

Finally, the "Roaming" services also provide the capability to exchange charging session records between CPOs and eMSPs to enable a Data Clearing House mechanism. These records are named Charge Detail Record (CDR). As for "Authorisation" process, several use cases are available:

- Asynchronous Exchange
  - the CPO sends one or several Charge Detail Records (CDR) to the GIREVE's Platform
  - the eMSP retrieves a list of Charge Detail Records (CDR) corresponding to a given time interval
- Synchronous Exchange
  - the CPO sends a Charge Detail Records (CDR) to the GIREVE's Platform
  - the GIREVE's Platform contacts the related eMSP to provide it the Charge Detail Records (CDR).

Figure 14: Charge Detail Records Services

4.4.2 Web Service Description

Authorisation Services

Several web services are required to manage all "Authorisation" use cases.

- The GIREVE's Platform is providing four web services to support "Authorisation" services.
- In order to support the synchronous "Authorisation Request" use case, the eMSP shall also implement one additional web service.
- In order to support the synchronous "Remote Authorisation" use case, the CPO shall implement one additional web service.

eMSP→ Platform	**eMIP_ToIOP_SetAuthenticationData**
	Send a list of authorised users on the GIREVE's Platform for CPOs.
	eMIP_ToIOP_SetServiceAuthorisation
	Request a remote authorisation for a given Charging Point. The GIREVE's Platform will contact the related CPO to enable the authorisation.
Platform → eMSP	**eMIP_FromIOP_GetServiceAuthorisation**
	The GIREVE's Platform can contact the eMSP System using this request • to trigger an authorisation request initiated by a Charging Point's CPO System for a given requested service • to define if the requested eMSP is the one managing a given user (in this case, requestedServiceId is "0").
	eMIP_ToIOP_GetAuthenticationData
	Retrieve a list of authorised users.

CPO→ Platform	**eMIP_ToIOP_GetServiceAuthorisation**
	Request an authorisation for a given user contract id. The GIREVE's Platform will contact the related eMSP to check the authorisation of this user.
Platform → CPO	**eMIP_FromIOP_SetServiceAuthorisation**
	The GIREVE's Platform can contact the CPO System using this request to trigger an authorisation request initiated by an eMSP.

Message Exchange

The GIREVE's Platform is providing two optional web services to support "Message Exchange" services: one for the CPOs to report an event, and another one for eMSPs to request an action.

eMSP→ Platform	**eMIP_ToIOP_SetSessionActionRequest**
	Request an action from the CPOs.
Platform → eMSP	**eMIP_FromIOP_SetSessionEventReport**
	The GIREVE's Platform can contact the eMSP System using this request to report an event triggered by CPO system.
CPO→ Platform	**eMIP_ToIOP_SetSessionEventReport**
	Report an event to the eMSPs.
Platform →CPO	**eMIP_FromIOP_SetSessionActionRequest**
	The GIREVE'sPlatform can contact the CPO System using this request to request an action asked by the eMSP System.

Charging Session Record Exchange Service for Data Clearing House

Several web services are required to manage all "Charging Session Record Exchange" use cases.

- The GIREVE's Platform is providing three web services to support "Data Clearing House" services: one for the CPOs to send charging session records, and two others for eMSPs to retrieve these pieces of information one by one or several at a time.
- In order to support the synchronous "Charging Session Record Exchange" use case, the eMSP shall also implement one additional web service.

eMSP → Platform	**eMIP_ToIOP_GetChargeDetailRecord**
	To receive a charging session record for a given session. Session ids are available in the GIREVE's Platform responses of authorisation services.
	eMIP_ToIOP_GetChargeDetailRecordList
	To receive a list of charging session record from a given time interval.
Platform → eMSP	**eMIP_FromIOP_SetChargeDetailRecord**
	The GIREVE's Platform can contact the eMSP System using this request to trigger a charging session record exchange request initiated by a CPO System.
CPO → Platform	**eMIP_ToIOP_SetChargeDetailRecord**
	To send a charging session record.

4.4.3 System Behaviour Description

Authentication Data Exchange

As depicted in the figure below, in this use case, the eMSP System calls periodically eMIP_ToIOP_SetAuthenticationData, and the CPO System calls regularly eMIP_ToIOP_GetAuthenticationData.
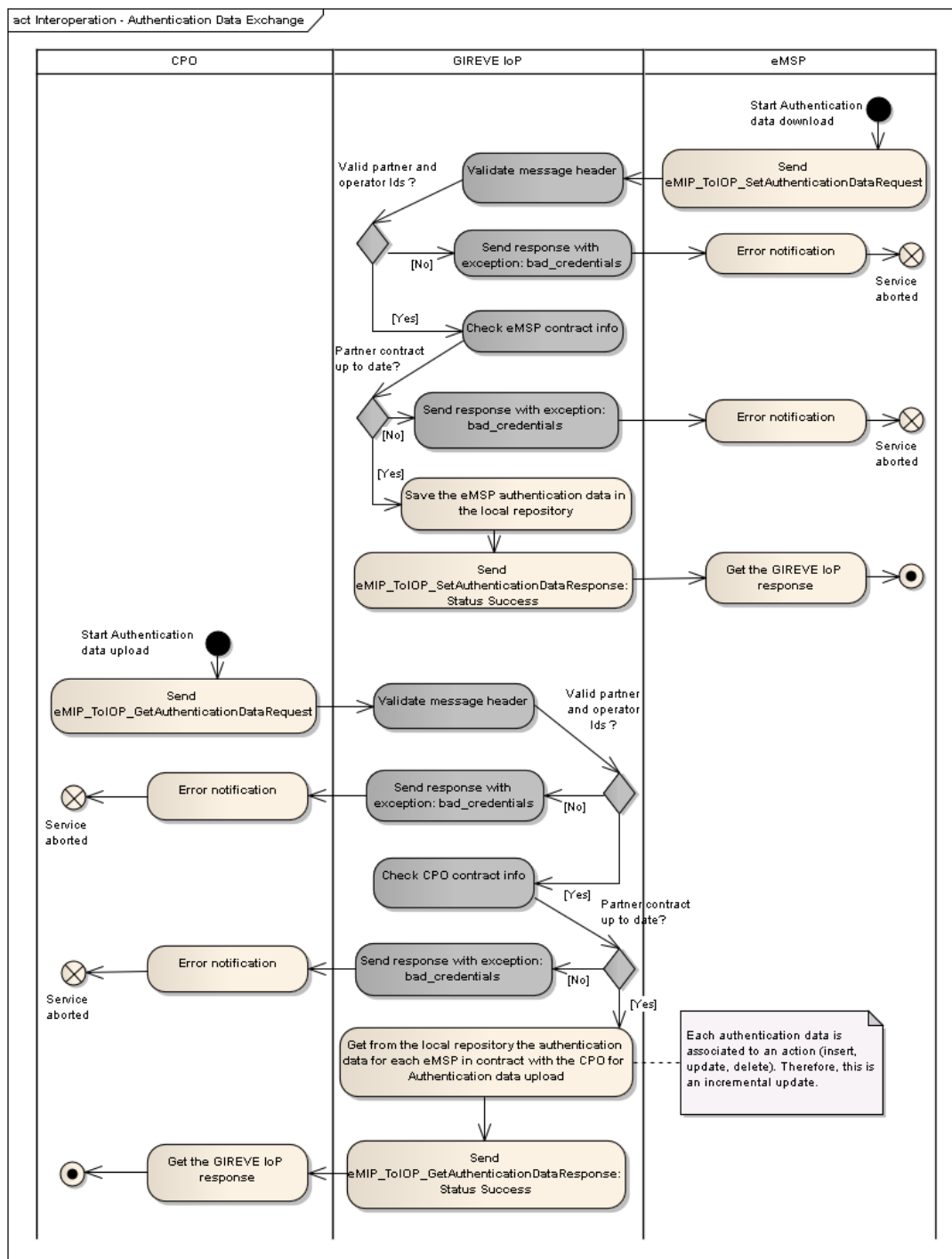
Figure 15: Processing Authentication Data Exchange

Authorisation Request

As depicted in the figure below, in this use case, once an end-user authenticates himself to a Charging Point (e.g. RFiD badge, etc.), the Charging Point's CPO System sends an

eMIP_ToIOP_GetServiceAuthorisation request. Then the GIREVE's Platforms calls eMIP_FromIOP_GetServiceAuthorisation request of the related eMSP System.
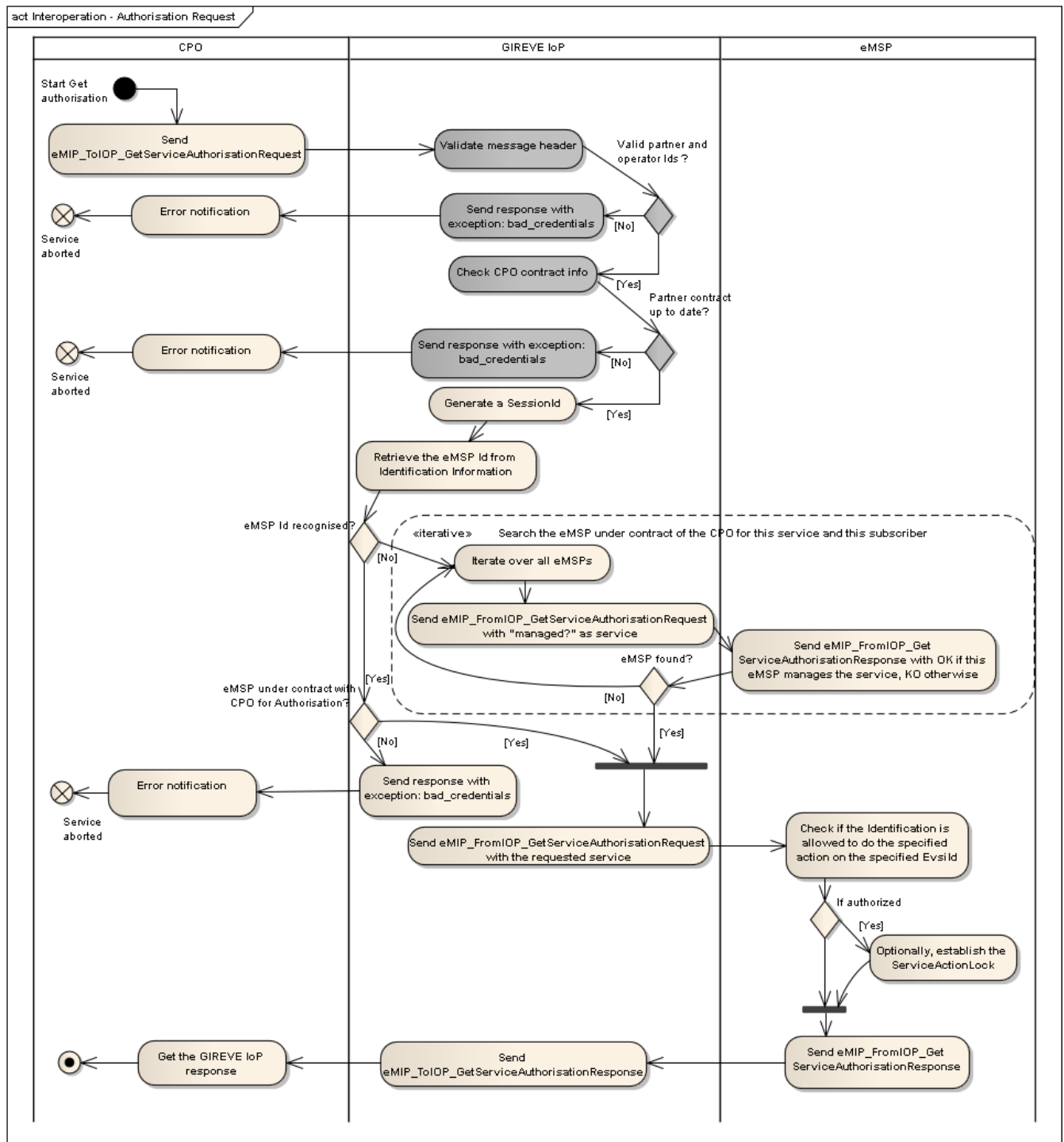
Figure 16: Processing Authorisation Request

Remote Authorisation

As depicted in the figure below, in this use case, the eMSP System sends an eMIP_ToIOP_SetServiceAuthorisation request, and then the GIREVE's Platforms calls eMIPeMIP_FromIOP_SetServiceAuthorisation request of the related CPO System.
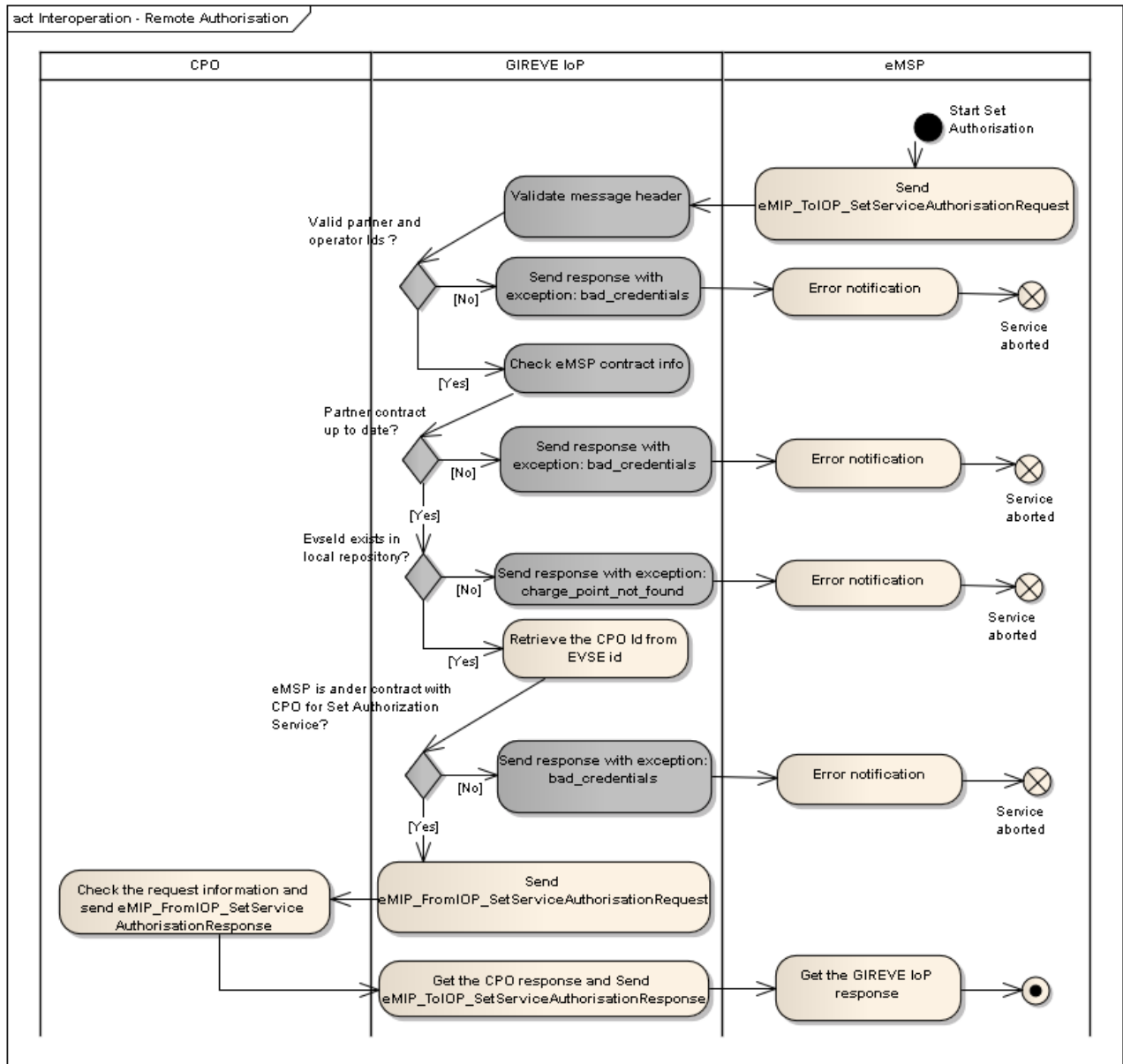
Figure 17: Processing Remote Authorisation

Asynchronous Authentication Data Exchange & Synchronous Authorisation

In this use case, the eMSP System calls regularly eMIP_ToIOP_SetAuthenticationData request, once an end-user authenticates to a Charging Point (e.g. RFiD badge, etc.), the Charging Point's CPO System sends an eMIP_ToIOP_GetServiceAuthorisation request and then the GIREVE's Platform can reply directly to the CPO System.

The usage of this use case instead of the "Authorisation Request" one will depend on the IoP configuration for the related eMSP.
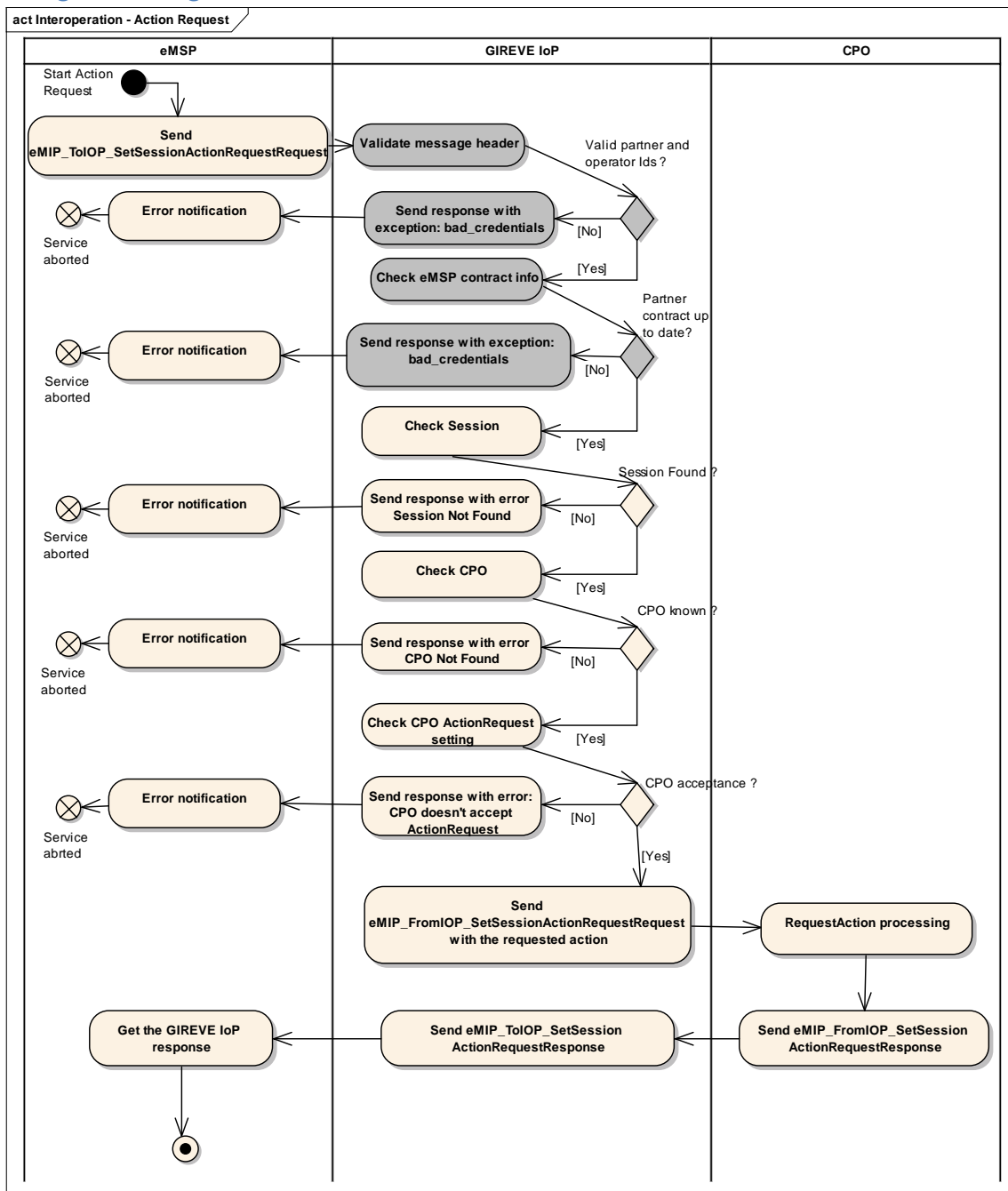
Figure 18: Processing Charging Session Action Request
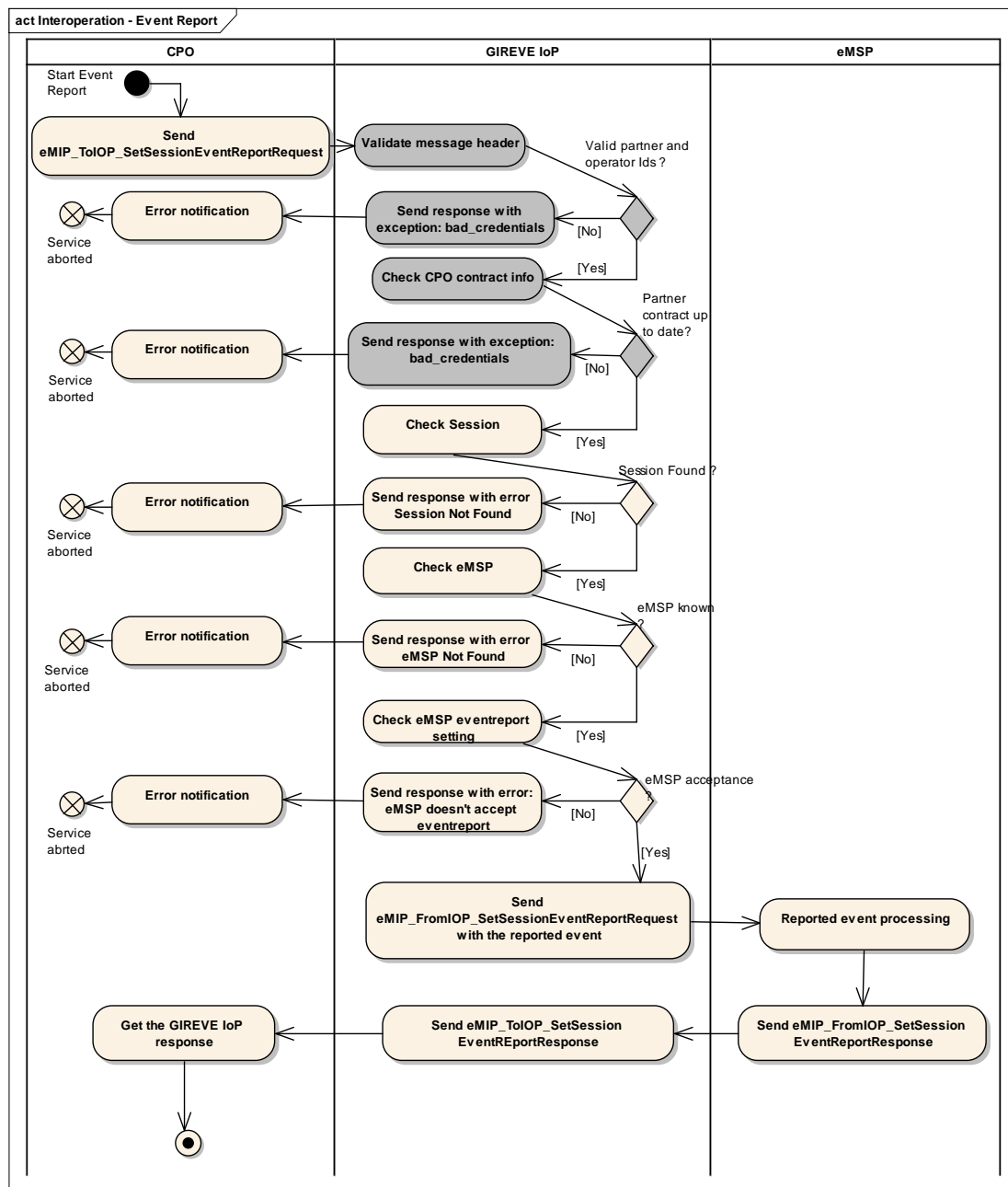
Figure 19: Processing Charging Session Event Report

Charging Session Record Exchange
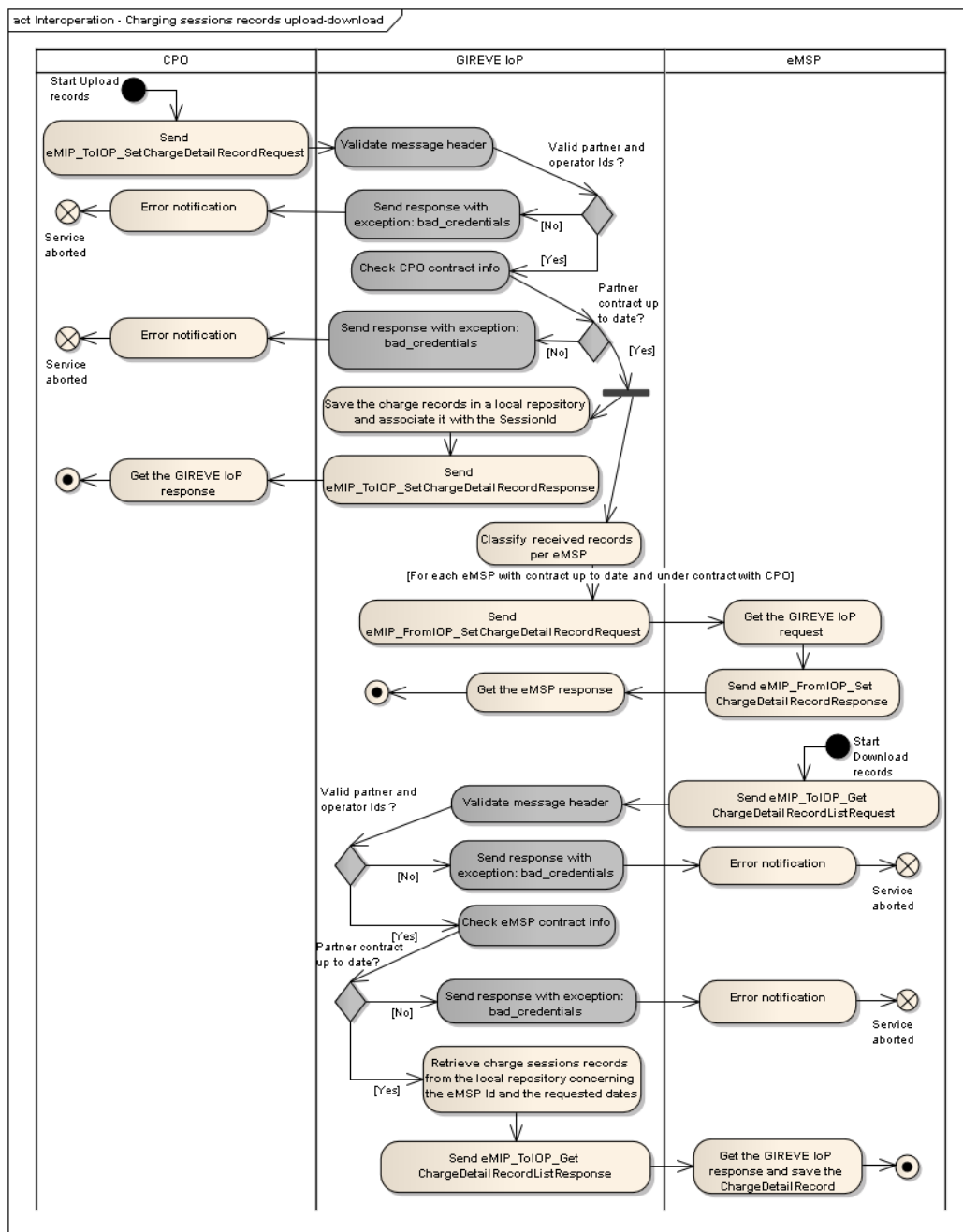
Figure 20: Processing Charging Session Record Upload and Download

4.5 Use case 5 – Platforms Monitoring and SLA Improvement

4.5.1 Use Case Description

The GIREVE's Platform includes a monitoring capability of the Communication Partners in order to know which one is alive and connected or not, and therefore to detect as soon as possible a communication break or a Communication Partner breakdown. To support such a feature, **the GIREVE's Platform provides a "Heartbeat" service that all Communication Partners (CPO and eMSP systems)** call regularly:

- To ensure that the GIREVE's Platform knows that they are still alive.
- To let them know that the GIREVE's Platform is still alive.

To be considered "alive", a Communication Partner shall send a service message to the GIREVE's Platform at least every "Heartbeat Period". This message can be a "Heartbeat" request, or any other service request, or even a reply to a request received from the GIREVE's Platform. If the Communication Partner doesn't send any message to the GIREVE's Platform since the "Heartbeat Period", it shall send a "Heartbeat" request to be considered "alive".
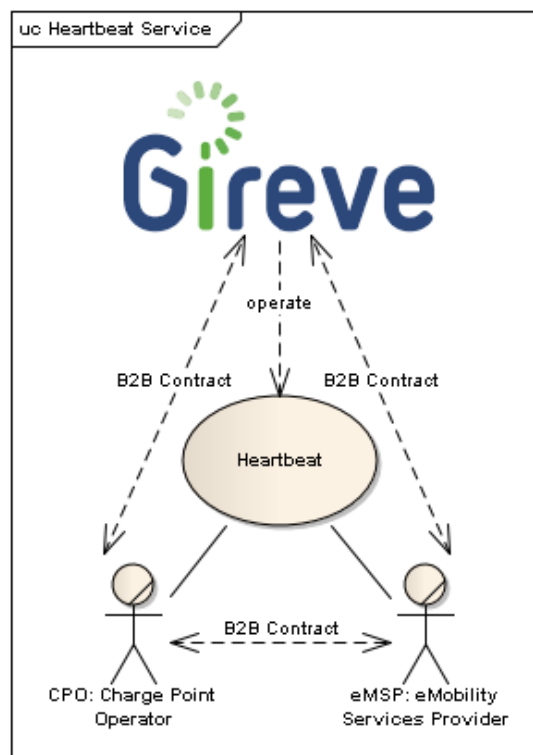
Figure 21: Heartbeat Service for Communication Partners Monitoring

4.5.2 Web Service Description

The "Heartbeat" service is provided as one web service.

eMSP and CPO → Platform	**eMIP_ToIOP_HeartBeat**
	The response message of the "Heartbeat" service may contain the current time of the GIREVE's Platform for clock synchronisation. It may also include a new "Heartbeat Period".

4.5.3 System Behaviour Description

When processing a "Heartbeat" request received from an eMSP or a CPO, the GIREVE's Platform will check the validity of the partner's contract, and update the state of this Communication Partner as depicted in Figure 22. Each Communication Partner shall monitor a heartbeat timer that trigger a "Heartbeat" request sending, to be considered "alive" for the GIREVE"s Platform.
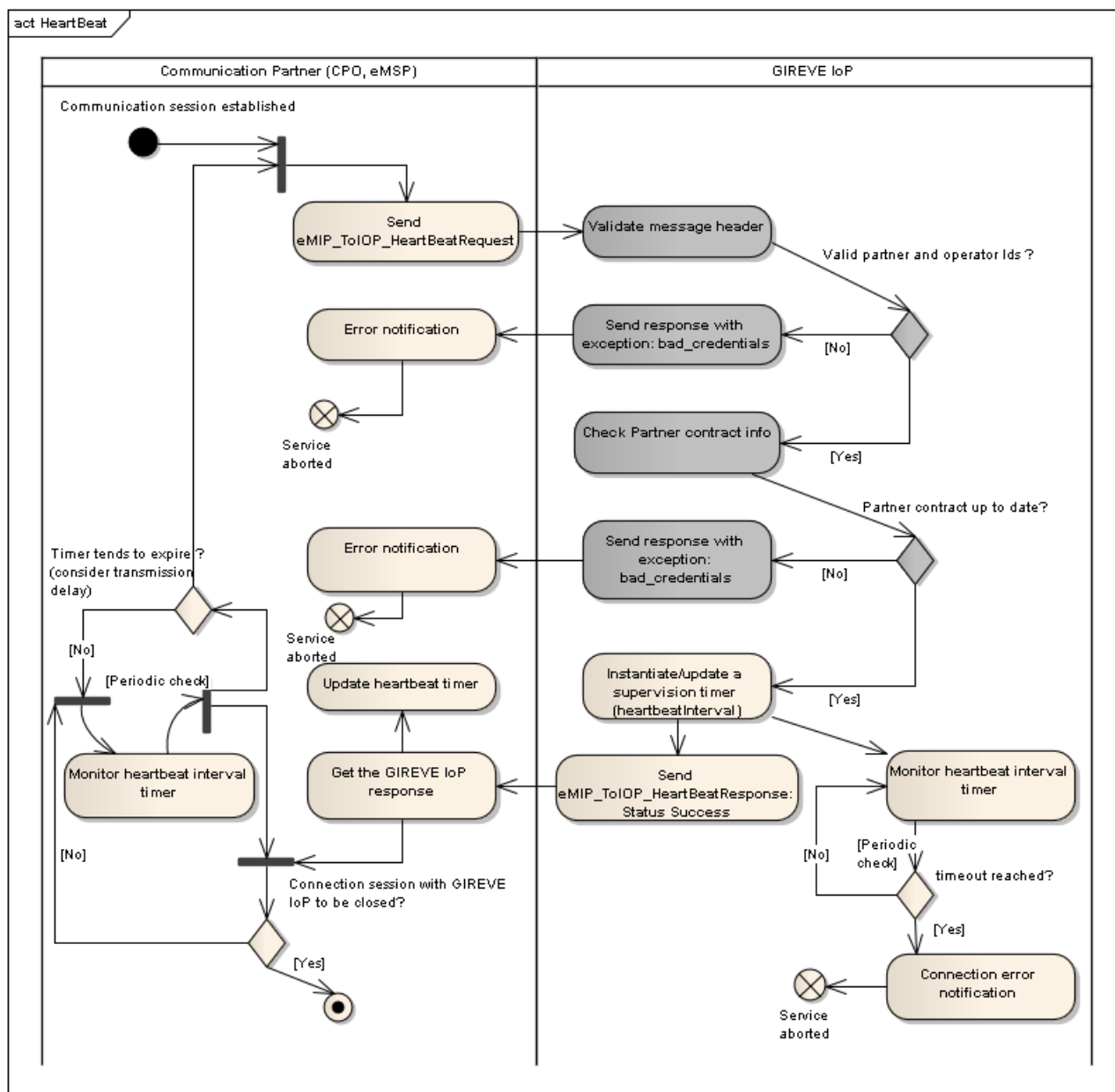
Figure 22: Processing of a Heartbeat request

5 Messages

5.1 ToIOP_GetServiceAuthorisation

5.1.1 Description

Request an authorisation for a given user contract id. The GIREVE's Platform will contact the related eMSP to check the authentication and authorisation of this user.

5.1.2 Request

Action

eMIP_ToIOP_GetServiceAuthorisationRequest

Parameters

Attribute name		Type	Description
EVSEIdType	M	xsd:string	Type of the EVSE id
EVSEId	M	xsd:string	EVSE id
userIdType	M	xsd:string	Type of the User id
userId	M	xsd:string	User id
requestedServiceId	M	xsd:string See 7.28 ServiceId	Service for which an authorisation is requested E.g. • 1 : "Charge", ...
partnerServiceSessionId	O	xsd:string	Session id of the CPO for information and traceability

Please note that the value "0" ("Managed?") for the attribute requestedServiceId, **is not valid** for the eMIP_**To**IOP_GetServiceAuthorisation.

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_GetServiceAuthorisationV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/AuthorisationV1/">
    <m:eMIP_ToIOP_GetServiceAuthorisationRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*CPO</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*489</operatorId>
        <EVSEIdType>eMI3</EVSEIdType>
        <EVSEId>FR*489*E4984489</EVSEId>
        <userIdType>RFID-UID</userIdType>
        <userId>1234567890ABCD</userId>
        <requestedServiceId>1</requestedServiceId>
        <partnerServiceSessionId>659565543543</partnerServiceSessionId
>
    </m:eMIP_ToIOP_GetServiceAuthorisationRequest>
</soap:Body>
</soap:Envelope>
```

5.1.3 Response

Action

eMIP_ToIOP_GetServiceAuthorisationResponse

Parameters

Attribute name		Type	Description
salePartnerOperatorIdType	O	xsd:string	Type of the eMSP id
salePartnerOperatorId	O	xsd:string	eMSP id
authorisationValue	M	xsd:int See 7.5 AuthorisationValue	Result of the authorisation E.g. OK, KO
serviceSessionId	M	xsd:string	GIREVE session id for this service session
intermediateCDRRequested	M	xsd:int See 7.17 IntermediateCDRRequestedValue	This flag notifies the CPO about intention of the eMSP on intermediate charging session record. The eMSP can request for intermediate charging session records. E.g. Not Requested , Requested
UserContractIdAlias	O	xsd:string	Alias of the contract id between the end-user and the eMSP. This alias may have been anonymised by the eMSP.
meterLimitList	O	iopauth:MeterReport See 7.21 MeterReport	Meter limits for this authorisation: the eMSP can authorise the charge but for less than x Wh or y minutes, or z euros…
parameter	O	xsd:string	eMSP parameter string (reserved for future use)

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
202	Ok-Warning	There is no roaming contract between the CPO and the eMSP for the requested service
203	Ok-Warning	The eMSP of the end-user cannot be identified
10210	Ko-Error	The eMSP did not respond correctly to the request
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/AuthorisationV1/">
      <m:eMIP_ToIOP_GetServiceAuthorisationResponse>
          <transactionId>TRANSACTION_46151</transactionId>
          <requestStatus>1</requestStatus>
          <salePartnerOperatorIdType>eMI3</salePartnerOperatorIdType>
          <salePartnerOperatorId>FR*EMP</salePartnerOperatorId>
          <authorisationValue>1</authorisationValue>
          <serviceSessionId>IOP-SID-GIR-V-IOPFT01-
0dc6fc3...153e</serviceSessionId>
          <intermediateCDRRequested>1</intermediateCDRRequested>
          <parameter>IOP={specific data for
IOP}CPO={comment}</parameter>
      </m:eMIP_ToIOP_GetServiceAuthorisationResponse>
</soap:Body>
</soap:Envelope>
```

5.2 FromIOP_GetServiceAuthorisation

5.2.1 Description

The GIREVE's Platform can contact the related eMSP System using this request to trigger an authorisation request initiated by a Charging Point's CPO System.

5.2.2 Request

Action

eMIP_FromIOP_GetServiceAuthorisationRequest

Parameters

Attribute name		Type	Description
targetOperatorIdType	M	xsd:string	Type of the eMSP id
targetOperatorId	M	xsd:string	eMSP id
EVSEIdType	M	xsd:string	Type of the EVSE id
EVSEId	M	xsd:string	EVSE id
userIdType	M	xsd:string	Type of the User id
userId	M	xsd:string	User id
requestedServiceId	M	xsd:string See 7.28 ServiceId	Service for which an authorisation is requested E.g. • Managed? The CPO would like to know if the eMSP manage this user. • Charge, ...
serviceSessionId	O	xsd:string	GIREVE session id for this charging session

Please note that the value "0" ("Managed?") for the attribute requestedServiceId, **is valid** for the eMIP_FromIOP_GetServiceAuthorisation. This value has to be interpreted by the requested eMSP (defined by targetOperatorId and targetOperatorIdType) as "Are you the eMSP which manages this user ?". Please note that only one eMSP could be the eMSP managing a user.

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_FromIOP_GetServiceAuthorisationV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/AuthorisationV1/">
     <m:eMIP_FromIOP_GetServiceAuthorisationRequest>
          <transactionId>TRANSACTION_46151</transactionId>
          <partnerIdType>eMI3</partnerIdType>
          <partnerId>FR*IOP</partnerId>
          <operatorIdType>eMI3</operatorIdType>
          <operatorId>FR*001</operatorId>
          <targetOperatorIdType>eMI3</targetOperatorIdType>
          <targetOperatorId>FR*EMP</targetOperatorId>
          <EVSEIdType>eMI3</EVSEIdType>
          <EVSEId>FR*001*E4984489</EVSEId>
          <userIdType>RFID-UID</userIdType>
          <userId>1234567890ABCD</userId>
          <requestedServiceId>1</requestedServiceId>
          <serviceSessionId>IOP-SID-GIR-V-IOPFT01-
0dc6fc3...153e</serviceSessionId>
     </m:eMIP_FromIOP_GetServiceAuthorisationRequest>
</soap:Body>
</soap:Envelope>
```

5.2.3 Response

Action
eMIP_FromIOP_GetServiceAuthorisationResponse

Parameters

Attribute name		Type	Description
authorisationValue	M	xsd:int See 7.5 AuthorisationValue	Result of the authorisation E.g. OK, KO
partnerServiceSessionId	M	xsd:string	Session id of the eMSP for information and traceability
intermediateCDRRequested	M	xsd:int See 7.17 IntermediateCDRRequestedValue	This flag notifies the CPO about intention of the eMSP on intermediate charging session record. The eMSP can request for intermediate charging session records. E.g. Not Requested , Requested

UserContractIdAlias	O	xsd:string	Alias of the contract id between the end-user and the eMSP. This alias may have been anonymised by the eMSP.
meterLimitList	O	iopauth:MeterReport See 7.21 MeterReport	Meter limits for this authorisation: the eMSP can authorise the charge but for less than x Wh or y minutes, or z euros.
parameter	O	xsd:string	eMSP parameter string (reserved for future use)

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/AuthorisationV1/">
    <m:eMIP_FromIOP_GetServiceAuthorisationResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
        <authorisationValue>1</authorisationValue>
        <partnerServiceSessionId>8798489</partnerServiceSessionId>
        <intermediateCDRRequested>1</intermediateCDRRequested>
        <parameter>IOP={specific data for
IOP}CPO={comment}</parameter>
    </m:eMIP_FromIOP_GetServiceAuthorisationResponse>
</soap:Body>
</soap:Envelope>
```

5.3 ToIOP_SetServiceAuthorisation

5.3.1 Description

Request a remote authorisation for a given Charging Point. The GIREVE's Platform will contact the related CPO to enable the authorisation.

The eMSP can use this request to start a charging process (AuthorisationValue OK).

5.3.2 Request

Input

eMIP_ToIOP_SetServiceAuthorisationRequest

Parameters

Attribute name		Type	Description
EVSEIdType	M	xsd:string	Type of the EVSE id
EVSEId	M	xsd:string	EVSE id
userIdType	M	xsd:string	Type of the User id
userId	M	xsd:string	User id
requestedServiceId	M	xsd:string See 7.28 ServiceId	Service for which an authorisation is requested E.g. • Managed? To know if the eMSP manage this user. • Charge, ...
partnerServiceSessionId	O	xsd:string	Session id of the eMSP for information and traceability
authorisationValue	M	xsd:int See 7.5 AuthorisationValue	Result of the authorisation E.g. • OK Start a charging process • KO Stop a charging process
intermediateCDRRequested	M	xsd:int See 7.17 IntermediateCDRRequestedValue	This flag notifies the CPO about intention of the eMSP on intermediate charging session record. The eMSP can request for intermediate charging session records. E.g. Not Requested , Requested
UserContractIdAlias	O	xsd:string	Alias of the contract id between the end-user and the eMSP. This alias may have been anonymised by the eMSP.
meterLimitList	O	iopauth:MeterReport See 7.21 MeterReport	Meter limits for this authorisation: the eMSP can authorise the charge but for less than x Wh or y minutes, or z euros.
parameter	O	xsd:string	eMSP parameter string (reserved for future use)

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_SetServiceAuthorisationV1/"
Content-Length: xxx
```

```
<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/AuthorisationV1/">
     <m:eMIP_ToIOP_SetServiceAuthorisationRequest >
          <transactionId>TRANSACTION_46151</transactionId>
          <partnerIdType>eMI3</partnerIdType>
          <partnerId>FR*MSP</partnerId>
          <operatorIdType>eMI3</operatorIdType>
          <operatorId>FR*879</operatorId>
          <EVSEIdType>eMI3</EVSEIdType>
          <EVSEId>FR*798*E4984489</EVSEId>
          <userIdType>RFID-UID</userIdType>
          <userId>1234567890ABCD</userId>
          <requestedServiceId>1</requestedServiceId>
          <partnerServiceSessionId>8798489</partnerServiceSessionId>
          <authorisationValue>2</authorisationValue>
          <intermediateCDRRequested>1</intermediateCDRRequested>
          <parameter>IOP={specific data for
IOP}CPO={comment}</parameter>
     </m:eMIP_ToIOP_SetServiceAuthorisationRequest >
</soap:Body>
</soap:Envelope>
```

5.3.3 Response

Input

eMIP_ToIOP_SetServiceAuthorisationResponse

Parameters

Attribute name		Type	Description
serviceSessionId	M	xsd:string	GIREVE session id for this charging session
execPartnerOperatorIdType	O	xsd:string	Type of the CPO id
execPartnerOperatorId	O	xsd:string	CPO id

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
201	Ok-Warning	The CPO of the EVSE cannot by identified
202	Ok-Warning	There is no roaming contract between the CPO and the eMSP for the requested service
205	Ok-Warning	The autorisation request is rejected by CPO:The requested service is not available on this EVSE
206	Ok-Warning	The autorisation request is rejected by CPO:The EVSE is not technically reachable (communication)
207	Ok-Warning	The authorisation request is rejected: The CPO does not accept remote authorisation

10201	Ko-Error	The autorisation request is rejected: Unknown error	
10207	Ko-Error	The CPO of the EVSE is not reachable	
Others < 10 000	Ok	Reserved for future use	
Others >= 10 000	Ko-Error	Reserved for future use	

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT


<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/AuthorisationV1/">
     <m:eMIP_ToIOP_SetServiceAuthorisationResponse>
     <transactionId>TRANSACTION_46151</transactionId>
     <requestStatus>1</requestStatus>
     <serviceSessionId>IOP-SID-GIR-V-IOPFT01-
0dc6fc3...153e</serviceSessionId>
     <execPartnerOperatorIdType>eMI3</execPartnerOperatorIdType>
     <execPartnerOperatorId>FR*CPO</execPartnerOperatorId>
     </m:eMIP_ToIOP_SetServiceAuthorisationResponse>
</soap:Body>
</soap:Envelope>
```

5.4 FromIOP_SetServiceAuthorisation

5.4.1 Description

The GIREVE's Platform can contact the CPO System using this request to trigger an authorisation request initiated by an eMSP.

The eMSP can use this request to start a charging process (AuthorisationValue OK).

5.4.2 Request

Input

eMIP_FromIOP_SetServiceAuthorisationRequest

Parameters

Attribute name		Type	Description
targetOperatorIdType	M	xsd:string	Type of the CPO id
targetOperatorId	M	xsd:string	CPO id
EVSEIdType	M	xsd:string	Type of the EVSE id
EVSEId	M	xsd:string	EVSE id
userIdType	M	xsd:string	Type of the User id
userId	M	xsd:string	User id
requestedServiceId	M	xsd:string See 7.28 ServiceId	Service for which an authorisation is requested E.g.

			• Managed? To know if the eMSP manage this user. • Charge, ...
serviceSessionId	M	xsd:string	GIREVE session id for this charging session
authorisationValue	M	xsd:int See 7.5 AuthorisationValue	Result of the authorisation E.g. • OK Start a charging process • KO Stop a charging process
intermediateCDRRequested	M	xsd:int See 7.17 IntermediateCDRRequestedValue	This flag notifies the CPO about intention of the eMSP on intermediate charging session record. The eMSP can request for intermediate charging session records. E.g. Not Requested , Requested
UserContractIdAlias	O	xsd:string	Alias of the contract id between the end-user and the eMSP. This alias may have been anonymised by the eMSP.
meterLimitList	O	iopauth:MeterReport See 7.21 MeterReport	Meter limits for this authorisation: the eMSP can authorise the charge but for less than x Wh or y minutes, or z euros.
parameter	O	xsd:string	eMSP parameter string (reserved for future use)

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_FromIOP_SetServiceAuthorisationV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/AuthorisationV1/">
    <m:eMIP_FromIOP_SetServiceAuthorisationRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*IOP</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*001</operatorId>
        <targetOperatorIdType>eMI3</targetOperatorIdType>
        <targetOperatorId>FR*CPO</targetOperatorId>
        <EVSEIdType>eMI3</EVSEIdType>
        <EVSEId>FR*CPO*E4984489</EVSEId>
        <userIdType>RFID-UID</userIdType>
```

```
            <userId>1234567890ABCD</userId>
            <requestedServiceId>1</requestedServiceId>
            <serviceSessionId>IOP-SID-GIR-V-IOPFT01-
0dc6fc3...153e</serviceSessionId>
            <authorisationValue>2</authorisationValue>
            <intermediateCDRRequested>1</intermediateCDRRequested>
            <parameter>IOP={specific data for
IOP}CPO={comment}</parameter>
        </m:eMIP_FromIOP_SetServiceAuthorisationRequest>
</soap:Body>
</soap:Envelope>
```

5.4.3 Response

Input

eMIP_FromIOP_SetServiceAuthorisationResponse

Parameters

Attribute name		Type	Description
partnerServiceSessionId	O	xsd:string	Session id of the CPO for info and traceability.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
205	Ok-Warning	The autorisation request is rejected by CPO:The requested service is not available on this EVSE
206	Ok-Warning	The autorisation request is rejected by CPO:The EVSE is not technically reachable (communication)
10201	Ko-Error	The autorisation request is rejected : Unknown error
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/AuthorisationV1/">
    <m:eMIP_FromIOP_SetServiceAuthorisationResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
        <partnerServiceSessionId>8798489</partnerServiceSessionId>
    </m:eMIP_FromIOP_SetServiceAuthorisationResponse>
</soap:Body>
</soap:Envelope>
```

5.5 ToIOP_GetAuthenticationData

5.5.1 Description

This request allows a CPO to retrieve a list of authorised subscribers allowed to charge.

5.5.2 Request

Input

eMIP_ToIOP_GetAuthenticationDataRequest

Parameters

Attribute name		Type	Description
dateTimeFrom	M	xsd:dateTime	Search for records after this date.
dateTimeTo	O	xsd:dateTime	Search for records before this date.

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_GetAuthenticationDataV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/AuthorisationV1/">
     <m:eMIP_ToIOP_GetAuthenticationDataRequest>
          <transactionId>TRANSACTION_46151</transactionId>
          <partnerIdType>eMI3</partnerIdType>
          <partnerId>FR*CPO</partnerId>
          <operatorIdType>eMI3</operatorIdType>
          <operatorId>FR*489</operatorId>
          <dateTimeFrom>2015-10-26T21:32:52</dateTimeFrom>
     </m:eMIP_ToIOP_GetAuthenticationDataRequest>
</soap:Body>
</soap:Envelope>
```

5.5.3 Response

Input

eMIP_ToIOP_GetAuthenticationDataResponse

Parameters

Attribute name		Type	Description
respAuthenticationData	M	iopauth:CPOAuthenticationData See 0 **22 Attached cable CHAdeMO 500V (EN62196-3)**	List of authentication data: id, authorisation, expiry date.

Value	Meaning
23	Attached cable Combo-Type 2 500V (EN62196-3)
24	Attached cable CHAdeMO 950V (EN62196-3)
25	Attached cable Combo-Type 2 950V (EN62196-3)
26	Attached cable with connector IEC 62196-2 type 2 DC 400V
27	Attached cable with connector IEC 62196-2 type 2 DC 500V

5.6 LOV ConnectorTypeFootprint

5.6.1 Description

The ConnectorTypeFootprint is an integer value describing a connector type.

5.6.2 Accepted Values

Value	Meaning
0	Unknown
2	Attached cable CHAdeMO (EN62196-3)
3	Attached cable Combo-Type 2 (EN62196-3)
4	Socket Domestic E, F, E+F (CEE 7/5, CEE 7/4, CEE 7/7)
5	Socket IEC60309 Industrial Blue (EN60309)
6	Socket IEC60309 Industrial Red (EN60309)
7	Attached cable Type 1 (EN62196-2)
9	Socket Type 2 (EN62196-2)
10	Socket Type 3c (EN62196-2)
11	Attached cable Type 2 (EN62196-2)
12	Socket Type 3a (EN62196-2)
14	Attached cable AVCON Connector
15	Attached cable Tesla-Model S
16	Attached cable Tesla-Roadster
18	Socket Domestic G (BS 1363, IS 401 & 411, MS 58)
19	Socket Domestic J (SEV 1011)
20	Socket Domestic K (section 707-2-D1)
21	Socket Domestic L (CEI 23-16 /VII)

CPOAuthenticationData

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/AuthorisationV1/">
     <m:eMIP_ToIOP_GetAuthenticationDataResponse>
          <transactionId>TRANSACTION_46151</transactionId>
          <requestStatus>1</requestStatus>
          <respAuthenticationData>
               <actionType>1</actionType>
               <userContractIdAlias>FR-798-
C12345678</userContractIdAlias>
               <userIdType>RFID-UID</userIdType>
               <userId>1234567890ABCD</userId>
               <operatorIdType>2</operatorIdType>
               <operatorId>FR*798</operatorId>
               <authorisedServiceId>1</authorisedServiceId>
               <printedNumber>ID_897897</printedNumber>
               <expiryDate>2015-10-26T21:32:52Z</expiryDate>
               <parameter>IOP={specific data for
IOP}CPO={comment}</parameter>
          </respAuthenticationData>
          <respAuthenticationData>
               <actionType>1</actionType>
               <userContractIdAlias>FR-798-
C87654321</userContractIdAlias>
               <userIdType>RFID-UID</userIdType>
               <userId>1234567890ABEF</userId>
               <operatorIdType>eMI3</operatorIdType>
               <operatorId>FR*798</operatorId>
               <authorizedServiceId>1</authorizedServiceId>
               <printedNumber>ID_897897</printedNumber>
               <expiryDate>2015-10-30T09:32:52Z</expiryDate>
               <parameter>IOP={specific data for
IOP}CPO={comment}</parameter>
          </respAuthenticationData>
     </m:eMIP_ToIOP_GetAuthenticationDataResponse>
</soap:Body>
</soap:Envelope>
```

5.7 ToIOP_SetAuthenticationData

5.7.1 Description

This request allows an eMSP to send a list of authorised subscribers that CPOs can get from the GIREVE IoP.

5.7.2 Request

Input

eMIP_ToIOP_SetAuthenticationDataRequest

Parameters

Attribute name		Type	Description
reqAuthenticationDataList	M	List of iopauth:eMSPAuthenticationData See 7.14 eMSPAuthenticationData	Authentication data: id, authorisation, expiry date.

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_GetAuthenticationDataV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/AuthorisationV1/">
    <m:eMIP_ToIOP_SetAuthenticationDataRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*MSP</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*798</operatorId>
        < reqAuthenticationDataList>
            <reqAuthenticationData>
                <actionType>1</actionType>
                <userContractIdAlias>FR-798-
C12345678</userContractIdAlias>
                <userIdType>RFID-UID</userIdType>
                <userId>1234567890ABCD</userId>
                <authorisedServiceId>1</authorisedServiceId>
                <printedNumber>ID_897897</printedNumber>
                <expiryDate>2015-10-26T21:32:52Z</expiryDate>
                <parameter>IOP={specific data for
    IOP}CPO={comment}</parameter>
            </reqAuthenticationData>
            <reqAuthenticationData>
                <actionType>2</actionType>
                <userContractIdAlias>FR-798-
C12345678</userContractIdAlias>
                <userIdType>RFID-UID</userIdType>
                <userId>1234567890ABEF</userId>
                <authorisedServiceId>1</authorisedServiceId>
                <printedNumber>ID_897878</printedNumber>
                <expiryDate>2015-09-26T21:32:52Z</expiryDate>
                <parameter>IOP={specific data for
    IOP}CPO={comment}</parameter>
```

```
                </reqAuthenticationData>
            </reqAuthenticationDataList>
        </m:eMIP_ToIOP_SetAuthenticationDataRequest>
</soap:Body>
</soap:Envelope>
```

5.7.3 Response

Input

eMIP_ToIOP_SetAuthenticationDataResponse

Parameters

No specific parameter.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
204	Ok-Warning	Partial data upload: some errors have been encountered (example: bad action type, problem at create/update/delete…)
10211	Ko-Error	Authentication Data: At least one line has been rejected
10212	Ko-Error	Only eMSPs can update their white list
10213	Ko-Error	The request contains too much elements to update and has been rejected. (limit: 500 authenticationData per request)
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/AuthorisationV1/">
    <m:eMIP_ToIOP_SetAuthenticationDataResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
    </m:eMIP_ToIOP_SetAuthenticationDataResponse>
</soap:Body>
</soap:Envelope>
```

5.8 ToIOP_SetSessionActionRequest

5.8.1 Description

Request an action from an eMSP during a charging session. The GIREVE's Platform will contact the related CPO to perform the action.

5.8.2 Request

Input

eMIP_ToIOP_SetSessionActionRequestRequest

Parameters

Attribute name		Type	Description
serviceSessionId	O!	xsd:string	GIREVE session id for this charging session.
salePartnerSessionId	O!	xsd:string	Session id of the eMSP for information and traceability.
SessionAction	M	iopauth:sessionAction see 7.34 SessionAction	The requested Action.

O! : One of these 2 sessionIds is mandatory

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_SetSessionActionRequestV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope
  xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
  xmlns:aut="https://api-iop.gireve.com/schemas/AuthorisationV1/">
  <soap:Body>
    <aut:eMIP_ToIOP_SetSessionActionRequestRequest>
      <transactionId>Action-Event-001</transactionId>
      <partnerIdType>gireve</partnerIdType>
      <partnerId>Pa EMP</partnerId>
      <operatorIdType>gireve</operatorIdType>
      <operatorId>Op eMSP</operatorId>
      <serviceSessionId></serviceSessionId>
      <salePartnerSessionId>eMSP_Id_001</salePartnerSessionId>
      <sessionAction>
        <sessionActionNature>0</sessionActionNature>
        <sessionActionId></sessionActionId>
        <sessionActionDateTime>2015-11-
18T22:47:35.123Z</sessionActionDateTime>
        <sessionActionParameter>Parameter1</sessionActionParameter>
        <relatedSessionEventId></relatedSessionEventId>
      </sessionAction>
    </aut:eMIP_ToIOP_SetSessionActionRequestRequest>
  </soap:Body>
</soap:Envelope>
```

5.8.3 Response

Input

eMIP_ToIOP_SetSessionActionRequestResponse

Parameters

Attribute name		Type	Description
serviceSessionId	O	xsd:string	GIREVE session id for this charging session
sessionActionId	M	xsd:string	Unique Id of the Action

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
10501	Ko-Error	session not found
10502	Ko-Error	CPO/eMSP not found
10503	Ko-Error	the CPO/eMSP does not accept Action/Event
10504	Ko-Error	the request cannot be sent to the CPO/eMSP or the CPO/eMSP does not respond
10505	Ko-Error	the CPO/eMSP returns an IOP Fault
10506	Ko-Error	the CPO/eMSP doesn't recognise the actionNature/eventNature: No action on its side
10507	Ko-Error	the CPO/eMSP returns an error code: an error occured on its side during the action/report treatment
10508	Ko-Error	The requestor is neither eMSP nor CPO for this session.
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope
  xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
  <soap:Body>
    <aut:eMIP_ToIOP_SetSessionActionRequestResponse
      xmlns:aut="https://api-iop.gireve.com/schemas/AuthorisationV1/">
      <transactionId>Action-Event-001</transactionId>
      <serviceSessionId>IOP-SID-GIR-V-IOPFT01-
0dc6fc3...153e</serviceSessionId>
      <sessionActionId>00969e30-78a0-435e-a368-
ea50ef20e878</sessionActionId>
      <requestStatus>1</requestStatus>
    </aut:eMIP_ToIOP_SetSessionActionRequestResponse>
  </soap:Body>
</soap:Envelope>
```

5.9 FromIOP_SetSessionActionRequest

5.9.1 Description

The GIREVE's Platform can contact the related CPO System using this request to trigger an action initiated by an eMSP System.

5.9.2 Request

Input

eMIP_FromIOP_SetSessionActionRequestRequest

Parameters

Attribute name		Type	Description
targetOperatorIdType	M	xsd:string	Type of the CPO id
targetOperatorId	M	xsd:string	CPO id
serviceSessionId	M	xsd:string	GIREVE session id for this charging session.
execPartnerSessionId	M	xsd:string	Session id of the CPO for information and traceability.
SessionAction	M	iopauth:sessionAction see 7.34 SessionAction	The requested Action.

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_SetSessionActionRequestV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope
  xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
  <soap:Body>
    <aut:eMIP_FromIOP_SetSessionActionRequestRequest
      xmlns:aut="https://api-iop.gireve.com/schemas/AuthorisationV1/">
      <transactionId>d19035fe-49d7-46bc-81f2-ae52acd8ea71</transactionId>
      <partnerIdType>eMI3</partnerIdType>
      <partnerId>FR*IOP</partnerId>
      <operatorIdType>gireve</operatorIdType>
      <operatorId>Op EMP</operatorId>
      <targetOperatorIdType>eMI3</targetOperatorIdType>
      <targetOperatorId>FR*CPO</targetOperatorId>
      <serviceSessionId>IOP-SID-GIR-V-IOPFT01-
0dc6fc3...153e</serviceSessionId>
      <sessionAction>
        <sessionActionNature>0</sessionActionNature>
        <sessionActionId>00969e30-78a0-435e-a368-
ea50ef20e878</sessionActionId>
        <sessionActionDateTime>2015-11-
18T22:47:35.123Z</sessionActionDateTime>
        <sessionActionParameter>Parameter1</sessionActionParameter>
        <relatedSessionEventId></relatedSessionEventId>
      </sessionAction>
    </aut:eMIP_FromIOP_SetSessionActionRequestRequest>
  </soap:Body>
</soap:Envelope>
```

5.9.3 Response

Input

eMIP_FromIOP_SetSessionActionRequestResponse

Parameters

There is no specific parameter.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
10506	Ko-Error	the CPO/eMSP doesn't recognise the actionNature/eventNature: No action on its side
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope
  xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
  <soap:Body>
    <aut:eMIP_FromIOP_SetSessionActionRequestResponse>
      <transactionId>d19035fe-49d7-46bc-81f2-ae52acd8ea71</transactionId>
      <requestStatus>1</requestStatus>
    </aut:eMIP_FromIOP_SetSessionActionRequestResponse>
  </soap:Body>
</soap:Envelope>
```

5.10 ToIOP_SetSessionEventReport

5.10.1   Description

Report an event from a CPO during a charging session. The GIREVE's Platform will contact the related eMSP to report the event.

5.10.2   Request

Input

eMIP_ToIOP_SetSessionEventReportRequest

Parameters

Attribute name		Type	Description
serviceSessionId	O!	xsd:string	GIREVE session id for this charging session.

| execPartnerSessionId | O! | xsd:string | Session id of the CPO for information and traceability. |
| SessionEvent | M | iopauth:sessionEvent see 7.37 SessionEvent | The reported Event. |

O! : One of these 2 sessionIds is mandatory

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_SetSessionEventreportV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope
  xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
  xmlns:aut="https://api-iop.gireve.com/schemas/AuthorisationV1/">
  <soap:Body>
    <aut:eMIP_ToIOP_SetSessionEventReportRequest>
      <transactionId>Action-Event-006</transactionId>
      <partnerIdType>eMI3</partnerIdType>
      <partnerId>FR*PAR</partnerId>
      <operatorIdType>eMI3</operatorIdType>
      <operatorId>FR*CPO</operatorId>"
      <serviceSessionId></serviceSessionId>
      <execPartnerSessionId>CPOxxx2</execPartnerSessionId>
      <sessionEvent>
        <sessionEventNature>1</sessionEventNature>
        <sessionEventId>Event-Id-2015-11-
19T11:14:17.123Z</sessionEventId>
        <sessionEventDateTime>2015-11-
19T11:14:17.123Z</sessionEventDateTime>
        <sessionEventParameter>Param1</sessionEventParameter>
        <relatedSessionActionId></relatedSessionActionId>
      </sessionEvent>"
    </aut:eMIP_ToIOP_SetSessionEventReportRequest>
  </soap:Body>
</soap:Envelope>
```

5.10.3   Response

Input

eMIP_ToIOP_SetSessionEventReportResponse

Parameters

Attribute name		Type	Description
serviceSessionId	O	xsd:string	GIREVE session id for this charging session
sessionEventId	M	xsd:string	Unique Id of the Event

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion

10501	Ko-Error	session not found
10502	Ko-Error	CPO/eMSP not found
10503	Ko-Error	the CPO/eMSP does not accept Action/Event
10504	Ko-Error	the request cannot be sent to the CPO/eMSP or the CPO/eMSP does not respond
10505	Ko-Error	the CPO/eMSP returns an IOP Fault
10506	Ko-Error	the CPO/eMSP doesn't recognise the actionNature/eventNature: No action on its side
10507	Ko-Error	the CPO/eMSP returns an error code: an error occured on its side during the action/report treatment
10508	Ko-Error	The requestor is neither eMSP nor CPO for this session.
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope
  xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
  <soap:Body>
    <aut:eMIP_ToIOP_SetSessionEventReportResponse
      xmlns:aut="https://api-iop.gireve.com/schemas/AuthorisationV1/">
      <transactionId>Action-Event-006</transactionId>
      <serviceSessionId>IOP-SID-GIR-V-IOPFT01-
0dc6fc3...153e</serviceSessionId>
      <sessionEventId>Event-Id-2015-11-19T11:14:17.123Z</sessionEventId>
      <requestStatus>1</requestStatus>
    </aut:eMIP_ToIOP_SetSessionEventReportResponse>
  </soap:Body>
</soap:Envelope>
```

5.11 FromIOP_SetSessionEventReport

5.11.1   Description

The GIREVE's Platform can contact the related eMSP System using this request to report an event occurred on a CPO System.

5.11.2   Request

Input
eMIP_FromIOP_SetSessionEventReportRequest

Parameters

Attribute name		Type	Description
targetOperatorIdType	M	xsd:string	Type of the eMSP id
targetOperatorId	M	xsd:string	eMSP id
serviceSessionId	M	xsd:string	GIREVE session id for this charging session.

salePartnerSessionId	M	xsd:string	Session id of the eMSP for information and traceability.
SessionEvent	M	iopauth:sessionEvent see 7.37 SessionEvent	The reported Event.

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_FromIOP_SetSessionEventReportV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope
  xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
  <soapenv:Body>
    <aut:eMIP_FromIOP_SetSessionEventReportRequest
      xmlns:aut="https://api-iop.gireve.com/schemas/AuthorisationV1/">
      <transactionId>c04e29c1-f3ea-46f4-86f0-4f8e3c9829b4</transactionId>
      <partnerIdType>eMI3</partnerIdType>
      <partnerId>FR*IOP</partnerId>
      <operatorIdType>eMI3</operatorIdType>
      <operatorId>FR*CPO</operatorId>
      <targetOperatorIdType>eMI3</targetOperatorIdType>
      <targetOperatorId>FR*EMP</targetOperatorId>
      <serviceSessionId>IOP-SID-GIR-V-IOPFT01-
0dc6fc3...153e</serviceSessionId>
      <salePartnerSessionId>eMPSxxx2</salePartnerSessionId>
      <sessionEvent>
        <sessionEventNature>1</sessionEventNature>
        <sessionEventId>Event-Id-2015-11-
19T11:14:17.123Z</sessionEventId>
        <sessionEventDateTime>2015-11-
19T11:14:17.123Z</sessionEventDateTime>
        <sessionEventParameter>Cas=9 Param={Fonctionnement
normal}</sessionEventParameter>
        <relatedSessionActionId>x</relatedSessionActionId>
      </sessionEvent>
    </aut:eMIP_FromIOP_SetSessionEventReportRequest>
  </soapenv:Body>
```

5.11.3   Response

Input

eMIP_FromIOP_SetSessionEventReportResponse

Parameters

There is no specific parameter.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
10506	Ko-Error	the CPO/eMSP doesn't recognise the actionNature/eventNature: No action on its side

Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT


<?xml version="1.0"?>
<soap:Envelope
  xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
  <soap:Body>
    <aut:eMIP_FromIOP_SetSessionEventReportResponse>
      <transactionId>c04e29c1-f3ea-46f4-86f0-4f8e3c9829b4</transactionId>
      <requestStatus>1</requestStatus>
    </aut:eMIP_FromIOP_SetSessionEventReportResponse>
  </soap:Body>
</soap:Envelope>
```

5.12 ToIOP_GetChargeDetailRecord

This message doesn't exist yet in eMIP 0.7.4

5.12.1 Description

The "GetChargeDetailRecord" service allows eMSP to retrieve a charging session record of a given session from GIREVE IoP.

Session ids are available in the GIREVE's Platform responses of authorisation services.

5.12.2 Request

Input

eMIP_ToIOP_GetChargeDetailRecordRequest

Parameters

Attribute name		Type	Description
serviceSessionId	O	xsd:string	GIREVE session id for this charging session.
execPartnerSessionId	O	xsd:string	Session id of the CPO for information and traceability.
salePartnerSessionId	O	xsd:string	Session id of the eMSP for information and traceability.

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_GetChargeDetailRecordV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/AuthorisationV1/">
    <m:eMIP_ToIOP_GetChargeDetailRecordRequest>
        <transactionId>TRANSACTION_46151</transactionId>
```

```
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*MSP</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*798</operatorId>
        <serviceSessionId>IOP-SID-GIR-V-IOPFT01-
0dc6fc3...153e</serviceSessionId>
        <execPartnerSessionId>8798489</execPartnerSessionId>
        <salePartnerSessionId>8756546889</salePartnerSessionId>
    </m:eMIP_ToIOP_GetChargeDetailRecordRequest>
</soap:Body>
</soap:Envelope>
```

5.12.3   Response

Input

eMIP_ToIOP_GetChargeDetailRecordResponse

Parameters

Attribute name		Type	Description
chargeDetailRecord	M	iopauth:ChargeDetailRecord	Information record about a given charging session.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/AuthorisationV1/">
    <m:eMIP_ToIOP_GetChargeDetailRecordResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
        <chargeDetailRecord>
            <CDRNature>1</CDRNature>
            <serviceSessionId>IOP-SID-GIR-V-IOPFT01-
0d...153e</serviceSessionId>
            <execPartnerSessionId>8798489</execPartnerSessionId>

    <execPartnerOperatorIdType>eMI3</execPartnerOperatorIdType>
            <execPartnerOperatorId>FR*CPO</execPartnerOperatorId>
            <salePartnerSessionId>8756546889</salePartnerSessionId>

    <salePartnerOperatorIdType>eMI3</salePartnerOperatorIdType>
            <salePartnerOperatorId>FR*EMP</salePartnerOperatorId>
```

```
                <requestedServiceId>8756546889</requestedServiceId>
                <EVSEIdType>eMI3</EVSEIdType>
                <EVSEId>FR*CPO*E4984489</EVSEId>
                <userContractIdAlias>FR-EMP-
C12345678</userContractIdAlias>
                <userIdType>RFID-UID</userIdType>
                <userId>1234567890ABCD</userId>
                <partnerProductId>FullService</partnerProductId>
                <startTime>2015-10-26T10:32:52Z</startTime>
                <endTime>2015-10-26T14:32:52Z</endTime>
                <meterReportList>
                    <meterReport>
                        <meterTypeId>1</meterTypeId>
                        <meterValue>180</meterValue>
                        <meterUnit>min</meterUnit>
                    </meterReport>
                    <meterReport>
                        <meterTypeId>2</meterTypeId>
                        <meterValue>3.15</meterValue>
                        <meterUnit>Wh</meterUnit>
                    </meterReport>
                </meterReportList>
            </chargeDetailRecord>
        </m:eMIP_ToIOP_GetChargeDetailRecordResponse>
</soap:Body>
</soap:Envelope>
```

5.13 ToIOP_GetChargeDetailRecordList

5.13.1   Description

The "GetChargeDetailRecordList" service allows an eMSP to retrieve from GIREVE IoP a list
of charging session records (related to the requester eMSP), for a given time interval.

5.13.2   Request

Input

eMIP_ToIOP_GetChargeDetailRecordListRequest

Parameters

Attribute name		Type	Description
dateTimeFrom	M	xsd:dateTime	Search for records after this date.
dateTimeTo	O	xsd:dateTime	Search for records before this date.

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_GetChargeDetailRecordListV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/AuthorisationV1/">
    <m:eMIP_ToIOP_GetChargeDetailRecordListRequest>
```

```
            <transactionId>TRANSACTION_46151</transactionId>
            <partnerIdType>eMI3</partnerIdType>
            <partnerId>FR*MSP</partnerId>
            <operatorIdType>eMI3</operatorIdType>
            <operatorId>FR*798</operatorId>
            <dateTimeFrom>2014-10-01T00:00:00Z</dateTimeFrom>
            <dateTimeTo>2014-11-01T00:00:00Z</dateTimeTo>
        </m:eMIP_ToIOP_GetChargeDetailRecordListRequest>
    </soap:Body>
</soap:Envelope>
```

5.13.3   Response

Input

eMIP_ToIOP_GetChargeDetailRecordListResponse

Parameters

Attribute name		Type	Description
chargeDetailRecordList	M	iopauth:ChargeDetailRecord See 7.10 ChargeDetailRecord	Information records about the sessions matching the request criteria.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/AuthorisationV1/">
    <m:eMIP_ToIOP_GetChargeDetailRecordListResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
        <chargeDetailRecord>
            <CDRNature>1</CDRNature>
            <serviceSessionId>IOP-SID-GIR-V-IOPFT01-
0d...153e</serviceSessionId>
            <execPartnerSessionId>8798489</execPartnerSessionId>

    <execPartnerOperatorIdType>eMI3</execPartnerOperatorIdType>
            <execPartnerOperatorId>FR*CPO</execPartnerOperatorId>
            <salePartnerSessionId>8756546889</salePartnerSessionId>

    <salePartnerOperatorIdType>eMI3</salePartnerOperatorIdType>
            <salePartnerOperatorId>FR*EMP</salePartnerOperatorId>
```

```xml
                <requestedServiceId>8756546889</requestedServiceId>
                <EVSEIdType>eMI3</EVSEIdType>
                <EVSEId>FR*CPO*E4984489</EVSEId>
                <userContractIdAlias>FR-EMP-
C12345678</userContractIdAlias>
                <userIdType>RFID-UID</userIdType>
                <userId>1234567890ABCD</userId>
                <partnerProductId>FullService</partnerProductId>
                <startTime>2015-10-26T10:32:52Z</startDate>
                <endTime>2015-10-26T14:32:52Z</endTime>
                <meterReportList>
                    <meterReport>
                        <meterTypeId>1</meterTypeId>
                        <meterValue>180</meterValue>
                        <meterUnit>min</meterUnit>
                    </meterReport>
                    <meterReport>
                        <meterTypeId>2</meterTypeId>
                        <meterValue>3.15</meterValue>
                        <meterUnit>Wh</meterUnit>
                    </meterReport>
                </meterReportList>
            </chargeDetailRecord>
            <chargeDetailRecord>
                <CDRNature>1</CDRNature>
                <serviceSessionId>IOP-SID-GIR-V-IOPFT01-
0d...153e</serviceSessionId>
                <execPartnerSessionId>8798492</execPartnerSessionId>

        <execPartnerOperatorIdType>eMI3</execPartnerOperatorIdType>
                <execPartnerOperatorId>FR*CPO</execPartnerOperatorId>
                <salePartnerSessionId>8756546102</salePartnerSessionId>

        <salePartnerOperatorIdType>eMI3</salePartnerOperatorIdType>
                <salePartnerOperatorId>FR*EMP</salePartnerOperatorId>
                <requestedServiceId>8756546889</requestedServiceId>
                <EVSEIdType>eMI3</EVSEIdType>
                <EVSEId>FR*CPO*E4984489</EVSEId>
                <userContractIdAlias>FR-EMP-
C12345678</userContractIdAlias>
                <userIdType>RFID-UID</userIdType>
                <userId>1234567890ABEF</userId>
                <partnerProductId>FullService</partnerProductId>
                <startTime>2015-10-26T10:32:52Z</startDate>
                <endTime>2015-10-26T14:32:52Z</endTime>
                <meterReportList>
                    <meterReport>
                        <meterTypeId>1</meterTypeId>
                        <meterValue>240</meterValue>
                        <meterUnit>min</meterUnit>
                    </meterReport>
                    <meterReport>
                        <meterTypeId>2</meterTypeId>
                        <meterValue>1.25</meterValue>
                        <meterUnit>Wh</meterUnit>
                    </meterReport>
                </meterReportList>
            </chargeDetailRecord>
        </m:eMIP_ToIOP_GetChargeDetailRecordListResponse>
</soap:Body>
</soap:Envelope>
```

5.14 ToIOP_SetChargeDetailRecord

5.14.1 Description

This request allows a CPO to send a charging session record to the GIREVE IoP.

5.14.2 Request

Input

eMIP_ToIOP_SetChargeDetailRecordRequest

Parameters

Attribute name		Type	Description
chargeDetailRecord	M	iopauth:ChargeDetailRecord	Information record about the charging session.

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_SetChargeDetailRecordV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/AuthorisationV1/">
    <m:eMIP_ToIOP_SetChargeDetailRecordRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*CPO</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*489</operatorId>
        <chargeDetailRecord>
            <CDRNature>1</CDRNature>
            <serviceSessionId>IOP-SID-GIR-V-IOPFT01-
0d...153e</serviceSessionId>
            <execPartnerSessionId>8798492</execPartnerSessionId>

    <execPartnerOperatorIdType>eMI3</execPartnerOperatorIdType>
            <execPartnerOperatorId>FR*CPO</execPartnerOperatorId>
            <salePartnerSessionId>8756546102</salePartnerSessionId>
            <salePartnerOperatorIdType></salePartnerOperatorIdType>
            <salePartnerOperatorId></salePartnerOperatorId>
            <requestedServiceId>8756546889</requestedServiceId>
            <EVSEIdType>eMI3</EVSEIdType>
            <EVSEId>FR*CPO*E4984489</EVSEId>
            <userContractIdAlias>FR-MSP-
C12345678</userContractIdAlias>
            <userIdType>RFID-UID</userIdType>
            <userId>1234567890ABCD</userId>
            <partnerProductId>FullService</partnerProductId>
            <startTime>2015-10-26T10:32:52Z</startDate>
            <endTime>2015-10-26T14:32:52Z</endTime>
            <meterReportList>
                <meterReport>
                    <meterTypeId>1</meterTypeId>
                    <meterValue>240</meterValue>
```

```
                        <meterUnit>min</meterUnit>
                    </meterReport>
                    <meterReport>
                        <meterTypeId>2</meterTypeId>
                        <meterValue>1.25</meterValue>
                        <meterUnit>Wh</meterUnit>
                    </meterReport>
                </meterReportList>
            </chargeDetailRecord>
        </m:eMIP_ToIOP_SetChargeDetailRecordRequest>
</soap:Body>
</soap:Envelope>
```

5.14.3   Response

Input

eMIP_ToIOP_SetChargeDetailRecordResponse

Parameters

Attribute name		Type	Description
salePartnerOperatorIdType	O	xsd:string	Type of the eMSP id
salePartnerOperatorId	O	xsd:string	eMSP id
serviceSessionId	M	xsd:string	GIREVE session id for this charging session.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/AuthorisationV1/">
    <m:eMIP_ToIOP_SetChargeDetailRecordResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
        <salePartnerOperatorIdType>eMI3</salePartnerOperatorIdType>
        <salePartnerOperatorId>FR*EMP</salePartnerOperatorId>
        <serviceSessionId>IOP-SID-GIR-V-IOPFT01-
0dc6fc3...153e</serviceSessionId>
    </m:eMIP_ToIOP_SetChargeDetailRecordResponse>
</soap:Body>
</soap:Envelope>
```

5.15 FromIOP_SetChargeDetailRecord

5.15.1   Description

The GIREVE's Platform can contact the eMSP System using this request to trigger a charging session record exchange request initiated by a CPO System.

5.15.2   Request

Input

eMIP_FromIOP_SetChargeDetailRecordRequest

Parameters

Attribute name		Type	Description
targetOperatorIdType	M	xsd:string	Type of the eMSP id
targetOperatorId	M	xsd:string	eMSP id
chargeDetailRecord	M	iopauth:ChargeDetailRecord	Information record about the charging session.

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_FromIOP_SetChargeDetailRecordV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/AuthorisationV1/">
    <m:eMIP_FromIOP_SetChargeDetailRecordRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*IOP</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*001</operatorId>
        <chargeDetailRecord>
            <CDRNature>1</CDRNature>
            <serviceSessionId>IOP-SID-GIR-V-IOPFT01-
0d...153e</serviceSessionId>
            <execPartnerSessionId>8798492</execPartnerSessionId>

    <execPartnerOperatorIdType>eMI3</execPartnerOperatorIdType>
            <execPartnerOperatorId>FR*CPO</execPartnerOperatorId>
            <salePartnerSessionId>8756546102</salePartnerSessionId>

    <salePartnerOperatorIdType>eMI3</salePartnerOperatorIdType>
            <salePartnerOperatorId>FR*EMP</salePartnerOperatorId>
            <requestedServiceId>8756546889</requestedServiceId>
            <EVSEIdType>eMI3</EVSEIdType>
            <EVSEId>FR*CPO*E4984489</EVSEId>
            <userContractIdAlias>FR-EMP-
C12345678</userContractIdAlias>
            <userIdType>RFID-UID</userIdType>
            <userId>1234567890ABCD</userId>
            <partnerProductId>FullService</partnerProductId>
            <startTime>2015-10-26T10:32:52Z</startDate>
            <endTime>2015-10-26T14:32:52Z</endTime>
            <meterReportList>
                <meterReport>
```

```
                    <meterTypeId>1</meterTypeId>
                    <meterValue>240</meterValue>
                    <meterUnit>min</meterUnit>
                </meterReport>
                <meterReport>
                    <meterTypeId>2</meterTypeId>
                    <meterValue>1.25</meterValue>
                    <meterUnit>Wh</meterUnit>
                </meterReport>
            </meterReportList>
        </chargeDetailRecord>
    </m:eMIP_FromIOP_SetChargeDetailRecordRequest>
</soap:Body>
</soap:Envelope>
```

5.15.3   Response

Input

eMIP_FromIOP_SetChargeDetailRecordResponse

Parameters

Attribute name		Type	Description
partnerServiceSessionId	M	xsd:string	eMSP session id for this charging session.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
701	Ok-Warning	eMSP doesn't accept this final CDR because one has already been received for this session (optional)
702	Ok-Warning	eMSP doesn't accept this final CDR because of inconsistent data (optional)
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/AuthorisationV1/">
    <m:eMIP_FromIOP_SetChargeDetailRecordResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
        <partnerServiceSessionId>IOP-SID-GIR-V-IOPFT01-
0dc6fc3...153e</partnerServiceSessionId>
    </m:eMIP_FromIOP_SetChargeDetailRecordResponse>
</soap:Body>
```

```
</soap:Envelope>
```

5.16 ToIOP_HeartBeat

5.16.1   Description

This request allows Communication partners to send a heartbeat.

The response message of the "Heartbeat" service may contain the current time of the GIREVE's Platform for clock synchronisation. It may also include a new "Heartbeat Period".

5.16.2   Request

Input

eMIP_ToIOP_HeartBeatRequest

Parameters

There is no specific parameter.

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_HeartBeatV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/PlatformV1/">
    <m:eMIP_ToIOP_HeartBeatRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*MSP</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*798</operatorId>
    </m:eMIP_ToIOP_HeartBeatRequest>
</soap:Body>
</soap:Envelope>
```

5.16.3   Response

Input

eMIP_ToIOP_HeartBeatResponse

Parameters

Attribute name		Type	Description
heartBeatPeriod	M	xsd:int	New heartbeat period in seconds. **(Useless in heartbeat process with IOP)**
currentTime	M	xsd:dateTime	Current time of the Platform for clock synchronisation.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/PlatformV1/">
     <m:eMIP_ToIOP_HeartBeatResponse>
          <transactionId>TRANSACTION_46151</transactionId>
          <requestStatus>1</requestStatus>
          <heartBeatPeriod>2000</heartBeatPeriod>
          <currentTime>2015-10-26T10:32:52</currentTime>
     </m:eMIP_ToIOP_HeartBeatResponse>
</soap:Body>
</soap:Envelope>
```

5.17 ToIOP_SearchEVSE

5.17.1 Description

The eMSP can search for EVSEs given:
- a location area,
- a list of attribute values that the searched EVSE fulfil
  - e.g. EVSEMaxPower("3") >= "7" kW,
- the language of the resulting EVSE information,
- and the maximum number of EVSE information to retrieve.

5.17.2 Request

Input

eMIP_ToIOP_SearchEVSERequest

Parameters

Attribute name		Type	Description
latitude	M	xsd:double	The latitude coordinate Following WGS84
longitude	M	xsd:double	The longitude coordinate Following WGS84
radius	M	xsd:double	The search area radius in km around the given GPS coordinate
searchAlgo	M	xsd:int	The algorithm to be used for the search

		See 7.26 SearchAlgorithmValue	
maxCount	O	xsd:int	The maximum number of EVSE to retrieve
language	O	xsd:string	The language to be used for retrieved textual and localised data Following ISO 639-1.
andCombinedCriteria	O	iopfind:SearchCriteria See 7.27 SearchCriteria	A list of criteria that the EVSE to be retrieved must match

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_SearchEVSEV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-
iop.gireve.com/schemas/ChargeSpotFinderV1/">
     <m:eMIP_ToIOP_SearchEVSERequest>
          <transactionId>TRANSACTION_46151</transactionId>
          <partnerIdType>eMI3</partnerIdType>
          <partnerId>FR*MSP</partnerId>
          <operatorIdType>eMI3</operatorIdType>
          <operatorId>FR*798</operatorId>
          <latitude>45.259749</latitude>
          <longitude>2.3254852</longitude>
          <radius>10.0</radius>
          <searchAlgo>1</searchAlgo>
          <maxCount>100</maxCount>
          <language>fr</language>
          <andCombinedCriteria>
               <attributeId>3044</attributeId>
               <attributeCondition>
                    <conditionOperator>&gt;=</conditionOperator>
                    <attributeValue>7000</attributeValue>
               </attributeCondition>
          </andCombinedCriteria>
     </m:eMIP_ToIOP_SearchEVSERequest>
</soap:Body>
</soap:Envelope>
```

5.17.3   Response

Input

eMIP_ToIOP_SearchEVSEResponse

Parameters

Attribute name		Type	Description
dataAgregatordType	M	xsd:string	Type of the data aggregator id e.g. eMI3, gireve, external

dataAgregatorId	M	xsd:string	Data aggregator id
dataAgregatorName	M	xsd:string	Data aggregator name
EVSEDescrip	O	iopfind:EVSEDescrip See 7.15 EVSEDescrip	List of information about the EVSE matching the request

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
101	Ok-Info	Ok, but a partial response has been built by IOP: at least one aggregator did not respond or responded KO. The returned list may be incomplete.
102	Ok-Warning	Ok, but no Data Aggregator did respond. The returned list is empty.
103	Ok-Normal	OK, but there is no CPO with a valid roaming contract with the requestor. The returned list is empty.
104	Ok-Info	OK, but there is no Data Aggregator which covers the search area (given as input). The returned list is empty.
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-
iop.gireve.com/schemas/ChargeSpotFinderV1/">
    <m:eMIP_ToIOP_SearchEVSEResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
        <dataAgregatordType>2</dataAgregatordType>
        <dataAgregatorId>1</dataAgregatorId>
        <dataAgregatorName>GIREVE - RPC</dataAgregatorName>
        <EVSEDescrip>
            <EVSEIOPIdType>gireve</EVSEIOPIdType>
            <EVSEIOPId>1478621</EVSEIOPId>
            <EVSEIdType>eMI3</EVSEIdType>
            <EVSEId>FR*007*E1515-8798489</EVSEId>
            <chargingStationIdType>gireve</chargingStationIdType>
            <chargingStationId>4897</chargingStationId>
            <chargingPoolIdType>eMI3</chargingPoolIdType>
            <chargingPoolId>FR*007*P1515</chargingPoolId>
            <chargingPoolName>Général Foy</chargingPoolName>
            <chargingPoolAddress>
                <streetName>rue du Général Foy</streetName>
                <postCode>75008</postCode>
                <city>Paris</city>
```

```
                <country>France</country>
            </chargingPoolAddress>
            <entrancelatitude>45.259749</entrancelatitude>
            <entrancelongitude>2.3254852</entrancelongitude>

    <chargingStationlatitude>45.259749</chargingStationlatitude>

    <chargingStationlongitude>2.3254852</chargingStationlongitude>
            <connectorType>Combo</connectorType>
            <authorisationMode>0</authorisationMode>
            <paymentMode>0</paymentMode>
            <accessibility>2.3254852</accessibility>
            <isOpen24_7>1</isOpen24_7>
            <openTimes>
                <weekDay>monday</weekDay>
                <startTime>2002-05-30T09:00:00Z</startTime>
                <endTime>2002-05-30T21:00:00Z</endTime>
                <weekDay>tuesday</weekDay>
                <startTime>2002-05-30T09:00:00Z</startTime>
                <endTime>2002-05-30T21:00:00Z</endTime>
                <weekDay>wednesday</weekDay>
                <startTime>2002-05-30T09:00:00Z</startTime>
                <endTime>2002-05-30T21:00:00Z</endTime>
                <weekDay>thursday</weekDay>
                <startTime>2002-05-30T09:00:00Z</startTime>
                <endTime>2002-05-30T21:00:00Z</endTime>
                <weekDay>friday</weekDay>
                <startTime>2002-05-30T09:00:00Z</startTime>
                <endTime>2002-05-30T21:00:00Z</endTime>
            </openTimes>
            <bookable>1</bookable>
            <availabilityStatus>2</availabilityStatus>
            <busyStatus>1</busyStatus>     </EVSEDescrip>
    </m:eMIP_ToIOP_SearchEVSEResponse>
</soap:Body>
</soap:Envelope>
```

5.18 FromIOP_SearchEVSE

This message doesn't exist in eMIP 0.7.4

5.18.1   Description

The GIREVE's Platform can use this request to search for EVSEs in a data aggregator database given:

- a location area,
- a list of attribute values that the searched EVSE fulfil
    - e.g. EVSEMaxPower("3") >= "7" kW,
- the language of the resulting EVSE information,
- and the maximum number of EVSE information to retrieve.

5.18.2   Request

Input
eMIP_FromIOP_SearchEVSERequest

Parameters

Attribute name		Type	Description
latitude	M	xsd:double	The latitude coordinate

			Following WGS84
longitude	M	xsd:double	The longitude coordinate Following WGS84
radius	M	xsd:double	The search area radius in km around the given GPS coordinate
searchAlgo	M	xsd:int See 7.26 SearchAlgorithmValue	The algorithm to be used for the search
maxCount	O	xsd:int	The maximum number of EVSE to retrieve
language	O	xsd:string	The language to be used for retrieved textual and localised data Following ISO 639-1.
andCombinedCriteria	O	iopfind:SearchCriteria See 7.27SearchCriteria	A list of criteria that the EVSE to be retrieved must match
EVSEAttributeIdList	O	iopfind:DataField See 7.47 DataField	A list of data type about EVSE to be retrieved

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_FromIOP_SearchEVSEV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-
iop.gireve.com/schemas/ChargeSpotFinderV1/">
    <m:eMIP_FromIOP_SearchEVSERequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*MSP</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*798</operatorId>
        <latitude>45.259749</latitude>
        <longitude>2.3254852</longitude>
        <radius>10.0</radius>
        <searchAlgo>0</searchAlgo>
        <maxCount>100</maxCount>
        <language>fr</language>
        <andCombinedCriteria>
            <attributeId>3044</attributeId>
            <attributeCondition>
                <conditionOperator>&gt;=</conditionOperator>
                <attributeValue>7000</attributeValue>
            </attributeCondition>
        </andCombinedCriteria>
    </m:eMIP_FromIOP_SearchEVSERequest>
</soap:Body>
</soap:Envelope>
```

5.18.3 Response

Input

eMIP_FromIOP_SearchEVSEResponse

Parameters

Attribute name		Type	Description
dataAgregatordType	M	xsd:string	Type of the data aggregator id e.g. eMI3, gireve, external
dataAgregatorId	M	xsd:string	Data aggregator id
dataAgregatorName	M	xsd:string	Data aggregator name
EVSEDescrip	O	iopfind:EVSEDescrip See 7.15 EVSEDescrip	List of information about the EVSE matching the request

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-
iop.gireve.com/schemas/ChargeSpotFinderV1/">
    <m:eMIP_FromIOP_SearchEVSEResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
        <dataAgregatordType>2</dataAgregatordType>
        <dataAgregatorId>1</dataAgregatorId>
        <dataAgregatorName>GIREVE - RPC</dataAgregatorName>
        <EVSEDescrip>
            <EVSEIOPIdType>gireve</EVSEIOPIdType>
            <EVSEIOPId>EVSEID_8798489</EVSEIOPId>
            <EVSEIdType>eMI3</EVSEIdType>
            <EVSEId>FR*CPO*E*123456</EVSEId>
            <chargingStationIdType>gireve</chargingStationIdType>
            <chargingStationId>4897</chargingStationId>
            <chargingPoolIdType>eMI3</chargingPoolIdType>
            <chargingPoolId>FR*489*P8798489</chargingPoolId>
            <chargingPoolBrandName>CP_Brand</chargingPoolBrandName>
            <chargingPoolName>Général Foy</chargingPoolName>
            <chargingPoolAddress>
                <streetName>rue du Général Foy</streetName>
                <postCode>75008</postCode>
                <city>Paris</city>
```

```
                <country>France</country>
            </chargingPoolAddress>
            <entrancelatitude>45.259749</entrancelatitude>
            <entrancelongitude>2.3254852</entrancelongitude>

    <chargingStationlatitude>45.259749</chargingStationlatitude>

    <chargingStationlongitude>2.3254852</chargingStationlongitude>
            <connectorType>Combo</connectorType>
            <authorisationMode>0</authorisationMode>
            <paymentMode>0</paymentMode>
            <accessibility>2.3254852</accessibility>
            <isOpen24_7>1</isOpen24_7>
            <openTimes>
                <weekDay>7</weekDay>
                <startTime>2002-05-30T09:00:00Z</startTime>
                <endTime>2002-05-30T21:00:00Z</endTime>
            </openTimes>
            <bookable>1</bookable>
            <availabilityStatus>2</availabilityStatus>
            <busyStatus>1</busyStatus>
        </EVSEDescrip>
    </m:eMIP_FromIOP_SearchEVSEResponse>
</soap:Body>
</soap:Envelope>
```

5.19 ToIOP_GetEVSEData_FullList

5.19.1   Description

This request belongs to the "Data Download" (SDD and DDD) services, and allows an eMSP to get EVCI description data.

- The requestor will get EVSE description, for each EVSE managed by a CPO with which the eMSP is in contract.
- For each EVSE, this request will give a set of attributes, attached
  - o   to the Charging-Pool and the Charging-Station that contain the EVSE (upper hierarchy),
  - o   to the EVSE itself
  - o   to the Charging-Connectors contained by the EVSE (lower hierarchy).

This service has to be used in an initialisation phase, ie only one time.

A guide, that describes how to implement the SDD and DDD services, is available. Please refer to *Gireve_Tech_eMIP-V0.7.4_ImplementationGuide-Data Download_1.0.1_en.pdf*

5.19.2   Request

Input
eMIP_ToIOP_GetEVSEData_FullListRequest

Parameters

Attribute name		Type	Description
pageNumber	M	xsd:integer	Number of the requested page

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_GetEVSEData_FullListRequestV1/"
```

```
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIStaticV1/">
    <m:eMIP_ToIOP_GetEVSEData_FullListRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*EMP</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*798</operatorId>
        <pageNumber>3</pageNumber>
    </m:eMIP_ToIOP_GetEVSEData_FullListRequest>
</soap:Body>
</soap:Envelope>
```

5.19.3   Response

Input

eMIP_ToIOP_GetEVSEData_FullListResponse

Parameters

Attribute name		Type	Description
EVSERichDescripList	M	List of iopdd:EVSERichDescrip See 7.38 EVSERichDescrip	List of EVSEs described by a list of attributes.
nextPageNumber	M	xsd:integer	Number of the next page (in case of very large nb of EVSE). 0 means "no next page"

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
401	Ok-Warning	Info: DataSet is empty (no CPO found)
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIStaticV1/">
    <m:eMIP_ToIOP_GetEVSEData_FullListResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
```

```xml
<EVSERichDescripList>
  <EVSERichDescrip>
    <EVSEAttributeList>
      <EVSEAttribute>
        <attributeId>3001</attributeId>
        <attributeValue>11376</attributeValue>
      </EVSEAttribute>
      <EVSEAttribute>
        <attributeId>3003</attributeId>
        <attributeValue></attributeValue>
      </EVSEAttribute>
      <EVSEAttribute>
        <attributeId>2001</attributeId>
        <attributeValue>9151</attributeValue>
      </EVSEAttribute>
      <EVSEAttribute>
        <attributeId>2003</attributeId>
        <attributeValue></attributeValue>
      </EVSEAttribute>
      …
      <EVSEAttribute>
        <attributeId>1103-2</attributeId>
        <attributeValue>monday</attributeValue>
        <attributeValue>tuesday</attributeValue>
        <attributeValue>monday</attributeValue>
        <attributeValue>wednesday</attributeValue>
      </EVSEAttribute>
      <EVSEAttribute>
        <attributeId>1103-3</attributeId>
        <attributeValue>T08:00:00</attributeValue>
        <attributeValue>T08:00:00</attributeValue>
        <attributeValue>T14:00:00</attributeValue>
        <attributeValue>T14:00:00</attributeValue>
      </EVSEAttribute>
      <EVSEAttribute>
        <attributeId>1103-4</attributeId>
        <attributeValue>T12:00:00</attributeValue>
        <attributeValue>T12:00:00</attributeValue>
        <attributeValue>T17:00:00</attributeValue>
        <attributeValue>T17:00:00</attributeValue>
      </EVSEAttribute>
      …
      <EVSEAttribute>
        <attributeId>1103-2</attributeId>
        <attributeValue>monday</attributeValue>
        <attributeValue>tuesday</attributeValue>
        <attributeValue>monday</attributeValue>
        <attributeValue>wednesday</attributeValue>
      </EVSEAttribute>
      <EVSEAttribute>
        <attributeId>1103-3</attributeId>
        <attributeValue>T08:00:00</attributeValue>
        <attributeValue>T08:00:00</attributeValue>
        <attributeValue>T14:00:00</attributeValue>
        <attributeValue>T14:00:00</attributeValue>
      </EVSEAttribute>
      <EVSEAttribute>
        <attributeId>1103-4</attributeId>
        <attributeValue>T12:00:00</attributeValue>
        <attributeValue>T12:00:00</attributeValue>
        <attributeValue>T17:00:00</attributeValue>
```

```
            <attributeValue>T17:00:00</attributeValue>
          </EVSEAttribute>
          …
          <EVSEAttribute>
            <attributeId>3101</attributeId>
            <attributeValue>0</attributeValue>
          </EVSEAttribute>
          <EVSEAttribute>
            <attributeId>3102</attributeId>
            <attributeValue></attributeValue>
          </EVSEAttribute>
        </EVSEAttributeList>
      </EVSERichDescrip>
    </EVSERichDescripList>
  </m:eMIP_ToIOP_GetEVSEData_FullListResponse>
</soap:Body>
</soap:Envelope>
```

5.20 ToIOP_GetEVSEStaticDataChanges

5.20.1 Description

This request belongs to the "Static Data Download" (SDD) services, and allows an eMSP to get EVCI description data.

- The requestor will get EVSE description, for each EVSE managed by a CPO with which the eMSP is in contract, and that has changed since the last requestor call.
- For each EVSE, this request will give a set of attributes, attached
  - to the Charging-Pool, and the Charging-Station that contains the EVSE (upper hierarchy),
  - to the EVSE itself
  - to the Charging-Connectors contained by the EVSE (lower hierarchy).

A guide, that describes how to implement the SDD and DDD services, is available. Please refer to *Gireve_Tech_eMIP-V0.7.4_ImplementationGuide-Data Download_1.0.1_en.pdf*

5.20.2 Request

Input

eMIP_ToIOP_GetEVSEStaticDataChangesRequest

Parameters

Attribute name		Type	Description
dateTimeFrom	M	xsd:dateTime	Search for records after this date. Must be contained in interval [currentDate – 1 month; currentDate]
dateTimeTo	O	xsd:dateTime	Search for records before this date.

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_GetEVSEStaticDataChangesV1/"
Content-Length: xxx
```

```
<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIStaticV1/">
    <m:eMIP_ToIOP_GetEVSEStaticDataChangesRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*EMP</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*798</operatorId>
        <dateTimeFrom>2016-11-02T16:00:00Z</dateTimeFrom>
        <dateTimeTo>2010-11-03T16:00:00Z</dateTimeTo>
</m:eMIP_ToIOP_GetEVSEStaticDataChangesRequest>
</soap:Body>
</soap:Envelope>
```

5.20.3   Response

Input

eMIP_ToIOP_GetEVSEStaticDataChangesResponse

Parameters

Attribute name		Type	Description
staticDataChangeList	M	List of iopdd:staticDataChangeElement See 7.40 StaticDataChangeElement	List of changes on static data.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
401	Ok-Warning	Info: DataSet is empty (no CPO found)
405	Ok-Warning	dateTimeFrom is too old
10701	Ko-Error	Too much changes, result list is truncated
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIStaticV1/">
    <m:eMIP_ToIOP_GetEVSEStaticDataChangesResponse>
        <transactionId>TRANSACTION_46151</transactionId>
```

```
        <requestStatus>1</requestStatus>
        <staticDataChangeList>
                <staticDataChangeElement>
                    <staticDataChangeEvent>
                        <statusEventDate>2016-11-
15T18:32:10.000+01:00</statusEventDate>
                        <EVSEIdType>gireve</EVSEIdType>
                        <EVSEId>16378</EVSEId>
                        <actionType>2</actionType>
                    </staticDataChangeEvent>
                    <EVSERichDescrip>
                        <EVSEAttributeList>
                            <EVSEAttribute>
                                <attributeId>3001</attributeId>

<attributeValue>16378</attributeValue>
                            </EVSEAttribute>
                            <EVSEAttribute>
                                <attributeId>3003</attributeId>
                                <attributeValue/>
                            </EVSEAttribute>
                            <EVSEAttribute>
                                <attributeId>2001</attributeId>

<attributeValue>14112</attributeValue>
                            </EVSEAttribute>
                            <EVSEAttribute>
                                <attributeId>2003</attributeId>
                                <attributeValue/>
                            </EVSEAttribute>
                            …
                            <EVSEAttribute>
                                <attributeId>3101</attributeId>
                                <attributeValue>0</attributeValue>
                            </EVSEAttribute>
                            <EVSEAttribute>
                                <attributeId>3102</attributeId>
                                <attributeValue/>
                            </EVSEAttribute>
                        </EVSEAttributeList>
                    </EVSERichDescrip>
                </staticDataChangeElement>
            </staticDataChangeList>
        </m:eMIP_ToIOP_GetEVSEStaticDataChangesResponse>
</soap:Body>
</soap:Envelope>
```

5.21 ToIOP_ActivateEVSEStaticDataChangesFlows

5.21.1   Description

This request belongs to the "Static Data Download" (SDD) services, and allows an eMSP to get EVCI description data. This request will activate the "Push" mode. It means that, after such a request, the GIREVE's Platform will push a message (ie request the eMSP) each time a static data change occurs on an EVSE.

A guide, that describes how to implement the SDD and DDD services, is available. Please refer to *Gireve_Tech_eMIP-V0.7.4_ImplementationGuide-Data Download_1.0.1_en.pdf*

5.21.2 Request

Input

eMIP_ToIOP_ActivateEVSEStaticDataChangesFlowRequest

Parameters

Attribute name		Type	Description
dateTimeFrom	M	xsd:dateTime	Search for records after this date. Used for the initialization.
callbackUrl	M	xsd:string	URL of the partner backend where to push static data changes.

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_ActivateEVSEStaticDataChangesFlowV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body>
    <evc:eMIP_ToIOP_ActivateEVSEStaticDataChangesFlowRequest>
      <!--Optional:-->
      <transactionId>azert-yuiop</transactionId>
      <partnerIdType>eMI3</partnerIdType>
      <partnerId>FR*107</partnerId>
      <operatorIdType>eMI3</operatorIdType>
      <operatorId>FR*MSP</operatorId>
      <dateTimeFrom>2016-11-30T23:00:00Z</dateTimeFrom>
      <callbackUrl>http://urlToCall.test.com/pushChanges</callbackUrl>
    </evc:eMIP_ToIOP_ActivateEVSEStaticDataChangesFlowRequest>
  </soap:Body>
</soap:Envelope>
```

5.21.3 Response

Input

eMIP_ToIOP_ActivateEVSEStaticDataChangesFlowResponse

Parameters

Attribute name		Type	Description
activeFlowId	M	xsd:string	Id of the static data change flow.
staticDataChangeList	M	List of iopdd:staticDataChangeElement See 7.40 StaticDataChangeElement	List of changes on static data happened since the dateTimeFrom of the request.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
401	Ok-Warning	Info: DataSet is empty (no CPO found)
402	Ok-Warning	Info: this flow is already activated for this operator and partner
405	Ok-Warning	dateTimeFrom is too old
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soapenv:Envelope xmlns:soapenv="http://www.w3.org/2003/05/soap-
envelope">
   <soapenv:Body>
      <ns:eMIP_ToIOP_ActivateEVSEStaticDataChangesFlowResponse
xmlns:ns="https://api-iop.gireve.com/schemas/EVCIDataDownloadV1/">
         <transactionId>azet-ghjkl</transactionId>
         <requestStatus>1</requestStatus>
         <activeFlowId>IOP-DDFID-GIR-V-IOPPPFT01-67fbfadc-b68c-4bc5-b6d5-
51af8300e2f1</activeFlowId>
         <staticDataChangeList>
            <staticDataChangeElement>
               <staticDataChangeEvent>
                  <statusEventDate>2016-12-
01T15:51:25.000+01:00</statusEventDate>
                  <EVSEIdType>eMI3</EVSEIdType>
                  <EVSEId>FR*S28*EXXXXXXXXX</EVSEId>
                  <actionType>2</actionType>
               </staticDataChangeEvent>
               <EVSERichDescrip>
                  <EVSEAttributeList>
                     <EVSEAttribute>
                        <attributeId>3001</attributeId>
                        <attributeValue>45147</attributeValue>
                     </EVSEAttribute>
                     <EVSEAttribute>
                        <attributeId>2001</attributeId>
                        <attributeValue>35068</attributeValue>
                     </EVSEAttribute>
                     <EVSEAttribute>
                        <attributeId>1045</attributeId>
                        <attributeValue>Avenue du
Maréchal</attributeValue>
                     </EVSEAttribute>
                     …
                     <EVSEAttribute>
                        <attributeId>3101</attributeId>
                        <attributeValue>2</attributeValue>
```

```
                </EVSEAttribute>
                <EVSEAttribute>
                    <attributeId>3102</attributeId>
                    <attributeValue/>
                </EVSEAttribute>
            </EVSEAttributeList>
          </EVSERichDescrip>
        </staticDataChangeElement>
      </staticDataChangeList>
    </ns:eMIP_ToIOP_ActivateEVSEStaticDataChangesFlowResponse>
  </soapenv:Body>
</soapenv:Envelope>
```

5.22 ToIOP_DeActivateEVSEStaticDataChangesFlows

5.22.1   Description

This request belongs to the "Static Data Download" (SDD) services. This request will **de-activate** the "Push" mode. It means that, after such a request, the GIREVE's Platform will stop pushing message each time a static data change occurs on an EVSE.

A guide, that describes how to implement the SDD and DDD services, is available. Please refer to *Gireve_Tech_eMIP-V0.7.4_ImplementationGuide-Data Download_1.0.1_en.pdf*

5.22.2   Request

Input

eMIP_ToIOP_DeActivateEVSEStaticDataChangesFlowRequest

Parameters

Attribute name		Type	Description
activeFlowId	M	xsd:string	Id of the flow to deactivate

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_DeActivateEVSEStaticDataChangesFlowV1/
"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIStaticV1/">
    <m:eMIP_ToIOP_ActivateEVSEStaticDataChangesFlowRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*EMP</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*798</operatorId>
        <activeFlowId>IOP-DDFID-GIR-V-IOPPPFT01-
    8aa168621779d294e53</activeFlowId>
    </m:eMIP_ToIOP_ActivateEVSEStaticDataChangesFlowRequest>
</soap:Body>
</soap:Envelope>
```

5.22.3 Response

Input

eMIP_ToIOP_DeActivateEVSEStaticDataChangesFlowResponse

Parameters

There is no specific parameter.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
401	Ok-Warning	Info: DataSet is empty (no CPO found)
403	Ok-Warning	Info: the flow is found but it is already inactive
404	Ok-Warning	Info: No flow found, that matches the given parameters
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIStaticV1/">
    <m:eMIP_ToIOP_DeActivateEVSEStaticDataChangesFlowResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
    </m:eMIP_ToIOP_DeActivateEVSEStaticDataChangesFlowResponse>
</soap:Body>
</soap:Envelope>
```

5.23 FromIOP_SetEVSEStaticDataChange

5.23.1 Description

This request belongs to the "Static Data Download" (SDD) services, and allows an eMSP to get EVCI description data. If the eMSP activated the "push" mode, the GIREVE's Platform, will notify the eMSP of each Static-Change by requesting this web service on the eMSP side

- The eMSP will receive this message, for each EVSE managed by a CPO with which the eMSP is in contract, and that changes.
- For each EVSE, this request will give a set of attributes, attached
  - to the Charging-Pool, or the Charging-Station that contains the EVSE (upper hierarchy),
  - to the EVSE itself
  - to the Charging-Connectors contained by the EVSE (lower hierarchy).

A guide, that describes how to implement the SDD and DDD services, is available. Please refer to *Gireve_Tech_eMIP-V0.7.4_ImplementationGuide-Data Download_1.0.1_en.pdf*

5.23.2 Request

Input

eMIP_FromIOP_SetEVSEStaticDataChangeRequest

Parameters

Attribute name		Type	Description
targetOperatorIdType	M	xsd:string	Type of the eMSP id
targetOperatorId	M	xsd:string	eMSP id
activeFlowId	M	xsd:string	Id of the push flow
staticDataChangeElement	M	Iopdd: staticDataChangeElement See 7.40 StaticDataChangeElement	Description of the modification on the EVSE (e.g. create/update/delete) and its static data updated

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_FromIOP_SetEVSEStaticDataChangeV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIStaticV1/">
    <m:eMIP_FromIOP_SetEVSEStaticDataChangeRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*EMP</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*798</operatorId>
        <targetOperatorIdType>gireve</targetOperatorIdType>
        <targetOperatorId>Oper_MSP</targetOperatorId>
        <activeFlowId>IOP-DDFID-GIR-V-IOPPPFT01-8aa16864-d0bd-4d38-
9999-21779d294e53</activeFlowId>
        <staticDataChangeElement>
          <staticDataChangeEvent>
            <statusEventDate>2016-12-
01T15:51:25.000+01:00</statusEventDate>
            <EVSEIdType>gireve</EVSEIdType>
            <EVSEId>45147</EVSEId>
            <actionType>2</actionType>
          </staticDataChangeEvent>
          <EVSERichDescrip>
            <EVSEAttributeList>
              <EVSEAttribute>
                <attributeId>3001</attributeId>
                <attributeValue>45147</attributeValue>
              </EVSEAttribute>
              <EVSEAttribute>
                <attributeId>1042</attributeId>
                <attributeValue>28110</attributeValue>
              </EVSEAttribute>
              <EVSEAttribute>
                <attributeId>1043</attributeId>
```

```
                    <attributeValue>Lucé</attributeValue>
                  </EVSEAttribute>
                  <EVSEAttribute>
                    <attributeId>1046</attributeId>
                    <attributeValue></attributeValue>
                  </EVSEAttribute>
                  <EVSEAttribute>
                    <attributeId>1041</attributeId>
                    <attributeValue>FR</attributeValue>
                  </EVSEAttribute>
                  …
                  <EVSEAttribute>
                    <attributeId>3102</attributeId>
                    <attributeValue></attributeValue>
                  </EVSEAttribute>
                </EVSEAttributeList>
              </EVSERichDescrip>
            </staticDataChangeElement>
          </ns:eMIP_FromIOP_SetEVSEStaticDataChangeRequest>
        </soapenv:Body>
      </soapenv:Envelope>
```

5.23.3   Response

Input

eMIP_FromIOP_SetEVSEStaticDataChangeResponse

Parameters

There is no specific parameter.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIStaticV1/">
    <m:eMIP_FromIOP_SetEVSEStaticDataChangeResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
    </m:eMIP_ FromIOP_SetEVSEStaticDataChangeResponse>
</soap:Body>
</soap:Envelope>
```

5.24 ToIOP_GetEVSEDynamicDataChanges

5.24.1   Description

This request belongs to the "Dynamic Data Download" (SDD) services, and allows an eMSP to get EVCI description data.

- The requestor will get EVSE description, for each EVSE managed by a CPO with which the eMSP is in contract, and that has changed since the last requestor call.
- For each EVSE, this request will give a set of attributes, attached
    - to the Charging-Pool, or the Charging-Station that contains the EVSE (upper hierarchy),
    - to the EVSE itself
    - to the Charging-Connectors contained by the EVSE (lower hierarchy).

A guide, that describes how to implement the SDD and DDD services, is available. Please refer to *Gireve_Tech_eMIP-V0.7.4_ImplementationGuide-Data Download_1.0.1_en.pdf*

5.24.2   Request

Input

eMIP_ToIOP_GetEVSEDynamicDataChangesRequest

Parameters

Attribute name		Type	Description
dateTimeFrom	M	xsd:dateTime	Search for records after this date. Must be contained in interval [currentDate – 1 month; currentDate]
dateTimeTo	O	xsd:dateTime	Search for records before this date.

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_GetEVSEDynamicDataChangesV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_GetEVSEDynamicDataChangesRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*EMP</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*798</operatorId>
        <dateTimeFrom>2016-12-23T14:55:06+00:00</dateTimeFrom>
        <dateTimeTo>2016-12-23T15:00:06+00:00</dateTimeTo>
    </m:eMIP_ToIOP_GetEVSEDynamicDataChangesRequest>
</soap:Body>
</soap:Envelope>
```

5.24.3   Response

Input

eMIP_ToIOP_GetEVSEDynamicDataChangesResponse

Parameters

Attribute name		Type	Description
dynamicDataChangeList	M	List of iopdd:dynamicDataChangeElement See 7.42 DynamicDataChangeElement	List of changes on dynamic data during requested dateTime interval

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
401	Ok-Warning	Info: DataSet is empty (no CPO found)
405	Ok-Warning	dateTimeFrom is too old
10701	Ko-Error	Too much changes, result list is truncated
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_GetEVSEDynamicDataChangesResponse>
         <transactionId>TRANSACTION_46151</transactionId>
         <requestStatus>1</requestStatus>
         <dynamicDataChangeList>
       <dynamicDataChangeElement>
        <dynamicDataChangeEvent>
          <statusEventDate>2016-12-
22T20:00:13.000+01:00</statusEventDate>
          <EVSEIdType>eMI3</EVSEIdType>
          <EVSEId>FR*S37*EXXX</EVSEId>
        </dynamicDataChangeEvent>
        <EVSEDynamicData>
          <availabilityStatus>2</availabilityStatus>
          <availabilityStatusComment>En
service</availabilityStatusComment>
          <busyStatus>1</busyStatus>
          <busyStatusComment>Libre</busyStatusComment>
          <useabilityStatus>2</useabilityStatus>
          <useabilityStatusComment>Utilisable</useabilityStatusComment>
```

```
            </EVSEDynamicData>
        </dynamicDataChangeElement>
        <dynamicDataChangeElement>
            <dynamicDataChangeEvent>
              <statusEventDate>2016-12-
23T13:15:17.000+01:00</statusEventDate>
              <EVSEIdType>eMI3</EVSEIdType>
              <EVSEId>FR*S37*EYYYY</EVSEId>
            </dynamicDataChangeEvent>
            <EVSEDynamicData>
              <availabilityStatus>2</availabilityStatus>
              <availabilityStatusComment>En
service</availabilityStatusComment>
              <busyStatus>1</busyStatus>
              <busyStatusComment>Libre</busyStatusComment>
              <useabilityStatus>2</useabilityStatus>
              <useabilityStatusComment>Utilisable</useabilityStatusComment>
            </EVSEDynamicData>
        </dynamicDataChangeElement>
      </dynamicDataChangeList>
    </m:eMIP_ToIOP_GetEVSEDynamicDataChangesResponse>
</soap:Body>
</soap:Envelope>
```

5.25 ToIOP_ActivateEVSEDynamicDataChangesFlows

5.25.1   Description

This request belongs to the "Dynamic Data Download" (SDD) services, and allows an eMSP to get EVCI description data. This request will activate the "Push" mode. It means that, after such a request, the GIREVE's Platform will push a message (ie request the eMSP) each time a dynamic data change occurs on an EVSE.

A guide, that describes how to implement the SDD and DDD services, is available. Please refer to *Gireve_Tech_eMIP-V0.7.4_ImplementationGuide-Data Download_1.0.1_en.pdf*

5.25.2   Request

Input
eMIP_ToIOP_ActivateEVSEDynamicDataChangesFlowRequest

Parameters

Attribute name		Type	Description
dateTimeFrom	M	xsd:dateTime	Search for records after this date. Used for the initialization.
callbackUrl	M	xsd:string	URL of the partner backend where to push dynamic data changes.

Example
```
POST /api/emip HTTP/1.1
```

```
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_ActivateEVSEDynamicDataChangesFlowV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_ActivateEVSEDynamicDataChangesFlowRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*EMP</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*798</operatorId>
        <dateTimeFrom>2016-11-30T23:00:00Z</dateTimeFrom>


    <callbackUrl>http://urlToCall.test.com/pushChanges</callbackUrl>
    </m:eMIP_ToIOP_ActivateEVSEDynamicDataChangesFlowRequest>
</soap:Body>
</soap:Envelope>
```

5.25.3 Response

Input

eMIP_ToIOP_ActivateEVSEDynamicDataChangesFlowResponse

Parameters

Attribute name		Type	Description
activeFlowId	M	xsd:string	Id of the dynamic data change flow.
dynamicDataChangeList	M	List of iopdd:dynamicDataChangeElement See 7.42 DynamicDataChangeElement	List of changes on dynamic data happened since the dateTimeFrom of the request.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
402	Ok-Warning	Info: this flow is already activated for this operator and partner
405	Ok-Warning	dateTimeFrom is too old
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT
```

```xml
<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_ActivateEVSEDynamicDataChangesFlowResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
        <activeFlowId>IOP-DDFID-GIR-V-IOPPPFT01-
8f1b1cd1d2c5cfe9b</activeFlowId>
        <dynamicDataChangeList>
                <dynamicDataChangeElement>
                 <dynamicDataChangeEvent>
            <statusEventDate>2016-12-
23T16:07:52.000+01:00</statusEventDate>
                <EVSEIdType>gireve</EVSEIdType>
                <EVSEId>16378</EVSEId>
            </dynamicDataChangeEvent>
            <EVSEDynamicData>
                <availabilityStatus>2</availabilityStatus>
                <availabilityStatusComment>En
service</availabilityStatusComment>
                <busyStatus>2</busyStatus>
                <busyStatusComment>Occupé</busyStatusComment>
                <useabilityStatus>1</useabilityStatus>
                <useabilityStatusComment>Not
Usable</useabilityStatusComment>
            </EVSEDynamicData>
        </dynamicDataChangeElement>
     </dynamicDataChangeList>
    </m:eMIP_ToIOP_ActivateEVSEDynamicDataChangesFlowResponse>
</soap:Body>
</soap:Envelope>
```

5.26 ToIOP_DeActivateEVSEDynamicDataChangesFlows

5.26.1   Description

This request belongs to the "Dynamic Data Download" (SDD) services. This request will **de-**activate the "Push" mode. It means that, after such a request, the GIREVE's Platform will stop pushing message each time a dynamic data change occurs on an EVSE.

A guide, that describes how to implement the SDD and DDD services, is available. Please refer to *Gireve_Tech_eMIP-V0.7.4_ImplementationGuide-Data Download_1.0.1_en.pdf*

5.26.2   Request

Input
eMIP_ToIOP_DeActivateEVSEDynamicDataChangesFlowRequest

Parameters

Attribute name		Type	Description
activeFlowId	M	xsd:string	Id of the flow to deactivate

Example
```
POST /api/emip HTTP/1.1
```

```
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_DeActivateEVSEDynamicDataChangesFlowV1
/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
     <m:eMIP_ToIOP_ActivateEVSEDynamicDataChangesFlowRequest>
            <transactionId>TRANSACTION_46151</transactionId>
            <partnerIdType>eMI3</partnerIdType>
            <partnerId>FR*EMP</partnerId>
            <operatorIdType>eMI3</operatorIdType>
            <operatorId>FR*798</operatorId>
            <activeFlowId>IOP-DDFID-GIR-V-IOPPP-4d1c-b9fd-
952ea2f2b855</activeFlowId>
</m:eMIP_ToIOP_ActivateEVSEDynamicDataChangesFlowRequest>
</soap:Body>
</soap:Envelope>
```

5.26.3   Response

Input

eMIP_ToIOP_DeActivateEVSEDynamicDataChangesFlowResponse

Parameters

There is no specific parameter.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
403	Ok-Warning	Info: the flow is found but it is already inactive
404	Ok-Warning	Info: No flow found, that matches the given parameters
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
     <m:eMIP_ToIOP_DeActivateEVSEDynamicDataChangesFlowResponse>
            <transactionId>TRANSACTION_46151</transactionId>
```

```
            <requestStatus>1</requestStatus>
        </m:eMIP_ToIOP_DeActivateEVSEDynamicDataChangesFlowResponse>
</soap:Body>
</soap:Envelope>
```

5.27 FromIOP_SetEVSEDynamicDataChange

5.27.1   Description

This request belongs to the "Dynamic Data Download" (SDD) services, and allows an eMSP to get EVCI description data. If the eMSP activated the "push" mode, the GIREVE's Platform, will notify the eMSP of each Dynamic-Change by requesting this web service on the eMSP side

- The eMSP will receive this message, for each EVSE managed by a CPO with which the eMSP is in contract, and that changes.
- For each EVSE, this request will give a set of attributes, attached
    - to the Charging-Pool, or the Charging-Station that contains the EVSE (upper hierarchy),
    - to the EVSE itself
    - to the Charging-Connectors contained by the EVSE (lower hierarchy).

A guide, that describes how to implement the SDD and DDD services, is available. Please refer to *Gireve_Tech_eMIP-V0.7.4_ImplementationGuide-Data Download_1.0.1_en.pdf*

5.27.2   Request

Input

eMIP_FromIOP_SetEVSEDynamicDataChangeRequest

Parameters

Attribute name		Type	Description
targetOperatorIdType	M	xsd:string	Type of the eMSP id
targetOperatorId	M	xsd:string	eMSP id
activeFlowId	M	xsd:string	Id of the push flow
dynamicDataChangeElement	M	iopdd:dynamicDataChangeElement See 7.42 DynamicDataChangeElement	Description of the dynamic data change and new dynamic status

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_FromIOP_SetEVSEDynamicDataChangeV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_FromIOP_SetEVSEDynamicDataChangeRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*EMP</partnerId>
        <operatorIdType>eMI3</operatorIdType>
```

```
            <operatorId>FR*798</operatorId>
            <targetOperatorIdType>gireve</targetOperatorIdType>
            <targetOperatorId>Oper_MSP</targetOperatorId>
            <activeFlowId>IOP-DDFID-GIcc3-2084-4391-82ad-
    bd1d2c5cfe9b</activeFlowId>
            <dynamicDataChangeElement>
              <dynamicDataChangeEvent>
                <statusEventDate>2016-12-
    23T16:20:33.000+01:00</statusEventDate>
                <EVSEIdType>gireve</EVSEIdType>
                <EVSEId>16378</EVSEId>
              </dynamicDataChangeEvent>
              <EVSEDynamicData>
                <availabilityStatus>2</availabilityStatus>
                <availabilityStatusComment>En
    service</availabilityStatusComment>
                <busyStatus>2</busyStatus>
                <busyStatusComment>Occupé</busyStatusComment>
                <useabilityStatus>1</useabilityStatus>
                <useabilityStatusComment>Not
    Usable</useabilityStatusComment>
              </EVSEDynamicData>
            </dynamicDataChangeElement>
            </m:eMIP_FromIOP_SetEVSEDynamicDataChangeRequest>
      </soap:Body>
</soap:Envelope>
```

5.27.3   Response

Input

eMIP_FromIOP_SetEVSEDynamicDataChangeResponse

Parameters

There is no specific parameter.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_FromIOP_SetEVSEDynamicDataChangeResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
```

```
</m:eMIP_ FromIOP_SetEVSEDynamicDataChangeResponse>
</soap:Body>
</soap:Envelope>
```

5.28 ToIOP_GetChargingPoolStaticData
This message doesn't exist in eMIP 0.7.4

5.28.1   Description
This request allows a CPO to get the attributes of a Charging Pool: id, location, opening days and hours, number of parking places and charging stations, related charging station ids, pictures of the pool, operators, power distributors and the current availability status.

5.28.2   Request
Input
eMIP_ToIOP_GetChargingPoolStaticDataRequest

Parameters

Attribute name		Type	Description
chargingPoolIdType	M	xsd:string	Type of the EVCI id e.g. eMI3, gireve, external
chargingPoolId	M	xsd:string	Id of the EVCI element

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_GetChargingPoolStaticDataV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIStaticV1/">
     <m:eMIP_ToIOP_GetChargingPoolStaticDataRequest>
          <transactionId>TRANSACTION_46151</transactionId>
          <partnerIdType>eMI3</partnerIdType>
          <partnerId>FR*CPO</partnerId>
          <operatorIdType>eMI3</operatorIdType>
          <operatorId>FR*798</operatorId>
          <chargingPoolIdType>eMI3</chargingPoolIdType>
          <chargingPoolId>FR*138*P1ETG5578567YU4D</chargingPoolId>
     </m:eMIP_ToIOP_GetChargingPoolStaticDataRequest>
</soap:Body>
</soap:Envelope>
```

5.28.3   Response
Input
eMIP_ToIOP_GetChargingPoolStaticDataResponse

Parameters

Attribute name	Type	Description

dataField	M	iopsta:DataField See 7.47 DataField	List of attributes describing the EVCI element attribute id → attribute value

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIStaticV1/">
    <m:eMIP_ToIOP_GetChargingPoolStaticDataResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
        <dataField>
            <attributeId>1004</attributeId>
            <attributeValue>POOLID_8454984</attributeValue>
        </dataField>
        <dataField>
            <attributeId>1006</attributeId>
            <attributeValue>Général Foy</attributeValue>
        </dataField>
        <dataField>
            <attributeId>1041</attributeId>
            <attributeValue>France</attributeValue>
        </dataField>
        <dataField>
            <attributeId>1042</attributeId>
            <attributeValue>75008</attributeValue>
        </dataField>
        <dataField>
            <attributeId>1043</attributeId>
            <attributeValue>PARIS</attributeValue>
        </dataField>
        <dataField>
            <attributeId>1045</attributeId>
            <attributeValue>rue du Général Foy</attributeValue>
        </dataField>
        <dataField>
            <attributeId>1051</attributeId>
            <attributeValue>1</attributeValue>
        </dataField>
        <dataField>
            <attributeId>1144</attributeId>
            <attributeValue>3</attributeValue>
        </dataField>
```

```
        <dataField>
                <attributeId>1082</attributeId>
                <attributeValue>1</attributeValue>
        </dataField>
     </m:eMIP_ToIOP_GetChargingPoolStaticDataResponse>
</soap:Body>
</soap:Envelope>
```

5.29 ToIOP_SetChargingPoolStaticData

This message doesn't exist in eMIP 0.7.4

5.29.1   Description

This request allows a CPO to set the attributes of a Charging Pool: id, location, opening days and hours, number of parking places and charging stations, related charging station ids, pictures of the pool, operators, power distributors and the current availability status.

5.29.2   Request

Input

eMIP_ToIOP_SetChargingPoolStaticDataRequest

Parameters

Attribute name		Type	Description
chargingPoolIdType	M	xsd:string	Type of the EVCI id
chargingPoolId	M	xsd:string	EVCI id
actionType	M	xsd:int	Action to perform: Insert, Update, Delete.
dataField	M	iopsta:DataField See 7.47 DataField	List of data to set attribute id → attribute value

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_SetChargingPoolStaticDataV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIStaticV1/">
     <m:eMIP_ToIOP_SetChargingPoolStaticDataRequest>
         <transactionId>TRANSACTION_46151</transactionId>
         <partnerIdType>eMI3</partnerIdType>
         <partnerId>FR*CPO</partnerId>
         <operatorIdType>eMI3</operatorIdType>
         <operatorId>FR*489</operatorId>
         <chargingPoolIdType>eMI3</chargingPoolIdType>
         <chargingPoolId>FR*138*P1ETG5578567YU4D</chargingPoolId>
         <actionType>0</actionType>
         <dataField>
                <attributeId>1006</attributeId>
                <attributeValue>Général Foy</attributeValue>
         </dataField>
         <dataField>
```

```
                      <attributeId>1041</attributeId>
                      <attributeValue>France</attributeValue>
              </dataField>
              <dataField>
                      <attributeId>1042</attributeId>
                      <attributeValue>75008</attributeValue>
              </dataField>
              <dataField>
                      <attributeId>1043</attributeId>
                      <attributeValue>PARIS</attributeValue>
              </dataField>
              <dataField>
                      <attributeId>1045</attributeId>
                      <attributeValue>rue du Général Foy</attributeValue>
              </dataField>
              <dataField>
                      <attributeId>1051</attributeId>
                      <attributeValue>1</attributeValue>
              </dataField>
              <dataField>
                      <attributeId>1144</attributeId>
                      <attributeValue>3</attributeValue>
              </dataField>
              <dataField>
                      <attributeId>1082</attributeId>
                      <attributeValue>1</attributeValue>
              </dataField>
      </m:eMIP_ToIOP_SetChargingPoolStaticDataRequest>
</soap:Body>
</soap:Envelope>
```

5.29.3   Response

Input

eMIP_ToIOP_SetChargingPoolStaticDataResponse

Parameters

There is no specific parameter.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIStaticV1/">
```

```
        <m:eMIP_ToIOP_SetChargingPoolStaticDataResponse>
              <transactionId>TRANSACTION_46151</transactionId>
              <requestStatus>1</requestStatus>
        </m:eMIP_ToIOP_SetChargingPoolStaticDataResponse>
</soap:Body>
</soap:Envelope>
```

5.30 ToIOP_GetChargingStationStaticData
This message doesn't exist in eMIP 0.7.4

5.30.1   Description

This request allows a CPO to get the attributes of a Charging Station: id, location, tariff information, capability (bookable, language supported, communicating), related charging point ids, pictures of the station, and the current availability status.

5.30.2   Request

Input

eMIP_ToIOP_GetChargingStationStaticDataRequest

Parameters

Attribute name		Type	Description
chargingStationIdType	M	xsd:string	Type of the EVCI id e.g. eMI3, gireve, external
chargingStationId	M	xsd:string	Id of the EVCI element

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_GetChargingStationStaticDataV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIStaticV1/">
      <m:eMIP_ToIOP_GetChargingStationStaticDataRequest>
            <transactionId>TRANSACTION_46151</transactionId>
            <partnerIdType>eMI3</partnerIdType>
            <partnerId>FR*CPO</partnerId>
            <operatorIdType>eMI3</operatorIdType>
            <operatorId>FR*798</operatorId>
            <chargingStationIdType>gireve</chargingStationIdType>
            <chargingStationId>4984489</chargingStationId>
      </m:eMIP_ToIOP_GetChargingStationStaticDataRequest>
</soap:Body>
</soap:Envelope>
```

5.30.3   Response

Input

eMIP_ToIOP_GetChargingStationStaticDataResponse

Parameters

Attribute name		Type	Description
dataField	M	iopsta:DataField See 7.47 DataField	List of attributes describing the EVCI element attribute id → attribute value

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIStaticV1/">
    <m:eMIP_ToIOP_GetChargingStationStaticDataResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
        <dataField>
            <attributeId>2004</attributeId>
            <attributeValue>STATIONID_8454984</attributeValue>
        </dataField>
        <dataField>
            <attributeId>2041</attributeId>
            <attributeValue>45.556546</attributeValue>
        </dataField>
        <dataField>
            <attributeId>2042</attributeId>
            <attributeValue>2.5654656</attributeValue>
        </dataField>
        <dataField>
            <attributeId>2063</attributeId>
            <attributeValue>0</attributeValue>
        </dataField>
        <dataField>
            <attributeId>2067</attributeId>
            <attributeValue>1</attributeValue>
        </dataField>
    </m:eMIP_ToIOP_GetChargingStationStaticDataResponse>
</soap:Body>
</soap:Envelope>
```

5.31 ToIOP_SetChargingStationStaticData
This message doesn't exist in eMIP 0.7.4

5.31.1 Description

This request allows a CPO to set the attributes of a Charging Station: id, location, tariff information, capability (bookable, language supported, communicating), related charging point ids, pictures of the station, and the current availability status.

5.31.2 Request

Input

eMIP_ToIOP_SetChargingStationStaticDataRequest

Parameters

Attribute name		Type	Description
chargingStationIdType	M	xsd:string	Type of the EVCI id
chargingStationId	M	xsd:string	EVCI id
actionType	M	xsd:int	Action to perform: Insert, Update, Delete.
dataField	M	iopsta:DataField See 7.47 DataField	List of data to set attribute id → attribute value

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_SetChargingStationStaticDataV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIStaticV1/">
    <m:eMIP_ToIOP_SetChargingStationStaticDataRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*CPO</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*489</operatorId>
        <chargingStationIdType>gireve</chargingPoolIdType>
        <chargingStationId>4984489</chargingPoolId>
        <actionType>0</actionType>
        <dataField>
            <attributeId>2041</attributeId>
            <attributeValue>45.556546</attributeValue>
        </dataField>
        <dataField>
            <attributeId>2042</attributeId>
            <attributeValue>2.5654656</attributeValue>
        </dataField>
        <dataField>
            <attributeId>2063</attributeId>
            <attributeValue>0</attributeValue>
        </dataField>
        <dataField>
            <attributeId>2067</attributeId>
            <attributeValue>1</attributeValue>
        </dataField>
    </m:eMIP_ToIOP_SetChargingStationStaticDataRequest>
</soap:Body>
</soap:Envelope>
```

5.31.3　Response

Input

eMIP_ToIOP_SetChargingStationStaticDataResponse

Parameters

There is no specific parameter.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIStaticV1/">
    <m:eMIP_ToIOP_SetChargingStationStaticDataResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
    </m:eMIP_ToIOP_SetChargingStationStaticDataResponse>
</soap:Body>
</soap:Envelope>
```

5.32 ToIOP_GetEVSEStaticData

This message doesn't exist in eMIP 0.7.4

5.32.1　Description

This request allows a CPO to get the attributes of a Charging Point: id, maximum available power, meter type, related charging connector ids, current availability status and the current busy status.

5.32.2　Request

Input

eMIP_ToIOP_GetEVSEStaticDataRequest

Parameters

Attribute name		Type	Description
EVSEIdType	M	xsd:string	Type of the EVCI id e.g. eMI3, gireve
EVSEId	M	xsd:string	Id of the EVCI element

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_GetEVSEStaticDataV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIStaticV1/">
    <m:eMIP_ToIOP_GetEVSEStaticDataRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*CPO</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*798</operatorId>
        <EVSEIdType>eMI3</EVSEIdType>
        <EVSEId>FR*798*E4984489</EVSEId>
    </m:eMIP_ToIOP_GetEVSEStaticDataRequest>
</soap:Body>
</soap:Envelope>
```

5.32.3   Response

Input

eMIP_ToIOP_GetEVSEStaticDataResponse

Parameters

Attribute name		Type	Description
dataField	M	iopsta:DataField See 7.47 DataField	List of attributes describing the EVCI element attribute id → attribute value

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIStaticV1/">
    <m:eMIP_ToIOP_GetEVSEStaticDataResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
```

```
        <dataField>
               <attributeId>3004</attributeId>
               <attributeValue>EVSEID_8454984</attributeValue>
        </dataField>
        <dataField>
               <attributeId>3044</attributeId>
               <attributeValue>7000</attributeValue>
        </dataField>
     </m:eMIP_ToIOP_GetEVSEStaticDataResponse>
</soap:Body>
</soap:Envelope>
```

5.33 ToIOP_SetEVSEStaticData

This message doesn't exist in eMIP 0.7.4

5.33.1 Description

This request allows a CPO to set the attributes of a Charging Point: id, maximum available power, meter type, related charging connector ids, current availability status and the current busy status.

5.33.2 Request

Input

eMIP_ToIOP_SetEVSEStaticDataRequest

Parameters

Attribute name		Type	Description
EVSEIdType	M	xsd:string	Type of the EVCI id
EVSEId	M	xsd:string	EVCI id
actionType	M	xsd:int	Action to perform: Insert, Update, Delete.
dataField	M	iopsta:DataField See 7.47 DataField	List of data to set attribute id → attribute value

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_SetEVSEStaticDataV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIStaticV1/">
     <m:eMIP_ToIOP_SetEVSEStaticDataRequest>
          <transactionId>TRANSACTION_46151</transactionId>
          <partnerIdType>eMI3</partnerIdType>
          <partnerId>FR*CPO</partnerId>
          <operatorIdType>eMI3</operatorIdType>
          <operatorId>FR*489</operatorId>
          <EVSEIdType>eMI3</chargingPoolIdType>
          <EVSEId>FR*489*E4984489</EVSEId>
          <actionType>0</actionType>
          <dataField>
                 <attributeId>3044</attributeId>
```

```
                    <attributeValue>7000</attributeValue>
                </dataField>
        </m:eMIP_ToIOP_SetEVSEStaticDataRequest>
</soap:Body>
</soap:Envelope>
```

5.33.3   Response

Input

eMIP_ToIOP_SetEVSEStaticDataResponse

Parameters

There is no specific parameter.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIStaticV1/">
    <m:eMIP_ToIOP_SetEVSEStaticDataResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
    </m:eMIP_ToIOP_SetEVSEStaticDataResponse>
</soap:Body>
</soap:Envelope>
```

5.34 ToIOP_GetChargingConnectorStaticData
This message doesn't exist in eMIP 0.7.4

5.34.1   Description

This request allows a CPO to get the attributes of a Charging Connector: id, connector type, maximum amperage power and voltage, and the current availability status.

5.34.2   Request

Input

eMIP_ToIOP_GetChargingConnectorStaticDataRequest

Parameters

Attribute name	Type	Description

chargingConnectorIdType	M	xsd:string		Type of the EVCI id e.g. eMI3, gireve
chargingConnectorId	M	xsd:string		Id of the EVCI element

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_GetChargingConnectorStaticDataV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIStaticV1/">
    <m:eMIP_ToIOP_GetChargingConnectorStaticDataRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*CPO</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*798</operatorId>
        <chargingConnectorIdType>external</chargingConnectorIdType>

    <chargingConnectorId>FR138X1ETG5578567YU1D</chargingConnectorId>
    </m:eMIP_ToIOP_GetChargingConnectorStaticDataRequest>
</soap:Body>
</soap:Envelope>
```

5.34.3   Response

Input

eMIP_ToIOP_GetChargingConnectorStaticDataResponse

Parameters

Attribute name		Type	Description
dataField	M	iopsta:DataField See 7.47 DataField	List of attributes describing the EVCI element attribute id → attribute value

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
```

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIStaticV1/">
      <m:eMIP_ToIOP_GetChargingConnectorStaticDataResponse>
          <transactionId>TRANSACTION_46151</transactionId>
          <requestStatus>1</requestStatus>
          <dataField>
               <attributeId>4004</attributeId>
               <attributeValue>CONNECTORID_8454984</attributeValue>
          </dataField>
          <dataField>
               <attributeId>4021</attributeId>
               <attributeValue>Combo</attributeValue>
          </dataField>
          <dataField>
               <attributeId>4042</attributeId>
               <attributeValue>240</attributeValue>
          </dataField>
          <dataField>
               <attributeId>4043</attributeId>
               <attributeValue>7000</attributeValue>
          </dataField>
          <dataField>
               <attributeId>4044</attributeId>
               <attributeValue>1</attributeValue>
          </dataField>
      </m:eMIP_ToIOP_GetChargingConnectorStaticDataResponse>
</soap:Body>
</soap:Envelope>
```

5.35 ToIOP_SetChargingConnectorStaticData

This message doesn't exist in eMIP 0.7.4

5.35.1   Description

This request allows a CPO to set the attributes of a Charging Connector: id, connector type, maximum amperage power and voltage, and the current availability status.

5.35.2   Request

Input

eMIP_ToIOP_SetChargingConnectorStaticDataRequest

Parameters

Attribute name		Type	Description
chargingConnectorIdType	M	xsd:string	Type of the EVCI id
chargingConnectorId	M	xsd:string	EVCI id
actionType	M	xsd:int	Action to perform: Insert, Update, Delete.
dataField	M	iopsta:DataField See 6.4 DataField List for a Charging Connector	List of data to set attribute id → attribute value

Example

```
POST /api/emip HTTP/1.1
```

```
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_SetChargingConnectorStaticDataV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIStaticV1/">
     <m:eMIP_ToIOP_SetChargingConnectorStaticDataRequest>
          <transactionId>TRANSACTION_46151</transactionId>
          <partnerIdType>eMI3</partnerIdType>
          <partnerId>FR*CPO</partnerId>
          <operatorIdType>eMI3</operatorIdType>
          <operatorId>FR*CPO</operatorId>
          <chargingConnectorIdType>external</chargingConnectorIdType>

     <chargingConnectorId>FR138X1ETG5578567YU1D</chargingConnectorId>
          <actionType>0</actionType>
          <dataField>
               <attributeId>4021</attributeId>
               <attributeValue>Combo</attributeValue>
          </dataField>
          <dataField>
               <attributeId>4042</attributeId>
               <attributeValue>240</attributeValue>
          </dataField>
          <dataField>
               <attributeId>4043</attributeId>
               <attributeValue>7000</attributeValue>
          </dataField>
          <dataField>
               <attributeId>4044</attributeId>
               <attributeValue>1</attributeValue>
          </dataField>
     </m:eMIP_ToIOP_SetChargingConnectorStaticDataRequest>
</soap:Body>
</soap:Envelope>
```

5.35.3   Response

Input

eMIP_ToIOP_SetChargingConnectorStaticDataResponse

Parameters

There is no specific parameter.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
```

```
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIStaticV1/">
    <m:eMIP_ToIOP_SetChargingConnectorStaticDataResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
    </m:eMIP_ToIOP_SetChargingConnectorStaticDataResponse>
</soap:Body>
</soap:Envelope>
```

5.36 ToIOP_GetChargingPoolAvailabilityStatus

5.36.1   Description

This request allows a CPO to get the attributes of a Charging Pool: current availability status.

5.36.2   Request

Input

eMIP_ToIOP_GetChargingPoolAvailabilityStatusRequest

Parameters

Attribute name		Type	Description
chargingPoolIdType	M	xsd:string	Type of the EVCI id e.g. eMI3, gireve, external
chargingPoolId	M	xsd:string	Id of the EVCI element

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_GetChargingPoolAvailabilityStatusV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_GetChargingPoolAvailabilityStatusRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*CPO</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*798</operatorId>
        <chargingPoolIdType>eMI3</chargingPoolIdType>
        <chargingPoolId>FR*138*P1ETG5578567YU4D</chargingPoolId>
    </m:eMIP_ToIOP_GetChargingPoolAvailabilityStatusRequest>
</soap:Body>
</soap:Envelope>
```

5.36.3   Response

Input

eMIP_ToIOP_GetChargingPoolAvailabilityStatusResponse

Parameters

Attribute name		Type	Description
statusEventDate	M	xsd:dateTime	Time of the last status change
availabilityStatus	M	xsd:int	Availability status of the EVCI element
availabilityStatusUntil	O	xsd:dateTime	Time until which the given availability status is valid
availabilityStatusComment	O	xsd:string	Comment about the availability status of the EVCI element

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_GetChargingPoolAvailabilityStatusResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
        <statusEventDate>2015-05-30T09:00:00</statusEventDate>
        <availabilityStatus>1</availabilityStatus>
    </m:eMIP_ToIOP_GetChargingPoolAvailabilityStatusResponse>
</soap:Body>
</soap:Envelope>
```

5.37 ToIOP_SetChargingPoolAvailabilityStatus

5.37.1   Description

This request allows a CPO to set the attributes of a Charging Pool: id and the current availability status.

5.37.2   Request

Input

eMIP_ToIOP_SetChargingPoolAvailabilityStatusRequest

Parameters

Attribute name		Type	Description
chargingPoolIdType	M	xsd:string	Type of the EVCI id e.g. eMI3, gireve, external
chargingPoolId	M	xsd:string	Id of the EVCI element
statusEventDate	M	xsd:dateTime	Time of the status change
availabilityStatus	M	xsd:int	Availability status of the EVCI element
availabilityStatusUntil	O	xsd:dateTime	Time until which the given availability status is valid
availabilityStatusComment	O	xsd:string	Comment about the availability status of the EVCI element

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_SetChargingPoolAvailabilityStatusV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_SetChargingPoolAvailabilityStatusRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*CPO</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*489</operatorId>
        <chargingPoolIdType>eMI3</chargingPoolIdType>
        <chargingPoolId>FR*489*P4984489</chargingPoolId>
        <statusEventDate>2015-05-30T09:00:00</statusEventDate>
        <availabilityStatus>1</availabilityStatus>
    </m:eMIP_ToIOP_SetChargingPoolAvailabilityStatusRequest>
</soap:Body>
</soap:Envelope>
```

5.37.3   Response

Input

eMIP_ToIOP_SetChargingPoolAvailabilityStatusResponse

Parameters

There is no specific parameter.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
10601	Ko-Error	The Charging Pool/Station/Point/Connector is unknown
10602	Ko-Error	The Charging Pool/Station/Point/Connector is not operated by the requestor
10603	Ko-Error	Dynamic updates blocked for the operator or this specific EVCI. Please contact GIREVE.
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_SetChargingPoolAvailabilityStatusResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
    </m:eMIP_ToIOP_SetChargingPoolAvailabilityStatusResponse>
</soap:Body>
</soap:Envelope>
```

5.38 ToIOP_GetChargingStationAvailabilityStatus

5.38.1 Description

This request allows a CPO to get the attributes of a Charging Station: current availability status.

5.38.2 Request

Input

eMIP_ToIOP_GetChargingStationAvailabilityStatusRequest

Parameters

Attribute name		Type	Description
chargingStationIdType	M	xsd:string	Type of the EVCI id e.g. eMI3, gireve, external
chargingStationId	M	xsd:string	Id of the EVCI element

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_GetChargingStationAvailabilityStatusV1
/"
Content-Length: xxx
```

```
<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_GetChargingStationAvailabilityStatusRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*CPO</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*798</operatorId>
        <chargingStationIdType>gireve</chargingStationIdType>
        <chargingStationId>4984489</chargingStationId>
    </m:eMIP_ToIOP_GetChargingStationAvailabilityStatusRequest>
</soap:Body>
</soap:Envelope>
```

5.38.3   Response

Input

eMIP_ToIOP_GetChargingStationAvailabilityStatusResponse

Parameters

Attribute name		Type	Description
statusEventDate	M	xsd:dateTime	Time of the last status change
availabilityStatus	M	xsd:int	Availability status of the EVCI element
availabilityStatusUntil	O	xsd:dateTime	Time until which the given availability status is valid
availabilityStatusComment	O	xsd:string	Comment about the availability status of the EVCI element

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_GetChargingStationAvailabilityStatusResponse>
        <transactionId>TRANSACTION_46151</transactionId>
```

```
            <requestStatus>1</requestStatus>
            <statusEventDate>2015-05-30T09:00:00</statusEventDate>
            <availabilityStatus>1</availabilityStatus>
        </m:eMIP_ToIOP_GetChargingStationAvailabilityStatusResponse>
</soap:Body>
</soap:Envelope>
```

5.39 ToIOP_SetChargingStationAvailabilityStatus

5.39.1   Description

This request allows a CPO to set the attributes of a Charging Station: id and the current availability status.

5.39.2   Request

Input

eMIP_ToIOP_SetChargingStationAvailabilityStatusRequest

Parameters

Attribute name		Type	Description
chargingStationIdType	M	xsd:string	Type of the EVCI id e.g. eMI3, gireve, external
chargingStationId	M	xsd:string	Id of the EVCI element
statusEventDate	M	xsd:dateTime	Time of the status change
availabilityStatus	M	xsd:int	Availability status of the EVCI element
availabilityStatusUntil	O	xsd:dateTime	Time until which the given availability status is valid
availabilityStatusComment	O	xsd:string	Comment about the availability status of the EVCI element

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_SetChargingStationAvailabilityStatusV1
/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_SetChargingStationAvailabilityStatusRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*CPO</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*489</operatorId>
        <chargingStationIdType>gireve</chargingStationIdType>
        <chargingStationId>4984489</chargingStationId>
        <statusEventDate>2015-05-30T09:00:00</statusEventDate>
        <availabilityStatus>1</availabilityStatus>
    </m:eMIP_ToIOP_SetChargingStationAvailabilityStatusRequest>
```

```
</soap:Body>
</soap:Envelope>
```

5.39.3   Response

Input

eMIP_ToIOP_SetChargingStationAvailabilityStatusResponse

Parameters

There is no specific parameter.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
10601	Ko-Error	The Charging Pool/Station/Point/Connector is unknown
10602	Ko-Error	The Charging Pool/Station/Point/Connector is not operated by the operator requesting IOP.
10603	Ko-Error	Dynamic updates blocked for the operator or this specific EVCI. Please contact GIREVE.
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_SetChargingStationAvailabilityStatusResponse>
            <transactionId>TRANSACTION_46151</transactionId>
            <requestStatus>1</requestStatus>
    </m:eMIP_ToIOP_SetChargingStationAvailabilityStatusResponse>
</soap:Body>
</soap:Envelope>
```

5.40 ToIOP_GetEVSEAvailabilityStatus

5.40.1   Description

This request allows a CPO to get the attributes of a Charging Point: current availability status.

5.40.2   Request

Input

eMIP_ToIOP_GetEVSEAvailabilityStatusRequest

Parameters

Attribute name		Type	Description
EVSEIdType	M	xsd:string	Type of the EVCI id e.g. eMI3, gireve, external
EVSEId	M	xsd:string	Id of the EVCI element

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_GetEVSEAvailabilityStatusV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_GetEVSEAvailabilityStatusRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*CPO</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*798</operatorId>
        <EVSEIdType>eMI3</EVSEIdType>
        <EVSEId>FR*CPO*E4984489</EVSEId>
    </m:eMIP_ToIOP_GetEVSEAvailabilityStatusRequest>
</soap:Body>
</soap:Envelope>
```

5.40.3   Response

Input

eMIP_ToIOP_GetEVSEAvailabilityStatusResponse

Parameters

Attribute name		Type	Description
statusEventDate	M	xsd:dateTime	Time of the last status change
availabilityStatus	M	xsd:int	Availability status of the EVCI element
availabilityStatusUntil	O	xsd:dateTime	Time until which the given availability status is valid
availabilityStatusComment	O	xsd:string	Comment about the availability status of the EVCI element

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
Others < 10 000	Ok	Reserved for future use

Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_GetEVSEAvailabilityStatusResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
        <statusEventDate>2015-05-30T09:00:00</statusEventDate>
        <availabilityStatus>1</availabilityStatus>
    </m:eMIP_ToIOP_GetEVSEAvailabilityStatusResponse>
</soap:Body>
</soap:Envelope>
```

5.41 ToIOP_SetEVSEAvailabilityStatus

5.41.1   Description

This request allows a CPO to set the attributes of a Charging Point: id and the current availability status.

5.41.2   Request

Input

eMIP_ToIOP_SetEVSEAvailabilityStatusRequest

Parameters

Attribute name		Type	Description
EVSEIdType	M	xsd:string	Type of the EVCI id e.g. eMI3, gireve, external
EVSEId	M	xsd:string	Id of the EVCI element
statusEventDate	M	xsd:dateTime	Time of the status change
availabilityStatus	M	xsd:int	Availability status of the EVCI element
availabilityStatusUntil	O	xsd:dateTime	Time until which the given availability status is valid
availabilityStatusComment	O	xsd:string	Comment about the availability status of the EVCI element

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_SetEVSEAvailabilityStatusV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
```

```
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_SetEVSEAvailabilityStatusRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*CPO</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*489</operatorId>
        <EVSEIdType>eMI3</EVSEIdType>
        <EVSEId>FR*489*E4984489</EVSEId>
        <statusEventDate>2015-05-30T09:00:00</statusEventDate>
        <availabilityStatus>1</availabilityStatus>
    </m:eMIP_ToIOP_SetEVSEAvailabilityStatusRequest>
</soap:Body>
</soap:Envelope>
```

5.41.3   Response

Input

eMIP_ToIOP_SetEVSEAvailabilityStatusResponse

Parameters

There is no specific parameter.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
10601	Ko-Error	The Charging Pool/Station/Point/Connector is unknown
10602	Ko-Error	The Charging Pool/Station/Point/Connector is not operated by the requestor
10603	Ko-Error	Dynamic updates blocked for the operator or this specific EVCI. Please contact GIREVE.
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_SetEVSEAvailabilityStatusResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
    </m:eMIP_ToIOP_SetEVSEAvailabilityStatusResponse>
</soap:Body>
</soap:Envelope>
```

5.42 ToIOP_GetEVSEBusyStatus

5.42.1 Description

This request allows a CPO to get the attributes of a Charging Point: the current busy status.

5.42.2 Request

Input

eMIP_ToIOP_GetEVSEBusyStatusRequest

Parameters

Attribute name		Type	Description
EVSEIdType	M	xsd:string	Type of the EVCI id e.g. eMI3, gireve, external
EVSEId	M	xsd:string	Id of the EVCI element

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_GetEVSEBusyStatusV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
     <m:eMIP_ToIOP_GetEVSEBusyStatusRequest>
          <transactionId>TRANSACTION_46151</transactionId>
          <partnerIdType>eMI3</partnerIdType>
          <partnerId>FR*CPO</partnerId>
          <operatorIdType>eMI3</operatorIdType>
          <operatorId>FR*798</operatorId>
          <EVSEIdType>eMI3</EVSEIdType>
          <EVSEId>FR*CPO*E4984489</EVSEId>
     </m:eMIP_ToIOP_GetEVSEBusyStatusRequest>
</soap:Body>
</soap:Envelope>
```

5.42.3 Response

Input

eMIP_ToIOP_GetEVSEBusyStatusResponse

Parameters

Attribute name		Type	Description
statusEventDate	M	xsd:dateTime	Time of the last status change
busyStatus	M	xsd:int See 7.8 BusyStatusValue	Busy status of the EVSE
busyStatusUntil	O	xsd:dateTime	Time until which the given busy status is valid
busyStatusComment	O	xsd:string	Comment about the busy status of the EVSE

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_GetEVSEBusyStatusResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
        <statusEventDate>2015-05-30T09:00:00</statusEventDate>
        <busyStatus>2</busyStatus>
    </m:eMIP_ToIOP_GetEVSEBusyStatusResponse>
</soap:Body>
</soap:Envelope>
```

5.43 ToIOP_SetEVSEBusyStatus

5.43.1 Description

This request allows a CPO to set the attributes of a Charging Point: id and the current busy status.

5.43.2 Request

Input
eMIP_ToIOP_SetEVSEAvailabilityStatusRequest

Parameters

Attribute name		Type	Description
EVSEIdType	M	xsd:string	Type of the EVCI id e.g. eMI3, gireve, external
EVSEId	M	xsd:string	Id of the EVCI element
statusEventDate	M	xsd:dateTime	Time of the status change
busyStatus	M	xsd:int See 7.8 BusyStatusValue	Busy status of the EVSE
busyStatusUntil	O	xsd:dateTime	Time until which the given busy status is valid
busyStatusComment	O	xsd:string	Comment about the busy status of the EVSE

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_SetEVSEBusyStatusV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_SetEVSEBusyStatusRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*CPO</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*489</operatorId>
        <EVSEIdType>eMI3</EVSEIdType>
        <EVSEId>FR*489*E4984489</EVSEId>
        <statusEventDate>2015-05-30T09:00:00</statusEventDate>
        <busyStatus>1</busyStatus>
    </m:eMIP_ToIOP_SetEVSEBusyStatusRequest>
</soap:Body>
</soap:Envelope>
```

5.43.3   Response

Input

eMIP_ToIOP_SetEVSEBusyStatusResponse

Parameters

There is no specific parameter.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
10601	Ko-Error	The Charging Pool/Station/Point/Connector is unknown
10602	Ko-Error	The Charging Pool/Station/Point/Connector is not operated by the requestor
10603	Ko-Error	Dynamic updates blocked for the operator or this specific EVCI. Please contact GIREVE.
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
```

```
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_SetEVSEBusyStatusResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
    </m:eMIP_ToIOP_SetEVSEBusyStatusResponse>
</soap:Body>
</soap:Envelope>
```

5.44 ToIOP_GetEVSESyntheticStatus

5.44.1 Description

This request allows a CPO to get the attributes of a Charging Point: the current availability, busy and usability status. The usability status aggregates charging pool, station and point availability status and the charging point busy status.

5.44.2 Request

Input

eMIP_ToIOP_GetEVSESyntheticStatusRequest

Parameters

Attribute name		Type	Description
EVSEIdType	M	xsd:string	Type of the EVCI id e.g. eMI3, gireve, external
EVSEId	M	xsd:string	Id of the EVCI element

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_GetEVSESyntheticStatusV1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_GetEVSESyntheticStatusRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*CPO</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*798</operatorId>
        <EVSEIdType>eMI3</chargingPoolIdType>
        <EVSEId>FR*798*E4984489</chargingPoolId>
    </m:eMIP_ToIOP_GetEVSESyntheticStatusRequest>
</soap:Body>
</soap:Envelope>
```

5.44.3 Response

Input

eMIP_ToIOP_GetEVSESyntheticStatusResponse

Parameters

Attribute name		Type	Description
availabilityStatusEventDate	M	xsd:dateTime	Time of the last availability status change
availabilityStatus	M	xsd:int	Availability status of the EVCI element
availabilityStatusUntil	O	xsd:dateTime	Time until which the given availability status is valid
availabilityStatusComment	O	xsd:string	Comment about the availability status of the EVCI element
busyStatusEventDate	M	xsd:dateTime	Time of the last busy status change
busyStatus	M	xsd:int See 7.8 BusyStatusValue	Busy status of the EVSE
busyStatusUntil	O	xsd:dateTime	Time until which the given busy status is valid
busyStatusComment	O	xsd:string	Comment about the busy status of the EVSE
useabilityStatusEventDate	M	xsd:dateTime	Time of the last usability status change
useabilityStatus	M	xsd:int See 7.8 BusyStatusValue	Busy status of the EVSE
useabilityStatusUntil	O	xsd:dateTime	Time until which the given usability status is valid
useabilityStatusComment	O	xsd:string	Comment about the usability status of the EVSE

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT


<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_GetEVSESyntheticStatusResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
```

```
            <availabilityStatusEventDate>2015-05-
30T09:00:00</availabilityStatusEventDate>
            <availabilityStatus>1</availabilityStatus>
            <busyStatusEventDate>2015-05-30T09:00:00</busyStatusEventDate>
            <busyStatus>1</busyStatus>
            <useabilityStatusEventDate>2015-05-
30T09:00:00</useabilityStatusEventDate>
            <useabilityStatus>1</useabilityStatus>
        </m:eMIP_ToIOP_GetEVSESyntheticStatusResponse>
</soap:Body>
</soap:Envelope>
```

5.45 ToIOP_GetChargingConnectorAvailabilityStatus

This message doesn't exist in eMIP 0.7.4

5.45.1 Description

This request allows a CPO to get the attributes of a Charging Connector: the current availability status.

5.45.2 Request

Input

eMIP_ToIOP_GetChargingConnectorAvailabilityStatusRequest

Parameters

Attribute name		Type	Description
chargingConnectorIdType	M	xsd:string	Type of the EVCI id e.g. eMI3, gireve, external
chargingConnectorId	M	xsd:string	Id of the EVCI element

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_GetChargingConnectorAvailabilityStatus
V1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_GetChargingConnectorAvailabilityStatusRequest>
            <transactionId>TRANSACTION_46151</transactionId>
            <partnerIdType>eMI3</partnerIdType>
            <partnerId>FR*CPO</partnerId>
            <operatorIdType>eMI3</operatorIdType>
            <operatorId>FR*798</operatorId>
            <chargingConnectorIdType>external</chargingConnectorIdType>

    <chargingConnectorId>FR138X1ETG5578567YU1D</chargingConnectorId>
    </m:eMIP_ToIOP_GetChargingConnectorAvailabilityStatusRequest>
</soap:Body>
</soap:Envelope>
```

5.45.3 Response

Input

eMIP_ToIOP_GetChargingConnectorAvailabilityStatusResponse

Parameters

Attribute name		Type	Description
statusEventDate	M	xsd:dateTime	Time of the last status change
availabilityStatus	M	xsd:int	Availability status of the EVCI element
availabilityStatusUntil	O	xsd:dateTime	Time until which the given availability status is valid
availabilityStatusComment	O	xsd:string	Comment about the availability status of the EVCI element

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_GetChargingConnectorAvailabilityStatusResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
        <statusEventDate>2015-05-30T09:00:00</statusEventDate>
        <availabilityStatus>1</availabilityStatus>
    </m:eMIP_ToIOP_GetChargingConnectorAvailabilityStatusResponse>
</soap:Body>
</soap:Envelope>
```

5.46 ToIOP_SetChargingConnectorAvailabilityStatus

5.46.1 Description

This request allows a CPO to set the attributes of a Charging Connector: id and the current availability status.

5.46.2 Request

Input

eMIP_ToIOP_SetChargingConnectorAvailabilityStatusRequest

Parameters

Attribute name		Type	Description
chargingConnectorIdType	M	xsd:string	Type of the EVCI id e.g. eMI3, gireve, external
chargingConnectorId	M	xsd:string	Id of the EVCI element
statusEventDate	M	xsd:dateTime	Time of the status change
availabilityStatus	M	xsd:int	Availability status of the EVCI element
availabilityStatusUntil	O	xsd:dateTime	Time until which the given availability status is valid
availabilityStatusComment	O	xsd:string	Comment about the availability status of the EVCI element

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_SetChargingConnectorAvailabilityStatus
V1/"
Content-Length: xxx

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_SetChargingConnectorAvailabilityStatusRequest>
        <transactionId>TRANSACTION_46151</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>FR*CPO</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>FR*489</operatorId>
        <chargingConnectorIdType>external</chargingConnectorIdType>

    <chargingConnectorId>FR138X1ETG5578567YU1D</chargingConnectorId>
        <statusEventDate>2015-05-30T09:00:00</statusEventDate>
        <availabilityStatus>1</availabilityStatus>
    </m:eMIP_ToIOP_SetChargingConnectorAvailabilityStatusRequest>
</soap:Body>
</soap:Envelope>
```

5.46.3 Response

Input

eMIP_ToIOP_SetChargingConnectorAvailabilityStatusResponse

Parameters

There is no specific parameter.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
10601	Ko-Error	The Charging Pool/Station/Point/Connector is unknown
10602	Ko-Error	The Charging Pool/Station/Point/Connector is not operated by the requestor
10603	Ko-Error	Dynamic updates blocked for the operator or this specific EVCI. Please contact GIREVE.
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
<soap:Header />
<soap:Body xmlns:m="https://api-iop.gireve.com/schemas/EVCIDynamicV1/">
    <m:eMIP_ToIOP_SetChargingConnectorAvailabilityStatusResponse>
        <transactionId>TRANSACTION_46151</transactionId>
        <requestStatus>1</requestStatus>
    </m:eMIP_ToIOP_SetChargingConnectorAvailabilityStatusResponse>
</soap:Body>
</soap:Envelope>
```

5.47 ToIOP_DeleteAllAuthenticationData

5.47.1   Description

Delete, in IOP, all white list entries of the eMSP that request.

5.47.2   Request

Input

eMIP_ToIOP_ DeleteAllAuthenticationDataRequest

Parameters

There are no specific parameters.

Example

```
POST /api/emip HTTP/1.1
Content-Type: application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_ToIOP_DeleteAllAuthenticationDataV1/"
Content-Length: xxx

<?xml version="1.0" encoding="utf-8"?>
<env:Envelope
  xmlns:env="http://www.w3.org/2003/05/soap-envelope"
  xmlns:ns1="https://api-iop.gireve.com/schemas/AuthorisationV1/">
  <env:Body>
    <ns1:eMIP_ToIOP_DeleteAllAuthenticationDataRequest>
```

```
        <transactionId>azertyuiop</transactionId>
        <partnerIdType>eMI3</partnerIdType>
        <partnerId>XX*XXX</partnerId>
        <operatorIdType>eMI3</operatorIdType>
        <operatorId>XX*XXX</operatorId>
    </ns1:eMIP_ToIOP_DeleteAllAuthenticationDataRequest>
  </env:Body>
</env:Envelope>
```

5.47.3   Response

Input

eMIP_ToIOP_DeleteAllAuthenticationDataResponse

Parameters

Attribute name		Type	Description
deletedRecordsCount	O	xsd:string	Count of deleted white list entries

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
10212	Ko-Error	Only eMSPs can update their white list

Example

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset=utf-8
Content-Length: xxx
Date: Thu, 20 Mar 2014 16:01:31 GMT

<?xml version="1.0" encoding="utf-8"?>
<soapenv:Envelope
  xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope">
  <soapenv:Body>
    <com:eMIP_ToIOP_DeleteAllAuthenticationDataResponse
      xmlns:com="https://api-iop.gireve.com/schemas/AuthorisationV1/">
      <transactionId>azertyuiop</transactionId>
      <deletedRecordsCount>8206</deletedRecordsCount>
      <requestStatus>1</requestStatus>
    </com:eMIP_ToIOP_DeleteAllAuthenticationDataResponse>
  </soapenv:Body>
</soapenv:Envelope>
```

5.48 FromIOP_SetExtendedChargeDetailRecord

5.48.1   Description

Send the charge detail record completed by "Check" information and optionally "Bill" information.

5.48.2   Request

Input

eMIP_FromIOP_SetExtendedChargeDetailRecordRequest

Parameters

Attribute name		Type	Description
targetOperatorIdType	M	xsd:string	Type of the eMSP id
targetOperatorId	M	xsd:string	eMSP id
chargeDetailRecord	M	iopauth:ChargeDetailRecord	Information record about the charging session.
checkResultList	M	List of iopauth:CheckResult See 7.49 CheckResult	Result of Check treatments done by GIREVE for this CDR.
billResultList	M	List of iopauth:BillResult See 7.50 BillResult	Result of Bill treatments done by GIREVE for this CDR.
additonalInfoList	M	List of iopauth:AdditonalInfo See 7.55 AdditionalInfo	Additional information added by GIREVE for this CDR.

Example

```
[VERB: POST], [HEADERS: {cache-control:no-cache}{content-
type:application/soap+xml; charset=UTF-8; action="https://api-
iop.gireve.com/services/eMIP_FromIOP_SetExtendedChargeDetailRecordV1/"}{c
onnection:close}{host:localhost:7002}{transfer-
encoding:chunked}{accept:text/html, image/gif, image/jpeg, *; q=.2, */*;
q=.2}{User-Agent:IoP/SslProxy}{pragma:no-cache}] [BODY:
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
  xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope">
  <soapenv:Body>
    <ns:eMIP_FromIOP_SetExtendedChargeDetailRecordRequest
      xmlns:ns="https://api-iop.gireve.com/schemas/AuthorisationV1/">
      <transactionId>IOP-TID-GIR-V-IOPQUA01-2a58b024-086b-493f-9f27-
cf07056ea889</transactionId>
      <partnerIdType>eMI3</partnerIdType>
      <partnerId>FR*XXX</partnerId>
      <operatorIdType>eMI3</operatorIdType>
      <operatorId>FR*YYY</operatorId>
      <targetOperatorIdType>eMI3</targetOperatorIdType>
      <targetOperatorId>FR*ZZZ</targetOperatorId>
      <chargeDetailRecord>
        <CDRNature>1</CDRNature>
        <serviceSessionId>dbe4e73a-774e-4a11-853c-
3b2143fefe76</serviceSessionId>
        <execPartnerSessionId></execPartnerSessionId>
        <execPartnerOperatorIdType>eMI3</execPartnerOperatorIdType>
        <execPartnerOperatorId>FR*YYY</execPartnerOperatorId>
        <salePartnerSessionId>PSSID_cdr_Def-20190328-
151422797</salePartnerSessionId>
        <salePartnerOperatorIdType>eMI3</salePartnerOperatorIdType>
        <salePartnerOperatorId>FR*ZZZ</salePartnerOperatorId>
        <requestedServiceId>1</requestedServiceId>
        <EVSEIdType>eMI3</EVSEIdType>
        <EVSEId>FR*XXX*E1</EVSEId>
        <userContractIdAlias>toto01</userContractIdAlias>
```

```
            <userIdType>RFID-UID</userIdType>
            <userId>0101010101</userId>
            <partnerProductId></partnerProductId>
            <startTime>2019-03-25T10:00:00Z</startTime>
            <endTime>2019-03-25T11:00:00Z</endTime>
            <meterReportList>
              <meterReport>
                <meterTypeId>2</meterTypeId>
                <meterValue>0,000001</meterValue>
                <meterUnit>kWh</meterUnit>
              </meterReport>
              <meterReport>
                <meterTypeId>1.0</meterTypeId>
                <meterValue>3600</meterValue>
                <meterUnit>s</meterUnit>
              </meterReport>
            </meterReportList>
          </chargeDetailRecord>
          <checkResultList>
            <checkResult>
              <descriptionList></descriptionList>
              <nature>2</nature>
              <status>1</status>
            </checkResult>
            <checkResult>
              <descriptionList></descriptionList>
              <nature>1</nature>
              <status>1</status>
            </checkResult>
          </checkResultList>
          <billResultList>
            <billResult>
              <descriptionList></descriptionList>
              <nature>1</nature>
              <status>1</status>
              <recommended>2</recommended>
              <amount>60</amount>
              <currency>EUR</currency>
            </billResult>
          </billResultList>
        </ns:eMIP_FromIOP_SetExtendedChargeDetailRecordRequest>
    </soapenv:Body>
</soapenv:Envelope>]
```

5.48.3   Response

Input

eMIP_FromIOP_SetExtendedChargeDetailRecordResponse

Parameters

There are no specific parameters.

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion

701	Ok-Warning	eMSP doesn't accept this final CDR because one has already been received for this session (optional)
702	Ok-Warning	eMSP doesn't accept this final CDR because of inconsistent data (optional)
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
[VERB: POST], [CODE: 200], [HEADERS: {null:HTTP/1.1 200 OK}{Content-
Length:475}{Connection:close}{Content-
Type:application/soap+xml;charset=UTF-8}{Server:Jetty(6.1.26)}] [BODY:
<soap:Envelope
  xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
  xmlns:aut="https://api-iop.gireve.com/schemas/AuthorisationV1/">
  <soap:Header/>
  <soap:Body>
    <aut:eMIP_FromIOP_SetExtendedChargeDetailRecordResponse>
      <transactionId>IOP-TID-GIR-V-IOPQUA01-2a58b024-086b-493f-9f27-
cf07056ea889</transactionId>
      <requestStatus>1</requestStatus>
    </aut:eMIP_FromIOP_SetExtendedChargeDetailRecordResponse>
  </soap:Body>
</soap:Envelope>]
```

5.49 eMIP_ToIOP_SetBookingChargingPoolOrEVSE

5.49.1 Description

This webservice is used by an eMSP of booking (eMSPb) to book a given EVSE or whatever eVSE of a Charging Pool. The eMSP of booking does the booking for a customer of an eMSP of « access/payment ».

5.49.2 Request

Input

eMIP_ToIOP_ SetBookingChargingPoolOrEVSERequest

Parameters

Attribute name		Type	Description
transactionId	O	string	Transaction id (for Traceability)
partnerIdType	M	string	Enum. ("eMI3","gireve", etc ...)
partnerId	M	string	Id of the Partner that requests
operatorIdType	M	string	Enum. ("eMI3","gireve", etc ...)
operatorId	M	string	Id of the Operator that requests
bookingActors	M	List of actorsDescription See 7.56 actorsDescriptionType	List of operators involved in this booking
bookPartnerBookingId	M	string	Id, for the eMSPb, of this booking action
userIdList	O	List of UserDescription	Identifiers of the driver (RFID-UID, eMA, …)

		See 7.57 UserDescriptionType	
bookingChargeService	M!	Description of the ChargeService See 7.60 chargeServiceRequest	One of these 2 data structures is mandatory. 1 and only 1
bookingChargeNeed	M!	Description of the ChargeNeed See 7.62 chargeNeedRequest	
chargingPoolIdType	M	string	Enum. ("eMI3","gireve", etc ...)
chargingPoolId	M	string	Id of the reserved charging pool
EVSEIdType	O	string	Enum. ("eMI3","gireve", etc ...)
EVSEId	O	string	Id of the reserved EVSE
expiryDate	M	DateTime	The limit date, requested by eMSPb, for the driver to reach and identify himself on the EVSE

Example

```
[VERB: POST], [HEADERS: {Transfer-
Encoding:chunked}{iop.mediation.sender:iop_common_mediate_seq}{Host:local
host:7001}{X-Forwarded-For:95.130.157.50}{User-Agent:Synapse-
HttpComponents-NIO{Connection:Close}{Content-Type:application/soap+xml;
charset=utf-8; action="https://api-
iop.gireve.com/services/SetBookingChargingPoolOrEVSEV1/"}{iop.mediation.c
alleduri:/services}], [PARAMS: ], [BODY:
<?xml version="1.0" encoding="utf-8"?>
<env:Envelope
  xmlns:env="http://www.w3.org/2003/05/soap-envelope"
  xmlns:ns1="https://api-iop.gireve.com/schemas/BookingV1/">
  <env:Body>
    <ns1:eMIP_ToIOP_SetBookingChargingPoolOrEVSERequest>
      <transactionId>ca9ebc29-1dde-4553-a275-78189c55cd9b</transactionId>
      <partnerIdType>eMI3</partnerIdType>
      <partnerId>FR*XXX</partnerId>
      <operatorIdType>eMI3</operatorIdType>
      <operatorId>FR*YYY</operatorId>
      <bookingActors>
        <actorDescription>
          <actorIdType>eMI3</actorIdType>
          <actorId>FR*AAA</actorId>
          <actorType>1</actorType>
        </actorDescription>
        <actorDescription>
          <actorIdType>eMI3</actorIdType>
          <actorId>FR*YYY</actorId>
          <actorType>2</actorType>
        </actorDescription>
        <actorDescription>
          <actorIdType>eMI3</actorIdType>
          <actorId>FR*YYY</actorId>
          <actorType>3</actorType>
        </actorDescription>
      </bookingActors>
```

```
        <bookPartnerBookingId>e4004900-2e11-4ee6-9d9d-
9672579a1a6f</bookPartnerBookingId>
      <userIdList>
        <userDescription>
          <userIdType>RFID-UID</userIdType>
          <userId>XXXXXXX</userId>
        </userDescription>
      </userIdList>
      <bookingChargeService>
        <cableList></cableList>
        <arrivalDateTime>2019-03-05T10:32:28+00:00</arrivalDateTime>
        <requestedServiceId>1</requestedServiceId>
      </bookingChargeService>
      <chargingPoolIdType>eMI3</chargingPoolIdType>
      <chargingPoolId>5029</chargingPoolId>
      <EVSEIdType>eMI3</EVSEIdType>
      <EVSEId>FR*AAA*E1305</EVSEId>
      <expiryDate>2019-03-05T10:32:28+00:00</expiryDate>
    </ns1:eMIP_ToIOP_SetBookingChargingPoolOrEVSERequest>
  </env:Body>
</env:Envelope>]
```

5.49.3   Response

Input

eMIP_ToIOP_ SetBookingChargingPoolOrEVSEResponse

Parameters

Attribute name	Type		Description
transactionId	M	String	Transaction id (for Traceability)
bookingConfirmation	M	Integer	Enum. (1=Ok,2=KO ...) (see 7.65 LOV bookingConfirmation)
bookingId	M	String	Unique Id generated by IOP to identify this booking act
expiryDate	M	DateTime	The limit date for the driver to reach and identify himself on the EVSE. Normally greater or equal than the one requested by eMSPb
EVSEIdType	O	String	Enum. ("eMI3","gireve", etc ...)
EVSEId	O	String	Id of the reserved EVSE
bookingChargeServiceResponse	O	chargeServiceResponse See 7.61 chargeServiceResponse	Response to a chargeServiceRequest. Not mandatory if no information needed.
bookingChargeNeedResponse	O	chargeNeedResponse See 7.63 chargeNeedResponse	Response to a chargeNeedRequest. Not mandatory if no information needed.
requestStatus	M	Integer	Request status (Ok, KO + error code)

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
711	Ok-Warning	ChargingPool/EVSE is not bookable
712	Ok-Warning	No available EVSE to be booked
713	Ok-Warning	Request incompatible with CPO requirements (no reservation in the future, don't support multiple userIds, …)
10701	Ko-Error	bookPartnerBookingId must be unique
10715	Ko-Error	Technical error during request to CPO
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
[CODE:200], [HEADERS: {Date:Thu, 18 Apr 2019 10:18:07 GMT}{Content-
Length:263}{Content-Type:application/soap+xml;charset=UTF-8}{Server:WSO2
Carbon Server}], [BODY:
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope
  xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
  <soap:Body>
    <book:eMIP_ToIOP_SetBookingChargingPoolOrEVSEResponse
      xmlns:book="https://api-iop.gireve.com/schemas/BookingV1/">
      <transactionId>20181128_TestBk_TF3</transactionId>
      <bookingConfirmation>1</bookingConfirmation>
      <bookingId>IOP-BID-GIR-V-IOPQUA01-634cedc6-27b9-411d-aa6f-
8510be04136c</bookingId>
      <expiryDate>2019-04-18T12:18:07+01:00</expiryDate>
      <EVSEIdType>eMI3</EVSEIdType>
      <EVSEId>FR*AAA*E1305</EVSEId>
      <bookingChargeServiceResponse>
        <cableList></cableList>
        <arrivalDateTime>2019-04-18T12:18:07+01:00</arrivalDateTime>
      </bookingChargeServiceResponse>
      <requestStatus>1</requestStatus>
    </book:eMIP_ToIOP_SetBookingChargingPoolOrEVSEResponse>
  </soap:Body>
</soap:Envelope>]
```

5.50 eMIP_FromIOP_SetBookingChargingPoolOrEVSE

5.50.1 Description

This webservice is used by IOP to transfer the booking request from an eMSPb to a CPO.

5.50.2 Request

Input

eMIP_FromIOP_ SetBookingChargingPoolOrEVSERequest

Parameters

Attribute name		Type	Description
transactionId	O	string	Transaction id (for Traceability)
partnerIdType	M	string	Enum. ("eMI3","gireve", etc ...)
partnerId	M	string	Id of the Partner that requests
operatorIdType	M	string	Enum. ("eMI3","gireve", etc ...)
operatorId	M	string	Id of the Operator that requests
targetOperatorIdType	M	String	Enum. ("eMI3","gireve", etc ...)
targetOperatorId	M	string	Id of the Operator targeted by this request
bookingActors	M	List of actorsDescription See 7.56 actorsDescriptionType	List of operators involved in this booking
bookingId	M	string	Unique Id generated by IOP to identify this booking act
userIdList	O	List of UserDescription See 7.57 UserDescriptionType	Identifiers of the driver (RFID-UID, eMA, …)
bookingChargeService	M!	Description of the ChargeService See 7.60 chargeServiceRequest	One of these 2 data structures is mandatory. 1 and only 1
bookingChargeNeed	M!	Description of the ChargeNeed See 7.62 chargeNeedRequest	
chargingPoolIdType	M	String	Enum. ("eMI3","gireve", etc ...)
chargingPoolId	M	string	Id of the charging pool where reserve
EVSEIdType	O	string	Enum. ("eMI3","gireve", etc ...)
EVSEId	O	string	Id of the reserved EVSE
expiryDate	M	DateTime	The duration, requested by eMSPb, for the driver to reach and identify himself on the EVSE

Example

```
[VERB: POST], [HEADERS: {Transfer-
Encoding:chunked}{iop.mediation.sender:iop_common_mediate_seq}{Host:local
host:7001}{X-Forwarded-For:95.130.157.50}{User-Agent:Synapse-
HttpComponents-NIO{Connection:Close}{Content-Type:application/soap+xml;
charset=utf-8; action="https://api-
iop.gireve.com/services/SetBookingChargingPoolOrEVSEV1/"}{iop.mediation.c
alleduri:/services}], [PARAMS: ], [BODY:
<?xml version="1.0" encoding="utf-8"?>
<env:Envelope
  xmlns:env="http://www.w3.org/2003/05/soap-envelope"
  xmlns:ns1="https://api-iop.gireve.com/schemas/BookingV1/">
```

```
  <env:Body>
    <ns1:eMIP_FromIOP_SetBookingChargingPoolOrEVSERequest>
      <transactionId>ca9ebc29-1dde-4553-a275-78189c55cd9b</transactionId>
      <partnerIdType>eMI3</partnerIdType>
      <partnerId>FR*107</partnerId>
      <operatorIdType>eMI3</operatorIdType>
      <operatorId>FR*YYY</operatorId>
      <targetOperatorIdType>eMI3</operatorIdType>
      <targetOperatorId>FR*AAA</operatorId>

      <bookingActors>
        <actorDescription>
          <actorIdType>eMI3</actorIdType>
          <actorId>FR*AAA</actorId>
          <actorType>1</actorType>
        </actorDescription>
        <actorDescription>
          <actorIdType>eMI3</actorIdType>
          <actorId>FR*YYY</actorId>
          <actorType>2</actorType>
        </actorDescription>
        <actorDescription>
          <actorIdType>eMI3</actorIdType>
          <actorId>FR*YYY</actorId>
          <actorType>3</actorType>
        </actorDescription>
      </bookingActors>
      <bookPartnerBookingId>e4004900-2e11-4ee6-9d9d-
9672579a1a6f</bookPartnerBookingId>
      <userIdList>
        <userDescription>
          <userIdType>RFID-UID</userIdType>
          <userId>XXXXXXX</userId>
        </userDescription>
      </userIdList>
      <bookingChargeService>
        <cableList></cableList>
        <arrivalDateTime>2019-03-05T10:32:28+00:00</arrivalDateTime>
        <requestedServiceId>1</requestedServiceId>
      </bookingChargeService>
      <chargingPoolIdType>eMI3</chargingPoolIdType>
      <chargingPoolId>5029</chargingPoolId>
      <EVSEIdType>eMI3</EVSEIdType>
      <EVSEId>FR*AAA*E1305</EVSEId>
      <expiryDate>2019-03-05T10:32:28+00:00</expiryDate>
    </ns1:eMIP_FromIOP_SetBookingChargingPoolOrEVSERequest>
  </env:Body>
</env:Envelope>]
```

5.50.3   Response

Input
eMIP_FromIOP_SetBookingChargingPoolOrEVSEResponse

Parameters

Attribute name	Type	Description

transactionId	M	String	Transaction id (for Traceability)
bookingConfirmation	M	Integer	Enum. (1=Ok,2=KO ...) (see 7.65 LOV bookingConfirmation)
execPartnerBookingId	O	String	Unique Id generated by the CPO to identify this booking act. Should not be empty if booking confirmed.
expiryDate	M	DateTime	The duration for the driver to reach and identify himself on the EVSE. Normally greater or equal than the one requested by eMSPb
EVSEIdType	O	String	Enum. ("eMI3","gireve", etc ...)
EVSEId	O	String	Id of the reserved EVSE
bookingChargeServiceResponse	O	chargeServiceResponse See 7.61 chargeServiceResponse	Response to a chargeServiceRequest. Not mandatory if no information needed.
bookingChargeNeedResponse	O	chargeNeedResponse See 7.63 chargeNeedResponse	Response to a chargeNeedRequest. Not mandatory if no information needed.
requestStatus	M	Integer	Request status (Ok, KO + error code)

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
711	Ok-Warning	ChargingPool/EVSE is not bookable
712	Ok-Warning	No free EVSE to book
713	Ok-Warning	Request incompatible with CPO requirements (no reservation in the future, don't support multiple userIds, …)
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

```
[CODE:200], [HEADERS: {Date:Thu, 18 Apr 2019 10:18:07 GMT}{Content-
Length:263}{Content-Type:application/soap+xml;charset=UTF-8}{Server:WSO2
Carbon Server}], [BODY:
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope
  xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
  <soap:Body>
    <book:eMIP_FromIOP_SetBookingChargingPoolOrEVSEResponse
      xmlns:book="https://api-iop.gireve.com/schemas/BookingV1/">
      <transactionId>20181128_TestBk_TF3</transactionId>
      <bookingConfirmation>1</bookingConfirmation>
      <execPartnerBookingId>IOP-BID-GIR-V-IOPQUA01-634cedc6-27b9-411d-
aa6f-8510be04136c</execPartnerBookingId>
      <expiryDate>2019-04-18T12:18:07+01:00</expiryDate>
      <EVSEIdType>eMI3</EVSEIdType>
      <EVSEId>FR*AAA*E1305</EVSEId>
      <bookingChargeServiceResponse>
        <cableList></cableList>
        <arrivalDateTime>2019-04-18T12:18:07+01:00</arrivalDateTime>
      </bookingChargeServiceResponse>
      <requestStatus>1</requestStatus>
    </book:eMIP_FromIOP_SetBookingChargingPoolOrEVSEResponse>
  </soap:Body>
</soap:Envelope>]
```

5.51 eMIP_ToIOP_SetBookingEventReport

5.51.1 Description

This webservice is used by a CPO to inform eMSP and eMSPb about a booking event.

5.51.2 Request

Input

eMIP_ToIOP_SetBookingEventReportRequest

Parameters

Attribute name		Type	Description
transactionId	O	String	Transaction id (for Traceability)
partnerIdType	M	String	Enum. ("eMI3","gireve",etc ...)
partnerId	M	String	Operator Id that requests
operatorIdType	M	String	Enum. ("eMI3","gireve",etc ...)
operatorId	M	String	Operator Id that requests
bookingId	O!	String	Gireve booking Id (Gireve manages bookingId: CPO, eMSP, Gireve)
execPartnerBookingId	O!	String	CPO booking Id
bookingEvent	M	bookingEventType See 7.59 bookingEventType	Description de l évènement

Example

```
[CODE:200], [HEADERS: {Date:Thu, 18 Apr 2019 10:18:07 GMT}{Content-
Length:263}{Content-Type:application/soap+xml;charset=UTF-8}{Server:WSO2
Carbon Server}], [BODY:
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope
  xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
  xmlns:book="https://api-iop.gireve.com/schemas/BookingV1/">
  <soap:Body>
    <book:eMIP_ToIOP_SetBookingEventReportRequest>
      <!--Optional:-->
      <transactionId>20170106_SetBkEvReport_TF26</transactionId>
      <partnerIdType>eMI3</partnerIdType>
      <partnerId>FR*XXX</partnerId>
      <operatorIdType>eMI3</operatorIdType>
      <operatorId>FR*AAA</operatorId>
      <!--Optional:-->
      <bookingId>IOP-BID-GIR-V-IOPQUA01-ecd4d3e5-9c31-48ee-b561-
3fcb3d3abe4e</bookingId>
      <bookingEvent>
        <bookingEventNature>20</bookingEventNature>
        <bookingEventDateTime>2017-01-01T12:00:00Z</bookingEventDateTime>
      </bookingEvent>
    </book:eMIP_ToIOP_SetBookingEventReportRequest>
  </soap:Body>
</soap:Envelope>]
```

5.51.3   Response

Input

eMIP_ToIOP_SetBookingEventReportResponse

Parameters

Attribute name	Type		Description
transactionId	M	String	Transaction id (for Traceability)
bookingEventId	M	String	Unique Id of the bookingEvent (calculated by IOP)
requestStatus	M	Integer	Request status (Ok, KO + error code)

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
751	Ok-Warning	eMSP(b) doesn't know this bookingEventNature
10711	Ko-Error	Booking reference is not valid
10751	Ko-Error	Technical error during request to eMSP(b)
Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
[CODE:200], [HEADERS: {Date:Thu, 18 Apr 2019 10:18:07 GMT}{Content-
Length:263}{Content-Type:application/soap+xml;charset=UTF-8}{Server:WSO2
Carbon Server}], [BODY:
<?xml version="1.0" encoding="utf-8"?>
<soapenv:Envelope
  xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope">
  <soapenv:Body>
    <aut:eMIP_ToIOP_SetBookingEventReportResponse
      xmlns:aut="https://api-iop.gireve.com/schemas/BookingV1/">
      <transactionId>20170106_SetBkEvReport_TF26</transactionId>
      <bookingEventId>IOP-BEM-GIR-V-IOPQUA01-bc14dd03-4aaa-447b-911f-
324b8b5a56ca</bookingEventId>
      <requestStatus>1</requestStatus>
    </aut:eMIP_ToIOP_SetBookingEventReportResponse>
  </soapenv:Body>
</soapenv:Envelope>]
```

5.52 eMIP_FromIOP_SetBookingEventReport

5.52.1 Description

This webservice is used by IOP to transfer to eMSP and eMSPb a booking event sent by a CPO.

5.52.2 Request

Input

eMIP_FromIOP_SetBookingEventReportRequest

Parameters

Attribute name		Type	Description
transactionId	O	String	Transaction id (for Traceability)
partnerIdType	M	String	Enum. ("eMI3","gireve",etc ...)
partnerId	M	String	Operator Id that requests
operatorIdType	M	String	Enum. ("eMI3","gireve",etc ...)
operatorId	M	String	Operator Id that requests
targetOperatorIdType	M	String	Enum. ("eMI3","gireve", etc ...)
targetOperatorId	M	string	Id of the Operator targeted by this request
bookingId	O!	String	Gireve booking Id (Gireve manages bookingId: CPO, eMSP, Gireve)
salePartnerBookingId	O!	String	eMSP booking Id
bookPartnerBookingId	O!	String	eMSPb booking Id
bookingEvent	M	bookingEventType See 7.59 bookingEventType	Description de l'évènement

Example

```
[VERB: POST], [HEADERS: {content-type:application/soap+xml; charset=UTF-
8; action="https://api-
iop.gireve.com/services/eMIP_FromIOP_SetBookingEventReportV1/"}{connectio
n:close}{host:localhost:7002}{transfer-encoding:chunked}{User-
Agent:IoP/SslProxy}] [BODY:
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
  xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope">
  <soapenv:Body>
    <aut:eMIP_FromIOP_SetBookingEventReportRequest
      xmlns:aut="https://api-iop.gireve.com/schemas/BookingV1/">
      <transactionId>IOP-TID-GIR-V-IOPQUA01-81e60294-7332-404d-b0dc-
3fda5a7c5224</transactionId>
      <partnerIdType>eMI3</partnerIdType>
      <partnerId>FR*ZZZ</partnerId>
      <operatorIdType>eMI3</operatorIdType>
      <operatorId>FR*YYY</operatorId>
      <targetOperatorIdType>eMI3</targetOperatorIdType>
      <targetOperatorId>FR*XXX</targetOperatorId>
      <bookingId>IOP-BID-GIR-V-IOPQUA01-ecd4d3e5-9c31-48ee-b561-
3fcb3d3abe4e</bookingId>

<bookPartnerBookingId>PsOIdU0638ddGHJdsdKLKJHGFD</bookPartnerBookingId>
      <bookingEvent>
        <bookingEventNature>20</bookingEventNature>
        <bookingEventId>IOP-BEM-GIR-V-IOPQUA01-bc14dd03-4aaa-447b-911f-
324b8b5a56ca</bookingEventId>
        <bookingEventDateTime>2017-01-01T12:00:00Z</bookingEventDateTime>
      </bookingEvent>
    </aut:eMIP_FromIOP_SetBookingEventReportRequest>
  </soapenv:Body>
</soapenv:Envelope>]
```

5.52.3   Response

Input

eMIP_FromIOP_SetBookingEventReportResponse

Parameters

Attribute name	Type		Description
transactionId	*M*	String	Transaction id (for Traceability)
requestStatus	*M*	Integer	Request status (Ok, KO + error code)

Request Status

The possible values for the "requestStatus" output parameter are listed in the table below.

requestStatus Value	Severity	Description
1	Ok-Normal	Normal successful completion
751	Ok-Warning	eMSP(b) doesn't know this bookingEventNature

Others < 10 000	Ok	Reserved for future use
Others >= 10 000	Ko-Error	Reserved for future use

Example

```
[VERB: POST], [CODE: 200], [HEADERS: {null:HTTP/1.1 200 OK}{Content-
Length:448}{Connection:close}{Content-
Type:application/soap+xml;charset=UTF-8}{Server:Jetty(6.1.26)}] [BODY:
<soap:Envelope
  xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
  xmlns:book="https://api-iop.gireve.com/schemas/BookingV1/">
  <soap:Header/>
  <soap:Body>
    <book:eMIP_FromIOP_SetBookingEventReportResponse>
      <transactionId>IOP-TID-GIR-V-IOPQUA01-81e60294-7332-404d-b0dc-
3fda5a7c5224</transactionId>
      <requestStatus>1</requestStatus>
    </book:eMIP_FromIOP_SetBookingEventReportResponse>
  </soap:Body>
</soap:Envelope>]
```

6 EVCI data

6.1 DataField List for a Charging Pool

Value	Type	Description	Returned by IOP
1001	See xsd:string	PoolGIREVEId	Yes
1003	See xsd:string	PooleMI3Id	Yes
1004	See xsd:string	PoolExternalId	No
1005	See xsd:string	TradingName	Yes
1006	See xsd:string	Name	Yes
1007	See xsd:string	Displayable label	Yes
1041	See xsd:string	Country code Following ISO 3166-1 alpha 2 E.g. fr	Yes
1042	See xsd:string	PostalCode	Yes
1043	See xsd:string	City	Yes
1044	See xsd:string	StreetNumber	Yes
1045	See xsd:string	StreetName	Yes
1046	See xsd:string	AddrComplement	Yes
1047	See xsd:double	PoolLatitude	No
1048	See xsd:double	PoolLongitude	No
1049	See xsd:double	PoolAltitude	No
1050	See xsd:string	FloorNumber	Yes
1051	See xsd:int	TimeZone E.g. 1 for UTC+1	No
1052	See xsd:string (list)	Province code Following ISO 3166-2	Yes
1061	See xsd:int See 7.1 AccessibilityValue	AccessibilityType	Yes
1062	See xsd:double	PoolEntryLatitude Following WGS84	Yes
1063	See xsd:double	PoolEntryLongitude Following WGS84	Yes
1064	See xsd:double	PoolEntryAltitude Following WGS84	No
1065	See xsd:string	PoolPhoneNumber	Yes
1066	See xsd:string	PoolWifiName	No
1067	See xsd:string	PoolAccessibilityComment	Yes
1081	See xsd:int See 7.29 SiteTypeValue	PoolSiteType	Yes
1082	See xsd:int	AvailabilityStatus	Yes

1083	See xsd:dateTime	AvailabilityStatusUntil	Yes
1101	See xsd:int	The Charging Pool provides a 24x7 service. Otherwise, the OpeningHoursList will be used to specify opening hours.	Yes
1102	See xsd:int	OpeningHoursList-NbItem	No
1103-1	See xsd:int	Index	No
1103-2	See 7.22 OpenTimes	DayOfWeek	Yes
1103-3	See 7.22 OpenTimes	Opening start time	Yes
1103-4	See 7.22 OpenTimes	Opening end time	Yes
1104	See xsd:string	Opening pool information	No
1142	See xsd:int	PoolStationList-NbItem	No
1143	See xsd:string (list)	List of the station ids of the pool	No
1144	See xsd:int	ParkingPlacesNumber	Yes
1161	See xsd:int	OperatorList-NBItem	No
1162	See xsd:string (list) See 7.23 OperatorInfo	List of information about the operators (role and id)	No
1183	See xsd:double	PoolNominalAvailablePower	No
1184	See xsd:double	PoolInstantaneousAvailablePower	No
1204	See xsd:string	PoolCreatedBy	No
1205	See xsd:dateTime	PoolCreatedOn	No
1206	See xsd:string	PoolModifiedBy	No
1207	See xsd:dateTime	PoolModifiedOn	Yes
1221	See xsd:int See 7.31 UseabilityStatusValue	UseabilityStatus	No
1222	See xsd:dateTime	UseabilityStatusUntil	No
1251	See xsd:string	GireveId - TechOperator	Yes
1252	See xsd:string	eMI3Id - TechOperator	Yes
1253	See xsd:string	Name - TechOperator	Yes
1261	See xsd:string	GireveId - CommOperator	No
1262	See xsd:string	eMI3Id - CommOperator	No
1273	See xsd:string	OwnerOperator name	No

6.2 DataField List for a Charging Station

Value	Type	Description	Returned by IOP
2001	See xsd:string	StationGIREVEId	Yes
2002	See xsd:string	StationParentId	No
2003	See xsd:string	StationeMI3Id	Yes

2004	See xsd:string	StationExternalId	No
2005	See xsd:string	VisualId	No
2041	See xsd:double	StationLatitude Following WGS84	Yes
2042	See xsd:double	StationLongitude Following WGS84	Yes
2061	See xsd:int See 7.1 AccessibilityValue	StationAccessibility	Yes
2062	See xsd:string	StationTariffInformation	Yes
2063	See xsd:int See 7.6 AuthenticationModeValue	StationAuthentMode	Yes
2064	See xsd:int See 7.24 PaymentModeValue	StationPaymentMode	Yes
2065	See xsd:string	StationPaymentInformation	Yes
2066	See xsd:int	Bookable	Yes
2067	See xsd:int	AvailabilityStatus	No
2068	See xsd:dateTime	AvailabilityStatusUntil	No
2069	See xsd:int	StationLanguageList-NbItem	No
2070	See xsd:string (list)	List of the languages supported in this station Following ISO 639-1	No
2071	See xsd:double	StationNominalAvailablePower	No
2072	See xsd:double	StationInstantaneousAvailablePower	No
2082	See xsd:int	StationEVSEList-NBItem	No
2083	See xsd:string (list)	List of the EVSE id of this station	No
2121	See xsd:string	StationManufacturer	No
2122	See xsd:string	StationProductId	No
2123	See xsd:int	Communicating	No
2141	See xsd:int	StationDataCompletionIndex	No
2142	See xsd:sting	StationCreatedBy	No
2143	See xsd:dateTime	StationCreatedOn	No
2144	See xsd:string	StationModifiedBy	No
2145	See xsd:dateTime	StationModifiedOn	Yes
2161	See xsd:int See 7.31 UseabilityStatusValue	UseabilityStatus	No
2162	See xsd:dateTime	UseabilityStatusUntil	No

6.3 DataField List for a Charging Point

Value	Type	Description	Returned by IOP

3001	See xsd:string	EVSEGIREVEId	Yes
3002	See xsd:string	EVSEParentId	No
3003	See xsd:string	EVSEeMI3Id	Yes
3004	See xsd:string	EVSEExternalId	No
3005	See xsd:string	VisualId	No
3006	See xsd:int	EVSEGroupList-NbItem	No
3007	See xsd:string (list)	List of the EVSE group gireveIds	Yes
3008	See xsd:string (list)	List of the EVSE group names	Yes
3009	See xsd:string (list)	List of the EVSE group external Ids	No
3041	See xsd:int See 7.8 BusyStatusValue	BusyStatus	Yes
3042	See xsd:dateTime	BusyStatusUntil	Yes
3043	See xsd:dateTime	LastUseDateTime	No
3044	See xsd:double	EVSEMaxPower	Yes
3045	See xsd:string	EVSECertificationLabel	No
3046	See xsd:int	AvailabilityStatus	Yes
3047	See xsd:dateTime	AvailabilityStatusUntil	Yes
3048	See xsd:int See 7.20 MeterTypeValue	MeterType	No
3049	See xsd:double	EVSEAvailablePower	Yes
3050	See xsd:double	Instantaneous Power supplied (in kW) (dynamic Info)	No
3051	See xsd:int	Roamable	No
3052	See xsd:int (list)	List of Serviceid of this EVSE	Yes
3061	See xsd:int	EVSEConnectorList-NBItem	No
3062	See xsd:string (list)	List of the connector ids of this EVSE	No
3063	See xsd:string	ElectricCurrentType	No
3081	See xsd:sting	StationCreatedBy	No
3082	See xsd:dateTime	StationCreatedOn	No
3083	See xsd:sting	StationModifiedBy	No
3084	See xsd:dateTime	StationModifiedOn	Yes
3101	See xsd:int See 7.31 UseabilityStatusValue	UseabilityStatus	Yes
3102	See xsd:dateTime	UseabilityStatusUntil	Yes
3111	See xsd:double	ChargeSpeed	Yes

6.4 DataField List for a Charging Connector

Value	Type	Description	Returned by IOP
4001	See xsd:string	ConnectorGIREVEId	Yes
4002	See xsd:string	ConnectorParentId	No
4003	See xsd:string	ConnectoreMI3Id	No
4004	See xsd:string	ConnectorExternalId	Yes
4005	See xsd:string	VisualId	No
4021	See xsd:string See 7.11 ConnectorTypeValue	ConnectorType	Yes
4041	See xsd:int See 7.18 MaxAmperageValue	ConnectorMaxAmperage	Yes
4042	See xsd:int See 7.48 MaxVoltageValue	ConnectorMaxVoltage	Yes
4043	See xsd:double	ConnectorMaxPower	Yes
4044	See xsd:int	AvailabilityStatus	No
4045	See xsd:dateTime	AvailabilityStatusUntil	No
4047	See 7.46 Connector mode	ConnectorMode	Yes
4048	See xsd:double	Available Power supplied (in kW)	Yes
4049	See xsd:string	ElectricCurrentType	Yes
4061	See xsd:sting	ConnectorCreatedBy	No
4062	See xsd:dateTime	ConnectorCreatedOn	Yes
4063	See xsd:sting	ConnectorModifiedBy	No
4064	See xsd:dateTime	ConnectorModifiedOn	Yes
4081	See xsd:int See 7.31 UseabilityStatusValue	UseabilityStatus	No
4082	See xsd:dateTime	UseabilityStatusUntil	No

7 Data Types

7.1 AccessibilityValue

7.1.1 Description

The AccessibilityValue is an integer value describing the accessibility for Charging Pool and Charging Station elements.

7.1.2 Accepted Values for Charging Pool

Value	Meaning
0	Unknown accessibility
1	Free access
2	Restricted access

7.1.3 Accepted Values for Charging Station

Value	Meaning
0	Unknown service accessibility
1	Free public access
2	Controlled access
3	Car-Sharing Only
4	Only for employees
5	Public access with Key/Ticket ...
6	Only for residents
7	Only for clients

7.2 ActionTypeValue

7.2.1 Description

The ActionTypeValue is an integer value describing an action to perform.

7.2.2 Accepted Values

Value	Meaning
1	Create
2	Update
3	Delete

7.3 Address

7.3.1 Description

The Address type contains all elements to describe a physical postal address of an EVCI.

7.3.2 Parameters

Parameter		Type	Description
complement	O	xsd:int	Address complement
streetNumber	O	xsd:string	Street number
streetName	M	xsd:string	Street name

			E.g. rue du Général Foy
postCode	M	xsd:string	Postal code E.g. 75008
city	M	xsd:string	City name E.g. PARIS
province	O	xsd:string	Province code Following ISO 3166-2
country	M	xsd:string	Country code Following ISO 3166-1 alpha 2 E.g. fr

7.4 AttributeCondition

7.4.1 Description

The AttributeCondition type describes a condition. It contains a value to compare, and an operator describing the comparison to perform.

7.4.2 Parameters

Parameter		Type	Description
conditionOperator	M	xsd:string	Comparison operator. Accepted values are: =, !=, like, >, >=, <, <= In order to respect the XML format, these values shall be written: =, !=, like, >, >=, <, <=.
attributeValue	M	xsd:string	Value to be compared

7.5 AuthorisationValue

7.5.1 Description

The AuthorisationValue is an integer value describing an authorisation result or an authorisation request.

7.5.2 Accepted Values

Value	Meaning
1	OK An eMSP has authorised the service or request a service
2	KO An eMSP has forbidden the service

7.6 AuthenticationModeValue

7.6.1 Description

The AuthenticationModeValue is an integer value describing the mode of authentication on a Charging Station.

7.6.2 Accepted Values

Value	Meaning

0	Not specified
1	RFID Badge / NFC Phone - Mifare Classic
2	RFID Badge / NFC Phone - Mifare Desfire
3	Calypso RFID Badge
4	Keyboard key
5	Remote Auth. w mobile app incl. Roaming
6	Phone
7	CPL 15118
8	Radio 15118
9	Phone (via platform)
10	SMS
11	RFID Ultralight
12	BarCode
13	RFID Badge
14	Local Auth. w/ EV
15	Remote Auth. w mobile app excl. Roaming
100	No Authentication

7.7 AvailabilityStatusValue

7.7.1 Description

The AvailabilityStatusValue is an integer value describing the availability status of an EVCI element.

7.7.2 Accepted Values

Value	Meaning
0	Unspecified The EVCI element status is unknown
1	Out of order The EVCI element is not available to the end-user
2	In service The EVCI element is available to the end-user
3	Future The EVCI element is not available to the end-user because it does not exist yet. The installation of this element is scheduled.
4	Deleted The EVCI element is not available to the end-user because it does not exist anymore.

7.8 BusyStatusValue

7.8.1 Description

The BusyStatusValue is an integer value describing the busy status of an EVSE element.

7.8.2 Accepted Values

Value	Meaning
0	Unspecified

		The Charging Point busy status is unknown
	1	Free The Charging Point is ready to charge any authorised end-user
	2	Busy The Charging Point is currently in use and cannot be used by any other end-user
	3	Reserved The Charging Point has been reserved and is waiting to charge the end-user who reserved the point and only him

7.9 CDRNatureValue

7.9.1 Description

The CDRNatureValue is an integer value describing a Charge Detail Record (CDR) Nature.

7.9.2 Accepted Values

Value	Meaning
2	Intermediate
1	Final

7.10 ChargeDetailRecord

7.10.1 Description

The ChargeDetailRecord type contains all elements to describe a charging session.

7.10.2 Parameters

Parameter		Type	Description
CDRNature	M	xsd:int See 7.9 CDRNatureValue	State of the charging session E.g. intermediate, final
serviceSessionId	M	xsd:string	GIREVE session id for this charging session.
execPartnerSessionId	O	xsd:string	Session id of the CPO for info and traceability
execPartnerOperatorIdType	M(Out), O(In)*	xsd:string	Type of the CPO id
execPartnerOperatorId	M(Out), O(In)*	xsd:string	CPO id
salePartnerSessionId	O	xsd:string	Session id of the eMSP for info and traceability
salePartnerOperatorIdType	M(Out), O(In)*	xsd:string	Type of the eMSP id
salePartnerOperatorId	M(Out), O(In)*	xsd:string	eMSP id
requestedServiceId	M	xsd:int See 7.28 ServiceId	Id of the requested service for this charging session.
EVSEIdType	M	xsd:string	Type of the EVSE id.
EVSEId	M	xsd:string	Id of the EVSE.

UserContractIdAlias	M	xsd:string	Alias of the contract id between the end-user and the eMSP. This alias may have been anonymised by the eMSP.
userIdType	M	xsd:string	Type of the user Id.
userId	M	xsd:string	Id of the user.
partnerProductId	O	xsd:string	
connectorType	O(In)*	xsd :int See 7.12 LOV ConnectorTypeFootprint	
startTime	M	xsd:dateTime	Start time of the charging session.
endTime	M	xsd:dateTime	End time of the charging session In case of intermediate Charging Detail Record, it is the current time of the meter reading.
meterReportList	M	List of meterReport See 7.21 MeterReport	Quantitative and qualitative description of the delivered service (ex: duration, energy, …).

* M(Out), O(In)   Means Mandatory in "OutGoing" flows and services, Optional in "InComing" flows and services

7.11 ConnectorTypeValue

7.11.1   Description

The ConnectorTypeValue is an integer value describing a connector type.

7.11.2   Accepted Values

Value	Meaning
0	Unspecified
1	Attached cable Type 2-one phase (EN62196-2)
2	Attached cable CHAdeMO 400V (EN62196-3)
3	Attached cable Combo-Type 2 400V (EN62196-3)
4	Socket Domestic E, F, E+F (CEE 7/5, CEE 7/4, CEE 7/7)
5	Socket IEC60309 Industrial Blue (EN60309)
6	Socket IEC60309 Industrial Red (EN60309)
7	Attached cable Type 1 (EN62196-2)
8	Socket Type 2-one phase (EN62196-2)
9	Socket Type 2-three phases (EN62196-2)
10	Socket Type 3c-three phases (EN62196-2)
11	Attached cable Type 2-three phases (EN62196-2)
12	Socket Type 3a (EN62196-2)
13	Attached cable with connector IEC 62196-2 type 1 (SAE J1772)
14	Attached cable AVCON Connector
15	Attached cable Tesla-Model S

16	Attached cable Tesla-Roadster
17	Socket Type 3c-one phase (EN62196-2)
18	Socket Domestic G (BS 1363, IS 401 & 411, MS 58)
19	Socket Domestic J (SEV 1011)
20	Socket Domestic K (section 707-2-D1)
21	Socket Domestic L (CEI 23-16 /VII)
22	Attached cable CHAdeMO 500V (EN62196-3)
23	Attached cable Combo-Type 2 500V (EN62196-3)
24	Attached cable CHAdeMO 950V (EN62196-3)
25	Attached cable Combo-Type 2 950V (EN62196-3)
26	Attached cable with connector IEC 62196-2 type 2 DC 400V
27	Attached cable with connector IEC 62196-2 type 2 DC 500V

7.12 LOV ConnectorTypeFootprint

7.12.1 Description

The ConnectorTypeFootprint is an integer value describing a connector type.

7.12.2 Accepted Values

Value	Meaning
0	Unknown
2	Attached cable CHAdeMO (EN62196-3)
3	Attached cable Combo-Type 2 (EN62196-3)
4	Socket Domestic E, F, E+F (CEE 7/5, CEE 7/4, CEE 7/7)
5	Socket IEC60309 Industrial Blue (EN60309)
6	Socket IEC60309 Industrial Red (EN60309)
7	Attached cable Type 1 (EN62196-2)
9	Socket Type 2 (EN62196-2)
10	Socket Type 3c (EN62196-2)
11	Attached cable Type 2 (EN62196-2)
12	Socket Type 3a (EN62196-2)
14	Attached cable AVCON Connector
15	Attached cable Tesla-Model S
16	Attached cable Tesla-Roadster
18	Socket Domestic G (BS 1363, IS 401 & 411, MS 58)
19	Socket Domestic J (SEV 1011)
20	Socket Domestic K (section 707-2-D1)
21	Socket Domestic L (CEI 23-16 /VII)

7.13 CPOAuthenticationData

7.13.1 Description

The CPOAuthenticationData type identifies an end-user's contract and specifies which service he is authorised to use. It contains only the information relevant for CPOs.

7.13.2 Parameters

Parameter	Type	Description

operatorIdType	M	xsd:string	Type of the operator id
operatorId	M	xsd:string	Id of the operator
UserContractIdAlias	O	xsd:string	Alias of the contract id between the end-user and the eMSP. This alias may have been anonymised by the eMSP.
userIdType	M	xsd:string	Type of the user Id
userId	M	xsd:string	Id of the user
authorisedServiceId	M	xsd:int See 7.28 ServiceId	Id of the authorised service for this charging session
printedNumber	O	xsd:string	Number printed on the user's badge. This can be used when calling a call centre for example.
expiryDate	M	xsd:dateTime	Expiry date of this authentication
parameter	O	xsd:string	Optional information from eMSP to CPO and/or to IOP. Reserved for future use.

7.14 eMSPAuthenticationData

7.14.1 Description

The eMSPAuthenticationData type identifies an end-user's contract and specifies which service he is authorised to use. It contains only information available by the eMSP emitter.

7.14.2 Parameters

Parameter		Type	Description
actionType	M	xsd:int See 6.2 ActionType	Action to perform on this whitelist entry : insert, update or delete
userContractIdAlias	O	xsd:string	Alias of the contract id between the end-user and the eMSP. This alias may have been anonymised by the eMSP.
userIdType	M	xsd:string	Type of the user Id
userId	M	xsd:string	Id of the user
authorizedServiceId	M	xsd:int	Id of the authorised service for this charging session
printedNumber	O	xsd:string	Number printed on the user's badge. This can be used when calling a call center for example.
expiryDate	M	xsd:dateTime	Expiry date of this authentication
parameter	O	xsd:string	Optional information from eMSP to CPO and/or to IOP. Reserved for future use.

7.15 EVSEDescrip

7.15.1 Description

The EVSEDescrip type provides all attributes of an EVSE element.

7.15.2 Parameters

Parameter		Type	Description
EVSEIOPIdType	M	xsd:string	gireve type
EVSEIOPId	M	xsd:string	gireve Id of the EVSE
EVSEIdType	M	xsd:string	Type of the EVSE id
EVSEId	M	xsd:string	Id of the EVSE
chargingStationIdType	M	xsd:string	Type of the Charging Station id
chargingStationId	M	xsd:string	Id of the Charging Station
chargingPoolIdType	O	xsd:string	Type of the Charging Pool id
chargingPoolId	M	xsd:string	Id of the Charging Pool
chargingPoolBrandName	M	xsd:string	Charging pool name
chargingPoolName	M	xsd:string	Charging pool name
chargingPoolAddress	M	iopauth:Address See 7.3 Address	Physical postal address of the charging pool
entrancelatitude	M	xsd:double	Latitude coordinate of the charging station entrance Following WGS84
entrancelongitude	M	xsd:double	Longitude coordinate of the charging station entrance Following WGS84
chargingStationlatitude	M	xsd:double	Latitude coordinate of the charging station Following WGS84
chargingStationlongitude	M	xsd:double	Longitude coordinate of the charging station Following WGS84
phoneNumber	O	xsd:string	Phone number providing information about this charging pool
connectorTypeList	O	xsd:string See 7.11 ConnectorTypeValue	Type of connectors
power	O	xsd:double	Power supplied in kW
instantaneousPower	O	xsd:double	Instantaneous Power supplied (in kW) (dynamic Info)
speed	O	xsd:double	Charge speed supplied
authorisationMode	O	xsd:int See 7.5 AuthorisationValue	Authorisation mode
authorisationInformation	O	xsd:string	Comment about the authorisation mode
paymentMode	M	xsd:int See 7.24 PaymentModeValue	Payment mode
paymentInformation	O	xsd:string	Comment about the payment mode
poolAccessibility	M	xsd:int	Accessibility of the Charging pool

		See 7.1 AccessibilityValue	
stationAccessibility	M	xsd:int See 7.1 AccessibilityValue	Accessibility of the Charging station
isOpen24_7	M	xsd:int See 7.45 isOpen24_7	Always open: 24 hours per day and 7 days per week; or not
openTimesList	M	iopfind:OpenTimes See 7.22 OpenTimes	Opening times
Bookable	M	xsd:int	Bookable
availabilityStatus	M	xsd:int	Availability status of the Charging station
availabilityStatusUntil	O	xsd:dateTime	Last change of the availability status
busyStatus	M	See xsd:int See 7.8 BusyStatusValue	Busy status of the Charging station
busyStatusUntil	O	xsd:dateTime	Last change of the busy status
useabilityStatus	O	See xsd:int See 7.31 UseabilityStatusValue	Useability status of the Charging station
useabilityStatusUntil	O	xsd:dateTime	Last change of the useability status

7.16 HTTP Status Code

Value	Meaning
200	OK
404	Not found
500	Internal server error

7.17 IntermediateCDRRequestedValue

7.17.1 Description

The IntermediateCDRRequestedValue type is an integer value describing if the eMSP requires intermediate retrieving of Charge Detail Records or not.

7.17.2 Accepted Values

Value	Meaning
0	Not requested
1	Requested

7.18 MaxAmperageValue

7.18.1 Description

The MaxAmperageValue is an integer value describing a maximum of amperage value available on a Charging Connector.

7.18.2   Accepted Values

Since January 2021, the value is provided directly. It is not a LOV anymore.

Example: Value "21" received in eMIP flows means "21 amperes".

7.19 MeterTypeIdValue

7.19.1   Description

The MeterTypeIdValue is an integer value describing the type of a meter report value.

7.19.2   Accepted Values

Value	M/O	Meaning
1	M	Duration in minutes
2	M	Transferred energy equivalent in Wh
3	O	B2B Service Cost
4	O	B2B session Cost - calculated by Gireve
5	O	Total veh-charge-duration (total duration of the time interval during which the vehicle consumed electricity)
6	O	Total parking-duration (total duration of the time interval during which the vehicle is parked)
1000+x [1001-1999]	O	Charging duration at a given level of power ("x" value) Example: 1012 means "Charging duration at 12 kW"
21	O	Average power, per step of **1** minutes (Repetitive meter)
25	O	Average power, per step of **5** minutes (Repetitive meter)
31	O	Maximum consumed power reached, per step of **1** minutes (Repetitive meter)
35	O	Maximum consumed power reached, per step of **5** minutes (Repetitive meter)
41	O	Delivered energy, per step of **1** minutes (Repetitive meter)
45	O	Delivered energy, per step of **5** minutes (Repetitive meter)
Any other integer value should be accepted, please refer to implementation guide		

7.20 MeterTypeValue

7.20.1   Description

The MeterTypeValue is an integer value describing the type of a meter of an EVSE.

7.20.2   Accepted Values

Value	Meaning
0	Not specified
1	Counter MID not communicating

2	Counter MID communicating
3	Counter non MID
4	No Meter

7.21 MeterReport

7.21.1 Description

The MeterReport type reports the metering values of a charging session.

7.21.2 Parameters

Parameter		Type	Description
meterValue	M	xsd:string	Value of the meter report
meterUnit	M	xsd:string	Unit of the value
meterTypeId	M	xsd:int	Type of the value E.g. duration in minutes, Wh, ...

7.22 OpenTimes

7.22.1 Description

The OpenTimes type describes when an EVCI element is opened, and therefore has a chance to be available, or closed.

7.22.2 Parameters

Parameter		Type	Description
weekDay	M	xsd:int	English name of the day in the week (lowercase) Example: "Monday", "Tuesday" …
startTime	M	xsd:dateTime	Start time (only the "time" part of the dateTime is relevant). Following ISO-8601 Example: "T08:00:00" , "T14:00:00"
endTime	M	xsd:dateTime	End time (only the "time" part of the dateTime is relevant). Following ISO-8601 Example: "T08:00:00" , "T14:00:00"

7.23 OperatorInfo

7.23.1 Description

The OperatorInfo type describes an operator by its role and its id.

7.23.2 Parameters

Parameter		Type	Description
id	M	xsd:string	Operator id
Role	M	Xsd:string	Operator role

7.24 PaymentModeValue

7.24.1   Description

The PaymentModeValue is an integer value describing the mode of payment on a Charging Station.

7.24.2   Accepted Values

Value	Meaning
0	Unspecified payment mode
1	Free recharge
2	Payment by operator contract
3	Credit card
4	Payment by cash
5	Prepaid card

7.25 RequestStatusValue

7.25.1   Description

The RequestStatusValue describes the result of a request. It can be OK, or KO with an eventual error code.

7.25.2   Accepted Values

A very simple rule is useful to define if the service is successful or not:

If the requestStatus value is lower than 10 000

- then, it means that the service was successful,
- otherwise, it means that the service was not successful

Each web service may return different requestStatus values but typical values are:

Value	Meaning
1	OK
1 < and < 10 000	OK but warning or info
≥10000	KO

7.26 SearchAlgorithmValue

7.26.1   Description

The SearchAlgorithmValue is an integer value describing the algorithm to use to perform the EVSE search.

7.26.2   AcceptedValues

Value	Meaning
1	Geodesic distance search

7.27 SearchCriteria

7.27.1   Description

The SearchCriteria type links an attribute to a condition. The attribute shall match the condition to pass this criterion.

7.27.2   Parameters

Parameter		Type	Description
attributeId	M	xsd:int	Attribute id
attributeCondition	M	iopfind:AttributeCondition See 7.4 AttributeCondition	Condition that the related attribute shall match

7.28 ServiceId

7.28.1   Description

The ServiceId describes which type of charge service to be used.

7.28.2   Accepted Values

Value	Meaning
0	Is this user managed by you?
1	Standard Charge Start
Any other integer value should be accepted, please refer to implementation guide	

7.29 SiteTypeValue

7.29.1   Description

The SiteTypeValue is an integer value describing the site type of a Charging Pool.

7.29.2   Parameters

Value	Meaning
0	Unknown site type
1	Public on-street lot
2	Public site
3	Company
4	Shop
5	Parking
6	Other

7.30 SOAP Fault Code

Fault Code	Fault String	Meaning
FAULT	Check credentials failed	IOP found an invalid Partner/Operator association (unknown partner or operator, invalid IP address or certificate, operator and partner not associated)
INTERNAL_ERROR	MSG_SUIVI_WS_CANNOT_CREATE_TRANSACTION_EXCEPTION	IOP/RPC did not succeed in creation a valid transactionId (internal error)
INTERNAL_ERROR	MSG_SUIVI_WS_BDD_CALL_FAIL	IOP/RPC did not succeed in accessing the DataBase (internal error)
INTERNAL_ERROR	MSG_SUIVI_WS_PARTNER_ID_EMPTY	IOP/RPC did not succeed in identifying the Partner (the partnerId is empty)

INTERNAL_ERROR	MSG_SUIVI_WS_PARTNER_UNKNOWN	IOP/RPC did not succeed in identifying the Partner (the partner is unknown)
INTERNAL_ERROR	MSG_SUIVI_WS_OPERATOR_ID_EMPTY	IOP/RPC did not succeed in identifying the operator (the operatorId is empty)
INTERNAL_ERROR	MSG_SUIVI_WS_OPERATOR_UNKNOWN	IOP/RPC did not succeed in identifying the operator (the operator is unknown)
INTERNAL_ERROR	MSG_SUIVI_WS_PARTNER_OPERATOR_NO_LINK	IOP/RPC did not succeed in validating the right association between operator and partner
INTERNAL_ERROR	MSG_SUIVI_CSF_ELASTICSEARCH_EXTERNAL_CALL_FAIL	IOP/RPC did not succeed in accessing the DataBase Index (internal error)
INTERNAL_ERROR	MSG_SUIVI_CSF_ATTRIBUTE_ID_NOT_VALID	IOP/RPC did not succeed in identifying an AttributeId
INTERNAL_ERROR	MSG_SUIVI_DDU_INVALID_ID_TYPE	IOP/RPC did not succeed in defining the IdType
INTERNAL_ERROR	MSG_SUIVI_DDU_GIREVE_ID_PARSING_FAIL	IOP/RPC did not succeed in updating Dynamic Data (Invalid gievereID)
INTERNAL_ERROR	MSG_SUIVI_DDU_CODE_PARSING_FAIL	IOP/RPC did not succeed in updating Dynamic Data (internal error)
INTERNAL_ERROR	MSG_SUIVI_DDU_INSTANTIATE_FAIL	IOP/RPC did not succeed in updating Dynamic Data (internal error)
INTERNAL_ERROR	MSG_SUIVI_DDU_UNEXPECTED_CLASS	IOP/RPC did not succeed in updating Dynamic Data (internal error)
INTERNAL_ERROR	MSG_SUIVI_DDU_UNKNOWN_ENTITY	IOP/RPC did not succeed in defining the EVCI element (Pool, Station, EVSE, Connector)
INTERNAL_ERROR	MSG_SUIVI_DDU_UNKNOWN_OPERATOR	IOP/RPC did not succeed in identifying the operator that operates this EVCI elements (the operator is unknown)
INTERNAL_ERROR	MSG_SUIVI_DDU_OPERATOR_RIGHTS_INVALID	IOP/RPC did not succeed in updating Dynamic Data (the requester has no valid "update")
INTERNAL_ERROR	MSG_SUIVI_DDU_UPDATE_STATUS_INVALID_DATES	IOP/RPC did not succeed in updating Availability or BusyStatus (invalid date)
INTERNAL_ERROR	MSG_SUIVI_DDU_UPDATE_AVAILABILITY_STATUS_FAIL	IOP/RPC did not succeed in updating AvailabilityStatus (internal error)
INTERNAL_ERROR	MSG_SUIVI_DDU_AVAILABILITY_STATUS_EMPTY	IOP/RPC did not succeed in updating AvailabilityStatus (AvailabilityStatus value is missing)
INTERNAL_ERROR	MSG_SUIVI_DDU_AVAILABILITY_STATUS_UNKNOWN	IOP/RPC did not succeed in updating AvailabilityStatus (AvailabilityStatus value is not a valid value)
INTERNAL_ERROR	MSG_SUIVI_DDU_BUSY_STATUS_EMPTY	IOP/RPC did not succeed in updating BusyStatus (BusyStatus value is missing)
INTERNAL_ERROR	MSG_SUIVI_DDU_BUSY_STATUS_UNKNOWN	IOP/RPC did not succeed in updating BusyStatus (BusyStatus value is not a valid value)
INTERNAL_ERROR	MSG_SUIVI_DDU_UPDATE_BUSY_STATUS_FAIL	IOP/RPC did not succeed in updating BusyStatus (internal error)

| INTERNAL_E RROR | MSG_SUIVI_DDU_ELASTI CSEARCH_EXTERNAL_C ALL_FAIL | IOP/RPC did not succeed in accessing the DataBase Index (internal error) |

7.31 UseabilityStatusValue

7.31.1 Description

The UseabilityStatusValue is an integer value describing the useability status of an EVCI element.

7.31.2 Accepted Values

Value	Meaning
0	Not specified
1	Not Useable
2	Useable

7.32 XXXIdType (for EVCI elements)

7.32.1 Description

The XXXIdType describes the type of an id. This is a string value. Note that the values are case sensitive.

XXX is for partner, operator, user, charging pool, charging station, EVSE or charging connector.

7.32.2 Accepted Values

Value	Meaning
eMI3	eMI3 id Available for: User, Operator, partner and EVCI
gireve	IOP id or GIREVE Id Available for: Operator, partner and EVCI
external	External id Available for: EVCI
dataAggregator	DataAggregator Id Available for: EVCI

7.32.3 "gireve" IdType

The GIREVEIdType indicates that the id has been given by GIREVE.

7.32.4 "eMI3" IdType

The eMI3IdType indicates that the id shall follow the specification of identifiers standardised in DIN SPEC 91286 (2011).

This standard normalized:

- one pattern for Charging Point id: EVSEID
- one pattern for Charging Pools id

EVSEID

An eMI[3] EVSEID shall match the following pattern:

<Country Code> <S> <EVSE Operator ID> <S> <ID Type> <Power Outlet ID>

Parameter		Description
Country Code	M	Country code where the Charging Point is situated 2 digits Following ISO 3166-1 alpha-2
EVSE Operator ID	M	ID of the Charging Point operator, defined and listed by the eMI[3] group This ID is unique per country 3 digits
ID Type	M	Type of eMI3 ID 1 alpha character For EVSEID, this field shall contain "E" (letter E). For ChargingPoolID, this field shall contain "P" (letter P).
Power Outlet ID	M	Unique identifier of the Charging Point for its operator Start with 1 digit, followed by 0 to 30 alphanumeric or <S> characters
S	O	Separator For EVSEID or ChargingPoolId, this field shall be empty or contain one "*" (star).

This pattern can be checked using the following Regex pattern:

[A-Za-z]{2}*?[0-9A-Za-z]{3}*?E[0-9][0-9A-Za-z*]{0,30}

Two more rules shall be applied to format a valid EVSEID:

- An EVSEID or a ChargingPoolId can be created without separator, or with at least two separators
  - E.g. 'FR138E1ETG5578567YU8D' and 'FR*138*E1ETG5578567YU8D' are valid, but not 'FR*138E1ETG5578567YU8'
- An EVSEID is case insensitive
  - E.g. 'FR138E1ETG5578567YU8D' is the same as 'fr138E1etg5578567yu8d' or 'fE138E1etG5578567yU8d'

ChargingPool-ID

An eMI[3] ChargingPool-Id shall match the following pattern:

<Country Code> <S> <EVSE Operator ID> <S> <ID Type> <Power Outlet ID>

Parameter		Description
Country Code	M	Country code where the Charging Point is situated 2 digits Following ISO 3166-1 alpha-2
EVSE Operator ID	M	ID of the Charging Point operator, defined and listed by the eMI[3] group This ID is unique per country 3 digits

ID Type	M	Type of eMI3 ID 1 alpha character For EVSEID, this field shall contain "E" (letter E). For ChargingPoolID, this field shall contain "P" (letter P).
Power Outlet ID	M	Unique identifier of the Charging Point for its operator Start with 1 digit, followed by 0 to 30 alphanumeric or <S> characters
S	O	Separator For EVSEID or ChargingPoolId, this field shall be empty or contain one "*" (star).

This pattern can be checked using the following Regex pattern:

[A-Za-z]{2}*?[0-9A-Za-z]{3}*?E[0-9][0-9A-Za-z*]{0,30}

Two more rules shall be applied to format a valid EVSEID:

- An EVSEID or a ChargingPoolId can be created without separator, or with at least two separators
    - E.g. 'FR138E1ETG5578567YU8D' and 'FR*138*E1ETG5578567YU8D' are valid, but not 'FR*138E1ETG5578567YU8'
- An EVSEID is case insensitive
    - E.g. 'FR138E1ETG5578567YU8D' is the same as 'fr138E1etg5578567yu8d' or 'fE138E1etG5578567yU8d'

XXXIdType (for partners an operators)

7.32.5 Description

The XXXIdType describes the type of an id. This is a string value. Note that the values are case sensitive.

XXX is for partner or operator.

7.32.6 Accepted Values

Value	Meaning
eMI3	eMI3 id Available for: User, Operator, partner and EVCI
gireve	IOP id or GIREVE Id Available for: Operator, partner and EVCI

7.32.7 "gireve" IdType

The GIREVEIdType indicates that the id has been given by GIREVE.

7.32.8 "eMI3" IdType

The eMI3IdType indicates that the id shall follow the eMI3 specifications of operators (CPO) and providers (eMSP) identifiers. An eMI[3] operator (or partner, or provider) shall match the following pattern:

<Country Code> <S> <Provider ID>

7.33 XXXIdType (for users)

7.33.1 Description

The XXXIdType describes the type of an id. This is a string value. Note that the values are case sensitive.

XXX is for user.

7.33.2 Accepted Values

Value	Meaning
RFID-UID	RFID Tag Id : Characters String Must be provided (write): uppercase with leading zeros (up to 8 ou 14 char) Must be interpreted (read): non case sensitive. Leading zeros optional (up to 8 ou 14 char)
eMI3	eMI3 Token Id : See eMI3 ("Business objects" doc)
eMA	eMAid (see eMI3) : See eMI3 ("Business objects" doc)
EVCO	EVCOId (see 15118) See eMI3 ("Business objects" doc)
EMP-SPEC	eMSP specific Id

7.33.3 eMAId

An eMI[3] eMAId shall match the following pattern:

<Country Code> <S> <Provider ID> <S> <ID Type> <ID Instance> <S> <Check Digit>

Parameter		Description
Country Code	M	Country code where the contract was signed 2 digits Following ISO 3166-1 alpha-2
Provider ID	M	ID of the provider, defined and listed by the eMI[3] group This ID is unique per country 3 digits
ID Type	M	Type of eMI3 ID 1 alpha character For eMAId, this field shall contain "C" (letter C).
ID Instance	M	Unique identifier of the eMobility Account for its operator 9 alphanumeric characters
Check Digit	O	Check digit computed from the 14th first character of the eMAId (without separators) 0 or 1 alphanumeric character
S	O	Separator For EVCOID, this field shall be empty or contain one "-" (dash).

This pattern can be checked using the following Regex pattern:

[A-Za-z]{2}-?[0-9A-Za-z]{3}-?C[0-9A-Za-z]{9}-?[0-9A-Za-z]?

Two more rules shall be applied to format a valid EVCOID:

- An eMAId can be created without separator, or with three separators
  - E.g. 'FR7S5CETG567YU8' and 'FR-7S5-CETG567YU8' are valid, but not 'FR-7S5CETG567YU8'
- An eMAId is case insensitive
  - E.g. 'FR7S5CETG567YU8' is the same as 'fr7s5cetg567yu8' or 'fr7s5cetG567Yu8'

7.33.4   EVCOID (deprecated, see eMAId)

An eMI[3] EVCOID shall match the following pattern:

<Country Code> <S> <Provider ID> <S> <ID Type> <ID Instance> <S> <Check Digit>

Parameter		Description
Country Code	M	Country code where the contract was signed 2 digits Following ISO 3166-1 alpha-2
Provider ID	M	ID of the provider, defined and listed by the eMI[3] group This ID is unique per country 3 digits
ID Type	M	Type of eMI3 ID 1 alpha character For EVCOID, this field shall contain "C" (letter C).
ID Instance	M	Unique identifier of the EVCO for its operator 9 alphanumeric characters
Check Digit	O	Check digit computed from the 14th first character of the EVCOID (without separators) 0 or 1 alphanumeric character
S	O	Separator For EVCOID, this field shall be empty or contain one "-" (dash).

This pattern can be checked using the following Regex pattern:

[A-Za-z]{2}-?[0-9A-Za-z]{3}-?C[0-9A-Za-z]{9}-?[0-9A-Za-z]?

Two more rules shall be applied to format a valid EVCOID:

- An EVCOID can be created without separator, or with three separators
  - E.g. 'FR7S5CETG567YU8' and 'FR-7S5-CETG567YU8' are valid, but not 'FR-7S5CETG567YU8'
- An EVCOID is case insensitive
  - E.g. 'FR7S5CETG567YU8' is the same as 'fr7s5cetg567yu8' or 'fr7s5cetG567Yu8'

7.34 SessionActionNature

7.34.1 Description

The SessionActionNature is an integer value describing the action requested by an eMSP during a charging session.

7.34.2 Accepted Values

Value	Meaning
0	Emergency Stop
1	Stop and terminate current operation
2	Suspend current operation
3	Restart current operation
Any other integer value should be accepted. See implementation guide	

7.35 SessionAction

7.35.1 Description

The sessionAction type contains all elements to describe a requested action during the charging session.

7.35.2 Parameters

Parameter	Type		Description
sessionActionNature	M	xsd:int See 7.34 SessionActionNature	Nature of the Action to be requested
sessionActionId	M(Out), O(In) *	xsd:string	Unique id of the Action
sessionActionDateTime	M	xsd:string	Action DateTime
sessionActionParameter	O	xsd:string	Action Parameter
relatedSessionEventId	O	xsd:string	If the action is related to an event, contains the Id of the related Session

* M(Out), O(In)   Means Mandatory in "OutGoing" flows and services, Optional in "InComing" flows and services

7.36 SessionEventNature

7.36.1 Description

The sessionEventNature is an integer value describing the event reported by a CPO during a charging session.

7.36.2 Accepted Values

Value	Meaning
0	Emergency Stop
1	Operation terminated
2	Operation suspended

3	Operation started
11	Start of charge
12	End of charge
13	Pre-Stop Notification

Any other integer value should be accepted. See implementation guide

7.37 SessionEvent

7.37.1   Description

The sessionEvent type contains all elements to describe an occured event during the charging session.

7.37.2   Parameters

Parameter		Type	Description
sessionEventNature	M	xsd:int See 7.36 SessionEventNature	Nature of the Event to be requested
sessionEventId	M(Out), O(In) *	xsd:string	Unique id of the Event
sessionEventDateTime	M	xsd:string	Event DateTime
sessionEventParameter	O	xsd:string	Event Parameter
relatedSessionActionId	O	xsd:string	If the Event is related to an action, contains the Id of the related Session

* M(Out), O(In)   Means Mandatory in "OutGoing" flows and services, Optional in "InComing" flows and services

7.38 EVSERichDescrip

7.38.1   Description

The EVSERichDescrip type contains a list of attributes which describe an EVSE.

7.38.2   Parameters

Parameter		Type	Description
EVSEAttributeList	M	List of iopdd:EVSEAttribute See 7.39 EVSEAttribute	List of attributes describing an EVSE.

* M(Out), O(In)   Means Mandatory in "OutGoing" flows and services, Optional in "InComing" flows and services

7.39 EVSEAttribute

7.39.1   Description

The EVSEAttribute type describes one attribute of an EVSE.

7.39.2 Parameters

Parameter		Type	Description
attributeId	M	xsd:string	Id of the attribute
attributeValue	M	xsd:string	Value of the attribute

* M(Out), O(In)   Means Mandatory in "OutGoing" flows and services, Optional in "InComing" flows and services

7.40 StaticDataChangeElement

7.40.1 Description

The StaticDataChangeElement type describes the modification on the element (e.g. create/update/delete) and its updated static data

7.40.2 Parameters

Parameter		Type	Description
staticDataChangeEvent	M	iopdd:staticDataChangeEvent See 7.41 StaticDataChangeEvent	Description of the static data change event.
EVSERichDescrip	M	iopdd:EVSERichDescrip See 7.38 EVSERichDescrip	List of attributes describing an EVSE.

* M(Out), O(In)   Means Mandatory in "OutGoing" flows and services, Optional in "InComing" flows and services

7.41 StaticDataChangeEvent

7.41.1 Description

The StaticDataChangeEvent type describes the event of a static data change.

7.41.2 Parameters

Parameter		Type	Description
statusEventDate	M	xsd:dateTime	Date of the event
EVSEIdType	M	xsd:string	Type of the EVSE id e.g. eMI3, gireve, external
EVSEId	M	xsd:string	Id of the EVSE
actionType	M	xsd:int See 7.2 ActionTypeValue	Type of the event (create, update or delete)

* M(Out), O(In)   Means Mandatory in "OutGoing" flows and services, Optional in "InComing" flows and services

7.42 DynamicDataChangeElement

7.42.1 Description

The DynamicDataChangeElement type describes an update of a dynamic status on the element and its updated dynamic status.

7.42.2　Parameters

Parameter		Type	Description
dynamicDataChangeEvent	M	iopdd:dynamicDataChangeEvent See 7.43 DynamicDataChangeEvent	Description of the dynamic data change event
EVSEDynamicData	M	iopdd:EVSEDynamicData See 7.44 EVSEDynamicData	Updated dynamic status

* M(Out), O(In)　　　Means Mandatory in "OutGoing" flows and services, Optional in "InComing" flows and services

7.43 DynamicDataChangeEvent

7.43.1　Description

The DynamicDataChangeEvent type contains the date of the event and the Id of the EVSE

7.43.2　Parameters

Parameter		Type	Description
statusEventDate	M	xsd:dateTime	Date of the event
EVSEIdType	M	xsd:string	Type of the EVSE id e.g. eMI3, gireve, external
EVSEId	M	xsd:string	Id of the EVSE

* M(Out), O(In)　　　Means Mandatory in "OutGoing" flows and services, Optional in "InComing" flows and services

7.44 EVSEDynamicData

7.44.1　Description

The EVSEDynamicData type contains the updated dynamic status of the EVSE.

7.44.2　Parameters

Parameter		Type	Description
availabilityStatus	M	xsd:string See 7.7 AvailabilityStatusValue	Availability status of the element.
availabilityStatusUntil	O	xsd:dateTime	The status is consistent at least until this date.
availabilityStatusComment	O	xsd:string	A comment sent by the CPO.
busyStatus	M	xsd:string See 7.8 BusyStatusValue	Busy status of the element.
busyStatusUntil	O	xsd:dateTime	The status is consistent at least until this date.
busyStatusComment	O	xsd:string	A comment sent by the CPO.
useabilityStatus	M	xsd:string See 7.31 UseabilityStatusValue	Useability status of the element.

useabilityStatusUntil	O	xsd:dateTime	The status is consistent at least until this date.
useabilityStatusComment	O	xsd:string	A comment sent by the CPO.

* M(Out), O(In)   Means Mandatory in "OutGoing" flows and services, Optional in "InComing" flows and services

7.45 isOpen24_7

7.45.1   Description

The isOpen24_7 is an integer value describing if the element is opened 24/7 or not. If not opened 24/7, opening times are described.

7.45.2   Accepted Values

Value	Meaning
0	Yes: Is open 24/7
1	No: Not open 24/7

7.46 Connector mode

7.46.1   Description

-

7.46.2   Accepted Values

Value	Meaning
0	Not specified
1	Mode 1
2	Mode 2
3	Mode 3
4	Mode 4

7.47 DataField

7.47.1   Description

The DataField type represents an attribute of an EVCI. It is a set of attribute id → attribute value.

An attribute value contains a string as defined by xsd:string. Anyway, depending on the attribute, this string can be interpreted as a numeric value, a date/time value, a complex type value, or even a list of values. Therefore, all values have to be serialised into a string, which can be done without any issues for numeric and date / time values. The serialisation of complex types and list into string shall follow these requirements:

- For complex type, the elements of the type are separated by commas (E.g. OpenTimes → "1,09:00:00,18:00:00").
- For list, the elements of the list are separated by semicolons (E.g. "element1;element2;element3").

The meaning of each attribute value string is described in the following tables.

Each EVCI element has its own list of DataFields. These lists are described below.

7.47.2 Parameters

Parameter		Type	Description
attributeId	M	xsd:int	Identifier of the attribute (EVCI element field)
attributeValue	M	xsd:string	Value of the attribute (field content)

7.48 MaxVoltageValue

7.48.1 Description

The MaxVoltageValue is an integer describing max voltage values displayable by a connector.

7.48.2 Accepted Values

Value	Meaning
0	Not specified
1	100-120VAC, single-phased
2	200-240VAC, single-phased
3	380-480VAC, three-phased
4	500V-DC
5	480V-DC
6	400V-DC

7.49 CheckResult

7.49.1 Description

The CheckResult type describes the result of a Check treatment done for a CDR.

7.49.2 Parameters

Parameter		Type	Description
nature	M	xsd:int See 7.52 CheckNature	Nature of the check
status	M	xsd:string	Synthetic result of the checks for this nature (1=OK, 2= KO)
descriptionList	M	List of iopauth:BipDescription See 7.51 BipDescription	List of check result description

* M(Out), O(In)   Means Mandatory in "OutGoing" flows and services, Optional in "InComing" flows and services

7.50 BillResult

7.50.1 Description

The BillResult type describes the result of a calculation (price, …) done for a CDR.

7.50.2 Parameters

Parameter		Type	Description
nature	M	xsd:int See 7.53 BillNature	Enum (1=B2B, 2=B2C)
status	M	xsd:string	Synthetic result of the bill for this nature (1=OK, 2= KO)
recommended	M	xsd:int	"Should be billed"/"Should not be billed": Best Practices based recommendation
amount	M	xsd:string	Bill value
currency	M	xsd:string Following ISO 4217	Bill currency
descriptionList	M	List of iopauth:BipDescription See 7.51 BipDescription	List of billing calculation results description

* M(Out), O(In)   Means Mandatory in "OutGoing" flows and services, Optional in "InComing" flows and services

7.51 BipDescription

7.51.1 Description

The BipDescription type describes complementary information of a Check/Bill treatment.

7.51.2 Parameters

Parameter		Type	Description
severity	M	xsd:string See 7.54 Severity	Enum string "S"=success, "I"=Information, "W"=Warning, "E"=Error
check	O	xsd:string	Name of the Check
description	M	xsd:string	An english text that describes the result of the check

* M(Out), O(In)   Means Mandatory in "OutGoing" flows and services, Optional in "InComing" flows and services

7.52 CheckNature

7.52.1 Description

-

7.52.2 Accepted Values

Value	Meaning
1	Validity
2	Billable
3	Good practice

7.53 BillNature

7.53.1　Description

The BillNature value defines if the price calculated is a B2B or B2C price.

7.53.2　Accepted Values

Value	Meaning
1	B2B
2	B2C

7.54 Severity

7.54.1　Description

-

7.54.2　Accepted Values

Value	Meaning
S	Success
I	Information
W	Warning
E	Error

7.55 AdditionalInfo

This type is not yet implemented by GIREVE

7.55.1　Description

The AdditionalInfo type describes a complement information computed by GIREVE regarding the CDR sent by the CPO.

7.55.2　Parameters

Parameter		Type	Description
typeId	M	xsd:int	To complete by GIREVE
value	M	xsd:string	To complete by GIREVE
unit	M	xsd: string	To complete by GIREVE
index	M	xsd:int	To complete by GIREVE

* M(Out), O(In)　　　Means Mandatory in "OutGoing" flows and services, Optional in "InComing" flows and services

7.56 actorsDescriptionType

7.56.1　Description

The actorsDescriptionType desc　　ribes an actor involved in a Booking act.

7.56.2   Parameters

Attribute name		Type	Description
actorIdType	M	xsd:String	Enum. ("eMI3","gireve",etc ...)
actorId	M	xsd:String	Id of the eMSPb
actorType	M	xsd:String	Enum. (1: CPO, 2: eMSP, 3: eMSPb)

7.57 UserDescriptionType

7.57.1   Description

The UserDescriptionType describes user authentication information.

7.57.2   Parameters

Attribute name		Type	Description
userIdType	M	xsd:String	Enum. ("RFID-UID","eMA",etc ...)
userId	M	xsd:String	Id of the customer

7.58 cableCapacityType

7.58.1   Description

The cableCapacityType describes connector information.

7.58.2   Parameters

Attribute name		Type	Description
plugType	M	enum integer (LOV)	The connector type
cableCurrentCapacity	M	float	
cableNbPhasis	O	integer	1,2,3 for AC, -1 for DC

7.59 bookingEventType

7.59.1   Description

The bookingEventType describes an Event, sent by a CPO, related to a booking act.

7.59.2   Parameters

Attribute name		Type	Description
bookingEventNature	M	xsd:int	Nature of the Event to be reported
bookingEventId	M(FromIOP), O(ToIOP) *	xsd:String	Unique Id of the Event
bookingEventDateTime	M	xsd:DateTime	Event DateTime
bookingEventParameter	O	xsd:string	Event Parameter

7.60 chargeServiceRequest

7.60.1 Description

The chargeServiceRequest type describes a charge service requested by an eMSP(b).

7.60.2 Parameters

Attribute name		Type	Description
minPower	O	float	Requested minimum power
cableList	O	List of cableCapacity See 7.58 cableCapacityType	list of cables/plugs valid
arrivalDateTime	O	datetime	datetime of the vehicle arrival at the pool
departureDateTime	O	datetime	datetime of the vehicle departure from the pool
requestedServiceId	M	integer	Id du service demandé (1 : charge, etc…)

7.61 chargeServiceResponse

7.61.1 Description

The chargeServiceResponse type describes a charge service response returned by a CPO to a charge service request.

7.61.2 Parameters

Attribute name		Type	Description
minPower	O	float	Minimum power available
cableList	O	List of cableCapacity See 7.58 cableCapacityType	list of cables/plugs valid
arrivalDateTime	O	datetime	datetime of the vehicle arrival at the pool
departureDateTime	O	datetime	datetime of the vehicle departure from the pool

7.62 chargeNeedRequest

7.62.1 Description

The chargeNeedRequest type describes a charge need requested by an eMSP(b).

7.62.2 Parameters

Attribute name		Type	Description
estimatedEnergyNeedFlexMin	M	float	Energy need : lower Limit of the flexibility interval

estimatedEnergyNeed FlexMax	O	float	Energy need : upper Limit of the flexibility interval
arrivalDateTimeFlexMin	M	dateTime	DateTime for the veh arrival at ChargingStation: lower Limit of the flexibility interval
arrivalDateTimeFlexMax	O	dateTime	DateTime for the veh arrival at ChargingStation: upper Limit of the flexibility interval
departureDateTimeFlexMin	M	dateTime	DateTime for the veh dep from ChargingStation: lower Limit of the flexibility interval
departureDateTimeFlexMax	O	dateTime	DateTime for the veh dep from ChargingStation: upper Limit of the flexibility interval
powerInTime	O	List of powerPerStep	Charge curve (x=t, y=Power) cf detailed dataStructure (powerPerStep)
cableList	M	List of cableCapacity See 7.58 cableCapacityType	list of cables/plugs valid
flexibilityRule	O	enum integer (LOV)	enum that indicates the flexibility rule (what is the priority: Energy, Dep Time, Price … ?)
chargePauseAllowed	O	boolean	Indicates if pause during charge is allowed
EVCabinPrecondActivated	O	enum integer (LOV)	Enum that indicates if the cabin pre conditionner is activated
chargeStartingDuration	O	integer	max waiting time before Charge really starts (in seconds)
requestedServiceId		integer	

7.63 chargeNeedResponse

7.63.1 Description

The chargeNeedResponse type describes a charge need response returned by a CPO to a charge need request.

7.63.2 Parameters

Attribute name		Type	Description
estimatedEnergyNeed FlexMin	M	xsd:float	Energy need : lower Limit of the flexibility interval
estimatedEnergyNeed FlexMax	O	xsd:float	Energy need : upper Limit of the flexibility interval
arrivalDateTimeFlexMin	M	xsd:dateTime	DateTime for the veh arrival at ChargingStation: lower Limit of the flexibility interval
arrivalDateTimeFlexMax	O	xsd:dateTime	DateTime for the veh arrival at ChargingStation: upper Limit of the flexibility interval

departureDateTimeFlexMin	M	xsd:dateTime	DateTime for the veh dep from ChargingStation: lower Limit of the flexibility interval
departureDateTimeFlexMax	O	xsd:dateTime	DateTime for the veh dep from ChargingStation: upper Limit of the flexibility interval
powerInTime	O	List of powerPerStep	Charge curve (x=t, y=Power) cf detailed dataStructure (powerPerStep)
cableList	M	List of cableCapacity See 7.58 cableCapacityType	list of cables/plugs valid

7.64 LOV actorType

7.64.1   Description

The actorType value defines a type of eMobility actor.

7.64.2   Accepted Values

Value	Description
1	CPO
2	eMSP
3	eMSPb

7.65 LOV bookingConfirmation

7.65.1   Description

The bookingConfirmation value defines if a booking is accepted or not.

7.65.2   Accepted Values

Value	Description
1	Confirmed
2	Not confirmed

7.66 LOV bookingEventNature

7.66.1   Description

The bookingEventNature value defines the type of booking event sent by a CPO.

7.66.2   Accepted Values

Value	Description
1	Begin of the booked service
2	End of the booked service
3	No show
10	EVSE successfully reserved (asynchronous call to EVSE)

11	Error when sending to EVSE, booking cancelled (asynchronous call to EVSE)