OCPP 2.0.1 Edition 3

Errata 2024-09

Table of Contents

Disclaimer

Version History

Version	Date	Description
2024-09	2024-09-25	Includes new errata for Part 4, Part 5 and Part 6 of OCPP 2.0.1 Edition 3
2024-06	2024-06-27	Includes new errata for Part 5 and Part 6.

Scope

This document contains errata on the OCPP 2.0.1 documentation. These errata have to be read as an addition to the release of OCPP 2.0.1 Edition 3.

The errata do not affect any schemas of OCPP messages. Certain errata do contain changes to requirements or even new requirements, but only in cases where a requirement contains an obvious error and would not or could not be implemented literally. New requirements are only added when they were already implicitly there. These changes have been discussed in or were proposed by the Technology Working Group of the Open Charge Alliance.

The appendices of the OCPP specification can be updated without requiring a new OCPP release. This mainly concerns the components and variables of the OCPP device model, which can be extended with new components or variables, as long as they are optional.

Terminology and Conventions

Bold: when needed to clarify differences, bold text might be used.

The errata entries are sorted by page number of the affected section of the specification document. When an errata entry affects multiple parts of the specification, then the various changes are grouped together with subsections referring to the pages affected by those changes.

This is version 2024-09 of the errata. The errata of this version are marked with "(2024-09)" in the section title.

Where possible the issue number by which it was reported, is added in square brackets at the end of the section title, e.g. "[349]". For retrieval of the issue in the issue tracking system prefix the number with "OCPP20M", like "[OCPP20M-349]".

0. Part 0

Currently no new errata for OCPP 2.0.1 Edition 3 part 0.

1. Part 1

Currently no new errata for OCPP 2.0.1 Edition 3 part 1.

2. Part 2

Currently no new errata for OCPP 2.0.1 Edition 3 part 2.

3. Part 3

Currently no new errata for OCPP 2.0.1 part 3.

4. Part 4

4.1. Page 10 - (2024-09) - 4.1.4. Message ID

Change the following text in paragraph 4.1.4:

Old text	The message ID serves to identify a request. A message ID for any CALL message MUST be different from all message IDs previously used by the same sender for any other CALL messages on any WebSocket connection using the same unique Charging Station identifier. ~~This also applies to retries of messages.~~
New text	The message ID serves to identify a request. A message ID for any CALL message MUST be different from all message IDs previously used by the same sender for any other CALL messages on any WebSocket connection using the same unique Charging Station identifier. The message ID for a retried message (e.g. when no response was received within timeout) MAY be identical to the message ID of the original message.

5. Part 5

5.1. Page 19 - (2024-09) - TC_E_04_CS Updated condition for test case to exclude it for MacAddress and ISO 15118 PnC

This test case cannot be performed with the local authorization option MacAddress or ISO 15118 PnC.

		Local start transaction - Authorization first					
Old	TC_E_04	Success	C	M	Applicable if one or more of the local start authorization options is implemented.	C-30 - C-35 or ISO 15118 support	Authorization options for local start
New	TC_E_04	Success	C	M	Applicable if one or more of the local start authorization options is implemented.	(C-30 or C-31 or C-32 or C-33 or C-35)	Authorization options for local start

5.2. Page 22 - (2024-09) - TC_E_17_CS Updated condition for test case to correctly specify the applicable TxStopPoint combinations

This testcase allows for a limited set of TxStopPoint combinations, otherwise it is not applicable.

		Local start transaction - Authorization first					
Old	TC_E_17	Deauthorized - EV side disconnect	C	M	- TxStopPoint can either be ReadOnly with a subset of the values or have a valueList of supported values, that contains a subset. This testcase is applicable if the value Authorized or PowerPathClosed is a supported value. - StopTxOnEVSideDisconnect needs to ReadWrite or ReadOnly with value true	(C-10.2 or C-10.3) and C-06.2 and AQ-9	Supported Transaction Stop points
New	TC_E_17	Deauthorized - EV side disconnect	C	M	This testcase is applicable if the value Authorized is a supported value for TxStopPoint AND EVConnected, PowerPathClosed and EnergyTransfer must not be set as TxStopPoint AND StopTxOnEVSideDisconnect true must be a supported value.	C-10.2 and C-06.2 and AQ-9 and NOT (NOT C-52 AND (10.1 OR C-10.3 OR 10.4))	Supported Transaction Stop points

5.3. Page 48 - (2024-06) - Added additional questions to appendix

The following additional questions are added for CSMSs:

Id	Additional questions for lab testing
AQ-3	Does your CSMS support Absolute values for the following Charging Profiles:
AQ-3.1	*TxDefaultProfile*
AQ-3.2	*ChargingStationMaxProfile*
AQ-4	Does your CSMS support Recurring values for the following Charging Profiles:
AQ-4.1	*TxDefaultProfile*
AQ-4.2	*ChargingStationMaxProfile*

6. Part 6

6.1. Charging Station

6.1.1. Page 22 - (2024-09) - TC_A_19_CS - Fixed references to ConfigurationSlot [O20-4762]

Test case name	**Upgrade Charging Station Security Profile - Accepted**	
Test case Id	TC_A_19_CS	
Main (Test scenario)	**Charging Station**	**CSMS**
	2. The Charging Station responds with a **SetNetworkProfileResponse**	**1.** The OCTT sends a **SetNetworkProfileRequest** with **configurationSlot** is *<Configured configurationSlot>* or *<Configured configurationSlot2>* depending on which one is already in use - **connectionData.messageTimeout** *<Configured messageTimeout>* - **connectionData.ocppCsmsUrl** *<Configured ocppCsmsUrl>* - **connectionData.ocppInterface** *<Configured ocppInterface>* - **connectionData.ocppVersion** *OCPP20* - **connectionData.securityProfile** *<Configured securityProfile + 1>*
	4. The Charging Station responds with a **SetVariablesResponse**	**3.** The OCTT sends a **SetVariablesRequest** with **variable.name** is *"NetworkConfigurationPriority"* **component.name** is *"OCPPCommCtrlr"* **attributeValue** is *"<Configured configurationSlot2>,<Configured configurationSlot>"*
	...	...
Tool validations	* Step 2: Message **SetNetworkProfileResponse** - **status** *Accepted* * Step 4: Message **SetVariablesResponse** - **setVariableResult[0].attributeStatus** *Accepted* OR *RebootRequired* * Step 6: Message **ResetResponse** - **status** *Accepted* * Step 11: Message **GetVariablesResponse** - **getVariableResult[0].attributeValue** *<Configured securityProfile + 1>* * Step 13: Message **GetVariablesResponse** - **getVariableResult[0].attributeValue** Does not contain the configurationSlot with the previous (lower) security profile	
	Post scenario validations: - N/a	

6.1.2. Page 56 - (2024-09) - TC_B_20_CS - Added check on omitting evseId [4390]

Test case name	**Reset Charging Station - Without ongoing transaction - OnIdle**
Test case Id	TC_B_20_CSMS
...	

Test case name	Reset Charging Station - Without ongoing transaction - OnIdle	
Main (Test scenario)	**Charging Station**	**CSMS**
	…	
Tool validations	* Step 1: Message **ResetRequest** - **evseId** must be omitted * Step 4: Message **BootNotificationResponse** - **status** *Accepted*	
	Post scenario validations: - N/a	

6.1.3. Page 57 - (2024-09) - TC_B_21_CS - Added check on omitting evseId [4390]

Test case name	Reset Charging Station - With Ongoing Transaction - OnIdle	
Test case Id	TC_B_21_CSMS	
…		
Main (Test scenario)	**Charging Station**	**CSMS**
	…	
Tool validations	* Step 1: Message **ResetRequest** - **type** *OnIdle* - **evseId** must be omitted * Step 8: Message **BootNotificationResponse** - **status** *Accepted*	
	Post scenario validations: - N/a	

6.1.4. Page 58 - (2024-09) - TC_B_22_CS - Added check on omitting evseId [4390]

Test case name	Reset Charging Station - With Ongoing Transaction - Immediate	
Test case Id	TC_B_22_CSMS	
…		
Main (Test scenario)	**Charging Station**	**CSMS**
	…	
Tool validations	* Step 1: Message **ResetRequest** - **type** *Immediate* - **evseId** is omitted * Step 6: Message **BootNotificationResponse** - **status** *Accepted*	
	Post scenario validations: - N/a	

6.1.5. Page 138 - (2024-09) - TC_C_47_CS - StoppedReason must be validated in Ended event [O20-4467]

Test case name	Stop Transaction with a Master Pass - With UI - All transactions
Test case Id	TC_C_47_CS
…	

Test case name	Stop Transaction with a Master Pass - With UI - All transactions	
Main (Test scenario)	**Charging Station**	**CSMS**
	...	...
Tool validations	* Step 1: Message **AuthorizeRequest** - **idToken.idToken** *<Configured masterpass_idtoken_idtoken>* - **idToken.type** *<Configured masterpass_idtoken_type>* * Step 3: Message **TransactionEventRequest** - **transactionInfo.stoppedReason** *MasterPass* (in last TransactionEventRequest) - **idToken** *omit* or - **idToken.idToken** *<Configured masterpass_idtoken_idtoken>* and - **idToken.type** *<Configured masterpass_idtoken_type>* (once per stopped transaction) - **eventType** *Ended* (in last TransactionEventRequest)	
	Post scenario validations: - N/a	

6.1.6. Page 151 - (2024-09) - TC_C_54_CS - removed reusable state IdTokenCached [O20-3510]

Test case name	Authorization using Contract Certificates 15118 - Offline - ContractValidationOffline is true	
Test case Id	TC_C_54_CS	
...		
Before (Preparations)	**Configuration State:** ...	
	Memory State: *CertificateInstalled* for certificateType *V2GRootCertificate* *CertificateInstalled* for certificateType *MORootCertificate* ~~*IdTokenCached* for *<Configured valid IdToken fields>* (If implemented)~~ *IdTokenLocalAuthList* for *<Configured valid IdToken fields>* (If implemented)	
	Reusable State(s): N/a	
Main (Test scenario)	**Charging Station**	**CSMS**
	...	...
...		

6.1.7. Page 153 - (2024-09) - TC_C_55_CS - removed reusable state IdTokenCached [O20-3510]

Test case name	Authorization using Contract Certificates 15118 - Offline - ContractValidationOffline is false
Test case Id	TC_C_55_CS
...	
Before (Preparations)	**Configuration State:** ...
	Memory State: *CertificateInstalled* for certificateType *V2GRootCertificate* *CertificateInstalled* for certificateType *MORootCertificate* ~~*IdTokenCached* for *<Configured valid IdToken fields>* (If implemented)~~ *IdTokenLocalAuthList* for *<Configured valid IdToken fields>* (If implemented)
	Reusable State(s): N/a

Test case name	Authorization using Contract Certificates 15118 - Offline - ContractValidationOffline is false	
Main (Test scenario)	**Charging Station**	**CSMS**
	...	...
...		

6.1.8. Page 174 - (2024-09) - TC_E_17_CS -Updated prerequisite for test case to correctly specify the applicable TxStopPoint combinations

This testcase allows for a limited set of TxStopPoint combinations, otherwise it is not applicable.

Test case name	Stop transaction options - Deauthorized - EV side disconnect
Test case Id	TC_E_17_CS
...	
Old: Prerequisite(s)	- The Charging Station does NOT have the following configuration; The mutability of **TxStopPoint** is *ReadOnly* AND the value *Authorized* OR *PowerPathClosed* is NOT set OR (*EnergyTransfer* OR *DataSigned* OR *EVConnected is set).* *- If the mutability of **TxStopPoint** is _ReadWrite*, then the value *Authorized* OR *PowerPathClosed* must be supported.
New: Prerequisite(s)	This testcase is applicable if the value Authorized is a supported value for TxStopPoint AND EVConnected, PowerPathClosed and EnergyTransfer must not be set as TxStopPoint AND StopTxOnEVSideDisconnect true must be a supported value.

6.1.9. Page 185 - (2024-09) - TC_E_35_CS - StoppedReason must be validated in Ended event [O20-4467]

Test case name	Stop transaction options - PowerPathClosed - Remote stop	
Test case Id	TC_E_35_CS	
...		
Main (Test scenario)	**Charging Station**	**CSMS**
	...	...
Tool validations	* Step 2: Message: **RequestStopTransactionResponse** - **status** must be *Accepted* * Step 3: Message: **TransactionEventRequest** - **triggerReason** must be *RemoteStop* (for one of the TransactionEventRequests) - **transactionInfo.stoppedReason** must be *Remote* (for the last TransactionEventRequest) - **eventType** must be *Ended* (for the last TransactionEventRequest)	
	Post scenario validations: N/a	

6.1.10. Page 214 - (2024-06) TC_E_43_CS Move reusable state TransactionEventsInQueueEnded to Before [768]

State TransactionEventsInQueueEnded is moved to Before stage.

Test Case Id: TC_E_43_CS

Test case name	Offline Behaviour - Transaction during offline period
Test case Id	TC_E_43_CS
Use case Id(s)	E12
Requirement(s)	E12.FR.01,E12.FR.02,E12.FR.06
System under test	Charging Station

Test case name	Offline Behaviour - Transaction during offline period	
Description	The Charging Station queues TransactionEvent messages to inform the CSMS that a transaction occurred while the Charging Station was Offline.	
Purpose	To verify if the Charging Station is able to queue TransactionEvent messages while it was offline.	
Prerequisite(s)	The Charging Station supports authorization methods other than NoAuthorization	
Before (Preparations)	**Configuration State:** N/a	
	Memory State: N/a	
	Reusable State(s): **State is** *TransactionEventsInQueueEnded*	
Main (Test scenario)	**Charging Station**	**CSMS**
	~~**1. Execute Reusable State** *TransactionEventsInQueueEnded*~~	
	1. The Charging Stations sends a **TransactionEventRequest** Note(s): *- The Charging Station will empty its Transaction message queue. This will contain one or more TransactionEventRequest messages*	**2.** The OCTT responds with a **TransactionEventResponse**
Tool validations	* Step 1: All messages: **TransactionEventRequest** - **offline** must be *true* One of the messages: **TransactionEventRequest** - **eventType** *Started* One of the messages: **TransactionEventRequest** - **eventType** *Ended*	
	Post scenario validations: N/a	

NOTE If the Charging Station supports ISO15118, this testcase needs to be executed using EIM.

6.1.11. Page 221 - (2024-06) TC_F_04_CS Made mandatory in part 5, but prerequisite in part 6 was not updated

Removed Prerequisite(s):

Old	The Charging Station supports TxCtrlr.TxStartPoint ParkingBayOccupancy OR Authorized.
New	N/a

6.1.12. Page 295 - (2024-09) - TC_J_XX_CS Meter Values

Meter values cannot have *location* = "EV", unless it is for measurand "SoC".

For all test cases in J add the following Post scenario validation:

...	
Tool validations	...
	Post scenario validations: Message: **MeterValuesRequest/TransactionEventRequest** - ... - None of the provided **sampledValue** s shall have **location** = *EV* , except when **measurand** = *S*

6.1.13. Page 297 - (2024-09) - TC_J_02_CS Clock-aligned Meter Values

Meter values must be reported for all phases.

Test case name	**Clock-aligned Meter Values - Transaction ongoing**	
Test case Id	TC_J_02_CS	
Use case Id(s)	J01	
…		
Before (Preparations)	**Configuration State:** **AlignedDataInterval** is *<Configured clock-aligned Meter Values interval>* **AlignedDataSendDuringIdle** is *false* (If implemented) **RegisterValuesWithoutPhases** is *false* (If implemented)	
	Memory State: N/a	
	Reusable State(s): **State is** *EnergyTransferStarted*	
Main (Test scenario)	**Charging Station**	**CSMS**
	…	
Tool validations	*Note: The following steps do not need to be sent in a specific order.* * Step 1: Message: **MeterValuesRequest** - **meterValue[0].sampledValue[0].context** must be *Sample.Clock* - **meterValue[0].sampledValue** must contain *<An element per configured measurand at the AlignedDataMeasurands for the number of phases reported in **SupplyPhases**. The measurand field may be omitted when the measurand is "Energy.Active.Import.Register">* * Step 3: Message: **TransactionEventRequest** - **triggerReason** must be *MeterValueClock* - **metervalue[0].sampledValue[0].context** must be *Sample.Clock* - **metervalue[0].sampledValue** must contain *<An element per configured measurand at the AlignedDataMeasurands for the number of phases reported in **SupplyPhases**. The measurand field may be omitted when the measurand is "Energy.Active.Import.Register">*	
	Post scenario validations: …	

6.1.14. Page 306 - (2024-06) - TC_J_10_CS - Remove reference to non-existing requirements [4697]

Test case name	**Sampled Meter Values - EventType Ended**
Test case Id	TC_J_10_CS
Use case Id(s)	J02 & (E06,E07,E08,E09,E10,E12)
Requirement(s)	J02.FR.01,J02.FR.02,J02.FR.03,J02.FR.04,J02.FR.10, E06.FR.11, ~~E06.FR.17~~, E07.FR.08, ~~E07.FR.13~~,E08.FR.09,E09.FR.05,E10.FR.04,E12.FR.07
…	

6.1.15. Page 345 - (2024-06) TC_K_35_CS Get Charging Profile - EvseId > 0 + chargingProfilePurpose [773]

Change initial charging state from "N/A" to:

	Charging State: **State is** *EnergyTransferStarted*

6.1.16. Page 362 - (2024-09) - TC_K_56_CS Removed expecting triggerReason=ChargingRateChanged [776]

A trigger reason ChargingStateChange must only be sent, when an external actor (not CSMS) changes the charging rate. Therefore, removed the check that triggerReason=ChargingStateChanged is sent. Also added a check that the EV charging schedule fits within the given charging profile.

Test case name	**Charging with load leveling based on High Level Communication - Offline**	
Test case Id	TC_K_56_CS	
…		
Main (Test scenario)	**Charging Station**	**CSMS 6.** The OCTT responds with a **TransactionEventResponse**.
	…	
Tool validations	* Step 3: (Message: **NotifyEVChargingScheduleRequest**) **evseId** *<Configured evseId>* **chargingSchedule.chargingSchedule[0].chargingRateUnit** *<Configured chargingRateUnit>* **chargingSchedule.chargingSchedule[0].chargingSchedulePeriod[0].startPeriod** *0* If <Configured chargingRateUnit> is W: **chargingSchedule.chargingSchedule[0].chargingSchedulePeriod[0].limit** <= *8000* Else: **chargingSchedule.chargingSchedule[0].chargingSchedulePeriod[0].limit** <= *8* * ~~Step 5:~~ ~~Message: **TransactionEventRequest**~~ ~~- **triggerReason** must be *ChargingStateChanged*~~ ~~- **transactionInfo.chargingState** must be *Charging*~~ ~~- **offline** *true*~~	
	Post scenario validations: N/a	

6.1.17. Page 468 - (2024-06) TC_N_23_CS Offline Notification - OfflineMonitoringEventQueuingSeverity set higher than severityLevel of the monitor [772]

Test case name	**Offline Notification - OfflineMonitoringEventQueuingSeverity set higher than severityLevel of the monitor**
Test case Id	TC_N_23_CS
Use case Id(s)	N07
Requirement(s)	N07.FR.04
System under test	Charging Station
Description	Charging Station does not queue event notifications when offline.
Purpose	To test that Charging Station does not queue event notifications with a severity higher than `OfflineMonitoringEventQueuingSeverity`.
Prerequisite(s)	Charging Station is online at start of test for configuration. CS has implemented device model monitoring and MonitoringCtrlr::Enabled = true.
Before (Preparations)	**Configuration State:** SetConfiguration with: - **component.name** = *"MonitoringCtrlr"* - **variable.name** = *"OfflineQueuingSeverity"* - **attributeValue** = *<Configured Severity>*
	Memory State: Charging Station has custom or predefined monitors on variable AvailabilityState of Configured EVSE and Configured ConnectorId with *severity = <Configured severity> + 1*
	Reusable State(s): N/a

Test case name	Offline Notification - OfflineMonitoringEventQueuingSeverity set higher than severityLevel of the monitor	
Main (Test scenario)	**Charging Station**	**CSMS**
	Manual Action: *Connect the EV and EVSE.*	
	1. The Charging Station notifies the CSMS about the status change of the connector.	**2.** The OCTT responds accordingly.
	Note(s): *Step 3, 4, 5, 6, 7, and 8 need to be executed when **TxStartPoint** contains EVConnected OR ParkingBayOccupancy*	
	3. The Charging Station sends a **TransactionEventRequest**	**4.** The OCTT responds with a **TransactionEventResponse**
	Manual Action: *Take Charging Station offline.*	
	Manual Action: *Disconnect the EV and EVSE.*	
	Manual Action: *Connect the EV and EVSE.*	
	Note(s): *The tool will now wait for <Configured Transaction Duration> seconds*	
	Manual Action: *Bring Charging Station back online.*	
	5. The Charging Station sends a **TransactionEventRequest**	**6.** The OCTT responds with a **TransactionEventResponse**
	7. The Charging Station sends a **TransactionEventRequest**	**8.** The OCTT responds with a **TransactionEventResponse**
	Note(s): *The CS shall not send a NotifyEventRequest for AvailabilityState of EVSE and Connector. A StatusNotification may still be received.*	

Test case name	Offline Notification - OfflineMonitoringEventQueuingSeverity set higher than severityLevel of the monitor
Tool validations	* Step 1: *(Optional:)* Message: **StatusNotificationRequest** - **evseId** *<configured evseId>* - **connectorId** *<configured connectorId>* - **connectorStatus** must be *Occupied* *(Required, but can be combined into one NotifyEventRequest:)* Message: **NotifyEventRequest** - **eventData[0].trigger** must be *Delta* - **eventData[0].actualValue** must be *Occupied* - **eventData[0].component.name** must be *Connector* - **eventData[0].component.evse.id** must be *Configured EVSE* - **eventData[0].component.evse.connectorId** must be *Configured ConnectorId* - **eventData[0].variable.name** must be *AvailabilityState* Message: **NotifyEventRequest** - **eventData[0].trigger** must be *Delta* - **eventData[0].actualValue** must be *Occupied* - **eventData[0].component.name** must be *EVSE* - **eventData[0].component.evse.id** must be *Configured EVSE* - **eventData[0].variable.name** must be *AvailabilityState*
	* Step 3: Message: **TransactionEventRequest** - **triggerReason** must be *CablePluggedIn* - **transactionInfo.chargingState** must be *EVConnected*
	* Step 5: Message: **TransactionEventRequest** - **triggerReason** must be *EVCommunicationLost* - **transactionInfo.chargingState** must be *Idle*
	* Step 7: Message: **TransactionEventRequest** - **triggerReason** must be *CablePluggedIn* - **transactionInfo.chargingState** must be *EVConnected*
	Post scenario validations: N/A

6.1.18. Page 470 - (2024-09) - TC_N_24_CS - Referring to incorrect use case and requirements [O20-4793]

Test case name	Set Variable Monitoring - Periodic event	
Test case Id	TC_N_24_CS	
Use case Id(s)	N04, N08	
Requirement(s)	N04.FR.01, N04.FR.08, N08.FR.05 and N08.FR.06	
…		
Main (Test scenario)	**Charging Station**	**CSMS**
	…	…
Tool validations	…	
	Post scenario validations: N/A	

6.1.19. Page 493 - (2024-09) - TC_N_41_CS - Set Variable Monitoring - Return to FactoryDefault

Moved preconfigured monitor to Prerequisite.

Test case name	**Set Variable Monitoring - Return to FactoryDefault**	
Test case Id	TC_N_41_CS	
…		
Prerequisite(s)	Charging Station supports Monitoring and a preconfigured monitor exists with *id <Preconfigured monitor id>* for *component EVSE* and *variable AvailabilityState* and *type = Delta* and *severity = <Preconfigured severity>*	
Before (Preparations)	**Configuration state:** N/a	
	Memory state: ~~a preconfigured monitor exists with *id <Preconfigured monitor id>* for *component EVSE* and *variable AvailabilityState* and *type = Delta* and *severity = <Preconfigured severity>*~~	
	Charging State: N/a	
Main (Test scenario)	**Charging Station**	**CSMS**
	…	

6.1.20. Page 482 - (2024-09) - TC_N_63_CS - Clear Customer Information - Clear and report - customerCertificate

Test case design top stop transaction was not correct for an ISO 15118 session.

Test case name	**Clear Customer Information - Clear and report - customerCertificate**
Test case Id	TC_N_63_CS
…	
Before (Preparations)	**Configuration State:** N/a
	Memory State: N/a
	Charging State: Execute **Reusable State** *EVConnectedPreSession* Execute **Reusable State** *Authorized15118* ~~Execute **Reusable State** *ParkingBayUnoccupied*~~

Test case name	Clear Customer Information - Clear and report - customerCertificate	
Main (Test scenario)	**Charging Station**	**CSMS**
	Note : The Charging Station receives a SessionStopReq(Terminate) message from the EV to finish the transaction.	
	2. The Charging Station responds with a **CustomerInformationResponse**	**1.** The OCTT sends a **CustomerInformationRequest** with - **report** *true* AND - **clear** *true* AND - **customerCertificate** *customer information used in the transaction*
	3. The Charging Station sends a **NotifyCustomerInformationRequest**	**4.** The OCTT responds with a **NotifyCustomerInformationResponse**
	Note(s): *- If **tbc** is True at Step 3 then step 3 and 4 will be repeated*	
	6. The Charging Station responds with a **CustomerInformationResponse**	**5.** The OCTT sends a **CustomerInformationRequest** with - **report** *true* AND - **clear** *false* AND - **customerCertificate** *customer information used in the transaction*
	7. The Charging Station sends a **NotifyCustomerInformationRequest**	**8.** The OCTT responds with a **NotifyCustomerInformationResponse**
	Note(s): *- If **tbc** is True at Step 7 then step 7 and 8 will be repeated*	
Tool validations	...	

6.1.21. Page 575 - (2024-09) - Reusable state RenewChargingStationCertificate expects a reconnection [784]

If a valid certificate is installed, then charging station must use it. This involves reconnecting to set up a new TLS with the new certificate. If the charging station does not do so automatically, then OCTT will force it by sending a Reset command.

State	RenewChargingStationCertificate
System under test	Charging Station
Description	The ChargingStationCertificate is renewed using A02/A03
...	

State	RenewChargingStationCertificate	
Main (Test scenario)	**Charging Station**	**CSMS**
	2. The Charging Station responds with a **TriggerMessageResponse**	**1.** The OCTT sends a **TriggerMessageRequest** With **requestedMessage** *SignChargingStationCertificate*
	3 The Charging Station sends a **SignCertificateRequest**	**4.** The OCTT responds with a **SignCertificateResponse** With **status** *Accepted*
	6. The Charging Station responds with a **CertificateSignedResponse**	**5.** The OCTT sends a **CertificateSignedRequest** With **certificateChain** *<Certificate generated from the received CSR from step 3 and signed by the provided CSMS Root certificate>* **certificateType** *ChargingStationCertificate*
	If the certificate is valid, then Charging Station should reconnect with the new certificate. OCTT waits some time for a reconnection, and if that does not occur, will send a Reset command to Charging Station to force a reconnection.	
	7. The Charging Station reconnects.	
	8 . *If the reconnect was forced by a Reset:* The Charging Station sends a **BootNotificationRequest**	**9.** OCTT responds with a **BootNotificationResponse** .
Tool validations	* Step 2: Message: **TriggerMessageResponse** - **status** must be *Accepted* * Step 3: Message: **SignCertificateRequest** - **csr** must contain *<An CSR that meets the following requirements:* *When using RSA or DSA the key must be at least 2048 bits long.* *and when using elliptic curve cryptography the key must be at least 224 bits long.* *The received CSR must be transmitted as described in RFC 2986 and then encoded in Privacy-Enhanced Mail (PEM) format.>* * Step 6: Message: **CertificateSignedResponse** - **status** must be *Accepted* * Step 7: Charging Station must reconnect with new certificate.	
	Post scenario validations: N/a	

6.2. CSMS

6.2.1. Page 596 - (2024-09) - TC_A_14_CSMS - Update Charging Station Certificate by request of CSMS - Invalid certificate

SecurityEventNotification(InvalidChargingStationCertificate) has been added.

Test case name	**Update Charging Station Certificate by request of CSMS - Invalid certificate**	
Test case Id	TC_A_14_CSMS	
…		
Main (Test scenario)	**Charging Station**	**CSMS**
	2. The OCTT responds with a **TriggerMessageResponse** With **status** *Accepted*	**1.** The CSMS sends a **TriggerMessageRequest**
	3 The OCTT sends a **SignCertificateRequest** With **csr** *<Configured CSR>* **certificateType** *ChargingStationCertificate*	**4.** The CSMS responds with a **SignCertificateResponse**
	6. The OCTT responds with a **CertificateSignedResponse** With **status** *Rejected*	**5.** The CSMS sends a **CertificateSignedRequest**
	7. The OCTT sends a **SecurityEventNotificationRequest** with **type** = *InvalidChargingStationCertificate*	**8.** The CSMS responds with a **SecurityEventNotificationResponse**
Tool validations	…	

6.2.2. Page 597 - (2024-09) - TC_A_19_CSMS - Removed validation of OcppCsmsUrl [O20-4355]

Validation of OcppCsmsUrl has been removed, because in some implementations the URL changes with the security profile.

Test case name	**Upgrade Charging Station Security Profile - Accepted**	
Test case Id	TC_A_19_CSMS	
…		
Main (Test scenario)	**Charging Station**	**CSMS**
	…	…
Tool validations	* Step 1: Message **SetNetworkProfileRequest** - **connectionData.messageTimeout** *<Configured messageTimeout>* - ~~**connectionData.ocppCsmsUrl** *<Configured ocppCsmsUrl>*~~ - **connectionData.ocppInterface** *<Configured ocppInterface>* - **connectionData.ocppTransport** *JSON* - **connectionData.ocppVersion** *OCPP20* - **connectionData.securityProfile** *<Configured securityProfile + 1>* * Step 3: Message **SetVariablesRequest** **setVariableData**: - **variable.name** = *"NetworkConfigurationPriority"* - **component.name** = *"OCPPCommCtrlr"* - **attributeValue** = *<contains configurationSlot provided at step 1>*	
	Post scenario validations: - N/a	

6.2.3. Page 639 - (2024-09) - TC_C_52_CSMS - TC does not use <Configured contract_certificate>

OCTT already has a keystore that contains the certificate. The pdf should not mention the <Configured contract_certificate> as the testcase does not use it

Test case name	**Authorization using Contract Certificates 15118 - Online - Central contract certificate validation - Accepted**	
Test case Id	TC_C_52_CSMS	
…		
Prerequisite(s)	- The configured eMAID is known by the CSMS as valid. - The ~~configured~~ contract certificate is signed by the configured V2GRoot or MORoot certificate at the CSMS. - Contract certificate has a responder URL that points to an OCSP service for OCTT. - CSMS does not have a cached OCSP response for the contract certificate.	
…		
Main (Test scenario)	**Charging Station**	**CSMS**
	1. The OCTT sends an **AuthorizeRequest** With **idToken.idToken** *<Configured valid_idtoken_idtoken>* **idToken.type** *<Configured valid_idtoken_type>* **iso15118CertificateHashData** is absent **certificate** *from keystore*	**2.** The CSMS sends an OCSP request to responder URL of **certificate** to check validity
…		

6.2.4. Page 712 - (2024-09) - TC_I_01_CSMS - Show EV Driver running total cost

Test case name	**Show EV Driver running total cost during charging - costUpdatedRequest**	
Test case Id	TC_I_01_CSMS	
…		
Main (Test scenario)	**Charging Station**	**CSMS**
	…	
	7. The OCTT sends a **TransactionEventRequest** With **triggerReason** is *MeterValuePeriodic* **eventType** is *Updated* **timestamp** *<The intervals between the timestamps of the received Meter Value messages equals the configured sampled Meter Values interval>.* **sampledValue.context** is *Sample.Periodic* *Note(s):* *_- This step will be executed every _<Configured sampled Meter Values interval>* *- The OCTT will end the testcase after two MeterValues.*	**8.** The CSMS responds with a **TransactionEventResponse**
	…	
Tool validations	…	
	Post scenario validations: - N/a	

6.2.5. Page 728 - (2024-09) - TC_K_03_CSMS - Not requiring validFrom/To fields in charging profile [O20-4592] and chargingProfileKind must be Absolute [O20-4591]

Test case name	**Set Charging Profile - ChargingStationMaxProfile**	
Test case Id	TC_K_03_CSMS	
…		
Main (Test scenario)	**Charging Station**	**CSMS**
	…	…
Tool validations	* Step 1: Message **SetChargingProfileRequest** **evseId** *0* AND **chargingProfile.stackLevel** *<Configured stackLevel>* AND **chargingProfile.chargingProfilePurpose** *ChargingStationMaxProfile_* AND **chargingProfile.chargingProfileKind** *Absolute* ~~OR *Relative*~~ **chargingProfile.chargingSchedule.chargingRateUnit** *<Configured ChargingRateUnit>* **chargingProfile.chargingSchedule.duration** *<Configured duration>* **chargingProfile.chargingSchedule.chargingSchedulePeriod.startPeriod** *0* **chargingProfile.chargingSchedule.chargingSchedulePeriod.limit** *8.0* or *8000.0* **chargingProfile.chargingSchedule.chargingSchedulePeriod.numberPhases** *<Configured numberPhases>* where *<Configured numberPhases>* not *3* OR **chargingProfile.chargingSchedule.chargingSchedulePeriod.numberPhases** *<Configured numberPhases>* or *<omit>* where *<Configured numberPhases> 3* ~~**chargingProfile.validFrom** *<Not omitted>*~~ ~~**chargingProfile.validTo** *<Not omitted>*~~ **chargingProfile.chargingSchedule.startSchedule** *<Not omitted>*	
	Post scenario validations: - N/a	

6.2.6. Page 733 - (2024-09) - TC_K_10_CSMS - Not requiring validFrom/To fields in charging profile [O20-4592]

Test case name	**Set Charging Profile - TxDefaultProfile - All EVSE**	
Test case Id	TC_K_10_CSMS	
…		
Main (Test scenario)	**Charging Station**	**CSMS**
	…	…

Test case name	Set Charging Profile - TxDefaultProfile - All EVSE
Tool validations	* Step 1: Message **SetChargingProfileRequest** **evseId** *0* AND **chargingProfile.stackLevel** *<Configured stackLevel>* AND **chargingProfile.chargingProfilePurpose** *TxDefaultProfile* AND **chargingProfile.chargingProfileKind** *Absolute* AND ~~**chargingProfile.validFrom** *<Not omitted>* AND~~ ~~**chargingProfile.validTo** *<Not omitted>* AND~~ **chargingProfile.chargingSchedule.startSchedule** *<Not omitted>* AND **chargingProfile.chargingSchedule.chargingRateUnit** *<Configured ChargingRateUnit>* AND **chargingProfile.chargingSchedule.chargingSchedulePeriod.startPeriod** *0* AND **chargingProfile.chargingSchedule.duration** *<Configured duration>* **chargingProfile.chargingSchedule.chargingSchedulePeriod.limit** *6.0* or *6000.0* AND **chargingProfile.chargingSchedule.chargingSchedulePeriod.numberPhases** *<Configured numberPhases>* where *<Configured numberPhases>* not *3* OR **chargingProfile.chargingSchedule.chargingSchedulePeriod.numberPhases** *<Configured numberPhases>* or *<omit>* where *<Configured numberPhases> 3*
	Post scenario validations: - N/a

6.2.7. Page 734 - (2024-09) - TC_K_15_CSMS - Not requiring validFrom/To fields in charging profile [O20-4592]

Test case name	Set Charging Profile - Not Supported	
Test case Id	TC_K_15_CSMS	
…		
Main (Test scenario)	**Charging Station**	**CSMS**
	2. The OCTT responds with RPC Framework: CALLERROR: NotSupported.	**1.** The CSMS sends a **SetChargingProfileRequest** with: **evseId** *<Configured evseId>* AND **chargingProfile.stackLevel** *<Configured stackLevel>* AND **chargingProfile.chargingProfilePurpose** *TxDefaultProfile* AND **chargingProfile.chargingProfileKind** *Absolute* AND ~~**chargingProfile.validFrom** *<Not omitted>* AND~~ ~~**chargingProfile.validTo** *<Not omitted>* AND~~ **chargingProfile.chargingSchedule.startSchedule** *<Not omitted>* AND **chargingProfile.chargingSchedule.chargingRateUnit** *<Configured ChargingRateUnit>* AND **chargingProfile.chargingSchedule.chargingSchedulePeriod.startPeriod** *0* AND **chargingProfile.chargingSchedule.duration** *<Configured duration>* **chargingProfile.chargingSchedule.chargingSchedulePeriod.limit** *6.0* or *6000.0* AND **chargingProfile.chargingSchedule.chargingSchedulePeriod.numberPhases** *<Configured numberPhases>*
Tool validations	…	

6.2.8. Page 753 - (2024-09) - TC_K_55_CSMS, TC_K_57_CSMS, TC_K_58_CSMS, TC_K_59_CSMS Removed triggerReason = ChargingRateChanged [776]

A trigger reason ChargingStateChange must only be sent, when an external actor (not CSMS) changes the charging rate. Therefore, removed the sending of a triggerReason=ChargingStateChanged by OCTT. This does not affect tool validations, but it was incorrect behavior of OCTT.

The step that sends a TransactionEventRequest with triggerReason=ChargingRateChanged has been removed from:

- TC_K_55_CSMS
- TC_K_57_CSMS
- TC_K_58_CSMS
- TC_K_59_CSMS