Assumptions **GFI 1.0RC5**

Cross-cutting assumptions

IRP	Description	GFI Assumption	IRP = GFI Assumption?	Comments
IRP205	Encoding and length of variable length unsigned integers	GBCS Only	No	GFI doesn't implement IRP205
IRP230	Grouping header field sequence	GBCS Only	No	GFI follows the GBCS text section 7.2.7, doesn't implement IRP230
IRP265	Length of serialNumber	GFI has only been tried with BT generated credentials	-	IRP265 doesn't affect GFI. It will work with a serialnumber size of 8 as well as 16
IRP283	GBT - Requesting of missing blocks before the end of window	No Assumption made	No	GFI doesn't support the request of missing blocks in GBT
IRP292	What contributes to the signature and MAC	GBCS Only: Signature follows concatenation in 7.2.7 (rather than the table in 7.2.7)	No	GFI doesn't implement IRP292
IRP358	IV FixedField	Follows 4.3.3.4, using Business Originator ID	Yes	GFI follows the GBCS text section 4.3.3.4 and thus is aligned with IRP358, using the Business Originator ID as part of the IV
IRP375	Endianness		Yes	aligned with IRP 375

Use Case-specific assumptions

USE CASE	GIST	IRP	R1.1	GFI ASSUMPTIONS
CCS01			X	None
CCS02			X	None
CCS03	3705 3868 3679	226 219	X	As per IRP #3705, it is assumed that upon execution of this use-case, no alert of type CS14 will be generated afterwards. The statement in issue #3868 is assumed to be correct (need for a supplementary party), as IRP 219 proposes changes in this direction.
CCS05_CCS04			X	None
CS01a				None
CS01b				None
CS02a				None
CS02b	5152		X	As reported in Issue #5152, we've assumed that the replacementCertificate field should be encoded as regular ASN.1 certificate.
CS02c			X	None
CS02d			X	None
CS02e				None
CS03	5000 5060	269 321	X	Issue 5000/IRP 269 : CS03A2 should be SME.C.C Issue 5060: CS03C shall not have the "Supplementary Remote Party Data required?" marked with "yes" in mapping table.
CS04	5060	321	X	Issue 5060: CS04AC shall not have the "Supplementary Remote Party Data required?" is marked yes in mapping table.
CS06		268	X	None
CS07			X	None

USE CASE	GIST	IRP	R1.1	GFI ASSUMPTIONS
CS10a	5036	282219		Based on IRP 282, it's assumed that:- There is only an alternate response (and not 4 as it's stated in the message template);- The Number Of Events/Log Payload Control field is set to 0x00.
CS10b	4367	219		While Zigbee mentions only Least significant nibble = 0x4 (Security Log), template implies 0x14
CS11				None
CS14	3746 3705	226	X	It shall be assumed that this Use Case is Non-Critical as stated in the Mapping Table.
DLMS_FDRA				None
DLMS_GCA				None
DLMS_GNCA				None
ECS01a	5012 5059 5061	279		Issue 5012: Since parameter in row 1143 belongs to the same DLMS class containing the remaining parameters of StandingCharge object, it is assumed that parameter in row 1211 should be removed. It is considered the IRP279. Issue 5059: It is assumed that the size of TariffThresholdMatrixBlocks arrays may be variable. Issue 5061: It is assumed that the "TariffThresholdMatrixBlocks" arrays aren't OPTIONAL.
ECS01b	4759 5012	258		IRP 258/GIST #4959 : In the Set Price Use Case, (1) threshold matrix activationdatetime rows should not be present (threshold matrix is not part of any price and so should only be in set tariff and price). It is also assumed that parameter in row 1211 should be removed.
ECS01c	5056	329 279 229		Issue 5056: "specialday_date" attribute type is date"/OCTET-STRING.

USE CASE	GIST	IRP	R1.1	GFI ASSUMPTIONS
ECS01d				None
ECS02	4984	296		It is assumed that this being a Future Dated DLMS Use Case it should generate one alert per activation date attribute present in the command
ECS03	4984	296		It is assumed that this being a Future Dated DLMS Use Case it should generate one alert per activation date attribute present in the command.
ECS04a				None
ECS04b				None
ECS05				None
ECS07				None
ECS08	5056	329		Issue 5056: "specialday_date" attribute type is date"/OCTET-STRING.
ECS09				None
ECS10				None
ECS12				None
ECS14				None
ECS15a				None
ECS15c	3859	250		It is assumed that the value of AuxiliaryLoadControlSwitchEventLog.method:clear is zero.
ECS16				None
ECS17a		219		Command can be issued by the ACB on behalf of other parties.
ECS17b			X	None
ECS17c	3874	233		Assuming that the IRP affects ECS17e and not ECS17c (Issue 3874).
ECS17d				None
ECS17e				None

USE CASE	GIST	IRP	R1.1	GFI ASSUMPTIONS
ECS18a				None
ECS18b	5086			Issue #5086: "exec_specdays" is a bit-string(0) instead of bitstring(9)
ECS19				None
ECS20a	4371 4557	274		Both toDateTime and fromDateTime can't be "NULL".
ECS20b	3730 4557			The use case is marked as "Supplementary Originator Counter required in Response" and "Key Agreement Certificate" needed. Both toDateTime and fromDateTime can't be "NULL".
ECS20c	3730 4557			The use case is marked as "Supplementary Originator Counter required in Response" and "Key Agreement Certificate" needed. Both toDateTime and fromDateTime can't be "NULL".
ECS20d	4371 5004	311		Assumptions had to be made: dlValue assumed as double-long.
ECS21a				None
ECS21b				None
ECS21c	3868	219		The use case is marked as "Supplementary Remote Party Data required"
ECS22a				None
ECS22b				None
ECS22c				None
ECS23	3729	219		According to IRP219, it's assumed that the ACB shall be able to execute this Use Case's command and it shall require Supplementary Remote Party Data.
ECS23b	3729	219		According to IRP219, it's assumed that the ACB shall be able to execute this Use Case's command and it shall require Supplementary Remote Party Data.

USE CASE	GIST	IRP	R1.1	GFI ASSUMPTIONS
ECS24	5029 5030 5031	315 279		Issue #5029 : There shall only be only one charge_per_unit, and the single index and charge_per_unit elements must be together within the same charge_table_element structure. Issue #5030 : Until further clarifications ECS24 TariffBlockPriceMatrixTOU: valueCurrent.commodityScale will be considered constant, like mentioned in Table 19.3 Issue #5031: considered charge_table_element.index as an octet_string(1)
ECS24b	5045 5049	315 316		Issue #5045: There shall only be only one charge_per_unit, and the single index and charge_per_unit elements must be together within the same charge_table_element structure. Issue #5049: TariffSwitchingTableSecondaryElementSpecialDays.index[1.20].next (mapping table row #1815) is not relevant and does not need to be included in ECS24b messages.
ECS25a				None
ECS25b				None
ECS26a				None
ECS26b	3868	219		The use case is marked as "Supplementary Remote Party Data required"
ECS26c	3868	219		The use case is marked as "Supplementary Remote Party Data required"
ECS26d	3868	219		The statement in issue #3868 is assumed to be correct (need for a supplementary party), as IRP 219 proposes changes in this direction.
ECS26e	3868	219		The statement in issue #3868 is assumed to be correct (need for a supplementary party), as IRP 219 proposes changes in this direction.

USE CASE	GIST	IRP	R1.1	GFI ASSUMPTIONS
ECS26f	3868	219		The use case does not have the "Supplementary Remote Party Data required?" set as "Yes" in the mapping table, although the Access Control Broker has access to the use case. We are assuming that this data is required as the GBCS will be updated accordingly (see issue #3868 in GIST). Also, we are assuming that "Supplementary Originator Counter required in Response?" will be set as "No" in the mapping table and, therefore, will not be required in the response.
ECS26i	3868	219		According to IRP219, this Use Case shall require Supplementary Remote Party Data.
ECS26j	3868	219		The statement in issue #3868 is assumed to be correct (need for a supplementary party), as IRP 219 proposes changes in this direction.
ECS26k	3868	219		The use case is marked as "Supplementary Remote Party Data required"
ECS27	3124	219		This test case was implemented considering that the Access Control Broker also has access to the use case. Issue #3124 implies that ACB also can invoke this use case although is not explicitly showed in the mapping table. We are assuming that this will be corrected as indicated in the issue and we implemented the use case accordingly.
ECS28a		229		IRP 3696: Future dated alerts and certificate alerts
ECS28b				None
ECS29a				None
ECS29b				None
ECS30				None

USE CASE	GIST	IRP	R1.1	GFI ASSUMPTIONS
ECS34	4752	262		The message template of ECS34 command present on COSEM Message Templates is wrong: it is assumed that the command has only one requested parameter (an array with two entries) instead of two (two arrays with two entries each), as stated in IRP262.
ECS35a	4369 3868	276 219		Assumed entry_eventLogEntry8 is being used (which has OCTET-STRING size 8 not 12). The use case is marked as "Supplementary Remote Party Data required"
ECS35b	3868	219		The use case is marked as "Supplementary Remote Party Data required"
ECS35c	3856 3868	219		Assumed entry_eventLogEntry8 is being used (which has OCTET-STRING size 8 not 12) The use case is marked as "Supplementary Remote Party Data required"
ECS35d	3868	219		The use case is marked as "Supplementary Remote Party Data required"
ECS35e	4373 3868 4372	330 219 301		Only one request; other info as double-long-unsigned. The use case is marked as "Supplementary Remote Party Data required"
ECS35f	4374	304		Assumption: Assumed that mapping table has precedence over section 18.2.1 of GBCS 0.8.1 (switchNumberAndAction as long-unsigned not double-long-unsigned as in GBCS 18.2)
ECS37	3707			It is assumed that both MaximumDemandConfigurableTimePeriod.currentEntries[1..2].index and MaximumDemandConfigurableTimePeriod.currentEntries[1..2].scriptSelector can assume any valid lon-unsigned value. A request for clarification was created nevertheless to clarify if this is so or if these attributes are limited to a selection of values.
ECS38				None

USE CASE	GIST	IRP	R1.1	GFI ASSUMPTIONS
ECS39a				None
ECS39b				None
ECS40	3145	201		GIST Issue #3145: "ECS40 - Notes for attribute MeterPointAdministrationNumber(combinedMPANS)"
ECS42				None
ECS43				None
ECS44				None
ECS45	3679	219		As defined in IRP219 this UC contains Supplementary Remote Party
ECS46a				None
ECS46c	5056 5038	329 257		Assumption: specialday_date in the spec_day_entry structure was assumed to be an octet-string(5) date (not a date-time octet-string(12)), according to 4.1.6.1 of the Blue Book (also see GIST Issue #5056). Assumption: entries:entries[1..20].spec_day_entry changed to [0..20]; entries:entries[1..48].schedule_table_entry changed to [0..60] (the number of calendar entries was assumed to be 0..60 as per the IRP257, GIST Issue #5038) .
ECS47	4368			Each ECS47 command applies to a single action in a single ALCS.
ECS50				None
ECS52	3868	219	X	Issue #3868: it is assumed that this use case is available to the ACB and the "Supplementary Remote Party Data required?" attribute should be set.
ECS57				None
ECS61a	5073 4368			The command is needed to interpret the response correctly. ECS61a can read the data from multiple ALCSs.

USE CASE	GIST	IRP	R1.1	GFI ASSUMPTIONS
ECS61c	3699			It is assumed method input toDateTime is of type DATE-TIME. An issue is to be raised as the specs are not clear regarding whether or not the dates can assume null values.
ECS62				None
ECS66				None
ECS68	3915 3708	298 270		Issue 3915: Assumed DEEC position on which ECS68 Alert Code will be corrected from 0x000A to 0x800A in mapping table/HTML use cases. Issue 3708: Assumed that the length of arrays inside of compact arrays is encoded as a 2 octets integer.
ECS70	3901 3899	302 305	X	Issue #3901: the correct possible values for attribute 4 of the Clock (status) are (0) reliableTime, (1) unknownTime and (2) potentiallyUnreliableTime. Issue #3899: GBCS is correct and therefore the ECS70 Message Template should be corrected as described in the attached file in GIST's page of the issue.
ECS80	50325033	320		The alert codes considered for this Use Case were the ones present in the Event and Alert Codes table. Additionally, as stated in the Mapping Table, it was assumed that this Use Case does not require Supplementary Remote Party Data.
ECS81				None
ECS82				None
GCS01a	5098 5103			Issue #5098: One activateNextDateTime needs to be removed and other corrected. Issue #5103: We are assuming that mentioned items (scaler, multiplier and divisor) are dynamic.

USE CASE	GIST	IRP	R1.1	GFI ASSUMPTIONS
GCS01b	5014 5098 5103	312		Issue #5014: We have not followed issue assumption. Instead it has been assumed currency is included. Issue #5098: One activateNextDateTime needs to be removed and other corrected. Issue #5103: We are assuming that mentioned items may be dynamic although we will set it with this value in the tests.
GCS02	5041			It was assumed that this Use Case's alert 'Use Case Specific Components' field should contain its extended header cluster id with a big endian byte order.
GCS03	5041			It was assumed that this Use Case's alert 'Use Case Specific Components' field should contain its extended header cluster id with a big endian byte order.
GCS04	4745	275		Zigbee standard (ZSE) is correct (as well as SMETS section / table listing 5 possible values for Debt Recovery Frequency) and takes precedence over the message template "Value" definitions and as such all 5 values are considered to be valid on the Zigbee message template (that should contain "0x00 | 0x01 | 0x02 | 0x03 | 0x04", 2 times). Zigbee standard (ZSE) is correct and as "Debt Recovery Frequency" is not relevant for "5 = Payment-based debt Incremental", the constant "Value" sent for "Debt Recovery Frequency" should be 0xFF not 0x00 | 0x01 as it is stated on the current Zigbee message template.

USE CASE	GIST	IRP	R1.1	GFI ASSUMPTIONS
GCS05	4751 5037 5143 5166 5165	261 244		The parameter "PublishDayProfile.DayScheduleEntries" parameter description is "Array of Day Schedule Entries. Each entry is interpreted as follows: Start Time (minutes from midnight, UINT16); Friendly Credit Enable (BOOLEAN) - 0x01 (Enabled) or 0x00 (not enabled)". The parameter "PublishSpecialDays.SpecialDays" has a lower bound of zero. The description should read "Array of between 0 and 20 Special Day Entry(s)". The zigbee response to the command PublishDayProfile varies from 1-5 instances. The parameter "Extended Header Control Field" in the "Set Low Credit Warning Level" command is set to 0x00. The value of the "Extended Header GBZ Command Length" of the "Set Low Credit Warning Level" is 0x000B and not 0x0007.
GCS06				None
GCS07	3884	313		"Duration in Minutes" is set to 0xFFFF (which means the message should be displayed by the meter until a new message is received, according to ZSE), since the specification does not include any default value for this particular dynamic field
GCS11				None
GCS13a			X	None
GCS13b				None
GCS13c	5080	332		Assumed that the length calculation in issue 5080 is correct.
GCS14	3633	233		The use case is not future dated

USE CASE	GIST	IRP	R1.1	GFI ASSUMPTIONS
GCS15b	5080 5093	332		The Extended Header GBZ Command Length has been calculated as per the assumption described in issue #5080. Two of this Use Case's SMETS Objects - BillingDataLog(SetPaymentModeOrTariffTriggeredFinancialExcExport): logEntries[1..12].logEntry.paymentDebtRegisterValue and BillingDataLog(SetPaymentModeOrTariffTriggeredFinancialExcExport): logEntries[1..12].logEntry.Block[1..4].RegisterMatrixValue - have been mapped to ZSE according to the rationale described in Issue #5093.
GCS15c	5080 5093 5122	332		The Extended Header GBZ Command Length has been calculated as per the assumption described in issue #5080; The SMETS Object BillingDataLog(BillingCalendarTriggeredExcExport): logEntries[1..12].logEntry.Block[1..4].RegisterMatrixValue has been mapped to ZSE according to the rationale described in Issues #5093 and #5122.
GCS15d	5081 5080	350 332		Assumption 1: The 4 octets used by the From Date Time field should be added to the Command Length field's value(i.e. this field should be 0x000D/0x000C instead of 0x0009/0x0008 for GCS15d/GCS15e); Assumption 2: Extended Header GBZ Command Length calculated as per assumption in issue #5080;
GCS15e	5081 5080 4971	350 332 266		Assumption 1: The 4 octets used by the From Date Time field should be added to the Command Length field's value(i.e. this field should be 0x000D/0x000C instead of 0x0009/0x0008 for GCS15d/GCS15e); Assumption 2: Encryption is not used as originally stated, as per IRP 266.

USE CASE	GIST	IRP	R1.1	GFI ASSUMPTIONS
GCS16a	5080 5093 5122	332		The Extended Header GBZ Command Length has been calculated as per the assumption described in issue #5080; The SMETS Object DailyReadLog(excExport): logEntries[1..31].logEntry.tariffBlockCounterMatrix has been mapped to ZSE according to the rationale described in Issues #5093 and #5122.
GCS16b	5080	332		The Extended Header GBZ Command Length has been calculated as per the assumption described in issue #5080.
GCS17				None
GCS18	4982 3124			- Issue #4982: it was followed the following assumption: "ZigBee is correct and takes precedence over GBCS definitions" - Issue #3124: Assumed that requires Sup. Remote Party Data.
GCS20	4977			Issue #4977: It is assumed that Alerts Configuration Settings: methodInput: eventList parameter is a STRUCT composed by an ARRAY of UINT16 and an UINT8.
GCS21a				None

USE CASE	GIST	IRP	R1.1	GFI ASSUMPTIONS
GCS21b	4751	261		Assumed IRP 261 decisions including embedded message template for GCS21b (add missing attributes described below; remove Prepayment Information - Payment Control Configuration). See embedded docs in the IRP document (GIST issue #4751).Fields DebtRecoveryRates[1].scalerCurrent, DebtRecoveryRates[2].scalerCurrent, DebtRecoveryRates[1].amountCurrent, DebtRecoveryRates[2].amountCurrent: These fields are not present in the 0.8.1 GBZ template and it was assumed that they will be added to it (these fields are already being considered on IRP 261). Fields DebtRecoveryRates[1].amountCurrent, DebtRecoveryRates[2].amountCurrent: Incompatible data type between read and write (see GCS04 - INT32 vs UINT32) and also with defined range. We are assuming ZSE has precedence and as such that values read are UINT32 (as also considered in IRP 261).
GCS21d	3868	219		The statement in issue #3868 is assumed to be correct (need for a supplementary party), as IRP 219 proposes changes in this direction.
GCS21e	3874 4558	233 257 219 349		Assumption 1: ModelTypeHWVersion.value is dropped, as per IRP 233 (No SMETS requirement); Assumption 2: New message format/Supplier Name dropped, as per IRP 257 2nd version. Assumption 3: The type of the attributes ManufacturerName and ModelIdentifier is Character String and not Octet String.
GCS21f		293		None

USE CASE	GIST	IRP	R1.1	GFI ASSUMPTIONS
GCS21j	3679	219		According to IRP219 this Use Case should include a Supplementary Remote Party Role if executed by the ACB.
GCS23	2958	33		This test is compliant with updates/corrections released in GBCS v0.8.1, namely attributes "Start Time" in both commands are now assumed to be constant, set to 0x00000000, and their meaning updated to: "Means that the GSME shall apply immediately on receipt".
GCS24	3717	257		It is assumed measurementPeriod and StabilisationPeriod are dynamic parameters.
GCS25				None
GCS28			X	None
GCS31				None
GCS32				None
GCS33	3868	219		The statement in issue #3868 is assumed to be correct (need for a supplementary party), as IRP 219 proposes changes in this direction.
GCS36				None
GCS38			X	None
GCS39				None
GCS40a				None
GCS40b				None
GCS40c				None
GCS40d				None
GCS41				None
GCS44				None
GCS46		219		None

USE CASE	GIST	IRP	R1.1	GFI ASSUMPTIONS
GCS53	5080 5093 5066	332 298		The Extended Header GBZ Command Length has been calculated as per the assumption described in issue #5080; The SMETS Object BillingDataLog(BillingCalendarTriggeredExcExport): logEntries[1..12].logEntry.Block[1..4].RegisterMatrixValue has been mapped to ZSE according to the rationale described in Issues #5093; As stated in IRP298, we've assumed that this Use Case's Alert Code shall be 0x800A.
GCS60				None
ZigBee_GCA				None
ZigBee_GNCA				None
ZigBee_FDRA	5153			The Manufacturer Image Hash field value shall be composed only by the concatenation of the length and content of the Manufacturer Image Hash as described in Issue #5153.