DRAFT AMENDMENT NO. 3 Jan 2023
TO
IS 15959 (Part 2):2016 DATA EXCHANGE FOR ELECTRICITY METER READING, TARIFF AND LOAD CONTROL -- COMPANION SPECIFICATION

(Page 2, Clause 4)
Add the following as Note
Note: HLS Authentication Mechanism Id 2 or 5 can be used in the implementation.

(Page 2, Clause 6, Para 3)
Replace
'The Smart Meter shall exclusively use "Push setup Interface Class: Interface class 40" which has the required attributes as illustrated (with example values) in Fig.2'
with
'The Smart Meter shall exclusively use "Push setup Interface Class: Interface class 40 version 0" which has the required attributes as illustrated (with example values) in Fig.2'

(Page 3, Clause 6, Para 5)
Replace
'This push script table shall have five scripts as given in table 3'
with
'This push script table shall have six scripts as given in table 3'

(Page 3, Clause 6, Para 5)
Replace
'This standard has identified five Push setup instances and are as listed in Table 3.'
with
'This standard has identified six Push setup instances and are as listed in Table 3.'

(Page 3, Clause 6, Table 3, Objects for Scripts in the Push Script Table)
'Remove Row number 1 from table and update Sl.No. for rest of the rows'

(Page 3, Clause 6, Table 3, Objects for Scripts in the Push Script Table)
Add the following two rows at the end of the table

SM to HES (Block Load Profile)	0.5.25.9.0.255	6	0.4.15.0.4.255 22 (Single Action Schedule).
SM to HES (Daily Load Profile)	0.6.25.9.0.255	7	0.5.15.0.4.255 22 (Single Action Schedule).

(*Page* 3, Table 3**)** – Add the following note after Note 2:
'3. Attribute 3 of the Push Setup instances to be used for configuring destination address and port of the respective Push instances.' Example [IPv6 address]: Port Number

[2402:3a80:1700:1d:c96a:d3af:d161:640c]:2223

(Page 4, Table 6) Add the following as Note
1. Device ID shall be a combination of 3 letter manufacturer FLAG ID + serial number

(Page 4) Remove section 6.1.1. Periodic Push (SM to HES): OBIS <0.0.25.9.0.255> and update section numbers of subsequent sections **& reference Table nos. in subsequent paragraphs wherever applicable.**

(*Page* 4, Table 7, Sl. No. (iv) to (vii), Col 2**)** – Replace 'A5' by 'A14'.

(Page 5, Table 8)
Add the following as Note
1. Device ID shall be a combination of 3 letter manufacturer FLAG ID + serial number

(Page 5, Table 10)
Replace description of bits 85 and 86 as:

85 Last Gasp (Occurrence of Power failure)
86 First Breath (Occurrence of Power restoration)

(Page 5, Table 10, Notes)
Replace Note 2 and add Note 3 as below:
Note 2- Bits associated with events which are not applicable shall always be set to '0'. Bit status will be '1' for occurrence & '0' for restoration. For example, in case of load disconnection (301), bit (84) status will be '1' & '0' for load connection (302).
Note 3- In case of event id, the odd number is for occurrence & the even number is for restoration.

(Page 5, clause 6.1.5) Add the following:
6.1.6 SM to HES (Block Load Profile)
In this service, Block Load Profile and other associated objects are periodically notified by smart meter to HES. Push capture objects are shown in Table 11.

Table – 11 SM to HES (Block Load Profile) Capture objects

Sl. No.	**Parameter**	**OBIS code A.B.C.D.E. F**	**Interface Class / Attributes**	**Access Right**
i	Device ID	0.0.96.1.2.255	1/2	Read
ii	Push Setup ID	0.5.25.9.0.255	40/1	Read
iii	Real Time Clock – Date and Time	0.0.1.0.0.255	8/2	Read
iv	Block Load Profile Buffer	1.0.99.1.0.255	7/2	Read

NOTE - Device ID shall be a combination of 3 letter manufacturer FLAG ID + serial number

6.1.6.1 Data Index

Data Index is a pointer selecting a specific element of an attribute with a complex data type (structure or array). For Sl. No i, ii and iii, data index shall be 0x0000. For Sl.No. iv, the data index carries selective access parameters relative to current date or entry. For Block Load Profile Push, this specification requires Push data index based on hours. Data index is of long unsigned data type and the usage of two bytes are shown in table 11A.

Table 11A - Block Load Profile Push – Data index

Data index	Most significant byte		Least significant byte
	Upper nibble	Lower nibble	

- Most significant byte - upper nibble shall be set to 0xd (Last complete no of hours)
- Most significant byte - lower nibble shall be 0x0(all columns).
- Least significant byte - number of recent complete time periods to be pushed. The default value shall be 0x01 (meaning SM will push last one-hour Block Load Profile entries on every Push). LSB can be set to other non-zero values decided between buyer and seller. (However, maximum limit shall be 1 day)
- Data index will be calculated internally by meter as per single action schedule for load profile push.

6.1.6.2 SM to HES (Block Load Profile) Push Schedule

SM to HES (Block Load Profile) Push is triggered internally by meter at date/time specified in SM to HES (Block Load Profile) Push Single Action Schedule object.

Table 11B Single action schedule

Function	**Interface Class**	**OBIS Code A.B.C.D.E. F**
Block Load Profile Push Schedule	22 – Single Action Schedule	0.4.15.0.4.255

Execution time shall be in the format hh:mm: 00:00, where minute field can have values as integral multiple of Load profile capture period configured in meter. Execution date shall be in the format yyyy-mm-dd. Wild card(0xFF) can be used in some or all the date fields (see examples given below). Execution time shall have read & write access in US association. Execution time shall have minimum recurrence interval (effective interval between two execution times) of one hour.
The interval duration between two push operation should be same.

Example 1(schedule date and time to push every hour)
Execution time = array
[0] = {FFFF-FF-FF-FF FF: 00:00:00}

Example 2(schedule date and time to push once in every two hours)
Execution time = array
[0] = {FFFF-FF-FF-FF 00:00:00:00}

[1] = {FFFF-FF-FF-FF 02:00:00:00}
[2] = {FFFF-FF-FF-FF 04:00:00:00}
[3] = {FFFF-FF-FF-FF 06:00:00:00}
[4] = {FFFF-FF-FF-FF 08:00:00:00}
[5] = {FFFF-FF-FF-FF 10:00:00:00}
[6] = {FFFF-FF-FF-FF 12:00:00:00}
[7] = {FFFF-FF-FF-FF 14:00:00:00}
[8] = {FFFF-FF-FF-FF 16:00:00:00}
[9] = {FFFF-FF-FF-FF 18:00:00:00}
[10] = {FFFF-FF-FF-FF 20:00:00:00}
[11] = {FFFF-FF-FF-FF 22:00:00:00}

(Page 5) Add the following:

6.1.7 SM to HES (Daily Load Profile)

In this service, Daily Load Profile and other associated objects are periodically notified by smart meter to HES. Push capture objects are shown in Table 11C.

Table – 11C SM to HES (Daily Load Profile) Capture objects

Sl. No.	**Parameter**	**OBIS code A.B.C.D.E. F**	**Interface Class / Attributes**	**Access Right**
i	Device ID	0.0.96.1.2.255	1/2	Read
ii	Push Setup ID	0.6.25.9.0.255	40/1	Read
iii	Real Time Clock – Date and Time	0.0.1.0.0.255	8/2	Read
iv	Daily Load Profile Buffer	1.0.99.2.0.255	7/2	Read

NOTE - Device ID shall be a combination of 3 letter manufacturer FLAG ID + serial number

6.1.7.1 Data Index

Data Index is a pointer selecting a specific element of an attribute with a complex data type (structure or array). For Sl.No i, ii and iii, data index shall be 0x0000. For Sl.No. iv, the data index carries selective access parameters relative to current date or entry. For Daily Load Profile Push, this specification requires Push data index based on days. Data index is of long unsigned data type and the usage of two bytes are shown in table 15.

Table 11D - Daily Load Profile Push – Data index

Data index	Most significant byte		Least significant byte
	Upper nibble	Lower nibble	

- Most significant byte - upper nibble shall be set to 0xe (Last complete no of days)
- Most significant byte - lower nibble shall be 0x0(all columns).

- Least significant byte - Value shall be fixed to 0x01(meaning SM will push last one day Daily Load Profile entry on every Push).

6.1.7.2 SM to HES (Daily Load Profile) Push Schedule

SM to HES (Daily Load Profile) Push is triggered internally by meter at date/time specified in SM to HES (Daily Load Profile) Push Single Action Schedule object.

Table 11E Single action schedule

Function	**Interface Class**	**OBIS Code A.B.C.D.E. F**
Daily Load Profile Push Schedule	22 – Single Action Schedule	0.5.15.0.4.255

Execution time shall be in the format hh:mm:00:00. Execution date shall be wild card(0xFF). Execution date and time shall have read & write access in US association. Execution time shall have only one entry.

Example

If execution time is configured as {year = 0xFFFF, month = 0xFF, day of month = 0xFF, day of week = 0xFF hour = 0x00, minute = 0x00, second = 0x00, hundredth = 0x00}, then Push will be triggered at 00:00:00 of every day, every month, every year.

Example 1(schedule date and time to push every day at 00:00:00)

Execution time = array
[0] = {FFFF-FF-FF-FF 00:00:00:00}

(*Page 5*, Table 10, Bit No. 87) – Replace the existing with below:
'Billing on Manual/MRI reset'

(Page 6, clause 7.3.1) — Substitute the following at the end of second paragraph in place of existing (see also Amendment No.1):
'The security setup object (0.0.43.0.e.255, e = 2, 3, 4, 5) shall be used for changing the Global keys (encryption & authentication). New global key will be wrapped with Master key using AES Key wrap algorithm and key transfer method is executed in US association. The new key shall be activated immediately after the successful key transfer. IHD Association shall use separate Global key which will be factory set. Changing of the same is not in the scope of this document.'

(*Page 6*, Clause 7.3) – Add the following after the end of the clause
"7.4 Invocation counter
For each ciphered application association, meter shall maintain an invocation counter receive object with read-only access in PC association.

Table 11F: Invocation counter objects

Sl.No	Object name	Interface Class	OBIS Code
(1)	(2)	(3)	A.B.C.D.E.F

			(4)
1	Invocation counter receive – MR	1	0.0.43.1.2.255
2	Invocation counter receive – US	1	0.0.43.1.3.255
3	Invocation counter receive – PUSH	1	0.0.43.1.4.255
4	Invocation counter receive – FW	1	0.0.43.1.5.255
5	Invocation counter receive – IHD	1	0.0.43.1.6.255

Every time meter uses decryption function using global encryption key, invocation counter receive object value corresponding to the association will be incremented by one.

(*Page 8*, Table A1) – Replace the parameter name at Sl. No. (xix) as
'Load Switch Status' instead of 'Load Limit Function Status.'

(*Page 9*, Clause 12, Paragraph 1) – Add the below paragraph after paragraph 1.

The block load profiles shall not store or return values (typically zero values) for conditions where the meter is powered down for a full day, where a full day is defined as the 24 h period from midnight 00 h to the next midnight 00 h. Under such conditions the block load profile for the entire 24 h period shall not be stored nor padded with zero entries. Whenever capture period of Block Load Survey profile is changed, the earlier load survey data shall be cleared and the load survey data with new capture period shall be available from that particular days' first entry. However, if the meter is powered up even for a small amount of time (sufficient for it to boot up and record the Power up event) during the 24 h period, it shall store and return the block load profile for the entire 24 h duration.

(*Page 9*, Clause 12.1, Paragraph 1) – Remove the word '(Column 4)' from the paragraph.

(*Page 10*, Clause 15, Paragraph 1) – Replace existing with below:
'e ranges from 0 to 6' instead of 'e range from 1 to 6'

(*Page 11*, Table A7) – Replace the parameter name at Sl. No. (vii) as
'Load limit (W) set' instead of 'Load limit (kW) set'

(Page 11, Table A7) – Replace the column 3 of sl. No. viii as
'Connect Load Switch'

(Page 11, Table A7) – Replace the column 3 of sl. No. ix as
'Disconnect Load Switch'

(*Page 11*, Table A7) – Add the following notes after note 4:

'5. For sl. No. xxiii and xxiv attribute 4 of load disconnect control (0.0.96.3.10.255) shall be used. The mode 0 of this configuration will disable the connect/disconnect functionality and changing mode (1 to 6) will enable the connect/disconnect functionality. Supported value of mode should be mentioned in document for testing purpose.

6. Event Id 164 will not be used in new implementation.'

(*Page 12*, Clause 16.2 a) – Replace existing as "Public Client -- Read only for real time clock"

(*Page* 12, Table A13**)** – Replace the table with following table:

Sl. No.	Parameter	OBIS Code A.B.C.D.E.F	Interface Class	Attribute/ Method	Event ID/s for Event/s to be logged in transaction related profile
i)	Real Time Clock – Date and Time	0.0.1.0.0.255	8	Attribute 2	151
ii)	Demand Integration Period	1.0.0.8.0.255	1	Attribute 2	152
iii)	Profile Capture Period	1.0.0.8.4.255	1	Attribute 2	153
iv)	Single-action Schedule for Billing Dates	0.0.15.0.0.255	22	Attribute 4	154
v)	Activity Calendar for Time Zones	0.0.13.0.0.255	20	Attribute 9,10 Method 1(optional)	155
vi)	Image transfer	0.0.44.0.0.255	18	Method 1,2,3 & method 4 is optional	157
vii)	Load limit (Watt)	0.0.17.0.0.255	71	Attribute 4	158
viii)	Connect/Disconnect load switch	0.0.96.3.10.255	70	Method 1, 2	159/160
ix)	LLS secret	0.0.40.0.2.255	15	Attribute 7	161
x)	HLS key	0.0.40.0.e.255 (e=3, 5)	15	Method 2	162, 163
xi)	Global key change	0.0.43.0.e.255	64	Method 2	164
xii)	ESWF	0.0.94.91.26.255	1	Attribute 2	165
xiii)	MD Reset	0.0.10.0.1.255	9	Method 1	166
xiv)	Image activation single action schedule	0.0.15.0.2.255	22	Attribute 4	169
xv)	Block Load Profile Push schedule change	0.4.15.0.4.255	22	Attribute 4	170
xvi)	Daily Load Profile Push schedule change	0.5.15.0.4.255	22	Attribute 4	171
xvii)	Last token recharge amount	0.0.94.91.21.255	1	Attribute 2	-
xviii)	Last token recharge time	0.0.94.91.22.255	1	Attribute 2	-
xix)	Total amount at last recharge	0.0.94.91.23.255	1	Attribute 2	-
xx)	Current balance amount	0.0.94.91.24.255	1	Attribute 2	-
xxi)	Current balance time	0.0.94.91.25.255	1	Attribute 2	-
xxii)	Metering mode changed to "Forwarded only" mode	0.0.94.91.19.255	1	Attribute 2	177
xxiii)	Metering mode changed to "Import and Export" mode	0.0.94.91.19.255	1	Attribute 2	178

xxiv)	Payment mode changed to post-paid mode	0.0.94.91.20.255	1	Attribute 2	179
xxv)	Payment mode changed to post-paid mode	0.0.94.91.20.255	1	Attribute 2	180
xxvi)	Switch control mode changed to "mode 0"	0.0.96.3.10.255	70	Attribute 4	181
xxvii)	Switch control mode changed to "mode 1-6"	0.0.96.3.10.255	70	Attribute 4	182
xxviii)	Global Encryption key changed	0.0.43.0.e.255 (e=2, 3, 4, 5, 6)	64	Method 2	183, 184, 185, 186, 187
xxix)	Global Authentication key changed	0.0.43.0.e.255 (e=3, 5)	64	Method 2	188, 189
xxx)	Push Destination IP and Port Configuration	0.e.25.9.0.255 (e=4, 5, 6)	40	Attribute 3	190

NOTES:

1. The Parameters are programmable by the utility engineers with required access rights.
2. Unit for demand integration period and profile capture period is in 'seconds.' The Demand Integration Period shall be 1800 s (default) and programmable to 900 s. The Profile Capture Period shall be 1800 s (default) and programmable to 900 or 3600 s.
3. On activation of passive calendar, the on-going billing cycle data will be generated, and a new billing cycle shall be commenced as per new activity calendar.
4. Programming of any of the parameters shall increment the 'cumulative programming count' value.
5. The RTC – time format by default shall be HH:MM: SS.
6. For Sl No. (xxii) and (xxiii), value shall be represented in unsigned character format and interpreted as below
   • 0 => means Forwarded only metering mode
   • 1 => means net metering mode
7. For Sl No. (xxiv) and (xxv), value shall be represented in unsigned character format and interpreted as below
   • 0 => means post-paid meter
   • 1 => means pre-paid meter
8. Prepayment facilities shall be achieved by HES. In "pre-paid meter" mode the parameter listed at Sl No. (xvii), (xviii), (xix), (xx) and (xxi) shall only be updated in meter from HES. These parameters shall have Read Write access in US association and Read Only access in MR and IHD Associations.
9. Parameter listed at Sl No. (xviii) and (xxi) shall be represented as octet string (12) and interpreted in DLMS date-time format.
10. Parameter listed at Sl No. (vi) shall have execute access and Parameter listed at Sl No. (xiv) shall have set access in FW association.
11. No programming count shall be incremented for the parameters listed at Sl No. (xvii), (xviii), (xix), (xx) and (xxi).
12. HLS Key change for firmware upgrade association is applicable in US association only.
13. For Sl No. (xvii) to (xxv), it is recommend using India specific codes, however codes specified in amendment 1 can be used.

(*Page 13*, Clause 18, Paragraph 1) – Add the below paragraph after paragraph 1.

The block load profiles shall not store or return values (typically zero values) for conditions where the meter is powered down for a full day, where a full day is defined as the 24 h period from midnight 00 h to the next midnight 00 h. Under such conditions the

block load profile for the entire 24 h period shall not be stored nor padded with zero entries. Whenever capture period of Block Load Survey profile is changed, the earlier load survey data shall be cleared and the load survey data with new capture period shall be available from that particular days' first entry. However, if the meter is powered up even for a small amount of time (sufficient for it to boot up and record the Power up event) during the 24 h period, it shall store and return the block load profile for the entire 24 h duration.

(*Page 13*, Table A14) – Replace the parameter name at Sl. No. (xxviii) as
'Load Switch Status' instead of 'Load Limit Function Status.'

(*Page 16*, Table A19) – Insert the following at the end of the table:

xiii)	57	Phase – R CT open – Occurrence
xiv)	58	Phase – R CT open – Restoration
xv)	59	Phase – Y CT open – Occurrence
xvi)	60	Phase – Y CT open - Restoration
xvii)	61	Phase – B CT open – Occurrence
xviii)	62	Phase – B CT open - Restoration

(*Page 17*, Table A21) – Replace the parameter name at Sl. No. (vii) as
'Load limit (W) set' instead of 'Load limit (kW) set'

(Page 17, Table A21) – Replace the column 3 of sl. No. viii as
'Connect Load Switch'

(Page 17, Table A21) – Replace the column 3 of sl. No. ix as
'Disconnect Load Switch'

(*Page* 18, Table A27**)** – Replace the table with following table:

Sl. No.	Parameter	OBIS Code A.B.C.D.E.F	Interface Class	Attribute/ Method	Event ID/s for Event/s to be logged in transaction related profile
i)	Real Time Clock – Date and Time	0.0.1.0.0.255	8	Attribute 2	151
ii)	Demand Integration Period	1.0.0.8.0.255	1	Attribute 2	152
iii)	Profile Capture Period	1.0.0.8.4.255	1	Attribute 2	153
iv)	Single-action Schedule for Billing Dates	0.0.15.0.0.255	22	Attribute 4	154
v)	Activity Calendar for Time Zones	0.0.13.0.0.255	20	Attribute 9,10 Method 1(optional)	155
vi)	Image transfer	0.0.44.0.0.255	18	Method 1,2,3 & method 4 is optional	157
vii)	Load limit (Watt)	0.0.17.0.0.255	71	Attribute 4	158

viii)	Connect/Disconnect load switch	0.0.96.3.10.255	70	Method 1, 2	159/160
ix)	LLS secret	0.0.40.0.2.255	15	Attribute 7	161
x)	HLS key	0.0.40.0.e.255 (e=3, 5)	15	Method 2	162, 163
xi)	Global key change	0.0.43.0.e.255	64	Method 2	164
xii)	ESWF	0.0.94.91.26.255	1	Attribute 2	165
xiii)	MD Reset	0.0.10.0.1.255	9	Method 1	166
xiv)	Image activation single action schedule	0.0.15.0.2.255	22	Attribute 4	169
xv)	Block Load Profile Push schedule change	0.4.15.0.4.255	22	Attribute 4	170
xvi)	Daily Load Profile Push schedule change	0.5.15.0.4.255	22	Attribute 4	171
xvii)	Last token recharge amount	0.0.94.91.21.255	1	Attribute 2	-
xviii)	Last token recharge time	0.0.94.91.22.255	1	Attribute 2	-
xix)	Total amount at last recharge	0.0.94.91.23.255	1	Attribute 2	-
xx)	Current balance amount	0.0.94.91.24.255	1	Attribute 2	-
xxi)	Current balance time	0.0.94.91.25.255	1	Attribute 2	-
xxii)	Metering mode changed to “Forwarded only” mode	0.0.94.91.19.255	1	Attribute 2	177
xxiii)	Metering mode changed to “Import and Export” mode	0.0.94.91.19.255	1	Attribute 2	178
xxiv)	Payment mode changed to post-paid mode	0.0.94.91.20.255	1	Attribute 2	179
xxv)	Payment mode changed to post-paid mode	0.0.94.91.20.255	1	Attribute 2	180
xxvi)	Switch control mode changed to “mode 0”	0.0.96.3.10.255	70	Attribute 4	181
xxvii)	Switch control mode changed to “mode 1-6”	0.0.96.3.10.255	70	Attribute 4	182
xxviii)	Global Encryption key changed	0.0.43.0.e.255 (e=2, 3, 4, 5, 6)	64	Method 2	183, 184, 185, 186, 187
xxix)	Global Authentication key changed	0.0.43.0.e.255 (e=3, 5)	64	Method 2	188, 189
xxx)	Push Destination IP and Port Configuration	0.e.25.9.0.255 (e=4, 5, 6)	40	Attribute 3	190

NOTES:

1. The Parameters are programmable by the utility engineers with required access rights.
2. Unit for demand integration period and profile capture period is in ‘seconds.’ The Demand Integration Period shall be 1800 s (default) and programmable to 900 s. The Profile Capture Period shall be 1800 s (default) and programmable to 900 or 1800 s.
3. On activation of passive calendar, the on-going billing cycle data will be generated, and a new billing cycle shall be commenced as per new activity calendar.

4. Programming of any of the parameters shall increment the 'cumulative programming count' value.
5. The RTC – time format by default shall be HH:MM: SS.
6. For Sl No. (xxii) and (xxiii), value shall be represented in unsigned character format and interpreted as below
   • 0 => means Forwarded only metering mode
   • 1 => means net metering mode
7. For Sl No. (xxiv) and (xxv), value shall be represented in unsigned character format and interpreted as below
   • 0 => means post-paid meter
   • 1 => means pre-paid meter
8. Prepayment facilities shall be achieved by HES. In "pre-paid meter" mode the parameter listed at Sl No. (xvii), (xviii), (xix), (xx) and (xxi) shall only be updated in meter from HES. These parameters shall have Read Write access in US association and Read Only access in MR and IHD Associations.
9. Parameter listed at Sl No. (xviii) and (xxi) shall be represented as octet string (12) and interpreted in DLMS date-time format.
10. Parameter listed at Sl No. (vi) shall have execute access and Parameter listed at Sl No. (xiv) shall have set access in FW association.
11. No programming count shall be incremented for the parameters listed at Sl No. (xvii), (xviii), (xix), (xx) and (xxi).
12. HLS Key change for firmware upgrade association is applicable in US association only.
13. For Sl No. (xvii) to (xxv), it is recommend using India specific codes, however codes specified in amendment 1 can be used.

(*Page* 20, Fig 5**)** – Add below text on the arrow between two boxes:

'IPv6 link'

(*Page 20*, Table A30, Sl. No. 1) – Delete item at sl. no. 1 and renumber the subsequent items.

(Amendment 1, *Page* 3, Table A7**)** – Insert the following at the end of the table

xvi)	169	Image Activation Single Action Schedule
xvii)	170	Block Load Profile Push schedule change
xviii)	171	Daily Load Profile Push schedule change
xix)	177	Configuration change to "Forwarded only" mode
xx)	178	Configuration change to "Import and Export" mode
xxi)	179	Configuration change to post-paid mode
xxii)	180	Configuration change to pre-paid mode
xxiii)	181	Switch control mode changed to "mode 0"
xxiv)	182	Switch control mode changed to "mode 1-6"
xxv)	183	Global Encryption key changed (MR)
xxvi)	184	Global Encryption key changed (US)
xxvii)	185	Global Encryption key changed (Push)
xxviii)	186	Global Encryption key changed (FW)
xxix)	187	Global Encryption key changed (IHD)
xxx)	188	Global Authentication key changed (US)
xxxi)	189	Global Authentication key changed (FW)
xxxii)	190	Push Destination IP and Port Configuration

(Amendment 1, *Page* 3, Table A8**)** – Delete parameters at sr. no. (ix), (x), (xi), and (xii) and renumber the remaining parameters.

Event Ids 211 to 214 must not be used for any new event in the future.

(Amendment 1, *Page 5*, Table A21**)** – Insert the following at the end of the table

xvi)	169	Image Activation Single Action Schedule
xvii)	170	Block Load Profile Push schedule change
xviii)	171	Daily Load Profile Push schedule change
xix)	177	Configuration change to “Forwarded only” mode
xx)	178	Configuration change to “Import and Export” mode
xxi)	179	Configuration change to post-paid mode
xxii)	180	Configuration change to pre-paid mode
xxiii)	181	Switch control mode changed to “mode 0”
xxiv)	182	Switch control mode changed to “mode 1-6”
xxv)	183	Global Encryption key changed (MR)
xxvi)	184	Global Encryption key changed (US)
xxvii)	185	Global Encryption key changed (Push)
xxviii)	186	Global Encryption key changed (FW)
xxix)	187	Global Encryption key changed (IHD)
xxx)	188	Global Authentication key changed (US)
xxxi)	189	Global Authentication key changed (FW)
xxxii)	190	Push Destination IP and Port Configuration

(Amendment 1, *Page* 5, Table A22**)** – Delete parameters at sr. no. (ix), (x), (xi), and (xii) and renumber the remaining parameters.

Event Ids 211 to 214 must not be used for any new event in the future.