

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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ELECTRONIC RAILWAY EQUIPMENT – TRAIN COMMUNICATION NETWORK (TCN) –

Part 2-3: TCN communication profile

CORRIGENDUM 2

5.3.2.3

Replace existing Figure 15 by the following new Figure.

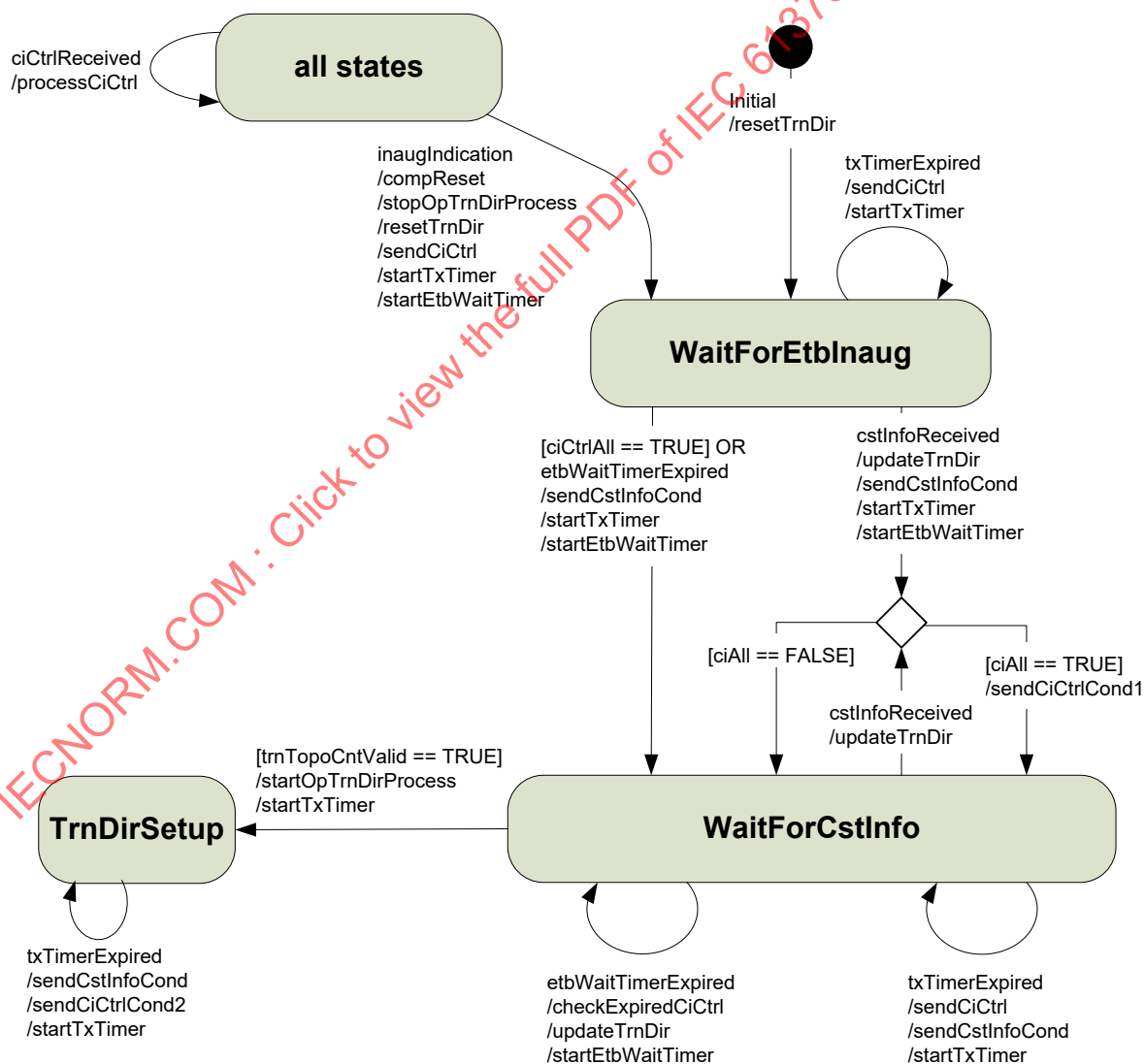


Table 5

Add the following entry at the end of the table.

Action	Description
compReset	Reset the composition by triggering the event 'compReset' in the leading function state machine (see 6.5.3.2) and the confirmation/correction state machine (see 6.6.4).

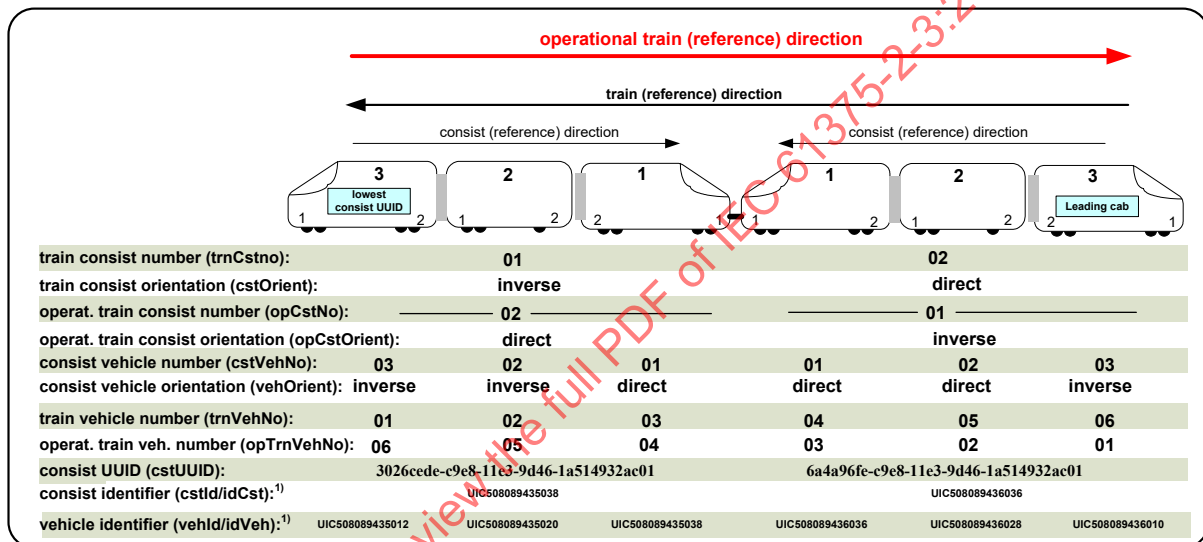
5.3.3.2.16, item d)

Replace existing item d) by the following new text.

d) Setting the topography counter to a value of 0 declares the topography counter to be invalid.

5.4.4.6.1

Replace existing Figure 20 by the following new figure.



¹⁾ Identifiers as defined by UIC are used in these examples, e.g. 'UIC508089435038' corresponds to UIC identifier '50 80 89 – 43 503 - 8'

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5.4.5.2, second paragraph following note 1

Replace the existing text by the following new text.

The decomposition for ETB-related groups is defined as:
11101111.11000001.bbgggggg.gggggggg

5.4.5.2, second paragraph following Table 20

Replace the existing text by the following new text.

The decomposition for ETB-related groups is defined as:
11101111.11000010.bbgggggg.gggggggg

5.5.3 Examples, last bullet item preceding Figure 21

Replace the existing text by the following new text.

- group doorCTRL@fctDoor.anyVeh.cst03.anyCITrn.ITrn in consist 'E'

5.5.3, Example 3, first two sentences

Replace the existing text by the following new text.

The following example shows how a TCN-URI can be resolved to a train wide multicast group address. Here it is assumed that the IP MC group 'fctDoor' has been defined as a train wide group with a group Id = 50.

5.5.3, Example 4, text preceding Table 26

Replace the existing text by the following new text.

The following example shows how a TCN-URI can be resolved to a consist-limited multicast group address. Here it is assumed that the two door controllers in consist E form a multicast group with group Id = 50. For resolving the TCN-URI 'doorCTRL@fctDoor.anyVeh.cst03.anyCITrn.ttrm' the ETB0 DNS server has to execute the steps as listed in Table 26:

Table 26, step 1, last column

Replace the existing text by the following new text.

= "fctDoor.anyVeh.cst03

Table 26, step 2, second column

Replace the existing text by the following new text.

Lookup 'cstUUID' of label 'cstNo' = 3 in the train directory of the local TTDB

6.4.5.2, Table 28, 2nd column, 2nd box

Replace the existing text by the following new text.

Stop processing of the operational train directory, triggered by the train directory computation state machine, see .5.3.2.

If the transmission of ETBCTRL telegram continues, telegram parameter 'trnTopoCnt' shall be set to 0 until processing of the operational train directory is restarted (trigger 'startOpTrnDirProcess')

6.5.3.2, Figure 30

Replace existing Figure 30 by the following new figure.

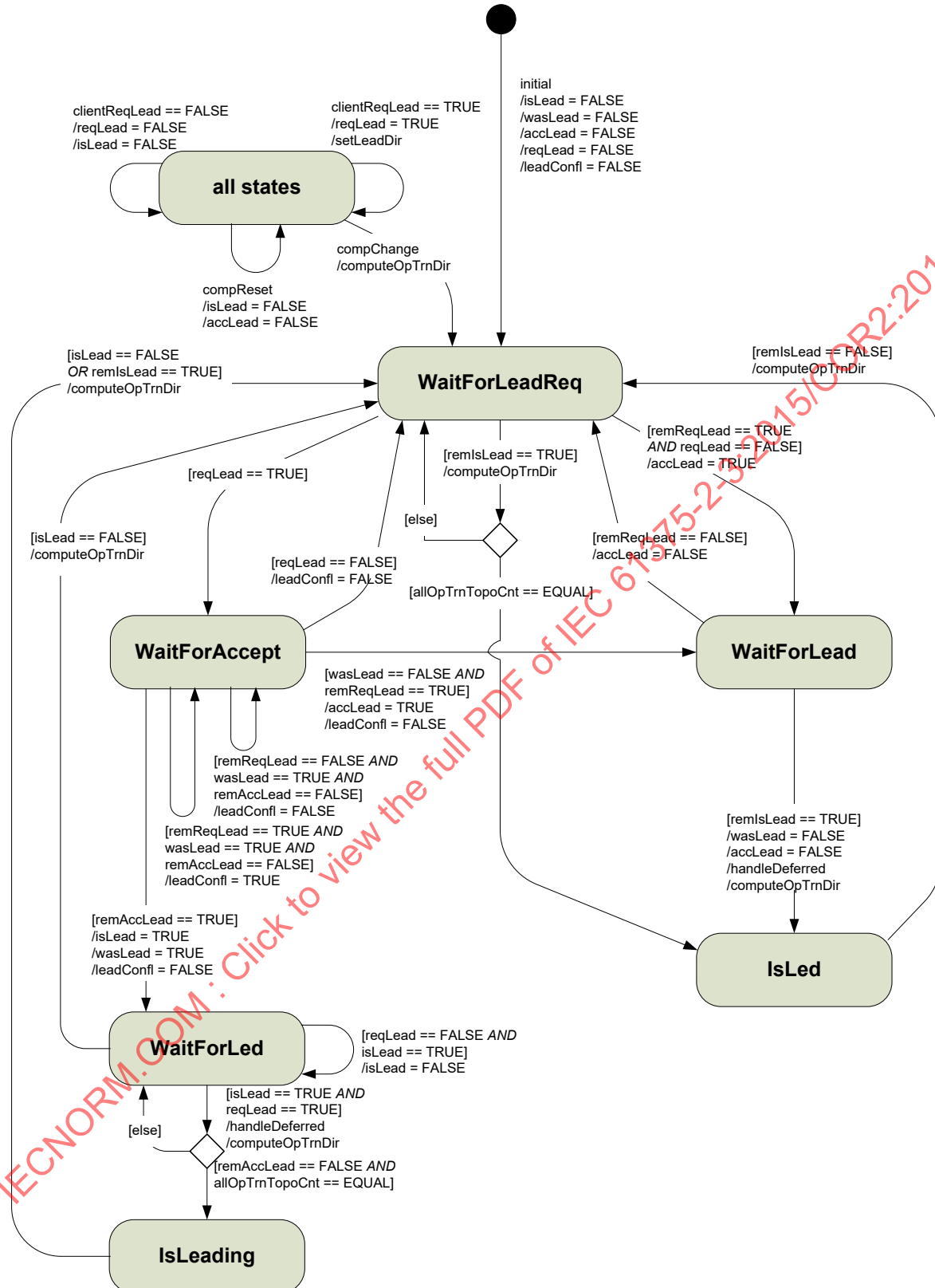


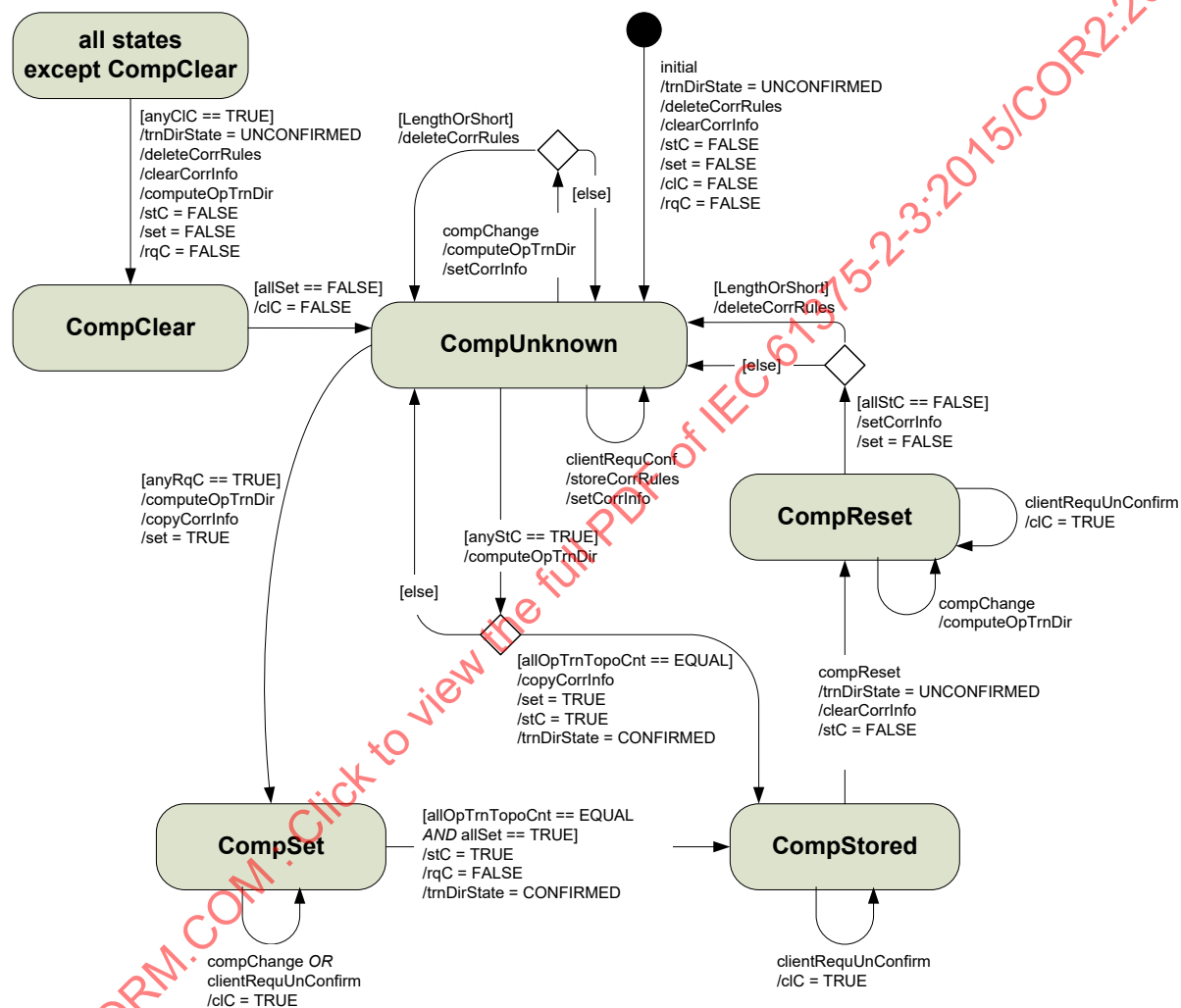
Table 35

Add the following entry to Table 35.

Trigger	Description
compReset	composition reset

6.6.4, Figure 35

Replace existing Figure 35 by the following new figure.

**Table 42**

Add the following entry to Table 42.

Trigger	Description
compReset	Confirmed composition reset

Table 43

Replace the existing 3rd and 4th entries by the following.

allStC == FALSE	Logical OR over the 'stC' control flags in all ETBCTRL telegrams equals FALSE
allSet == FALSE	Logical OR over the 'set' control flags in all ETBCTRL telegrams equals FALSE for a time of at least 3 ETBCTRL cycles. NOTE This time condition shall ensure that also reinserted ECSP properly enter state CompUnknown.

6.7.3.2, Table 48, 1st column, 1st box

Replace the existing text by the following new text.

determineOpTrainDirection

Clause A.5, 2nd paragraph

Replace the existing text by the following new text

The ComId forms, together with source IP address and destination IP address, a unique identifier of the PDU within the train.

A.6.6.3, 6th paragraph

Replace the existing text by the following new text.

Topography counters of an incoming request telegram shall be checked in accordance to A.6.7.

A.6.8.2, Table A.10

Replace existing Table A.10 by the following new table.

Table A.10 – PD publisher state diagram – guards

Guards	Description
checkTopoCounts	Check the topography counters submitted with the request against the actual topography counters. At least one of the cases listed in Table A.5 for the topography counters shall be fulfilled.

A.6.8.3, Table A.15

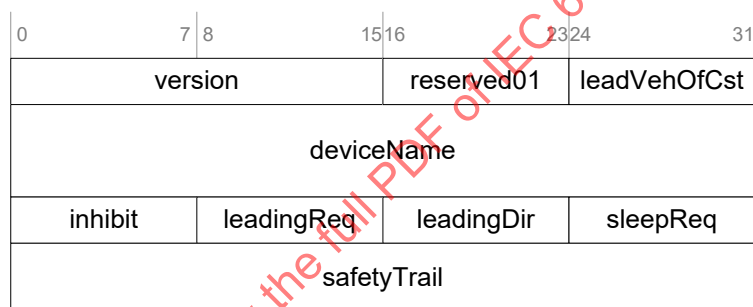
Replace existing Table A.15 by the following new table.

Table A.15 – PD subscriber state diagram – guards

Guards	Description
pattern	configured communication pattern for the PD-PDU exchange Values: PUSH PULL
checkTopoCounts	Check the topography counters of the received telegram against the topography counters submitted with the subscription. At least one of the cases listed in Table A.5 for the topography counters shall be fulfilled.

E.3.2, Figure E.3

Replace existing Figure E.3 by the following new figure.



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Introduce the related corrected record definition with additional entry ('leadVehOfCst') as follows:

```

ECSP_CTRL ::= RECORD
{
    version      UINT16      -- telegram version information
                           (vrr, v-version, r-release)
                           version = 1
                           release = 0

    reserved01   UINT8       -- reserved (= 0)

    leadVehOfCst  UINT8      -- position of leading vehicle in consist
                           value range 0..32
                           0 = not defined
                           (1 = first vehicle in consist in
                           Direction 1, 2 = second vehicle, etc.)

    deviceName   LABEL      -- function device of ECSC which sends
                           the telegram
}

```

E.5.2.2, penultimate paragraph

Replace the existing text by the following new text.

```

TCN_URI ::= RECORD
{
    tcnUriStr          CHAR[80]          -- Host part of TCN-URI, terminated with
                                         ASCII character NUL
    reserved01         INT16             -- reserved (= 0)
    resolvState        INT16             -- request message: reserved (= 0)
                                         reply message:
                                         0 = OK
                                         -1 = unknown TCN-URI
    tcnUriIpAddrUINT32 -- IP address related to query
                                         unicast address (source and destination
                                         scope, address range) or
                                         MC group address (destination scope)
                                         value = 0 if 'resolvState' < 0
    tcnUriIpAddr2      UINT32            -- 2nd IP address in case the query
                                         produces an IP address range
                                         (see 5.4.4.6.2).
                                         Defines the higher IP address of the
                                         range.
                                         To be set to 0 if not resolved to an
                                         IP address range
}

```

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