

# **ITU T.35**

**Brief overview of ITU T.35 message**

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# Overview of ITU T.35

- Defines the procedure for the allocation of ITU-T code for non-standard facilities
  - Recommendation T.35 spec
  - Unique code to be allocated to each provider
- Structure of the code consists of three parts
  - Country code
  - Terminal provider code
  - Terminal provider oriented code (*in case of terminal specific non-standard facilities*)

# Country code

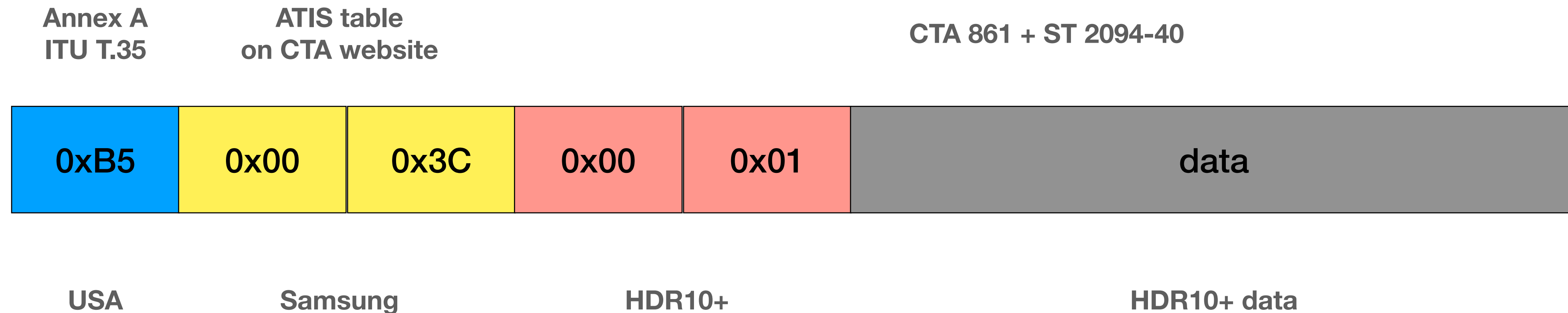
- Director of Telecommunication Standardization Bureau (TSB) is in charge
  - New requests go directly to Director of TSB
- 1 byte to signal the country (Annex A)
  - 197 values already in use (since 1990)
  - 57 available
  - 0xFF is reserved as an extension byte
- 1 optional extra byte if first byte was 0xFF (Annex B)
  - All codes except 0xFF are available

# Terminal provider code

- An Administration or national body (NB) designated by an Administration is in charge
  - In case of NB, Address and Name of NB are sent to Director of TSB
- e.g. Alliance for Telecommunications Industry Solutions (ATIS) is in charge of terminal provider code assignment in North America
  - List of US and Canadian terminal provider codes is available here.
  - Terminal provider code for US and Canada are always 2 bytes.

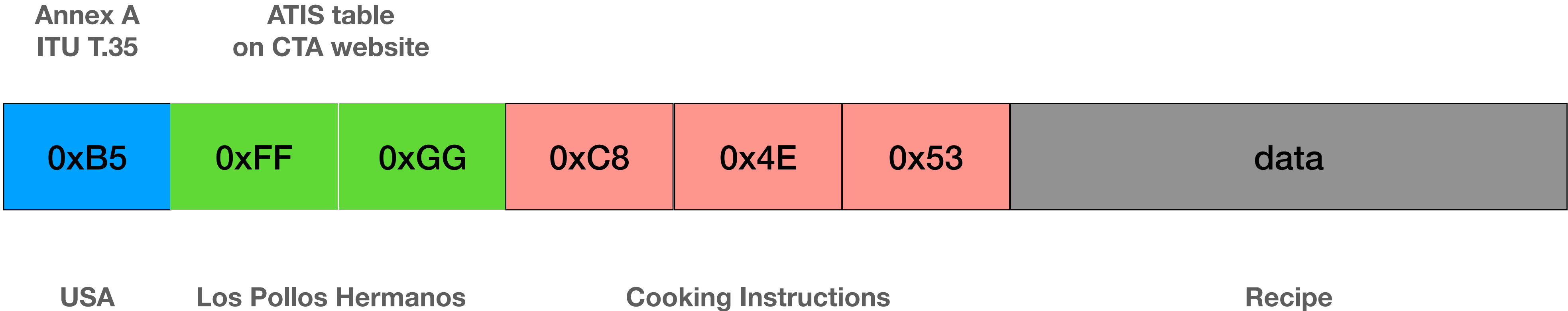
# Terminal provider oriented code

- Manufacturers with allocated terminal provider code by an Administration are in charge
- Example T.35 with HDR10+ metadata:



# Terminal provider oriented code

- Manufacturers with allocated terminal provider code by an Administration are in charge
- Example T.35 with Los Pollos Hermanos cooking instructions metadata:



# Few examples for carriage of T.35

5.8.2. Metadata ITUT T35 syntax <a href="#">↗</a>	
metadata_itut_t35( ) {	Type
itu_t_t35_country_code	f(8)
if ( itu_t_t35_country_code == 0xFF ) {	
itu_t_t35_country_code_extension_byte	f(8)
}	
itu_t_t35_payload_bytes	
}	

- Metadata OBU in AV1
- User data registered ITU T.35 SEI in HEVC
- T.35 sample group 'it35' in ISOBMFF (in current amendment)
- T.35 item 'it35' for HEIF in ISOBMFF (in current amendment)

D.2.6 User data registered by Rec. ITU-T T.35 SEI message syntax	
user_data_registered_itu_t_t35( payloadSize ) {	Descriptor
<b>itu_t_t35_country_code</b>	b(8)
if( itu_t_t35_country_code != 0xFF )	
i = 1	
else {	
<b>itu_t_t35_country_code_extension_byte</b>	b(8)
i = 2	
}	
do {	
<b>itu_t_t35_payload_byte</b>	b(8)
i++	
} while( i < payloadSize )	
}	