# ETSI TS 102 726-2 V2.1.1 (2011-06)

Technical Specification

**Electromagnetic compatibility
and Radio spectrum Matters (ERM);
Conformance testing for Mode 1 of
the digital Private Mobile Radio (dPMR);
Part 2: Test Suite Structure and
Test Purposes (TSS&TP) specification**

Reference
RTS/ERM-TGDMR-290-2

Keywords
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Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Electromagnetic compatibility and Radio spectrum Matters (ERM).

The present document is part 2 of a multi-part deliverable. Full details of the entire series can be found in part 1 [i.2].

1 Scope

The present document specifies the conformance Test Purposes (TPs) for the Peer-to-Peer Digital Private Mobile Radio (dPMR) standard, TS 102 658 [1]. TPs are defined using the TPLan notation described in ES 202 553 [i.1]. Test purposes have been written based on the test specification framework described in TS 102 351 [2] and based on the methodology defined in ISO/IEC 9646-2 [3].

2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the reference document (including any amendments) applies.

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2.1 Normative references

The following referenced documents are necessary for the application of the present document.

[1] ETSI TS 102 658 (V2.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Digital Private Mobile Radio (dPMR) using FDMA with a channel spacing of 6,25 kHz".

[2] ETSI TS 102 351 (V2.1.1): "Methods for Testing and Specification (MTS); Internet Protocol Testing (IPT); IPv6 Testing: Methodology and Framework".

[3] ISO/IEC 9646-2: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 2: Abstract Test Suite specification".

[4] ETSI TS 102 795: "Electromagnetic compatibility and Radio spectrum Matters (ERM); digital Private Mobile Radio (dPMR); Part 3: Requirements catalogue".

2.2 Informative references

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

[i.1] ETSI ES 202 553: "Methods for testing and Specification (MTS); TPLan: A notation for expressing test Purposes".

[i.2] ETSI TS 102 726-1: "Electromagnetic compatibility and Radio spectrum Matters (ERM); Conformance testing for Mode 1 of the digital Private Mobile Radio (dPMR); Part 1: Protocol Implementation Conformance Statement (PICS) proforma".

3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

BS2	Mode 2 Repeater
CF	(Test) ConFiguration
CSF	Configured Services and Facilities
dPMR	digital Private Mobile Radio
ISF	Initial Services and Facilities
IUT	Implementation Under Test
M1	Mode 1
M2	Mode 2
M3	Mode 3
MS	Mobile Station
OACSU	Off Air Call Set-Up
PTT	Push To Talk
RC	Requirements Catalogue
RQ	ReQuirement
TP	Test Purpose
TSS	Test Suite Structure

4 Test Suite Structure (TSS)

The Test Suite Structure is based on the dPMR Requirements Catalogue (TS 102 795 [4]). It is defined by the groups within the following TPLan specification of test purposes. The numbering is not contiguous so that new TPs can be added at a later date without the need to completely renumber the TSS groups.

The test purposes have been divided into four groups:

- Group 1: Common requirements.

- Group 2: Services.

- Group 3: Channel access.

- Group 4: Addressing

The sub-grouping of these three group follows the structure of the RC. Some of the sub-groups of the RC contained no testable requirement. Headings for those sub-groups are in this test purpose document in the node group to give a full view on the relation between RQ and TSS&TP.

```
5.1         Framing
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5.1.1.2     Dialling Plan
5.1.1.3     Talking Party ID
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5.1.3.2     PTT Call
5.1.4       END frame
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5.1.6.5.2   Late entry
5.1.6.5.3   Slow user data
5.1.7       Power save
```

```
5.1.8       Superframe
5.1.8.1     Traffic channel
5.1.8.2     Voice TCH
```

5   Test Purposes (TP)

The test purposes have been written in the formal notation TPlan. Configurations that are referenced by test purposes are shown in annex A. TPLan user definitions are listed in annex B.

5.1   Framing

```
TP id   : TP_PMR_0401_01
summary : 'Payload frame length with voice data'
RQ ref  : RQ_001_0401
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_0401_01
with {   IUT in standby
     }
ensure that {
  when  { IUT is requested to start a Voice_Transmission }
  then  { IUT sends Voice_Transmission containing 384 bit Payload_Frames }
}


-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id   : TP_PMR_0401_02
summary : 'Payload frame length with Type 1 data'
RQ ref  : RQ_001_0401
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_0401_02
with {   IUT in standby
     }
ensure that {
  when  { IUT is requested to start a T1_Transmission }
  then  { IUT sends T1_Transmission containing 384 bit Payload_Frames }
}


-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id   : TP_PMR_0401_03
summary : 'Payload frame length with Type 2 data'
RQ ref  : RQ_001_0401
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_0401_03
with {   IUT in standby
     }
ensure that {
  when  { IUT is requested to start a T2_Transmission }
  then  { IUT sends T2_Transmission containing 384 bit Payload_Frames }
}


-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id   : TP_PMR_0401_04
summary : 'Message frame length'
RQ ref  : RQ_001_0401
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_0401_04
with {   IUT in standby
     }
ensure that {
  when  { IUT is requested to start a Voice_Transmission }
  then  { IUT sends Voice_Transmission starting with a 384 bit Message_Frame }
}
```

```
-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id   : TP_PMR_0402_01
summary : 'There are an integral number of superframes in a dPMR transmission'
RQ ref  : RQ_001_0402
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_0402_01
with {   IUT in standby
     }
ensure that {
  when  { IUT is requested to start a Voice_Transmission }
  then  { IUT sends a Voice_Transmission containing an integral_number of Superframes  }
}


-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id   : TP_PMR_0403_01
summary : 'There are four payload frames in a superframe in a voice transmission'
RQ ref  : RQ_001_0403
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_0403_01
with {   IUT in standby
     }
ensure that {
  when  { IUT is requested to start a Voice_Transmission }
  then  { IUT sends a Voice_Transmission containing Superframes (each containing 4 Payload_Frames) }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id   : TP_PMR_0403_02
summary : 'There are four payload frames in a superframe in a Type 1 data transmission'
RQ ref  : RQ_001_0403
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_0403_02
with {   IUT in standby
     }
ensure that {
  when  { IUT is requested to start a T1_Transmission }
  then  { IUT sends a T1_Transmission containing Superframes (each containing 4 Payload_Frames) }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id   : TP_PMR_0403_03
summary : 'There are four payload frames in a superframe in a Type 2 data transmission'
RQ ref  : RQ_001_0403
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_0403_03
with {   IUT in standby
     }
ensure that {
  when  { IUT is requested to start a T2_Transmission }
  then  { IUT sends a T2_Transmission containing Superframes (each containing 4 Payload_Frames) }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_0404_01
summary  : 'A voice transmission is composed of header frame, integral superframes, end frame'
RQ ref   : RQ_001_0404
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_0404_01
with {    IUT in standby
     }
ensure that {
  when  { IUT is requested to start a Voice_Transmission }
  then  { IUT sends a Voice_Transmission containing a Message_Frame
                      followed by an integral_number of Superframes
                      followed by an End_Frame }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0404_02
summary  : 'A Type 1 data transmission is composed of header frame, integral superframes, end frame'
RQ ref   : RQ_001_0404
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_0404_02
with {    IUT in standby
     }
ensure that {
  when  { IUT is requested to start a T1_Transmission }
  then  { IUT sends a T1_Transmission containing a Message_Frame
                      followed by an integral_number of Superframes
                      followed by an End_Frame }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0404_03
summary  : 'A Type 2 data transmission is composed of header frame, integral superframes, end frame'
RQ ref   : RQ_001_0404
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_0404_03
with {    IUT in standby
     }
ensure that {
  when  { IUT is requested to start a T2_Transmission }
  then  { IUT sends a T2_Transmission containing a Message_Frame
                      followed by an integral_number of Superframes
                      followed by an End_Frame }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0405_01
summary  : 'Header and end frame in manual connection request'
RQ ref   : RQ_001_0405
TP type  : conformance
Role     : M1, M2
config   : CF_dPMR_01
TC ref   : TC_PMR_0405_01
with {    IUT in standby
     }
ensure that {
  when  { IUT is requested to send Connection_Request }
  then  { IUT sends a Connection_Request }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_0405_02
summary  : 'Header and end frame in automatic connection request'
RQ ref   : RQ_001_0405
TP type  : conformance
Role     : M1, M2
config   : CF_dPMR_01
TC ref   : TC_PMR_0405_02
with {    IUT in standby and
             OACSU_enabled
       }
ensure that {
  when  { IUT is requested to send a Voice_Transmission to an individual_address }
  then  { IUT sends a Connection_Request }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id    : TP_PMR_0406_01
summary  : 'Header frame is used to acknowledge connect request'
RQ ref   : RQ_001_0406
TP type  : conformance
Role     : M1, M2
config   : CF_dPMR_01
TC ref   : TC_PMR_0406_01
with {    IUT in standby
       }
ensure that {
  when  { IUT receives a Connection_Request }
  then  { IUT sends a Ack_Frame  }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id    : TP_PMR_0406_02
summary  : 'Acknowledge frame is used to acknowledge type 1 data transmission'
RQ ref   : RQ_001_0406
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_0406_02
with {    IUT 'receiving a T1_Transmission'
       }
ensure that {
  when  { IUT receives End_Frame indicating Ack_Request }
  then  { IUT sends a Ack_Frame  }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id    : TP_PMR_0406_03
summary  : 'Acknowledge frame is used to acknowledge Type 2 data transmission'
RQ ref   : RQ_001_0406
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_0406_03
with {    IUT 'is receiving T2_Transmission'
       }
ensure that {
  when  { IUT receives End_Frame indicating Ack_Request }
  then  { IUT sends a Ack_Frame  }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id    : TP_PMR_0406_04
summary  : 'Acknowledge frame is used to acknowledge Type 3 data transmission'
RQ ref   : RQ_001_0406
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_0406_04
with {   IUT 'is receiving T3_Transmission'
     }
ensure that {
   when  { IUT receives End_Frame indicating Ack_Request }
   then  { IUT sends a Ack_Frame   }
}


-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0407_01
summary  : 'Header and end frame pairs in manual disconnection request'
RQ ref   : RQ_001_0407
TP type  : conformance
Role     : M1, M2
config   : CF_dPMR_01
TC ref   : TC_PMR_0407_01
with {   IUT in standby
     }
ensure that {
   when  { IUT is requested to send Disconnection_Request }
   then  { IUT sends a Disconnection_Request }
}


-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0407_02
summary  : 'Header and end frame pairs in automatic disconnection request'
RQ ref   : RQ_001_0407
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_0407_02
with {   IUT is 'sending T1_Transmission' to TESTER
     }
ensure that {
   when  { IUT completes T1_Transmission }
   then  { IUT sends a Disconnection_Request }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0407_03
summary  : 'Header and end frame pairs in automatic disconnection request'
RQ ref   : RQ_001_0407
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_0407_03
with {   IUT is 'sending T2_Transmission' to TESTER
     }
ensure that {
   when  { IUT completes T2_Transmission }
   then  { IUT sends a Disconnection_Request }
}

  -- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id   : TP_PMR_0407_04
summary : 'Header and end frame pairs in automatic disconnection request'
RQ ref  : RQ_001_0407
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_0407_04
with {   IUT is 'sending T3_Transmission' to TESTER
     }
ensure that {
  when  { IUT completes T3_Transmission }
  then  { IUT sends a Disconnection_Request }
}


-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id   : TP_PMR_0408_01
summary : 'Header frame and End frame pair is used to respond to a status request'
RQ ref  : RQ_001_0408
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_0408_01
with {   IUT in standby
     }
ensure that {
  when  { IUT receives a Message_Frame
                        containing a Message_Type indicating Status_Request
                   followed by an End_Frame}
  then  { IUT sends a Status_Response  }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id   : TP_PMR_0601_01
summary : 'Colour Codes'
RQ ref  : RQ_001_0601
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_0601_01
with {   IUT in standby and configured with a valid CC_value
     }
ensure that {
  when  { IUT is requested to send a Voice_Transmission }
  then  { IUT sends a Voice_Transmission with colour_code set to the CC_value }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id   : TP_PMR_0601_02
summary : 'Colour Codes'
RQ ref  : RQ_001_0601
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_0601_02
with {   IUT in standby and not configured with a CC_value
     }
ensure that {
  when  { IUT is requested to send a Voice_Transmission }
  then  { IUT sends a Voice_Transmission with colour_code set to the CC_value determined from
CC_algorithm }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

5.1.1 Addressing

5.1.1.1 All Call

```
TP id    : TP_PMR_0838_01
summary  : 'Broadcast calls'
RQ ref   : RQ_001_0838
TP type  : conformance
Role     : M1, M2
config   : CF_dPMR_01
TC ref   : TC_PMR_0838_01
with {    IUT in standby
     }
ensure that {
  when  { IUT is requested to make a Broadcast_Call }
  then  { IUT sends Voice_Transmission with Message_Frame
                    containing Communications_Format set to '0000b'}
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

5.1.1.2 Dialling Plan

```
TP id    : TP_PMR_1310_01
summary  : 'Transmitting individual call'
RQ ref   : RQ_001_1310
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_1310_01
with {    IUT configured_for_Standard_User_Interface and in standby
     }
ensure that {
  when  { IUT is requested to send a Voice_Transmission to an individual_address }
  then  { IUT sends a Voice_Transmission
            containing a Message_Frame
              containing Called_Station_ID
                set to the Tx_B2_conversion of the individual_address
        }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id    : TP_PMR_1310_02
summary  : 'Receiving individual call'
RQ ref   : RQ_001_1310
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_1310_02
with {    IUT and configured_for_Standard_User_Interface in standby
     }
ensure that {
  when  { IUT receives a Voice_Transmission
            containing Called_Station_ID
              set to Tx_B2_conversion of the IUT individual_address }
  then  { IUT outputs the 'audible test tone' }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id    : TP_PMR_1310_03
summary : 'Transmitting group call with wildcards '
RQ ref  : RQ_001_1310
TP type : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref  : TC_PMR_1310_03
with {    IUT configured_for_Standard_User_Interface and wildcards
              and in standby
      }
ensure that {
   when { IUT is requested to send a Voice_Transmission to a wildcard_group_address }
   then { IUT sends a Voice_Transmission with Message_Frame
              containing Called_Station_ID set to the Tx_B2_conversion of that
wildcard_group_address }
}
```

```
-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_1310_04
summary : 'Receiving group call with wildcards'
RQ ref  : RQ_001_1310
TP type : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref  : TC_PMR_1310_04
with {    IUT configured_for_Standard_User_Interface
              and in standby
      }
ensure that {
   when { IUT receives a Voice_Transmission with Message_Frame
              containing Called_Station_ID
                set to the Tx_B2_conversion of a wildcard_group_address valid for the
individual_address of the IUT and
              containing 'audible test tone as payload'}
   then { IUT outputs 'the audible test tone' }
}
```

```
-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_1317_01
summary : 'Standard user interface transmitting All Call'
RQ ref  : RQ_001_1317
TP type : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref  : TC_PMR_1317_01
with {    IUT configured_for_Standard_User_Interface and in standby
      }
ensure that {
   when { IUT is requested to send a Voice_Transmission to all_call_address }
   then { IUT sends a Voice_Transmission
                  with Message_Frame
                     containing Called_Station_ID set to 'F8 33 A6h' }
}
```

```
-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_1317_02
summary : 'Standard user interface All Call within prefix'
RQ ref  : RQ_001_1317
TP type : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref  : TC_PMR_1317_02
with {    IUT configured_for_Standard_User_Interface and in standby
      }
ensure that {
   when { IUT is requested to send a Voice_Transmission to all_call_within_a_prefix_address }
   then { IUT sends a Voice_Transmission with Message_Frame
              containing Called_Station_ID set to the Tx_B2_conversion of the
all_call_within_a_prefix_address }
}
```

```
-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id   : TP_PMR_1317_03
summary : 'Standard user interface Receiving All Call'
RQ ref  : RQ_001_1317
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_1317_03
with {    IUT configured_for_Standard_User_Interface
              and in standby
      }
ensure that {
  when  { IUT receives a Voice_Transmission containing Called_Station_ID
                set to 'F8 33 A6h' and
                containing 'audible test tone as payload'}
  then  { IUT outputs 'the audible test tone' }
}
```

-- **xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx**

```
TP id   : TP_PMR_1317_04
summary : 'Standard user interface receiving All Call within a prefix'
RQ ref  : RQ_001_1317
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_1317_04
with {    IUT configured_for_Standard_User_Interface
              and in standby
      }
ensure that {
  when  { IUT receives a Voice_Transmission containing Called_Station_ID
                  set to the Tx_B2_conversion of an all_call_within_a_prefix_address valid for the
individual_address of the IUT and
                containing 'audible test tone as payload'}
  then  { IUT outputs 'the audible test tone' }
}
```

-- **xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx**

```
TP id   : TP_PMR_1403_01
summary : 'Call not initiated without using no hash or send key'
RQ ref  : RQ_001_1403
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_1403_01
with {    IUT configured_for_Standard_User_Interface and in standby
      }
ensure that {
  when  { IUT has seven_digit_address entered or selected  }
  then  { IUT does not transmit  }
}
```

-- **xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx**

```
TP id   : TP_PMR_1403_02
summary : 'Call initiated when using hash or send key'
RQ ref  : RQ_001_1403
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_1403_02
with {    IUT configured_for_Standard_User_Interface
              and in standby
      }
ensure that {
  when  { IUT has a seven_digit_address entered or selected
           before the hash_key or dedicated_send_key pressed }
  then  { IUT sends a Voice_Transmission }
}
```

-- **xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx**

```
TP id   : TP_PMR_1416_01
summary : 'Call initiated when using 7 digit dialing string'
RQ ref  : RQ_001_1403
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_1416_01
with {    IUT configured_for_Standard_User_Interface
              and in standby
      }
ensure that {
  when  { IUT has a seven_digit_address entered or selected
           before the hash_key or dedicated_send_key pressed }
  then  { IUT sends a Voice_Transmission
              with Message_Frame
                  containing Called_Station_ID set to the Tx_B2_conversion of the
seven_digit_address }
}


-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id   : TP_PMR_1417_01
summary : 'Abbreviated dialling for individual calls'
RQ ref  : RQ_001_1417
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_1417_01
with {    IUT configured_for_Standard_User_Interface
              and in standby and
              and configured_for_abbreviated_dialling
      }
ensure that {
  when  { IUT has a valid abbreviated_dialling_string entered or selected  -- valid means here
agreeing with the MS specific abbreviated address configuration
           before IUT hash_key or dedicated_send_key is pressed }
  then  { IUT sends a Voice_Transmission with Message_Frame
               containing Called_Station_ID set to the Tx_B2_conversion of the
                            'address resulting from substituting the abbreviated_dialling_string for
the least significant digits of the IUT individual address' }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id   : TP_PMR_1417_02
summary : 'Abbreviated dialling works for group call'
RQ ref  : RQ_001_1417
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_1417_02
with {    IUT configured_for_Standard_User_Interface
              and in standby and configured for wildcards
              and configured_for_abbreviated_dialling
      }
ensure that {
  when  { IUT has a valid abbreviated_dialling_string containing a wildcard entered or selected  --
valid means here agreeing with the MS specific abbreviated address configuration
           before the hash_key or dedicated_send_key is pressed }
  then  { IUT sends a Voice_Transmission
               with Message_Frame
                  containing Called_Station_ID set to the Tx_B2_conversion of the
                    'address resulting from substituting the abbreviated_dialling_string for the
least significant digits of the IUT individual address'  }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_1418_01
summary  : 'Masked dialling works for individual calls'
RQ ref   : RQ_001_1418
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_1418_01
with {    IUT configured_for_Standard_User_Interface
              and in standby
              and 'a dialling string input mask enabled'
      }
ensure that {
  when  { IUT has a valid masked_dialling_string entered or selected -- valid means the exact number
of digits as in mask
           before IUT hash_key or dedicated_send_key is pressed }
  then  { IUT sends a Voice_Transmission
                with Message_Frame
                   containing Called_Station_ID set to the Tx_B2_conversion of the
                         'address resulting from substituting the masked_dialling_string for
those digits of the IUT individual address that fall within the input mask' }
}


-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_1418_02
summary  : 'Masked dialling for group'
RQ ref   : RQ_001_1418
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_1418_02
with {    IUT configured_for_Standard_User_Interface
              and in standby
              and configured for wildcards
              and 'a dialling string input mask enabled'
      }
ensure that {
  when  { IUT has a valid masked_dialling_string containing a wildcard entered or selected   --
valid means the exact number of digits as in mask
           before IUT hash_key or dedicated_send_key is pressed }
  then  { IUT sends a Voice_Transmission
                   with Message_Frame
                      containing Called_Station_ID set to the Tx_B2_conversion of the
                            'address resulting from substituting the masked_dialling_string for
those digits of the IUT individual address that fall within the input mask' }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_1418_03
summary  : 'Abbreviated masked dialling works for individual calls'
RQ ref   : RQ_001_1418
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_1418_03
with {    IUT configured_for_Standard_User_Interface
              and in standby
              and 'a dialling string input mask enabled'
              and configured_for_abbreviated_dialling
      }
ensure that {
  when  { IUT has a valid abbreviated_masked_dialling_string entered or selected
           before IUT hash_key or dedicated_send_key is pressed }
  then  { IUT sends a Voice_Transmission
                with Message_Frame
                   containing Called_Station_ID set to the Tx_B2_conversion of the
                         'address resulting from substituting the
abbreviated_masked_dialling_string for those digits of the IUT individual address that fall within
the least significant digits of the input mask' }
}


-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

TP id : TP_PMR_1418_04
summary : 'Abbreviated masked dialling for group'
RQ ref : RQ_001_1418
TP type : conformance
Role : **M1**, **M2**, **M3**
config : **CF_dPMR_01**
TC ref : TC_PMR_1418_04
with {   IUT configured_for_Standard_User_Interface
                and in standby
                and configured for wildcards
                and configured_for_abbreviated_dialling
                and 'a dialling string input mask enabled'
        }
ensure that {
    when { **IUT has a valid abbreviated_masked_dialling_string containing a wildcard entered or
selected**
            before IUT hash_key or dedicated_send_key is pressed }
    then { **IUT sends a Voice_Transmission**
                    with Message_Frame
                        containing Called_Station_ID set to the Tx_B2_conversion of the
        'address resulting from substituting the abbreviated_masked_dialling_string for those
digits of the IUT individual address that fall within the least significant digits of the input
mask' }
}

-- **xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx**

TP id : TP_PMR_1420_01
summary : 'Broadcast with wildcard group address'
RQ ref : RQ_001_1420
TP type : conformance
Role : **M1**, **M2**, **M3**
config : **CF_dPMR_01**
TC ref : TC_PMR_1420_01
with {   IUT configured_for_Standard_User_Interface
                and in standby and
                configured for wildcards
        }
ensure that {

    when { **IUT has a broadcast_command and valid wildcard_group_address entered or selected**
            before hash_key or dedicated_send_key is pressed }
    then { **IUT sends a Voice_Transmission**
                    with Message_Frame
                        containing Called_Station_ID set to the Tx_B2_conversion of that
wildcard_group_address and
                        containing Communications_Format set to '0000b' }
}

-- **xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx**

TP id : TP_PMR_1420_02
summary : 'Broadcast with abbreviated wildcard group address'
RQ ref : RQ_001_1420
TP type : conformance
Role : **M1**, **M2**, **M3**
config : **CF_dPMR_01**
TC ref : TC_PMR_1420_02
with {   IUT configured_for_Standard_User_Interface
                and in standby and
                configured for wildcards
                and configured_for_abbreviated_dialling
        }
ensure that {
    when { **IUT has a broadcast_command and a valid abbreviated_dialling_string containing a wildcard
entered or selected**
        before IUT hash_key or dedicated_send_key is pressed }
    then { **IUT sends a Voice_Transmission**
                    with Message_Frame
                        containing Called_Station_ID set to the Tx_B2_conversion of the
                        'address resulting from substituting the abbreviated_dialling_string for the
least significant digits of the IUT individual address' **and**
                        containing Communications_Format set to '0000b' }
}

-- **xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx**

```
TP id    : TP_PMR_1420_03
summary : 'Broadcast with abbreviated masked wildcard group address'
RQ ref  : RQ_001_1420
TP type : conformance
Role     : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_1420_03
with {    IUT configured_for_Standard_User_Interface
                and in standby and
                configured for wildcards
                and configured_for_abbreviated_dialling
                and 'a dialling string input mask enabled'
      }
ensure that {
   when  { IUT has a broadcast_command and a valid abbreviated_masked_dialling_string containing a
wildcard entered or selected
      before IUT hash_key or dedicated_send_key is pressed }
   then  { IUT sends a Voice_Transmission
                     with Message_Frame
                        containing Called_Station_ID set the Tx_B2_conversion of the
           'address resulting from substituting the abbreviated_masked_dialling_string for those
digits of the IUT individual address that fall within the least significant digits of the input
mask' and
                        containing Communications_Format set to '0000b' }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id    : TP_PMR_1420_04
summary : 'Broadcast with numeric group address'
RQ ref  : RQ_001_1420
TP type : conformance
Role     : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_1420_04
with {    IUT configured_for_Standard_User_Interface and
                in standby and
                programmed_with_a_numeric_group_address
      }
ensure that {
   when  { IUT has a broadcast_command and the numeric_group_address entered or selected
          before hash_key or dedicated_send_key is pressed }
   then  { IUT sends a Voice_Transmission
                   with Message_Frame
                        containing Called_Station_ID set to the Tx_B2_conversion of that
numeric_group_address and
                        containing Communications_Format set to '0000b' }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id    : TP_PMR_1420_05
summary : 'Broadcast with abbreviated numeric group address'
RQ ref  : RQ_001_1420
TP type : conformance
Role     : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_1420_05
with {    IUT configured_for_Standard_User_Interface and
                in standby and
                programmed_with_a_numeric_group_address and
                configured_for_abbreviated_dialling
      }
ensure that {
   when  { IUT has a broadcast_command and a valid abbreviated_dialling_string 'for the
numeric_group_address' entered or selected
      before IUT hash_key or dedicated_send_key is pressed }
   then  { IUT sends a Voice_Transmission
                     with Message_Frame
                        containing Called_Station_ID set to the Tx_B2_conversion of that
numeric_group_address and
                        containing Communications_Format set to '0000b' }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id    : TP_PMR_1420_06
summary  : 'Broadcast with abbreviated masked numeric group address'
RQ ref   : RQ_001_1420
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_1420_06
with {    IUT configured_for_Standard_User_Interface
            and in standby and
            programmed_with_a_numeric_group_address and
            configured_for_abbreviated_dialling and
            'a dialling string input mask enabled'
      }
ensure that {
  when  { IUT has a broadcast_command and a valid abbreviated_masked_dialling_string 'for the
numeric_group_address' entered or selected
      before IUT hash_key or dedicated_send_key is pressed }
  then  { IUT sends a Voice_Transmission
                  with Message_Frame
                    containing Called_Station_ID set to the Tx_B2_conversion of the
numeric_group_address and
                    containing Communications_Format set to '0000b' }
}


-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_1420_07
summary  : 'Broadcast with invalid numeric group address'
RQ ref   : RQ_001_1420
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_1420_07
with {    IUT configured_for_Standard_User_Interface and
            in standby and
            programmed_with_a_numeric_group_address
      }
ensure that {
  when  { IUT has a broadcast_command and a seven_digit_address different from the
numeric_group_address entered or selected
        before hash_key or dedicated_send_key is pressed }
  then  { IUT notifies Call_Fail }
}


-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_1421_01
summary  : 'Status call with specific address'
RQ ref   : RQ_001_1421
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_1421_01
with {    IUT configured_for_Standard_User_Interface and
            in standby
      }
ensure that {
  when  { IUT has a status_command and a status_code set to '09' and a valid seven_digit_address
entered or selected
        before IUT hash_key or dedicated_send_key is pressed }
  then  { IUT sends a Status_Call
              with Message_Frame
                containing Called_Station_ID set to the Tx_B2_conversion of the
seven_digit_address and
                containing Message_Type set to '0111b'and
              with End_Frame
                containing End_Type set to '01b'and
                containing ARQ set to '00b' and
                containing STAT set to '01001b'}
}


-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_1423_01
summary  : 'Forced talkgroup call with specific address'
RQ ref   : RQ_001_1423
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_1423_01
with {    IUT configured_for_Standard_User_Interface and
               not_programmed_with_a_numeric_group_address and
               in standby
      }
ensure that {
   when  { IUT has a talkgroup_command and a seven_digit_address entered or selected
          before IUT hash_key or dedicated_send_key is pressed }
   then  { IUT sends a Voice_Transmission
                      with a Message_Frame
                         containing Called_Station_ID set to the Tx_B2_conversion of the
seven_digit_address }
}


-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_1424_01
summary  : 'Call cancel'
RQ ref   : RQ_001_1424
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_1424_01
with {    IUT configured_for_Standard_User_Interface and
               in standby and
               configured_for_polite_to_own_CC
      }
ensure that {
   when  { TESTER sends a continuous Voice_Transmission using 'a signal level of >-102 dBm' and
          IUT is requested to make a Voice_Transmission }
   then  { IUT does not transmit }
   when  { IUT hash_key is pressed twice -- call only cancelled here!
          before the TESTER terminates the continuous Voice_Transmission }
   then  { IUT does not transmit }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

5.1.1.3   Talking Party ID

```
TP id    : TP_PMR_0803_01
summary  : 'Talking Party ID'
RQ ref   : RQ_001_0803
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_0803_01
with {    IUT in standby and TPID_is_enabled
      }
ensure that {
   when  { IUT receives a Voice_Transmission from TESTER }
   then  { IUT notifies the Own_Station_ID of the TESTER }
}


-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

5.1.2   Base Station framing

```
TP id    : TP_PMR_0409_01
summary  : 'Call set up'
RQ ref   : RQ_001_0409
TP type  : conformance
Role     : BS2
config   : CF_dPMR_01
TC ref   : TC_PMR_0409_01
with {   IUT in idle
     }
ensure that {
  when  { IUT receives a Connection_Request to a valid individual_address }
  then  { IUT sends the Connection_Request on downlink followed by preservation_frames
          with Message_Type set to '0100b' and PM bit set to '1' }
}


-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0410_01
summary  : 'Ack to Call set up'
RQ ref   : RQ_001_0410
TP type  : conformance
Role     : BS2
config   : CF_dPMR_01
TC ref   : TC_PMR_0410_01
with {   IUT sends Connection_Request then preservation_frames
     }
ensure that {
  when  { IUT receives an acknowledgement to the Connection_Request }
  then  { IUT inserts the acknowledgement on downlink between preservation_frames
          and 'maintains bit synchronisation' }
}


-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0411_01
summary  : 'transmit items'
RQ ref   : RQ_001_0411
TP type  : conformance
Role     : BS2
config   : CF_dPMR_01
TC ref   : TC_PMR_0411_01
with {   IUT in idle
     }
ensure that {
  when  { IUT receives a transmit_item from a MS that is party_to_call }
  then  { IUT sends the transmit_item on downlink followed by preservation_frames
          with Message_Type set to '0100b' and PM bit set to '1' }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0412_01
summary  : 'transmit items'
RQ ref   : RQ_001_0412
TP type  : conformance
Role     : BS2
config   : CF_dPMR_01
TC ref   : TC_PMR_0412_01
with {   IUT sends preservation_frames
     }
ensure that {
  when  { IUT receives a transmit_item from a MS that is party_to_call }
  then  { IUT inserts the transmit_item on downlink between preservation_frames
          and 'maintains bit synchronisation' }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_0413_01
summary : 'Disconnect'
RQ ref  : RQ_001_0413
TP type : conformance
Role    : BS2
config  : CF_dPMR_01
TC ref  : TC_PMR_0413_01
with {    IUT sends preservation_frames
      }
ensure that {
  when  { IUT receives a Disconnection_Request from a MS that is party_to_call }
  then  { IUT inserts the Disconnection_Request on downlink after a complete preservation_frames
          and 'maintains bit synchronisation' then returns to idle }
}


-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0414_01
summary : 'status'
RQ ref  : RQ_001_0414
TP type : conformance
Role    : BS2
config  : CF_dPMR_01
TC ref  : TC_PMR_0414_01
with {    IUT in idle
      }
ensure that {
  when  { IUT receives a Status_Request from a valid individual_address }
  then  { IUT sends the Status_Request on downlink followed by preservation_frames
          with Message_Type set to '0100b' and PM bit set to '1' }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0415_01
summary : 'status'
RQ ref  : RQ_001_0415
TP type : conformance
Role    : BS2
config  : CF_dPMR_01
TC ref  : TC_PMR_0415_01
with {    IUT sends preservation_frames
      }
ensure that {
  when  { IUT receives a Status_Response from an address that is party_to_call }
  then  { IUT inserts the Status_Response on downlink after a complete preservation_frame
          and 'maintains bit synchronisation' then returns to idle }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0416_01
summary : 'short data'
RQ ref  : RQ_001_0416
TP type : conformance
Role    : BS2
config  : CF_dPMR_01
TC ref  : TC_PMR_0416_01
with {    IUT is idle
      }
ensure that {
  when  { IUT receives a Short_Data Call from a valid address }
  then  { IUT transmits preservation_frames on downlink
  then inserts the Short_Data Call after a complete preservation_frame then returns to idle }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_0417_01
summary : 'call divert'
RQ ref   : RQ_001_0417
TP type : conformance
Role     : BS2
config   : CF_dPMR_01
TC ref   : TC_PMR_0417_01
with {   IUT is idle and has a Call_Divert for a valid address to a Divert_Address
     }
ensure that {
  when  { IUT receives a transmit_item addressed to the valid address }
  then  { IUT transmits the transmit_item on the downlink using the Divert_Address instead of the
valid address
     }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id    : TP_PMR_0418_01
summary : 'call divert'
RQ ref   : RQ_001_0418
TP type : conformance
Role     : BS2
config   : CF_dPMR_01
TC ref   : TC_PMR_0418_01
with {   IUT is idle and has a Call_Divert for a valid address to a Divert_Address
         IUT receives a Call_Divert cancel from a different valid address
     }
ensure that {
  when  { IUT receives a transmit_item addressed to the valid address }
  then  { IUT transmits the transmit_item on the downlink using the Divert_Address instead of the
valid address
     }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id    : TP_PMR_0419_01
summary : 'call set up to line'
RQ ref   : RQ_001_0419
TP type : conformance
Role     : BS2
config   : CF_dPMR_01
TC ref   : TC_PMR_0419_01
with {   IUT is idle
     }
ensure that {
  when  { IUT receives a Connection_Request addressed from a valid address to a line_connection
address }
  then  { IUT transmits preservation_frames on downlink }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id    : TP_PMR_0419_02
summary : 'call set up to line'
RQ ref   : RQ_001_0419
TP type : conformance
Role     : BS2
config   : CF_dPMR_01
TC ref   : TC_PMR_0419_02
with {   IUT receives a Connection_Request addressed to a line_connection address
         and transmits preservation_frames on downlink
     }
ensure that {
  when  { IUT receives an acknowledgement to the Connection_Request }
  then  { IUT inserts the acknowledgement on downlink after a preservation_frame
         and 'maintains bit synchronisation'}
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id    : TP_PMR_0419_03
summary  : 'call set up to line'
RQ ref   : RQ_001_0419
TP type : conformance
Role     : BS2
config   : CF_dPMR_01
TC ref   : TC_PMR_0419_03
with {   IUT receives a Connection_Request addressed to a line_connection address
         and transmits preservation_frames on downlink
     }
ensure that {
  when  { IUT receives a NACK to the Connection_Request }
  then  { IUT inserts the NACK on downlink after a preservation_frame
          and returns to idle }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0420_01
summary  : 'call set up to line'
RQ ref   : RQ_001_0420
TP type : conformance
Role     : BS2
config   : CF_dPMR_01
TC ref   : TC_PMR_0420_01
with {   IUT receives an acknowledgement to a Connection_Request addressed to a line_connection
address
     }
ensure that {
  when  { IUT inserts the acknowledgement on downlink after a preservation_frame }
  then  { IUT transmits the line_connection source on the downlink }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0421_01
summary  : 'call set up from line'
RQ ref   : RQ_001_0421
TP type : conformance
Role     : BS2
config   : CF_dPMR_01
TC ref   : TC_PMR_0421_01
with {
         IUT in idle
     }
ensure that {
  when  { IUT receives a Connection_Request from a line_connection address }
  then  { IUT transmits the Connection_Request on the downlink and then preservation_frames }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0422_01
summary  : 'Co-channel BS access'
RQ ref   : RQ_001_0422
TP type : conformance
Role     : BS2
config   : CF_dPMR_01
TC ref   : TC_PMR_0422_01
with {
         IUT is 'part of a co-channel network' and is idle
         IUT is 'BS number x' of a 'network of n total BS'
     }
ensure that {
  when  { IUT receives a BS_Access_Header addressed to 'COCHI0'}
  then  { IUT transmits a BS_Access_Header response
          in the 'frame pair starting 2(n-x)+1 frames after the original BS Access Header' }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id   : TP_PMR_0423_01
summary : 'Co-channel BS access'
RQ ref  : RQ_001_0423
TP type : conformance
Role    : BS2
config  : CF_dPMR_01
TC ref  : TC_PMR_0423_01
with {
        IUT is 'part of a co-channel network and has transmitted a BS Access Header response to a
COCHI0 header'
        IUT is 'BS number x' of a 'network of n total BS'
    }
ensure that {
  when  { IUT receives an acknowledgement addressed to 'COCHIx'}
  then  { IUT transmits preservation_frames on the downlink }
}


-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id   : TP_PMR_0424_01
summary : 'Co-channel BS access'
RQ ref  : RQ_001_0424
TP type : conformance
Role    : BS2
config  : CF_dPMR_01
TC ref  : TC_PMR_0424_01
with {
        IUT is 'part of a co-channel network'
        IUT is 'BS number x' of a 'network of n total BS' and receives an acknowledgement addressed
to 'COCHIx'
    }
ensure that {
  when  { IUT receives a BS_Access_Header addressed to 'COCHI0'from same MS address as the 'COCHIx'
acknowledgement}
  then  { IUT transmits a BS_Access_Header response
        in the 'frame pair starting 2(n-x)+1 frames after the original BS Access Header' }
}


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TP id   : TP_PMR_0425_01
summary : 'Co-channel BS access'
RQ ref  : RQ_001_0425
TP type : conformance
Role    : BS2
config  : CF_dPMR_01
TC ref  : TC_PMR_0425_01
with {
        IUT is 'part of a co-channel network'
        IUT is 'BS number x' of a 'network of n total BS' and receives an acknowledgement addressed
to 'COCHIx'
    }
ensure that {
  when  { IUT receives a transmit_item addressed to 'COCHI not equals x'
        from same MS address as the 'COCHIx' acknowledgement}
  then  { IUT returns to idle }
}


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TP id   : TP_PMR_0427_01
summary : 'Co-channel BS access'
RQ ref  : RQ_001_0427
TP type : conformance
Role    : BS2
config  : CF_dPMR_01
TC ref  : TC_PMR_0427_01
with {
        IUT is 'part of a co-channel network'
        IUT is idle
    }
ensure that {
  when  { IUT receives Connection_Request from a line_connection}
  then  { IUT transmits a BS_Access_Header response
        to the MS address in the Connection_Request }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id   : TP_PMR_0429_01
summary : 'Idle frames'
RQ ref  : RQ_001_0429
TP type : conformance
Role    : BS2
config  : CF_dPMR_01
TC ref  : TC_PMR_0429_01
with {   IUT is configured for idle Frames
         IUT sends preservation_frames
     }
ensure that {
  when  { IUT receives a Disconnection_Request from a MS that is party_to_call }
  then  { IUT inserts the Disconnection_Request on downlink after a complete preservation_frames
          and 'maintains bit synchronisation'then transmits idle Frames
          with Message_Type set to '0100b' and PM bit set to '0b' and MI_type set to '000b'}
}
```

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```
TP id   : TP_PMR_0430_01
summary : 'Preservation frames'
RQ ref  : RQ_001_0430
TP type : conformance
Role    : BS2
config  : CF_dPMR_01
TC ref  : TC_PMR_0430_01
with {   IUT is transmitting a data transmit_item
     }
ensure that {
  when  { End_Frame has ARQ set to '00b'}
  then  { IUT returns to idle after transmitting the End_Frame on the downlink}
}
```

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```
TP id   : TP_PMR_0430_02
summary : 'Preservation frames'
RQ ref  : RQ_001_0430
TP type : conformance
Role    : BS2
config  : CF_dPMR_01
TC ref  : TC_PMR_0430_02
with {   IUT is transmitting a data transmit_item
     }
ensure that {
  when  { End_Frame has ARQ set to '01b'}
  then  { IUT transmits preservation_frames on downlink after the End_Frame }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

5.1.3   Channel Access

```
TP id   : TP_PMR_1004_01
summary : 'Interference on channel'
RQ ref  : RQ_001_1004
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_1004_01
with {   IUT in standby and configured_for_polite_to_own_CC
     }
ensure that {
  when  { TESTER sends a continuous Voice_Transmission using an invalid colour_code and 'a signal
level of >-102 dBm' and
          IUT is requested to make a Voice_Transmission }
  then  { IUT sends the Voice_Transmission  }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id    : TP_PMR_1005_01
summary : 'Tx WAIT Time'
RQ ref  : RQ_001_1005
TP type : conformance
Role    : M1, M2
config  : CF_dPMR_01
TC ref  : TC_PMR_1005_01
with {   IUT in standby
     }
ensure that {
  when { TESTER sends a Voice_Transmission with an End_Frame containing Tx_WAIT set to a non_zero
value and
         IUT is requested to send a PTT_Call during the Tx_WAIT time }
  then { IUT does not transmit during the Tx_WAIT time }
}


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TP id    : TP_PMR_1007_01
summary : 'Acknowledgement response time'
RQ ref  : RQ_001_1007
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_1007_01
with {   IUT in standby and configured_for_impolite_channel_access
     }
ensure that {
  when { TESTER sends a continuous Voice_Transmission using 'a signal level of >-102 dBm' and
               sends a Voice_Transmission using 'a signal level of >-82 dBm'
                       with an End_Frame containing ARQ set to '01b' }
  then { IUT sends an Ack_Frame   }
}


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TP id    : TP_PMR_1007_02
summary : 'Acknowledgement response time'
RQ ref  : RQ_001_1007
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_1007_02
with {   IUT in standby and configured_for_polite_to_own_CC and configured_to_use_Tack
     }
ensure that {
  when { TESTER sends a continuous Voice_Transmission using 'a signal level of >-102 dBm' and
               sends a Voice_Transmission using 'a signal level of >-82 dBm'
                       with an End_Frame containing ARQ set to '01b' }
  then { IUT sends an Ack_Frame within T_Ack seconds }
}


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TP id    : TP_PMR_1008_01
summary : 'Party to call'
RQ ref  : RQ_001_1008
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_1008_01
with {   IUT in standby
     }
ensure that {
  when { TESTER sends a continuous Voice_Transmission using a wildcard_group_address or
numeric_group_address of the IUT and
         IUT is requested to send a PTT_Call to the same wildcard_group_address or
numeric_group_address
              }
  then { IUT sends the PTT_Call}
}


-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id   : TP_PMR_1009_01
summary : 'Polite to CC'
RQ ref  : RQ_001_1009
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_1009_01
with {    IUT in standby and configured_for_polite_to_own_CC
     }
ensure that {
  when  { TESTER sends a continuous Voice_Transmission 'not addressed to the IUT' and
          IUT is requested to send a Voice_Transmission       }
  then  { IUT does not transmit}
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id   : TP_PMR_1010_01
summary : 'Polite to CC'
RQ ref  : RQ_001_1010
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_1010_01
with {    IUT in standby and configured_for_impolite_channel_access
     }
ensure that {
  when  { TESTER sends a continuous Voice_Transmission 'not addressed to the IUT' and
          IUT is requested to send a Voice_Transmission       }
  then  { IUT sends that Voice_Transmission}
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id   : TP_PMR_1011_01
summary : 'Polite to own group'
RQ ref  : RQ_001_1011
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_1011_01
with {    IUT in standby and configured_for_polite_to_own_group
     }
ensure that {
  when  { TESTER sends a continuous Voice_Transmission to an individual_address
                  that is 'also a member of a group configured in the IUT' and
          IUT is requested to send a Voice_Transmission       }
  then  { IUT does not transmit}
}

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TP id   : TP_PMR_1012_01
summary : 'Multiple acknowledgements'
RQ ref  : RQ_001_1012
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_1012_01
with {    IUT in standby and configured_for_impolite_channel_access and configured_for_multiple_acks
     }
ensure that {
  when  { TESTER sends a continuous Voice_Transmission using 'a signal level of >-102 dBm' and
                  sends a Voice_Transmission using 'a signal level of >-82 dBm'
                         with an End_Frame containing ARQ set to '01b' }
  then  { IUT sends up to 4 Ack_Frames }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_1012_02
summary : 'Acknowledgement response time'
RQ ref   : RQ_001_1012
TP type : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_1012_02
with {    IUT in standby and configured_for_polite_to_own_CC and configured_for_multiple_acks and
configured_to_use_Tack
     }
ensure that {
  when  { TESTER sends a continuous Voice_Transmission using 'a signal level of >-102 dBm' and
             sends a Voice_Transmission using 'a signal level of >-82 dBm'
                      with an End_Frame containing ARQ set to '01b' }
  then  { IUT sends up to 4 Ack_Frames within T_Ack seconds }
}
```

`-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx`

5.1.3.1   OACSU

```
TP id    : TP_PMR_0840_01
summary : 'OACSU'
RQ ref   : RQ_001_0840
TP type : conformance
Role     : M1, M2
config   : CF_dPMR_01
TC ref   : TC_PMR_0840_01
with {    IUT in standby and
            OACSU_enabled
     }
ensure that {
  when  { IUT is requested to send a OACSU_Call }
  then  { IUT sends a Connection_Request
             containing Message_Frame
                containing Message_Type set to '0001b' and
             containing End_Frame
                containing End_Type set to '00b' and
                containing ARQ set to '01b' }
}
```

`-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx`

```
TP id    : TP_PMR_0840_02
summary : 'OACSU'
RQ ref   : RQ_001_0840
TP type : conformance
Role     : M1, M2
config   : CF_dPMR_01
TC ref   : TC_PMR_0840_02
with {    IUT has_sent_OACSU_Connection_Request
     }
ensure that {
  when  { IUT receives an ACK_Frame
                          containing Message_Type set to '0011b' and
                          containing MI_information set to '001b' }
  then  { IUT notifies 'that Voice_Transmission can start' }
}
```

`-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx`

```
TP id    : TP_PMR_0840_03
summary : 'OACSU'
RQ ref   : RQ_001_0840
TP type : conformance
Role     : M1, M2
config   : CF_dPMR_01
TC ref   : TC_PMR_0840_03
with {    IUT has_sent_OACSU_Connection_Request
        }
ensure that {
  when  { IUT receives an Ack_Frame
                          containing Message_Type set to '0011b' and
                          containing MI_information not set to '001b' }
  then  { IUT notifies Call_Fail }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

5.1.3.2   PTT Call

```
TP id    : TP_PMR_0801_01
summary : 'PTT Call'
RQ ref   : RQ_001_0801
TP type : conformance
Role     : M1, M2
config   : CF_dPMR_01
TC ref   : TC_PMR_0801_01
with {    IUT in standby
        }
ensure that {
  when  { IUT is requested to make PTT_Call }
  then  { IUT sends a Voice_Transmission containing a Message_Frame
                      followed by an integral_number of Superframes
                      followed by an End_Frame   }
}
```
-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

5.1.4   END frame

```
TP id    : TP_PMR_0913_01
summary : 'END Frame'
RQ ref   : RQ_001_0913
TP type : conformance
Role     : M1, M2
config   : CF_dPMR_01
TC ref   : TC_PMR_0913_01
with {    IUT in standby
        }
ensure that {
  when  { IUT is requested to send a Connection_Request }
  then  { IUT sends a Connection_Request
             containing End_Frame
                 containing 2 indentical End_Data fields   }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id    : TP_PMR_0984_01
summary : 'END Frame'
RQ ref   : RQ_001_0984
TP type : conformance
Role     : M1, M2
config   : CF_dPMR_01
TC ref   : TC_PMR_0984_01
with {    IUT in standby
        }
ensure that {
  when  { IUT is requested to send a Connection_Request }
  then  { IUT sends a Connection_Request
             containing End_Frame
                 containing Frame_Sync set to "7D DF F5"   }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id    : TP_PMR_0985_01
summary : 'END Frame'
RQ ref   : RQ_001_0985
TP type : conformance
Role     : M1, M2
config   : CF_dPMR_01
TC ref   : TC_PMR_0985_01
with {    IUT in standby
     }
ensure that {
  when   { IUT is requested to send a Status_Response }
  then   { IUT sends a Status_Response
              containing End_Frame
                 containing End_Type set to "01" }
}

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TP id    : TP_PMR_0986_01
summary : 'END Frame'
RQ ref   : RQ_001_0986
TP type : conformance
Role     : M1, M2
config   : CF_dPMR_01
TC ref   : TC_PMR_0986_01
with {    IUT in standby
     }
ensure that {
  when   { IUT is requested to send a Connection_Request }
  then   { IUT sends a Connection_Request
              containing End_Frame
                 containing ARQ field set to "01" }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0987_01
summary : 'END Frame'
RQ ref   : RQ_001_0987
TP type : conformance
Role     : M1, M2
config   : CF_dPMR_01
TC ref   : TC_PMR_0987_01
with {    IUT in transmitting a Voice_Transmission and configured for 1 Superframe Tx_WAIT
     }
ensure that {
  when   { IUT is requested to end the Voice_Transmission  }
  then   { IUT sends an End_Frame
                 containing Tx_WAIT field set to "0100" }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

5.1.5   Message frame

```
TP id    : TP_PMR_0901_01
summary : 'Message frame'
RQ ref   : RQ_001_0901
TP type : conformance
Role     : M1
config   : CF_dPMR_01
TC ref   : TC_PMR_0901_01
with {    IUT in standby
     }
ensure that {
  when   { IUT is requested to make a Voice_Transmission }
  then   { IUT sends a Voice_Transmission
              with Message_Frame
                 containing PM set to '0b'
       }

  -- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_0911_01
summary  : 'Message frame'
RQ ref   : RQ_001_0911
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_0911_01
with {   IUT in standby and configured for 'peer to peer'
     }
ensure that {
  when  { IUT is requested to make a Voice_Transmission }
  then  { IUT sends a Voice_Transmission
              with Message_Frame
                  containing Communications_Format set to 01b }
        }

  -- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0911_02
summary  : 'Message frame'
RQ ref   : RQ_001_0911
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_0911_02
with {   IUT in standby and configured for 'duplex BS2 access'
     }
ensure that {
  when  { IUT is requested to make a Voice_Transmission }
  then  { IUT sends a Voice_Transmission
              with Message_Frame
                  containing Communications_Format set to 10b }
        }

  -- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0911_03
summary  : 'Message frame'
RQ ref   : RQ_001_0911
TP type  : conformance
Role     : BS2
config   : CF_dPMR_01
TC ref   : TC_PMR_0911_03
with {   IUT in standby
     }
ensure that {
  when  { IUT recieves a Voice_Transmission }
  then  { IUT sends a Voice_Transmission on the downlink
              with Message_Frame
                  containing Communications_Format set to 11b }
        }

  -- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0960_01
summary  : 'Message Frame Sync'
RQ ref   : RQ_001_0960
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_0960_01
with {   IUT in standby
     }
ensure that {
  when  { IUT requested to send a 'non packet transmission }
  then  { IUT sends a transmit_item
           containing Message_Frame
             containing Frame_Sync
               set to 'FF 5F 75 D5 77h'}
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_0961_01
summary : 'Type 3 Data Frame Sync'
RQ ref   : RQ_001_0961
TP type : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_0961_01
with {    IUT in standby
      }
ensure that {
  when   { IUT requested to send a T3_Transmission }
  then   { IUT sends a T3_Transmission
             containing Message_Frame
               containing Frame_Sync
                 set to 'FD 55 F5 DF 7F DDh'}
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

5.1.5.1   Message Information field

Void.

5.1.6   Payload

5.1.6.1   Packet data

```
TP id    : TP_PMR_0808_01
summary : 'T3 data transmission'
RQ ref   : RQ_001_0808
TP type : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_0808_01
with {    IUT in standby
      }
ensure that {

  when   { IUT is requested to send a T3_Transmission }
  then   { IUT sends T3_Transmission
                    containing a Message_Frame
                      containing Communications_Mode
                        set to '100b' }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id    : TP_PMR_0817_01
summary : 'Type 3 Data positive acknowledgement'
RQ ref   : RQ_001_0817
TP type : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_0817_01
with {    IUT in standby
      }
ensure that {
  when   { IUT receives a T3_Transmission   }
  then   { IUT sends a Ack_Frame containing Ack_type set to '001b'}
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id   : TP_PMR_0818_01
summary : 'Type 3 Data negative acknowledgement'
RQ ref : RQ_001_0818
TP type : conformance
Role   : **M1**, **M2**, **M3**
config : **CF_dPMR_01**
TC ref : TC_PMR_0818_01
with {   **IUT in standby**
        }
ensure that {
  when { **IUT receives a T3_Transmission with a packet_data_frame containing a data_checksum set to
an invalid CRC_D value**}
  then { **IUT sends a Ack_Frame containing Ack_type set to** '010b' **and**
  MI_information set to 'the number of the packet data frame before the one containing the
invalid_CRC'}
}

-- **xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx**

TP id   : TP_PMR_0819_01
summary : 'Type 3 Data call completion'
RQ ref : RQ_001_0819
TP type : conformance
Role   : **M1**, **M2**, **M3**
config : **CF_dPMR_01**
TC ref : TC_PMR_0819_01
with {   **IUT is** 'sending the last packet of a T3_Transmission'
        }
ensure that {
  when { **IUT receives a Ack_Frame containing Ack_type set to** '001b' }
  then { **IUT sends a Disconnection_Request**}
}

-- **xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx**

TP id   : TP_PMR_0820_01
summary : 'Type 3 Data negative acknowledgement'
RQ ref : RQ_001_0820
TP type : conformance
Role   : **M1**, **M2**, **M3**
config : **CF_dPMR_01**
TC ref : TC_PMR_0820_01
with {   **IUT is** 'sending a T3_Transmission'
        }
ensure that {
  when { **IUT receives a Ack_Frame containing Ack_type set to** '010b' **and MI_information set to a
packet_data_frame number**}
  then { **IUT sends** 'the previous T3_Transmission starting with the packet_data_frame following that
packet_data_frame number' }
}

-- **xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx**

TP id   : TP_PMR_0821_01
summary : 'Type 3 Data unused bytes'
RQ ref : RQ_001_0821
TP type : conformance
Role   : **M1**, **M2**, **M3**
config : **CF_dPMR_01**
TC ref : TC_PMR_0821_01
with {   **IUT in standby**
        }
ensure that {
  when { **IUT is requested to send a T3_Transmission** 'with a payload of 1400 bytes' }
  then { **IUT sends T3_Transmission**
                with the eighth packet_data_frame
                    containing data_length set to 140 **and**
                    last 40 **data_bytes set to** '00h'}
}

-- **xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx**

```
TP id    : TP_PMR_0822_01
summary : 'Type 3 Data CRC'
RQ ref   : RQ_001_0822
TP type : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_0822_01
with {    IUT in standby
      }
ensure that {

   when  { IUT is requested to send a T3_Transmission }
   then  { IUT sends a T3_Transmission
                       with every packet_data_frame
                          containing data_checksum set to the valid CRC_D value  }
   }
-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0949_01
summary : 'Packet data frame'
RQ ref   : RQ_001_0949
TP type : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_0949_01
with {   IUT in standby and configured with T3_test_data and configured with a CC_value of 32
      }
ensure that {
   when  { IUT is requested to make a T3_Transmission }
   then  { IUT sends a T3_Transmission
                 with each packet
                    containing colour_code
                       set to D7 55 F7h }
          }

   -- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0950_01
summary : 'Packet data frame'
RQ ref   : RQ_001_0950
TP type : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_0950_01
with {    IUT in standby and configured with T3_test_data
      }
ensure that {
   when  { IUT is requested to make a T3_Transmission }
   then  { IUT sends a T3_Transmission
                 with each packet
                    containing N
                       set to sequentially from 000b for the first packet to 111b for the last packet
}
          }

   -- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0951_01
summary : 'Packet data frame'
RQ ref   : RQ_001_0951
TP type : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_0951_01
with {    IUT in standby and configured with T3_test_data
      }
ensure that {
   when  { IUT is requested to make a T3_Transmission }
   then  { IUT sends a T3_Transmission
                 with each packet
                    containing LEN
                       set to 180 }
          }

   -- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id   : TP_PMR_0953_01
summary : 'Packet data frame'
RQ ref  : RQ_001_0953
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_0953_01
with {    IUT in standby and configured with T3_test_data
       }
ensure that {
   when  { IUT is requested to make a T3_Transmission }
   then  { IUT sends a T3_Transmission
                    with each packet
                       containing CRC_D
                          set to valid data_checksum }
          }
}

   -- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

5.1.6.2   Short data

```
   -- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id   : TP_PMR_0501_01
summary : 'Short data delivery'
RQ ref  : RQ_001_0501
TP type : conformance
Role    : M1, M2
config  : CF_dPMR_01
TC ref  : TC_PMR_0501_01
with {    IUT in standby
       }
ensure that {
   when  { IUT is requested to send a SDD_Call to TESTER }
   then  { IUT sends SDD_Call with
             each UDT_Frame containing 72 bits }
}

   -- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id   : TP_PMR_0502_01
summary : 'Short data delivery'
RQ ref  : RQ_001_0502
TP type : conformance
Role    : M1, M2
config  : CF_dPMR_01
TC ref  : TC_PMR_0502_01
with {    IUT in standby
       }
ensure that {
   when  { IUT is requested to send a binary SDD_Call to TESTER }
   then  { IUT sends SDD_Call with the first byte
             each UDT_Frame containing 11110001b }
}

   -- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id   : TP_PMR_0503_01
summary : 'Short data delivery'
RQ ref  : RQ_001_0503
TP type : conformance
Role    : M1, M2
config  : CF_dPMR_01
TC ref  : TC_PMR_0503_01
with {    IUT in standby
       }
ensure that {
   when  { IUT is requested to send a bcd SDD_Call to TESTER }
   then  { IUT sends SDD_Call with the first byte
             each UDT_Frame containing 11110010b }
}

   -- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id   : TP_PMR_0504_01
summary : 'Short data delivery'
RQ ref  : RQ_001_0504
TP type : conformance
Role    : M1, M2
config  : CF_dPMR_01
TC ref  : TC_PMR_0504_01
with {    IUT in standby
     }
ensure that {
   when  { IUT is requested to send an ISO7 SDD_Call to TESTER }
   then  { IUT sends SDD_Call with the first byte
               each UDT_Frame containing 11110011b }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id   : TP_PMR_0505_01
summary : 'Short data delivery'
RQ ref  : RQ_001_0505
TP type : conformance
Role    : M1, M2
config  : CF_dPMR_01
TC ref  : TC_PMR_0505_01
with {    IUT in standby
     }
ensure that {
   when  { IUT is requested to send an ISO8 SDD_Call to TESTER }
   then  { IUT sends SDD_Call with the first byte
               each UDT_Frame containing 11110100b }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id   : TP_PMR_0506_01
summary : 'Short data delivery'
RQ ref  : RQ_001_0506
TP type : conformance
Role    : M1, M2
config  : CF_dPMR_01
TC ref  : TC_PMR_0506_01
with {    IUT in standby
     }
ensure that {
   when  { IUT is requested to send an NMEA SDD_Call to TESTER }
   then  { IUT sends SDD_Call with the first byte
               each UDT_Frame containing 11110101b }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

5.1.6.3   T1 data

```
TP id   : TP_PMR_0934_01
summary : 'T1 data transmission'
RQ ref  : RQ_001_0934
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_0934_01
with {    IUT in standby
     }
ensure that {
   when  { IUT is requested to send a T1_Transmission }
   then  { IUT sends T1_Transmission
                      containing a Message_Frame
                        containing Communications_Mode
                            set to '010b'}
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

5.1.6.4   T2 data

```
TP id   : TP_PMR_0939_01
summary : 'T2 data transmission'
RQ ref  : RQ_001_0939
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_0939_01
with {    IUT in standby
     }
ensure that {
  when  { IUT is requested to send a T2_Transmission }
  then  { IUT sends T2_Transmission
                    containing a Message_Frame
                       containing Communications_Mode
                          set to '011b' }
}
```

-- **xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx**

5.1.6.5   Voice

5.1.6.5.1   Voice and attached data

```
TP id   : TP_PMR_0837_01
summary : 'Attached Data group calls'
RQ ref  : RQ_001_0837
TP type : conformance
Role    : M1, M2
config  : CF_dPMR_01
TC ref  : TC_PMR_0837_01
with {    IUT in standby and preset_with_AD_test_data
     }
ensure that {
  when  { IUT is requested to make a Group_AD_Call }
  then  { IUT sends Voice_Transmission
                    with Message_Frame
                       containing Communications_Mode set to '101b' }

  when  { IUT is requested to terminate the Group_AD_Call during the first Payload_Frame of a
Superframe }
  then  { IUT sends 'AD_test_data in penultimate and last Payload_Frames'}

}
```

-- **xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx**

```
TP id   : TP_PMR_0837_02
summary : 'Attached Data individual calls'
RQ ref  : RQ_001_0837
TP type : conformance
Role    : M1, M2
config  : CF_dPMR_01
TC ref  : TC_PMR_0837_02
with {    IUT is preset_with_AD_test_data
     }
ensure that {
  when  { IUT is requested to send a Individual_AD_Call }
  then  { IUT sends Voice_Transmission
                    containing Message_Frame
                       containing Communications_Mode set to '101b'}
  when  { IUT is requested to terminate the Individual_AD_Call during the first Payload_Frame of a
Superframe}
  then  { IUT sends 'AD_test_data in penultimate and last Payload_Frames'}
}
```

-- **xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx**

5.1.6.5.2   Late entry

```
TP id   : TP_PMR_0802_01
summary : 'Late Entry - Transmit Called Station Id'
RQ ref  : RQ_001_0802
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_0802_01
with {   IUT in standby
     }
ensure that {
  when  { IUT is requested to make PTT_Call }
  then  { IUT sends a Voice_Transmission
            with each first Payload_Frame
              containing ID0
                set to upper 12 bits 'of Called_Station_ID specified in Message_Frame' and
            with each second Payload_Frame
              containing ID2
                set to lower 12 bits 'of Called_Station_ID specified in Message_Frame'
        }
}
```

   -- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id   : TP_PMR_0802_02
summary : 'Late Entry - Transmit Own ID'
RQ ref  : RQ_001_0802
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_0802_02
with {   IUT in standby
     }
ensure that {
  when  { IUT is requested to make PTT_Call }
  then  { IUT sends a Voice_Transmission
            with each third Payload_Frame
              containing ID1
                set to upper 12 bits 'of Own_Station_ID specified in  Message_Frame' and
            with each third Payload_Frame
              containing ID3
                set to lower 12 bits 'of Own_Station_ID specified in  Message_Frame' and
        }
}
```
   -- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id   : TP_PMR_0802_03
summary : 'Late Entry - Communications mode and format'
RQ ref  : RQ_001_0802
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_0802_03
with {   IUT in standby
     }
ensure that {
  when  { IUT is requested to make PTT_Call }
  then  { IUT sends a Voice_Transmission
            with each Payload_Frame
              containing same Communications_Mode and Communications_Format 'as specified in
Message_Frame'
        }
}
```
   -- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id   : TP_PMR_0802_04
summary : 'Late Entry - Receive'
RQ ref  : RQ_001_0802
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_0802_04
with {    IUT in standby
     }
ensure that {
  when  { IUT receives Voice_Transmission
                         containing no Message_Frame and
                         containing an 'audible test tone as payload' }
  then  { IUT outputs the 'audible test tone' after a 'short delay' }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

5.1.6.5.3   Slow user data

```
TP id   : TP_PMR_0836_01
summary : 'Slow User Data group calls'
RQ ref  : RQ_001_0836
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_0836_01
with {    IUT in standby and preset_with_SLD_test_data
     }
ensure that {
  when  { IUT is requested to make a Group_SLD_Call }
  then  { IUT sends Voice_Transmission
                    containing a Message_Frame
                       containing the Communications_Mode
                          set to '001b' and
                    containing first Payload_Frame
                       containing CCH_data
                          set to first 2 bytes of SLD_test_data and
                    containing second Payload_Frame
                       containing CCH_data
                        set to second 2 bytes of SLD_test_data }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id   : TP_PMR_0843_01
summary : 'Slow User Data individual calls'
RQ ref  : RQ_001_0843
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_0843_01
with {    IUT in standby and preset_with_SLD_test_data
     }
ensure that {
  when  { IUT is requested to make a Individual_SLD_Call }
  then  { IUT sends Voice_Transmission
                      containing a Message_Frame
                         containing Communications_Mode set to '001b' and
                      containing first Payload_Frame
                         containing CCH_data
                            set to first 2 bytes of SLD_test_data and
                      containing second Payload_Frame
                         containing CCH_data
                            set to second 2 bytes of SLD_test_data }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id    : TP_PMR_0921_01
summary : 'Slow User Data group calls'
RQ ref  : RQ_001_0921
TP type : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref  : TC_PMR_0921_01
with {   IUT in standby and preset_with_SLD_test_data
     }
ensure that {
  when  { IUT is requested to make a Group_SLD_Call }
  then  { IUT sends Voice_Transmission
                    containing a Message_Frame
                       containing the Communications_Mode
                          set to '001b' and
                       containing first Payload_Frame
                          containing CCH_data
                             set to first 2 bytes of SLD_test_data and
                       containing second Payload_Frame
                          containing CCH_data
                            set to second 2 bytes of SLD_test_data }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0921_02
summary : 'Slow User Data individual calls'
RQ ref  : RQ_001_0921
TP type : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref  : TC_PMR_0921_02
with {   IUT in standby and preset_with_SLD_test_data
     }
ensure that {
  when  { IUT is requested to make a Individual_SLD_Call }
  then  { IUT sends Voice_Transmission
                    containing a Message_Frame
                       containing Communications_Mode set to '001b' and
                    containing first Payload_Frame
                       containing CCH_data
                          set to first 2 bytes of SLD_test_data and
                    containing second Payload_Frame
                       containing CCH_data
                          set to second 2 bytes of SLD_test_data }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

5.1.7   Power save

```
TP id    : TP_PMR_1101_01
summary : 'Powersave preamble'
RQ ref  : RQ_001_1101
TP type : conformance
Role     : M1, M2
config   : CF_dPMR_01
TC ref  : TC_PMR_1101_01
with {   IUT in standby and powersave_enabled
     }
ensure that {
  when  { IUT is requested to send a Voice_Transmission to TESTER }
  then  { IUT sends Voice_Transmission
                    with each Message_Frame
                       containing preamble set to '5F 5F 5F 5F 5F 5F 5F 5F 5Fh' }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_1102_01
summary  : 'Powersave call information'
RQ ref   : RQ_001_1102
TP type  : conformance
Role     : M1, M2
config   : CF_dPMR_01
TC ref   : TC_PMR_1102_01
with {    IUT in standby and powersave_enabled
     }
ensure that {
  when  { IUT is requested to send a Voice_Transmission to TESTER }
  then  { IUT sends Voice_Transmission with
              each Message_Frame containing MI_type set to '111b'
              except for the last Message_Frame containing MI_type not set to '111b' }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id    : TP_PMR_1103_01
summary  : 'Powersave preamble'
RQ ref   : RQ_001_1103
TP type  : conformance
Role     : M1, M2
config   : CF_dPMR_01
TC ref   : TC_PMR_1103_01
with {    IUT in standby and powersave_enabled using '15 Extended Headers'
     }
ensure that {
  when  { IUT is requested to send a Voice_Transmission to TESTER }
  then  { IUT sends Voice_Transmission with
              Message_Frame  1 containing MI_information set to '0000 1111b'
              Message_Frame  2 containing MI_information set to '0000 1110b'
              Message_Frame  3 containing MI_information set to '0000 1101b'
              Message_Frame  4 containing MI_information set to '0000 1100b'
              Message_Frame  5 containing MI_information set to '0000 1011b'
              Message_Frame  6 containing MI_information set to '0000 1010b'
              Message_Frame  7 containing MI_information set to '0000 1001b'
              Message_Frame  8 containing MI_information set to '0000 1000b'
              Message_Frame  9 containing MI_information set to '0000 0111b'
              Message_Frame 10 containing MI_information set to '0000 0110b'
              Message_Frame 11 containing MI_information set to '0000 0101b'
              Message_Frame 12 containing MI_information set to '0000 0100b'
              Message_Frame 13 containing MI_information set to '0000 0011b'
              Message_Frame 14 containing MI_information set to '0000 0010b'
              Message_Frame 15 containing MI_information set to '0000 0001b'
              Message_Frame 16 containing MI_information set to '0000 0000b' }
}
```

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

5.1.8   Superframe

5.1.8.1   Traffic channel

```
TP id    : TP_PMR_0904_01
summary  : 'Traffic channel superframe'
RQ ref   : RQ_001_0904
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_0904_01
with {    IUT in standby and configured with a CC_value of 32
     }
ensure that {
  when  { IUT is requested to make a Voice_Transmission }
  then  { IUT sends a Voice_Transmission
              with each second Payload_Frame
                 containing colour_code
                    set to D7 55 F7h and
              with each fourth Payload_Frame
                 containing colour_code
                    set to D7 55 F7h
        }
```

  -- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
TP id    : TP_PMR_0905_01
summary  : 'Traffic channel superframe'
RQ ref   : RQ_001_0905
TP type  : conformance
Role     : M1
config   : CF_dPMR_01
TC ref   : TC_PMR_0905_01
with {    IUT in standby
     }
ensure that {
  when  { IUT is requested to make a Voice_Transmission }
  then  { IUT sends a Voice_Transmission
                with each Payload_Frame
                    containing PM set to '0b'
        }

  -- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0906_01
summary  : 'Traffic channel superframe'
RQ ref   : RQ_001_0906
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_0906_01
with {    IUT in standby
     }
ensure that {
  when  { IUT is requested to make a Voice_Transmission }
  then  { IUT sends a Voice_Transmission
                with each Payload_Frame
                    containing V set to 00b
        }

  -- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0909_01
summary  : 'Traffic channel superframe'
RQ ref   : RQ_001_0909
TP type  : conformance
Role     : M1
config   : CF_dPMR_01
TC ref   : TC_PMR_0909_01
with {    IUT in standby
     }
ensure that {
  when  { IUT is requested to make a Voice_Transmission }
  then  { IUT sends a Voice_Transmission
                with each Payload_Frame
                    containing F set to 01b
        }

  -- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0910_01
summary  : 'Traffic channel superframe'
RQ ref   : RQ_001_0910
TP type  : conformance
Role     : M1, M2, M3
config   : CF_dPMR_01
TC ref   : TC_PMR_0910_01
with {    IUT in standby
     }
ensure that {
  when  { IUT is requested to make a Normal_Priority Voice_Transmission }
  then  { IUT sends a Voice_Transmission
                with each Payload_Frame
                    containing EP set to 0b
        }

  -- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id   : TP_PMR_0910_02
summary : 'Traffic channel superframe'
RQ ref  : RQ_001_0910
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_0910_02
with {   IUT in standby
     }
ensure that {
  when  { IUT is requested to make an Emergency_Priority Voice_Transmission }
  then  { IUT sends a Voice_Transmission
                with each Payload_Frame
                   containing EP set to 1b
        }

  -- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id   : TP_PMR_0915_01
summary : 'Traffic channel superframe'
RQ ref  : RQ_001_0915
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_0915_01
with {   IUT in standby
     }
ensure that {
  when  { IUT is requested to make a Voice_Transmission }
  then  { IUT sends a Voice_Transmission
                with each first Payload_Frame
                   containing FN
                     set to 00b and
                with each second Payload_Frame
                   containing FN
                     set to 01b
                with each third Payload_Frame
                   containing FN
                     set to 10b and
                with each fourth Payload_Frame
                   containing FN
                     set to 11b
        }

  -- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id   : TP_PMR_0929_01
summary : 'Traffic channel superframe'
RQ ref  : RQ_001_0929
TP type : conformance
Role    : M1, M2, M3
config  : CF_dPMR_01
TC ref  : TC_PMR_0929_01
with {   IUT in standby
     }
ensure that {
  when  { IUT is requested to make a Voice_Transmission }
  then  { IUT sends a Voice_Transmission
                with each first Payload_Frame
                   containing FS2
                     set to 5F F7 7Dh and
                with each third Payload_Frame
                   containing FS2
                     set to 5F F7 7Dh
        }

  -- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

5.1.8.2   Voice TCH

Void.

Annex A (normative): dPMR conformance test configurations
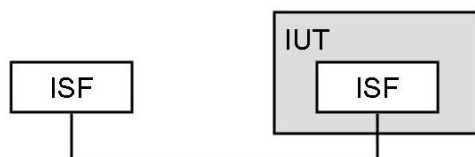
Figure A.1: Configuration CF_dPMR_ISF_01_C
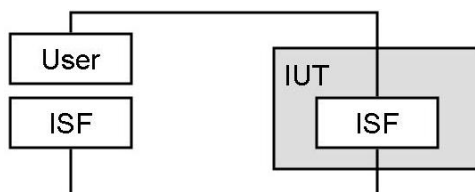
Figure A.2: Configuration CF_dPMR_ISF_02_C
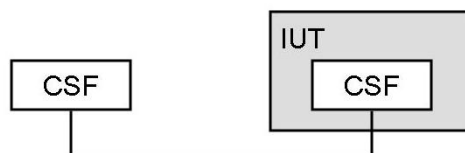

Figure A.3: Configuration CF_dPMR_CSF_01_C
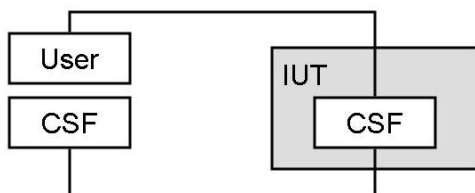

Figure A.4: Configuration CF_dPMR_CSF_02_C
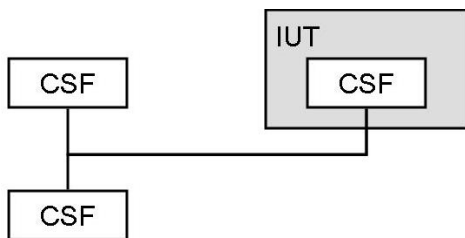

Figure A.5: Configuration CF_dPMR_CSF_03_C
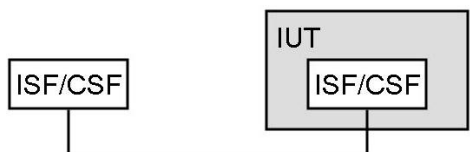

Figure A.6: Configuration CF_dPMR_ISF/CSF_01_C
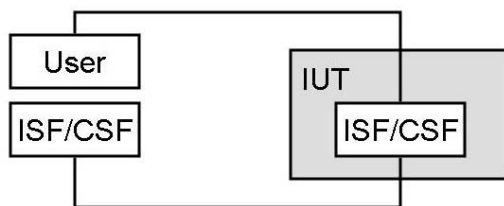
Figure A.7: Configuration CF_dPMR_ISF/CSF_02_C

In the configuration CF_dPMR_ISF/CSF_01_C and CF_dPMR_ISF/CSF_01_C either all entities are ISF or all are CSF.

Annex B (normative):
dPMR TPLan conformance testing user definitions

```
--***Cross references***

xref PICS_doc        {DTS/ERM-TGDMR-0nn-1}

-- Configurations
xref CF_dPMR_01      {DTS-ERM-TGDMR-0nn-3}


--***Definitions***

def header type    -- as in "TP type"

-- Entities

-- Messages or signals
def event PTT_Call    -- voice transmission directly initiated by the PTT switch
def event Message_Frame {message_type, format_coding } -- alias HF
def event End_Frame   {Ack_Request, ARQ, End_Type}  -- alias EF
def event Ack_Frame   {Ack_type}
def event Ack_Frames -- Up to 4 Ack frames repeated with 300-500ms intervals
def event Payload_Frame { CCH_data, ID0, ID1, ID2, ID3 }
def event Payload_Frames
def event preservation_frames
def event preservation_frame
def event Superframe   { Payload_Frames }
def event Superframes { Payload_Frames }
def event Frame
def event Frames
def event Voice_Transmission -- directly following sequence of HF, SFs, EF with audible tone as
payload
def event T1_Transmission    -- directly following sequence of HF, SFs, EF with Type 1 data in
payload
def event T2_Transmission    -- directly following sequence of HF, SFs, EF with Type 2 data in
payload
def event T3_Transmission    -- directly following sequence of HF, 8 PDFs, EF with Type 3 data in
payload
def event Short_Data         -- directly following sequence of HF, up to 4 UDT frames, EF
def event Connection_Request { MessageFrame, EndFrame } -- Manually initiated, e.g., PTT double
click,
                                              -- Status request, etc
def event BS_Access_Header
def event Disconnection_Request { MessageFrame1, EndFrame1, MessageFrame2, EndFrame2 }
def event Status_Response    { MessageFrame, EndFrame }
def event Individual_SLD_Call
def event Group_SLD_Call
def event Broadcast_Call
def event Individual_AD_Call
def event Group_AD_Call
def event OACSU_Call
def event Status_Call   { Messagerame, EndFrame}
def event Call_Fail    -- non-specified kind of user notification in case of a call failure
def event hash_key
def event dedicated_send_key
def event broadcast_command
def event talkgroup_command
def event packet
def event NACK              -- opposite of a positive acknowledgement
def event transmit_item  -- any single dPMR format transmission


-- Values
def value bit
def value integral_number
def value individual_address
def value Call_Data    -- Comms Mode, Comms Format, Caller, Callee IDs, Common_ID
                       -- ... appearing in header well as payload frames of CCH
def value Message_Type { Status_Request }
def value Own_Station_ID
def value Called_Station_ID
def value Communications_Mode
def value Communications_Format
```

```
def value format_coding
def value CRC_D
def value colour_code
def value CC_value          -- a value from 0 to 63
def value Frame_Sync
def value Status_Request
def value status_code           -- a value from 0 to 31
def value Ack_Request
def value error
def value packet_data_frame { data_bytes, data_length, data_checksum }
def value MI_type
def value MI_information         -- only the information part of CI (=call information)
def value wildcard_group_address  -- a 7 digit group address containing a wildcard in the last four
digits
def value numeric_group_address   -- a 7 digit talkgroup address
def value SLD_test_data          -- 4 bytes of data to be buffered in the IUT
def value AD_test_data           -- 40 bytes of data to be buffered in the IUT
def value T3_test_data           -- 1440 bytes of data to be buffered in the IUT
def value wildcards
def value STAT
def value preamble
def value Tx_WAIT
def value T_Ack
def value all_call_address               -- ****** (7 wildcard symbols)
def value all_call_within_a_prefix_address -- n***** (6 wildcard symbols)
def value seven_digit_address
def value abbreviated_dialling_string
def value number
def value wildcard
def value masked_dialling_string
def value dialling_string
def value abbreviated_masked_dialling_string
def value field
def value fields
def value End_Data


def unit bits
def unit bytes
def unit MHz
def unit seconds

-- Conditions
def condition standby
def condition transmit
def condition idle  -- state of BS where carrier is dropped (or idle frames transmitted for non-
COCHI BS)
def condition OACSU_enabled  -- radio configured for Off Air Call Set-up
def condition has_received_an_End_Frame_with_Acknowledge_Request
def condition TPID_is_enabled
def condition has_sent_OACSU_Connection_Request
def condition configured_for_abbreviated_dialling
def condition masked_dialling
def condition configured_for_Standard_User_Interface
def condition preset_with_SLD_test_data
def condition preset_with_AD_test_data
def condition invalid_CRC
def condition configured_for_impolite_channel_access
def condition configured_for_polite_to_own_CC
def condition configured_for_polite_to_own_group
def condition configured_for_multiple_acks
def condition configured_to_use_Tack
def condition powersave_enabled
def condition programmed_with_a_numeric_group_address
def condition not_programmed_with_a_numeric_group_address
def condition Normal_Priority
def condition Emergency_Priority
def condition party_to_call

-- Keywords - (Pre)conditions

-- Keywords - (Pre)conditions
def word configured
def word entered
def word selected
def word Tx_B2_conversion   -- B2 Algorythm forward conversion
def word Rx_B2_conversion   -- B2 Algorythm reverse conversion
def word CC_algorithm        -- CC number = 64 x (f modulo 0,4)   where f is the channel freq in MHz
```

```
-- Keywords - Stimuli
def word start
def word make
def word requested
def context {is ~requested to}
def word completes
def word cancel
def word terminate
def word terminates
def word pressed

-- Keywords - Responses
def word outputs
def word output
def word notifies
def word returns
def word send
def word determined

-- Keywords - other
def word set
def context {~set to}
def word up
def context {~up to}
def word instead
def context {~instead of}
def word same
def word their
def word upper
def word lower
def word each
def word every
def word first
def word second
def word third
def word fourth
def word eighth
def word last
def word except
def word for
def word followed
def word by
def context {~followed by}
def word using
def word part
def word between
def word twice
def word does
def word has
def word non_zero
def word source
def word time
def word during
def word continuous
def word sequentially
def word valid
def word invalid
def word different
def word indentical
def word complete
```

Annex C (informative):
Bibliography

ETSI TS 102 726-3: "Electromagnetic compatibility and Radio spectrum Matters (ERM); Conformance testing for Mode 1 of the digital Private Mobile Radio (dPMR); Part 3: Interoperability Test Suite Structure and Test Purposes (TSS&TP) specification".

History

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