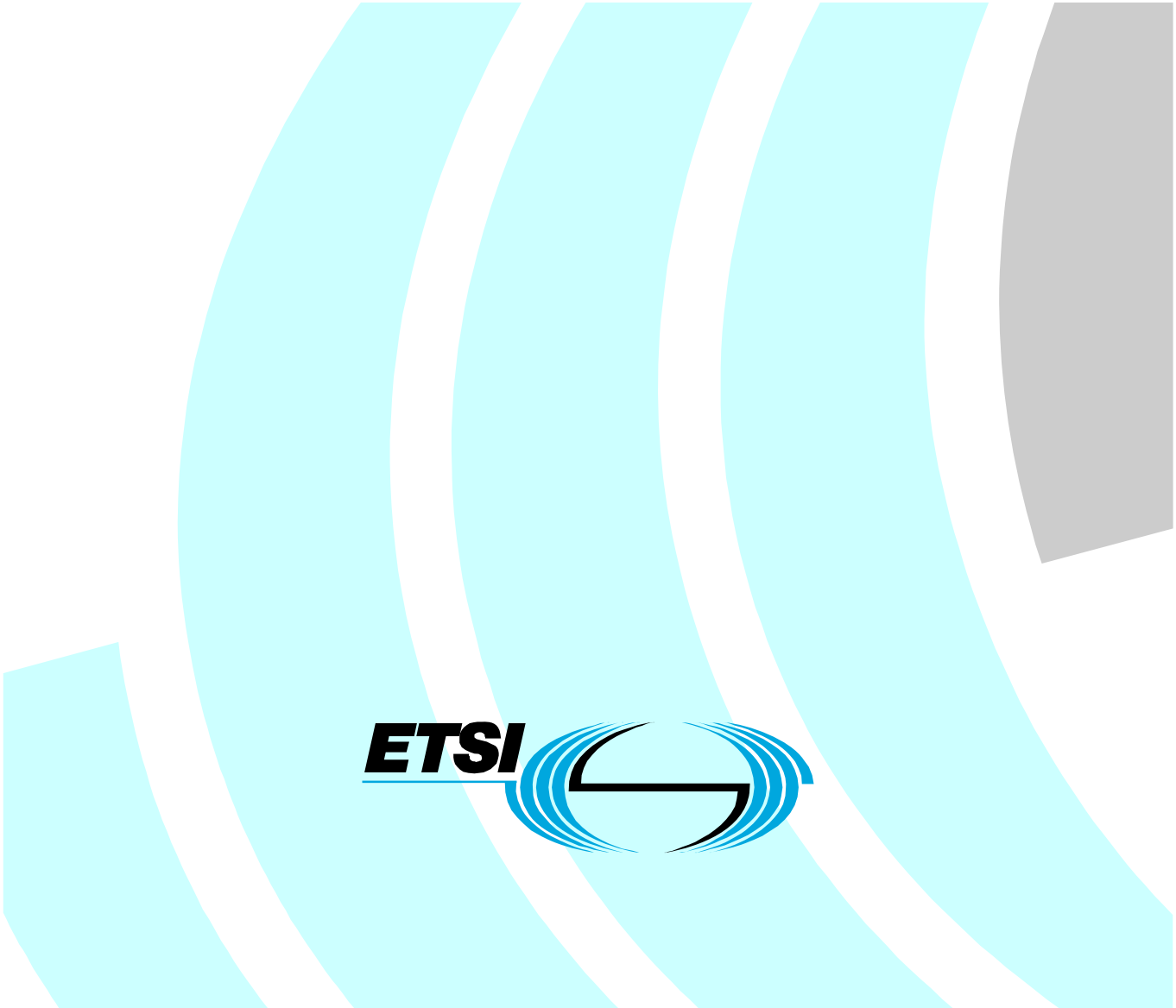
ETSI TS 102 726-3 V2.1.1 (2011-06)

Technical Specification

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



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Contents

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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 3 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 interoperability Test Purposes (TPs) for the 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.

Referenced documents which are not found to be publicly available in the expected location might be found at http://docbox.etsi.org/Reference.

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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 102 587-3: "Electromagnetic compatibility and Radio spectrum Matters (ERM); Peer-to-Peer Digital Private Mobile Radio; 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
dPMR	digital Private Mobile Radio
M1	Mode 1
M2	Mode 2
OACSU	Off Air Call Set-Up
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 [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 groups 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.

```
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5.1.1.3     Talking Party ID
5.1.2       Base Station framing
5.1.3       Channel Access
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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

5.1.1 Addressing

5.1.1.1 All Call

Void.

5.1.1.2 Dialling Plan

```
TP id    : TP_PMR_1403_01
summary  : 'The user should enter or select a string of digits and then press a button to initiate
the call'
RQ ref   : RQ_001_1403
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {
          QE1 and EUT in standby and
          EUT Complies_with_Standard_User_Interface
     }
ensure that {
  when   { EUT_User enters or selects an address of QE1 }
  then   { QE1_User does not receive the Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_1403_02
summary  : 'The user should enter a string of digits and then press a button to initiate the call'
RQ ref   : RQ_001_1403
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {
         QE1 and EUT in standby and
         EUT Complies_with_Standard_User_Interface
     }
ensure that {
  when   { EUT_User enters or selects an address of QE1 before EUT_User
                presses the hash_key or dedicated_send_key }
  then   { QE1_User receives the Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_1412_01
summary  : 'Some numeric address are not permitted'
RQ ref   : RQ_001_1409
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     EUT Complies_with_Standard_User_Interface and
           QE1 and EUT in standby
     }
ensure that {
  when   { EUT_User enters or selects a non_dialable_address and
                presses dedicated_send_key }
  then   { EUT indicates an error} -- audible or visible prompt
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_1415_01
summary  : 'Radio receiving a talkgroup call - using wildcard'
RQ ref   : RQ_001_1415
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {
          QE1 and EUT in standby and
          QE1 Complies_with_Standard_User_Interface
      }
ensure that {
  when  { QE1_User enters or selects an EUT address
                    containing an asterisk_symbol 'in one of the last four digits' and
                presses the hash_key or dedicated_send_key  }
  then  { EUT_User receives a TalkGroup_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_1415_02
summary  : 'Radio receiving a talkgroup call'
RQ ref   : RQ_001_1415
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {
         (EUT 'programmed with a talkgroup address') and
          QE1 Complies_with_Standard_User_Interface and
          QE1 and EUT in standby
     }
ensure that {
  when  { QE1_User enters or selects the talkgroup_address of the EUT and
                presses the hash_key or dedicated_send_key }
  then  { EUT_User receives the TalkGroup_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_1417_01
summary  : 'Abbreviated dialled digit to address mapping'
RQ ref   : RQ_001_1417
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {
         (EUT Complies_with_Standard_User_Interface and
              abbreviated_dialling_available) and
          QE1 in standby
     }
ensure that {
  when  { EUT_User enters or selects an abbreviated_dialling_string of QE1 and
                presses the hash_key or dedicated_send_key  }
  then  { QE1_User receives the Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_1417_02
summary  : 'Abbreviated dialling string with wildcard and no match'
RQ ref   : RQ_001_1417
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {
          (EUT Complies_with_Standard_User_Interface and
               abbreviated_dialling_available)
          EUT and QE1 'addresses are same except for last two or more digits'
          EUT and QE1 in standby
     }
ensure that {
  when   { EUT_User enters or selects the asterisk_symbol and
                   presses the hash_key or dedicated_send_key }
  then   { QE1_User does not receive the Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_1417_03
summary  : 'Abbreviated dialling string with wildcard'
RQ ref   : RQ_001_1417
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {
         (EUT Complies_with_Standard_User_Interface and abbreviated_dialling_available)
          EUT and QE1 'addresses are same except for the last digit'
          EUT and QE1 in standby
     }
ensure that {
  when   { EUT_User enters or selects the asterisk_symbol and
                   presses the dedicated_send_key}
  then   { QE1_User receives the Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_1418_01
summary  : 'Talkgroup call'
RQ ref   : RQ_001_1418
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {
          (EUT Complies_with_Standard_User_Interface and
               'an address input mask enabled covering at least one of the last four digits') and
          (EUT and QE1 'addresses having the same digits outside of the mask' and
                       in standby)
     }
ensure that {
  when   { EUT_User enters or selects a masked_dialling_string of QE1
                     containing an asterisk_symbol 'as the last digit' and
                   presses the hash_key or dedicated_send_key  }
  then   { QE1_User receives the TalkGroup_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_1418_02
summary  : 'Talkgroup call'
RQ ref   : RQ_001_1418
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {
          (EUT Complies_with_Standard_User_Interface and
               abbreviated_dialling_available and
               'an address input mask is enabled covering at least one of the last four digits') and
           (EUT and QE1 'addresses having the same digits outside of the mask' and
                        in standby)
     }
ensure that {
  when  { EUT_User enters or selects an abbreviated_masked_dialling_string of QE1
                     containing an asterisk_symbol 'as the last digit' and
                  presses the hash_key or dedicated_send_key }
  then  { QE1_User receives the TalkGroup_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_1420_01
summary  : 'Broadcast plan'
RQ ref   : RQ_001_1420
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {
          EUT Complies_with_Standard_User_Interface and
          QE1 'programmed with a talkgroup address'
          QE1 and EUT in standby
     }
ensure that {
  when  { EUT_User enters a broadcast_command
                    containing a talkgroup_address of QE1 and
                  presses dedicated_send_key}
  then  { QE1_User receives the Broadcast_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_1420_02
summary  : 'Broadcast call - abbreviated dialling'
RQ ref   : RQ_001_1420
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {
          (EUT Complies_with_Standard_User_Interface and
               abbreviated_dialling_available) and
          EUT and QE1 'addresses differing in one or more of the last digits'
          QE1 and EUT in standby
     }
ensure that {
  when  { EUT_User enters a broadcast_command
                     containing a valid abbreviated_dialling_string of QE1
                       containing  'one or more asterisk symbols' and
                  presses the hash_key or dedicated_send_key }
  then  { QE1_User receives the Broadcast_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_1421_01
summary  : 'Status call'
RQ ref   : RQ_001_1421
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {
          EUT Complies_with_Standard_User_Interface and
          QE1 and EUT in standby
     }
ensure that {
  when  { EUT_User enters a status_command
                          containing a code between 0 and 31 and
                          containing the address of QE1 and
                  presses the hash_key or dedicated_send_key }
  then  { QE1_User receives the Status_Call indicating the selected code }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_1421_02
summary  : 'Status call - wrong status code entered'
RQ ref   : RQ_001_1421
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {
          EUT Complies_with_Standard_User_Interface
          QE1 and EUT in standby
     }
ensure that {
  when  { EUT_User enters a status_command
                          containing a code 'greater than' 31 and
                          containing the address of QE1 and
                  presses the dedicated_send_key }
  then  { EUT indicates an error}
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_1423_01
summary  : 'Force talkgroup service'
RQ ref   : RQ_001_1423
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {
          EUT Complies_with_Standard_User_Interface and
          QE1 and EUT in standby
     }
ensure that {
  when  { EUT_User enters a talkgroup_command
                        containing the address of QE1 and
                  presses the dedicated_send_key}
  then  { QE1_User receives the TalkGroup_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_1423_02
summary  : 'Force talkgroup service - abbreviated dialling'
RQ ref   : RQ_001_1423
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {
         (EUT Complies_with_Standard_User_Interface and
              abbreviated_dialling_available) and
          EUT and QE1 'addresses differing in one or more of the last digits'
          QE1 and EUT in standby
     }
ensure that {
  when  { EUT_User enters a talkgroup_command
                        containing a valid abbreviated_dialling_string of QE1 and
                  presses hash_key or dedicated_send_key }
  then  { QE1_User receives the TalkGroup_Call }
}
-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

5.1.1.3 Talking Party ID

```
TP id    : TP_PMR_0803_01
summary  : 'Support of Talking Party ID'
RQ ref   : RQ_001_0803
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 with powersave_disabled) and
           EUT in standby
     }
ensure that {
  when  { QE1_User makes an Individual_Call to EUT }
  then  { EUT indicates the address of QE1 }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0803_02
summary  : 'Support of Talking Party ID'
RQ ref   : RQ_001_0803
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 with powersave_disabled) and
           EUT in standby
     }
ensure that {
  when  { QE1_User makes a Group_Call to EUT }
  then  { EUT indicates the address of QE1 }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

5.1.2 Base Station framing

```
TP id    : TP_PMR_0409_01
summary  : 'Mode 2 BS'
RQ ref   : RQ_001_0409
TP type  : interoperability
Role     : BS2
config ref: CF_dPMR_02_I -- QE1, QE2 and EUT
TD ref   : TBD
with {     ( QE1 using a valid address and
             EUT in standby
     }
ensure that {
  when   { QE1_User makes a Connection_Request addressed to QE2 to EUT }
  then   { EUT transmits the Connection_Request on the downlink and
           QE2 receives the Connection_Request}
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0409_02
summary  : 'Mode 2 BS'
RQ ref   : RQ_001_0409
TP type  : interoperability
Role     : BS2
config ref: CF_dPMR_02_I -- QE1, QE2 and EUT
TD ref   : TBD
with {     ( QE1 not using a valid address and
             EUT in standby
     }
ensure that {
  when   { QE1_User makes a Connection_Request to EUT }
  then   { EUT does not transmit the Connection_Request on the downlink }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0410_01
summary  : 'Mode 2 BS'
RQ ref   : RQ_001_0410
TP type  : interoperability
Role     : BS2
config ref: CF_dPMR_02_I -- QE1, QE2 and EUT
TD ref   : TBD
with {     ( QE1 and QE2 in standby and configured polite_to_own_CC
             and EUT transmits a Connection_Request addressed to QE2 on the downlink
     }
ensure that {
  when   { QE2 makes an acknowledgement }
  then   { EUT transmits the acknowledgement on the downlink and QE1 receives the acknowledgement}
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0411_01
summary  : 'Mode 2 BS'
RQ ref   : RQ_001_0411
TP type  : interoperability
Role     : BS2
config ref: CF_dPMR_02_I -- QE1, QE2 and EUT
TD ref   : TBD
with {     ( QE1 using a valid address and
             EUT in standby
     }
ensure that {
  when   { QE1_User makes a PTT_Call to QE2 to EUT }
  then   { EUT transmits the PTT_Call on the downlink and QE2 receives the PTT_Call}
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_0413_01
summary  : 'Mode 2 BS'
RQ ref   : RQ_001_0413
TP type  : interoperability
Role     : BS2
config ref: CF_dPMR_02_I -- QE1, QE2 and EUT
TD ref   : TBD
with {     ( QE1 using a valid address and
             EUT in standby
     }
ensure that {
  when   { QE1_User makes a Disconnection_Request to EUT }
  then   { EUT transmits the Disconnection_Request to QE2 on the downlink and returns to idle }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0414_01
summary  : 'Mode 2 BS'
RQ ref   : RQ_001_0414
TP type  : interoperability
Role     : BS2
config ref: CF_dPMR_02_I -- QE1, QE2 and EUT
TD ref   : TBD
with {     ( QE1 and QE2 using valid addresses and
             EUT in standby
     }
ensure that {
  when   { QE1_User makes a Status_Request to QE2 to EUT }
  then   { EUT transmits the Status_Request on the downlink and QE2 receives the Status_Request}
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0415_01
summary  : 'Mode 2 BS'
RQ ref   : RQ_001_0415
TP type  : interoperability
Role     : BS2
config ref: CF_dPMR_02_I -- QE1, QE2 and EUT
TD ref   : TBD
with {     ( QE1 and QE2 using valid addresses and
             EUT in standby
     }
ensure that {
  when   { QE2_User makes a Status_Response to QE1 to EUT }
  then   { EUT transmits the Status_Response to QE1 on the downlink and returns to idle}
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0417_01
summary  : 'Mode 2 BS'
RQ ref   : RQ_001_0417
TP type  : interoperability
Role     : BS2
config ref: CF_dPMR_02_I -- QE1, QE2 and EUT
TD ref   : TBD
with {     ( QE1 and QE2 using valid addresses and
               QE3 configured with Divert_Address
             EUT in standby and QE1_User makes a Call_Divert to EUT
     }
ensure that {
  when   { QE2_User makes a Call to QE1 }
  then   { EUT transmits the Call to the Divert_Address on the downlink
           and QE3 receives the Call then returns to idle}
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_0418_01
summary  : 'Mode 2 BS'
RQ ref   : RQ_001_0418
TP type  : interoperability
Role     : BS2
config ref: CF_dPMR_02_I -- QE1, QE2, QE3 and EUT
TD ref   : TBD
with {     ( QE1 and QE2 using valid addresses and
             QE3 configured with Divert_Address
            EUT in standby and QE1_User makes a Call_Divert to EUT
            and QE2_User makes a Call_Divert cancel to EUT
     }
ensure that {
  when   { QE2_User makes a Call to QE1 }
  then   { EUT transmits the Call to the Divert_Address on the downlink and QE3 receives the Call
then returns to idle}
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0418_02
summary  : 'Mode 2 BS'
RQ ref   : RQ_001_0418
TP type  : interoperability
Role     : BS2
config ref: CF_dPMR_02_I -- QE1, QE2, QE3 and EUT
TD ref   : TBD
with {     ( QE1 and QE2 using valid addresses and
             QE3 configured with Divert_Address
            EUT in standby and QE1_User makes a Call_Divert to EUT
            and QE1_User makes a Call_Divert cancel to EUT
     }
ensure that {
  when   { QE2_User makes a Call to QE1 }
  then   { EUT transmits the Call to the Divert_Address on the downlink and QE1 receives the Call
then returns to idle}
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

5.1.3 Channel Access

```
TP id    : TP_PMR_1008_01
summary  : 'Channel access in own call '
RQ ref   : RQ_001_1008
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_02_I -- QE1, QE2 and EUT
TD ref   : TBD
with {     ((EUT and QE1 and QE2) using the same Group_ID and
                                  using_compatible_vocoders) and
            QE1 is transmitting
      }
ensure that {
  when   { EUT_User makes PTT_Call }
  then   { QE2_User receives the PTT_Call from EUT}
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_1008_02
summary  : 'Channel access in own call '
RQ ref   : RQ_001_1008
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_02_I -- QE1, QE2 and EUT
TD ref   : TBD
with {     ((EUT and QE1 and QE2) using the same call_group and
                                  using_compatible_vocoders) and
            QE1 is transmitting Voice_Transmission to EUT
     }
ensure that {
  when   { EUT_User makes a Voice_Transmission to QE2}
  then   { QE2_User receives the Voice_Transmission from EUT}
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_1009_01
summary  : 'Channel access when polite to own colour code'
RQ ref   : RQ_001_1009
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_02_I -- QE1, QE2 and EUT
TD ref   : TBD
with {     ((EUT and QE1 and QE2) using same Group_ID and
                                  using_compatible_vocoders) and
                                  and using same colour_code ) and
             EUT is polite_to_own_CC and
             QE1 is transmitting to QE2
     }
ensure that {
  when   { EUT_User makes PTT_Call }
  then   { QE2_User does not receive PTT_Call from EUT }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_1010_01
summary  : 'Channel access when impolite'
RQ ref   : RQ_001_1010
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_02_I -- QE1, QE2 and EUT
TD ref   : TBD
with {     ((EUT and QE1 and QE2) using_compatible_vocoders) and
            (EUT and QE2 using the same Group_ID) and
            (EUT and QE1 not using the same Group_ID) and
             EUT is impolite  and
             QE1 is transmitting
     }
ensure that {
  when   { EUT_User makes PTT_Call }
  then   { QE2_User receives PTT_Call from EUT }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_1011_01
summary  : 'Channel access when polite to own group and channel occupied by members of own group'
RQ ref   : RQ_001_1011
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_02_I -- QE1, QE2 and EUT
TD ref   : TBD
with {     ((EUT and QE1 and QE2) using same colour_code ) and
           ((EUT and QE1 and QE2) are 'member of same talkgroup') and
             EUT is polite_to_own_group and
             QE1 is transmitting to QE2
     }
ensure that {
  when   { EUT_User makes a Voice_Transmission to QE2}
  then   { QE2_User receives Voice_Transmission from QE1}    -- Indicating EUT does NOT transmit
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_1012_01
summary  : 'Repeated acknowledgements when RF channel is busy'
RQ ref   : RQ_001_1012
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_02_I -- QE1, QE2 and EUT
TD ref   : TBD
with {     ((EUT and QE1 and QE2) using same colour_code ) and
           ((EUT and QE2) are 'member of same talkgroup') and
             QE1 is transmitting
     }
ensure that {
  when   { QE2_User makes a connect_request to EUT}
  then   { QE2_User receives 'no more than four' acknowledgement from EUT}
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_1024_01
summary  : 'Automatic call termination by timeout timer '
RQ ref   : RQ_001_1024
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_02_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 powersave_disabled and
                        using_compatible_vocoders)
           QE1 in standby and EUT configured with a valid TOT_value
     }
ensure that {
  when   { EUT_User makes a Voice_Transmission addressed to QE1 and
           PTT_Key is not released }
  then   { QE1_User receives Voice_Transmission and
           EUT terminates the Voice_Transmission after TOT_value seconds }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_1024_02
summary  : 'Automatic call termination by timeout timer and call resume'
RQ ref   : RQ_001_1024
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 powersave_disabled) and EUT configured with a valid TOT_value and
           EUT in call_timeout_terminated
     }
ensure that {
  when   { EUT_User releases and presses the PTT_Key again }
  then   { QE1_User receives Voice_Transmission }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

5.1.3.1 OACSU

```
TP id    : TP_PMR_0840_01
summary  : 'Support receiving of OACSU call'
RQ ref   : RQ_001_0840
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 powersave_disabled and
                        using_compatible_vocoders and
                        OACSU_enabled) and
            EUT in standby
     }
ensure that {
  when   { QE1_User makes an OACSU_Call addressed to the EUT }
  then   { EUT_User receives the OACSU_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0840_02
summary  : 'Support sending of OACSU call'
RQ ref   : RQ_001_0840
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 powersave_disabled and
                        using_compatible_vocoders and
                        OACSU_enabled) and
            QE1 in standby
     }
ensure that {
  when   { EUT_User makes an OACSU_Call addressed to QE1 }
  then   { QE1_User receives the OACSU_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_1424_01
summary  : 'Support of cancel call set-up'
RQ ref   : RQ_001_1424
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1, QE2 and EUT
TD ref   : TBD
with {     (EUT OACSU_enabled and
               powersave_disabled and
               polite_to_own_CC) and
            QE1 is transmitting to QE2
     }
ensure that {
  when   { QE1 stops transmitting after EUT_User cancels an OACSU_Call addressed to QE2 }
  then   { QE2_User does not receive the OACSU_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

5.1.3.2 PTT Call

```
TP id    : TP_PMR_0801_01
summary  : 'A radio can be called by another'
RQ ref   : RQ_001_0801
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     ( EUT and QE1 using same Group_ID and
                        powersave_disabled and
                        using_compatible_vocoders) and
             EUT in standby
     }
ensure that {
  when   { QE1_User makes a PTT_Call to EUT }
  then   { EUT_User receives the PTT_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0801_02
summary  : 'A radio can call another'
RQ ref   : RQ_001_0801
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 using same Group_ID and
                       powersave_disabled and
                       using_compatible_vocoders) and
             EUT in standby
     }
ensure that {
  when   { EUT_User makes a PTT_Call }
  then   { QE1_User receives the PTT_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

5.1.4 END frame

Void.

5.1.5 Message frame

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  : 'Support receiving of type 3 short data messages'
RQ ref   : RQ_001_0808
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 with powersave_disabled) and
           EUT in standby
     }
ensure that {
  when   { QE1_User sends a T3_Transmission addressed to EUT }
  then   { EUT_User receives the T3_Transmission }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0808_02
summary  : 'Support sending of type 3 short data messages'
RQ ref   : RQ_001_0808
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 with powersave_disabled) and
           QE1 in standby
     }
ensure that {
  when   { EUT_User sends a T3_Transmission addressed to QE1 }
  then   { QE1_User receives the T3_Transmission }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

5.1.6.2 Short data

```
TP id    : TP_PMR_0502_01
summary  : 'Short data delivery'
RQ ref   : RQ_001_0502
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     ( EUT and QE1 using same Group_ID and
                      powersave_disabled ) and
           EUT in standby
     }
ensure that {
  when   { QE1_User makes a binary SDD_Call to EUT }
  then   { EUT_User receives the binary SDD_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0502_02
summary  : 'Short data delivery'
RQ ref   : RQ_001_0502
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 using same Group_ID and
                     powersave_disabled ) and
           EUT in standby
     }
ensure that {
  when   { EUT_User makes a binary SDD_Call }
  then   { QE1_User receives the binary SDD_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_0503_01
summary  : 'Short data delivery'
RQ ref   : RQ_001_0503
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     ( EUT and QE1 using same Group_ID and
                        powersave_disabled ) and
             EUT in standby
     }
ensure that {
  when   { QE1_User makes a bcd SDD_Call to EUT }
  then   { EUT_User receives the bcd SDD_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0503_02
summary  : 'Short data delivery'
RQ ref   : RQ_001_0503
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 using same Group_ID and
                       powersave_disabled ) and
             EUT in standby
     }
ensure that {
  when   { EUT_User makes a bcd SDD_Call }
  then   { QE1_User receives the bcd SDD_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0504_01
summary  : 'Short data delivery'
RQ ref   : RQ_001_0504
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     ( EUT and QE1 using same Group_ID and
                        powersave_disabled ) and
             EUT in standby
     }
ensure that {
  when   { QE1_User makes a ISO7 SDD_Call to EUT }
  then   { EUT_User receives the ISO7 SDD_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0504_02
summary  : 'Short data delivery'
RQ ref   : RQ_001_0504
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 using same Group_ID and
                       powersave_disabled ) and
             EUT in standby
     }
ensure that {
  when   { EUT_User makes a ISO7 SDD_Call }
  then   { QE1_User receives the ISO7 SDD_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_0505_01
summary  : 'Short data delivery'
RQ ref   : RQ_001_0505
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     ( EUT and QE1 using same Group_ID and
                        powersave_disabled ) and
             EUT in standby
     }
ensure that {
  when   { QE1_User makes a ISO8 SDD_Call to EUT }
  then   { EUT_User receives the ISO8 SDD_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0505_02
summary  : 'Short data delivery'
RQ ref   : RQ_001_0505
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 using same Group_ID and
                       powersave_disabled ) and
             EUT in standby
     }
ensure that {
  when   { EUT_User makes a ISO8 SDD_Call }
  then   { QE1_User receives the ISO8 SDD_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0506_01
summary  : 'Short data delivery'
RQ ref   : RQ_001_0506
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     ( EUT and QE1 using same Group_ID and
                        powersave_disabled ) and
             EUT in standby
     }
ensure that {
  when   { QE1_User makes a NMEA SDD_Call to EUT }
  then   { EUT_User receives the NMEA SDD_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0506_02
summary  : 'Short data delivery'
RQ ref   : RQ_001_0506
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 using same Group_ID and
                       powersave_disabled ) and
             EUT in standby
     }
ensure that {
  when   { EUT_User makes a NMEA SDD_Call }
  then   { QE1_User receives the NMEA SDD_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

5.1.6.3 T1 data

```
TP id    : TP_PMR_0807_01
summary  : 'Support receiving of type 1 group short data messages'
RQ ref   : RQ_001_0807
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 using same Group_ID and
                        powersave_disabled) and
            EUT in standby
     }
ensure that {
  when   { QE1_User sends a T1_Transmission to EUT }
  then   { EUT_User receives the T1_Transmission }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0807_02
summary  : 'Support sending of type 1 group short data messages'
RQ ref   : RQ_001_0807
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 using same Group_ID and
                        powersave_disabled) and
            QE1 in standby
     }
ensure that {
  when   { EUT_User sends a T1_Transmission to QE1 }
  then   { QE1_User receives the T1_Transmission }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0810_01
summary  : 'Support of type 1 individual short data messages'
RQ ref   : RQ_001_0810
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 powersave_disabled) and
            EUT in standby
     }
ensure that {
  when   { QE1_User sends a T1_Transmission addressed to EUT }
  then   { EUT_User receives the T1_Transmission }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0810_02
summary  : 'Support sending of type 1 individual short data messages'
RQ ref   : RQ_001_0810
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 with powersave_disabled) and
            QE1 in standby
     }
ensure that {
  when   { EUT_User sends a T1_Transmission addressed to QE1 }
  then   { QE1_User receives the T1_Transmission }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

5.1.6.4 T2 data

```
TP id    : TP_PMR_0806_01
summary  : 'Support receiving of type 2 group short data messages'
RQ ref   : RQ_001_0806
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 using same Group_ID and
                        powersave_disabled) and
            EUT in standby
     }
ensure that {
  when   { QE1_User sends a T2_Transmission to EUT }
  then   { EUT_User receives the T2_Transmission }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0806_02
summary  : 'Support sending of type 2 group short data messages'
RQ ref   : RQ_001_0806
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 using same Group_ID and
                        powersave_disabled) and
            QE1 in standby
     }
ensure that {
  when   { EUT_User sends a T2_Transmission to QE1 }
  then   { QE1_User receives the T2_Transmission }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0809_01
summary  : 'Support receiving of type 2 individual short data messages'
RQ ref   : RQ_001_0809
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 with powersave_disabled) and
            EUT in standby
     }
ensure that {
  when   { QE1_User sends a T2_Transmission addressed to EUT }
  then   { EUT_User receives the T2_Transmission }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0809_02
summary  : 'Support sending of type 2 individual short data messages'
RQ ref   : RQ_001_0809
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 with powersave_disabled) and
            QE1 in standby
     }
ensure that {
  when   { EUT_User sends a T2_Transmission addressed to QE1 }
  then   { QE1_User receives the T2_Transmission }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

5.1.6.5 Voice

5.1.6.5.1 Voice and attached data

```
TP id    : TP_PMR_0837_01
summary  : 'Support receiving of short attached data'
RQ ref   : RQ_001_0837
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 using same Group_ID and
                        powersave_disabled and
                        using_compatible_vocoders) and
            QE1 preset_with_AD_test_data and
            EUT in standby
     }
ensure that {
  when   { QE1_User makes a Group_AD_Call to EUT }
  then   { EUT_User receives the Group_Call and the AD_test_data }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0837_02
summary  : 'Support sending of short attached data'
RQ ref   : RQ_001_0837
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 using same Group_ID and
                        powersave_disabled and
                        using_compatible_vocoders) and
           EUT preset_with_AD_test_data and
           QE1 in standby
     }
ensure that {
  when   { EUT_User makes a Group_AD_Call to QE1 }
  then   { QE1_User receives the Group_Call and the AD_test_data }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0844_01
summary  : 'Support receiving of short attached data'
RQ ref   : RQ_001_0844
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 powersave_disabled and
                        using_compatible_vocoders) and
            QE1 preset_with_AD_test_data and
            EUT in standby
     }
ensure that {
  when   { QE1_User sends a Individual_AD_Call addressed to EUT }
  then   { EUT_User receives the Individual_Call and the AD_test_data }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_0844_02
summary  : 'Support sending of short attached data'
RQ ref   : RQ_001_0844
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 powersave_disabled and
                        using_compatible_vocoders) and
            EUT preset_with_AD_test_data and
            QE1 in standby
     }
ensure that {
  when   { EUT_User sends a Individual_AD_Call addressed to QE1 }
  then   { QE1_User receives the Individual_Call and the AD_test_data }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

5.1.6.5.2 Late entry

```
TP id    : TP_PMR_0802_01
summary  : 'Support of Late Entry with individual address'
RQ ref   : RQ_001_0802
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 powersave_disabled and
                        using_compatible_vocoders) and
            EUT switched_off and
            QE1 is transmitting an Individual_Call addressed to the EUT
     }
ensure that {
  when   { EUT is switched_on }
  then   { EUT_User receives the remainder of the Individual_Call after a 'short delay' }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0802_02
summary  : 'Support of Late Entry with wildcard address'
RQ ref   : RQ_001_0802
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 powersave_disabled and
                        using_compatible_vocoders) and
            EUT switched_off and
            QE1 is transmitting a Group_Call addressed to the EUT
     }
ensure that {
  when   { EUT is switched_on }
  then   { EUT_User receives the remainder of the Group_Call after a 'short delay' }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0802_03
summary  : 'Support of Late Entry with Talk Group address'
RQ ref   : RQ_001_0802
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 with powersave_disabled and
                        using_compatible_vocoders) and
            EUT switched_off and
            QE1 is transmitting a TalkGroup_Call addressed to the EUT
     }
ensure that {
  when   { EUT is switched_on }
  then   { EUT_User receives the remainder of the TalkGroup_Call after a 'short delay' }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

5.1.6.5.3 Slow user data

```
TP id    : TP_PMR_0836_01
summary  : 'Support receiving of slow user data'
RQ ref   : RQ_001_0836
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 using same Group_ID and
                        powersave_disabled and
                        using_compatible_vocoders) and
           QE1 preset_with_SLD_test_data and
           EUT in standby
     }
ensure that {
  when   { QE1_User makes a Group_SLD_Call to EUT }
  then   { EUT_User receives the Group_Call and the SLD_test_data }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0836_02
summary  : 'Support sending of slow user data'
RQ ref   : RQ_001_0836
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 using same Group_ID and
                        powersave_disabled and
                        using_compatible_vocoders) and
            EUT preset_with_SLD_test_data and
            QE1 in standby
     }
ensure that {
  when   { EUT_User makes a Group_SLD_Call to QE1 }
  then   { QE1_User receives the Group_Call and the SLD_test_data }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id    : TP_PMR_0843_01
summary  : 'Support receiving of slow user data'
RQ ref   : RQ_001_0843
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 powersave_disabled and
                        using_compatible_vocoders) and
            QE1 preset_with_SLD_test_data and
            EUT in standby
     }
ensure that {
  when   { QE1_User sends an Individual_SLD_Call addressed to EUT }
  then   { EUT_User receives the Individual_Call and the SLD_test_data }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

```
TP id    : TP_PMR_0843_02
summary  : 'Support sending of slow user data'
RQ ref   : RQ_001_0843
TP type  : interoperability
Role     : M1, M2
config ref: CF_dPMR_01_I -- QE1 and EUT
TD ref   : TBD
with {     (EUT and QE1 powersave_disabled and
                        using_compatible_vocoders) and
            EUT preset_with_SLD_test_data and
            QE1 in standby
     }
ensure that {
  when   { EUT_User sends an Individual_SLD_Call addressed to QE1 }
  then   { QE1_User receives the Individual_Call and the SLD_test_data }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

5.1.7 Power save

Void.

5.1.8 Superframe

5.1.8.1 Traffic channel

Void.

5.1.8.2 Voice TCH

Void.

Annex A (normative): dPMR interoperability test configurations

Void.

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

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

xref PICS_doc       {DTS/ERM-TGDMR-nnn-1}

-- Configurations
xref CF_dPMR_01_I {dPMR_IOT_Configurations.ppt} -- QE1, EUT
xref CF_dPMR_02_I {dPMR_IOT_Configurations.ppt} -- QE1, QE2, EUT


--***Definitions***

def header type  -- TP type

-- Entities
def entity EUT
def entity QE1
def entity QE2
def entity BS2
-- Note: user could be a human user, machine, or program
def entity QE1_User -- the user operating QE1
def entity QE2_User -- the user operating QE2
def entity EUT_User -- the user operating EUT

-- Messages or signals
def event PTT_Call -- user presses PTT button and payload transmisson starts immediately
def event Individual_Call
def event Group_Call        -- call with wildcard(s)
def event TalkGroup_Call    -- call with only numeric address
def event Call              -- any dialled call
def event Voice_Transmission        -- Group or individual call
def event PTT_Key
def event T1_Transmission          -- Type 1 data message call
def event T2_Transmission          -- Type 2 data message call
def event T3_Transmission          -- Type 3 data message call
def event Individual_SLD_Call       -- Individual call including slow user data
def event Group_SLD_Call            -- Group call including slow user data
def event Individual_AD_Call        -- Individual call including appended data
def event Group_AD_Call             -- Group call including appended data
def event SDD_Call                  -- Short data delivery call
def event Broadcast_Call
def event OACSU_Call                -- Individual call using off air call set up
def event acknowledgement
def event Connection_Request           -- call set up request
def event Disconnection_Request
def event Status_Call
def event dedicated_send_key
def event hash_key
def event broadcast_command         -- same as #1*
def event status_command { code  } -- same as #0ss*
def event talkgroup_command         -- same as #6*
def event error
def event preservation_frames
def event Call_Divert
def event idle_frames



-- Values

def value Group_ID
def value RF_Channel
def value channel
def value binary                    -- binary format short data
def value bcd                       -- bcd format short data
def value ISO7                      -- 7 bit ISO format short data
def value ISO8                      -- 8 bit ISO format short data
def value NMEA                      -- NMEA sentence format data
def value remainder
def value colour_code
def value call_group            -- "call group" means "group" in dPMR sense but needed since "group"
is already predefined TPLan keyword
```

```
def value SLD_test_data
def value AD_test_data
def value TOT_value
def value asterisk_symbol
def value dialling_string      -- keypad entry
def value addresses { address }
def value non_dialable_address -- '0000000', '1000000', '2000000', '3000000', '4000000', '5000000',
'6000000', '7000000', '8000000', '9000000'
def value abbreviated_dialling_string        -- address where some of the most signifact digits are
omitted
def value talkgroup_address                  -- Group or Talk group address
def value masked_dialling_string             -- digits of an address that are covered by an input
mask
def value abbreviated_masked_dialling_string -- digits of an address that are covered by an input
mask where some of the most signifcant digits have been omitted
def value downlink
def value Divert_Address

def unit seconds

def condition standby
def condition switched_on
def condition switched_off
def condition powersave_enabled
def condition powersave_disabled
def condition call_timeout_terminated      -- State if radio is that call got terminated by timeout
(after 180 sec)
def condition polite_to_own_CC             -- Channel access policy is "Polite to own Colour Code"
def condition polite_to_own_group          -- Channel access policy is "Polite to own group or
talkgroup"
def condition impolite                     -- Channel access policy is "Impolite"
def condition abbreviated_dialling_available
def condition Complies_with_Standard_User_Interface
def condition OACSU_enabled                -- radio configured for Off Air Call Set-up
def condition preset_with_SLD_test_data    -- buffering of slow data etc in the radio
def condition preset_with_AD_test_data     -- buffering of appended data etc in the radio
def condition using_compatible_vocoders

-- Keywords - (Pre)conditions
def word addressed
def word using
def word transmitting

-- Keywords - Stimuli
def word uses
def word makes
def word requested
def context {is ~requested to}
def word selects
def word terminates
def word releases
def word released
def context {is ~released}
def word presses
def word enters
def word cancels
def word stops

-- Keywords - Responses
def word receive
def word transmit
def word indicates

-- Keywords - Glue
def word on
def word for
def word both
def word between
def word same
def word being
def word are
def word another
def word valid    -- valid for BS2 implies an address that is permitted to access
def word selected
def word does
def word again

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

History

Document history		
V1.1.1	October 2009	Publication
V2.1.1	June 2011	Publication