

TSG RAN Meeting #17
 Biarritz, France, 3 - 6 September, 2002

RP-020493

Title CRs (Rel-5) to TS 25.105 and TS25.142 "Applicability of requirements in case of devices external to the BS"
Source TSG RAN WG4
Agenda Item 7.4.5

| RAN4 Tdoc | Spec | CR | R | Cat | Rel | Curr Ver | Title | Work Item |
|-----------|--------|-----|---|-----|-------|----------|--|-----------|
| R4-021204 | 25.105 | 124 | | F | Rel-5 | 5.1.0 | Applicability of requirements in case of RF devices external to the BS | TE15 |
| R4-021214 | 25.142 | 139 | | F | Rel-5 | 5.1.0 | Applicability of requirements in case of RF devices external to the BS | TE15 |

Helsinki, Finland 12 - 16 August 2002

CR-Form-v7

CHANGE REQUEST⌘ **25.105 CR 124** ⌘ rev ⌘ Current version: **5.1.0** ⌘For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.Proposed change affects: UICC apps ME Radio Access Network Core Network

| | | | |
|------------------------|---|-----------------|---|
| Title: | ⌘ Applicability of requirements in case of RF devices external to the BS | | |
| Source: | ⌘ RAN WG4 | | |
| Work item code: | ⌘ TEI5 | Date: | ⌘ 21/08/2002 |
| Category: | ⌘ F | Release: | ⌘ Rel-5 |
| | Use <u>one</u> of the following categories: | | Use <u>one</u> of the following releases: |
| | F (correction) | | 2 (GSM Phase 2) |
| | A (corresponds to a correction in an earlier release) | | R96 (Release 1996) |
| | B (addition of feature), | | R97 (Release 1997) |
| | C (functional modification of feature) | | R98 (Release 1998) |
| | D (editorial modification) | | R99 (Release 1999) |
| | Detailed explanations of the above categories can be found in 3GPP TR 21.900. | | Rel-4 (Release 4) |
| | | | Rel-5 (Release 5) |
| | | | Rel-6 (Release 6) |

| | |
|--------------------------------------|---|
| Reason for change: | ⌘ In case of external RF equipment (e.g. masthead amplifier, external LNA, filter etc.) the test ports are not clearly specified. |
| Summary of change: | ⌘ It is clarified that the requirements apply to the far end antenna connector when external RF equipment is used. |
| Consequences if not approved: | ⌘ In case of external RF equipment to the BS the ports where the requirements apply will be ambiguous. |

| | | | | | | | | | | | |
|-------------------------------------|---|---------------------|---|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|-------------------------------------|---------------------------|-------------------|
| Clauses affected: | ⌘ 6.1, 7.1 | | | | | | | | | | |
| Other specs affected: | <table border="1"> <tr> <td>Y</td> <td>N</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> </table> | Y | N | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Other core specifications | ⌘ 25.142 in CR139 |
| Y | N | | | | | | | | | | |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | | | | | | | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | | | | | | | | | | |
| | | Test specifications | | | | | | | | | |
| | | O&M Specifications | | | | | | | | | |
| Other comments: | ⌘ | | | | | | | | | | |

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <http://www.3gpp.org/specs/CR.htm>. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

6.1 General

Unless ~~described~~ otherwise stated the transmitter characteristics are specified at the antenna connector (test port A) with a full complement of transceivers for the configuration in normal operating conditions. If any external apparatus such as a TX amplifier, a filter or the combination of such devices is used, requirements apply at the far end antenna connector (port B).

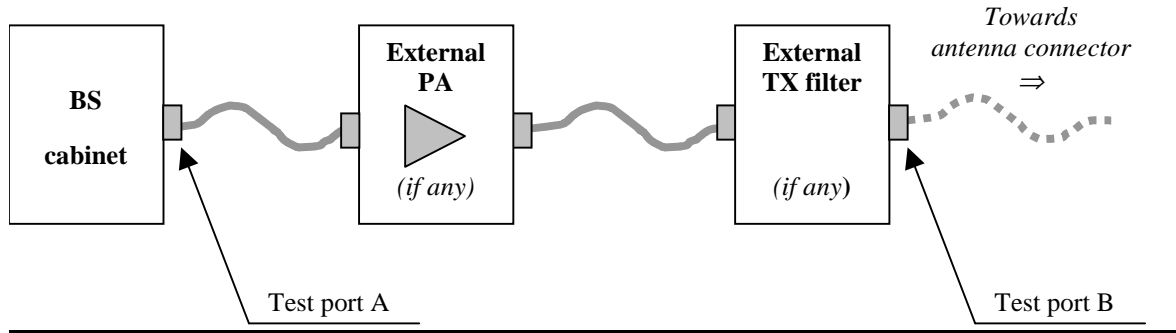


Figure 6.0 Transmitter test ports

--- next changed section ---

7.1 General

The requirements in this clause 7 assume that the receiver is not equipped with diversity. For receivers with diversity, the requirements apply to each antenna connector separately, with the other one(s) terminated or disabled. The requirements are otherwise unchanged.

Unless otherwise stated, the receiver characteristics are specified at the BS antenna connector (test port A) with a full complement of transceivers for the configuration in normal operating conditions. If any external apparatus such as a RX amplifier, a filter or the combination of such devices is used, requirements apply at the far end antenna connector (port B).

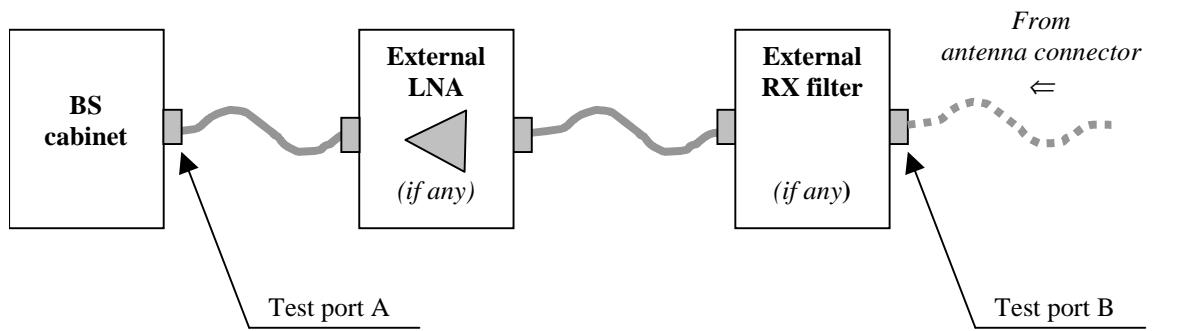


Figure 7.1: Receiver test ports

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CHANGE REQUEST
 ⌘ **25.142 CR 139** ⌘ rev ⌘ Current version: **5.1.0** ⌘

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 Proposed change affects: UICC apps ME Radio Access Network Core Network

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| Y | N | | | | | | | | | | |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | | | | | | | | | | |
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6.1 General

Unless otherwise stated, all measurements shall be made at the BS antenna connector- (test port A) with a full complement of transceivers for the configuration in normal operating conditions. If any external apparatus such as a TX amplifier, a filter or the combination of such devices is used, the tests according to subclauses 5.14.4 shall be performed to ensure that the requirements are met at test port B.

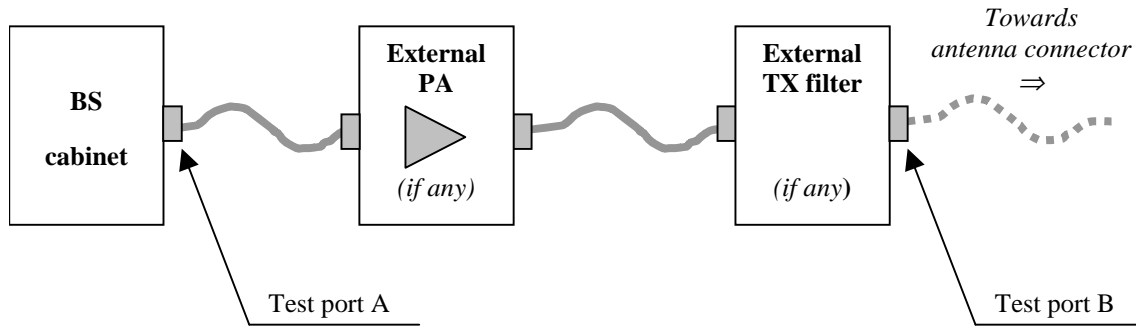


Figure 6.1: Transmitter test ports

--- next changed section ---

7.1 General

All tests unless otherwise stated in this subclause shall be conducted on Base Station Systems fitted with a full complement of Transceivers for the configuration. The manufacturer shall provide appropriate logical or physical test access to perform all tests in this subclause. Measurements shall include any RX multicoupler.

The tests in clause 7 assume that the receiver is not equipped with diversity. ~~Unless otherwise stated, For receivers with diversity, the tests for receiver with diversity shall may~~ be performed by applying the specified signals to one of the receiver inputs, and terminating or disabling the other(s). The tests and requirements are otherwise unchanged.

~~For receivers with diversity, testing of conformance shall be performed by applying the specified signals to one of the receiver inputs, and terminating or disabling the other(s).~~

In all the relevant subclauses in this clause all Bit Error Ratio (BER), Residual BER (RBER) and Frame Erasure Ratio (FER) measurements shall be carried out according to the general rules for statistical testing.

Unless detailed the receiver characteristic are specified at each antenna connector of the BS.

Unless otherwise stated, all tests in this clause shall be performed at the BS antenna connector (test port A).If any external apparatus such as a RX amplifier, a filter or the combination of such devices is used, the tests according to subclauses 5.14.4 shall be performed to ensure that the requirements are met at test port B.

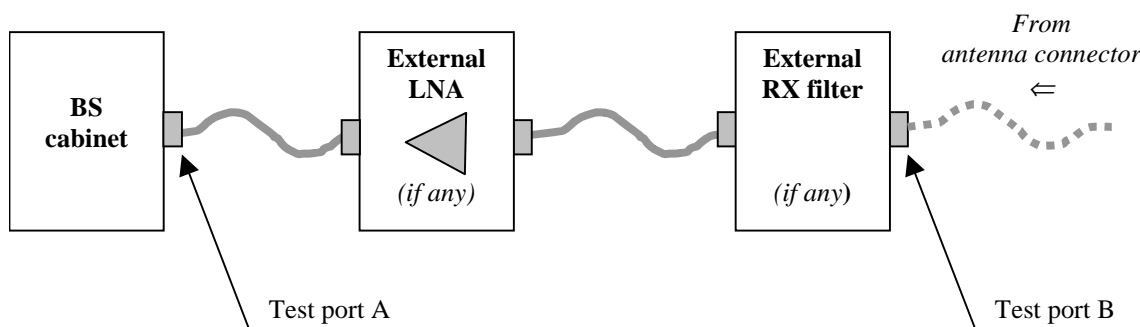


Figure 7.1: Receiver test ports