



**ETS 300 242/A1**

# AMENDMENT

September 1994

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**This amendment A1 modifies  
the European Telecommunication Standard ETS 300 242 (1992)**

## **Terminal Equipment (TE); Group 3 facsimile equipment**

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## Foreword

This Amendment to ETS 300 242 (1992) has been produced by the Terminal Equipment (TE) Technical Committee of the European Telecommunications Standards Institute (ETSI).

This Amendment to ETS 300 242 covers changes to tests in Annex B - Testing. The changes are to include clarification regarding the possibility of combining tests for efficiency and also to include a new Clause (B.7) covering the CCITT standardized Error Correction Mode (ECM).

ECM is an optional feature of a facsimile equipment. For equipment providing ECM, conformance to this ETS will include tests defined in Clause B.7 (see below).

For equipment not providing ECM, conformance testing to this ETS does not include tests defined in Clause B.7 (see below).

## Amendments

**The changes covering the combination of tests are as follows:**

**Page 14, subclause B.1.3 insert the following text at the start of the 4th paragraph.**

"For efficiency in testing, a test sequence may combine any number of tests where the combination does not affect its validity".

**Page 15, subclause B.1.4.1 add the following sentence at the end of the text.**

"However, for efficiency, tests may be combined".

**Insert the following text as Clause B.7 to Annex B.**

### **"B.7 Tests for CCITT Recommendation T.30 in ECM mode**

#### **B.7.1 Tests for normal conditions**

##### **B.7.1.1 Test No. TNO1 ... TNO9**

Testing normal conditions with ECM capability.  
Facsimile equipment transmitting/tester receiving.  
Facsimile equipment transmits two test charts: first a CCITT Test Chart No.3 followed by an all white page not exceeding A4 length.

Before each sequence a call is established and the tester shall:

T-DIS V2;  
R-DCS;  
R-phasing/training, TCF;  
T-CFR;  
R-fax msg in ECM mode.

For facsimile equipment capable of transmitting only one page, tests TNO4, TNO5 and TNO6 shall not be applied.

NOTE 1: Optional signals may appear before DCS.

NOTE 2: Tests TNO1-TNO3 may be repeated several times, depending on the number of bytes per frame selected in the DCS frame.

Table B.24

Test No.	Type of Test	Tester Action	Tester Detects	Comments
TNO1	transmit PPS-NULL		R-PPS-NULL	NOTE 2
TNO2	receive MCF	T-MCF		
TNO3	transmit fax msg		R-fax msg	
TNO4	transmit PPS-MPS		R-PPS-MPS	
TNO5	receive MCF	T-MCF		
TNO6	transmit fax msg		R-fax msg	
TNO7	transmit PPS-EOP		R-PPS-EOP	
TNO8	receive MCF	T-MCF		
TNO9	transmit DCN		R-DCN R-disconnect	

**B.7.1.2 Test No. RNO1 ... RNO9**

Testing normal conditions with ECM capability.

Facsimile equipment receiving/tester transmitting.

Facsimile equipment receives two pages not exceeding A4 length generated electronically by the Tester.

Before each sequence a call is established and the tester shall:

R-DIS;

T-DCS V2;

T-phasing/training, TCF;

R-CFR;

T-fax msg in ECM mode.

For facsimile equipment capable of receiving only one page, tests RNO4, RNO5 and RNO6 shall not be applied.

NOTE 1: Optional signals may appear before DIS.

NOTE 2: After PPS-Q is sent by tester, it is possible to receive from the SUT other signals like PPR or RNR. In these cases, the tester should act as defined in CCITT Recommendation T.30 [3].

**Table B.25**

Test No.	Type of Test	Tester Action	Tester Detects	Comments
RNO1	receive PPS-NULL	T-PPS-NULL		
RNO2	transmit MCF		R-MCF	NOTE 2
RNO3	receive fax msg	T-fax msg		
RNO4	receive PPS-MPS	T-PPS-MPS		
RNO5	transmit MCF		R-MCF	NOTE 2
RNO6	receive fax msg	T-fax msg		
RNO7	receive PPS-EOP	T-PPS-EOP		
RNO8	transmit MCF		R-MCF	NOTE 2
RNO9	receive DCN	T-DCN	R-disconnect	

**B.7.2 Tests for exception conditions****B.7.2.1 Test TE01 ... TE02**

Testing exceptional conditions during a transmission of document with ECM.  
Facsimile equipment transmitting/tester receiving.  
Facsimile equipment is set up to transmit one white page.

Before each sequence a call is established and the tester shall:

T-DIS V2;  
R-DCS;  
R-phasing/training, TCF;  
T-CFR;  
R-fax msg in ECM mode;  
R-PPS-EOP.

**Table B.26**

Test No.	Type of Test	Tester Action	Tester Detects	Comments
TE01	receive RNR and testing timeout T5	T-RNR during T5	R-RR or PPS-EOP during T5  R-DCN after timeout T5 R-disconnect	
TE02	receive PPR 4 times	T-PPR	R-fax msg (only frames with error) R-PPS-EOP	
		T-PPR	R-fax msg (only frames with error) R-PPS-EOP	
		T-PPR	R-fax msg (only frames with error) R-PPS-EOP	
		T-PPR	R-CTC or R-EOR-EOP	NOTE
NOTE: The SUT behaviour depends on the machine "capability of continue to correct". The action of SUT shall be according with CCITT Recommendation T.30 [3].				



**B.7.2.3 Test REO3**

Testing exceptional conditions during a reception of document with ECM.  
 Facsimile equipment receiving/tester transmitting.  
 Tester is set up to transmit two white pages.

Before each sequence a call is established and the tester shall:

R-DIS;  
 T-DCS V2;  
 T-phasing/training, TCF;  
 R-CFR.

**Table B.28**

<b>Test No.</b>	<b>Type of Test</b>	<b>Tester Action</b>	<b>Tester Detects</b>	<b>Comments</b>
REO3	flow control by the emitter	T-fax msg with first frame preceded by 30 s of flags  T-PPS-MPS  T-fax msg Flags of a duration of 30 s are present between frames no.1 and no.2  T-PPS-EOP  T-DCN	R-MCF       R-MCF	(see A.5 of CCITT Recommendation T.30 [3])    30 seconds represent minimum of T1  NOTE
NOTE: The transmission of flags during 30 s can occur between any two consecutive frames. The reference in this test case to frames no.1 and no.2 is given as an example.				



This subclause contains the additional DIS/DTC and DCS coding definition to be used in test cases for ECM.

**Table B.29: Content of the DIS/DTC frame**

DIS/DTC	Coding (hex) and bit assignment for DIS/DTC FIF
V2  Extended standard capabilities	FIF: 00 50 11 20  Receiver - T.4 operation data signalling rate V.27ter Standard vertical resolution 3,85 l/mm One-dimensional coding Recording width 215 mm (1 728 pels) A4 Max. recording length capability unlimited Min. scan line time receiver capability: - 20 ms at 3,85 and 7,7 l/mm.  Extended Field.  Error Correction Mode.

**Table B.30: Content of the DCS frame**

DCS	Coding (hex) and bit assignment for DCS FIF
V2  Extended standard capabilities	FIF: 00 50 11 30  Receiver - T.4 operation data signalling rate V.27ter Standard vertical resolution 3,85 l/mm One-dimensional coding Recording width 215 mm (1 728 pels) A4 Max. recording length capability A4 Min. scan line time receiver capability: 0 ms  Extended Field.  Error Correction Mode (frame size = 64 octets)."

**History**

<b>Document history</b>	
December 1992	First Edition of ETS 300 242
September 1994	Amendment 1 to First Edition of ETS 300 242
December 1995	Converted into Adobe Acrobat Portable Document Format (PDF)
Note :	<p>The references to the changed pages in the standard refer to an old presentation. See history box at the end of the standard itself.</p> <p>The new presentation format applied from 1 December 1995 might have different page numbering. The clause numbering has not changed.</p>