



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

V.14

(03/93)

DATA COMMUNICATION OVER THE TELEPHONE NETWORK

TRANSMISSION OF START-STOP CHARACTERS OVER SYNCHRONOUS BEARER CHANNELS

ITU-T Recommendation V.14

(Previously "CCITT Recommendation")

FOREWORD

The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the International Telecommunication Union. The ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Conference (WTSC), which meets every four years, established the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

ITU-T Recommendation V.14 was revised by the ITU-T Study Group XVII (1988-1993) and was approved by the WTSC (Helsinki, March 1-12, 1993).

NOTES

1 As a consequence of a reform process within the International Telecommunication Union (ITU), the CCITT ceased to exist as of 28 February 1993. In its place, the ITU Telecommunication Standardization Sector (ITU-T) was created as of 1 March 1993. Similarly, in this reform process, the CCIR and the IFRB have been replaced by the Radiocommunication Sector.

In order not to delay publication of this Recommendation, no change has been made in the text to references containing the acronyms "CCITT, CCIR or IFRB" or their associated entities such as Plenary Assembly, Secretariat, etc. Future editions of this Recommendation will contain the proper terminology related to the new ITU structure.

2 In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

© ITU 1993

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the ITU.

CONTENTS

	<i>Page</i>
1 Scope.....	1
1.3 Operation of DTE-DCE interface after failure to establish error-correcting (Recommendation V.42) operation.....	1
2 Data signalling rates.....	1
3 Signalling rate ranges of the start-stop characters at the converter input.....	1
4 Start-stop character format.....	1
5 Margin of the converter input.....	2
6 Selection of synchronous or asynchronous modes of operation	2
7 Async-to-sync conversion method	2
7.1 Transmitter.....	2
7.2 Receiver.....	2
7.3 Break signal	3
7.4 Tandem operation	3
7.5 Testing facilities.....	3
Annex A – Inclusion of an async-to-sync converter into a synchronous DCE	4