INTERNATIONAL STANDARD

ISO/IEC
3309

Fourth edition
1991-06-01

AMENDMENT 2
1992-01-15

Information technology — Telecommunications and information exchange between systems — High-level data link control (HDLC) procedures — Frame structure

AMENDMENT 2: Extended transparency options for start/stop transmission

Technologies de l'information — Télécommunications et échange d'information entre systèmes — Procédure de commande de liaison de données à haut niveau (HDLC) — Structure de trame

AMENDEMENT 2: Options de transparence étendue pour la transmission arythmique

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Amendment 2 to International Standard ISO/IEC 3309 : 1991 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*.

Introduction

This Amendment to ISO/IEC 3309 : 1991 indicates additional changes that have been agreed since the approval of ISO/IEC 3309.

This Amendment adds options for flow-control transparency (transparency processing for the DC1/XON and DC3/XOFF control characters defined in ISO 646) and control-character octet transparency (transparency processing for all control character octets plus the DELETE character octet defined in ISO 646). This option will enhance the use of Start/stop transmission in environments where character sensitive mechanisms may exist in the system between the corresponding entities.

Information technology — Telecommunications and information exchange between systems — High-level data link control (HDLC) procedures — Frame structure

AMENDMENT 2: Extended transparency options for start/stop transmission

1 Scope

This amendment to ISO/IEC 3309 : 1991 enhances the start/stop transmission so that it can be used in environments which are sensitive to the transmission of octets with values which may be interpreted as ISO 646 control characters, such as buffered modems that use character-sensitive flow control mechanisms.

2 Specific changes to ISO/IEC 3309

a) In clause **2 Normative Reference** -- add the following item:

ISO/IEC 646 : 1991, *Information technology — ISO 7-bit coded character set for information interchange*

b) In subclause **4.5.2 Start/stop transmission** -- change the title of this subclause to read

"Start/stop transmission — basic transparency".

c) Add the following subclauses:

4.5.3 Start/stop transmission — extended transparency

When necessary and by prior agreement between the stations, the *transmitter may apply the above transparency procedure (4.5.2)* to octets in the groups defined below, in addition to the flag and control escape octets.

4.5.3.1 Flow-control transparency

The flow-control transparency option provides transparency processing for the DC1/XON and DC3/XOFF control characters defined in ISO 646 (i.e., 1000100x and 1100100x, respectively, where "x" may be either "0" or "1"). This has the effect of assuring that the octet stream does not contain values which could be interpreted by intermediate equipment as flow control characters (regardless of parity).

4.5.3.2 Control-character octet transparency

The control-character octet transparency option provides transparency processing for all octets in which both the 6th and 7th bits are "0" (i.e., xxxxx00x, where "x" may be either "0" or "1") as well as for the DELETE character octet (i.e., 1111111x, where "x" may be either "0" or "1"). This has the effect of assuring that the octet stream does not contain values which could be interpreted by intermediate equipment as the control characters or DELETE character defined by ISO 646 (regardless of parity).