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Australian Standard®

**Information processing systems—
Data communication—High-level
data link control procedures—
Consolidation of classes of
procedures**

**Supplement 2: Description of
optional functions**



STANDARDS AUSTRALIA
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This Australian Standard was prepared by Committee IT/1, Information Processing Systems. It was approved on behalf of the Council of Standards Australia on 5 April 1989 and published on 14 July 1989.

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PREFACE

This Standard was prepared by Standards Australia's Committee on Information Processing Systems. It is identical with and has been reproduced from International Standard ISO 7809/Add.2:1987.

The Standard is one of a series of Open Systems Interconnection (OSI) Standards which are currently under development. Since OSI Standards are developmental, there may be some minor difficulties encountered in their implementation. For this reason, Standards Australia will be providing a limited interpretation service to coordinate and disseminate information concerning difficulties which are identified in using this Standard.

For the purpose of this Australian Standard, the text of the ISO Standard given herein should be modified as follows:

- (a) *Terminology.* The words 'Australian Standard' should replace the words 'International Standard' wherever they appear.
- (b) *References.* The references to International Standards should be replaced by references to Australian Standards as follows:

<i>Reference to International Standard</i>	<i>Australian Standard</i>
ISO	AS
7809 Information processing systems—High-level data link control procedures—Consolidation of classes of procedures	2751 Information processing systems—High-level data link control procedures—Consolidation of classes of procedures

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Information processing systems—Data communication— High-level data link control procedures—Consolidation of classes of procedures

Supplement 2: Description of optional functions

Addendum 2 to International Standard ISO 7809 : 1984 was prepared by Technical Committee ISO/TC 97, *Information processing systems*.

1 Scope and field of application

This addendum provides an addition to ISO 7809 to add narrative descriptions of all of the optional functions.

2 Specific changes to ISO 7809

In figure 5, change the title of Optional Function 2 "improved performance" to "REJ recovery".

In sub-clause 2.6, change "improved performance" to "REJ recovery" in both *example 1* and *example 3*.

Add the following as clause 5.

5 Uses of the optional functions

Some uses of the optional functions defined in 2.3 are described in this clause. The optional functions provide additional capabilities beyond the basic operations described in clauses 3 and 4. The commands and responses identified are, in general, defined in ISO 4335.

5.1 Option 1 — Identification

The Identification optional function provides the means for data link layer entities to exchange data link layer parameters and characteristics of operation before or during normal operation. The function utilizes the Exchange Identification (XID) command and response frames.

A prime application of Option 1 is in conjunction with a switched network connection. Following the indication of a working physical path from the Physical Layer, and prior to establishing a logical data link connection over which Network Layer information can be exchanged, the data link layer entities can exchange details concerning the data link layer addresses (individual and group) that they are responsive to, the capabilities that they support (for example options, class(es) of procedure, etc.), and the parameter values employed (for example value of Reply Timer, receive window size, maximum frame length, etc.) The manner in which these details are encoded in the information field of the XID frames exchanged is the subject of ISO 8885.

Included in the Identification function is an option for accommodating a limited amount of higher layer information in the