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Australian Standard 2600—1983

DATA COMMUNICATION—HDLC BALANCED CLASS OF PROCEDURES

STANDARDS ASSOCIATION OF AUSTRALIA
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Australian Banks Payment Systems Committee

Australian Bureau of Statistics

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Australian Computer Services Association

Australian Computer Users Association

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AUSTRALIAN STANDARD

DATA COMMUNICATION—HDLC BALANCED CLASS OF PROCEDURES

AS 2600—1983

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PREFACE

This standard was prepared by the Association's Committee on Information Processing Systems. It is identical with and has been reproduced from International Standard ISO 6256, drawn up by ISO TC/97, Information Processing Systems.

The purpose of this standard is to describe HDLC balanced class of procedures for synchronous data transmission.

For the purpose of this Australian standard, the text of ISO 6256 given herein should be modified as follows:

(a) *Terminology:* The words 'Australian standard' should replace the words 'International Standard' wherever they appear.

(b) *Cross-references:* The references to International Standards should be replaced by references to Australian standards as follows:

Reference to International Standard	*Appropriate Australian Standard*
ISO 3309, Data communication—High-level data link control procedures—Frame structure	AS 2572, Data communication—High-level data link control procedures—Frame structure
ISO 4335, Data communication—High-level data link control procedures—Elements of procedures	AS 2571, Data communication—High-level data link control procedures—Elements of procedures

STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

Data communication — HDLC balanced class of procedures

0 Introduction

This International Standard describes the HDLC balanced class of procedures. It applies to a variety of point-to-point configurations over either dedicated or switched data transmission facilities. The characteristic of this class is the existence of stations at both ends of the data link, called combined stations, that may equally share the responsibility in link management. Hence, the name of "balanced" class of procedures.

In its present form, this International Standard, which was developed in consultation with CCITT (International Telegraph and Telephone Consultative Committee), specifies procedures for the basic repertoire of commands and responses. Procedures for use of the optional functions are being considered for future enhancement of this International Standard.

The aim of the developers of this International Standard is that maximum commonality be maintained between the basic classes of procedures, unbalanced and balanced, as this is particularly desirable for stations with configurable capability which may provide characteristics of a primary, secondary, or combined stations as required for a specific connection.

1 Scope and field of application

Balanced operation is intended for use in circumstances which require equal control at either end of the link. This International Standard describes HDLC balanced class of procedures for synchronous data transmission. It covers balanced operation requirements and is consistent with an overall HDLC architecture. It uses the frame structure as defined in ISO 3309 and elements of procedure described in ISO 4335, plus addenda 1 and 2 of ISO 4335.

For the balanced operation, the link consists of two combined stations and operates in the asynchronous balanced mode. A basic repertoire of commands and responses is defined. The capability of the data link may be modified by the use of optional functions.

2 References

ISO 3309, *Data communication — High level data link control procedures — Frame structure.*

ISO 4335, *Data communication — High level data link control procedures — Elements of procedures.*

3 General description

3.1 Principles

3.1.1 Station type

One station type is defined for the balanced class of procedures (see figure 1) :

— combined station, which sends both commands and responses and also receives both commands and responses, and is responsible for link level error recovery.

3.1.2 Operational mode

The balanced procedures are described for two combined stations connected in a point-to-point configuration operating in asynchronous balanced mode (ABM) (see clause 4).