

AS 4080—1995

Australian Standard<sup>®</sup>

---

**User terminals for accessing the  
mobilesat satellite  
communications system**

---

This Australian Standard was prepared by Committee RC/2, Radiocommunications Equipment—Satellite and Telecommunications Networks. It was approved on behalf of the Council of Standards Australia on 31 October 1994 and published on 5 January 1995.

---

The following interests are represented on Committee RC/2:

Austel  
Australian Confederation of Consumers Association  
Australian Electronic and Electrical Manufacturers Association  
Australian Maritime Safety Authority  
Civil Aviation Authority  
Communication Workers Union  
Consumer Electronics Supplier Association  
Department of Communications and the Arts  
Department of Defence, Australia  
Federation of Australian Commercial TV Stations  
Ministry of Commerce, New Zealand  
National Association of Testing Authorities, Australia  
Optus Communications  
Spectrum Management Agency, Australia  
State Police/Emergency Services, Australia  
Telecom, Australia

Additional interests participating in preparation of Standard:

Australian Broadcasting Corporation  
CSIRO, Division of Radiophysics, Australia  
Department of Communications and Electronic Engineering, RMIT  
Digital Communications Group, University of South Australia  
Equipment manufacturers and suppliers  
Independent consultants  
Royal Flying Doctor Service of Australia

---

**Review of Australian Standards.** To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.

Full details of all Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

AS 4080—1995

Australian Standard<sup>®</sup>

---

**User terminals for accessing  
the mobilesat satellite  
communications system**

---

First published as AS 4080—1992.  
Second edition 1995.

PUBLISHED BY STANDARDS AUSTRALIA  
(STANDARDS ASSOCIATION OF AUSTRALIA)  
1 THE CRESCENT, HOMEBUSH, NSW 2140

ISBN 0 7262 9427 6

## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee RC/2 on Radiocommunications Equipment—Satellite and Telecommunications Networks, to supersede AS 4080—1992.

This Standard is the result of a consensus among Australian and New Zealand representatives on the Joint Committee to produce it as an Australian Standard. It is based on material supplied by OPTUS, owners and operators of the mobilesat system and includes proprietary protocols whose intellectual property is owned by OPTUS, who have advised that all manufacturers will be able to obtain licences for the intellectual property on an unlimited, non-exclusive and equitable basis. The trademark **mobilesat** is a registered OPTUS trademark.

It is intended to assist designers and manufacturers of appropriate terminal equipment as well as users of mobilesat.

The Standard was reviewed to incorporate changes intended to clarify and expand the detail of requirements. The changes are contained throughout the document and include the addition of specifications for an additional class of mobilesat terminal, with its associated parameters, specification for transmitted data rate accuracy and transmitting, receiving and environmental testing instructions.

The topics containing changes include antenna tracking requirements, OBTDm carrier acquisition requirements, power output monitoring, definitions for class and DAMA as well as Figures 6 and 8. Appendix A, including the figures, has also changed. Clarification has been made to RF radiation requirements, person-to-machine interface requirements and Table 4.

This Standard applies to mobile satellite earth terminals for accessing mobilesat which provides a range of circuit-switched voice, data, facsimile and messaging services, using the B Series OPTUS satellites. The satellite transponders will enable a large number of mobilesat terminals transmitting and receiving at L-band to communicate via satellite with fixed earth stations transmitting and receiving at Ku-band.

AUSTEL Technical Standard TS 022 defines the mobilesat terminal compatibility requirements for access to the mobilesat system and through it where appropriate, to a carrier network.

### © Copyright — STANDARDS AUSTRALIA

Users of Standards are reminded that copyright subsists in all Standards Australia publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia.

Standards Australia will permit up to 10 percent of the technical content pages of a Standard to be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia.

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia at any time.

## CONTENTS

	<i>Page</i>
FOREWORD .....	4
1 SCOPE .....	5
2 APPLICATION .....	5
3 REFERENCED AND RELATED DOCUMENTS .....	5
4 DEFINITIONS AND ABBREVIATIONS .....	6
5 TECHNICAL REQUIREMENTS .....	8
6 TESTING .....	19
APPENDIX A SPECIFICATION FOR THE INTERFACE BETWEEN THE MOBILE TERMINAL INDOOR UNIT AND THE AUXILIARY INTERFACE UNIT .....	24

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- Looking for additional Standards? Visit Intertek Inform Infostore
  - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-