



SIN 139

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Suppliers' Information Note

For The BT Network

2048 KBIT/S INTERFACE TO THE BT NETWORK PROVIDING ACCESS TO INTERNATIONAL 1544 KBIT/S NETWORKS

Service Description and Interface Specification

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Enquiries relating to this document should be directed to: help@sinet.bt.com

CONTENTS

1	INTRODUCTION.....	3
2	SERVICE DESCRIPTION.....	3
3	INTERFACE DESCRIPTION	3
3.1	FRAMING OPTIONS FOR 1536 KBIT/S USABLE DATA RATE.....	3
3.2	FRAMING OPTIONS FOR 1544 KBIT/S USABLE DATA RATE.....	3
4	FURTHER INFORMATION	4
5	ABBREVIATIONS	4
6	REFERENCES.....	4
7	HISTORY	5

1 Introduction

This Suppliers' Information Note (SIN) provides information for terminal equipment manufacturers and developers about BT's International Private Line Connect Service that provides 2048 kbit/s digital interfaces to international point-to-point digital private circuits which operate at 1544 kbit/s.

2 Service Description

This service provides a dedicated direct connection between two customer locations, in different countries, using high reliability digital private circuits that can carry voice, data, video, and IP traffic. The service is only available for digital international private circuits.

The service comprises a 2048 kbit/s National Access Section between the customer's premises and the associated BT International Centre in London, from where the circuit is onward routed to the overseas destination.

The usable data rate will be either 1536 kbit/s or 1544 kbit/s, depending upon the framing option employed. The availability of particular data rates may vary from destination to destination. For details of availability data rates to specific destinations, please consult your BT account manager or the Private Circuits Helpdesk.

3 Interface Description

The customer apparatus interface to the BT network is a 2048 kbit/s digital interface according to ITU-T Recommendation G.703, paragraph 9, co-axial option. The actual interface rate is determined by the customer apparatus within the constraint of 2048 kbit/s \pm 50 ppm.

The customer apparatus needs to structure the digital output stream in order that it may be correctly interpreted by the network. The structure may be one of the following options:

3.1 Framing options for 1536 kbit/s Usable Data Rate

- i) Framing in accordance with G.704 utilising timeslots 1-24, or
- ii) Framing in accordance with G.802 annex B utilising timeslots 1-15 and 17-25.

3.2 Framing options for 1544 kbit/s Usable Data Rate

- i) Framing in accordance with G.704 utilising timeslots 1-24 with the 193rd bit in timeslot 25, or
- ii) Framing in accordance with G.802 annex B utilising timeslots 1-15 and 17-25 with the 193rd bit in timeslot 26.

4 **Further Information**

For further information about BT's International Leased Line services please contact either the Private Line Connect Helpdesk, using the contact information at <http://www.sinet.bt.com/usenum.htm>, or your company's BT Account Manager.

If you have enquiries relating to this document then please contact: help@sinet.bt.com.

5 **Abbreviations**

IP	Internet Protocol
ITU-T	International Telecommunications Union For Telecommunications (formerly CCITT)
SIN	Suppliers' Information Note
ppm	Parts per million (10^6)

6 **References**

ITU-T Recommendations:

G.703	Physical/Electrical characteristics of hierarchical digital interfaces.
G.704	Synchronous frame structures used at 1544, 6312, 2048, 8448 and 44 736 kbit/s hierarchical levels.
G.802 Annex B	Interworking between networks based on different digital hierarchies and speech encoding laws. Annex B. Mapping method of a 1544 kbit/s signal into a G.704-structured 2048 kbit/s signal.

For information on where to obtain these referenced documents please see the document sources list at <http://www.sinet.bt.com/usenum.htm#docsources>.

7 History

Issue 1	May 1988	First Issued
Issue 2.0	April 2003	Major editorial update, SIN is made available in .pdf format. Technical content from referenced BT documents incorporated. Reference to terminal approval requirements removed.
Issue 2.1	May 2004	ITU-T Recommendation detail updated.
Issue 2.2	March 2005	Product name change.

-END-

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