



SIN 388

Issue 1.1
September 2003

Suppliers' Information Note

For The BT Network

ATM IN-SPAN HANDOVER OF DSL DELIVERED SERVICES

Service Description and Interface Specification

Each SIN is the copyright of British Telecommunications plc. Reproduction of the SIN is permitted only in its entirety, to disseminate information on the BT Network within your organisation. You must not edit or amend any SIN or reproduce extracts. You must not remove BT trade marks, notices, headings or copyright markings.

This document does not form a part of any contract with BT customers or suppliers.

Users of this document should not rely solely on the information in this document, but should carry out their own tests to satisfy themselves that terminal equipment will work with the BT network.

BT reserves the right to amend or replace any or all of the information in this document.

BT shall have no liability in contract, tort or otherwise for any loss or damage, howsoever arising from use of, or reliance upon, the information in this document by any person.

Due to technological limitations a very small percentage of customer interfaces may not comply with some of the individual characteristics which may be defined in this document.

Publication of this Suppliers' Information Note does not give or imply any licence to any intellectual property rights belonging to British Telecommunications plc or others. It is your sole responsibility to obtain any licences, permissions or consents which may be necessary if you choose to act on the information supplied in the SIN.

This SIN is available in Portable Document Format (pdf) from: <http://www.sinet.bt.com/index.htm>

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

CONTENTS

1	INTRODUCTION.....	3
2	SERVICE DESCRIPTION	3
2.1	GENERAL	3
2.2	SERVICE OPTIONS	3
2.3	PHYSICAL CONNECTION	3
2.4	SERVICE AVAILABILITY	5
2.5	SERVICE RESILIENCE.....	6
2.6	SERVICE LAYER	6
3	FURTHER INFORMATION	6
4	REFERENCES.....	7
5	ABBREVIATIONS	8
6	HISTORY	8

1 Introduction

This Suppliers' Information Note (SIN) describes the BT DSL ATM In-Span Handover (ISH) Service that provides Other Operators (Customers) with a new point of access to End Users of BT Broadband ATM services, specifically the BT DataStream Service.

2 Service Description

2.1 General

The BT Broadband ATM services provide connections to End Users using DSL. Customers can select from two types of Aggregate Access Connection into one (or many) Point(s) of Presence in the BT Broadband ATM network. This may be a Customer Access Link, presented as an ATM interface on BT-provided Network Terminating Equipment in the Customer's premises, for example, as described in SIN 347^[1]. Alternatively, the BT ATM In-Span Handover Service enables Customers to connect to the same ATM Point of Presence at an In-Span point in an optical fibre.

2.2 Service Options

ISH provides an option of STM-1, STM-4 or STM-16 interfaces, carrying 155Mbit/s or 622 Mbit/s circuits, in accordance with the Technical Recommendations^[2] agreed in the Public Network Operator Interest Group and relating to STM-1 and STM-4.

Please note that the STM-1 interface carries VC-4 circuits. The STM-4 and STM-16 interfaces offer a choice of VC-4 or VC4-4c circuits between operators. The port size on the BT ATM switch is either STM-1 or STM-4.

2.3 Physical Connection

An SDH connection is provided between the BT ATM switch (Point of Presence) and the point of connection in an ISH (BT) footway box on a public highway. This will be as near as is practicable (within 100 metres) to the BT building that houses the BT ATM switch. The Customer will be required to leave a roll of coiled fibre within the footway box and to donate this fibre to BT. BT will then pull the fibre through to the BT Exchange cable chamber and join the external fibre directly to an internal fibre. See Diagram 1 – Physical Layer.

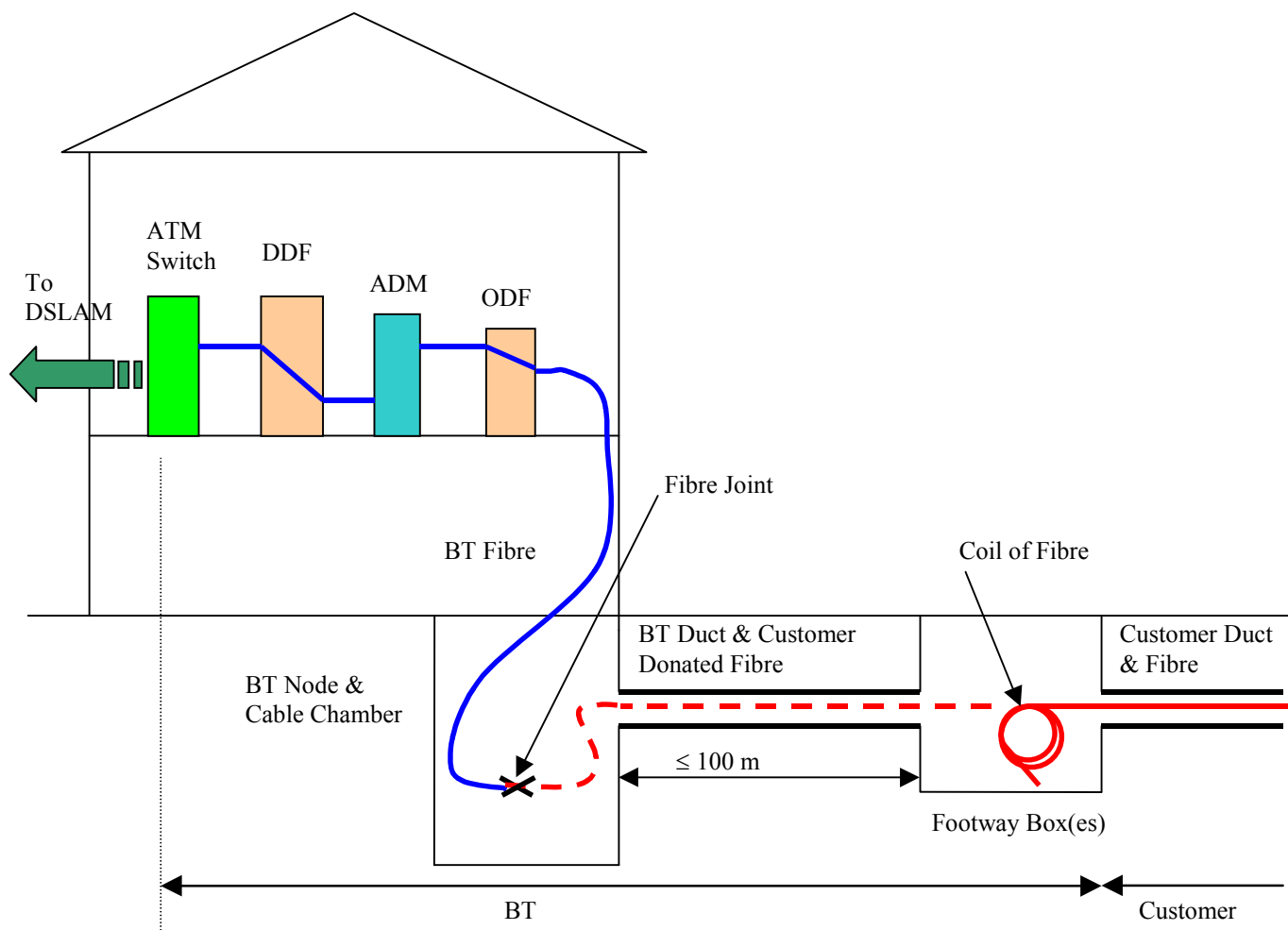


Diagram 1 – Physical Layer

2.4 Service Availability

ISH is available from BT's Points of Presence (PoPs) in the UK. These are based on the location of nominated BT ATM switches in the BT Broadband core network and specified as potential PoPs for the BT Broadband ATM services.

The Customer can have multiple In-Span Handovers and may nominate which BT PoPs they wish to connect to.

For a list of ATM Switches, approved by BT for connection to BT's Multi-Service Intranet Platform (MSIP) via permanent ATM connections, please refer to the DSL In-Span Handover and Partial Private Circuits Provisioning Manual ^[5].

2.5 Service Resilience

As a Customer option BT will, on request, support the same level of resilience under ISH as offered across the In-Span Interconnect product (telephony interconnection), whereby resilience may be offered using:

- a) a single BT footway box, jointing chamber and cable with two separate pairs of fibre in that cable; or
- b) a single BT footway box and jointing chamber with two separate cables; or
- c) two separate BT footway boxes, with two separate cables. BT may need to route the two separate cables within a common duct or jointing chamber at some point (site dependent).

The BT ADM will present a resilient optical interface to the Customer (1+1 MSP – non-revertive, single-ended)^[3]. The VC-4 path layer will be carried transparently into the ATM domain. The VC-4 trail termination, VC-4 trail management and VC-4 performance monitoring can therefore only be performed by the ATM switch.

2.6 Service Layer

The interface for ATM interconnect between BT's and the Customer's Systems will be as defined in the appropriate "Technical Recommendations" ^[3].

3 Further Information

For further information about the ISH Service please contact your company's BT Account Manager.

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

4 References

Suppliers' Information Notes

[1]	SIN 347	BT DataStream Office & BT DataStream Home (Service Provider) Services. Service Description And Interface Specification
-----	---------	---

Public Network Operator Interest Group Technical Recommendations

[2]	SDH Interconnect Between UK Licensed Operators – Overview	Issue 8
	SDH Interconnect Between UK Licensed Operators – Technical Recommendation	Issue 8
	SDH Interconnect Between UK Licensed Operators – Interconnect Commissioning Recommendation	Issue 8
[3]	ATM Access and Interconnect Between UK Licensed Operators – Overview	Issue 3
	ATM Access and Interconnect Between UK Licensed Operators – Technical Recommendation	Issue 3
	ATM Access and Interconnect Between UK Licensed Operators – Signalling ATM Adaptation Layer (SAAL) UNI Technical Recommendation	Issue 1

ATM Switches approved for interconnection to BT's ATM network

[5]	The DSL In-Span Handover and Partial Private Circuit Provisioning Manual	
-----	---	--

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

5 Abbreviations

ADM	Add-Drop Multiplexer
ATM	Asynchronous Transfer Mode
DDF	Digital Distribution Frame
DSL	Digital Subscriber Line
DSLAM	Digital Subscriber Line Access Multiplexer
ISH	In-Span Handover
MSIP	Multi-Service Intranet Platform
MSP	Multiplex Section Protection
ODF	Optical Distribution Frame
PoPs	Points of Presence
SDH	Synchronous Digital Hierarchy
SIN	Suppliers' Information Note
STIN	Suppliers' Trial Information Note
STM-1	Synchronous Transport Module Level 1
STM-4	Synchronous Transport Module Level 4
STM-16	Synchronous Transport Module Level 16
VC4	SDH Virtual Container 4
VC4-4c	SDH Virtual Container 4 (contiguous concatenation)

6 History

STIN 388 Issue 1.0	July 2001	
SIN 388 Issue 1.0	July 2002	STIN 388 re-issued as SIN 388, with amendments
SIN388 Issue 1.1	Sept 2003	Section 2.2 updated to add an STM-16 interface, VC4-4c circuits and the choice of 155Mbit/s or 622Mbit/s ATM Ports on the ATM Switch.

***WE WOULD BE GRATEFUL IF YOU WOULD SPEND A FEW MINUTES TO COMPLETE
AN ONLINE CUSTOMER SATISFACTION FORM AT
[HTTP://WWW.SINET.BT.COM/HAPPY.HTM](http://www.sinet.bt.com/happy.htm).***

END