

**Cable & Wireless ATM provides data transfer around the globe using asynchronous transfer mode (ATM), an efficient transmission technology that has very low delay.**

## Cable & Wireless ATM

Cable & Wireless ATM is appropriate for data applications requiring high-speed connections. ATM is designed to cope with bursty traffic, as found in local area networks (LANs) and wide area networks (WANs). C&W ATM provides everything you need for high-speed, reliable and efficient interconnections between these networks.

### Description

C&W ATM consists of an access circuit into the C&W network from each of your sites and onward connections across the network to all the destination sites. Data is carried over PVCs (permanent virtual connections or circuits) — dedicated pathways through the network set up by C&W between your sites.

C&W ATM is a global service, with nodes in the UK, Europe, USA and Asia.

### Access

Access to the C&W global ATM network is via bearers of 1.5, 2, 34, 45 and 155 Mbit/s. Sites can be connected in star or mesh configurations, or a combination.

Each site requires only one access circuit to the network, rather than a connection to every other site, minimising equipment and connection charges.

### Data rates

Although dynamic flow control is left to the end devices, the amount of data allowed onto the network is regulated by C&W, using three parameters that you specify for each PVC.

The sustained cell rate (SCR) is the

long-term data throughput available under normal network conditions.

Traffic can burst above the SCR up to the peak cell rate (PCR) — the maximum short-term cell rate supported. When the long-term load offered exceeds the SCR, a mechanism called usage parameter control (UPC) may discard cells, requiring them to be re-sent. Traffic exceeding the PCR is discarded at the point of ingress into the C&W Data Network, also using UPC.

The maximum burst size (MBS) is the maximum number of cells that your end device can offer to the network at the PCR, and still remain within the traffic contract.

The SCR, PCR and MBS form the basis of a traffic contract between Cable & Wireless and you. These contracts allow the network to deliver traffic fairly and predictably.

### Classes of service

C&W ATM offers three classes of service.

**Variable bit rate (VBR) service.** VBR is intended for applications that have bursty traffic characteristics. VBR offers average and peak traffic parameters: PCR, SCR and MBS. Two types of VBR service are available:

- Real-time (VBR-rt). VBR-rt is intended for time-sensitive applications (i.e those requiring tightly constrained delay and delay variation) such as video and voice.

- **ideal for connecting LANs or sites around the world**
- **managed service with a single point of contact**
- **fast, simple and reliable**



**CABLE & WIRELESS**

## Cable & Wireless ATM

- Non-real-time (VBR-nrt).  
VBR-nrt is appropriate for use with applications which have bursty traffic characteristics but do not have tight constraints on delay and delay variation, such as electronic mail (email) and file transfer.

**Constant bit rate (CBR) service** provides a constant bandwidth allocation. It is intended for real-time applications that are sensitive to delays and therefore require tight delay constraints e.g. mission-critical applications like real-time financial transactions.

### Resilience options

C&W ATM is highly resilient. The C&W Data Network has many diverse routes for carrying data around failed or congested points.

C&W offers two options to increase availability of your connections — diverse access bearers or backup PVCs (although backup PVCs are available only at certain locations. Speak to your C&W sales contact for details of where they're available).

### Why C&W ATM?

C&W ATM offers very high bandwidths and is designed to cope with applications that generate bursty traffic. It is thus particularly appropriate for interconnecting LANs or computers at different sites around the world. It offers high efficiency, very low network delay and protocol-transparent transmission.

C&W ATM is also likely to be of interest to medium and large companies, particularly multinationals, with specific applications requiring high bandwidths and probably with bursty traffic profiles.

In addition, Internet Service Providers (ISPs) could use C&W ATM for high-bandwidth connections at their core sites to carry their subscribers' Internet Protocol (IP) traffic to the public Internet.

Typical application examples are:

- LAN-to-LAN interconnection, including the transfer of large volumes of traffic such as electronic mail, file transfer and database enquiries
- disaster recovery — immediate recovery of data from a backup site
- data mirroring (saving data to a backup computer at another site at the same time as normal saving)

### Flexible

Asymmetrical PVCs are available to allow you to tailor the service to your traffic requirements.

C&W ATM has been designed from the start to be flexible and to be scalable (geographically and in terms of speed).

### Fast, simple and reliable

The fixed cell size offered by C&W ATM permits a high throughput, to accommodate bandwidth-hungry applications.

The C&W ATM network is managed around the clock, by Cable & Wireless and its partners.

The Global Service Management Centres (SMCs) support the service 24 hours a day, 365 days a year, backed up by the worldwide network of Network Management Centres operated by Cable & Wireless companies.

### Easy to monitor

Cable & Wireless offers a range of reporting services which make network monitoring and management easy and affordable. Reporting gives you accurate, detailed information on the configuration and operation of your C&W ATM network, enabling you to identify trends in its utilisation and plan changes to its configuration. The information also enables you to monitor Cable & Wireless' network management and assess the value for money of your Cable & Wireless service.

Reports are available online via Customer Link, a secure web site. Access is protected by usernames and passwords and all information is encrypted.

### Interworking

Cable & Wireless Frame-to-ATM interworking seamlessly integrates our Frame Relay and ATM networks. It allows C&W Frame Relay and C&W ATM to communicate with each other. You can therefore deploy both Frame Relay and ATM in your network, to suit the different requirements of your business.

Cable & Wireless  
Registered office address:  
124 Theobalds Road, London WC1X 8RX

Cable & Wireless pursues a policy of continuous development of its products and services. This document is for guidance only and does not form part of any contract. It is subject to change without notice.

MP/02.01

**For further information please ask your Cable & Wireless sales contact**

[www.cw.com](http://www.cw.com)