

Integrated Services Digital Network Basic Rate Access

Telecom Wholesale

Integrated Services Digital Network Basic Rate Access (ISDN BRA) allows service providers to offer data and voice services to smaller businesses that require high speed data transmission and want integration of voice, fax and data traffic over one access line.

ISDN Basic Rate Access is particularly suited to regional offices, small businesses and individual users within corporations.

It provides two 64 kbit/s channels (B Channels) into end-users premises over the existing telephone line. There is also a 16kbit/s D channel for call setup, signalling and D channel packet access. Up to eight separately addressed ISDN devices can be connected through a single Basic Rate Access giving access to the two 64kbit/s B channels. These channels are used to transit voice, data or video calls. Eight devices such as faxes, printers, telephones or computers can be connected to a single Basic Rate connection. One directory number comes as standard with Basic Rate Access but up to eight numbers can be provided using the Multiple Subscriber Number Service.

ISDN Basic Rate Access is ideal for high bandwidth applications and high speed calls where the average daily traffic on each channel is less than one hour. If requirements extend this, a higher bandwidth service should be considered.

Smartphone services can be incorporated with Basic Rate Access to increase end-user functionality.

BENEFITS

ISDN Basic Rate Access allows service providers to offer end-users:

- Connection of a small/medium size digital Private Automatic Branch Exchange (PABX) to the telephone network.
- Integration of low volumes of voice, data or video communications over a single access line.
- Transmission of high resolution or graphics or large files at high speeds to one or various destinations on an intermittent basis.
- Replacement of existing modems with a faster, more reliable solution.
- Remote dial up access to their Local Area Network (LAN).
- Leased circuit backup, or bandwidth, or demand for overload.
- High speed intermittent Internet access.

HOW IT WORKS

ISDN Basic Rate Access delivers two 64 kbit/s B channels, plus one 16kbit/s D channel over one copper pair, to the Service Delivery Point (SDP) in the end-user's premises. This terminates on a Network Terminator (NT). The NT can be either a Standard NT and/or NT Plus which contains two ordinary telephone sockets for telephones or fax. The wiring extending from the NT into the end-user's premises is called the S/T Bus cabling.

Basic Rate Access can have up to eight devices on the one connection, and any two of the devices can have simultaneous calls at the one time.

The major difference between Basic Rate Access and Primary Rate Access is the number of B channel connections. This allows much higher data bandwidths with Primary Rate Access.

Additional line capacity is provided at some exchanges by the use of Ericsson AXE switches.

AVAILABILITY

ISDN Basic Rate Access is available nationally but must be confirmed with a feasibility study.

REQUIREMENTS

In most cases an end-user's existing telephone line can be converted to ISDN. Telecom Wholesale connects the necessary equipment at the exchange and a Network Terminator (NT) at the end-user's premises. This includes an RJ45 telephone socket so end-users can connect their ISDN compatible equipment. For equipment that is not ISDN compatible, a Terminal Adapter (TA) will be required to convert the ISDN signal.

There are installation charges associated with ISDN BRA:

- Installation charges will be applied to all work that is carried out on an end-user's site in order to provide them a service. This includes all work carried out by Telecom or on behalf of Telecom except where the CPE is owned by the end-user.
- Telecom owns the service lead up to the network demarcation point but it does not own the internal wiring on the end-user's side of the demarcation point.
- A service visit fee is charged if a visit to an end-user's premise is required, to undertake installation of a line. Multiple visits not due to the fault of the end-user will not incur a further service visit fee.

- For standard installation that requires external wiring up to 65m a standard price applies. If the external wiring required is over 65m the end-user will be charged a 15-minute charge with a minimum charge of 1 hour. Additional charges include;
 - Internal removal charges – Charge when an ISDN BRA is relocated within a customer premise.
 - External removal charges – Charge when an ISDN BRA is relocated to another premise.
 - Conversion Charges – If the customer already has a Business line which they are converting to ISDN BRA, then they pay the conversion fee only.
 - Other Charges – If customers choose a term commitment contract they are required to pay an early cancellation fee if they relinquish the service within the contract period.

FOR MORE INFORMATION

For more information contact your Telecom Wholesale account manager.