

FROM THE PAST TO THE FUTURE: HOW TO MAKE THE MOVE FROM ISDN TO SIP



Organisations are changing the way they think about communications.

Today's business climate calls for reliability, agility and flexibility. In order to deliver on these core goals, the tools companies need to communicate to their customers and the wider world must be future ready and fit for purpose.

However, that is not always the case. Many companies are still relying on traditional Integrated Service Digital Network (ISDN) technology for their business communications, most of which are now becoming obsolete in a business environment where terms of interaction are dictated by increasingly demanding customers.



With the phrase 'always on' an expectation rather than a bonus, moving to a modern system is becoming a necessary step for businesses that are serious about how they communicate.

In this eGuide, we explore how the telecommunications landscape is changing, why businesses are moving and what the map to change looks like. We also see how one business revolutionised their communications by moving from a traditional ISDN-based solution to Session Initiated Protocol (SIP) trunking.



In this eGuide, we explore how the telecommunications landscape is changing

Traditional systems are dying

It is common knowledge amongst telecommunications experts that ISDN is a dying technology. **BT intend to switch off their ISDN network for good starting with a cease in supply in 2020, with a move to a full migration by 2025.** But this traditional system is still being used by many businesses.



What is ISDN?

ISDN is a communications network that relies heavily on physical infrastructure, specifically copper wiring. It came to prominence because it provided the opportunity to transmit voice and data over the same lines. However, because of its reliance on physical infrastructure to manage calls and additional functionality via a PBX (or multiple), this takes up space within business premises and requires resource to administer and maintain.

Similarly, it is hard to add and remove new lines to an ISDN network because it requires physical addition and removal.

AND WHEN
THINGS BREAK,
THERE IS NO
QUICK FIX.

A man in a dark suit and tie stands on a dark, broken staircase that is crumbling and crumbling. The staircase is set against a light purple background. The man is looking down at the broken steps. The overall image has a purple tint and a pattern of small white dots at the bottom.

WHAT TO REPLACE IT WITH?

The future-ready solution is SIP trunking. SIP is a ready-made replacement for ISDN, connecting a business's PBX to the provider's national network via broadband, ethernet or a private circuit.

SIP emerged through a growing need for reliable, flexible and scalable communications technology that enables growing businesses to manage communications effectively in line with demand and is already prepared for voice and data convergence further down the line.



3 REASONS WHY BUSINESSES ARE SWITCHING

Most modern businesses will have three things on their mind when it comes to telephony:

- Is it expensive?
- Can it support growth?
- Is it reliable?

Quite simply, SIP gives the right answer to each, meaning that the decision to leave traditional ISDN technology behind is becoming easier to justify than ever before.



1 COST

One SIP channel can cost approximately 50% of the ISDN equivalent

SIP trunking is not only less costly per channel for line rental than ISDN, but can also deliver savings on call costs, with many providers offering inclusive minutes as part of the monthly fee.

SIP trunking requires less physical infrastructure, with fewer lines needed than with ISDN, in turn reducing the maintenance costs on required PBXs. This is all the more important for enterprise businesses, who are likely to have multiple offices and more lines.

The bigger the business, the bigger the saving.



2 GROWTH

Additional SIP trunks can be added in less than a minute!

The beauty of a modern communications solution is that the addition of new lines and new office locations becomes a simple, pain free process. Line capacity to meet demand can be managed effectively without fuss and in most cases, call routing can be controlled easily, without requiring support from a supplier.

Importantly for growing businesses, it means that setting up new offices and remote workers does not require entire teams to stop working for installation to take place. Implementation can be seamless and in most cases the impact on productivity is minimal, if at all.

Number flexibility with SIP trunking ensures that if you are changing office completely, you can keep your existing numbers, even if you are moving to a different geographic location

3 RELIABILITY

When a traditional ISDN connection goes down, it can be for days rather than hours. Also, businesses are reliant on their provider for a resolution, or to implement expensive call forwarding options reactively until the problem is resolved. A modern solution, like SIP trunking or a fully-hosted phone system, comes with in-built resilience features. These solutions ensure that if something goes awry, business continuity can be maintained, with instant failover of voice traffic on to a different line or call plans that can include immediate redirection of calls to different hunt groups, office locations or even mobiles.

Due to this, thousands of UK businesses have identified cloud-based telephony as the future-ready technology they need to enable growth and agility.



MOVING FROM ISDN TO SIP: THE KEY STEPS YOU NEED TO TAKE

Step one: scoping the job

Work with your communications provider to find out what the move will look like for your business. This may be a wholesale switch in one move, a phased branch by branch transition, or even floor by floor. SIP can work alongside ISDN, so the switch needn't be fraught with the panic of turning one system off and another on at the same time. Costing will also be included within this part of the process.

During this period there should be little or no disturbance to your business. And any tests or checks can be carried out in a controlled environment.



Step two: audit the current system

A big part of the process from the customer end will be auditing current infrastructure and network capacity. Essentially, the provider needs this information in order to understand the optimum service provision required to meet business demands.

This can include the available bandwidth on the existing data connectivity, to decide if additional or dedicated connections are required to carry voice traffic. As with any audit, it will be a case of check and check again to ensure everything is accounted for.



The background image shows a person from behind, sitting at a desk and working on a computer. The setting appears to be a server room or data center, with rows of server racks visible in the background. The image is overlaid with a semi-transparent blue filter. There are decorative elements: a pattern of white dots in the top right corner and a pattern of white dots in the bottom left corner. The text is overlaid on the left side of the image.

Step three: installing the new system

With the project scoped and budgeted, the next step will be to begin installation. As SIP trunking comes with less physical infrastructure than ISDN, you will notice a substantial change in what has to be stored and maintained on site. Also, because SIP can work alongside ISDN whilst the installation is taking place, there should not be any real disturbance to your business systems during this stage of the process.

Step four: testing and checking

Unlike ISDN, a modern SIP-based phone system can integrate with business applications including Skype for Business. It also comes with built-in resilience and business continuity features. Each of these will be tested thoroughly before anything goes live to ensure the new system is working as expected.

The IT department may find itself a little busier than usual during this period. But workers, at large, shouldn't notice a thing as your provider checks your new system.

A hand holding a hexagonal sign that says "Testing Process". The background is a blue gradient with a pattern of white dots. The sign is white with a blue border and contains the text "Testing Process" in a bold, white, sans-serif font.

Testing
Process

Step five: go live

Time to turn the new system on. With all the checks done and continuity provisions in place, this stage should be less uncertain than it may first sound. Depending on your initial plan, the 'go live' could happen in one month, one day or one hour. The important thing is to note that if steps one to four have been completed correctly, step five should go smoothly.



**For modern businesses, there is no longer
a good reason to continue working with an
ISDN-based telecommunications solution.**

With the cost saving potential of SIP trunking, as well as its resilience and reliability, it is the common sense option for any organisation looking to be truly always on, and to provide customers with a first class experience. As this eGuide demonstrates, the benefits of moving to SIP trunking can transform business communications and the process of switching is simple and safe, even for the most risk averse of businesses.