

Far more for far less: the advantages of using SIP Trunking rather than ISDN

Lower TCO, greater flexibility,
increased capabilities

White Paper



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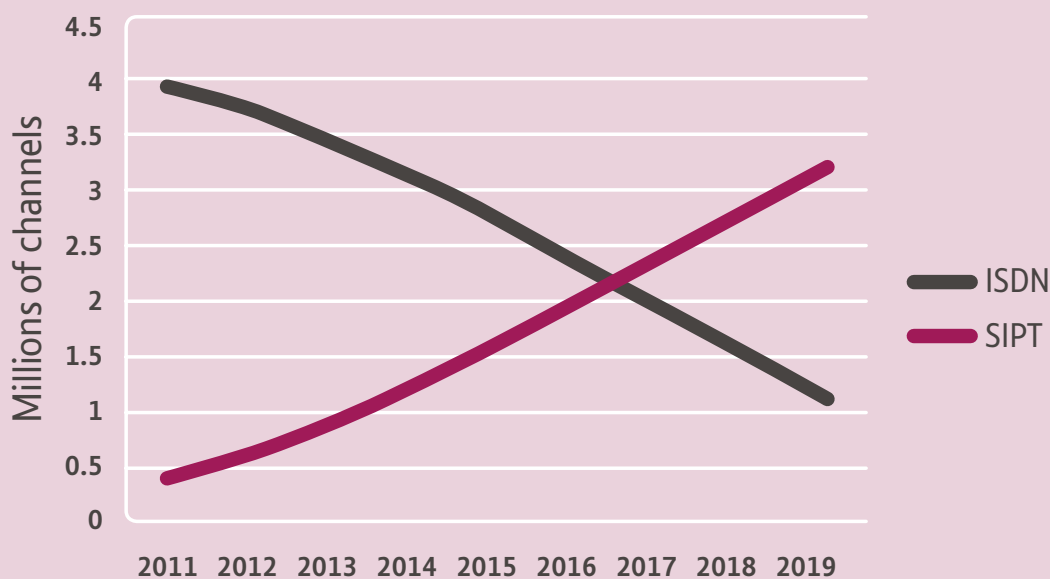
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Introduction

Session Initiation Protocol (SIP) is a very cost-effective way of providing voice, video and unified communications. More and more incumbent providers are phasing out ISDN and this will force users to migrate to an alternative over the next few years. Indeed, BT has announced* that it will close the ISDN network by 2025. SIP Trunking provides the perfect solution to fill the gap between legacy systems and the world of IP and cloud-based solutions. It allows users to make simultaneous calls over the Internet or a dedicated IP network and has already become the new standard for voice communications.



Decline of ISDN vs Rise of SIPT



According to industry analysts, the UK SIP Trunking market is worth some £560 million and is growing at a rate of about 15%. It offers major opportunities for communications providers. It's primarily being seen as a direct replacement for ISDN – which in itself is a huge opportunity, as Ofcom estimates that there are some 2.5 million unconverted ISDN channels. However, it's also used by businesses as a way of continuing to maximise and enhance their existing PBX investments. And it's ideal for end users that have high-capacity requirements, such as private cloud and contact centres.

It's worth noting that most modern PBXs have both ISDN and SIP interfaces – so this reduces the cost of moving over to SIP. SIP trunks are compatible with most PBXs – BT Wholesale's solution provides its own interoperability testing. If a PBX doesn't support SIP, affordable IP gateways are readily available.

So, why is SIP Trunking becoming so popular? Customer behaviour is changing, and end users now want more flexible solutions. Put simply, SIP Trunking provides greater flexibility, far more resilience, more features and a higher level of performance than ISDN.

Total Cost of Ownership (TCO)

For most businesses, cost has been a key factor in the decision to move from ISDN to SIP Trunking. But how great is the difference in the Total Cost of Ownership for these two alternatives? Huge savings can be made by changing to SIP and these savings will only grow larger as time goes by.

For instance, a recent analysis of the UK market by Cavell gave an average monthly price per trunk of around £4.50. The competitive nature of the market means that this price is quite likely to fall further in the immediate future. To gain a true comparison, connectivity also needs to be taken into account. This brings the average monthly cost up to about £9 to £12. These prices are still significantly lower than those for ISDN, even though SIP Trunking offers more features.

Other factors need to be taken into account when looking at the relative cost of ISDN and SIP. For instance, a few businesses might still be considering installing ISDN if they are moving premises – but the high connection charges alone can be prohibitive. It makes much more sense to buy a SIP-based solution, which has much lower installation costs, as it's based in the cloud.

Again, ISDN call charges are higher than those for SIP Trunking. With SIP Trunking, not only do users enjoy cheaper calls to mobiles and international numbers, but also calls between sites using SIP are free.

End users can also make significant savings, as has already been shown. Users can reduce the number of PBXs and associated lines, leading to savings of up to 50% when compared with a traditional ISDN.

Finally, SIP Trunking offers cost benefits to businesses of all sizes. For small businesses, it enables them to purchase just the number of channels they need (in contrast with ISDN 30, which sometimes requires them to purchase more channels than they actually need). Large businesses can use SIP with their own Virtual Private Network (VPN) to reduce costs.

Capabilities

However, cost isn't the only benefit of SIP Trunking. SIP trunks offer all of the standard benefits of ISDN but also create a path to unified communications delivered by cloud. This is the first step toward a wholly-hosted, cloud-based communications service. SIP Trunking also includes a range of sophisticated capabilities (such as disaster recovery).

With BT Wholesale's SIP Trunking solution, the end user's communications system can be connected to the BT network at different Points of Presence (PoPs) to create different resilience options. These include Managed Broadband; Direct Internet Access via BT Internet Connect; or Wholesale Ethernet (two main options and MPLS). The end result is that businesses enjoy very high call quality as calls are made over our HD voice network. For companies that retain their PBX, SIP Trunking can enhance its power by providing impressive new features and capabilities.

SIP Trunking can be deployed much more rapidly than ISDN – typically, in a few days. It's therefore the ideal choice for new, temporary and seasonal installations. SIP is also ideal for private cloud and contact centre environments as it provides high throughput and dialler support – and our solution can carry up to 5,000 channels and 50 calls per second.

In addition, SIP Trunking can be integrated with various unified communications applications, such as video and Skype for Business integration. It also enables businesses to control the pace of change: they can start with a hybrid environment and SIP Trunking will ultimately pave the way for them to migrate with ease to a fully hosted service when their PBX reaches the end of its useful life.

The BT Wholesale SIP Trunking solution provides peace of mind to end users, as it has built-in, high quality resilience options and is integrated into BT's highly resilient core network. It's also very secure.

Flexibility

Flexibility, agility and scalability are important issues in today's constantly changing business environment. SIP Trunking again scores heavily in these areas when compared with ISDN.

In terms of flexibility, BT Wholesale provides businesses with as many geographic telephone numbers for our SIP service as they want. They can port any number to the service, so they can retain their existing numbers, wherever they are today. If they want a local presence, they can deliver numbers from different geographic areas of the UK to a single location or keep the same geographic number if they are moving or changing offices. Companies can also prioritise how their calls are delivered, giving them greater control, or can configure call diverts on busy numbers, saving time and boosting efficiency.

In addition, SIP Trunking provides vital business continuity and disaster recovery as standard. Calls can be automatically rerouted to another number or site in the event of a disaster. This is a growing area, as firms need to plan for all eventualities so that they can comply with both regulatory and insurance requirements. As all of the services and features are based in the cloud, there is automatic protection from local disaster. In contrast, disaster recovery under ISDN can be very costly and can take some time to set up, as businesses have to duplicate their PBXs at a separate site.

Finally, SIP Trunking is also an easily scalable solution, and capacity can be increased or decreased to cope with seasonal variations in demand (such as Christmas or a calling campaign). This flexibility isn't available with most ISDN solutions.

Conclusion

As businesses have to respond ever more rapidly to changing needs – and with many having increasingly mobile workforces – a more versatile means of communication is required than has been possible with ISDN. Companies need to be exploring the potential for SIP Trunking and the role it could play in their business – such as allowing more fluid and flexible working and enabling them to enjoy more agile and even higher quality communications – and all at a lower overall cost.

SIP Trunking is also the stepping stone that will enable users to move from legacy systems to IP and unified communications:

- It's more affordable than ISDN, more versatile than ISDN and has much greater functionality.
- For end users, it provides a very reliable, high quality experience; a simpler yet more sophisticated method of communication; and an introduction to new ways of working.
- It's the first part of the journey towards hosted communications in the cloud.

Ultimately, the message is:
 "Move over ISDN – it's time to make way for SIP!"

* Source: BT Group plc Q3 2014/15 results



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