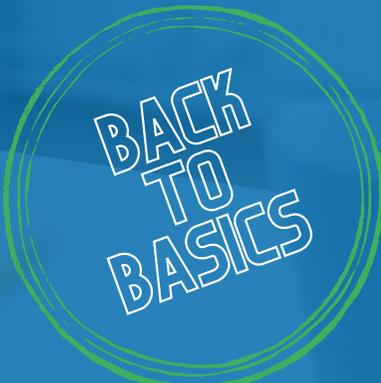
The background of the entire page is a blue-tinted photograph of a man in a light-colored shirt and tie, sitting at a desk. He is smiling and looking down at a document he is holding. A computer keyboard is visible on the desk to the left. The overall tone is professional and positive.

# [Basic Guide to Voice and UC]

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Everything you need to know about business telephony and Unified Comms

A circular logo with a double-line border. The text "BACK TO BASICS" is written inside in a white, bold, sans-serif font, arranged in three lines: "BACK", "TO", and "BASICS".

BACK  
TO  
BASICS

# [Introduction]

## Talk is cheap, but it's also extremely valuable

Telephony has changed. It was already changing before the pandemic, as cost and functionality advantages persuaded many businesses to swap landlines and on-premise PBX systems for all-IP and cloud-based alternatives.

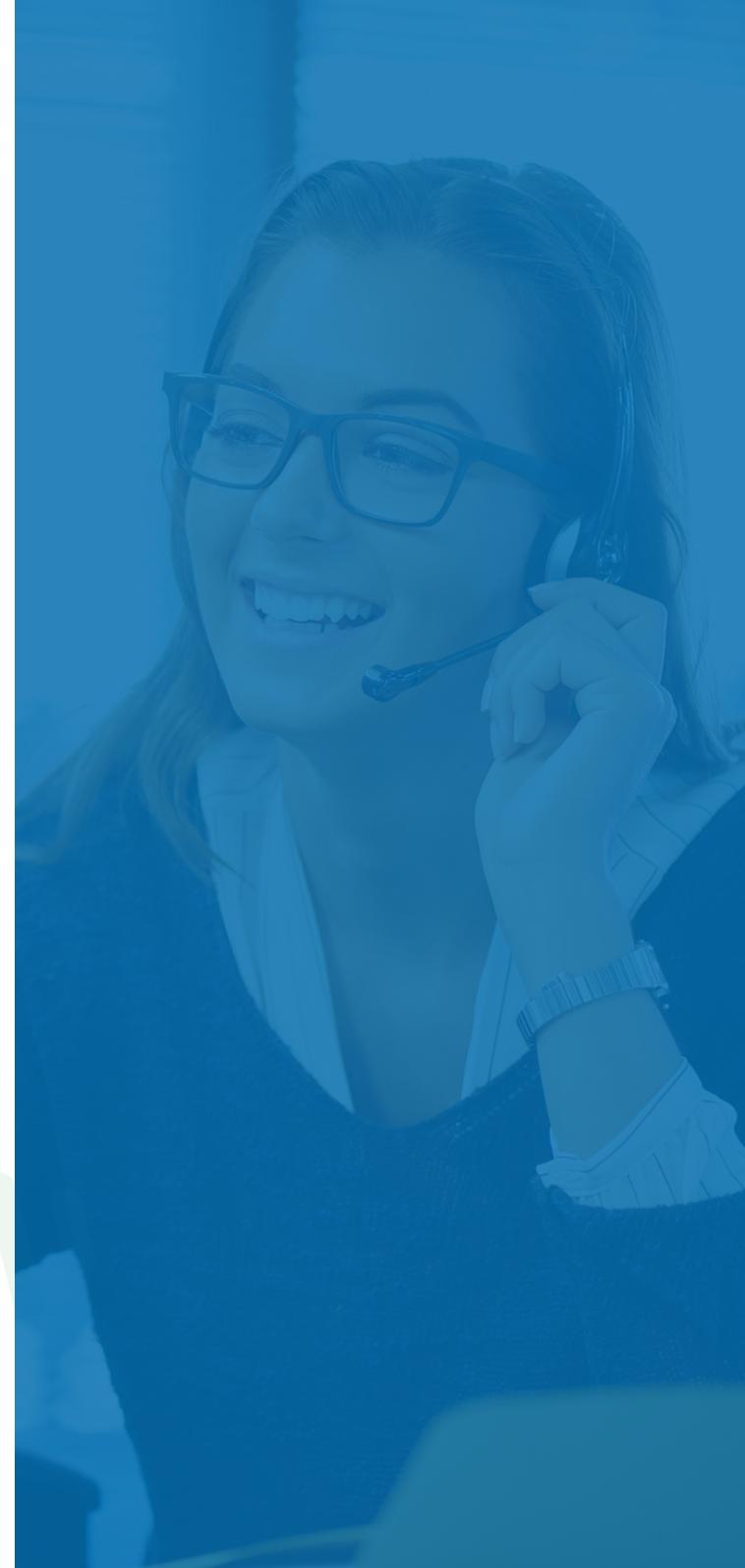
But the pandemic turned a trend into a stampede. The “work anywhere” benefits of cloud-based communication systems in particular made the transition to home working easy, at least in terms of telephony.

And if anything, the advent of semi-remote ‘hybrid’ working models make cloud telephony more attractive still. It means employees can access the same service and features whether they’re in the office, at home, or in the coffee shop round the corner. Their business number follows them wherever they go. They can make and take calls on laptops, smartphones and tablets.

Still, despite these advantages, many smaller businesses in particular are holding out against the tide. Their understandable attitude is “if it ain’t broke, why fix it?”

But even these firms will have to start thinking beyond the landline sooner rather than later. In 2025, BT is switching off the ISDN and PSTN (landline) network for good. From then on, all voice traffic will be routed through your internet connection.

In the rest of this guide, we’ll discuss the challenges businesses face when it comes to telephony, the alternatives available, and the benefits of modern communications solutions.



# [The Challenges of Telephony]

Talk is cheap, but it's also extremely valuable. Imagine not being able to talk to customers, colleagues or suppliers. How would your business cope?

That's why it's essential to understand the challenges businesses face around telephony services, so that you never lose the ability to talk. Here are the main ones:

## The ISDN/PSTN Switch Off

As mentioned, this is happening in 2025 whether we like it or not. For many businesses, that's a "not". According to one study, less than one in ten businesses is prepared for what will be the biggest shake up to telecommunications for more than 30 years.

Why is it happening? Quite simply, the ISDN network is creaky and old and can't handle the demands of modern, multichannel digital communications. It was made for a simpler time

And as it ages, the ISDN network is becoming more difficult to maintain. That could mean more outages and longer periods without services.

If organisations don't sort out an alternative for themselves before the switch off, they'll be forced onto basic internet-based telephony services that might not be ideal for their needs.

Our advice is to start researching the right ISDN replacement now so you end up with one that's

exactly right for you. Leave it too late and you may find yourself at the back of a very long queue.

## The Homeworking Revolution

Few businesses are forcing all their staff back to the office full time. Remote working - especially in part-time hybrid form - is becoming the norm. It's certainly what many employees want.

But for hybrid work to really, well, work, employees have to be properly equipped. In short, they need to be able to recreate the office wherever they are, and that's especially important when it comes to communications.

Your staff need to be able to make and take professional business calls from anywhere. They need to be able to communicate and collaborate with colleagues as well at home as they can in the office.

Your telephony service needs to facilitate this workplace revolution. If it can't, you may be left behind.



2025 sees the traditional BT 'landline' network switched off for good

## Requirements Are Changing

Communication requirements are changing, which means few companies can make do with just a landline and email address anymore.

That's partly driven by the needs of a more mobile workforce, and partly by the demands of customers. Either way, multichannel communications is starting to become essential.

Voice is one part of that, but it's often bundled with video, Instant Messaging, webchat and conferencing. It means your employees can collaborate more easily, and customers can get in touch in a way that best suits their needs.

Again, the challenge here for businesses is the potential for slipping behind the pack when it comes to staff expectations and customer experience.

## Spare Cash Is Hard To Find

We are not in an era of abundance. As economies gradually recover from recent shocks, spare cash can be hard to find. The challenge for business is to upgrade telephony and communications services in the most cost effective way.

That's one problem with a traditional on-premise PBX. You don't just have to buy the equipment, you have to house it and maintain it. If you need to add new employees to the system, you have to invest in extra lines.

In turbulent times, businesses need to be able to scale services up and down as circumstances dictate. They need to ensure they're only paying for capacity they actually use. And for many of them, a large CapEx outlay is currently out of the question.



# [Voice options explained]

These are the challenges organisations are wrestling with in terms of telephony. Luckily, there are more options than ever before.

## ISDN

ISDN is based on the traditional copper telephone network. It was installed in the 1980s to allow voice and basic digital traffic to travel over the same network. It has served the country well, but is now getting long in the tooth.

BT will stop selling new ISDN lines well before the switch off in 2025. It already has in some trial areas. But if you've recently invested in a new on-premise PBX that uses the ISDN network, it might not make sense to upgrade immediately.

Just be aware that these legacy PBX systems will need to be replaced eventually. They're simply not flexible enough for modern business needs, with little support for mobile services and only the most basic "work anywhere" functionality. They'll also become increasingly expensive to fix when something goes wrong.

So by all means sweat your PBX until it meets ROI criteria, but be aware that it's certainly not a solution for the future, and that more flexible and cost-effective alternatives are now available.

## SIP

SIP is something of a halfway house between traditional telephony and cloud communications. It's a way of adopting IP-calling without ditching your PBX investment or reinventing the wheel.

SIP Trunks is an on-premise system that modifies your existing PBX to combine a full VoIP phone system with multimedia communications in one package. SIP Trunking effectively allows you to divide your bandwidth between voice and data, leading to cost savings and easier scalability. It's not as flexible as cloud, but it does give you many of the benefits of internet voice.



## Cloud Communications

Most companies looking to replace ISDN now make the leap straight to cloud communications and Software as a Service (SaaS) solutions. That means the service is hosted in the cloud rather than on your premises, and all your calls are routed through the internet. A third party does the hosting. There are various flavours of cloud-based telephony services but they can be boiled down into two main types:

### Basic IP services

Basic Skype-like services offer full VoIP (Voice over Internet Protocol) capabilities, basic call management (like voicemail) and mobile integration, so you can make and take work calls from a smartphone. Many also offer chat and video conferencing.

### Unified Communications (UC)

UC services are complete cloud-based communications solutions in one package. They tend to include a full suite of multichannel options, like video, chat, IM and conferencing, along with collaboration tools like screen share and presence. A softphone app means you can take the service anywhere and make and take calls via handset, smartphone, computer or laptop.

Different solutions offer different things, but UC will often include powerful call handling features like auto-attendant, IVR (Interactive Voice Response), hunt groups and wallboards, making them suitable for small contact centres. Full-featured solutions also give you analytics and reporting to help you get the most from your contact teams.



With cloud communications, you don't host any equipment, so you don't have the expense of buying and maintaining it. Payment is on an OpEx model and based on a per-user-per-month licence. You can scale your service in a couple of clicks by adding or removing seats in an app or portal.

To put it simply, cloud communications takes what used to be a hardware issue and turns it into a software one. Keeping the hardware updated and maintained is somebody else's problem.



# [Upgrading to IP Voice?]

IP-voice tends to be plug and play, requiring very little in the way of set up or training. There are a couple of things to consider before upgrading, however:

## Connectivity

IP voice sends voice traffic across your internet connection, so you need the bandwidth to cope. You may already have enough, and IP voice isn't especially data hungry on its own, but capacity can be stretched if a number of employees are on calls at the same time. Video and conferencing services are more reliant on good connectivity. A provider can assess your needs and - if necessary - suggest a connectivity upgrade.

## Security and continuity

When moving to cloud telephony, you're putting your call data in somebody else's hands. Those third parties need to be secure and compliant, and if you take payments over the phone they'll specifically need MiFID and PCI compliance. Data and services should also be mirrored in more than one location, so if one server centre goes down, your service isn't affected.

## Your IP Voice options

Once your connectivity is fit for purpose you can purchase an "over the top" IP voice product. This simply means that your voice service will use the same connectivity as the rest of your data traffic. Options include:

- **SIP (Session Initiation Protocol) Trunking:** SIP Trunks modify your existing PBX to combine a full VoIP phone system with multimedia communications in one complete package.
- **Hosted voice:** This puts your telephone exchange in the cloud, giving you access from anywhere, the option to make work calls from laptops and smartphones (as opposed to desk-based handsets), and a range of powerful call management features.
- **Basic VoiP:** For small offices or home workers, a single line Voice Over IP service might be all you need.

## [The takeaway]

If you're still reliant on a traditional business phone line based on the ISDN network, a countdown of sorts has begun. Soon, you won't be able to buy any new ISDN lines. In 2025, the network will shut down for good. It's up to you whether you want to switch to a VoIP service before that date, but there are good reasons for doing so.

Efficient, effective communication is at the heart of every successful business. Trends towards more nomadic workers, and more digitally savvy customers, mean the most effective communications are now routed through the internet.

And more than that, they're hosted in the cloud. Cloud communications not only let you bundle a range of channels together in one integrated package, they let employees take a fully-featured business telephony service wherever they go. They offer easy scalability and predictable OpEx pricing.

Vaioni offers connectivity, cybersecurity, and UC services so we can design a complete end-to-end communications solution that precisely meets your business needs. If you'd like to know more, please get in touch.



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