Introduction
The Euskaltel Group is a leading Spanish telecommunications company that provides a comprehensive set of communications for individuals, institutions, and businesses. The Euskaltel Group, with its Euskaltel brand in the Basque Country, R in Galicia and Telecable in Asturias, is a leader in all the markets it serves with a focus on fiber optic-based and converged telecommunications services. In addition, its Virgin telco brand offers high-speed broadband, innovative mobile services, and cable TV to more than 23 million homes in Spain.

In summary, the Euskaltel Group offers Information and Communication Technologies (ICT) solutions for its residential and enterprise customers. It offers a wide range of technological services ranging from Internet, fixed telephony, mobile telephony, and digital television. The company helps enable the broadband to digital transformation processes, IoT (Internet of Things) solutions along with Artificial Intelligence and technology for Smart Cities and Industry 4.0.

Customer Challenges
To be effective, businesses need to create collaborative environments, so their employees are engaged and productive. Employees and customers are also driving workplace change, based on their changing expectations regarding the ability to connect with each other. Even before the global pandemic, industry experts were predicting changes in how we all work:

- As of the end of 2020, 50% of millennial workers have personal profiles that are oriented towards collaboration and social networks.
- 70% of work groups will use collaborative workflows as the primary means of communication between team members by 2022.
- 43% of employees are mobile and work away from their teams in various locations from time-to-time (remote employees).
- 75% of workers tend to use a combination of landline, mobile and PC for their communications (multi-device).

Obviously, the pandemic accelerated the need for better solutions to:

- Enable employees to work and be productive from any location or device. Employees need device access regardless of device location, device type (fixed or mobile) or work environment.
- Provide integration of communications services with collaborative tools (messaging, presence, sharing of screens, documents, and project environments).
- Assure secure and reliable solutions (assure security in uncontrolled environments while providing anytime, anywhere availability).
Customers of all sizes are migrating to more collaborative, cloud-based solutions, such as Microsoft 365 and Microsoft Teams. Cloud-based collaboration tools such as Microsoft Teams help them organize projects so that workgroups can meet virtually, regardless of employees work location, and connect on almost any device. Most users also need simple voice communications services so they can place and receive calls, transfer calls, and initiate 3-way calls to freely collaborate. These users expect to make and receive calls without requiring a physical terminal. They simply want to use their Microsoft Teams client, either on a PC/Mac or smartphone. They also want their collaboration and telephone worlds to be fully integrated, not separated as they were in the past, staying “always connected”.

**The Solution**

The Euskaltel Group offers voice integration with Microsoft Teams Direct Routing, connecting the Microsoft 365 cloud to the traditional telephone network; making it easy to use Teams collaboration services in concert with Euskaltel Group telecom services (including numbering plans and cost-effective rates). Euskaltel Group hosts software-based Session Border Controllers from Ribbon (Ribbon’s SBC SWE Lite) in their private cloud to securely connect Teams to Euskaltel Group telecom services, via SIP trunks. A dedicated SBC SWe Lite instance is created for each customer and provisioned according to each customer’s unique needs.

Microsoft Teams provides an ideal environment for workgroup collaboration including HD video conferencing, content sharing and recording. The same environment also integrates incoming and outgoing phone calls so users can connect outside of Teams. The solution uses desktop and mobile clients - so there are no physical phones required. However, they can be supported if desired.

Euskaltel offers a managed solution that allows users to integrate their existing phone numbers and Euskaltel group rates. The implementation of the solution includes user set-up as well as ongoing support and maintenance (7x24 with response time in less than 1 hour). It is easy to expand the solution as a customer adds employees or requires additional services. Euskaltel’s solution enables Teams environments to integrate with a customer’s existing PBXs, so customers can continue to leverage existing voice capabilities such as custom IVRs, contact centers, DECT wireless phones or existing integration with ERPs/CRMs, etc. Euskaltel provides connectivity to both the new and old worlds:

- SBCs integrate Teams with existing PBXs via SIP-based trunks or legacy PRI (for older equipment).
- Calls to existing desk phones can also ring on Teams desktop or mobile clients.
- Calls can be forwarded from a Teams client to a personal admin or central receptionist.

**Why Ribbon?**

Ribbon provides Microsoft-certified SBCs for Direct Routing. Its close collaboration with Microsoft assures that Microsoft's Technical Support organization is prepared to provide support for any issues that arise between a SIP trunk and the Microsoft Phone System. Ribbon has the largest portfolio of Microsoft-certified SBCs in the communications industry, backed by a worldwide support organization and the local technical support of Colabora Ingenieros, to ensure optimal equipment operation.
Use Cases

1. Teleworkers:
Allows the use of Teams clients like traditional PBX extensions so that employees can make and receive calls from the Teams client from anywhere (home, office, on-the-go, meetings, etc.) and any device (PC, tablet, mobile phone) using extension numbers (short numbers). If the employee places an outbound call, their work number appears in the Caller ID, not their personal mobile number. This capability requires the PBX to support simultaneous ring “forking” or allows the user to configure serial ringing.

2. Mobile Workers:
Enabling Direct Routing for Microsoft Teams gives employees instant access to office communications from their smartphone. Employees simply load the Teams client on their smartphone to enable employees access to voice services anywhere, at any time. There’s no special training required and no need to add special hardware or software. All conversations are automatically encrypted to prevent eavesdropping. The mobile Teams clients leverage an internet-friendly audio codec, SILK, to improve the sound quality of calls from mobile or Wi-Fi networks.

3. Elimination of Desk Phones:
Many organizations are interested in gradually replacing traditional PBX desk phones with Teams clients, especially for employees that do not make use of advanced PBX features such as calling groups, IVR, boss-admin features, etc. for staff that have no need for specialized devices such as an operator consoles, cordless phones, etc. Many users are already comfortable using a PC, softphone, and a headset. This strategy eliminates spending on new hardware and the associated maintenance contracts.