



Open Gateway

# Overview, use cases and case studies on the Carrier Billing API

Telefónica Open Gateway

September 21, 2023



# Table of Contents

**01.** Description

**02.** Characteristics of Carrier Billing

**03.** Use Cases

**04.** Case Studies

**05.** Start using Carrier Billing API!

**06.** Documentation

**07.** FAQs

**08.** Other relevant information

**Description**

01



## The Carrier Billing eliminates the need for users to enter their credit card details or other payment information manually.

With a simple click or confirmation, users can complete transactions swiftly, leading to a seamless and frictionless payment experience. This reduces the barriers to purchase and improves conversion rates for businesses.

The standardized API grants you access to several telco capabilities, such as payment processing, telco billing capabilities, and user authentication, through developer friendly interfaces.

This speeds up development and enhances app scalability, catering to diverse markets. Additionally, Unified API Access ensures a consistent and reliable payment experience for users, fostering trust across different services and telco operators.

# Features and Categorization

CAMARA	
COUNTRIES	
SECTORS	<p>MEDIA, ENTERTAINMENT &amp; XR</p> <p>TRANSPORT &amp; LOGISTICS</p>
SERVICIOS	PAYMENTS



# Characteristics of Carrier Billing

02

# Overview

## Characteristics of Carrier Billing



### Frictionless payment experience

With carrier billing, users can complete purchases with utmost ease and simplicity. Unlike traditional payment methods that may require users to input lengthy credit card details or create new accounts, carrier billing only requires a few clicks or simple confirmations to authorize the payment.



### Customer Reach

By offering carrier billing as a payment option, businesses can tap into previously untapped markets and demographics, including unbanked or underbanked individuals, young consumers without credit cards, or users who simply prefer the convenience of charging payments to their mobile bills.



### Security and trust

One of the key aspects of security in carrier billing is the **elimination of the need for users to share their credit card details** or other sensitive payment information during transactions. This significantly reduces the risk of data breaches or unauthorized access to personal financial information, providing users with peace of mind and a sense of security while making payments.



# Overview

## Characteristics of one standard Carrier Billing API



### Simplified Integration

With a standardized API, developers can seamlessly integrate carrier billing into their applications without the need for custom implementations for each telco operator. This simplifies the development process and reduces the time-to-market.

### Uniform Access to Telco Capabilities

The standardized API provides uniform access to various telco capabilities, such as payment processing, subscription management, and user authentication, through a single interface. This ensures consistency and versatility across different operators and markets.

### Enhanced User Experience

The standardized CAMARA Carrier Billing API fosters a consistent and reliable payment experience for users regardless of the telco operator involved. This uniformity builds trust and familiarity with the payment mechanism across different services and applications.



**Use Cases**

03

# Overview / Use Cases

## Gaming

The gaming industry has experienced significant growth, particularly in the mobile gaming segment. The Carrier Billing CAMARA API provides a seamless and convenient payment method for **in-app purchases**, game subscriptions, and virtual currency top-ups. With Carrier Billing, gamers can make purchases without the need for credit cards or additional authentication, leading to higher conversion rates and enhanced user experience. The API streamlines the payment process, allowing gamers to enjoy uninterrupted gameplay while ensuring secure and efficient transactions.



### OTHER RELATED APIs

**QoD Mobile**

**SECTOR**

MEDIA, ENTERTAINMENT & XR

**SERVICE**

PAYMENTS

### DEVELOPER NEEDS

- Provide mobile customers with access to a gaming library through plans, enabling players to enjoy a wide range of games at their convenience, anytime and anywhere, based on their selected plan.
- Optimize and make the connection more stable for a better gaming experience (5G use case)
- Making gaming more accessible by paying through the phone bill

# Overview / Use Cases

## Public Transport

As cities embrace smart solutions, the Mobility sector plays a crucial role in providing efficient transportation services. Carrier Billing via the CAMARA API offers an alternative payment method for various mobility services, such as **ride-sharing**, public transportation, parking, and bike-sharing. Users can easily pay for these services directly through their mobile carrier accounts, eliminating the need for separate payment cards or cash. The CAMARA API enables seamless integration with mobility service providers, ensuring a convenient and frictionless payment experience for users in smart city environments.



### OTHER RELATED APIs

**Location Verification**

#### SECTOR

TRANSPORT & LOGISTICS

#### SERVICE

PAYMENTS

### DEVELOPER NEEDS

- Provide solutions for people to move easily around/in the city, making it affordable for the citizens
- Verifying that a rented vehicle (bike sharing) is being used by the person who rented it by checking the location of both.
- Making smart cities services more accessible by paying through the phone bill

# Overview / Use Cases

## XR & VR

In virtual reality (VR) and extended reality (XR) environments, the traditional payment methods, such as credit cards, present significant challenges due to the immersive nature of the experience. Users wearing VR/XR headsets find it difficult to access and enter credit card information, disrupting the seamless and immersive experience they seek. However, integrating carrier billing as a payment option can revolutionize the payment process in VR/XR environments.

Carrier billing offers a simple and convenient alternative to credit card payments. With carrier billing, users only need to provide their mobile phone number to complete a transaction.



### OTHER RELATED APIs

**QoD Mobile**

#### SECTOR

MEDIA, ENTERTAINMENT & XR

#### SERVICE

PAYMENTS

### DEVELOPER NEEDS

- **Seamless Integration:** Developers require a payment solution that effortlessly integrates into their applications, ensuring a smooth user experience during transactions.
- **Immersive payment experience with carrier billing:** Seamlessly complete transactions in virtual environments without leaving the immersive context.

# Overview / Use Cases

## Tollgate

Tollgate payments pose unique challenges for motorists, especially in traditional cash or credit card-based systems where manually handling transactions can lead to delays and congestion. Integrating carrier billing as a payment method at tollgates simplifies the process for drivers, enabling them to associate their mobile phone numbers during the onboarding phase.

With carrier billing, drivers can effortlessly complete toll transactions by simply confirming the payment through their phones, eliminating the need for credit cards and the hassle of entering sensitive information at each toll booth. This streamlined payment method reduces waiting times, enhances the efficiency of toll road systems, and offers a user-friendly experience for motorists, ultimately contributing to a smoother and more seamless tollgate payment process.



<p><b>OTHER RELATED APIs</b></p> <p><b>Location Verification</b></p>	<p><b>SECTOR</b></p>	<p>TRANSPORT &amp; LOGISTICS</p>	<p><b>DEVELOPER NEEDS</b></p> <ul style="list-style-type: none"> <li>Carrier billing streamlines tollgate payments, offering a user-friendly and seamless option without the need for credit card entry or cash handling at toll booths.</li> <li>During the onboarding process, motorists can easily associate their mobile phone numbers, simplifying carrier billing setup for future tollgate transactions.</li> <li>Integrating carrier billing enhances toll collection efficiency, reducing waiting times and congestion at toll booths, ultimately optimizing the overall toll road system.</li> </ul>
<p><b>SERVICE</b></p>	<p>PAYMENTS</p>		

**Case Studies**

04

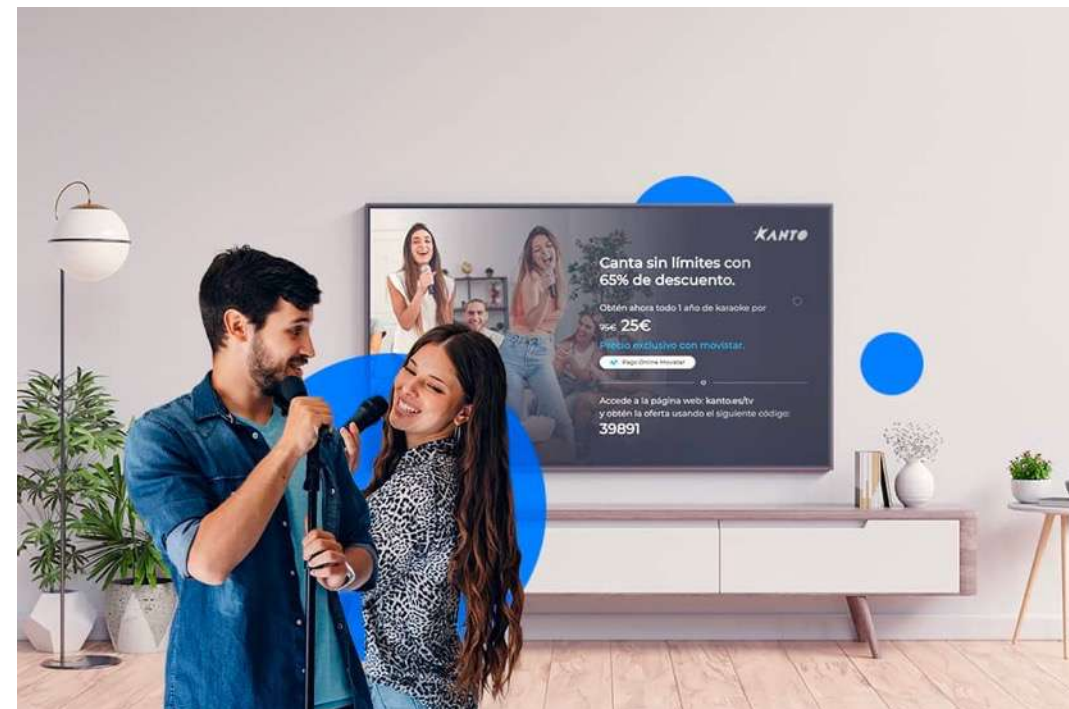


# Overview / Case Studies

## KANTO

Kanto's Living App is one of the digital experiences available in the "Apps" section of Movistar Plus+. It offers a catalogue of songs from different genres to transform users' living rooms into a karaoke venue.

As a new feature, customers now have the option to pay for a subscription to enjoy unlimited access to the service for one year, in a simple and secure manner. The cost of the annual premium plan is charged directly to the Movistar invoice. This is made possible through the Open Gateway CAMARA Carrier Billing API, which transforms telecommunications networks into future-ready platforms. This initiative enables Telefónica to open up telco capabilities to a standardized and interoperable environment through global APIs. It also allows service providers like Kanto to seamlessly communicate with the network in real-time. The Carrier Billing API is a reality that will benefit users.



### PARTNERS



### SECTOR

MEDIA, ENTERTAINMENT & XR





**Start using  
Carrier Billing API!**

05

# Getting Started with Carrier Billing API

Harness the power of Open Gateway and seamlessly integrate our API services into your app

Follow these initial steps for seamless API services to Developers within Channel Partners' environments, including Operators API Services integration for a cohesive product experience and efficient collaboration among stakeholders.



**Documentation**

06

# Official Carrier Billing CAMARA API Documentation

## Over CAMARA

CAMARA is an open-source project within Linux Foundation to define, develop and test the APIs. CAMARA works in close collaboration with the GSMA Operator Platform Group to align API requirements and publish API definitions and APIs. Harmonization of APIs is achieved through fast and agile created working code with developer-friendly documentation. API definitions and reference implementations are free to use (Apache2.0 license).

## Camara is supported by:



### Meetings

- Regular Virtual Meetings
- Bi-weekly on Wednesdays
- 16:00 to 17:00 CET

### Contributor ship & Mailing List

✓ [Subscribe](#)

### CCB (Subproject)

✓ [CAMARA Carrier Billing GitHub](#)

**FAQs**

07

# API Carrier Billing / FAQs

## What is the CAMARA Carrier Billing API?

The CAMARA Carrier Billing API is a standardized API that enables developers to integrate carrier billing as a payment method in their applications.

## What is the Unified API Access feature of the CAMARA Carrier Billing API?

Unified API Access provides a single, standardized API for accessing telco capabilities across different network operators, simplifying integration for developers.

## How does carrier billing simplify payment experiences for users?

Carrier billing allows users to complete purchases with minimal input, eliminating the need for credit card details or additional authentication.

## How does the CAMARA Carrier Billing API ensure consistency in payment experiences for users?

The standardized API provides uniform access to telco capabilities, ensuring a consistent and reliable payment experience regardless of the telco operator involved.

## What security measures does carrier billing employ to protect user data?

Carrier billing eliminates the need for users to share sensitive payment information, reducing the risk of data breaches and unauthorized access to personal financial details like credit card information.

## What is the role of the GSMA in standardizing the carrier billing process?

The GSMA plays a key role in setting standards and guidelines for carrier billing, ensuring consistency and interoperability across the industry.

# API Carrier Billing / FAQs

## How can businesses benefit from offering carrier billing as a payment option?

By offering carrier billing, businesses can tap into untapped markets and demographics, including unbanked or underbanked individuals, young consumers without credit cards, and users who prefer mobile billing.

## What types of services can benefit from carrier billing integration?

A wide range of services, including digital content subscriptions, app purchases, online services, and in-game purchases, can greatly benefit from carrier billing integration. This integration is particularly relevant in Europe, where all these services fall under the scope of the Payment Services Directive 2 (PSD2) directive. PSD2 aims to enhance consumer protection, foster innovation, and promote secure and efficient payment methods, making carrier billing a favorable option for businesses operating in the European market.

## What are the benefits of carrier billing for mobile gaming?

Carrier billing offers a simple and secure payment method for in-app purchases, virtual currency top-ups, and game subscriptions, leading to higher conversion rates and improved user experience.

## Do users need to sign up for carrier billing?

In most cases, users are automatically eligible for carrier billing, as it is typically offered by their mobile network operator. In cases where the user does not have the carrier billing service activated, they simply need to accept the terms and conditions of the service in the mobile line.

## What regulations does Carrier Billing comply with?

Carrier billing complies with PSD2 regulations, including the Strong Customer Authentication requirement for enhanced security. It ensures secure and compliant payment processing for users by implementing necessary authentication measures and adhering to transaction limits set by the directive (300 EUR/moth and 50 EUR/transaction). This provides a secure and trustworthy payment method, meeting legal requirements in the European Union's payment services landscape.



**Other relevant  
information**

08

# Discover more

## Join our Developer Hub

Join the [Telefónica Open Gateway Developer Hub](#) to test our APIs, develop use cases with the power of the network and improve user experiences.

## Enroll our Partner Program

If you are interested in the potential of Telefónica Open Gateway and you are willing to collaborate with us, you can [enroll our exclusive Partner Program](#).

## Subscribe our newsletter

Find out all about the latest of Telefónica Open Gateway in our [newsletter](#).

## Contact our experts

If you have any questions about the initiative, don't hesitate to [contact our experts](#).





Telefónica