Telefónica

Open Gateway

SIM Swap API

Preventing SIM Swap Fraud for Secure Digital Transactions

GSMA™ CAMARA THE TELCO GLOBAL API ALLIANCE

Open Gateway is a global initiative, **enabling telco operators to expose core network capabilities** as standardized, interoperable APIs.

- **Global & Multi-telco:** Backed by GSMA, adopted by Telcos Worldwide
- **Standardized & Secure:** Built on CAMARA open standards, privacy-first by design.
- **Trusted Network Intelligence:** Telco-grade accuracy and trust.

80 Operator Groups

291 Mobile Networks

>80% Network Connections

SIM Swap **fraud creates** critical vulnerabilities

Account Takeovers

SIM swap attacks lead to unauthorized access and stolen identities.

- Customers lose control of accounts
- Businesses face fraud loses

48%

of account takeover cases involve mobile phone accounts (Cifas)

Transaction Fraud

Fraudsters exploit SIM changes to authorize high-value transactions.

- Payments processed without checks
- Increased financial exposure

$11.5k

Average financial loss to consumer per incident (ICCC)

Identity Compromise

SIM swaps enable identity theft during recovery and onboarding.

- Sensitive data accessed easily
- Social and banking profiles hijacked

1055%

YoY rise in SIM Swap attacks in the UK (Cifas)

A solution is required that delivers **real-time** SIM integrity checks to **stop fraud** before it happens…

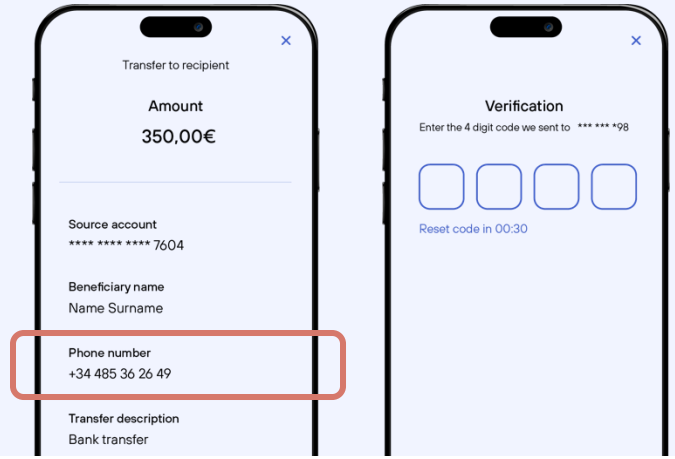
SIM Swap Detection – The New Standard in **Mobile Fraud Prevention**

Moving beyond static checks to **real-time** SIM integrity verification, **reducing fraud** risk, improving compliance, and delivering a **frictionless user experience** across platforms.

SIM Swap API **prevents fraud** in real time

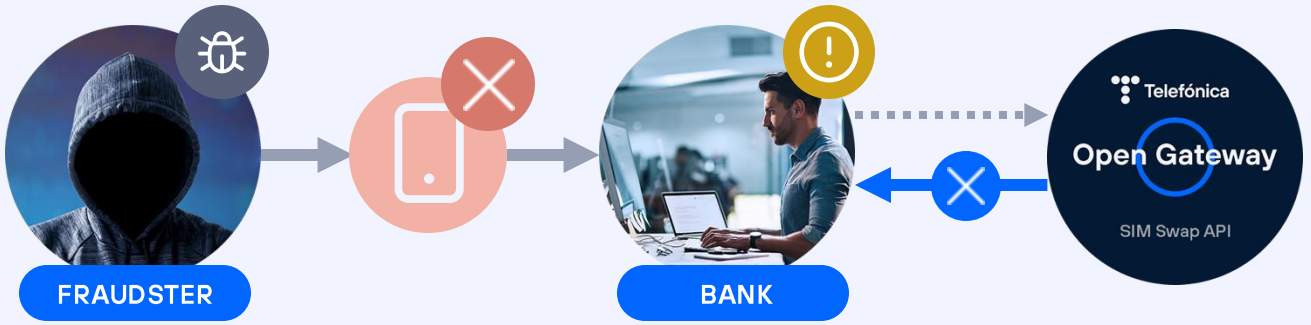
Checks if a user's SIM card has recently been changed, aiding businesses prevent fraud by alerting them to potential unauthorized account access, enhancing security during logins and transactions.

WHITOUT SIM SWAP API



A fraudster has obtained a new SIM card through phishing, and can now receive SMSs to confirm transactions or to takeover an account.

WITH SIM SWAP API



A business queries the SIM Swap API and verifies there has been a recent SIM card exchange. The transaction can be blocked, additional authentication can be requested, and the customer alerted.

The SIM Swap API is applicable **to different use cases**

Bank Login Security

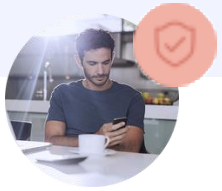
Detect and block fraudulent SIM swaps before mobile banking access to prevent account takeover and financial loss.

Transaction Protection

Validate SIM integrity before high-value transfers to reduce fraud risk and safeguard customer funds.

Wallet Migration Safety

Secure digital wallets during device changes to prevent unauthorized access and identity compromise.



Account Recovery Control

Ensure SIM stability before password resets to stop identity theft and unauthorized account recovery attempts.

Credit Risk Check

Detect SIM swap before instant loan approval to avoid fraudulent credit issuance and financial exposure.

Social Account Defence

Prevent SIM-based hijacks of social profiles during authentication processes and account verification steps.

SIM Swap API **benefits**

Fraud Reduction

Real-time SIM swap detection prevents identity theft and unauthorized transactions across multiple digital and financial services.

Cost Efficiency

Reduce manual fraud investigations and financial losses through automated SIM swap detection and prevention.

Frictionless Verification

Enable seamless checks without disrupting legitimate user experience or slowing down onboarding processes.

Regulatory Compliance

Meet anti-fraud and KYC requirements for financial institutions and digital service providers globally.

Enhanced Security

Protect sensitive accounts and transactions across banking, retail, and digital platforms with robust SIM integrity checks.

Future-Proof Services

Enable proactive fraud alerts and advanced risk scoring for evolving threats and new business models.

Real world benefits and added value **for business**

✓ **SIM Swap API**

Itaú, Brazil's largest private bank, uses the SIM Swap API to prevent fraud and verify identities, ensuring secure digital transactions for customers.

✓ **SIM Swap API**

BBVA, a leading European bank, applies the SIM Swap API to safeguard accounts and confirm identities, delivering secure transactions and protecting customers.

Next Steps to start using the SIM Swap API

Sandbox Testing

✓ Join Partner Program ✓ Test use case ✓ PRO environment

Try & Buy

✓ Proof of Concept ✓ Validate use case ✓ Business model discussion

Related Open Gateway APIs: to be combined with SIM Swap API in particular use case for added value

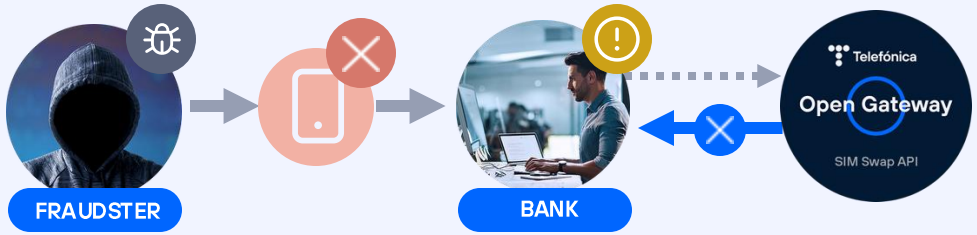
Device Swap API	Queries network data to detect recent changes in a user's device IMEI, enabling real-time risk assessment and enhanced fraud prevention.
KYC - Match API	Validates identity information against trusted operator data, using a sophisticated scoring system to provide a reliable approach to rapid online identity verification, onboarding and security.
Number Verification API	Authenticates the user of an app or online service by checking if the phone number they provide matches the one associated with the device they are currently using.

Telefónica

opengateway.telefonica.com

SIM Swap API: Real-Time Detection for Fraud Prevention

Checks if a user's SIM card has recently been changed, aiding businesses prevent fraud by alerting them to potential unauthorized account access, enhancing security during logins and transactions.



Secure Financial Access

Prevent SIM swap fraud before banking logins, **high-value transactions**, and credit approvals to **protect assets** and **customer trust**.

Protect Digital Identity

Safeguard wallets, social accounts, and **sensitive profiles** during device changes or account recovery processes to **reduce risk**.

Enable Risk-Based Decisions

Validate **SIM integrity** for instant credit, onboarding, and fraud-sensitive services in **real time** to minimize exposure.

Comprehensive Fraud Protection

Detect SIM changes instantly to stop account takeovers and unauthorized transactions across multiple platforms and services.

Cost & Efficiency Optimization

Reduce operational burden and fraud-related costs by automating SIM integrity checks during login, recovery and transactions.

Compliance & Future Readiness

Verify SIM integrity using trusted telco data and network capabilities to meet PSD3, GDPR and secure access requirements.

CHECK

Request	phone number and max age (1 to 2400 hours; default is 240 hours)
Response	True/False (depending on if the SIM has been changed

RETRIEVE

Request	phone number
Response	YYYY-MM-DD HH:MM:SS (date & time of last change