gms

GMS Flash Call Management

Traffic Management

Detect and mitigate flash calls and TTS to
prevent A2P SMS revenue drop

A new industry reality impacting Mobile Operators
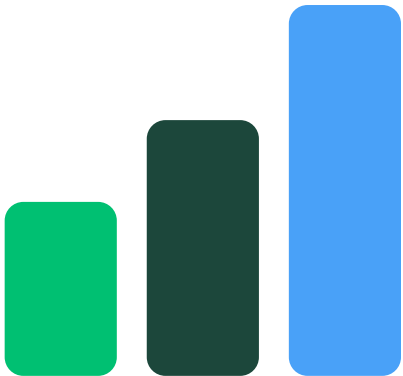
Why such an important flash call adoption?

60%

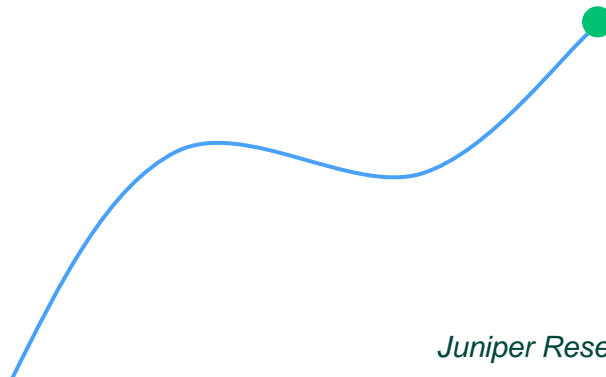Cost reduction

Using flash calls over SMS

22.8 billion

Flash call authentications **by 2026**

Operators to lose

$1.3 Billion

To flash calling over the next 5 years

Juniper Research

What are the next steps to take?

Mitigating or monetising flash calls to minimise revenue losses

Flash Calls and TTS
Challenges

A2P markets disruption

Revenue loss on A2P SMS

Limited capabilities

Existing MNO firewalls are not equipped to prevent flash call and TTS

Detection issue

Flash calls are difficult to trace and TTC difficult to manage

Impact on CX

Manually entering the OTP via TTS can lead to error and frustration

Flash Call and TTS

What is the difference?

Flash Calls

A Flash call is a near-instant dropped call that is automatically placed to a mobile number, usually as part of an authentication process known as flash call verification

TTS

Text-to-speech (TTS) technology transforms written text into spoken words, mimicking the natural flow and intonation of human speech

Flash Call

How does it work?

1 **Authentication request**

The Enterprise / OTT / App sends a user-authentication request

2 **Leveraging operator's gateways**

Flash call providers place a call using number provided, leveraging operators' gateways. The MSISDN is used to identify user

3 **Zero duration call**

The call is placed from MNO to mobile subscriber.
A specific A-party number is used to authenticate call.

4 **The call log is checked**

For Android devices, last digits of the CLI are used for the authentication automatically. For iOS devices, OTP must be entered manually

5 **Authentication confirmation**

The authentication confirmation is sent back to the enterprise

OTT

1   **5**

Flash Call
Provider

2   **4**

MNO

3

Mobile
subscriber
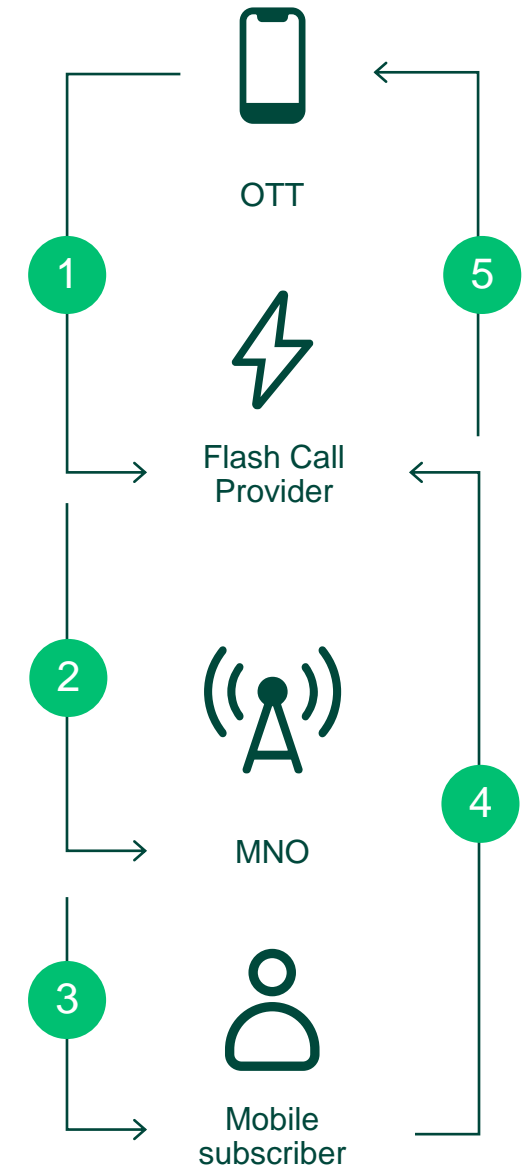
Why is it an issue?

1 **Revenue Losses**

Flash call increase leads to a decrease in SMS revenue for operators.

2 **Security Concerns**

Flash calls can be exploited for fraudulent activities

3 **Resource strain**

Handling a large number of flash calls can strain network resources

4 **Regulatory Compliance**

Unclear regulations for Mobile Operators

GMS Flash Call Management solution

Handling flash and TTS calls

GMS Flash Call Management
Goal

Detection

- Traffic analysis
- Flash call and TTS AI-ML driven detection
- Abnormal calls patterns identification

Prevention

- Flash Call Mitigation and TTS Management
- Dynamic calls handling
- Revenue leakage prevention

Monetisation

- Flash calls identification and data provided for billing

GMS Flash Call Management
AI-powered solution

A2P traffic and revenue recovery

- Messaging revenue protection
- Flash and TTS calls monetisation
- Automated correlation with A2P SMS

AI-driven technology

- ML / AI real-time detection of flash and TTS calls
- Multiprotocol support
- Dynamic call handling and cross-domain analytics
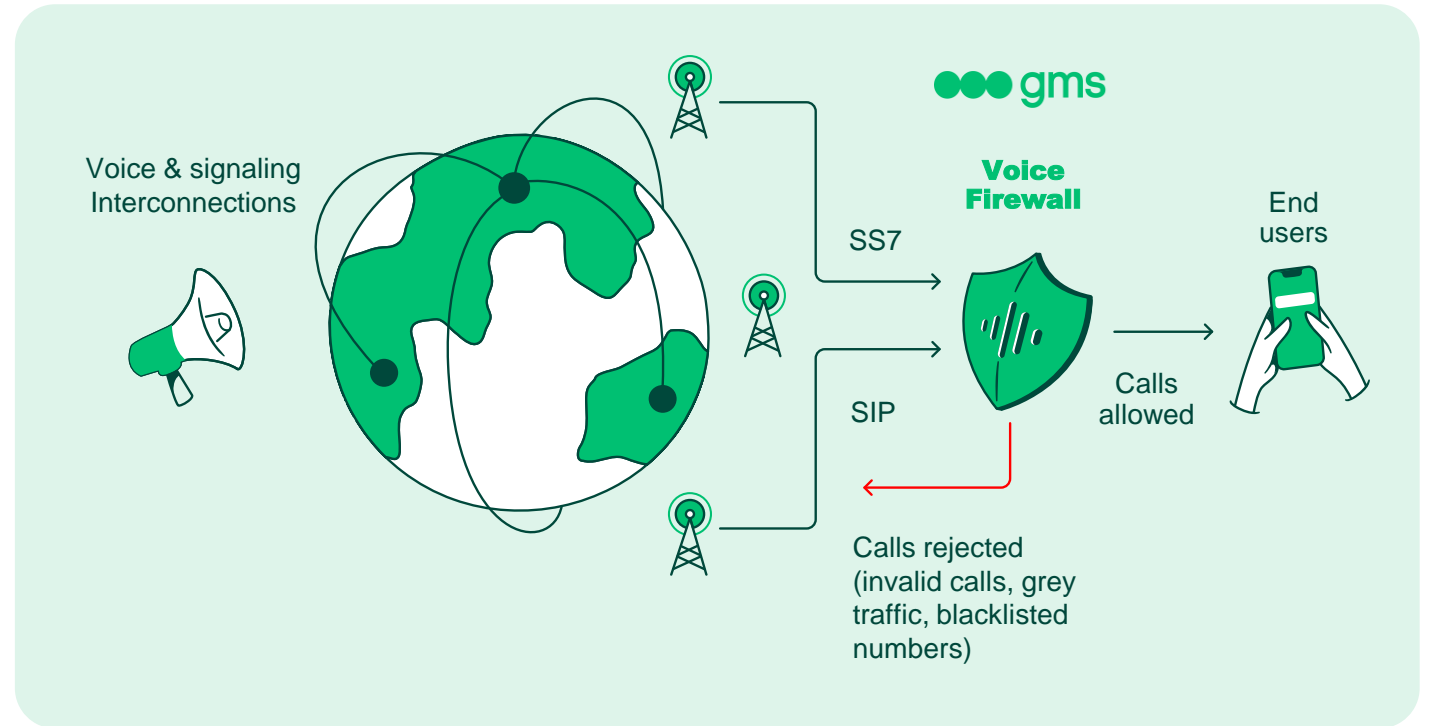
Flexible solution

- Flexible commercial models
- Quick and cost-efficient deployment
- Supports multiple protocols like SIP and CAMEL

Reliable and scalable suite

- Market-tested solution
- Scalable to full-fledged Voice FW

Empowering you to regain control

Flash Call Management solution enables Mobile Operators to detect, manage, monetise and mitigate flash calls and TTS

- Mobile Operators choose the way they want to manage flash calls (mitigation or monetisation)

- Flash Call Management solution is integrated in the MNO core network in active mode

- We monitor all inbound voice traffic entering the MNO's network (SS7, SIP) and take appropriate actions on real-time basis

Voice & signaling Interconnections

●●● gms

Voice Firewall

SS7

SIP

Calls allowed

End users

Calls rejected (invalid calls, grey traffic, blacklisted numbers)

Features

AI-driven and ML detection algorithms

Proactive and intelligent flash calls detection

- Highly Accurate 99% detection engine
- Multiple active checks support
- Call patterns and behaviors analysis

Fully automated E2E solution

Real-time mitigation and monetisation

- Real-time call profiling
- Dynamic call handling
- Workflows and process automation

Smart calls handling

Multiple actions and rules-sets support

- Call block and redirection
- Temporary call hold
- CLI suppression/ modification

Monetisation capability

New revenue stream for MNOs

- Voice network streamlining (blocking unwanted flash calls, monetising desired ones)

Ease of integration

Flexible and adaptable solution

- Standard protocols integrations like SIP and CAMEL

Cross-domain correlation

Data analysis combined from different domains

- Flash call to SMS conversion volumes
- App generating flash calls

TTS call management

Industry Challenges

TTS calls preventions presents some risks:

- False positives
- Voice revenue dip

Limitation of available solutions in the market

- Unlike flash calls, TTS is an answered call, hence it is the challenge to separate TTS from a genuine call
- Solutions available in the market are not capable of TTS accurate detection

GMS unique advantage

- GMS AI & ML algorithms can accurately detect and identify TTS calls
- Proven track record in TTS calls handling
- Minimal false positives

Continuous solution evolution

Continuous trends and threats monitoring to adjust our solution to market needs

AI Voice Scam

Solution automation

Full scale voice Firewall

Regulations

GMS FCM fulfills all regulatory and technical standards

There are no specific flash call related regulations in majority of the regions.

However, we are compliant with telco regulations and get complete support of local entities and MNOs for flash call management.

GSMA compliant

ITU-T, 3GPP and IEFT standards compliant

Call control plane only

Reporting

Analytics and system performance

- Traffic dashboards
- Hourly / Daily / Weekly flash and TTS call volumes
- Traffic trends (flash and TTS calls)
- Top apps generating flash and TTS calls
- Flash call conversion to A2P SMS
- Carrier information
- Resource utilisations
- System health check

Flash Call Management benefits

Enhanced network security

Ensuring a fully protected environment

Revenue Protection

Preventing revenue leakage and enabling A2P SMS traffic recovery

Improved service quality

Reducing network congestion and ensuring reliable service for users

Seamless Integration

Minimising operational disruption and ensuring immediate protection

Process Automation

Enabling effective flash call management without need for human intervention

Real-time evaluation

Minimising the risk of false positive

Project launched
and Testimonials

Market tested solution

Tested and approved

Solution launch: 2022
Pilot project and first customer onboarding: Jan 2023

Markets

**Pakistan – Bangladesh – Uzbekistan
Honduras – Mexico – Nigeria**

- Active with **75 millions** subscribers

- **Live with 4 Mobile Operators** located in 3 different countries

- Deployment stage with **5 Mobile Operators** in 3 countries

Trusted by

"

GMS team is highly knowledgeable

GMS has provided "Flash Call Management" product since December 2023 to regulate Banglalink's inbound voice traffic and manage flash calls very effectively, which enables establishing an efficient and secure voice traffic management and regaining control over A2P SMS traffic. The implementation and operation of the Flash Call Management by GMS was found satisfactory by the business team.

KM Zakaria
Director Procurement & Supply chain at Banglalink

GMS Flash Call Management

banglalink

"

Reliable and trusted partner

GMS Flash Call Management is used by PTCL since December 2023.

GMS has deployed its Flash calls and Text-to-speech flash calls in an effective and efficient manner.

It also enables us to improve our overall voice network monitoring and efficiency.

We can confirm that we haven't observed any major problems after the deployment of GMS Fash Call Management solution and are satisfied with tis implementation and performance in terms of disrupting the flash call channel.

Qaisar Hanif
Group Director International Solutions Sales

Solution

GMS Flash Call Management

"

GMS solution is a perfect fit

GMS solution has expanded our ability to identify and block flash calls, making a significant contribution to the creation of a secure and efficient call management system. We are pleased with its performance and believe that GMS solution is a perfect fit for our customer satisfaction goal.

B.S Irdzhanov
Deputy Director of the Security Department at Ucell

Solutions

GMS SMS Firewall

GMS Flash Call Management

Ucell

Greenlight Tomorrow.

gms

gms.net