

# Product & Services Catalog 2024



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MOBILE NETWORK SYSTEMS

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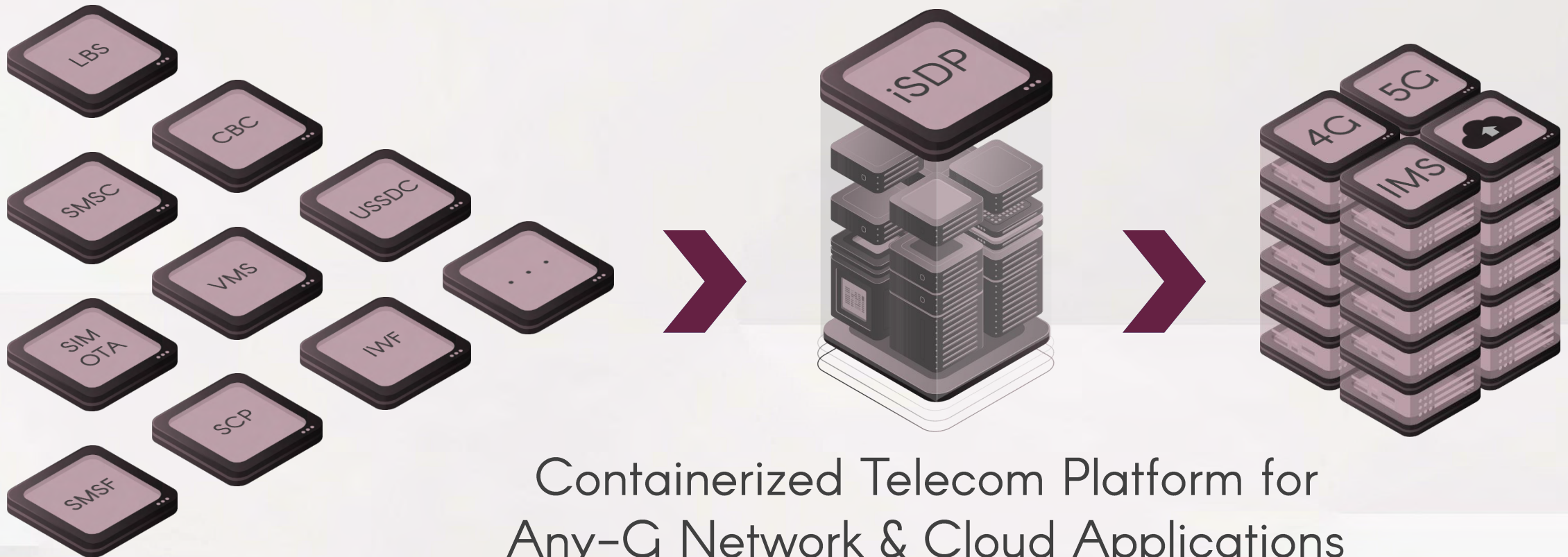
# About Opencode Systems

Opencode Systems is a telecommunications solutions provider, dedicated to open systems for any Generation and Telco-over-Cloud single- or multi-tenant mobile networks. Our patented and specialized converged services, multi-channel core network technology, Network Browser & Studio, are invisible to consumers but underlie many of the mobile services they use.

Built on-top of that technology, Opencode iSDP is the Super Telecom Application Server (Super TAS) running safely hundreds of complex, network applications while radically reducing development, go-live and operation cost.

Opencode iSDP is the market leading service delivery platform and preferred choice for the open and creative mobile network.

# Opencode iSDP Platform at a Glance



Containerized Telecom Platform for  
Any-G Network & Cloud Applications



# Patents

## Cutting Edge Mobile Network Innovation

In addition to market recognition, Opencode technology is leading several telecom areas such as Open and Converged Services Networks, Multi-channel Broadcast, Core Network and Media Intelligence. Our inventions are patented by EU and US patent offices.



# Client References



# Client Locations



# iSDP R5-S Platform

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# Opencode iSDP Super TAS

Market-leading Do-It-Yourself Telecom Application Server

Converged Service Delivery Platform using cutting-edge Opencode Network Browser & Studio. It delivers and orchestrates open services, access channels and networks on a dedicated, private or public cloud. Delivered also turnkey with composable HW and virtual infrastructure.

# Opencode Studio

## IDE for Converged Network Services and Mobile Apps

End-to-end multi-channel, multi-provider and multi-network Service Creation Environment for developing, testing and deploying sophisticated network services and mobile apps. Allows effortless on-premises and in-the-cloud service deployment.

# Opencode Network Browser

## Game-changing Open Services Telecom Engine

Integrate, execute and orchestrate on a single or multiple instances hundreds of complex and concurrent multi-channel open telecom applications without hassle. Have the freedom and versatility to consolidate and elevate Any-G data, messaging and voice services.

# Opencode Network Bubbles

## Visual Service Creation Environment

Simplifies service creation by introducing visual service design tools. Easily combines front-end subscriber interaction with back-end mobile network actions. Turns network services development into simple visual flows, thus reducing required operator's expertise and go-live schedule.



# Opencode Core Gateways

## 5G/4G/3G/2G Core Mobile Network Integration

Myriad of Any-G gateways that allow quick integration regardless of supported network standards or manufacturers. A built-in gateway intelligence removes deployment and scaling complexity so network applications can truly focus on creativity and end-user value.

# Opencode IT Gateways

## Flexible and Quick Integration of the IT Ecosystem

Big variety of server, client and web service interfaces that cover the latest IT standards and vendor systems. More than 50 off-the-shelf protocols allow communication with Telecom and Information systems, such as OCS, BSS, OSS, CRM, CVM, third parties and Clouds.

# Opencode File Processor

## Enabling Event-driven Network Services

Performs processing and analysis of different file types, like CDRs, CSV files, log files or any other source. Detects configured simple or composite events and triggers execution of service logic. Enables launching services, like beep call, call notification, fraud detection, subscriber lifecycle management, etc.

# Opencode Security Shield

## Improved Security on All Levels

iSDP R5-S comes with a configurable security layer, covering requirements from the Open Web Application Security Project and the Center for Internet Security. Internet and Partner exposure of platform services, application web GUIs, and APIs can be also enabled on a secured manner.

# Opencode Statistics Dashboard

## Freedom to Customize Application Statistics and Reports

Provides a consolidated statistics dashboard for all applications, components, services and configurations. Allows iSDP administrators to build their statistics and reports, and display them in a customized platform dashboard.

# Opencode Trace Viewer

## Reducing Network Investigation and Analysis Time

Tracks network information about subscribers and sessions by searching in system logs of all iSDP platform components and exchanges with external systems. Search is flexible and can be based on various parameters, such as MSISDN, error code, or free text. Radically reduces investigation efforts.

# Opencode Identity & Account Manager

## Secure and Flexible User Access Management

Allows implementing custom access rules and roles according to the MNO's organization and security policy. Manages configurable user password strength rules, lifecycle, and privileges both on individual and group level. Enables Multi-Factor Authentication for defined groups.

# iSDP R5-S Add-ons

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# Opencode Network API

## Effortless Exposure of Network and Service Assets

Transforms services into REST/SOAP APIs with just a few clicks.

Offers configurable input/output parameters and validation, automatic WSDL file generation, authentication and authorization, statistics and documentation. Can be upgraded with Opencode Network API Plus.

# Opencode Network API Plus

## Predefined Set of Network APIs

Ready-to-use APIs for an easier and faster way to retrieve subscriber location, look-up in MNP, generate one-time password, send SMS and OTA messages, and much more. Can be used by applications running on iSDP or on external systems, like CRM, Web Portal, Mobile Apps, etc.

# Opencode Encryption Service

## Secure Network Data Exchanges

This Network Browser plugin secures in real-time sensitive service data that circulates in the network. It uses symmetric/asymmetric algorithms like 3DES, RSA, AES, Base64, etc. Integrates with Hardware Security Module (HSM). Applicable for services like SIM, identity masking, mobile payments, etc.

# Opencode Load Balancer

## Seamless Traffic Balancing with a Single or Multisite Setup

Enables transparent traffic load balancing through HTTP and other protocols. Hides the platform complexity behind a single node and enables service exposure. Performs seamless traffic balancing between multiple sites and simplifies integrations to external networks and applications.

# Opencode Event Notification Service

## Timely Notifications for Platform and Service Events

Can be triggered by any iSDP component and application. Real-time notifications are sent in case of high traffic, resource limit, application reaching a threshold, etc. Notification channels are SMS and e-mail. Recipient lists can be conveniently configured.

# Opencode Telemetry Gateway

## Monitor Remotely Platform Metrics, Alarms and KPIs

Allows exposure of iSDP platform metrics, alarms and KPIs via different monitoring system interfaces. Monitoring systems, like Mito KPI Tool and Prometheus, can consolidate and process different iSDP system data. Detailed alarm notifications are sent via SMS or e-mail to administrators.

# Opencode Probing Gateway

## Subtle Source of Network Intelligence

Acts as a non-intrusive listener and provides valuable intelligence to services, like geofencing, network optimization and end-user marketing. Notifies applications in real time about identified network events, such as change of subscriber location, on- and off-net call cases, call drops, etc.

# Opencode Speech Services

## New Opportunities for Voice and Network Services

Enables real-time voice transformation, filtering, speech-to-text, text-to-speech and language translation in voice network applications. Opens horizons to new applications, such as fun voice changes, in-call translation, multi-language call centers, voicemail-to-text, text-to-voice SMS, etc.



# iSDP R5-S Cloud

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# iSDP on Containers

## High Efficiency with Less Resources

OpenCode iSDP can be deployed on containers, allowing flexible node organization, deployment, scaling, maintenance and relocation. Allows higher level of application isolation while making farther optimization of hardware resources possible. Shortens delivery and time to market.

# iSDP on a Dedicated Cloud

## More Applications, Less Infrastructure and Hardware

When iSDP is crowded with resource-intensive services, it can be conveniently delivered on a dedicated hyper-converged, virtualized or containerized iSDP cloud. This safely reduces hardware footprint by at least a factor of 3, raises software flexibility, and enables seamless growth.

# iSDP on a Private Cloud

## Higher Platform Return on Lower Budget

With NFVI, it provides up/down, in/out, live scaling of Opencode platform and its applications by automatically managing the assigned private cloud HW resources and Virtual Machines. Supports containerization for even higher application density within the hyper-converged architecture.

## iSDP on a SaaS Cloud

Deploy on a World-class Cloud (AWS, Azure, GCP)

Opencode iSDP can be offered as Software-as-a-Service. Thus, OPEX-driven MNOs and MVNOs can launch from a world-class cloud without investing in own infrastructure and within a much shorter time-to-market period. The Cloud provider can be conveniently contracted by Opencode.

# Location & Emergency

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## OC Emergency Alerting Portal

### One Alerting Place with All Channels

Enables alert broadcasting over multiple channels. Integrates with CBC, LB-SMS, TV, radio, signage, sirens and social networks. Manages alerts and templates with specific channel parameters. Comes with state-of-the-art geo module for a mint alert accuracy, user reach and impact analysis.

# OC Cell Broadcast Center (iCBC)

## Location-based and Early Warning Mass Broadcast

Allows government agencies and MNOs to broadcast public alerts to all-G mobile users in certain areas. Integrates with Alerting Portals via CAP and APIs. Supports DBGF (Device-Based Geo-Fencing) and ETWS (Earthquake & Tsunami Warning System). Provides data about subscriber density per cell.



# OC Cell Broadcast Entity (iCBE)

## Reverse-112 and Reverse-911 Early Warning Emission

iCBE is an environment for broadcasting of emergency messages to any location nationwide. It handles government agencies, broadcast networks and can reach the population simultaneously via multiple channels. Also, provides area selection on GIS-enabled maps or by using Cell Groups.

## OC Alert Broker

### Orchestrate Alert Delivery Across All Broadcast Systems

Allows authorities with Emergency Alert Portals to integrate and manage easily variety of broadcast systems. The Alert Broker receives alerts via CAP and APIs, processes and routes them to network and channel gateways like CBC, LB-SMS, TV, radio, signage, sirens, social networks and OTTs.

## OC Channel Broadcast eXpander (iCBX)

### Add Easily New Alert Broadcast Channels

Allows adding new alert channels such as TV, web feed, Social Networks and OTTs, Mobile Apps, sirens and public signs. Integrates with channel-specialized gateways and adapts flexibly to the channel specifics, making the addition of any new channel easy and without hassle.

## OC Location-based SMS (iLB-SMS)

### Accurate Geo-targeting and SMS Broadcasting

Delivers mass notifications and alerts to mobile users within areas of interest. Integrates with Emergency Alert Portals, CBEs and third parties. Manages alert priority campaigns and bypasses core network for instant message delivery. Builds real-time database about user location and density per cell.

## OC Emergency Location Gateway

### Add Location Data to Emergency Calls and SMS

Assists subscriber emergency and SMS calling by retrieving subscriber network location and passing it to the designated emergency services' end-points, such as 911 and 112 CRM. Supports various network protocols, like SIP, Diameter, MAP, CAMEL. Acts also as an AML GW to process and transmit GPS data.

# OC Subscriber Location Database

## Up-to-date Real-time Geolocation of All Subscribers

Builds and maintains accurately the subscriber location database for services like geofencing, mass alerting, and nation-wide heatmaps. Passively and actively integrates with All-G core and radio networks. Supports anonymization when integrated to third parties and agencies.

## OC Location Resource Function (iLRF)

### Location-Based Routing of Emergency Calls

Retrieves subscriber location during emergency call from several sources and provides routing information to e-CSCF in order to forward the call to the adequate PSAP. Can provide emergency caller location over a Web GUI or through APIs. Conforms to 3GPP TS 23.167.

# OC Cell Lock & Home Zone Services

## Location-Based Mobile and Broadband Services

Allows MNOs to launch mobile network services with limited mobility, such as fixed broadband Internet, calling and messaging. Helps winning new customers faster from competitor ISPs and fixed networks, while introducing new innovative services and IoT.



# 5G, 4G & IMS

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# OC 5G SMS Function (iSMSF)

## Delivering SMS in 5G Networks

Comes to complete 5G messaging deployment as a stand-alone node, or as an integrated module of Opencode iSMSC.

Allows legacy SMSCs to continue SMS journey in 5G networks.

Ensures also SMS delivery for IoT domain.

# OC 5G Interworking Function Gateway

## Make 5G Core Network Transition Easier

Provides transparent intersystem service continuity to subscribers by interconnecting 5G network functions and 4G network elements, like SMF, AMF, NRF, OCS, and PCRF, as well as translating all needed protocols. Supports Diameter and HTTP/2 interfaces, such as N7, N14, N50, Gx, Gy.

# OC 5G Network Exposure Function (NEF)

## Secure Exposure of 5G Core and Devices for Applications

Integration layer that connects applications to MNO's network. Securely exposes network services (voice, data connectivity, subscriber data, charging, etc.) over APIs for creating end-to-end offering. Helps to monetize network capabilities and accelerates partner-based innovation.

# OC Service Communication Proxy

## Securely Simplify 5G Core Signaling and Integration

HTTP/2-based enabler simplifying the dynamic integration and scaling of 5G network functions. Enables dynamic routing and load balancing of 5G communications. Simplifies mesh complexity and allows multi-vendor network connectivity and scalability.

# OC 5G Policy Control Function (PCF)

## Reinforce 5G Data Policy Control

Allows flexible control and configuration of data QoS. Manages the policy rules that are best adapted to 5G NG-RAN specifics and the MNO's 5G offers. Typically, integrates with the SMF and AMF to enable the standard N7/N15 HTTP/2 interface-based services.

# OC iPCRF

## Flexible Tool for Personalized Policy Rules

Allows creation of personalized countless QoS and charging policies that are best adapted to MNO's network and offers. iPCRF is also suitable as a dedicated VoLTE and VoWiFi PCRF.

# OC IP-SM Gateway (IP-SM-GW)

## Bringing SMS into IMS World

Seamlessly binds legacy SMSC with IMS Core to deliver and receive SMS over SIP. It implements transport layer interworking for SMS over IP, based on 3GPP TS 24.341. Can be integrated as a stand-alone node, or as a module of Opencode iSMSC.



# OC USSI Function

## Running USSD Services in IMS Networks

Enables USSD applications to run in IMS networks without any need for redevelopment. Eliminates Circuit Switched Fallback (CSFB) problems caused by non-support of USSD in LTE networks. Provides seamless service continuity.

# OC WiFi Access Gateway (iTWAG)

## VoWiFi Calls Provided Over Trusted Wi-Fi Hotspots

Enables mobile devices to connect to a PDN-GW via a trusted WiFi network. Opens more usage opportunities by offering better subscriber experience for voice calls in WiFi networks. Hence helps MNOs to extend their coverage and services.

# OC Evolved Packet Data Gateway (ePDG)

## VoWiFi Calls Provided Over Untrusted Wi-Fi Hotspots

Fully authenticate users attached to untrusted Wi-Fi access points through EAP-enabled communication. Orchestrates end-to-end user sessions while acting as an IPSec/GTP tunnel gateway. Reduces the cost of traffic and enables cost-effective roaming services for MNOs.

# OC Open RAN

## Making 5G Radio Access Networks Affordable and Open

Based on general purpose equipment and open interfaces, Opencode Open RAN solution helps MNOs to build affordable 5G radio access networks dedicated to specific 5G applications, such as private networks, IoT, connected healthcare and transportation, smart city, etc.

# OC RAN Intelligent Controller (RIC)

## Enabling New Radio and Core Applications and Insights

Key open component of the O-RAN ecosystem, responsible for controlling and optimizing RAN resources. Being integrated with Opencode Studio allows ease access to data from across RAN and Core networks and build quickly bandwidth, cell, subscriber, location and other new applications.

# eSIM, SIM & IoT

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# OC SIM OTA Center

## Maintain SIM Data Up-to-date Dynamically

Secure over-the-air (OTA) management of SIM files and applets using SMS or IP channels. Allows mass and targeted SIM updates and profiling, while supporting the specifics of various SIM types and vendors. Increases Steering of Roaming (SoR) efficiency integrating to a SoR solution or a core network.

# OC Remote eSIM Provisioning (SMDP+)

## Secure and Robust Deployment of eSIM Identity Profiles

Allows on-demand and automatic remote provisioning of MNO profiles into subscriber, IoT and M2M eSIMs. Comes with Studio driven eSIM profile personalization and administration . Conforms to multiple standards including GSMA SGP.22, SGP.02, ES9+, ES8+ and ES2+.



# OC IoT Connect Center

## Rule the IoT Market

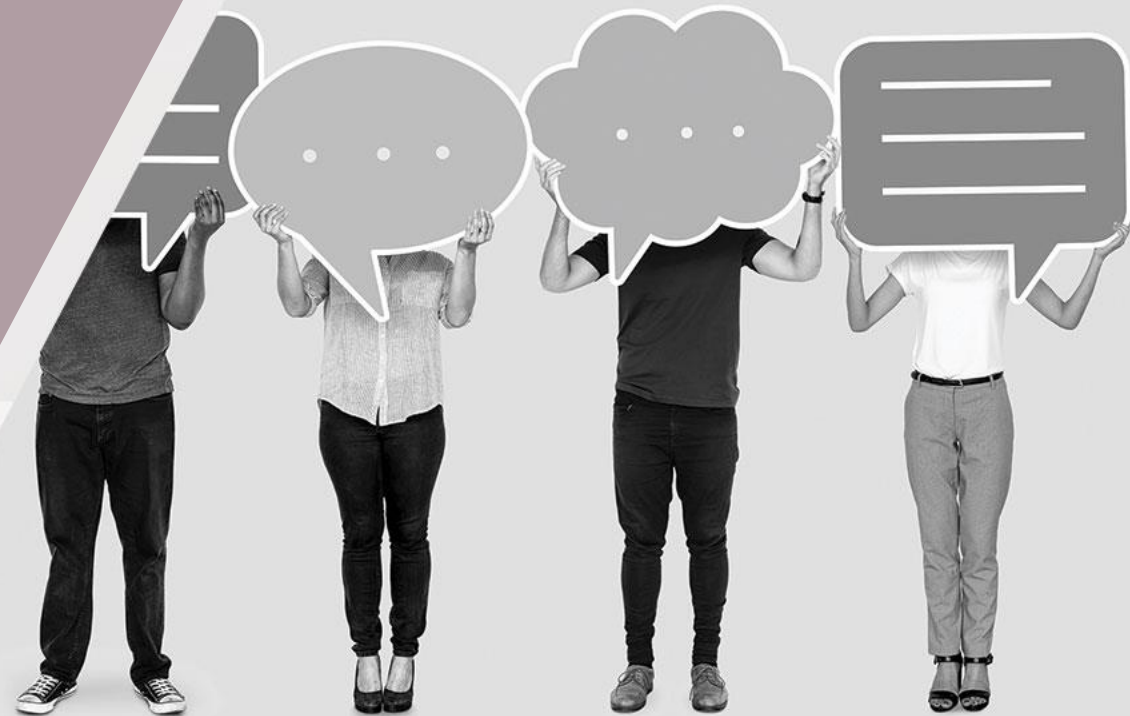
Combines existing or dedicated IoT device enablers, such as HLR, PCRF, Order Capture, Order Management and Charging GW. Offers an adaptive IoT partner portal for device connectivity and lifecycle management. Suitable for different IoT domains, like Smart Home, e-Agriculture, etc.

# OC IoT Messaging Hub

## Bridging Devices to Applications

Carrier Grade IoT messaging solution, enables reliable bidirectional routing of IoT data in real-time between IoT devices and cloud services. Supports multiple protocols, such as MQTT, AMQP and CoAP. Ensures dynamic message routing, low latency and reliable data delivery. Supports also encryption and end-to-end QoS management.

# Core, Messaging & Roaming



## OC iSCP

### Reliable Online Service Control & Charging

Acts as online charging node for Legacy, VoLTE/IMS and hybrid core networks. Monetizes in real time Voice, Messaging and Data services, when connected to home, roaming and WiFi networks. Preferably integrates BSS entities on Diameter.

## OC iDiameter Gateway

### Flexible and Fast Diameter Integration and Deployment

Allows homogenous integration of 5G/4G/IMS nodes, while also solving Diameter-to-Diameter, Diameter-to-HTTP/2, Diameter-to-CAMEL/MAP and Diameter-to-other interoperability cases. Also offers charging, signaling, profiling and API features. Can act as Diameter Routing Agent.

# OC SMS Center (iSMSC)

## Aim at Mission Critical Short Message Delivery

Reliable solution for critical P2P, A2P, P2A and A2A traffic. Comes with FDA, store-and-forward, and supports SMSF, IP-SM-GW and RCS-GW. A Lawful Interception module allows integration to local authorities. Provides Diameter charging and supports ITU and ANSI standards at the same time.

## OC iSMS Gateway

### Flexible Traffic Management of Application Providers

Carrier-grade platform allowing flexible routing and monetization of traffic between Application Providers and MNO subscribers. Secures the entry of A2P messages for external entities. Includes configurable APIs and charging, thus simplifying the creation and launch of new SMS applications.

# OC Anti-Spam SMS Firewall

## Improving User Experience While Protecting the Network

The OC Anti-spam SMS firewall can be built-in the OC iSMSC or deployed as independent node. While transparently securing the network, it blocks fraudulent, suspicious and incorrect messages. It improves significantly the end-user experience and increases the subscriber network trust.



## OC USSD Center (iUSSDC)

### Market Leader and Operators' #1 Choice

The most adopted multi-provider, app and cloud-enabled, open USSD platform. Its unrivaled, multi-application Studio includes multi-level service customization covering unlimited number of use cases in all-G networks. Supports USSI and USSI-to-SS7 functions for IMS integration.

## OC MMS Center (iMMSC)

### Enable Multimedia Messaging

Cost effective solution enabling person-to-person and application-to-person multimedia messaging and notifications. Supports all standard interfaces, making integration with core network, charging and billing systems simple.

# OC Call Completion Suite (iCCS)

## Necessary Move to Monetize Further Mobile Networks

A full set of call completion products, including voicemail, dynamic voicemail, missed call and reachability notifications (VMS, DVMS, MCN, NoR).

Configuration templates and subscriber Class of Service features provide maximum customization flexibility to MNOs and their subscribers.

# OC Voicemail Server (iVMS)

## Missed Calls Become Steady Voice Revenue

Increases voice revenue by completing missed calls when redirected to a personal or enterprise mailbox. Improves user experience thanks to a rich set of features, such as Visual Voice Mail, multi-channel and social media notifications, personalized greetings, event-based charging, etc.

## OC iRCS Center

### Broadening Messaging Horizons

RCS messaging offers incremental revenues for operators and brands through engagement, enabled by increased interactivity and security. It provides an enhanced user experience through advanced services like group chat, multimedia messaging and chat-bots.

## OC Roaming Suite

### Monetize Roaming with a Full Set of Services

A modular set of roaming services, including traffic steering, smart home routing, number correction, Welcome SMS, seamless callback, and more. Being flexible enough to meet Any-G network integration requirements, it is the ultimate solution for roaming optimization and monetization.

# Business Support Applications

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## OC Partner & Service Manager

### Manage Countless Business Configurations

An independent business layer that helps MNOs consolidate business and partners configurations from the network. Offer subscribers an easy switch to any service, bundle and profile. Manage service subscriptions, limitations, renewals, charging and partner services.



## OC iCarrier App

### Turn Network Services into Mobile Apps

Opencode Studio mobile app add-on enabling a new app channel for network services. Complements traditional Voice, Text, Data and Web user experience. The Studio conveniently supports today's favorite mobile/web CSS and reactive JS frameworks. Allows voice calls origination with WebRTC.

## OC Campaign Manager

### Personalized Mass Campaigns Across All Channels

Creates and runs targeted personalized, interactive and recurrent campaigns to boost revenue. Broadcasts to multiple channels concurrently, such as SMS, IVR, RCS and OTTs. Manages user profiling, channel, language, and messages. Implements flexible partner quota and multi-user partner management.

## OC E-Recharge & E-Voucher Center

### Modernizing m-Retail & m-Payments

Evolves the traditional and pre-paid voucher distribution to a mobile transaction hub for retailers, utility companies and banks. Ensures user privacy during the whole transaction process. Automates the multi-level retail chain. Embeds a mobile application for a better user experience.

## OC Mobile VPN

### Mission-critical Private Communications

Offers enterprises and government agencies intragroup dialing, private numbering plans, call filtering, call capping, as well as cost and usage control. Brings a richer user experience thanks to a flexible multi-channel self-care. Acts as a virtual PBX platform for all customers within the MNO network.

## OC Self-care IVR

### Interactive Voice Handling with Flexible Service Creation

Provides subscribers with interactive menu options and announcements. Allows implementing self-care services like subscription opt-in/opt-out, refill and bill payment. Simplifies the creation and integration of complex value added services like pre- and post-call announcements and sponsoring.

# OC Untrusted Traffic Firewall

## Calls and Messaging Spam Detection and Blocking

Allows MNOs to establish dynamic rules for efficient real-time detection and blocking of any type of spam traffic, based on a comprehensive dashboard. Protects subscribers from balance loss in case of spam messages and calls. Suitable for SIM-Box detection and blocking.

## OC Mobile Beep Call

### Flip Network-rejected Calls into Revenue

Transforms network-rejected calls due to insufficient balance into revenue. The network service generates a beep call to B-party on behalf of A-party. Up to 40% of B-parties return the call, helping MNOs monetize otherwise lost traffic.

## OC Virtual Mobile Numbers

### Multiple Mobile Lines in a Single SIM

Allows subscribers to use multiple mobile numbers without adding new SIM cards. Virtual lines can be temporary or permanent, with a prepaid or postpaid schedule and self-managed subscription, renewal and deactivation.



## OC OTP Authenticator

### Secure OTP Generation and Verification

Allows secure generation and verification of One Time Passwords (OTP). Exposes a set of APIs allowing seamless integration with MNOs IT infrastructure and any channel. Can be used for subscribers 2FA and for internal authentication purposes of the MNO.

## OC SIM Fleet Management

### Autonomous Enterprise Portal for SIM Fleet Management

Web/mobile application and service allowing enterprises to manage autonomously staff mobile plans and SIMs. Allows company fleet managers to activate and provision SIM cards, change user profiles and plans. Provides a comprehensive overview of user usage and history.

# Managed Services & Support

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# Monitoring, Operation & Maintenance

## Utilize a Team of Opencode Professionals

Opencode professionals will monitor and ensure smooth operation of your systems. Our experienced team will provide 24/7 surveillance, KPIs extraction and correlation avoided problems, fast investigation, as well as service recovery in case of problems.

# Opencode DevOps Engineer

Assist Your Teams Onsite and Remotely

Opencode DevOps engineer can help MNOs reduce significantly time to market. Either on a case-by-case or on a long mission, our developers will help your network teams translate functional specifications into reliable network applications.

## 24/7 Availability

### Providing 24/7 Mission-critical Emergency Support

Customers, under warranty or under maintenance, receive quality 3-level hotline and online support from dedicated engineers.

Opencode time-proven support and maintenance procedures ensure around-the-clock uptime and reliable network operation.

# Training

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# Opencode Platform Trainings

## A. Operation, Maintenance & Administration

### A1 OMA Fundamentals

3 Days

- Platform Introduction
- Architecture & Building Blocks
- Hardware and Virtualization
- Control Panel & User Management
- OS & Command Line Shell
- Health Check, Monitoring & Alarms
- KPI & Statistics
- High Availability & Cluster Implementation
- Disaster Recovery & Geo-redundancy
- Network Browser, Core & IT Gateways
- Network Integration
- Service Creation Environment

### A2 OMA & Service Creation Fundamentals

5 Days

- A1 Topics
- B1 Topics

Training Venues: Kuala Lumpur (Malaysia), Sofia (Bulgaria), Tunis (Tunisia)

Training Sessions: On-the-job, Onsite, Offsite & Web

For more information: [info@opencode.com](mailto:info@opencode.com)

## B. Introduction to Service Creation

### B1 Service Creation Fundamentals

3 Days

- Platform Introduction
- Service Creation Environment Overview
- Service Structure & Development
- Multi-language Implementation
- Custom CDR Generation
- Communication with External Systems
- Call Control Basics
- Events & Event Processor
- Transitions, Execution Flow
- Domains & Modules
- Subscription & Service Management

### B2 Service Creation & Hands-on Experience

5 Days

- B1 Topics
- Practical Exercises (Messaging & Voice)

## C. Advanced Service Creation

### C1 Network Applications

5 Days

- Service Creation Environment Overview
- Network Browser Functions
- JavaScript Basics
- Communication with IT Network & 3<sup>rd</sup> Parties
- Scheduled & Recurring Logic
- Multi-channel services
- Service Binding and Invocation
- Communication with Core Network
- Creating Call Flows
- Subscription & Service Management
- Practical Exercises

### C2 Turn Network Services into Mobile Apps

2 Days

- iCarrier App Introduction
- App Layout Configuration
- Functional & Graphical App Design Tools
- Custom App Design
- Communication with Network Services
- Subscriber Authentication
- Testing & Deployment
- Integration with Social Networks



# Highlighted Whitepapers

Was Cell Broadcast the Right Emergency Alert Channel for COVID-19 / Coronavirus Pandemic?

Open RAN — Long-term Business Opportunity or Another Transitional Technology?



## WHITEPAPER T135292

Wireless and Digital  
Broadcast Emergency  
Implementation

PUBLISHED: June 17, 2022

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