Connecting business to people

**DAS SMS Platform** was designed to enable Service Providers to achieve success in the wholesale SMS business by integrating all necessary modules in one platform and offering high throughput, platform stability, strong support and end-to-end management capabilities in line with all the industry requirements and GSMA recommendations. We offer both on-prem and cloud-based solutions.
Supporting all the main messaging protocols

(SMPP, SS7, HTTP and SIP)

DAS SMS Platform allows to connect directly to Mobile Operators, Service Providers, Carriers, Aggregators and Enterprises. It can also enable Mobile Operators to provide core SMSC features like subscriber to subscriber SMS messaging, broadcasting campaigns and group messaging between subscribers.
SMS Platform provides APIs for sending bulk SMS and a web Enterprise Portal.

Service Providers can offer their Enterprise customers our white-label Enterprise Portal (integrated with DAS SMS Platform) to create, send and schedule SMS campaigns, manage contacts, sender ID, templates and visualize reports and invoices.
FEATURES AND FUNCTIONALITY

INTELLIGENT ROUTING
Including origin and content-based routing capabilities.

FILTERING FUNCTIONALITY
To block or re-route SMS based on Sender ID, Content, Concatenated message, error codes of submitted SMS or DLR.

SECURE CONNECTIONS VIA VPN OR SSL/TLS
To set secured or unsecured connection when SMSG is connecting as client to supplier’s server.
FEATURES AND FUNCTIONALITY

CONCATENATED SMS PROCESSING
It routes all parts of concatenated messages via the same supplier.

LONG SMS SUPPORT
More than 160 characters SMS, coming through HTTP/API connections are splitted on the platform and sent as parts of concatenated SMS through SMPP or SS7 connections.

RE-COMBINE FUNCTION
SMSG can re-combine as well parts of the concatenated SMS and send as a long SMS to HTTP/API.
Features and Functionality

**Store and Forward**
Functionality allows sending high SMS volumes even through suppliers with low throughput connections.

**Retry Module**
Permits to create retry rules for resending stored messages (with temporary errors).

**Big Data Storage**
Via Cassandra d.b. to manage big traffic volumes. The database is used for storing messages which are unsent, successfully sent and failed to be sent, store CDR, number portability and rates update.
ADVANCED MONITORING

Through integration with Prometheus can be visualized with Grafana dashboard. This includes creation of Alarms, Alerts, Notifications and monitoring of Server parameters, traffic, DLR, SMPP links and other metrics.

ERROR MANAGEMENT

Mapping of error codes received and sent via different types of protocols: SS7, SMPP and HTTP.

MOBILE NUMBER PORTABILITY

Support for SMPP, HTTP, SS7 - possibility to perform routing of SMS using external data base with ported numbers.
Proprietary billing system

Import and management of Supplier rates and Customer rates, Rate analysis tool, which offers the possibility to find the routes with negative or zero margin, with no sale or buy rates, without the currency etc. The system offers the possibility to use two kind of filters, the default and advance filters.
DEFAULT FILTERS OF THE BILLING CONTAIN:

1. **Negative margin**
   - Negative margin between customer and supplier rates.

2. **Zero margin**
   - Zero margin between customer and supplier rates.

3. **Different currencies**
   - Different currencies of customer and supplier rates.

4. **Sales rate not assigned**
   - No rate is applied for any specific path.

5. **Buying rate not assigned**
   - No supplier rate is applied in any specific product/routing path.
**Advanced filters**

For the data analysis using key values such as Customer name, Customer account, Country, Operator, MCC, MNC, Product, Supplier name, Supplier account, Routing Context, Path, Sales rate, Sales rate currency, Buying rate, Buying rate currency, Rate margin (value), Rate margin (%).

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**Third party billing system integration**

By SIP protocol or CDR management and customization.

**Access & usage monitoring**

Via audit page provides allows to view users’ activity and logs.

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**Customer Invoices**

Module that offers possibility to view all generated customer invoices for provided services. The Platform shows by default the invoices issued during current month.

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**Reporting module**

Offers the possibility to create traffic reports with different parameters for selected period. In the 'Event Data Records' sub-modules can be viewed relevant logs data of each SMS. The report can be generated for submitted message, DLRs (delivery report) or both.
**Dedicated servers** to manage very large amounts of traffic the Platform can be installed on.

Maximum throughput per one instance was tested up to **1000 SMS/sec**. Smaller and medium businesses can also rely on our **hosted solution** where each type of protocol (SMPP, SS7 and HTTP) can be provided as a separate SaaS service depending on customer requirements. Platform has **No Limitations** in the amount of Supplier or Customer connections, users, rate plans, etc.
Graphical User Interface (GUI)

- Dashboard
- Partners
- Account Management
- Routing Management
- Billing
- Reporting
- SS7 Stack Management
- Monitoring
- Configuration
- Administration
Dashboard

Offers possibility to see in graphical mode the evolution of the traffic flow processed by SMSG. It contains charts aggregating traffic by Countries, Sender ID, Operators, Delivered report status, Customers, Outgoing paths, Suppliers and other necessary criteria.

Partners

Manage the information about partners details: general and commercial information, contacts, bank details, assigned accounts, additional services that can be contracted.
Account Management

Module for provision of both Customers and Suppliers accounts, change the messaging parameters for each account, as well as assign/change a specific routing plan. There are 4 types of accounts according to the protocols used: ESME Accounts (SMPP), HTTP Accounts, SS7 Accounts, SIP Accounts.
Outgoing Path Possibility to attribute one or several accounts to the same supplier and modify the sending parameters like: MSISDN, Origin GT, TON, NPI, ESME Class, Prefix, etc.

Routing Management
This module allows management of the wholesale traffic in the most convenient way for business, both quality and commercially wise. It is composed of several sub-modules:

Product Management
Create standard routing plans, as well as personalized routing plans for each customer.

Destinations
Link between E.164 and E.212 numbering plans corresponding to Countries and Operators names. The database of destinations and code ranges can be imported, exported or modified.

Routing Context
Manage routing modification functionality. For each destination in the routing plan can be applied one of the proposed routing algorithms: Fixed, Load Sharing, Active Standby or Round Robin.

Advanced Routing
Possibility to configure certain traffic blocking and re-routing based on: Sender ID, Content, Error Code or DLR Error Code

Outgoing Path
Possibility to attribute one or several accounts to the same supplier and modify the sending parameters like: MSISDN, Origin GT, TON, NPI, ESME Class, Prefix, etc.
Billing

Supplier Rates
Keep track of Suppliers’ rates changes, import A-Z and partial price lists, show rate fluctuations that occurred. After being imported, the new rates will be reflected in the routing tables and routing context management.

Customer Rates
Keep track of Customers’ rates changes, import A-Z and partial price lists, show rate fluctuations that occurred, override effective date and time when the rates will be applied.

Rates Analysis
Finding of products, routing paths, with negative or zero margin

Customer Invoices
Can be filtered for a certain period, Customer, issue date, generate or send status and can be downloaded in .pdf format. For each invoice will be performed a traffic report which can be downloaded in .xls format.
Traffic report

Generate aggregated traffic reports for a period using advanced filters by following keys: Customer Name, Customer Account, Country, Operator, Product, Supplier Name, Supplier Account, Path, Error code, DLR error, DLR status.

Event Data Records

Generate reports for all SMS with respective details specific to CDR: dates, country, operator, product, sender ID, destination address, message ID, DLR error and DLR status. All records can be filtered by advanced rules and keys.
SS7 Stack Management

Allows implementing and maintaining the connections to a server or a client (Servers or Associations). MSU3 package for SS7 traffic exchange, SCCP properties and resources for the nodes to connect to routers or ISP, and remote node properties. DAS MSG jSS7 Stack M3UA is based on RFC 4666 and supports ASP, SGW or IPSP modes as well as both Single Exchange and Double Exchange of messages. In this regard can be configured the 'M3UA', 'SCTP' and 'SCCP' in following submodules:
SS7 STACK MANAGEMENT

1. **SCTP management**
   - Create the SCTP servers, associations and see general SCTP details.

2. **M3UA management**
   - Configure M3UA parameters.

3. **SCCP properties**
   - Show general SCCP parameters.

4. **SCCP Resources**
   - Set the Remote Signaling Point Codes, Remote Sub-Systems and Concerned Service Point Codes.

5. **SCCP Router**
   - Set the Rules, Routing Addresses and Service Access Points.
MONITORING

GIVES THE POSSIBILITY TO MONITOR THE STATE OF CONNECTION LINKS ESTABLISHED BETWEEN SMSG AND OTHER GATEWAYS.

**ALARM TOOL**

Monitors and display ESME interconnections out of service.

**CACHE VIEWER**

Monitors cash server to store message data (message ID, origin address, destination address, etc) and rates data (customer rates, supplier rates).

**TASK RUNNER**

manually re-aggregate the data for different jobs which are periodically performed in system (at any predefined period of time).
CONFIGURATION

Configure general parameters of SMSC, connection with Database, connection with cache server and SMPP parameters encoding.

SMSC Properties
Set up all the parameters related to the SMS Gateway functionality for Database, Cache server, SMPP Parameters and Pre-analysis.

SMPP Server Properties
Manage the parameters related to the platform functionalities such as the cache for store and forward messages, IP addresses to cache, host, GTs of instances, ports, maximum number of SMS from cache to process per second, billing system connection an integration exist.

ERROR management
Define error codes for each protocol and mapping the error codes between protocols (SS7, SMPP, HTTP).

MNP configuration
Set Mobile Number Portability parameters.

BACKUP management
Set and view parameters for Backup of Configuration Files.

RETRY module
Create retry rule for stored messages.
Administration

Manage users, set profiles and managed instances in Graphical User Interface.

User Management

Manage users which must have access to SMSG via graphical user interface.

Servers Management

Manage all instances (servers, router etc.) that can be accessed at login in the Graphical User Interface.

Company profile

Manage own company data, which will be used for the management of other related modules such as invoices, customer rates, etc.

Audit

Show logs of user’s activity in Platform, such: create, modify, delete.

CLI management

Alternative possibility to manage the platform through Command Line Interface.
Where do we go next?
We are developing a one-stop-shop solution for unified cloud communications services by integrating all our existing solutions.

And adding new modules for RCS messaging, Conversation Flows, WebRTC, VoIP and by integrating with OTT messaging solutions (WhatsApp, Viber, Facebook, etc.)
Get in Touch

We'd love to hear your thoughts

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