Lithium SMS Network Product Family

**Overview**
Existing Short Message Service Centers (SMSCs) are no longer meeting operator needs. SMSCs have not kept up with the technology curve in terms of the cost of the equipment, performance and operating efficiency. They lack message-handling flexibility and do not support advanced features such as First Delivery Attempt (FDA), real-time pre-paid charging, SPAM control and real-time service monitoring; which would help operators significantly improve the efficiency and performance of their networks. Legacy SMSCs were designed to handle the relatively predictable traffic created by simple person-to-person text messaging. Unlike simple texting applications such as televoting create large spikes in signaling traffic, which can strain the capacity of the SMSC and create network bottlenecks.

**Product Description**
NewNet’s Lithium SMS Network concept is designed to overcome all the obstacles of legacy SMS infrastructures and allow operators to deploy new services that increase revenues.

**Features**

### SMS Router
- First Delivery Attempt (FDA) capabilities to offload SMS traffic from legacy SMSCs
- Supports very small-capacity to virtually unlimited-capacity configurations
- Rules-based routing engine: All SMS fields as conditions with field modifications
- Flexible routing paths: Supports mobile-to-mobile, mobile-to-application and application-to-mobile
- Throughput regulation: Overload protection with fall back to SS7 and IP destinations
- Full load balancing: Weighted, prioritized, and adaptive for SS7 and IP destinations
- Supports SS7 and SIGTRAN M3UA
- Open API-connecting with personalized services applications, external databases and third-party applications

### SMS Firewall
- Anti-spoofing detection
- Fake SMS detection
- GT scanning detection
- Fully configurable logging of all message details, suspect messages and blocked messages
- Advanced screening and detection mechanisms such as content filtering, anti-flooding and pattern detection

### SMS Store
- Reliable, high-capacity message storage
- Message prioritization
- Redundancy through multi-node support, message replication and queue redundancy
- Operator-defined message queues and delivery schemes

### Application Gateway
- Throughput regulation: Overload protection
- Full load balancing: Weighted, prioritized, and adaptive
- Application support: SMPP, UCP, CIMD2

### Converged Message Engine
- Rich Communication Suite (RCS) solution
- Presence-enabled address book
- Converged messaging services
IP Short Message Gateway
• Manages SMS origination and termination across circuit and IP networks
• Enables IP-based broadband access to interwork with existing SMS and MMS services

SMS Personalized Services
• SMS Forwarding
• SMS Copying
• Distribution lists
• Personal Filters
• Subscriber Provisioning via SMS
• Embedded Opt-in & Opt-out capabilities

Statistics
• Real-time SMS statistics
• Marketing information (on-line usage, Top 10’s, etc.)
• Successful and unsuccessful messages, including reasons for failure
• SMS network bottleneck monitoring and analysis tools

OAM
• Configuration Web GUI
• SNMP based alarming

Billing
• Fully configurable, including legacy SMSC-compatible formats and prepaid SMS billing interfaces such as CAMEL and DIAMETER

Benefits
• Improved Network Routing
  First Delivery Attempt (FDA) technology, advanced load balancing, throughput controls, and rules based routing enable efficient message delivery. Operators can leverage their existing legacy SMSCs or completely re-design their SMS infrastructures to better meet the demands of today’s SMS subscribers.

• Advanced Network Security
  Rules-based filtering and advanced anti-spoofing features virtually eliminate the delivery of unwanted messages to their subscribers. With the addition of modular filters, even the most advanced spam techniques such as message content and address randomizers, spoofing, flooding, viruses and phishing can be thwarted.

• Enhanced Network Performance
  The NewNet SMS Network solution presents the actual SMS data visualized per source and destination application, network and country, including successful and erroneous messages. Operators can compare message rates with network performance, identifying bottlenecks and other problems before they become service affecting.

• Increased Revenues
  Support for real-time prepaid billing reduces the opportunity for fraud to improve revenues. Additionally, sponsored and personalized SMS creates a new revenue opportunity for mobile operators.
About NewNet Communication Technologies, LLC

Headquartered in Arlington Heights, IL, NewNet is a recognized leader in mobility technologies with a primary focus in messaging, signaling, wireless broadband, consumer internet, multimedia content delivery, mobile advertising, and secure transaction processing. NewNet Communication Technologies is a part of the Skyview Capital LLC, portfolio of companies. Skyview Capital, LLC, is a private investment firm that specializes in the acquisition and management of companies across multiple sectors of technology, telecommunications, services, and niche manufacturing. For further information, please visit www.newnet.com

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