

SUNTEC 5G CONVERGENT CHARGING

Reduce Total Cost of Ownership and Prevent Revenue Leakage



Cloud Native | Cloud Agnostic





The advent of 5G technology has ushered in a transformative era in the global telecom industry, offering a multitude of benefits that extend far beyond high-speed download. 5G's network efficiency - ultra-low latency and high-speed data transmission capabilities are revolutionizing connectivity, enabling seamless communication, and unlocking the full potential of emerging technologies like the Internet of Things (IoT), augmented reality (AR), virtual reality (VR), and edge computing.

This technology is empowering businesses and individuals alike, fostering innovation and enhancing productivity across industries. Moreover, 5G's capacity for massive device connectivity and network slicing facilitates customized services, optimizing resource allocation, and bolstering network efficiency. Telecommunication operators are poised to tap into novel possibilities through their convergence with various industries, including healthcare, IoT, supply chain and logistics, banking, and Industry 4.0 manufacturing.

In addition, investment in 5G networks can be substantial, estimated to cost mobile operators approximately \$600 billion between 2022 and 2025.¹

Therefore, the retention of existing 4G subscribers and the acquisition of new 5G subscribers becomes crucial for operators to monetize their investments adequately. Convergent charging plays a pivotal role in this context.

To reduce the Total Cost of Ownership (TCO), seamless inter-working across multiple vendors is essential. Increasing the Average Revenue Per User (ARPU) by 16% to 20% is a fundamental strategy for monetizing 5G investments while maintaining 4G operations.²

At SunTec, we understand the challenges faced by Communications Service Providers (CSPs) in the evolving 5G landscape – be it monetizing new services, integrating legacy systems, or mitigating the costs associated with vendor lock-ins. The SunTec 5G Convergent Charging System is designed to address these key concerns and assist CSPs in achieving the necessary ARPU for revenue generation, all while reducing their overall TCO.

SUNTEC 5G CONVERGENT CHARGING: PAVING THE WAY FOR 4G AND 5G CONVERGENCE

In an era where 4G and 5G coexist, the demand for instant connectivity, real-time charging, rapid deployment, and reduced TCO is crucial to ensure customer satisfaction and revenue integrity. Discover how SunTec's innovative solution effectively tackles the challenges encountered by CSPs and empowers them to leverage both the current 4G landscape and the future of 5G.



KEY FEATURES

5G-READY CONVERGED CHARGING SYSTEM



- Deploy unified charging for multiple services, encompassing voice, data, messaging, IoT, and value-added services, thereby facilitating service-based charging for both real-time and offline billing.

REAL-TIME STREAM PROCESSING



- Capitalize on our event-driven platform offers to ensure low latency, scalability, flexibility, and fault tolerance.
- Integrate seamlessly with an array of data sources, databases, and applications.
- Support Kafka streaming of Call Detail Records (CDRs).

RATING AND CHARGING:



- Meet both your 4G and 5G charging requirements with a Service-Based Interface (SBI) approach within the 5G protocol stack, relying on HTTP/2. This enables innovative monetization strategies through integration with 5G Network Functions (NFs).
- Offer comprehensive support for both online and offline functionalities on the 5G N40 Interface, seamlessly integrated with the Network Repository Function (NRF).
- Accommodate the 4G Diameter Interface, facilitating various services such as Data, MMS, SMS, and IMS calls, utilizing the Gy and Ro interfaces for efficient communication.

CONVERGENT BILLING



- Streamline billing processes for various services and customer types, thus, improving operational efficiency and enhancing the customer experience.
- Utilize a convergent billing solution to manage complex multi-play offerings and billing them as a single package.

DEPLOYMENT



- Deploy a cloud-ready and cloud-agnostic convergent charging system as a container-based solution on Kubernetes across Private, Public or Hybrid environments.
- Operate autonomously as a standalone service and seamlessly integrate the solution with other systems.

RELIABILITY



- Supports local N+K redundancy and geo-redundancy using a multi-tier architecture and benefit from a scalable solution with five 9s reliability.

OPEN API INTEGRATION



- Connect with all upstream and downstream systems through Rest APIs and incorporate an offline interface utilizing messaging queues, such as Kafka.

BENEFITS



PROCESS OVER

5Bn

TRANSACTIONS PER DAY



PLUG

60Mn

/ YEAR WORTH REVENUE LEAKAGE



EVENT
COLLECTION



EVENT
CORRELATION



MEDIATION



RATING



BILLING



BILLING-AS-A-
SERVICE



ENTERPRISE
PRODUCT CATALOG



WORKFLOW
MANAGEMENT



FRAUD
MANAGEMENT



IOT



BIG DATA
ANALYTICS

Discover how SunTec 5G Convergent Charging system leverages cutting-edge technologies, offering CSPs the freedom to innovate without vendor constraints. Embrace the future of charging.

BENEFITS



ADDRESS COMPLEX SERVICE REQUIREMENTS

Get the flexibility to cater to the unique and complex service requirements of corporate customers. Our highly customizable solution ensures that specific communication needs are met effectively.



SCALE WITH EASE

Scale seamlessly as the number of corporate customers grow. Accommodate increased bandwidth and adapt to evolving communication needs, ensuring a smooth and efficient scaling process.



ADDRESS SECURITY CONCERNS

Ensure data security and privacy such as GDPR with robust cybersecurity measures. Protect sensitive corporate data from threats and vulnerabilities.



IMPROVE QUALITY OF SERVICE

Get superior quality of service, meeting the demanding requirements of corporate customers for their critical applications. Benefit from reliability and low latency, even in dynamic network environments.



SUPPORT REGULATORY COMPLIANCE

Navigate complex regulatory compliance requirements, ensuring that your corporate customers remain compliant with regional and industry-specific regulations. Aligned with the 3GPP R7 to R17 standards.



ENABLE INTEROPERABILITY

Seamlessly integrate with a variety of communication systems, including both legacy and modern platforms. This ensures that corporate customers can communicate effortlessly across different technologies.



OPTIMIZE COSTS

Offer competitive pricing structures while maintaining profitability. Strike the right balance between cost-effectiveness and investing in network upgrades.



SUPPORT SERVICE LEVEL AGREEMENTS (SLAs)

Meet and exceed SLAs that guarantee uptime and service availability. Keep disruptions to minimum even during network outages or maintenance windows.



AVOID VENDOR LOCK-IN

Empower corporate customers with flexibility, avoiding long-term vendor lock-in. It enables adaptability to changing technology without imposing significant penalties.

CUSTOMER SUCCESS STORIES

Real-world Results with SunTec

A leading Multiple System Operator (MSO) in North America faced three challenges when implementing their 5G network: vendor lock-in, complex integration, and the lack of real-time charging capabilities.

The MSO found itself locked into a vendor, resulting in high maintenance and renewal costs. The existing vendor's 5G charging capability was tightly bound to the legacy core infrastructure. The complexity of integrating the legacy system with other existing systems via proprietary interfaces posed a substantial hurdle. This complexity led to increased operational costs and inefficiencies in billing and charging processes. There was a critical need for real-time charging capabilities to provide personalized 5G products to end-users, a capability lacking in their existing infrastructure.

To address these challenges, the MSO sought a modern and flexible charging solution, and they found their answer in

SunTec's Converged Charging Solution. SunTec provided open API interfaces for seamless integration, eliminating the complexity associated with proprietary interfaces. This move significantly reduced operational costs. SunTec's flexible integration approach further lowered operational expenses, simplifying what was previously a complex process. SunTec's solution offered both offline and online real-time charging, meeting the demands of 5G services and enabling personalized offerings to end-users and streamlines the 5G network's charging and billing processes.

SunTec's 5G Convergent Charging System stands out by fully harnessing all 5G parameters without the constraints imposed by legacy charging systems. Operating on a stream-based platform, it enables real-time mediation of charging events and seamless integration with other systems, such as Online Anomaly/Fraud Detection. Moreover, it offers cross-vertical pricing

capabilities directly from the platform, ensuring adaptability to the intricate demands of 5G charging and billing processes. SunTec's solution also works seamlessly with any vendor complying with 3GPP standards, facilitating broad compatibility. Its Plug and Play deployment model simplified the implementation, and its versatility extends to delivering output to various Mediation or Billing systems, enhancing its overall utility in the 5G ecosystem.



REFERENCES

1. Mobile operators face \$600B capex by 2025- [mobileworldlive.com](https://www.mobileworldlive.com)
2. Unlocking the value of 5G in the B2C marketplace- [mckinsey.com](https://www.mckinsey.com)

CONTACT US

Unlock the 5G Potential with SunTec

Get in touch with our experts to explore how SunTec's 5G Convergent Charging Solution can transform your business.

ABOUT SUNTEC

SunTec is the world's No. 1 pricing and billing company that creates value for enterprises through its Cloud-based products. More than 150 clients in 45+ countries rely on SunTec to provide hyper-personalized products, offers, pricing, loyalty programs, tax compliance, and billing for over 400 million end-customers. SunTec products are based on our cloud-native and cloud-agnostic, API first, micro-services-based proprietary platform, Xelerate and are delivered on-premise, on private cloud and as SaaS. SunTec has global operations including the USA, UK, Germany, UAE, Singapore, Canada, Australia, and India. For more information, please visit us at www.suntecgroup.com or email us at marketing@suntecgroup.com

GET STARTED TODAY

Embrace the Future of 5G Charging

Take the first step towards reducing TCO and revenue leakage. Contact us to schedule a consultation and learn how SunTec can revolutionize your charging ecosystem.