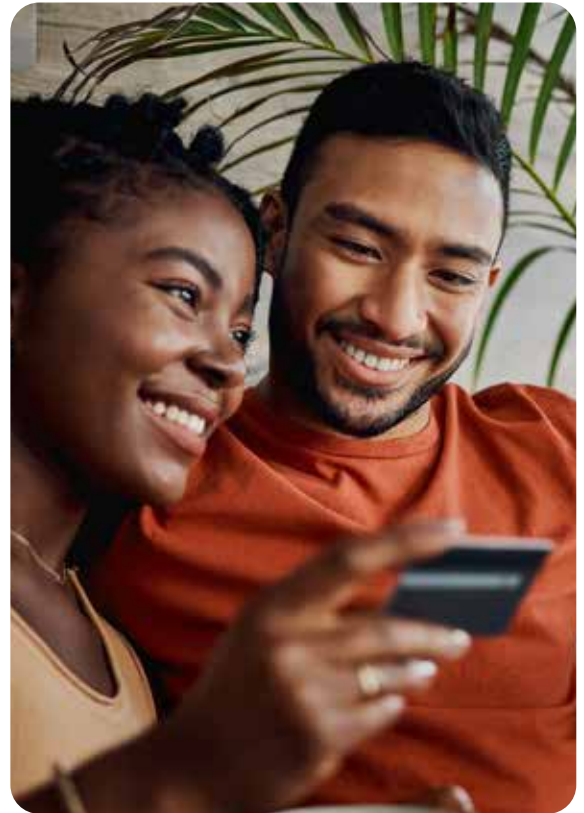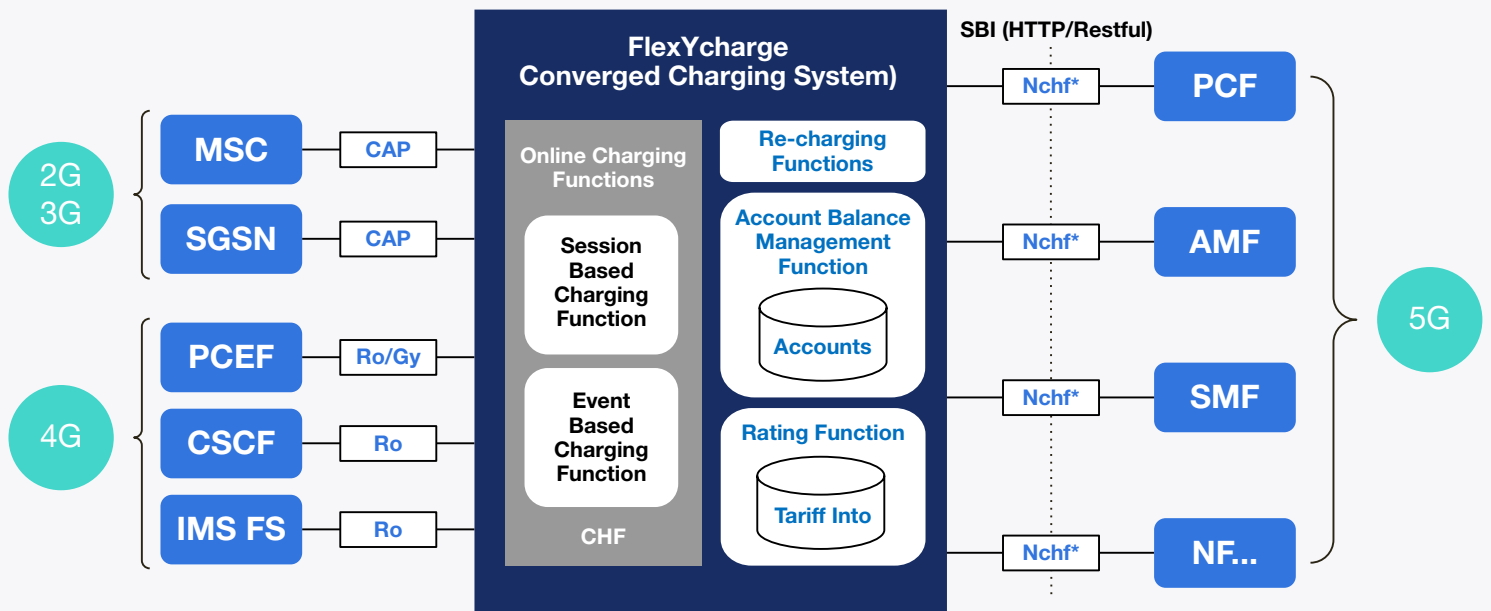# TNS FlexYcharge™

Converged Charging System (CCS)

As telecom network transformation continues, billing and charging system requirements are reaching new levels of complexity. Emerging applications, services and devices pose new challenges such as dedicated resource requirement and real-time charging of services.

FlexYcharge is a complete prepaid and credit control Converged Charging System (CCS) that solves these demands. It allows a service provider to charge services in real-time while handling subscribers account balance, rating, charging transaction control and correlation on a per transaction basis. TNS FlexYcharge arms the service provider with a comprehensive real-time rating and charging capability for rapid deployment to a wide range of services including voice, video, data, text and email for fixed, cable and mobile, 4G/5G networks.

> **Built on TNS Communications Application Server (CAS), FlexYcharge provides a flexible and reliable OCS for today's multi-service/multi-network environments.**

TNS FlexYcharge™ Application Highlights

- A single platform replacing silos of legacy market-specific solutions in service provider networks
- Highly scalable and carrier-grade solution supporting millions of subscribers
- Allows convergent billing for both prepaid and postpaid services
- Adaptable for multiple networks and operators: fixed, mobile, 4G, wholesale and MVNO
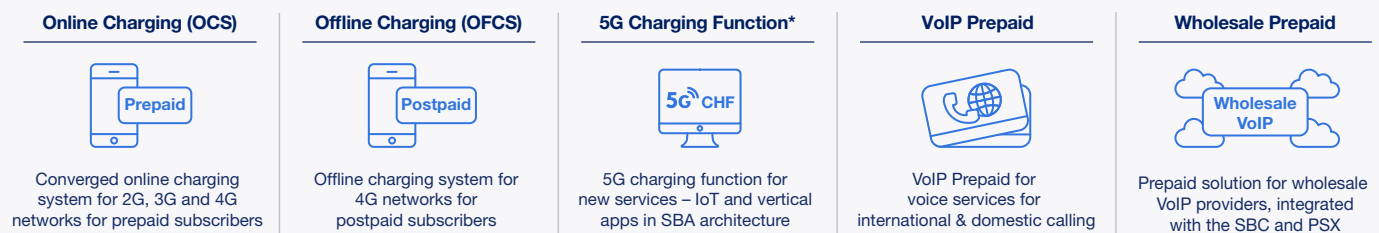
Service Provider Benefits

- Prepaid access to data and rich media applications
- Provides integrated QoS, enhanced security, and flexible charging
- Supports wholesale/reseller model
- Provides APIs for integration with existing OSS/BSS and reporting infrastructure
- Supports real-time national/international call rating – multi-language/multi-currency

End User Benefits

- Efficient and effective management of communications budget with real-time call rating
- Service personalization with branded announcements and web-based end-user control
- Flexible replenishing of prepaid balance through web and IVR interface
- Real-time notification for low balance warning
- Shared plan for family and friends, multi device support, 3G/4G/5G mobile and smart phones

Single Solution for Multiple Rating and Charging Needs

FlexYcharge can be deployed in service provider networks in multiple flavors as shown below. The modular architecture enables the common base application to address the different rating and charging requirements of the business.

Online Charging (OCS)	Offline Charging (OFCS)	5G Charging Function*	VoIP Prepaid	Wholesale Prepaid
Prepaid	**Postpaid**	**5G CHF**		**Wholesale VoIP**
Converged online charging system for 2G, 3G and 4G networks for prepaid subscribers	Offline charging system for 4G networks for postpaid subscribers	5G charging function for new services – IoT and vertical apps in SBA architecture	VoIP Prepaid for voice services for international & domestic calling	Prepaid solution for wholesale VoIP providers, integrated with the SBC and PSX

ABMF	Rating	Charging	IVR	Vouchers	Self-Care Portal	CDR	Reports	Notifications

*Marked functions and interfaces are on roadmap

TNS FlexYcharge™ Key Features

- Service plans based on device type
- Service bundles for voice, fixed packet/email
- Discount on amount of recharges
- Administration fee and universal fee
- Self-service web portal for recharging
- IVR menus plan purchase, balance check, voucher replenishment and language change
- Account lifecycle management
- Packet plan management (4G data)
- Voucher card management
- SMS and email notification for account lifecycle and service plan expiry, or advanced notice
- Dynamically configurable reports

- APIs for existing provisioning system integration
- APIs for bandwidth control management
- APIs for voice/packet control
- Wholesale prepaid and credit limit control
- Reseller management and branding
- CLI and PIN based authentication
- PIN locking
- Multi-currency support
- Promotions and bundling
- Stepped rating (time blocks)
- Multiple access number support
- Follow-on calls
- Dial out to CSR

Find out how TNS can help you with a wide range of telecom solutions:

solutions@tnsi.com

tnsi.com

USA	+1 703 453 8300
Europe	+44 (0)114 292 0200
Asia Pacific	+61 2 9959 0800