



vanrise  
solutions

| **Enabling** Telecom Success

# History

Vanrise Solutions was founded in 2006 by a core team of telecom veterans with a mission to build turnkey solutions that will help facilitate and manage key operational facets within various industry niches. Since its establishment, Vanrise has focused on ensuring its products fulfill and exceed all industry requirements for unified and comprehensive solutions.

Over the years, Vanrise has grown into a worldwide industry leader in providing amalgamated telecom solutions in the fields of OSS/BSS, Interconnect & Roaming, Revenue Assurance, Fraud Management, and Network Monitoring, tailored for Mobile and Fixed-Line Operators, Telecom Ministries, Telecom Regulators, Wholesale Carriers and Retail Providers. Vanrise has also secured huge projects, implementing its solutions for telecom entities around the African, Asian and European continents and fostering its successful growth.

Backed up by its network of partners and resellers around the globe, Vanrise today takes pride in achieving over 50 installations worldwide. In an industry that is spearheaded by constant change, Vanrise's dynamic team is working closely with clients to power their organizations with agile tools and services, managing all their vital operations and allowing them to focus on reinventing their companies and strategic business development approach. Diversifying its product offerings to satisfy the continuously changing market trends has allowed Vanrise to sustainably grow across the years, witnessing an average annual growth rate of over 20% and managing operations and teams across three continents. To date, Vanrise's products help telcos automate their core business operations, boost their business agility, achieve increased revenues and profit margins, and support their digital transformation initiatives and strategic goals. Vanrise's OSS/BSS complete solution in particular plays a major role in translating Vanrise's vision and the unique value it will offer to its clients as this solution provides unprecedented flexibility, seamless service orchestration amongst the various platform components, and rapid time-to-market, enabling operators to smoothly create, deliver, and monetize innovative new services which translate their expansion strategy and growth roadmap.

# Our Edge



## Our Team of Experts

Vanrise has forged a strong cohesive team of 150 staff working with clients and partners across the globe. Our team is cross-disciplined in all the facets and emerging industry trends encompassing OSS/BSS, Interconnect & Roaming, Revenue Assurance, Fraud Management, and Network Monitoring. Our executive team packs an average of 20 years of international industry experience, giving our clients a substantial advantage through working with a partner that understands the business requirements, simplifies the process, and makes it a successful one. Our people are our greatest asset, and we keep investing in developing their skillsets to stay ahead of the curve.



## Diversified Solutions Tailored for Every Business Need

Whilst developing solutions and providing services to our clients, we never lose sight of how these solutions will integrate within the businesses that we support. One of our main pillars is making sure that our solutions have the agility and flexibility to become a fundamental part of our clients' businesses, complementing their workflow and enhancing their cross-functional team performance. Our solutions flexibly cater to the requirements of businesses of various sizes and structures and smoothly support their core operations regardless of their complexity, permitting scalability and promoting growth. Nevertheless, through our TM Forum membership, we aim to offer products that conform to TM Forum's industry-leading best practices like eTOM, SID, TAM, and Open APIs, aligning with our product development strategy.



## Flexibility in Adapting to Clients' Constantly Changing Needs

We work within a very dynamic industry which is impacted by the technological advancements taking place especially at the level of mobile technologies, hardware innovations, data services, and fraud management. On the other hand, each of our clients around the globe is faced with unique business requirements demanding solutions specifically tailored to those needs. Taking into consideration these facts, our solutions are built allowing for a wide range of customizations and quick deployment; furthermore, our research and development teams respond quickly to new requests and emerging trends. We also provide custom software development and bespoke service packages to respond to newly arising needs.



## A Client-Centric Philosophy

At Vanrise, our clients top our priorities. Our client-centric mission is highly embodied in our achievement of the ISO 9001:2015 which translates to our commitment to achieve client satisfaction and maintain ongoing development at all levels. We continuously seek to work very closely with our global clientele and their individual teams to ensure successful integrations, develop new value-adding features within our solutions and services, and drive their business growth. Our 24/7 excellent customer support combined with our flexible, scalable, and fully-fledged solutions create an exceptional experience, promote our client base, and support continued long-term business with clients, our partners in success.



# Solutions

Vanrise Solutions develops fully-fledged telecom software solutions and services in the fields of OSS/BSS, Interconnect & Roaming, Revenue Assurance, Fraud Management, and Network Monitoring, tailored for Mobile and Fixed-Line Operators, Telecom Ministries, Telecom Regulators, Wholesale Carriers and Retail Providers. Our solutions are highly performant, modular, flexible, easily customizable, and scalable, enabling huge growth potential for clients and addressing their needs of full automation, optimized operations, and increased revenues.



## OSS/BSS Platform

**V-OSS/BSS** Platform can help you grow your telecom business. The solution provides unprecedented flexibility and rapid time-to-market features enabling operators to create, deliver, and monetize new innovative services. The OSS/BSS platform offers friendly-user interfaces ensuring transparency, security, actionable information, and efficient task execution.

### The solution is divided into the following sub-systems:

**V-Billing** suite is a web-based platform dedicated for operators providing fixed and mobile services. It provisions powerful management of voice, data, and SMS business operations, allowing for the full management of subscribers (residential/corporates & large accounts), credit amounts, product packaging, dynamic rating and billing.

**V-NIM** provides a full-fledged inventory management experience including fulfilling order management needs. It stores communications service providers' network plant assets and resources and is used by engineers to support decisions on resource allocation, configuration changes, and network planning.

**V-Activator** is a generic and dynamic activation system for provisioning different types of services covering existing customer network elements supporting online and offline provisioning.

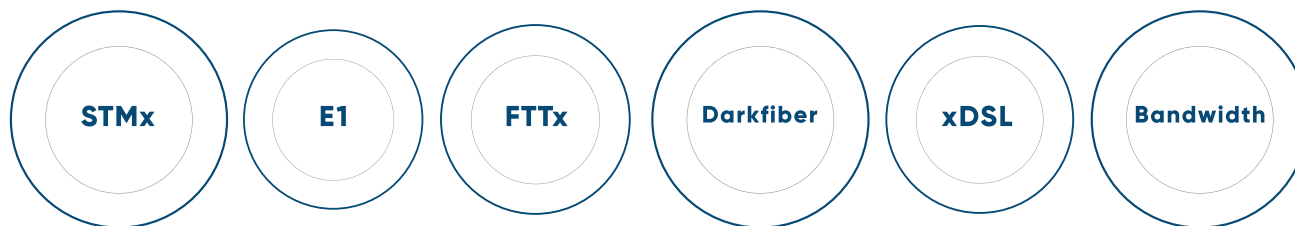
**V-CRM** provides a fully integrated suite of functions allowing sales and customer service staff to manage all aspects of the customer lifecycle efficiently from initial contact to sales, post sales, and financial management. It helps improve the customer experience by enabling high quality and consistent customer service across all contact channels.

**V-Mediator** platform is used to convert a range of telecom platforms' call data records from their proprietary format into a normalized form which can be analyzed and imported to the billing system.

**V-SOM** operates as an intermediate workflow executor and connector between different systems components. It executes orders from CRM towards other systems in a transactional methodology with intervention and rollback capability.

## Connectivity, Automation, & Billing Solution

"cabill" is a complete platform for wholesale and retail service providers to manage, bill, provision and monitor connectivity, data, and co-location services.



### Key Benefits

- ▶ Billing of event-based and non-event based services using dynamic pricing rules
- ▶ Automatic service provisioning and service deactivation
- ▶ Capabilities for order management and tracking
- ▶ Business process management (BPM) capabilities
- ▶ Alignment with the client's vision to introduce new service offerings
- ▶ Integration with any third party system such as CRM, ERP and payment gateways
- ▶ Tools to design advanced reports and dashboards
- ▶ Dynamic rule-based engine to detect, alert, and act against specific behaviors and business rules violations

## Revenue Assurance Solution

**TRACE** is a fully-fledged platform designed for regulatory authorities to monitor telecom traffic for revenue assurance and QoS purposes. It provides transparency as an independent source of reporting. TRACE is armed with components that automate the monitoring activities from data collection to processing and data reporting allowing for visibility over the revenues generated by telecom operators and the quality of the services offered.

### Key Benefits

- ▶ Real-time data management, monitoring and reporting
- ▶ Transparency and accuracy over operators' volume and revenue declarations
- ▶ Detection of revenue leakage and discrepancies
- ▶ Real-time tracking of operators' revenues and taxation
- ▶ Improved QoS
- ▶ Better subscriber experience
- ▶ Subscriber protection
- ▶ Elimination of fraud sources impacting revenues and QoS
- ▶ Boosted revenues enhancing the ICT sector in general

## ByPass Fraud Detection Solution

**F.Zero TCG** is a test call generation service that initiates manual/automatic calling campaigns originating from several desired originations and terminating at the telecom operator's network, using Vanrise's testing devices to track CLI changes across the path.

### Key Benefits

- ▶ Identifies fraudulent cases in real-time
- ▶ Generates customized timely reports of fraud findings and sends them to operators using various means (Email, FTP, API, etc.)
- ▶ Provides dynamic reporting and dashboards interface
- ▶ Can automatically block fraudulent SIMs/Analog & Digital Lines through integration means with the network elements of FNOs/MNOs
- ▶ Continuously considers the fraudster tactics in its deployed methodology to maximize fraud detection capabilities
- ▶ Utilizes a wide range of sources including mobile operators, wholesale carriers, SIP accounts and calling cards to identify as many fraudulent cases as possible



## Fraud Detection Solution

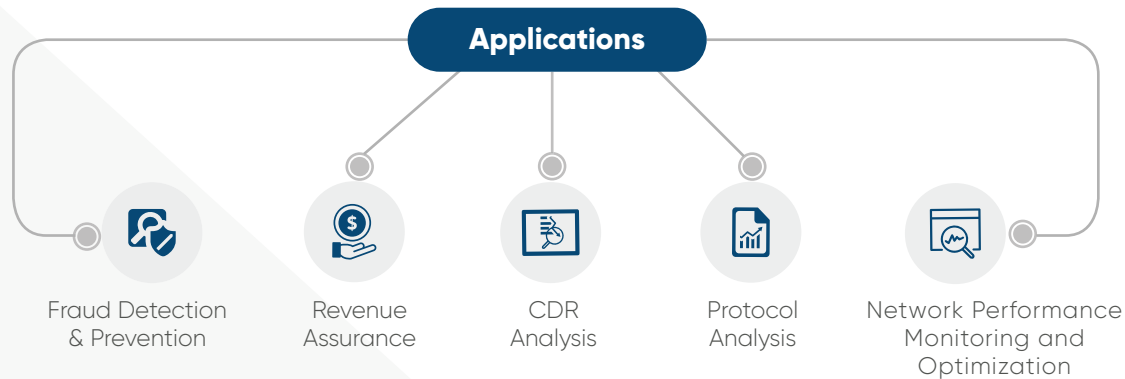
**inspkt Data Analysis System** is a system used to inspect, analyse, and monitor the telecom operators' national, international and roaming voice, SMS and data traffic to detect telecom fraud harming their networks, revenues and subscribers and act upon findings. The system collects traffic data from the data sources predefined in the system, applies data profiling and analysis, timely detects and reports fraudulent cases, generates alerts, and executes actions on the operators' network elements accordingly to stop the identified fraud attacks and prevent future attacks from the same sources.

### Key Benefits

- ▶ Addresses telecom fraud in real-time
- ▶ Provides faster, sharper, earlier and smarter telecom fraud detection mechanisms
- ▶ Deploys a dynamic rule-based engine to create an unlimited number of rules to handle any type of telecom fraud including (Wangiri attack; PBX-hacking; Call spoofing; Roaming fraud; IRSF fraud)
- ▶ Actively alerts concerned teams about detected fraudulent attempts through various mediums (SMS, emails, system notification, etc.)
- ▶ Applies automated blocking commands on the network elements
- ▶ Updates the blacklist with the newly detected fraud sources to prevent future attacks from the same sources
- ▶ Provides a dynamic reporting engine with built-in and ad-hoc reports and live dashboards
- ▶ Can be easily customized and configured to detect any new fraud threats jeopardizing the operator's business, improving the response time to these threats
- ▶ Proactively protects subscribers, achieving customer satisfaction and therefore customer retention
- ▶ Incorporates a bridging module for smooth integration with third-party systems

## Real-Time Passive Monitoring System

**inspkt Probe** is a network extraction system which functions in a passive mode to collect, in real-time, the signaling messages of voice, SMS and data services running over CS/PS networks of fixed and mobile operators and generates CDRs/IPDRs/counters that can be used for several applications.



## Key Benefits

- ▶ Captures voice/SMS/data messages in real-time
- ▶ Extracts QoS counters for better visibility on the core network status
- ▶ Supports signaling and media content splitting
- ▶ Provides ready-to-use and dynamic xDR outputs
- ▶ Supports File, SQL and Big Data storage types
- ▶ Provides unified IP output for all interfaces
- ▶ Provides the means to recognize, diagnose and identify low performing and faulty network elements

## Mobile QoE Measurement System

**inspkt DTS** is a complete drive test solution used to monitor and measure the QoE of voice, SMS and data services as well as network coverage at the access network level of mobile operators for both indoor and outdoor scenarios.

### Key Benefits

- ▶ Simulates the customer experience and the generation of measurable QoE KPIs over the voice, SMS and data services
- ▶ Calculates QoE KPIs in real-time for better visibility on the user experience at the different mobile operator's sites
- ▶ Helps recognize, diagnose and identify low performing and faulty cells
- ▶ Eases the troubleshooting, investigation and maintenance in response to any drop in the QoE levels
- ▶ Operates in either online or offline mode
- ▶ Provides a GIS map for the tested route
- ▶ Offers dynamic reports and live dashboards
- ▶ Drives taking smart decisions, measures and recommendations for network redistribution and upgrades based on the QoE output measurements
- ▶ Supports data export in different formats
- ▶ Supports all mobile technologies (2G, 3G and 4G); VOLTE and 5G are in the product road map
- ▶ Supports indoor and outdoor QoE measurement

## QoS/QoE Monitoring Solution

**inspkt QoS/QoE** is a network monitoring solution which collects QoS and QoE counters, CDRs and IPDRs from the defined data sources, processes the collected data, and calculates QoS/QoE KPIs. The system generates alerts and notifications respecting the QoS/QoE thresholds predefined in the system and presents the QoS/QoE KPIs in dynamic BI reports and dashboards.

### Key Benefits

- ▶ Calculates QoS/QoE KPIs in real-time for better visibility on the network performance and user experience
- ▶ Helps recognize, diagnose and identify low performing and faulty networks and cells
- ▶ Eases the troubleshooting, investigation and maintenance in response to any drop in the QoS/QoE
- ▶ Offers dynamic BI reports and live dashboards
- ▶ Provides a dynamic alerting engine
- ▶ Drives taking smart decisions, measures and recommendations for network redistribution and upgrades based on the QoS/QoE output measurements
- ▶ Incorporates a bridging module for smooth integration with third-party systems
- ▶ Supports data export in different formats

## Billing, Routing and Quality Monitoring Solution for Interconnect Voice and SMS Traffic

**T.One Wholesale Suite** is a web-based platform whose modules enable encompassing management across all facets of wholesale carriers' operations. The solution functions as a unified platform that brings cohesion and delivers exceptional results across NOC, technical, billing, routing, account management and top management teams, allowing them to focus on strategic business maneuvers and smart decisions. Moreover, T.One Wholesale Suite's agile scalability and ability to fit the requirements and technical needs of carriers of all sizes add to its uniqueness. T.One Wholesale Suite is exclusively tailored to the wholesale business needs of Fixed and Mobile Operators; it can also be cross-integrated with class 5 billing systems.

### Key Benefits

- ▶ Full business automation and enhanced revenue assurance
- ▶ Intelligent routing algorithms considering multiple factors
- ▶ Proactive management and monitoring of voice and sms business threats
- ▶ Maximized team coordination across all units
- ▶ Fully-customized and scalable platform

## Billing Solution for Local Interconnect and Roaming Partner's Traffic

**T.One ICX** is a real-time web application that uses state-of-the-art technologies and has a robust structure that renders it extremely stable and reliable. It is designed to streamline the operations of the local Interconnect and Roaming traffic and automate the billing activities and partners lifecycle management. The system provides the capability to bill multiple type of services provided by the telecom operator such as Voice, SMS, Data, leased lines or any new service the customer is willing to introduce in the future. Furthermore, T.One ICX simplifies the generation and automatic dispatch of invoices based on configurable settings as well as the reconciliation of the received invoices.

### Key Benefits

- ▶ Provides an extensible data model based on generic data architecture to support any requirement within the Interconnect (local, Roaming, etc.) and partners management fields
- ▶ Provides a single interface to manage multiple data sources by providing compatible integration protocols, mapping scripts and customized transformation process
- ▶ Supports 360° view partners management
- ▶ Handles hundreds of millions of calls/SMS per day depending on the hardware configuration
- ▶ Offers a dynamic and responsive web interface supporting mobile and tablet devices
- ▶ Provides user-defined dynamic dashboards and reporting
- ▶ Provides configurable and customizable alerting engines
- ▶ Provides rule-based pricing and normalization tools
- ▶ Provides rule-based data analysis engine
- ▶ Incorporates a bridging module for smooth integration with third-party systems

## Real-time Call Inspection and Tracing Solution

**inspkt Tracer** is a real-time inspection and tracing system which allows wholesale carriers to trace calls and store CDRs and pcap files for analysis and troubleshooting purposes. The system utilizes, inspkt Probe, as a main data source for network signalling messages extraction. Using, inspkt Probe, the system collects in real-time, the signaling messages of the voice services running over the wholesale carrier network and generates CDRs of the exchanged traffic.

### Key Benefits

- ▶ Monitors and troubleshoots the QoS of SIP VoIP calls
- ▶ Automatically sends pre-agreed upon and predefined live traces via email to the remote engineers without the need to have onsite engineers
- ▶ Deploys a dynamic rule-based engine to create an unlimited number of rules to handle any type of telecom fraud or alert on network issues impacting call attempts and call quality
- ▶ Detects, in real-time, any type of telecom fraud (Wangiri, CLI spoofing, IRSF fraud, etc.)
- ▶ Actively alerts concerned teams about detected fraudulent attempts or degraded voice quality through various mediums (SMS, email, system notification, etc.)
- ▶ Applies automated blocking commands on the network elements pursuant to the identified fraud sources, thus protecting the carrier's network, revenues and partnerships
- ▶ Guarantees high quality of voice services offered by or to the interconnected partners
- ▶ Grants the carrier's technical team full visibility over the voice traffic messages and call parameters while investigating billing disputes and other major technical issues
- ▶ Allows engineers to get on-demand traces in real-time
- ▶ Provides a dynamic reporting engine with built-in and ad-hoc reports and live dashboards
- ▶ Incorporates a bridging module for smooth integration with third-party systems

## Billing, Routing and Quality Monitoring Solution for Wholesale traffic

**ntegra Wholesale Suite** serves as a cornerstone for Tier-1, Tier-2 and Tier-3 carriers to fulfill their mediation, routing [LCR, BQR, etc...], trading and billing requirements and build up their call volumes and teams. ntegra Wholesale Suite's straight-forward implementation and minimal need for maintenance are additional reasons why it stands as the best option for growing carriers seeking cost-effective solutions. ntegra wholesale suite can also be cross-integrated with class 5 billing systems.

### Key Benefits

- ▶ Cost-effective unified solution
- ▶ Full carrier business automation
- ▶ Quick implementation & user-friendly platform
- ▶ Scalable platform supporting voice and sms business growth



## Multi-Service Billing Solution for Retail Operators

**n.tegra Retail Suite** is a web-based platform dedicated for retail operators (IP-Centrex providers, ISPs, and residential/enterprise voice and data providers). It provisions powerful management of the voice, data, and SMS retail business operations, enabling full management of subscribers, credit amounts, and product packaging and allowing for close monitoring and sound business decisions.

### Key Benefits

- ▶ A unified solution for multi-service billing
- ▶ Easy management of subscribers and balances
- ▶ Full customization of product packaging
- ▶ Assured revenues and profits
- ▶ Smooth integration with third-party systems
- ▶ White-Labeled Client Access Portal

## The Cloud-based Wholesale Traffic Management Platform

**cloudXpoint** is a cloud-based solution offered by vanrise for wholesale carriers seeking a state-of-the-art interconnect platform. The winning combination of our own Carrier-Grade Session Border Gateway (SBC) and the billing & Routing Management Platform encompasses all the services required by the different operation teams of a wholesale carrier. cloudXpoint helps voice service providers promote their networks and deliver services smoothly and at an affordable cost. It enables cost-effective scalability proportional to traffic growth.

### Key Benefits

- ▶ Smooth Service Setup
- ▶ High Availability & Non-Blocking Network Architecture
- ▶ Unified and Dynamic Platform for Rating, Billing, and Routing
- ▶ Cost Effective Network Scalability
- ▶ Low Operational Cost
- ▶ No Capital Expenses

### Services



Remote  
& Onsite Training



24x7 Technical  
Support



Dedicated  
Account Manager

## Augmenting Existing Solutions

**X-Booster** is a unique collection of cost-effective tools and an in-depth modular solution for carriers and different team units. The toolbox is a cloud-based solution that aims to boost the performance of the carrier's operations through the provisioning of missing functionalities in the carrier's telecom business. It can be smoothly integrated with the system in place without disrupting the carrier's daily workflow, thus immensely speeding up many tedious processes and reports. Telecom companies can try any of X-Booster tools offered for a specific period, according to their preferred business plan.

### X-Booster includes the following tools:



#### **CDR Compare Tool**

Automates the reconciliation of CDRs with suppliers and customers and clears disputes.



#### **Supplier Rate Management Tool**

Parses supplier pricelists, converting them into desired formats compatible with different switch brands.



#### **ClearVoice**

Tests, measures, and reports the quality of voice calls across many destinations & routes.

## International Gateway Management Solution

**VANGATE** facilitates engineering and running all international gateway operations required by ministries & regulatory bodies through its comprehensive embedded tools and solutions including:

- T.One Suite covering mediation, billing, routing, invoicing, and reporting
- International & national traffic management
- International carrier relations and marketing management
- FZero's fraud detection services
- TDM & VoIP connectivity management
- Setup of data centers & switching equipment through world renowned partners

### Key Benefits

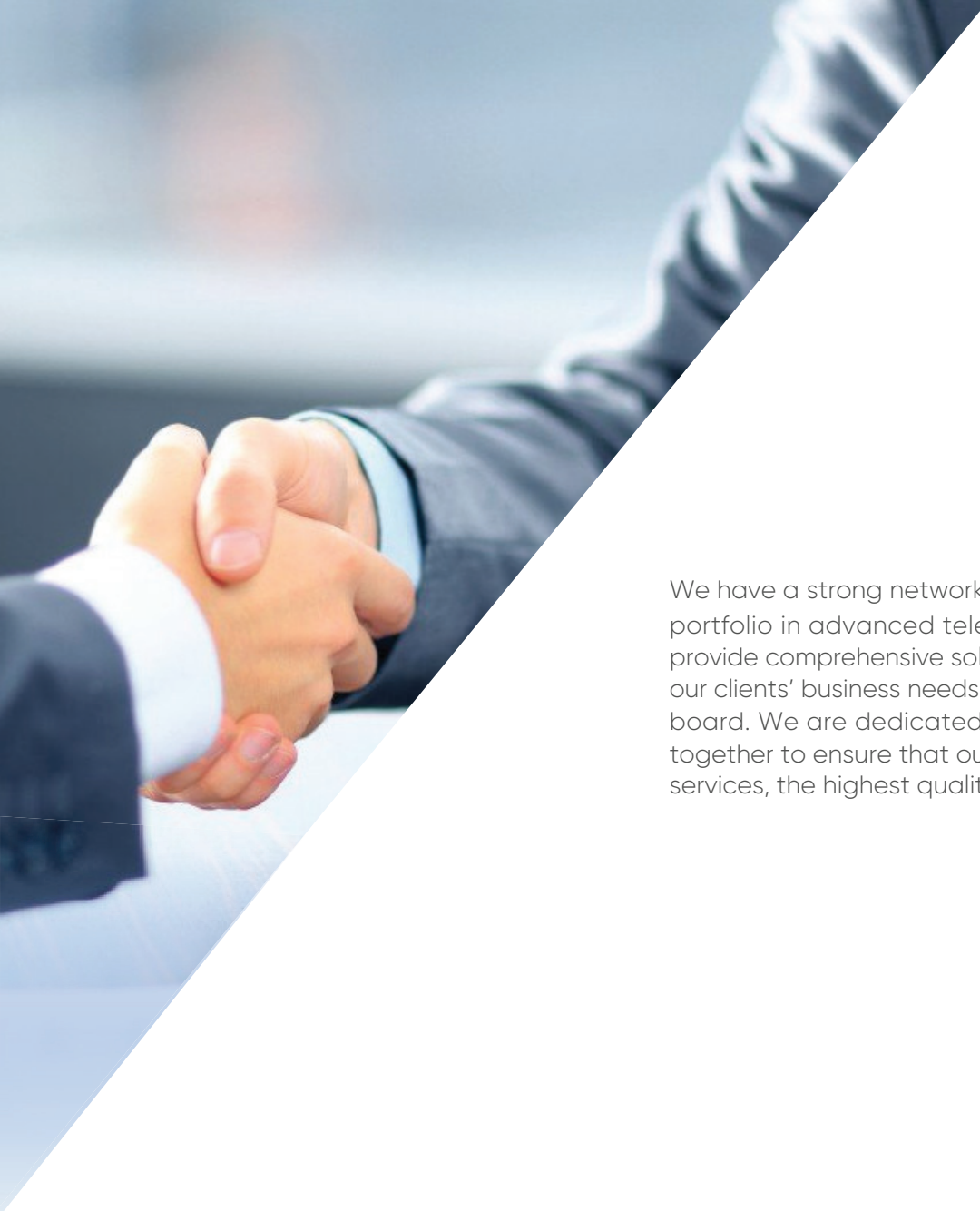
- ▷ Full international gateway management automation
- ▷ Accurate billing with international and local partners
- ▷ Assured revenues through anti-fraud methods



# Services

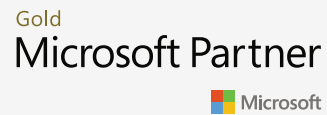
Our team's rich expertise and our experience in the field paired with our strong networks of highly recognized partners and consultants allow us to offer our clients a complete set of complimentary services including:

- ▶ Telecom Consultancy
- ▶ Systems Integration
- ▶ CRBT and VAS Services



## Partners

We have a strong network of partners and resellers with an outstanding global business portfolio in advanced telecommunications and IT services. This has empowered us to provide comprehensive solutions and services, strategically and holistically respond to all our clients' business needs, and achieve further tangible returns on investment across the board. We are dedicated to back our partners in every step of the way, and we work together to ensure that our mutual customers receive the most innovative solutions and services, the highest quality of support, and an alluring customer experience.





# Top Clients Portfolio

Every minute, Vanrise's software is mediating, processing, and rating hundreds of thousands of minutes and routing calls for clients across the globe. We take huge pride in partnering with a wide range of clients in over 15 countries throughout the telco eco-system.





