



THE ULTIMATE Buyer's Guide to Global Voice Solutions



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Navigating Today's Global Voice Communications Landscape

The global telecommunications landscape has fundamentally transformed over the past decade. What was once a fragmented collection of regional physical networks has evolved into a connected cloud-delivered ecosystem reaching businesses and customers across continents. Voice communications, despite predictions of its demise, remains the critical channel for high-value customer interactions- with even digital-first companies recognizing its importance for complex problem-solving and relationship building.

This transformation has accelerated dramatically in recent years. The global shift to remote work exposed weaknesses in legacy voice systems, while customer expectations have risen sharply across industries. Organizations now require voice solutions that deliver consistent quality regardless of geography, seamlessly integrate with modern business systems, and provide the flexibility to adapt quickly as business needs evolve.

Against this backdrop, IT and telecom leaders face a pivotal question: is their current voice infrastructure positioned to support their business both today and tomorrow? The stakes of this decision are considerable. Voice remains the preferred channel for resolving complex issues, and even brief service disruptions can damage customer relationships and brand reputation. Meanwhile, the right global voice solution can dramatically reduce operational complexity, improve customer experiences, and unlock new international growth opportunities.

This comprehensive guide is designed to help you navigate the decision-making process for global voice solutions. Whether you're consolidating existing providers, migrating to the cloud, or expanding internationally, we'll walk through the critical considerations at each stage of evaluation. By the end, you'll have a clear framework for assessing your organization's needs, evaluating potential solutions, and selecting a voice partner that aligns with your business objectives both now and in the future.



Common Triggers for Global Voice Investment

Organizations rarely embark on voice infrastructure changes without compelling reasons. These projects typically require significant resources, coordination across multiple teams, and navigating complex regulatory environments. Understanding what typically drives these initiatives can help you frame your own decision-making process and build internal consensus for change.

Provider Consolidation Needs

Many global enterprises manage multiple voice providers across regions—resulting from expansion, acquisitions, or decentralized purchasing.

Research shows 92% of multinational companies use more than one provider, with nearly 25% managing fifteen or more.

This fragmentation creates inconsistent service quality, complex troubleshooting, excessive vendor management time, and missed volume discounts. In response, **41% of organizations are actively consolidating providers, with another 49% considering similar initiatives.**

According to our research with Metrigy,

92% of companies **use more than one provider** for international voice services, **with nearly 25% managing fifteen or more.**

Source: The State of International Voice for the Contact Center

CCaaS and UCaaS Platform Transitions

As organizations adopt modern cloud platforms like Genesys or Amazon Connect, they naturally reassess their voice infrastructure. Voice quality directly impacts these platforms' performance, making transitions an ideal time to optimize the entire communications stack.

These migrations offer a strategic opportunity to address voice challenges previously tolerated with legacy systems, creating a more cohesive technical foundation for future growth.

AI Customer Experience Initiatives

Conversational AI, sentiment analysis, and automated quality assurance are transforming customer interactions. **Our research shows 94% of organizations are using or evaluating AI for voice channels.** These technologies require high-quality connections—poor audio quality significantly degrades AI performance.

As companies invest in these capabilities, many discover their existing voice infrastructure cannot deliver the quality needed, prompting a comprehensive review of voice solutions.

On-Premises to Cloud Migration

Legacy on-premises systems are reaching end-of-life with rising maintenance costs. Cloud-based voice offers improved flexibility, reduced capital expenditure, better disaster recovery, and simplified management.

This migration enables global standardization of voice operations, addressing regional inconsistencies and establishing unified processes for provisioning, monitoring, and optimization.

Geographic Expansion Requirements

International growth often exposes limitations in existing voice infrastructure. New markets require local presence, regulatory compliance, and consistent service quality. Many organizations discover their current providers cannot deliver comprehensive coverage in emerging markets.

The right global voice partner becomes an enabler of expansion rather than a limiting factor, supporting both current operations and future growth plans.

Dissatisfaction with Existing Provider(s)

Perhaps the most immediate trigger for change is dissatisfaction with current voice service. This can manifest in various ways: persistent quality issues that impact customer conversations, unresponsive support during critical outages, or limited visibility into performance metrics.

Our research reveals that 85% of organizations experience periodic downtime in their contact centers, with about 60% facing multiple outages each quarter. As these disruptions directly impact customer experience and employee productivity, they often catalyze a comprehensive reevaluation of voice partnerships.

For many organizations, the breaking point comes when they realize they're spending more time managing voice problems than focusing on strategic initiatives. When voice infrastructure becomes a constant source of firefighting rather than a reliable business enabler, it's time to explore alternatives.

According to our research with Metrigy, 60% of organizations experience multiple voice service outages every year.

Source: The State of International Voice for the Contact Center



Core Evaluation Criteria

Now that we've examined the common catalysts for global voice investments let's explore the essential criteria for evaluating potential solutions. This comprehensive framework will help you assess providers based on coverage, software capabilities, infrastructure quality, implementation approach, and cost structure.

Coverage and Numbers

The foundation of any global voice solution is its geographic reach and number portfolio. Without adequate coverage in your target markets, even the most sophisticated platform will fail to be able to support your business.

Geographic Availability Assessment

Start by mapping your current and future operational footprint. Where are your customers located? Where do your agents or employees need to make and receive calls? This geographic blueprint becomes your baseline requirement for evaluating provider coverage.

Leading global voice providers offer service in a seemingly large number of 150+ countries, but this headline number can be misleading. The depth of coverage within each country varies significantly—some providers may only offer coverage in major cities or have a limited number of types in certain regions. Request detailed documentation of a provider's coverage by country, including specific regions within larger nations.

Number Type Requirements

Different business scenarios require different number types. Local DIDs (Direct Inward Dialing) establish a regional presence. Two-way local presence numbers typically deliver the most favorable answer rates for outbound calls. Toll-free numbers provide customers with cost-free calling options but may have coverage limitations in certain regions. Mobile numbers might be necessary in markets where landline penetration is low, while vanity numbers can improve brand recall.

The most versatile global voice providers offer multiple number types wherever possible, including:

- Local DIDs
- Toll-free numbers (including ITFS– International Toll-Free Service)
- Mobile numbers
- TrueLocal™ solutions with two-way voice capability
- Non-geographic numbers
- Universal International Freephone Numbers (UIFN)

Your evaluation should assess whether providers can deliver the specific number types needed for each market.

Inventory Availability

Having the right number type in the right region is only valuable if you can acquire it quickly. Some providers may list extensive coverage on paper but have limited actual inventory available for immediate provisioning. When evaluating providers, inquire about their ready-to-provision inventory in your key markets. Leading providers maintain substantial number inventories and offer instant online provisioning through self-service portals, enabling you to acquire numbers in minutes rather than days or weeks.

Regulatory Compliance by Region

Telecommunications remains one of the most heavily regulated industries globally, with requirements varying dramatically by country. Some regions require local business entities, specific documentation, or even physical presence to acquire certain number types.

Your voice provider should offer comprehensive regulatory expertise and handle compliance requirements on your behalf. Evaluate their knowledge of local regulations and their ability to guide you through any documentation requirements, particularly in countries with complex regulatory environments like Brazil, China, and the United Arab Emirates. If you have had past issues in a given region, push them on their solutions and how they will ensure compliance and stability.

Software Platform

While coverage forms the foundation of global voice solutions, the software platform determines how effectively you can manage, analyze, and optimize your voice operations. A robust platform transforms voice from a tactical utility into a strategic business asset.

Analytics Capabilities

Data visibility has become the critical differentiator between legacy voice providers and modern cloud platforms. Legacy carriers typically offer minimal analytics beyond basic usage reports, while advanced providers deliver comprehensive insights into call quality, performance trends, and customer experience metrics.

Evaluate whether providers offer analytics that help you understand:

- Call quality metrics (MOS scores, jitter, packet loss)
- Connection rates and answer rates by region
- Geographic call distribution patterns
- Peak volume periods for capacity planning
- Detailed performance and call journey data by individual number

Testing and Link to Support

Proactive testing capabilities represent a significant advancement over-reactive troubleshooting approaches.

Modern voice platforms enable you to test number connectivity and audio quality directly from your management interface, often before customers experience any issues.

Data Visibility / Reporting

Comprehensive reporting transforms raw call data into actionable business intelligence. Sophisticated platforms provide both real-time dashboards for operational monitoring and detailed historical reports for strategic planning.

Evaluate whether providers offer:

- On-demand or scheduled automated number testing with configurable frequency
- Integration between testing tools and support systems
- Ability to initiate support cases directly from test interfaces

Assess whether providers offer:

- Customizable dashboards for different stakeholder needs
- Scheduled report delivery to key stakeholders
- Exportable data for integration with business intelligence tools
- Granular filtering capabilities for detailed analysis
- Trend visualization to identify patterns over time

Integration Requirements

Your voice solution doesn't exist in isolation—it must integrate seamlessly with your broader technology ecosystem, including contact center platforms, CRM systems, and business applications.

Evaluate whether providers offer:

- Native integrations with major CCaaS platforms (Genesys, Amazon Connect, etc.)
- SIP trunk connectivity options for custom integrations
- API access for programmatic management and data retrieval
- Webhook support for event-triggered workflows
- Compatibility with your organization's unified communications platforms

Security and Compliance Features

Voice systems often handle sensitive customer information, making security and compliance critical evaluation criteria. Modern platforms should incorporate comprehensive security features that protect both your infrastructure and your customer data.

Assess whether providers offer:

- TLS/SRTP encryption for voice traffic
- Role-based access controls for platform management
- Fraud monitoring and prevention capabilities
- Compliance with industry standards (SOC 2, GDPR, HIPAA, etc.)
- Single sign-on and multi-factor authentication options

Network Infrastructure

Behind any cloud voice platform lies physical infrastructure that determines fundamental performance characteristics like call quality, reliability, and scalability. While this infrastructure may be less visible than software features, it has profound implications for your overall experience.

Voice Quality and Reliability

Voice quality remains the most tangible aspect of call performance for both your agents and customers.

Research consistently shows that poor call quality significantly impacts customer satisfaction, agent productivity, and business outcomes.

Evaluate providers based on:

- Historical Mean Opinion Score (MOS) across regions
- Network redundancy and failover capabilities
- Packet loss and jitter management
- Latency minimization strategies
- Historical uptime performance

Global Footprint

Assess whether providers maintain:

- Multiple points of presence across major global regions
- Geographically distributed data centers for optimized network on-ramp and redundancy
- Direct interconnections with local carriers in key markets
- Cloud-native infrastructure
- Active-active configurations that eliminate single points of failure

Scalability

Your voice needs will inevitably evolve as your business grows and market conditions change. The ability to scale quickly—both up and down—ensures your voice infrastructure can adapt to changing requirements without requiring disruptive migrations.

Evaluate whether providers offer:

- On-demand capacity scaling without service interruption
- Ability to quickly provision numbers in new regions
- Flexible commitment levels that align with your business cycle
- Burst capacity for seasonal or promotional peaks
- Performance consistency, even during high-volume periods

Implementation & Support

Even the most sophisticated voice solution is only as good as its implementation and ongoing support.

The human element of your provider relationship often determines whether your voice investment delivers its full potential or becomes a source of ongoing frustration.

Onboarding Process

Effective onboarding establishes the foundation for a successful voice implementation. A structured approach minimizes disruption and accelerates time-to-value for your investment.

Evaluate whether providers offer:

- Comprehensive implementation planning before technical work begins
- Dedicated project resources with clear accountability
- Phased approaches that align with your business priorities
- Knowledge transfer to internal teams throughout the process
- Clear success criteria and validation procedures

Project Management Approaches

Complex voice implementations—especially those involving porting or migration—benefit from disciplined project management. Providers with mature methodologies deliver more predictable outcomes and reduced implementation risk.

Technical Expertise Requirements

Voice technology encompasses multiple specialized disciplines, from telecommunications engineering to cloud infrastructure management to regulatory compliance. Few organizations maintain comprehensive internal expertise across all these domains.

Assess whether providers employ:

- Documented project methodologies with clear milestones
- Regular status updates and transparent issue tracking
- Risk management frameworks with contingency planning
- Resource planning that accounts for dependencies
- Executive escalation paths for critical situations

Evaluate whether providers can supplement your internal capabilities with expertise in:

- International telecommunications regulations
- Network design and optimization
- Number porting procedures across regions
- SIP protocol and VoIP implementation
- Security and compliance requirements

Support Levels and Availability

When voice issues arise, rapid resolution is essential to minimize impact on your operations and customer experience. Support capabilities vary dramatically among providers, from basic ticket systems to comprehensive follow-the-sun models with dedicated resources.

Training Documentation

Comprehensive training and documentation empower your team to effectively manage your voice environment, reducing dependency on provider support for routine operations.

Assess whether providers offer:

- 24/7/365 support availability across all service areas
- Multiple support channels (phone, email, chat, portal)
- Clearly defined SLAs with meaningful remediation
- Prioritization mechanisms for critical issues
- Direct access to technical experts without excessive escalation

Evaluate whether providers offer:

- Role-based training programs for different user types
- Multiple learning formats (live, recorded, documentation)
- Regularly updated knowledge bases and technical resources
- Certification programs for advanced users
- Ongoing education about new features and capabilities

Pricing & Total Cost of Ownership

Voice pricing models can be notoriously complex, with variations by region, number type, usage pattern, and additional services. Understanding the full cost structure is essential for accurate budgeting and long-term planning.

Common Pricing Models

Voice solutions typically incorporate multiple pricing components, each with its own structure and variables.

Common elements include:

Number Fees: Monthly charges for each telephone number, varying by type (local, toll-free, etc.) and region.

Usage Charges: Per-minute fees for inbound and outbound calling, often with different rates by destination.

Platform Fees: Charges for access to management software, analytics, and additional capabilities.

Support Services: Costs for different support tiers, project management, and professional services.

Evaluate whether providers offer transparent pricing structures that clearly delineate these components and how they apply to your specific use case.

Cost Factors by Region

International calling rates vary dramatically by region due to differences in local market structures, regulatory environments, and infrastructure costs. Some regions may have rates 10-20 times higher than others for similar services.

Volume Considerations

For organizations with significant call volume, economies of scale should translate to more favorable pricing. However, these volume benefits vary considerably among providers.

Assess whether providers:

- Maintain competitive rates in your high-volume regions
- Offer transparency into regional pricing variations
- Provide predictable pricing for budget planning
- Allow customization of routing based on quality/cost preferences
- Minimize or eliminate connection fees and short-call penalties

Evaluate whether providers offer:

- Tiered pricing that improves with increased volume
- Commitment-based discounts for predictable usage
- Enterprise pricing options for large deployments
- Pooled minutes across regions or number types
- Volume discounts that apply automatically without renegotiation

Hidden Costs to Consider

The advertised price rarely reflects the full cost of voice services. Additional charges—sometimes disclosed only in contract fine print—can significantly impact your total expenditure.

ROI Evaluation Framework

Beyond pure cost analysis, evaluating return on investment helps quantify the business impact of your voice solution. A structured ROI framework incorporates both cost savings and operational improvements.

Watch for potential hidden costs such as:

- Contract lock-in and related break-up fees
- Installation or activation charges
- Number porting fees
- Early termination penalties
- Support or professional service fees
- Minimum monthly commitments
- Overage penalties

Consider factors such as:

- Vendor consolidation savings (contract, management, support)
- Improved agent productivity through better call quality
- Reduced downtime and associated revenue protection
- Enhanced customer experience and retention
- Operational efficiency through automation and self-service
- Scalability benefits for future growth

Provider Consolidation & Porting

For organizations with existing numbers across multiple providers, consolidation offers significant benefits in management efficiency, cost optimization, and service consistency. However, this process involves unique challenges that require careful planning and execution.

Assessing Current Provider Landscape

Before embarking on consolidation, a thorough assessment of your current voice environment establishes the baseline for planning and identifies potential challenges.

This assessment should document:

- All existing providers and their geographic coverage
- Number inventory by provider, type, and region
- Current usage patterns and costs by provider
- Contract terms, including renewal dates and commitments
- Known service issues or limitations by provider

Porting Requirements & Challenges

Number porting—transferring existing numbers from one provider to another—represents the most technically complex aspect of consolidation. Porting requirements vary dramatically by country and number type, with some regions presenting significant challenges.

Migration Planning Best Practices

Successful consolidation requires methodical planning that minimizes business disruption while managing technical complexity. The most effective approaches typically involve phased migrations rather than "big bang" cutover strategies.

When evaluating porting capabilities, assess whether providers:

- Offer porting services in all your required regions
- Provide clear documentation of country-specific requirements
- Maintain dedicated porting specialists with regional expertise
- Offer project management for complex porting initiatives
- Have established relationships with major carriers in each region

Effective migration plans typically incorporate:

- Prioritization framework based on business impact and technical complexity
- Phased approach that begins with lower-risk numbers and regions
- Clear testing protocols for each migration phase
- Rollback procedures in case of unexpected issues
- Communication plan for internal teams and customers

Risk Mitigation Strategies

Even well-planned migrations involve inherent risks that must be proactively addressed. Effective risk mitigation combines contingency planning with technical safeguards to protect business continuity.

Common risk mitigation strategies include:

- Maintaining parallel service during transition periods
- Implementing call forwarding as a backup mechanism
- Scheduling migrations during low-volume periods
- Conducting thorough pre-migration testing
- Developing detailed troubleshooting runbooks

Managing Provider Transitions

Beyond the technical aspects of migration, managing the business relationship transition requires careful coordination. This includes contract management, service termination procedures, and financial considerations.

Effective transition management involves:

- Mapping current contract end dates to migration timeline
- Understanding termination notice requirements and penalties
- Coordinating final billing and reconciliation with outgoing providers
- Ensuring service continuity during handover periods
- Documenting changes for compliance and audit purposes

Future-Proofing Your Investment

Voice infrastructure decisions have long-term implications for your business. The right solution should not only address current requirements but also provide a flexible foundation for future evolution.

Technology Roadmap Considerations

The voice technology landscape continues to evolve rapidly, with new capabilities emerging regularly. Evaluating a provider's technology roadmap helps ensure your solution will remain relevant as the industry advances.

Assess whether providers demonstrate:

- Clear vision for platform evolution and enhancement
- Transparent development priorities aligned with market trends
- Regular release cadence with meaningful improvements
- Commitment to backward compatibility and smooth updates
- Mechanisms for customer input into product development

Scalability Requirements

Future-proof solutions must accommodate growth across multiple dimensions—not just increased call volume, but also geographic expansion, new use cases, and integration with emerging technologies.

Evaluate whether providers can support:

- Rapid scaling during high-growth periods
- Entry into new geographic markets with minimal lead time
- Incorporation of new communication channels
- Integration with evolving business systems
- Flexible commercial terms that align with growth patterns

Emerging Trends in Voice Solutions

The voice landscape is being transformed by several key trends that will shape requirements for years to come. Understanding how providers position themselves relative to these trends provides insight into their long-term viability.

Key trends include:

- Voice AI integration for automation and agent assistance
- Omnipresent analytics across all communication touchpoints
- Programmable voice capabilities through APIs and webhooks
- Enhanced security mechanisms against sophisticated threats
- Deeper integration between voice and digital channels

Risk Management Strategies

Technology evolution inevitably introduces new risks that must be proactively managed. Future-proof solutions incorporate comprehensive risk management frameworks that address emerging threats and challenges.

Evaluate whether providers demonstrate:

- Proactive security enhancement to address evolving threats
- Compliance monitoring for changing regulatory requirements
- Geographic redundancy to mitigate regional disruptions
- Diverse carrier relationships to avoid single-vendor dependency
- Transparent incident response and communication processes



Decision Framework

Selecting the right global voice solution involves balancing multiple factors across technical, operational, and commercial dimensions. A structured decision framework helps ensure all critical considerations receive appropriate weight in your evaluation.

Evaluation Checklist

A comprehensive checklist ensures consistent evaluation across all potential providers, reducing the risk of overlooking critical requirements.

Implementation Planning

Beyond provider selection, preliminary implementation planning identifies potential challenges and establishes the foundation for successful deployment.

Timeline Considerations

Voice implementation timelines vary dramatically based on complexity, scope, and regional factors. Understanding realistic timeframes helps set appropriate expectations and align voice initiatives with broader business planning.

Stakeholder Alignment Guide

Voice solutions touch multiple functions across your organization, from IT and telecommunications teams to contact center operations, finance, and ultimately customer experience. Aligning these diverse stakeholders is essential for successful implementation.

Providers with experience in your industry can often provide guidance on effective stakeholder alignment based on similar implementations.

This comprehensive guide provides a structured framework

for evaluating global voice solutions based on coverage, software capabilities, infrastructure quality, implementation approach, cost structure, consolidation considerations, and future-proofing factors. By systematically addressing each of these dimensions, you can identify the solution that best aligns with your specific business requirements while positioning your organization for long-term success.

Remember that selecting a global voice provider is not merely a procurement decision but a strategic partnership that will significantly impact your operations and customer experience for years to come. The right partner brings not just technology but expertise, vision, and a commitment to your success that extends far beyond the initial implementation.

Want to learn more about optimizing your voice strategy?

Contact our team of voice experts
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ABOUT

AVOXI delivers a new generation of international cloud voice solutions to companies that need to easily connect and converse with their customers. With unmatched depth and breadth of global coverage and virtual number types, and a software platform that provides visibility and intelligence to manage voice service like never before, AVOXI's 5000+ clients are able to more effectively use voice to serve customers across geographic markets as part of a modern contact center approach. AVOXI's global team of cloud voice experts prides itself on ensuring clients receive the highest level of service possible – anywhere and anytime.