

KONTRON AI VOICE PLATFORM USE CASE



Redefining Voice Communications with AI

THE NEED FOR AI VOICE

Voice intensive sectors such as **Telco, Healthcare, Railways, Airports, and Logistics** demand **secure, reliable, and intelligent communication**. Traditional voice systems are no longer enough—today's environments require:

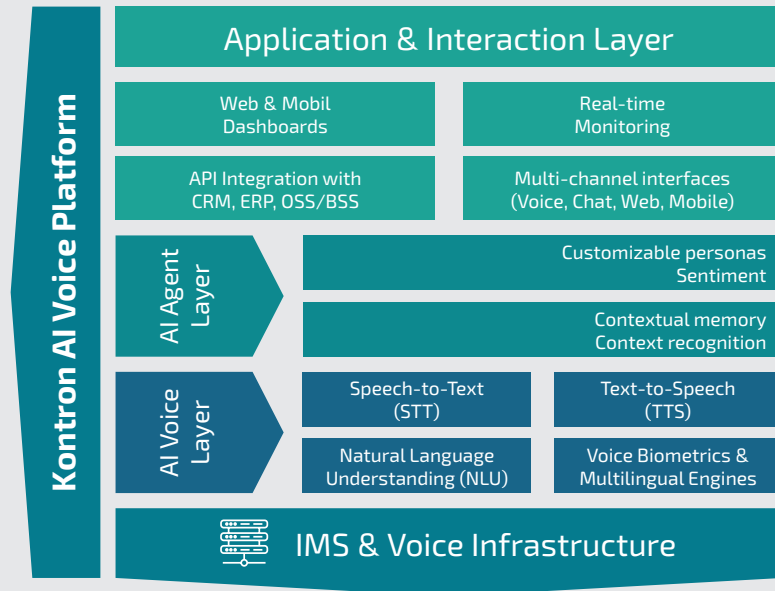
- **Traditional voice services** are now a commodity—enrichment with AI intelligence is essential to create real value.
- **Data privacy** where sensitive information must stay local.
- **Offline operability** to ensure service continuity even without cloud access.
- **Low latency and resilience**, made possible by **5G networks**.
- **Intelligent automation** to support decision-making in real time.

With the global shift toward **AI-driven services, IoT connectivity, and 5G-enabled networks**, organizations need a **voice platform that combines mission-critical reliability with AI intelligence** to meet the rising expectations of **speed, efficiency, and compliance**.

KONTRON'S 5G AI VOICE SOLUTIONS

Kontron introduces an **On-Premise AI Voice Assistant** with **Speech-to-Text** and **Text-to-Speech**, seamlessly integrated with our **cIMS and MCX platforms**. In combination with our **5G Core and RAN Mobile Private network**, the solution ensures **low latency, reliability, QoS, and preemption**—making it ideal for mission- and business-critical environments with automation based on AI agents, context summarization or suggestion for problem resolution based on embedded product manuals documentation.

With Kontron rich history and expertise in **IMS, MCX, and 5G Core**, we bring a **future-ready AI Voice Platform** that combines **mission-critical reliability** with **AI-driven intelligence** to transform communication and collaboration.



Use Case Examples



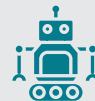
Telco Agents
Customer support, helpdesk, provisioning



Mines / Ports / Airports
Operational coordination, emergency handling, information



Transportation / Logistics
Order tracking, customer service



Manufacturing Agents
Automation, safety

Key capabilities include:

- **Privacy-First:** Fully offline AI processing—no sensitive data leaves the local network.
- **Seamless DECT replacement** with mobile-first communication
- **Modular & Flexible:** Plug-and-play ASR, NLU, and TTS, adaptable to custom workflows.
- **Real-time transcription** gain more clarity in discussions and less human resources to write reports, notes etc.
- **Voice Anywhere:** WebRTC/SIP input for kiosks, control rooms, or embedded devices.
- **Hands-Free & Reliable:** Ideal for **high-noise or hazardous environments**.
- **Smart Contact Centers:** AI agents reduce costs, improve user experience, and manage peak loads.
- **Offload repetitive tasks to AI;** experts get more time for important tasks
- **Hands-free access:** Connect with healthcare records, customs, freight, or logistics systems.

Your Benefits

- **Telco:** AI-powered Customer Center enabling task automation and self-provisioning
- **Healthcare:** Patient record lookups, medical documentation, and burnout reduction.
- **Defense & PPDR:** Secure tactical communication and operational queries.
- **Rail & Airports:** Incident response, coordination, and traffic data access.
- **Enterprises:** Business-critical DECT replacement and OTT voice with AI enhancements.

WHY KONTRON?

Kontron's 5G, cIMS and AI Voice platform is optimized for **industrial-grade performance, low power edge deployments**, and **open integration** with third-party automation systems. Combined with our deep experience in embedded systems, telco software, and industrial computing, Kontron is uniquely positioned to support manufacturers on their **Industry 4.0 and digital transformation journey**—starting with a compact **Starter Pack** and scaling to full-factory coverage.

