



Sovereign  
Systems



# AVARC

## NIB

**HYBRID NETWORK IN A BOX**

## FIRST RESPONDERS, EMERGENCY SERVICES, AND CRITICAL INFRASTRUCTURES

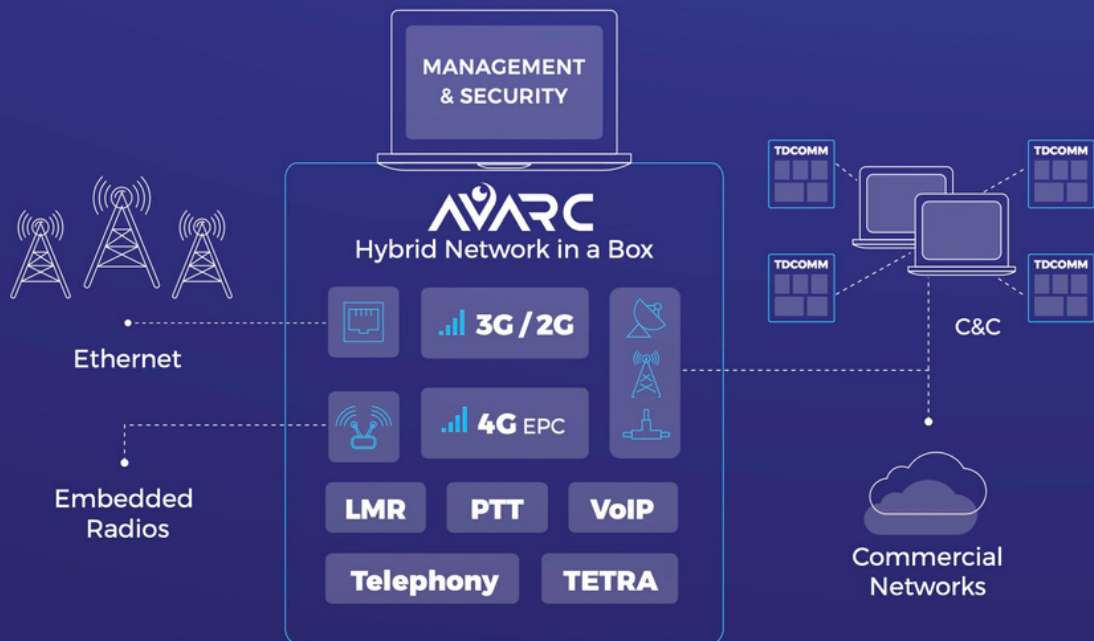
A disaster can strike any region or population – AVARC NIB powers your communications when most critical.

AVARC's industry-revolutionizing Hybrid Cellular Network technology is the only emergency preparedness solution that enables:

- ✓ Subscriber servicing via standard commercial network SIM's, eliminating the need for dedicated equipment and enabling service for all populations in an area
- ✓ Global network connectivity and reachability for subscribers in coverage, enabling communications with any commercially-serviced subscriber in the world such as remote command and decision makers
- ✓ Full field-proven scalability with up to 10,000 concurrent users per box
- ✓ Automated policies for effective resource allocation
- ✓ Embedded billing mechanisms for supporting communications in accordance with commercial network requirements

Combining the best-in-breed telco class components and technologies, AVARC's Hybrid Network in a box supports the cutting-edge of private network capabilities, including:

- ✓ Communication services in 2G/3G/4G and VoLTE
- ✓ Technology integration for combined communications over cellular, LMR, and Tetra networks
- ✓ PTT and Video over LTE
- ✓ High bandwidth and performance supporting enhanced applications such as rescue robots, sensors, and cameras
- ✓ RF flexibility enabling the utilization of on-the-ground equipment for extended range and throughput
- ✓ Robust backhauling for, C&C center, mobile network, and multi-system convergence



## FIRST RESPONDERS & MOBILE NETWORKS – IMPROVE YOUR COOPERATION CAPABILITIES AND SERVICE

AVARC's Hybrid Network model opens a whole new world of opportunities for the services and benefits you offer, reducing emergency deployment time, and enabling ongoing communications with populations in hard-hit areas and vicinities.

With AVARC, you can:

- ✓ Service any subscriber with a standard phone and create ongoing revenue
- ✓ Offer worldwide connectivity for users in a bubble, enabling communications with anyone in the world with no dedicated equipment
- ✓ Leverage any technology including 2G/3G/4G/Tetra/LMR
- ✓ Enforce communication policies for controlling usage and revenue with local control

## FIRST RESPONDERS & MOBILE NETWORKS – IMPROVE YOUR COOPERATION CAPABILITIES AND SERVICE

The on-prem AVARC core is integrated as a standard network extension within the local operator infrastructure and it's based on standard telecom interfaces – S1/S6a and IuH/SS7-MAP, enabling setup and operations in 2G/3G/4G within 10 working days.

## WE KNOW THAT OPERATIONAL READINESS ISN'T AN OUT-OF-THE-BOX EXPERIENCE

With our ultimate mission in mind, we offer flexible models for evaluation and expedited implementation for you to reach operational capability levels and reduce emergency deployment time.

### SYSTEM SPECIFICATIONS

Radio configuration	1-5 radios	Multi system mesh supported
LTE / VoLTE bands - FDD	1/2/3/4/5/7/8/12/13/14/17/20/28	S/W configurable
LTE / VoLTE bands - TDD	38/40/41/42/43/48	S/W configurable
UMTS bands	1/2/5	S/W configurable
GSM Bands	900/1800 MHz	S/W configurable
Power O/P	25/50/100 Watt	
Active Users	32 per radio / 10k per system	
User Types	Private / Commercial SIMS	BYOD / BYOS
Backhaul Channel	Ethernet / Cellular / SAT	QOS groups supported
PTT	PTT over cellular (POC) & LMR migration supported	ICOM, Mottorola, Hytera, Kenwood, Radiotek, Winnertech, Alinco LMR's supported

### MECHANICAL & ELECTRICAL SPECIFICATIONS

Dimensions	H335xW440xD255 mm
Weight	17 Kg
Environmental Spec	-20 to +45 C / IP55
Power Supply	110-220V

### APPLICATION LAYERS

Cellular communications	Private and commercial network interconnected services – voice, SMS and high bandwidth packet data
PTT Command & Control	Location on Map, Chats, Images, Video Streaming
Security & Policy Enforcement	Call flow & Packed Data control of more than 300 apps and services. Embedded DPI, Information & Cyber Security analytics and alerts
Operational Modes	Guest & Whitelist user servicing modes Monitoring, Control and Debrief security modes
Operational Flexibility	Emergency, First Response, Tactical COMMs, Convoy Security, Business application remote site networks
Survivability by Design	Redundant core architecture
	Local cellular core, maps, PTT servers inside
	Field proven with up to 10,000 concurrent users in critical applications

Contact us at [connect@sovsys.co](mailto:connect@sovsys.co)  
for more information

