

ResQNet

'Connecting Lives When Networks Fail'

A decentralised emergency communication platform that creates life-saving connections when traditional networks collapse during disasters.

Meet Our Team



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The Devastating Impact of Communication Breakdown

Network Failure
Isolation Crisis
Rescue Delays

Traditional communication infrastructure collapses
for help
O2

Rescue Delays

Emergency services operate without critical location data

Lives at Risk

Time-sensitive rescues become impossible to coordinate





Real-World Impact: Stories from the Field

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Kerala Floods 2018

"We could hear people calling for help, but couldn't locate them precisely. Our GPS systems weren't working, and mobile networks were completely down. We lost precious hours searching manually."

- Rescue Team Coordinator

"

Mumbai Building Collapse

"My phone had no signal, but I could see other phones around me. If only there was a way to connect through them to send my location to my family and emergency services."

- Survivor Testimony

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These aren't isolated incidents—they represent a systematic failure of our emergency communication infrastructure. Across India and globally, similar scenarios repeat during every major disaster. Traditional emergency protocols assume connectivity that simply doesn't exist when it's needed most.

Global Emergency Communication Challenges



Response Coordination Breakdown

Communication failures hinder rescue efforts, misallocating resources and delaying critical medical aid as victims struggle to convey their condition and location.

48%

Rescue Delay Rate

Operations delayed due to communication failures during disasters

73%

Network Congestion

Emergency calls fail during peak disaster response periods

91%

Location Uncertainty

Rescue missions operate without precise victim coordinates

Critical insight: The World Health Organization reports that effective communication systems can reduce disaster-related mortality by up to 60% through improved coordination and faster response times.

The Escalating Impact of Crisis Over Time

Immediate Impact (0-24 hours) — 1

Families separated, emergency services lack full situational awareness, leading to inefficient search and rescue.

Long-term Recovery Challenges (Weeks-Months)

Community rebuilding is fragmented, mental health impacts increase, and economic recovery slows without reliable networks.

Short-term Consequences (1-7 days)

Medical emergencies escalate, supply chains break down, and vulnerable populations remain isolated.

The Staggering Human Cost

Communication failures during emergencies lead to devastating human and financial costs, escalating crises into catastrophic losses.

2.3B

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People at Risk

Critical Hours

Global population in disaster-prone areas with poor communication.

Time before rescue efforts face difficulty.

85%

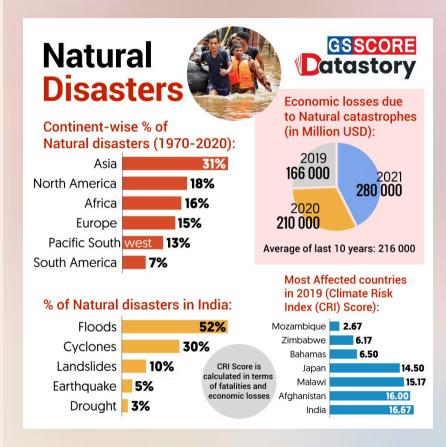
6X

Network Failure Rate

Mortality Increase

Communication towers fail during major disasters.

Higher death rates when emergency communication fails.



Current Solutions: Falling Short When It Matters Most

Satellite Communication Systems

Current Approach: Satellite phones, beacons.

Critical Limitations: High cost, limited battery, inaccessible to most civilians.

Emergency Broadcasting Systems

Current Approach: Radio alerts disseminate information.

Critical Limitations: One-way, needs power, no location help, no individual request for aid.

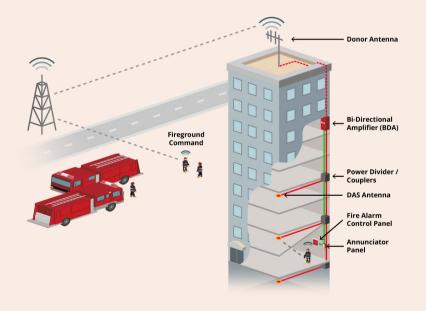
Mobile Network Priority Systems

Current Approach: WEA & priority access for emergency services.

Critical Limitations: Dependent on cell towers; ineffective when towers fail. Text-only, no precise location for users.

The Technology Gap in Emergency Response

Emergency Responder Radio Communication System



Persistent Technological Barriers

- Infrastructure Dependency
- Cost Prohibitive
- Complexity Barriers
- Limited Scalability

3 Research shows that 89% of existing emergency communication solutions become unreliable or completely non-functional within the first 12 hours of a major disaster, precisely when they are needed most.

ResQNet: Revolutionary Decentralised Emergency Communication

ResQNet transforms smartphones into lifelines, creating an emergency communication network that operates independently. It has peer-to-peer connectivity to establish communication channels even when cellular towers and internet services fail.



Mesh Network Technology

Devices connect to nearby phones, messages hop from device to device until they reach emergency services.



Precise Location Sharing

GPS coordinates are automatically embedded in communications, allowing rescue teams to locate victims precisely.



Ultra-Low Power Consumption

Optimised algorithms ensure minimal battery consumption, extending device life during extended emergencies when charging is impossible.



Secure & Private

End-to-end encryption protects sensitive communications, while authorised rescue services can still access critical location data.

ResQNet in Action: Experience the Future of Emergency Communication

Interactive Demonstration Features

- Real-time Network Formation
- Emergency Message Routing
- Location Precision
- Battery Optimisation

Experience ResQNet firsthand. Request a live demo to see how this life-saving technology enhances emergency response.

Video Demo

Github Link

Intuitive Interface & Critical Features

Minimising Accidental Alerts

Our interface prevents false alarms by adding a cancel request feature with in 3 seconds of pressing the button,

Decentralised Mesh Networking

Our app has the ability to build connections with other phones in the vicinity. This creates a robust network. If a phone within this network is connected to the internet, it acts as a relay, receiving critical information and then broadcasting it to a common server or database.

Live Location Tracking & Updates

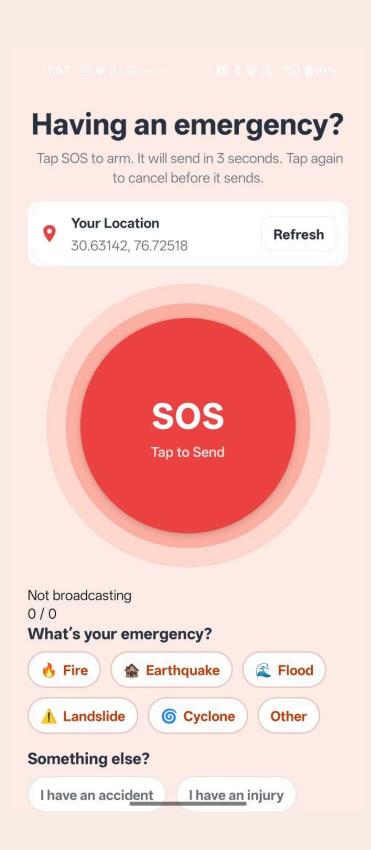
Once an alert is triggered, the system provides real-time location tracking and last-seen updates on a dynamic map, helping responders quickly locate people and deploy resources efficiently.

Personalised Disaster Alerts

Our app delivers location-based alerts, ensuring users get only relevant disaster updates without being overwhelmed.

Enhanced Identification for Responders

Users can securely add personal details in the app, giving responders quick identification during emergencies for faster, targeted rescues.



Market Impact and Scalability

Global Reach

Our app's mesh networking works even in remote or lowconnectivity areas, giving it global applicability and a vast market reach.

Government & NGO Partnerships

Our app supports governments and NGOs with real-time tracking and communication, streamlining coordination, resource use, and casualty management.

Enterprise Solutions

Enterprises can use our solution for on-site emergency response, ensuring employee safety and business continuity..

Community Resilience

The app empowers people with timely alerts and communication, strengthening community resilience for fewer casualties and faster recovery.

Return on Investment (ROI) and Demand

Humanitarian ROI

- Reduced Casualties: Timely alerts and rescues save lives and prevent injuries.
- Faster Recovery: Coordinated response speeds up community recovery.
- Enhanced Safety: Prepared citizens and responsive authorities ensure peace of mind.

Economic ROI

- Reduced Losses: Early warnings and targeted action cut damage and disruptions.
- Efficient Response: Real-time data optimises resources and lowers costs.
- Insurance Savings: Proactive preparedness can reduce premiums.

Surging Market Demand

- Rising Disasters: Extreme events are increasingly frequent.
- Stricter Regulations: Tighter rules on preparedness.
- Tech Push: AI, IoT, and advanced comms in emergency systems.
- Public Demand: Greater need for reliable disaster tools.

Sustainable Business Model



Freemium Model for Individuals

Core alerts and mesh networking are free for all. Premium offers location history, family tracking, and advanced privacy.



Enterprise & Corporate Packages

Custom solutions with system integration, employee tracking, tailored alerts, and dedicated support.



Government & NGO Subscriptions

Subscriptions with real-time data, analytics, secure communication, and priority support.



Data Monetisation (Ethical & Anonymised)

Anonymous disaster data can be shared with planners, researchers, and insurers to improve safety and preparedness and city planning, always with user consent.

Our Competitive Advantage



Privacy-by-Design

User data is encrypted and shared only with authorised responders during emergencies, with clear consent to build trust.



Intuitive UX for High-Stress Situations

Simple, clear interface with minimal steps for quick alerts and information during emergencies.



Real-time Location & Dynamic Updates

Real-time tracking and dynamic maps boost responders' awareness and speed.



Hardware Agnostic & Cross-Platform

Works on iOS and Android without special hardware, ensuring maximum accessibility.

Future Possibilities:

AI-Powered Predictive Analytics

Uses AI to predict disasters and impact zones, enabling proactive responses.

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Drone Integration for Aerial Mapping

Real-time aerial imagery feeds maps for responders, offering overhead views and damage assessment.



IoT Sensor Network Integration

Connects with smart sensors to receive automated alerts and monitor diverse hazards.

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Multi-Language Support & Accessibility

Supports multiple languages and includes features like textto-speech and voice commands for inclusivity.

THANK YOU

We appreciate your time and consideration.