

SACHET Emergency Alert System: How SACHET Emergency Alert System is Transforming Disaster Communication in India

May 3, 2026 • vajiramandravi.com



SACHET Emergency Alert System Latest News

- India has introduced the **SACHET Cell Broadcast system**, an indigenous emergency messaging service designed to deliver instant alerts to citizens during crises such as natural disasters, wars, or other emergencies.
- As part of testing, the government sent a nationwide notification with a siren sound, clarifying that no action was required as it was only a test message.
- The initiative aims to strengthen India's disaster response framework by ensuring timely alerts, thereby enhancing public safety and building a more resilient communication ecosystem.

SACHET: India's Integrated Emergency Alert System

- SACHET (meaning “alert”) is an **Integrated Alert System** designed to deliver **disaster and emergency warnings** directly to mobile users in geo-targeted areas via SMS.

Institutional Framework

- Launched by the Department of Telecommunications (DoT)
- Developed in collaboration with the **National Disaster Management Authority** (NDMA)
- Aims to strengthen real-time disaster communication across India

Purpose and Scope

- Provides timely alerts during:
 - Natural disasters (**cyclones, earthquakes, floods**)
 - Man-made emergencies (gas leaks, chemical hazards, wars)
- Ensures rapid dissemination of critical information to citizens

How the System Works

- Uses cellular network towers to broadcast alerts
- Works as a one-way communication system
- Does not require internet connectivity
- Can deliver messages to billions of users within seconds (if connected to network)
- Alerts can be nationwide or location-specific

Coverage and Reach

- Operational across all 36 States and Union Territories
- Has delivered over 134 billion SMS alerts
- Supports communication in 19 Indian languages

Test Use in India

- Around 11:40 AM on May 2, 2026, smartphones across India emitted a loud alert sound with vibrations and a pop-up message titled “extremely severe alert”, as part of a nationwide test of the cell broadcast system.
- Similar systems are already used in countries like Japan for tsunami and disaster warnings.
- India’s recent test marks one of the largest-scale implementations of this technology.

Significance

- Enhances disaster preparedness and response
 - Under the UN’s “**Early Warnings for All**” initiative, which **International Telecommunication Union (ITU)** helps implement, cell broadcast is seen as a key tool to ensure people receive timely, accurate alerts.
- Improves last-mile connectivity of emergency alerts

- Builds a more resilient and responsive public communication system in India

Cell Broadcast Technology: A Powerful Tool for Emergency Alerts

- Cell Broadcast is a communication method that enables authorities to send **short messages** simultaneously to multiple mobile phones within a specific geographic area.
- It can target either a large population or a limited set of users in a hazard-affected zone, ensuring precise and efficient dissemination of alerts.
- A major advantage of cell broadcast technology is its ability to **bypass network congestion**, allowing messages to be delivered instantly even during peak traffic conditions.
- It **does not rely on internet connectivity** and can be customised based on user preferences such as language, making it highly effective for mass communication.

Origin and Global Adoption

- Developed in the early 1990s by the European Telecommunications Standards Institute and first demonstrated in Paris in 1997, the technology has since been adopted globally.
- Today, it is used by over 30 countries as a best practice for issuing timely warnings during natural disasters.

How Cell Broadcast Technology Works

- Cell broadcast operates through the routine communication between mobile network towers and phones within their coverage area.
- These towers continuously transmit network-related information to connected devices, which usually remains invisible to users.
- Authorities utilise this existing one-way communication system to send emergency alerts.
- Instead of relying on individual messaging, the system enables a single alert to be transmitted from a cell tower to all connected devices simultaneously.
- By broadcasting one message to multiple users at once, cell broadcast ensures **instant, wide-scale delivery** without network congestion, making it highly effective for real-time alerts during disasters and emergencies.

Cell Broadcast vs SMS: Key Differences

- So far, India relied on an **SMS-based disaster alert system** operational across all 36 States and Union Territories.
- Now it has developed cell broadcast technology as a more advanced alert mechanism.
 - It is not clear when the full rollout of this technology will take place.
- Cell Broadcast (CB) is a **one-to-many system**, allowing a single message to reach millions of devices simultaneously, whereas **SMS operates on a one-to-one basis**, sending messages individually to each recipient.
- CB sends alerts through **specific cell towers**, targeting users within a geographic area.

- Unlike SMS, it does not require phone numbers, enabling **precise, location-specific messaging** without tracking individuals.
- Cell Broadcast is more privacy-friendly, as it does not rely on user data. It can also reach visitors and foreign users in the area, often delivering messages in multiple languages.
- CB alerts are **highly conspicuous**, featuring loud sounds and pop-ups, making them difficult to ignore. In contrast, SMS messages can be missed or overlooked more easily.

Source: IE | PIB | IE

Source: <https://vajiramandravi.com/current-affairs/sachet-emergency-alert-system/>

© Vajiram & Ravi. For personal use only.