



Mobile Cellular for Disaster Warning and Relief

By

Advanced Info Service Plc. (AIS)



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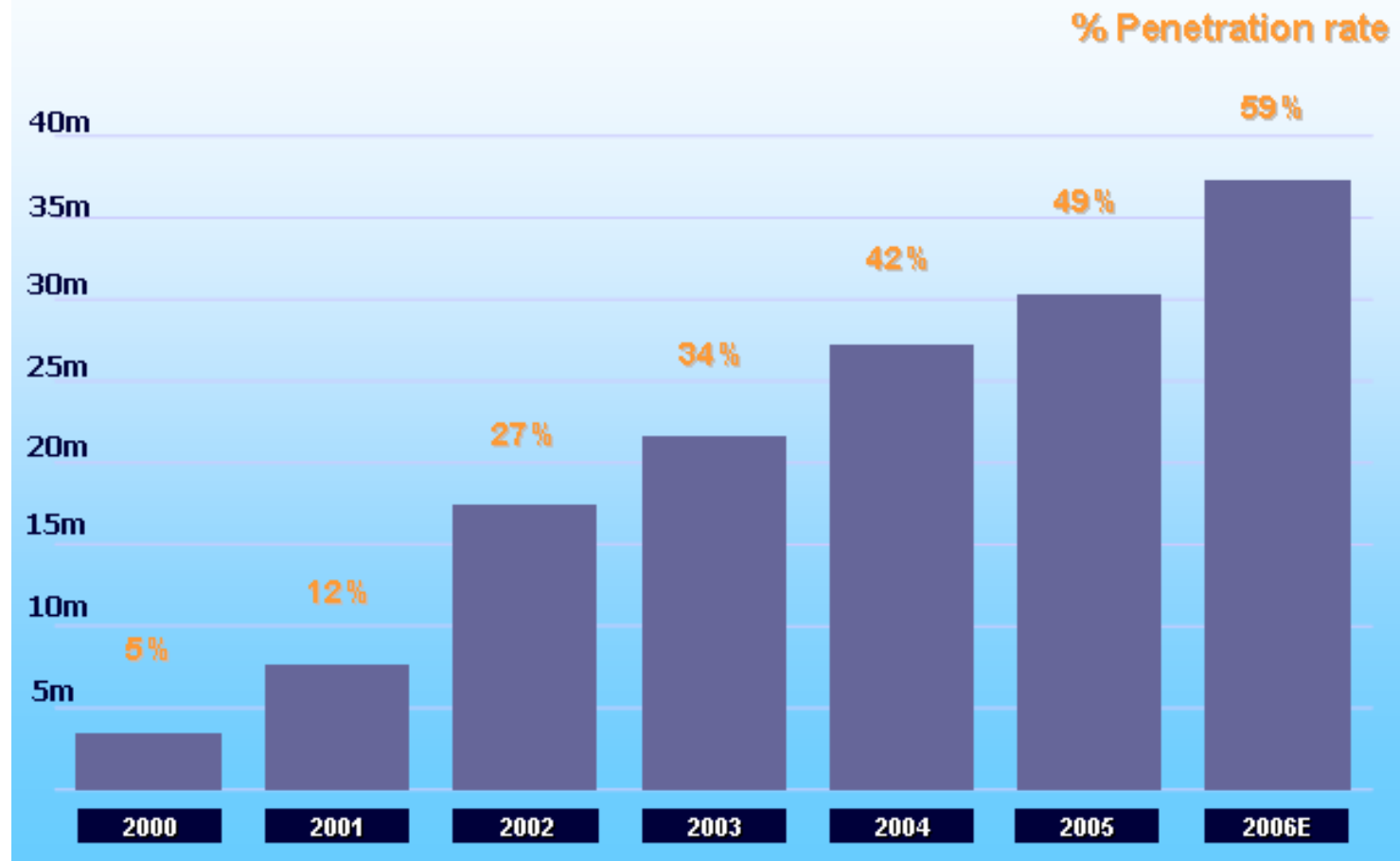
- AIS Company Profile
- Mobile Cellular in Thailand
- Mobile Cellular for Disaster Warning and Relief

AIS Company Profile

- 1986
 - Advanced Info Service Plc. (AIS) was established to run a computer rental business.
- 1990
 - AIS was awarded a concession by the Telephone Organization of Thailand (TOT) to operate a nationwide 900MHz cellular network
 - Launched its first cellular service with 900 MHz analog cellular system
- 1994
 - Launched new digital cellular service with GSM 900 MHz system
- 2000
 - Installed base stations in all 795 districts of Thailand
- 2001
 - Acquired Digital Phone Co., Ltd. (DPC) shares and became the operator who operate both 900MHz and 1800 MHz mobile cellular network.

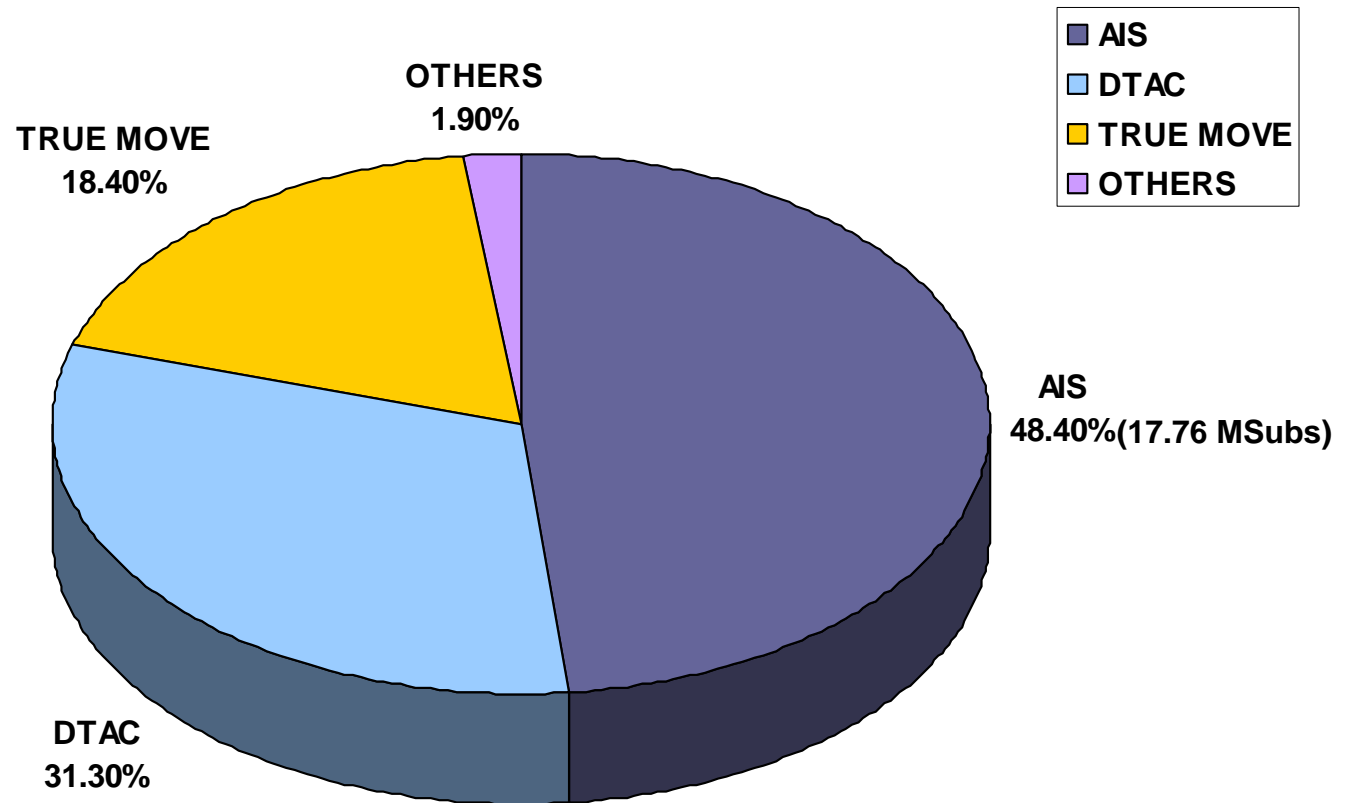
Mobile Cellular in Thailand

- Mobile Penetration Rate in Thailand



Mobile Cellular in Thailand

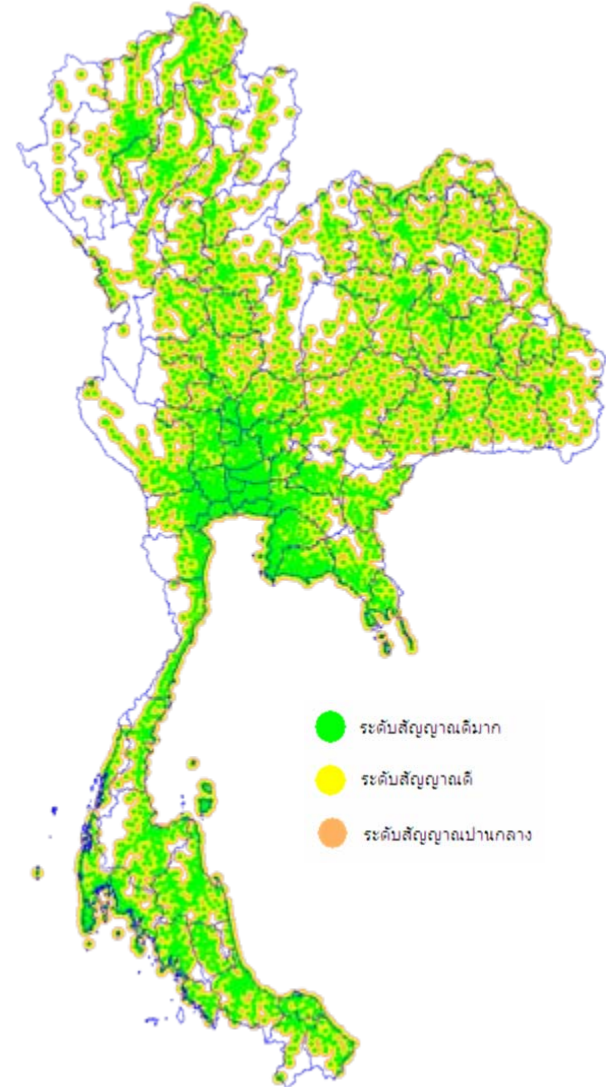
- Mobile Cellular Market Share in Thailand



Mobile Cellular in Thailand

- AIS Network Coverage

- Nationwide Network Coverage
- ~ 11,000 Base Stations





Mobile Cellular for Disaster Warning and Relief

- Why do we need to discuss about mobile cellular for disaster warning and relief?
 - Large no. of mobile subscribers
 - Large network coverage area
 - Personal communication

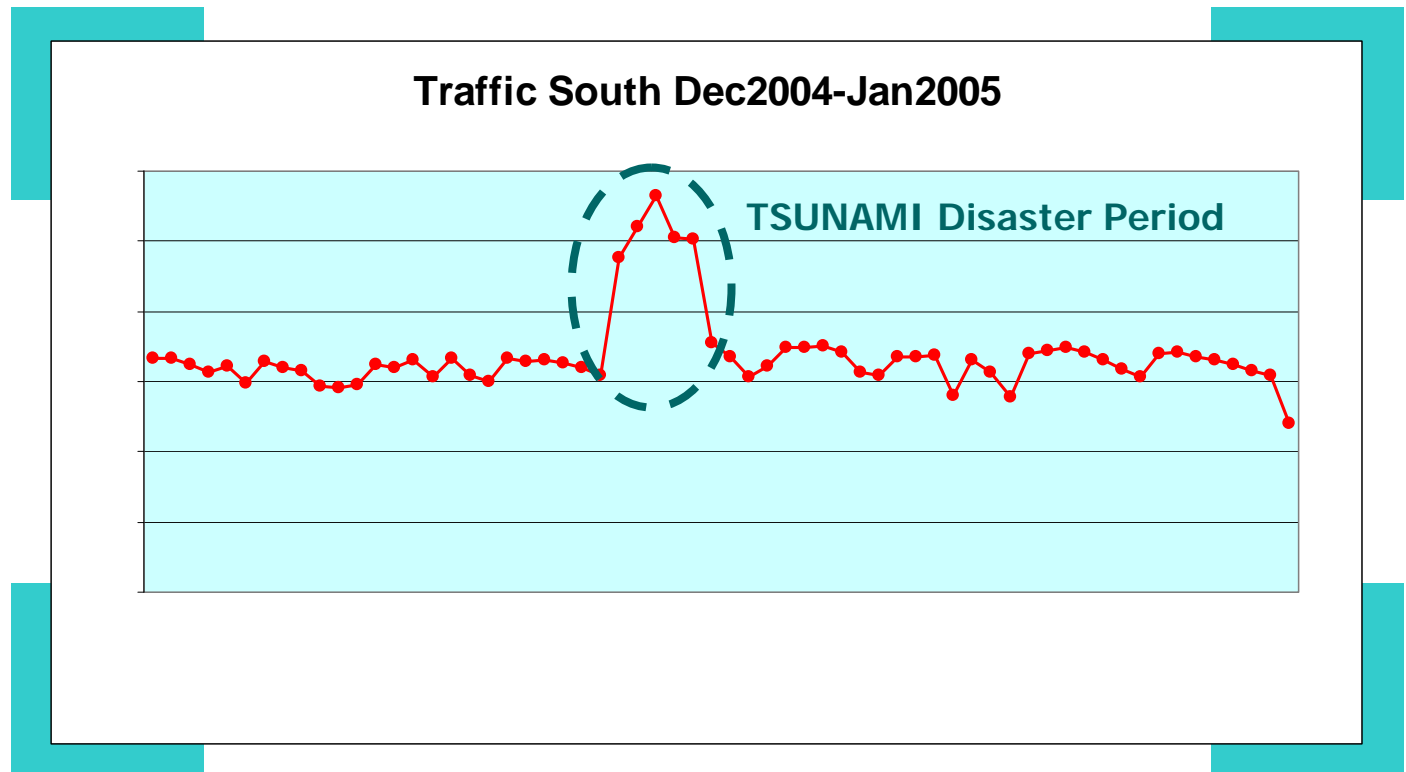


Mobile Cellular for Disaster Warning and Relief

- What did we experience on our mobile cellular network during disaster?
 - High no. of call congestions in the disaster area
 - Loss of Mobile coverage due to loss of network elements
 - Restart of switching network element due to the high usage attempted.
- How to cope with these situations?

Mobile Cellular for Disaster Warning and Relief

○ Network Capacity

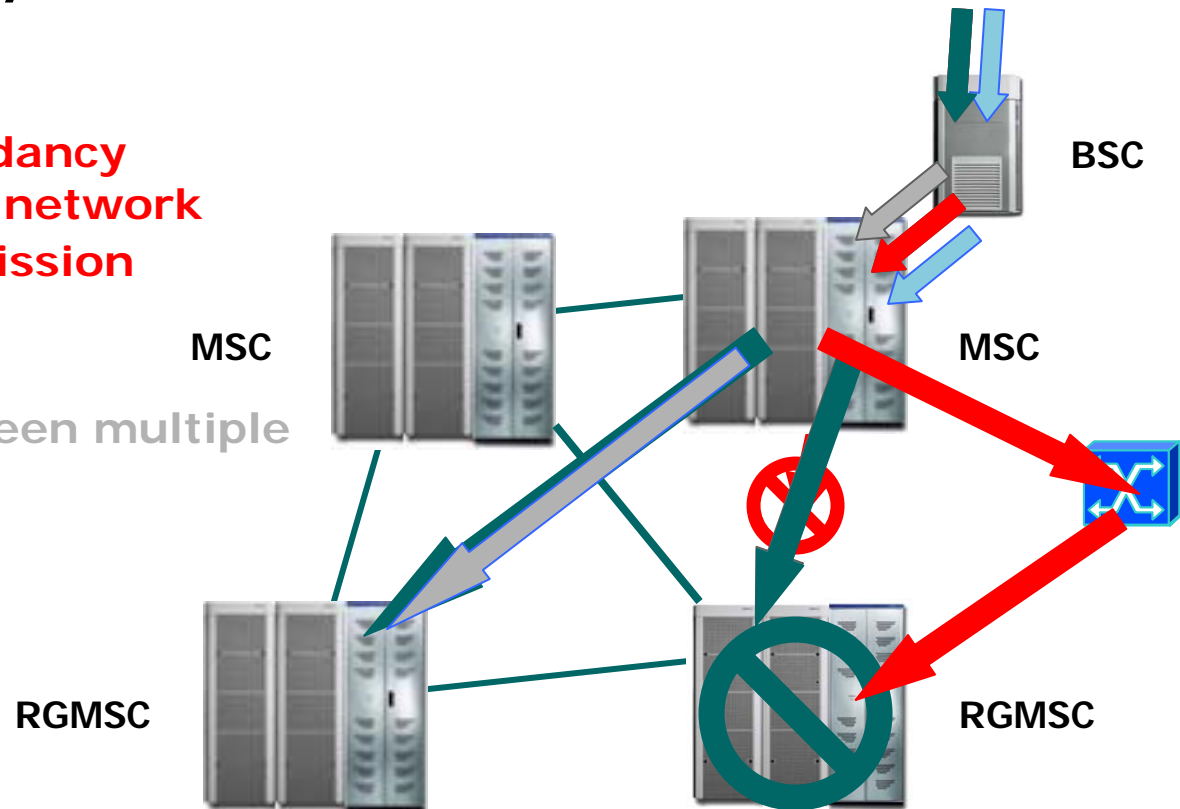


- Build spared network capacities in the potential disaster area.

Mobile Cellular for Disaster Warning and Relief

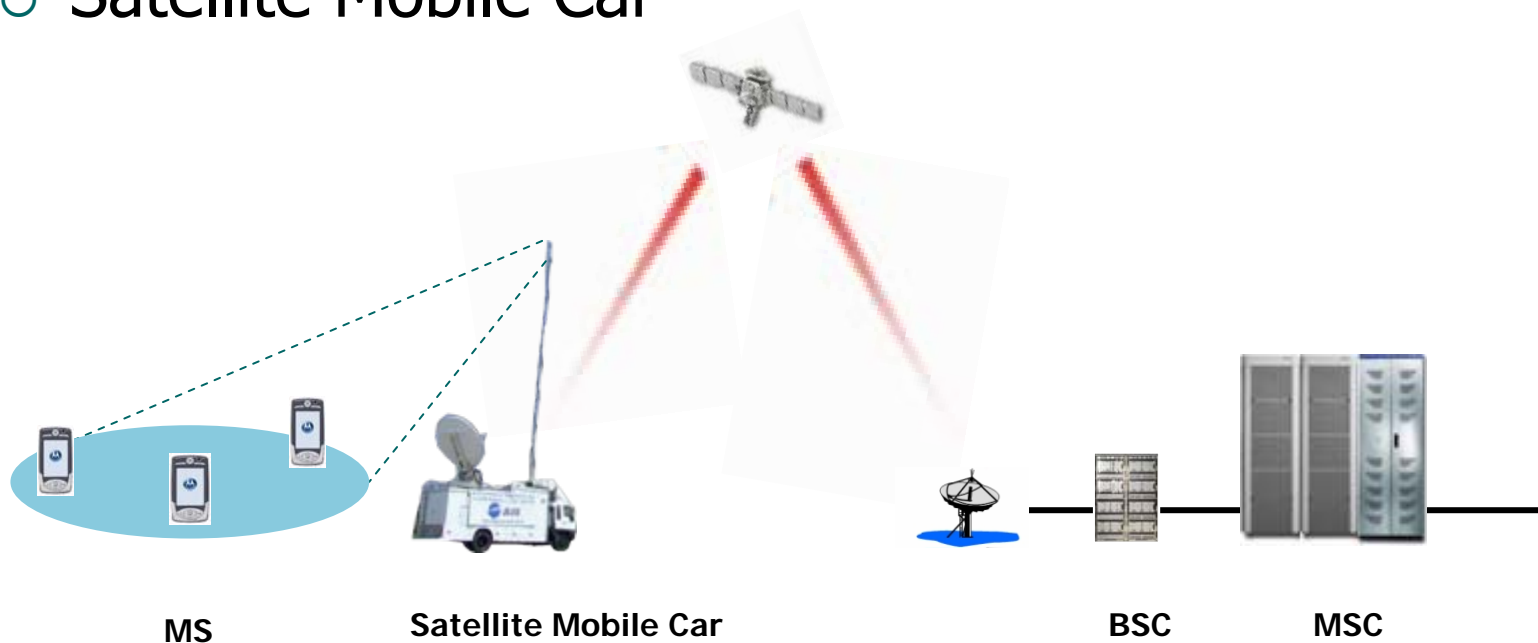
○ Network Design and Management strategy

1. **Transmission redundancy**
 - Transmission Ring network
 - Alternated Transmission Media
2. Traffic load sharing
 - Load sharing between multiple Switching Nodes
3. Node redundancy
 - N+1



Mobile Cellular for Disaster Warning and Relief

○ Satellite Mobile Car



- Fast recovery of base station coverage
- Easy way to increase the network capacity in the spot area

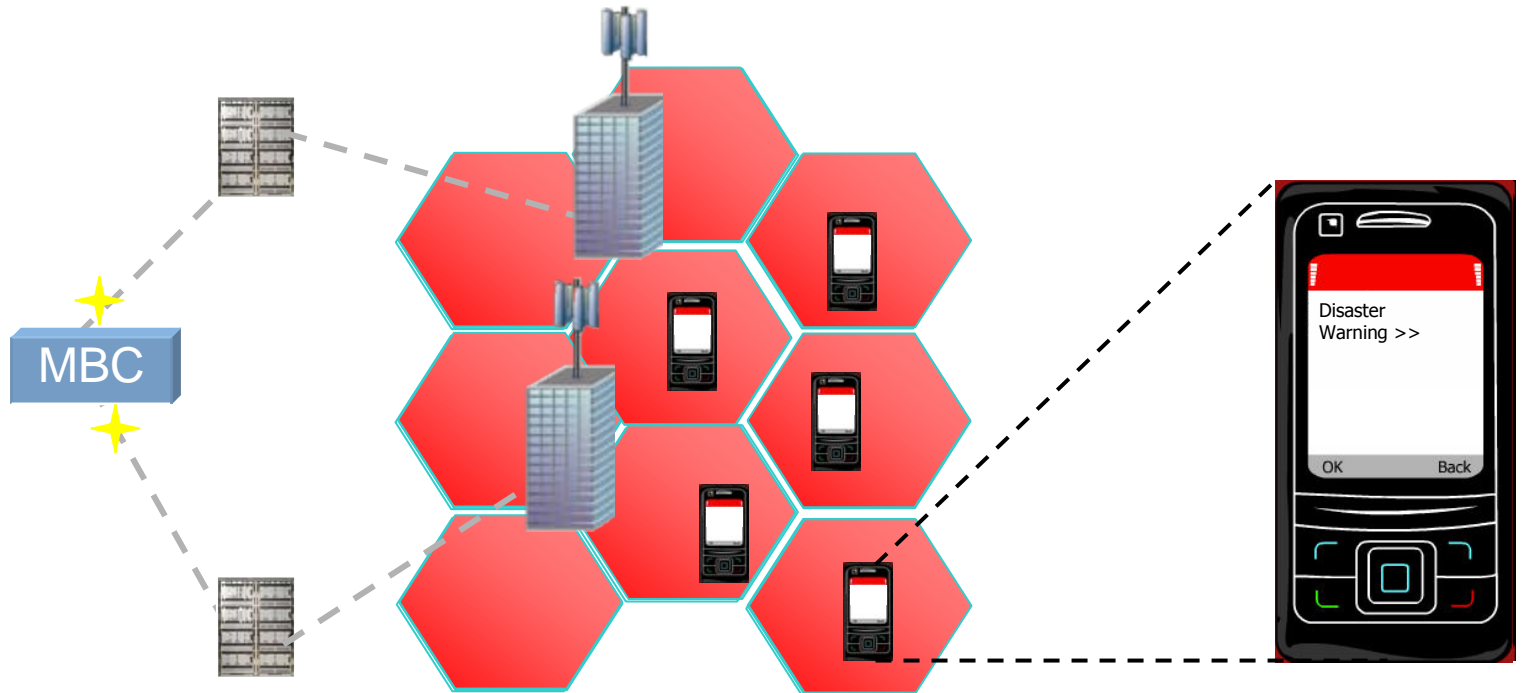
Mobile Cellular for Disaster Warning and Relief

- Satellite Mobile Car



Mobile Cellular for Disaster Warning and Relief

- Disaster Alert SMS



Sending SMS to Mobile User when there is a disaster event or warning.



Thank you

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