

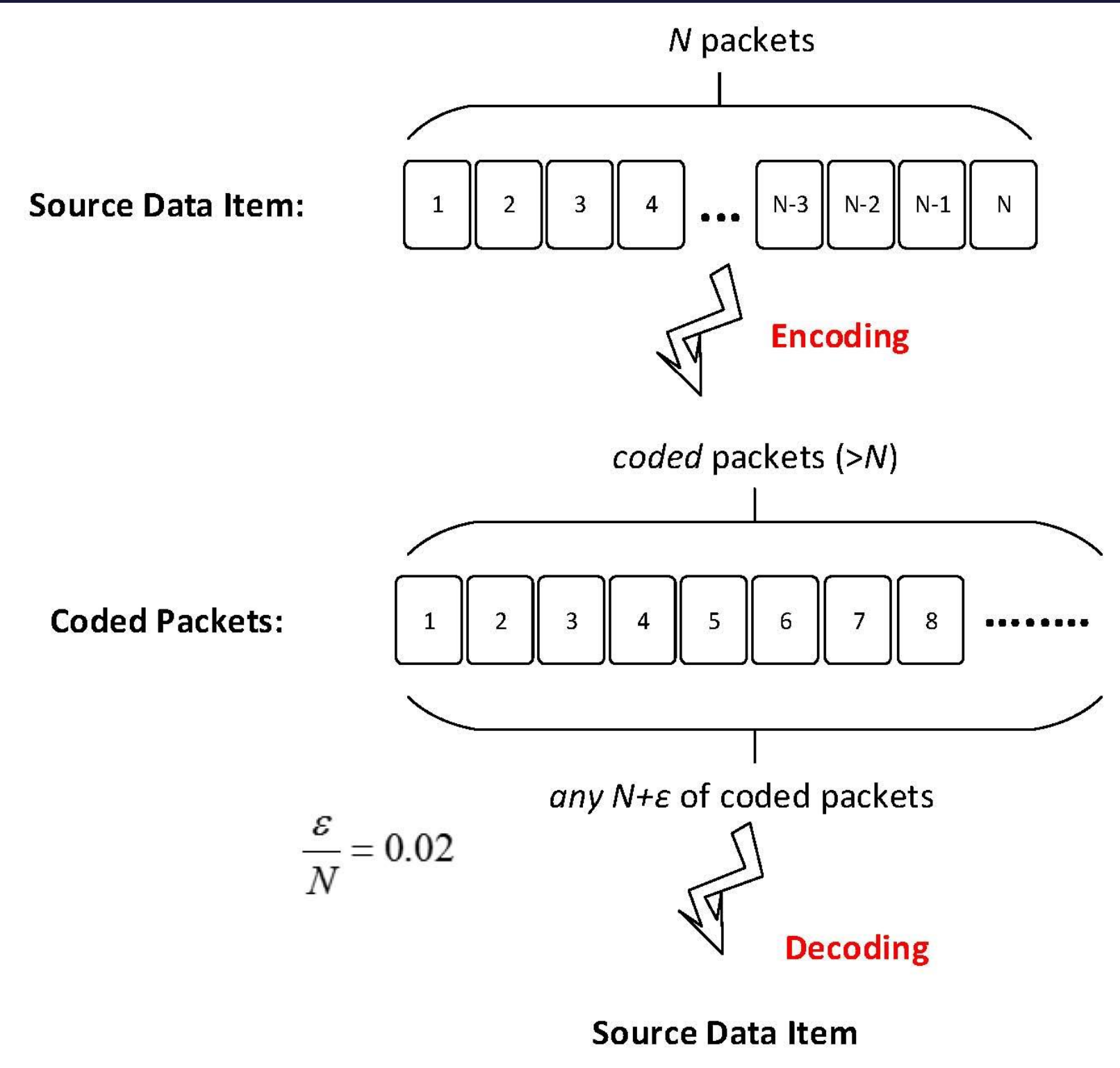
## Characteristics of Network on Battlefield

- Mobile wireless network capable of communicating voice, data and video traffic.
- The networking infrastructure is located in vehicles equipped with backhaul radio.
- Soldiers with short range devices form as group and are connected by MANET
- High mobility and loss rate

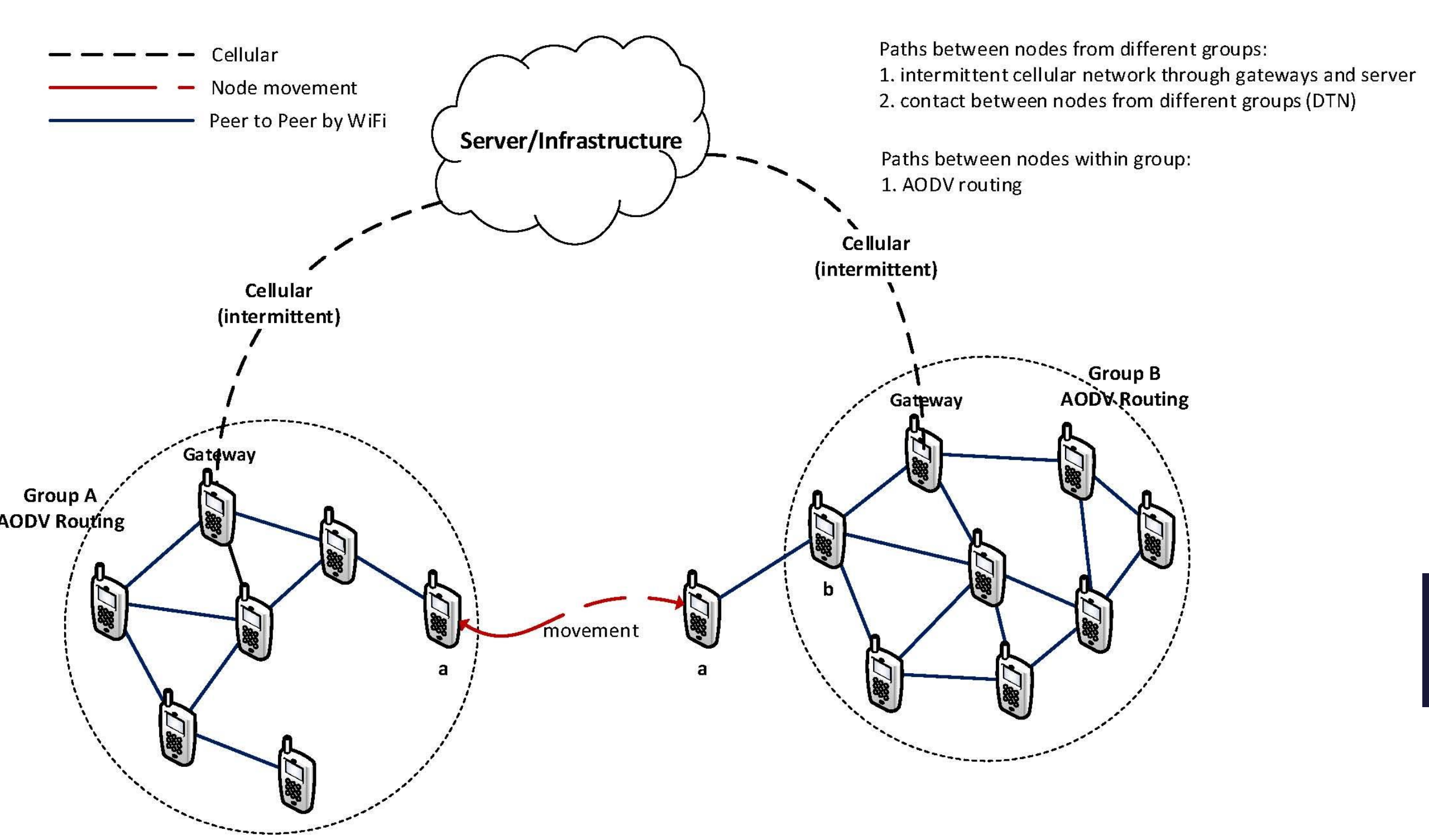
## Problems

- **How to transmit data between separated network components?**
  - Fall out of communication range.
  - “Carry-and-forward” (delay and storage).
- **How to deal with the high loss rate to the high mobility and harsh environment?**
  - Data integrity
  - Coupon collector problem

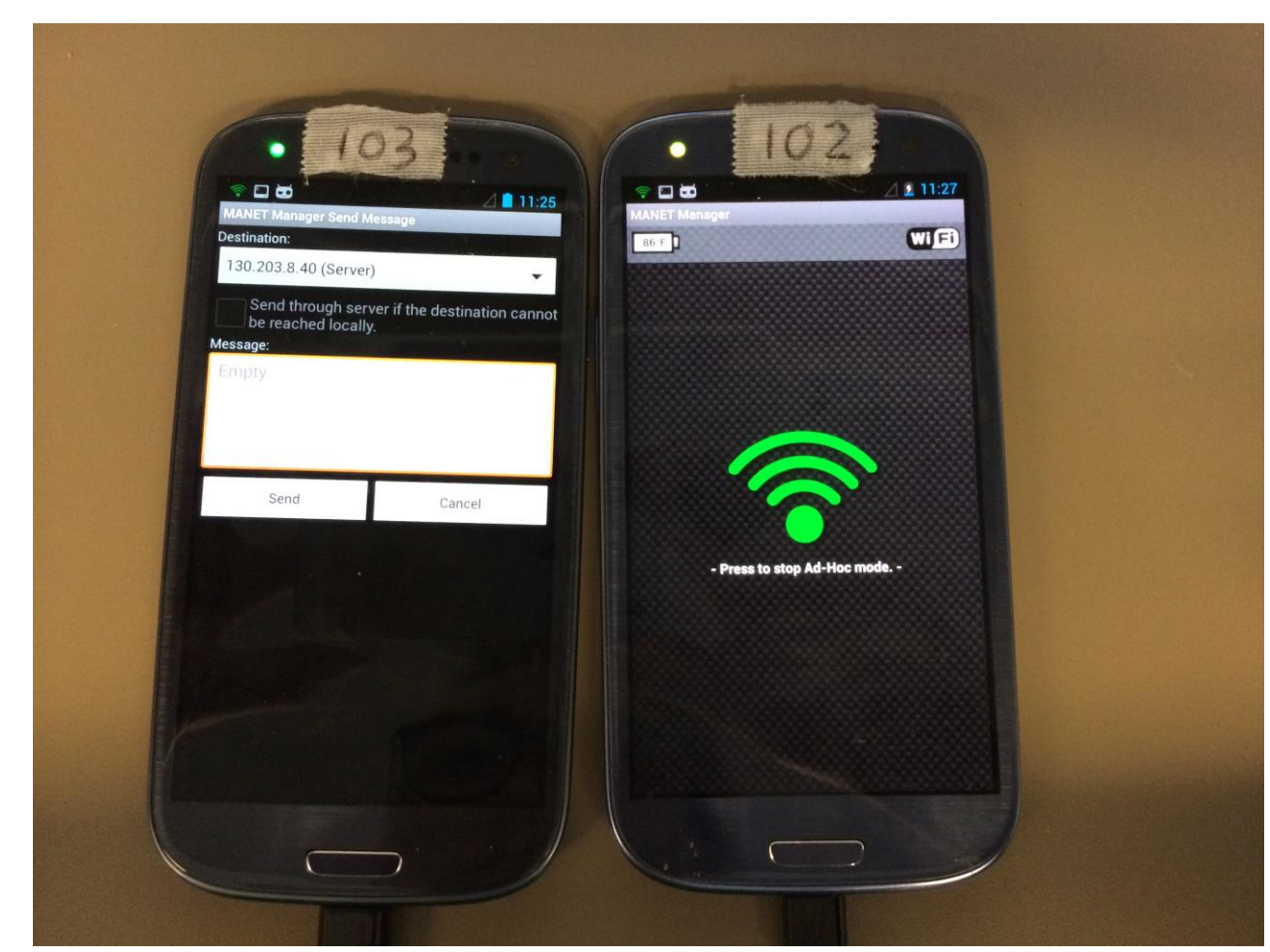
## Fountain Code



## Infrastructure



## System



## Future Work

- Since cellular connection is opportunistic and intermittent, how to efficiently transmit large data item in terms of integrity and delay?
- DTN routing