## Attack on transmission



- → Good key transmission algorithms include some form of error detection
- → Nonces, certificate authorities and web of Trust can be leveraged to ensure integrity and ownership of transmitted keys

## Unauthorized disclosure



- → Use keys-encrypting keys to protect long-term keys
- → Use secure data erasure to overwrite memory after key use.
  Scan memory for key patterns and repeat.
- → Separation of duties such that collusion is required to compromise the system
- → Secure shred keys on paper, fine-crush hardware containing keys, secure data erasure on disk
- → Consider different keys for different use to minimize impact of unauthorized disclosure