Services: Connections or not

(Most) Network layers offer one or both of the following types of services:

Connection-oriented: This is the telephone model: you first **establish** a connection, then do a lot communication, and finally **release** the connection.

Connectionless: The postal model: your data is put into some kind of envelope on which the destination address has been written. The envelope + contents is sent to the destination, and that's it.

Each service can provide some quality:

- *Is data delivered in the order it was sent?* With connections, this is generally the case.
- *Is data transmission **reliable**?* Generally offered with connections, but not always with connectionless services. Reliability requires sending acknowledgements ⇒ performance may degrade.