

CSE-3215

Data Communication

Lecture-04

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Chapter 2

Network Models

Layered Tasks

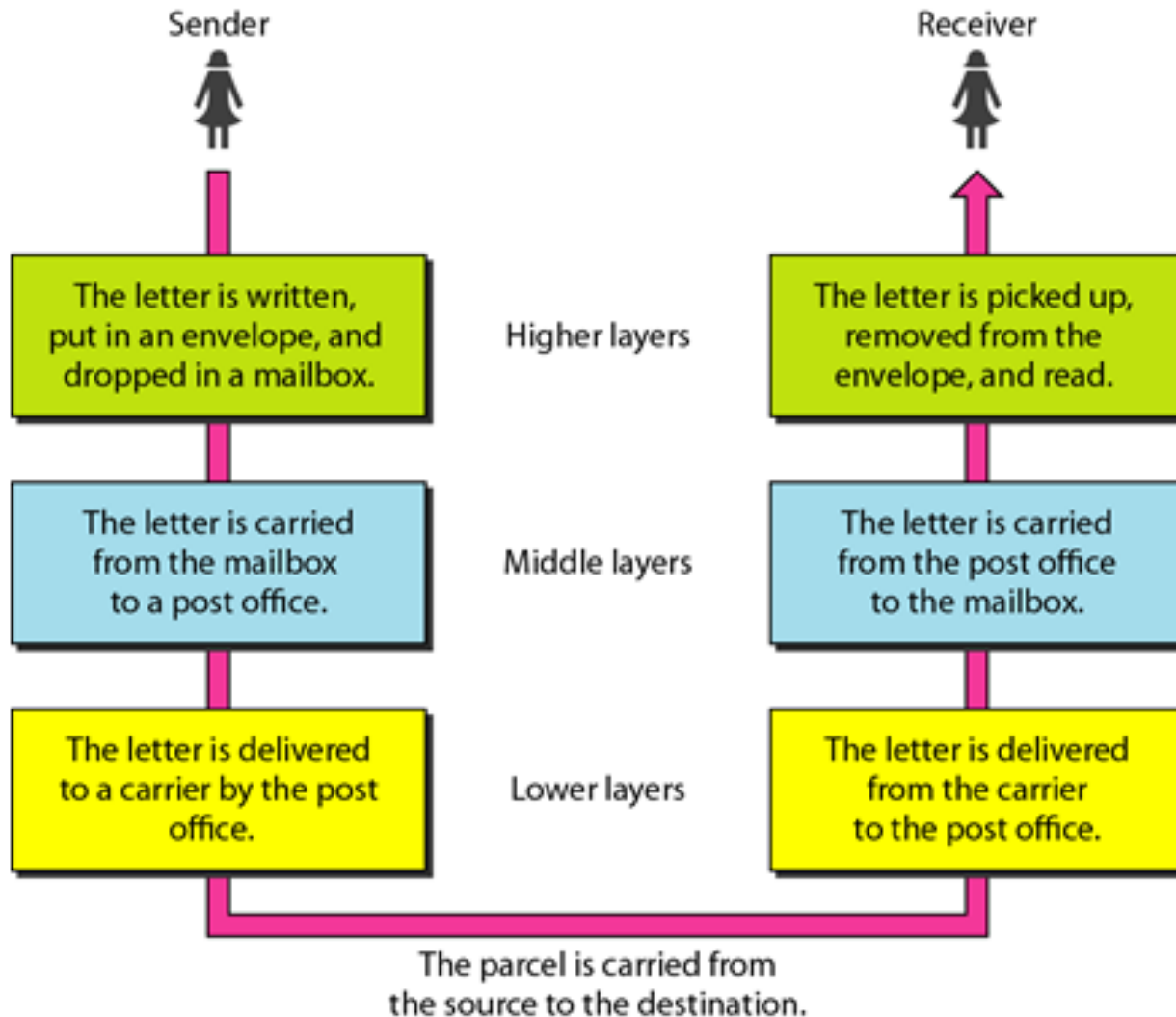
*We use the concept of **layers** in our daily life. As an example, let us consider two friends who communicate through postal mail. The process of sending a letter to a friend would be complex if there were no services available from the post office.*

Topics to be discussed in this section

Sender, Receiver, and Carrier
Hierarchy

- An Example -

Tasks involved in sending a letter



The OSI Model

*Established in 1947, the International Standards Organization (ISO) is a multinational body dedicated to worldwide agreement on international standards. An ISO standard that covers all aspects of network communications is the Open Systems Interconnection (OSI) model. It is called the **open system** model as it is open for connecting with other systems. It was first introduced in the late 1970s.*

Topics to be discussed in this section

Layered Architecture

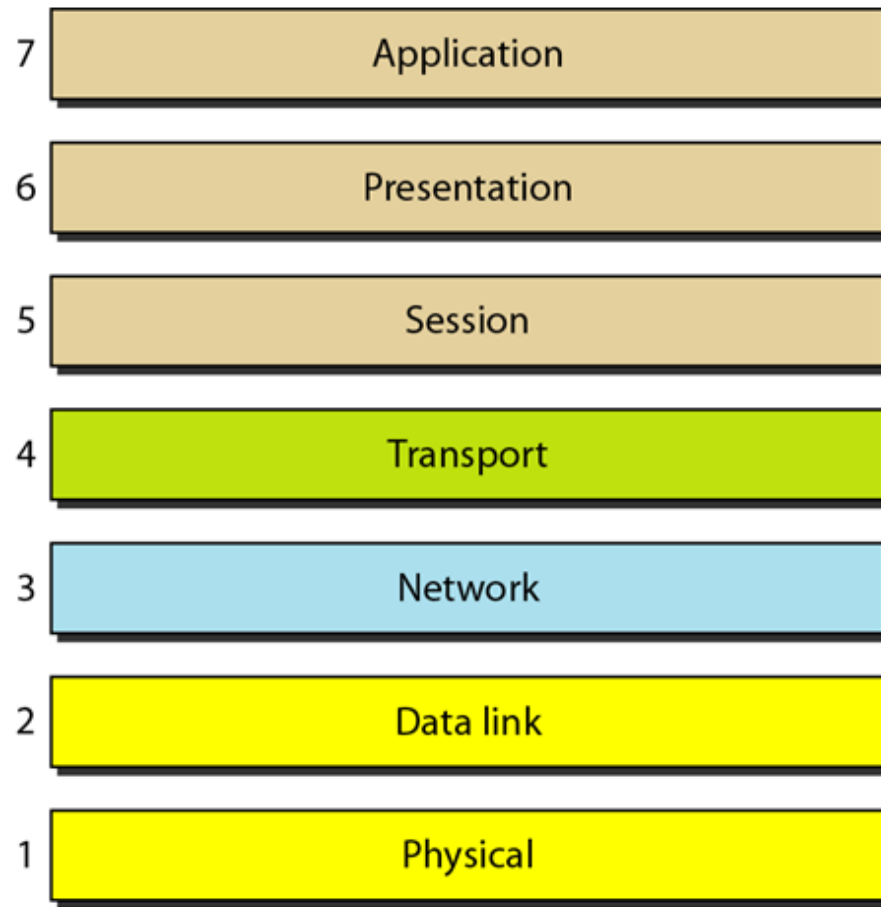
Peer-to-Peer Processes

Encapsulation

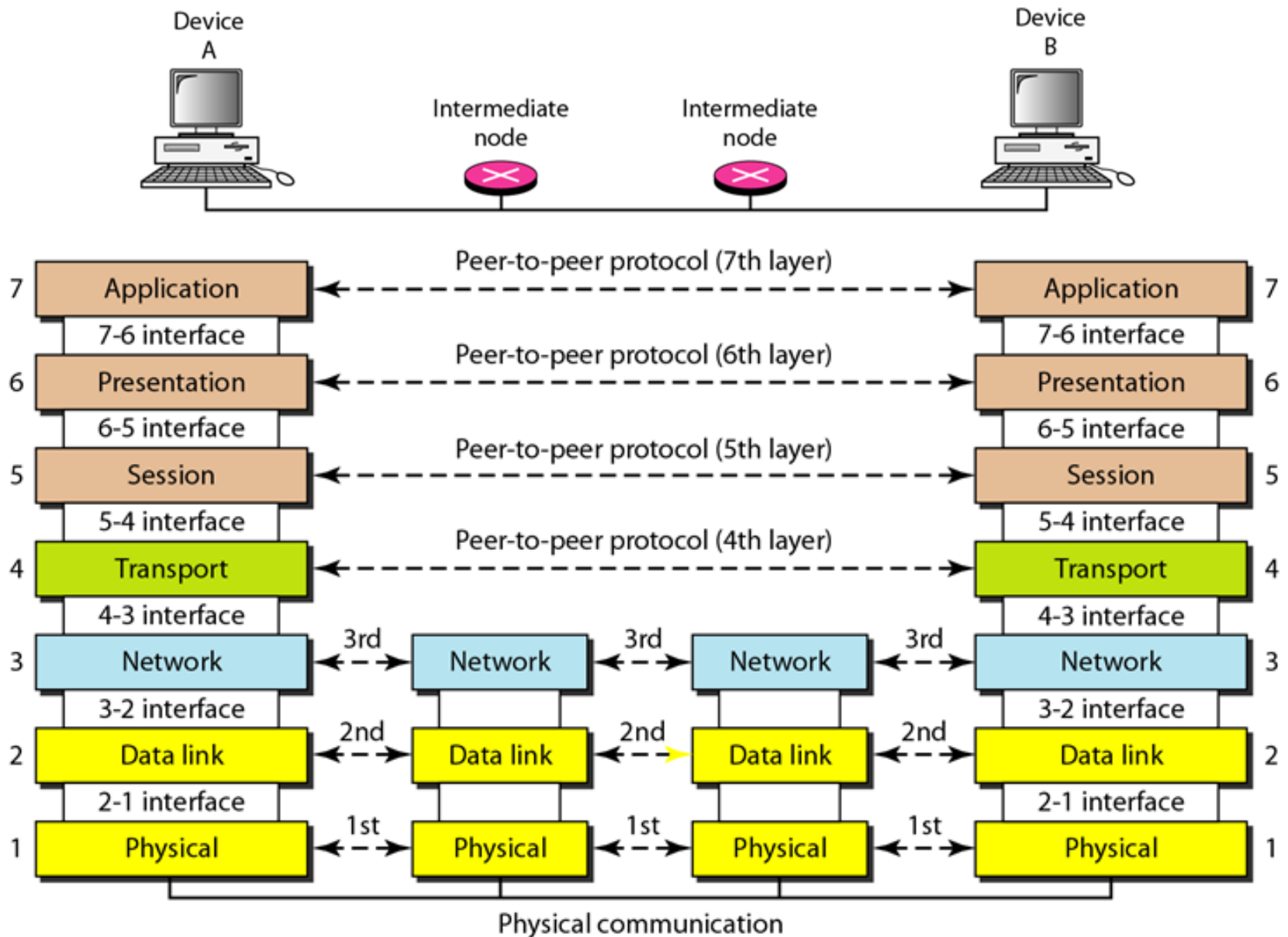
Note

**ISO is the organization.
OSI is the model.**

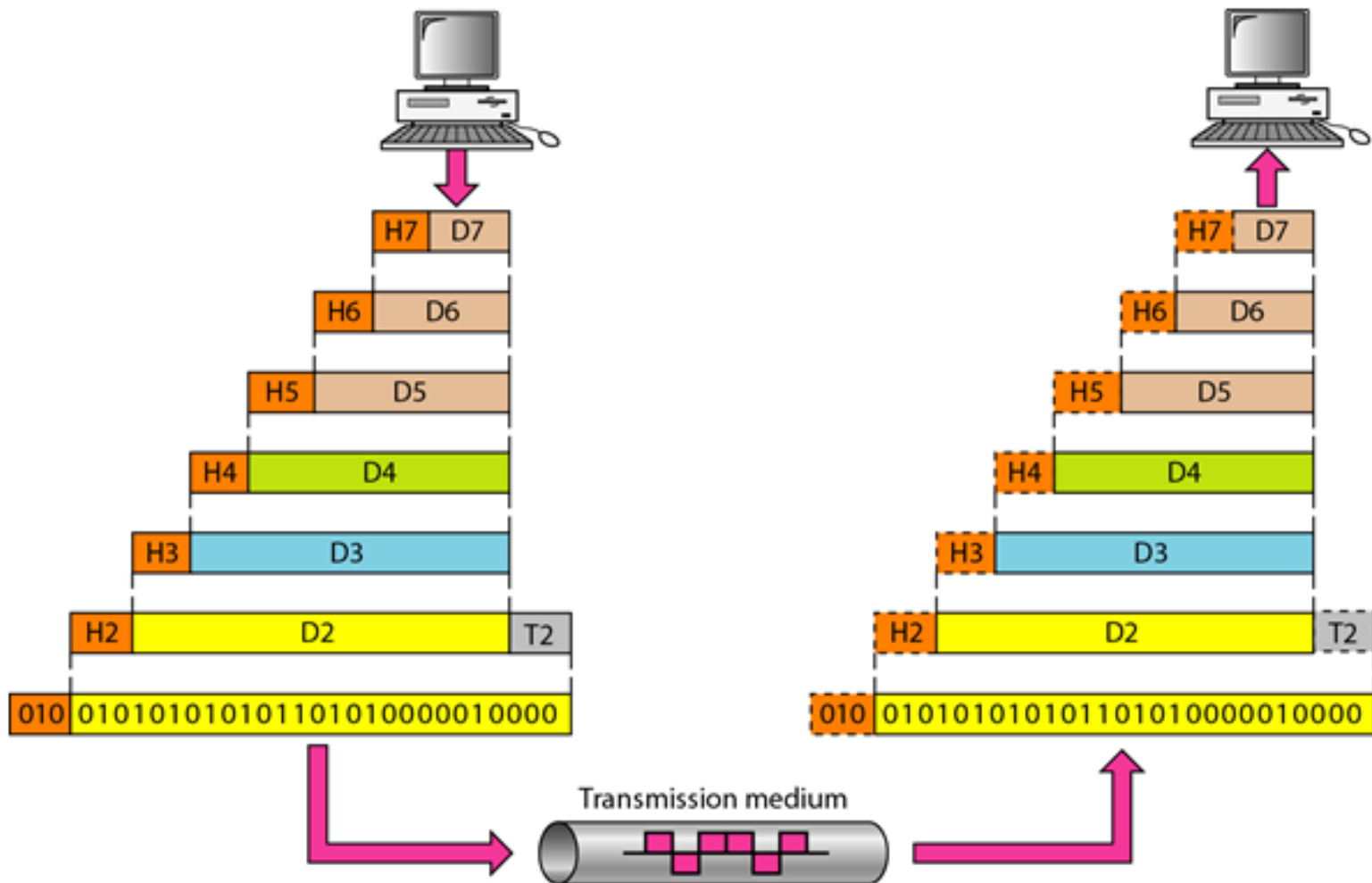
Seven Layers of The OSI Model

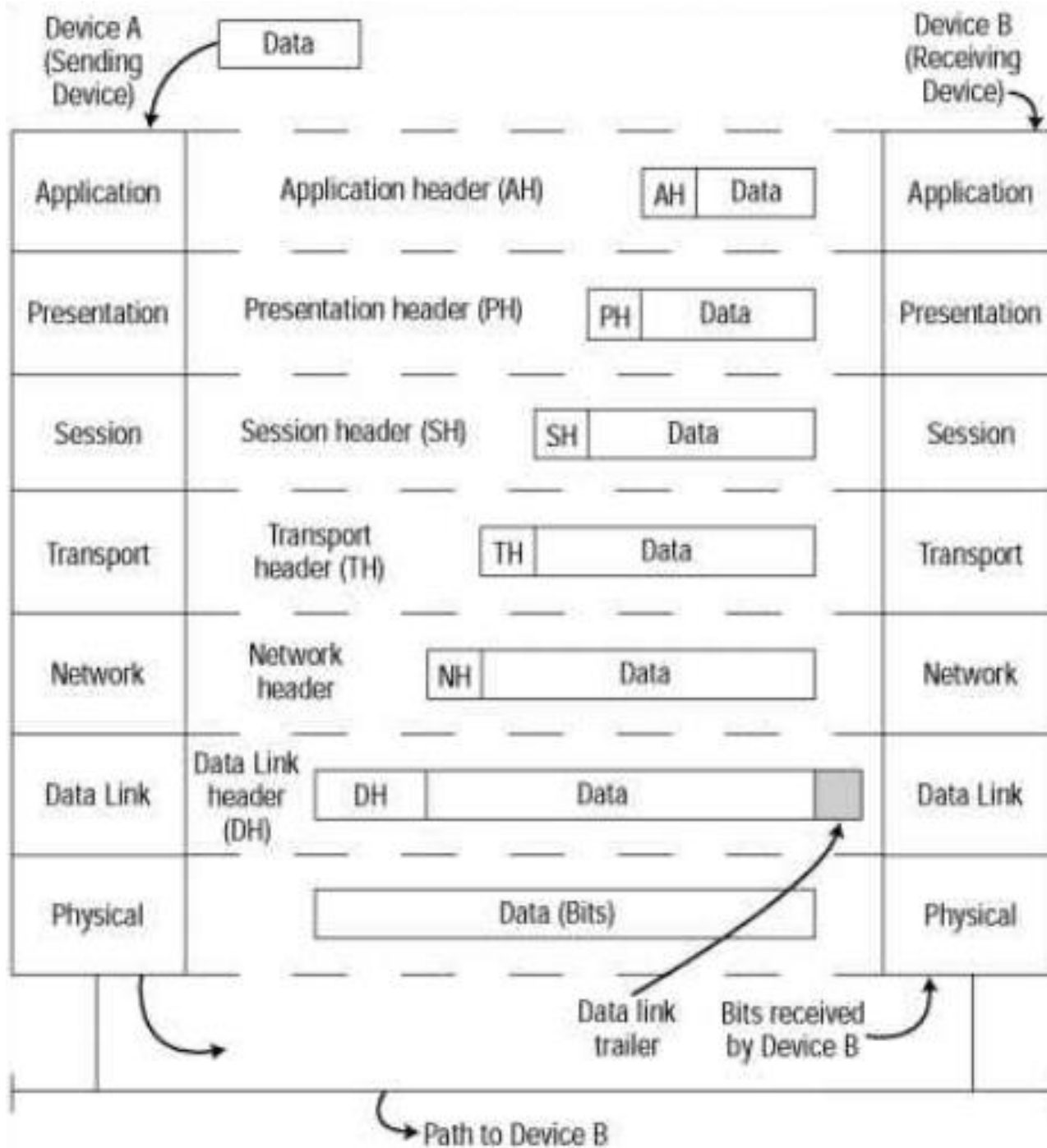


The Interaction between Layers in OSI Model



An Exchange Using The OSI Model





Note

The headers(H) and Trailers(T) contain control information. They form the envelope that carries the message to the desired destination.

The process of attaching these headers and trailers with message (on sender side) is called **encapsulation**. On the other hand, removing headers and trailers from message (on receiver side) is called **de-capsulation**.

That's all for today

Thank You