**Supplementary Information: Technical Terms and Abbreviations**

This document provides supplementary information about the technical terms and abbreviations used in the Introduction to Networks presentation.

**Access Network**: The portion of a telecommunications network that connects end users to their immediate service provider.

**ARP (Address Resolution Protocol)**: A protocol used to map an IP address to a physical MAC address in a local network.

**Bandwidth**: The maximum data transfer rate of a network or internet connection, measured in bits per second (bps).

**Bluetooth**: A short-range wireless technology standard for exchanging data between devices over short distances.

**Circuit Switching**: A method of implementing a communication network in which a dedicated channel is established for the duration of a transmission.

**Coaxial Cable**: A type of electrical cable with an inner conductor surrounded by a concentric conducting shield, used in wired communication.

**Content Provider Network**: Networks operated by organizations like Google or Akamai to deliver content directly to users.

**Data Center Network**: High-speed, high-bandwidth networks designed to connect servers and storage devices within data centers.

**Delay**: The time it takes for a data packet to travel from source to destination across a network.

**Edge Router**: A router that connects an internal network to external networks, such as the internet.

**Ethernet**: A family of wired networking technologies used in LANs, MANs, and WANs.

**FDM (Frequency Division Multiplexing)**: A technique where multiple signals are transmitted simultaneously on different frequency bands.

**Forwarding**: The process of sending packets from an input link to an appropriate output link within a router.

**Host**: A computer or other device connected to a network that can send and receive data.

**HTTP (HyperText Transfer Protocol)**: The protocol used for transmitting hypertext over the web.

**IETF (Internet Engineering Task Force)**: An open standards organization that develops and promotes internet standards.

**Internet Protocol (IP)**: A set of rules governing the format of data sent over the internet or other networks.

**ISP (Internet Service Provider)**: A company that provides internet access to users.

**LAN (Local Area Network)**: A network that connects computers within a limited area like a residence or office.

**Link Bandwidth**: The transmission capacity of a network link, measured in bps.

**MAC (Media Access Control) Address**: A unique identifier assigned to network interfaces for communications at the data link layer.

**Mesh Network**: A network topology where nodes are interconnected directly, dynamically, and non-hierarchically.

**Network Core**: The central part of a network that provides connectivity to various subnetworks.

**Network Protocol**: A set of rules governing data communication between network devices.

**Packet Switching**: A method of grouping data into packets that are transmitted over a network and reassembled at the destination.

**Protocol**: A set of rules and conventions for communication between network devices.

**Queuing Delay**: The time a data packet spends waiting in a queue before being transmitted over a network.

**RFC (Request for Comments)**: A type of publication from the IETF that describes methods, behaviors, or innovations applicable to the internet.

**Routing**: The process of selecting paths in a network to send data packets from source to destination.

**Satellite Link**: Communication using satellites, often involving long distances and high latency.

**Switching**: The process of directing packets or data from one network path to another.

**TDM (Time Division Multiplexing)**: A method of transmitting multiple signals over a single communication channel by dividing time into slots.

**Tier-1 ISP**: A major ISP that participates in internet traffic exchange without paying settlements.

**WiFi**: A wireless networking technology that uses radio waves to provide high-speed internet and network connections.