An **ATM (Automated Teller Machine)** operates through a secure network that connects it to a bank’s central system and interbank networks. Here's how its networking works:

**1. User Interaction**

* A customer inserts their debit/credit card and enters a **PIN** (Personal Identification Number).
* The ATM encrypts the PIN using security protocols (e.g., **Triple DES** or **AES**).

**2. ATM-to-Bank Communication**

* The ATM is connected to the bank via a secure network.
* It communicates using protocols like **ISO 8583**, which is the standard for financial transactions.
* If the ATM belongs to a different bank, it routes the request through an **interbank network** (e.g., Visa, Mastercard, or LINK in the UK).

**3. Transaction Processing**

* The bank’s **core banking system** checks the user’s account balance.
* If funds are available, the bank approves the withdrawal.
* The bank sends an authorization response back to the ATM.

**4. Cash Dispensing & Updating Balance**

* The ATM’s cash dispenser releases the requested amount.
* The bank updates the user’s account balance.
* A receipt is printed or displayed on the screen.

**5. Network Components in ATM Communication**

* **Leased Line or VPN:** Secure connection between the ATM and the bank.
* **Router & Firewall:** Ensures security and prevents cyber threats.
* **ATM Switch:** Routes the transaction to the correct bank or interbank network.