**5. Global Logistics and Supply Chain Management System**

Design an Entity-Relationship schema for a global logistics and supply chain management system. The database should store information about shipments with shipment ID, origin, destination, weight, content description, shipment date, and carrier. Warehouses have warehouse ID, location, capacity, and the shipments they store. Carriers have carrier ID, name, type (air, land, sea), and contact information. Clients have client ID, name, address, shipments they send, and shipments they receive.

Employees have employee ID, name, assigned warehouse or carrier, and role. Shipments can pass through multiple warehouses before reaching the destination, but can be stored in only one warehouse at any given time.

Each shipment is handled by a carrier, but carriers can change across different legs of the route. Clients can be both sender and receiver of shipments. Employees can either be warehouse staff or carrier crew but cannot be both. Warehouses can store multiple shipments and shipments may change storage warehouses multiple times before delivery. The system should handle complex scenarios like international shipments, customs clearance, and cross-docking operations.