

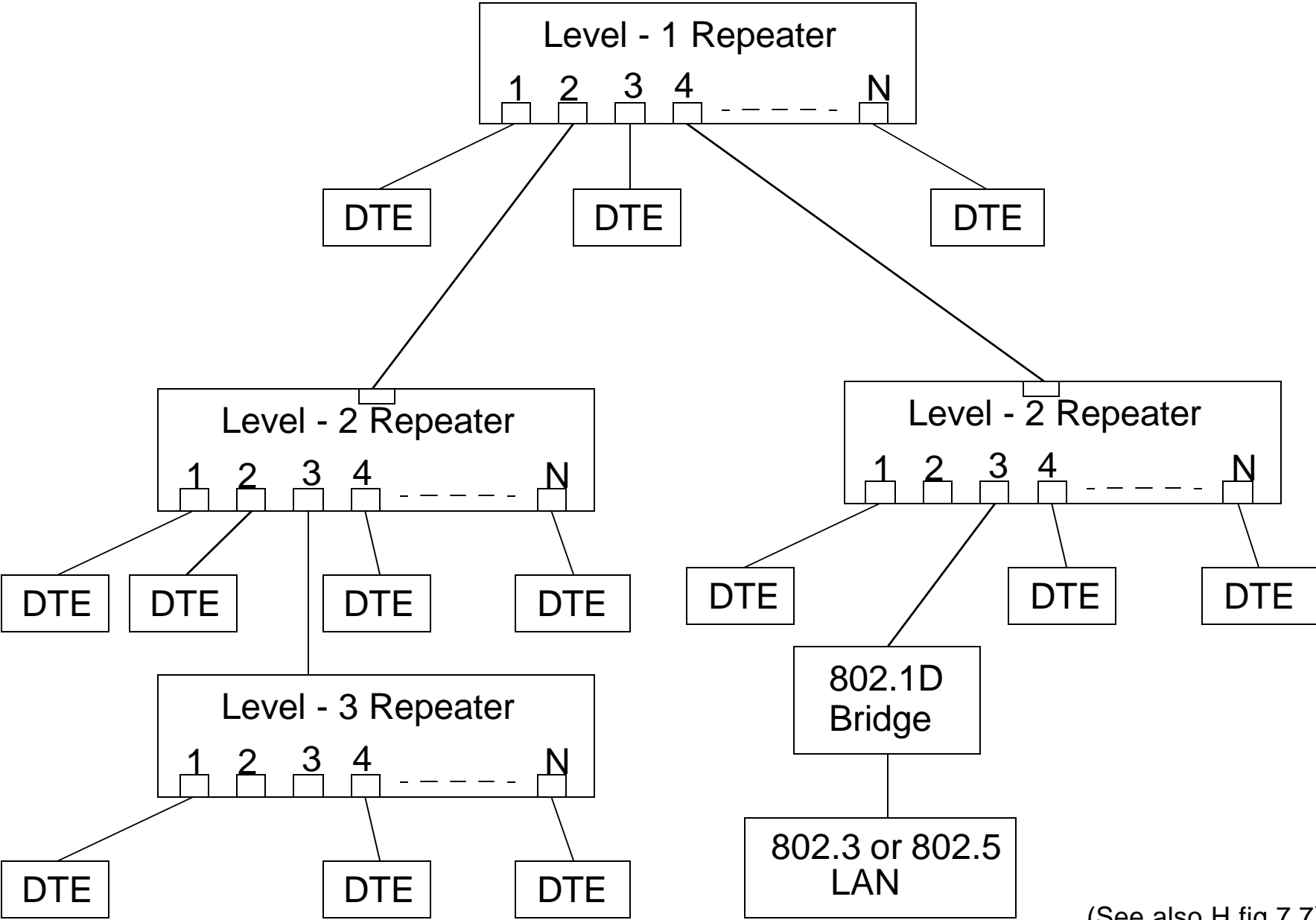
# **Switched LANs: VG100AnyLAN (IEEE 802.12)**

# VG100 AnyLAN (802.12)\*

- Many similar characteristics to switched Ethernet:
  - 100 Mb/s
  - Flexibility
  - Compatibility with existing wiring, interfaces, 802.x frames.
  - Interfaces to hubs are 100 BaseT Ethernet interfaces.
  - Ethernets interface through an 802.1d bridge.
- No special provision for isochronous, real-time traffic but ...
- Priority is supported; can be used for delay-sensitive traffic.
- Contention resolved by up to three layers of hubs using requests and round-robin service.
- Wiring is twisted pair (2 or 4 pairs) or optical fibre.
- Ports to hubs normally in full-duplex signaling mode; switched to half-duplex frame transfer mode as necessary.

\*(H 7.3)

# VG100 AnyLAN - Multilevel Hybrid Network



(See also H fig 7.7)

# Round Robin Algorithm

- Process starts at Level 1 (root) hub.
- Requests served in round-robin order except that all high-priority requests are served first.
- Lower-level hubs allowed  $N$  frames per cycle for  $N$  attached stations.
  - Hence attachment level does not affect service level.
- Single station nodes allowed 1 frame per cycle (presumably modifiable for high-load stations.)
- Access delay for low-priority frames is monitored and priority upgraded if delay excessive.