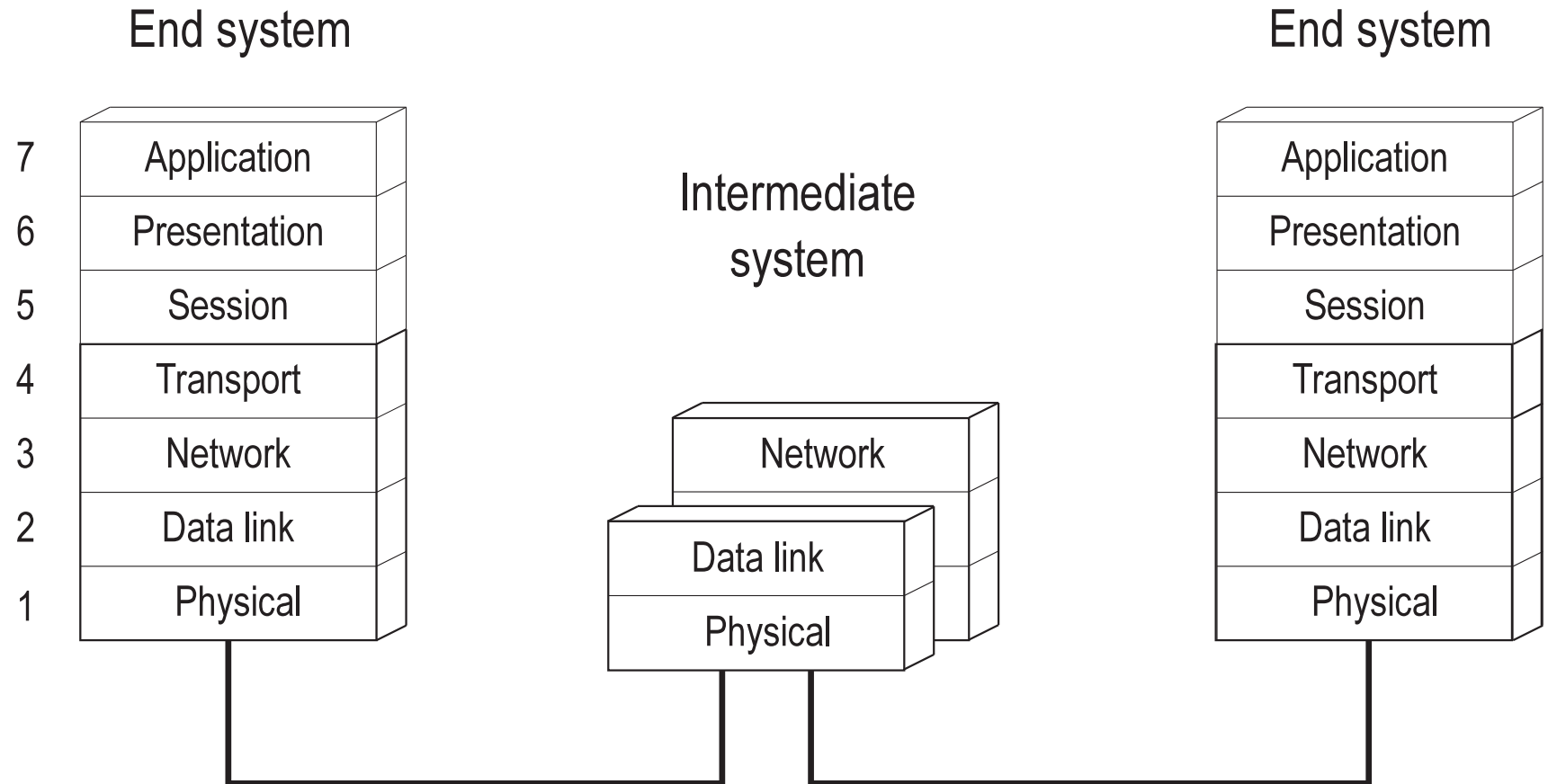

Lokální síť (01 - protokoly)

Jan Janeček

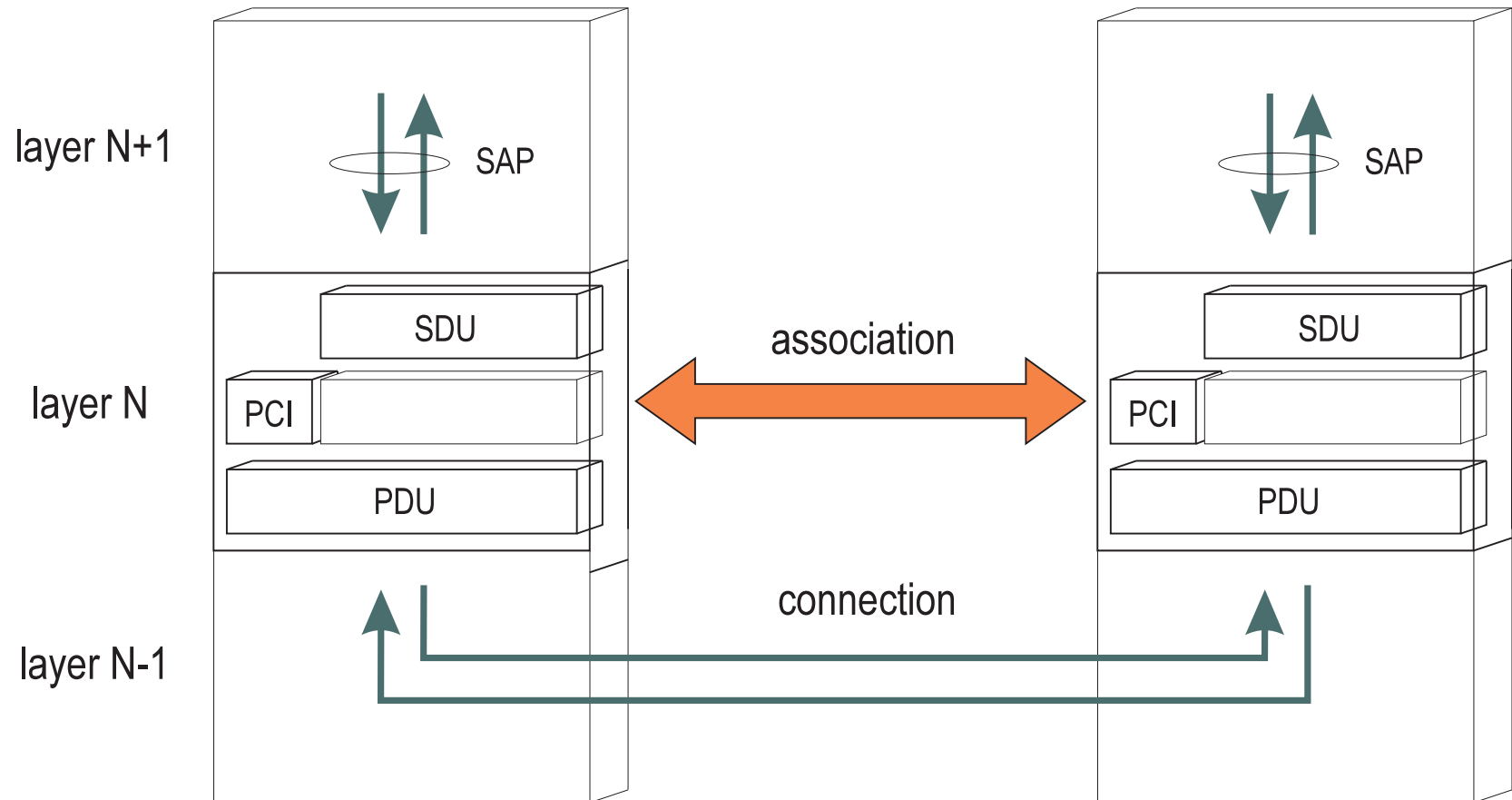
katedra počítačů

České vysoké učení technické v Praze

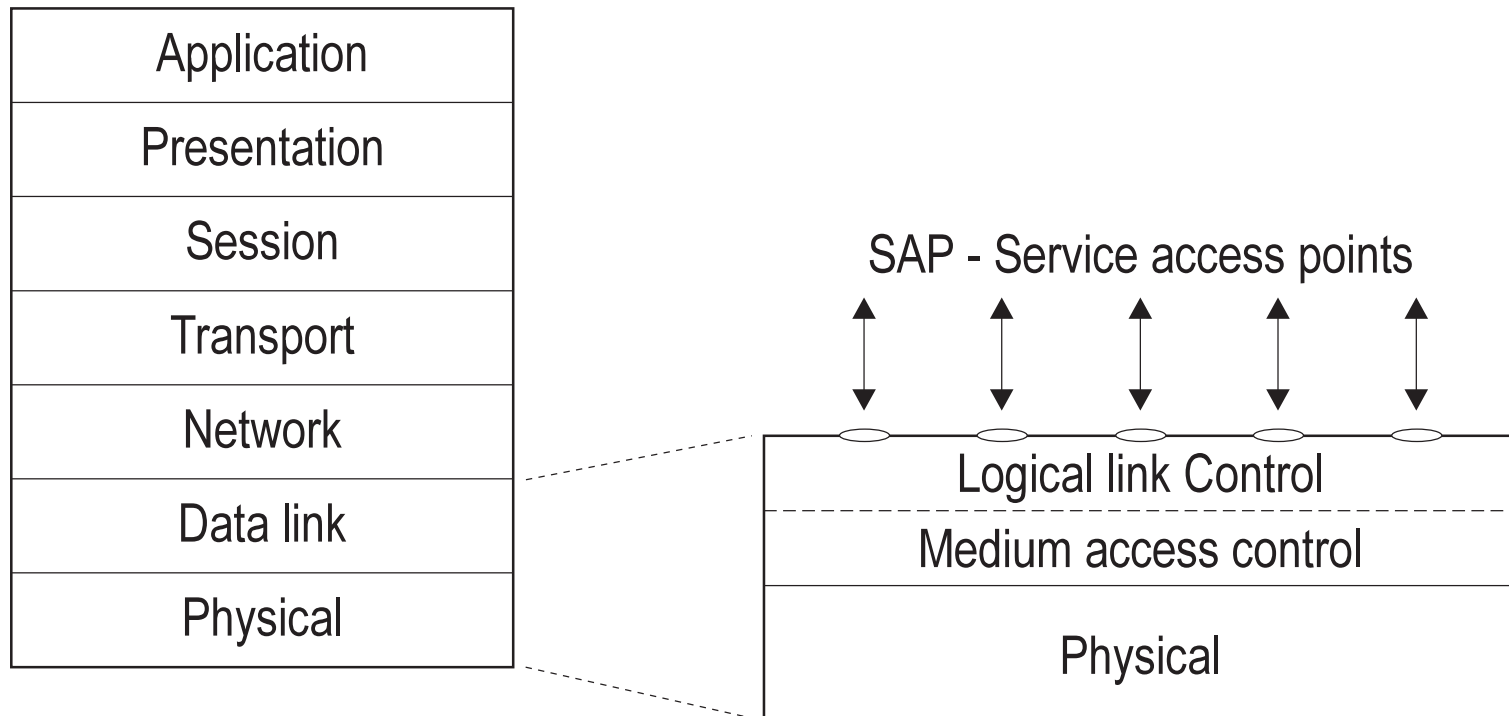
ISO OSI - architektura



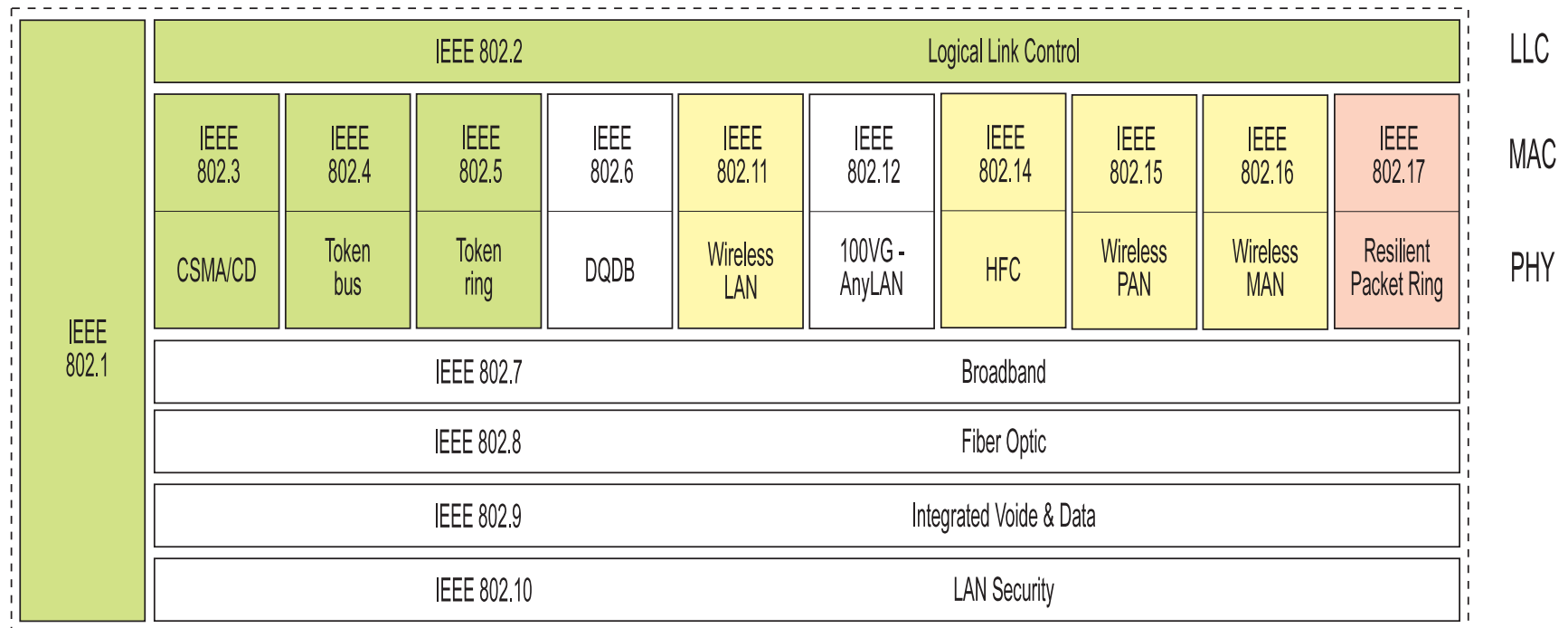
ISO OSI - vrstva



IEEE 802 - architektura



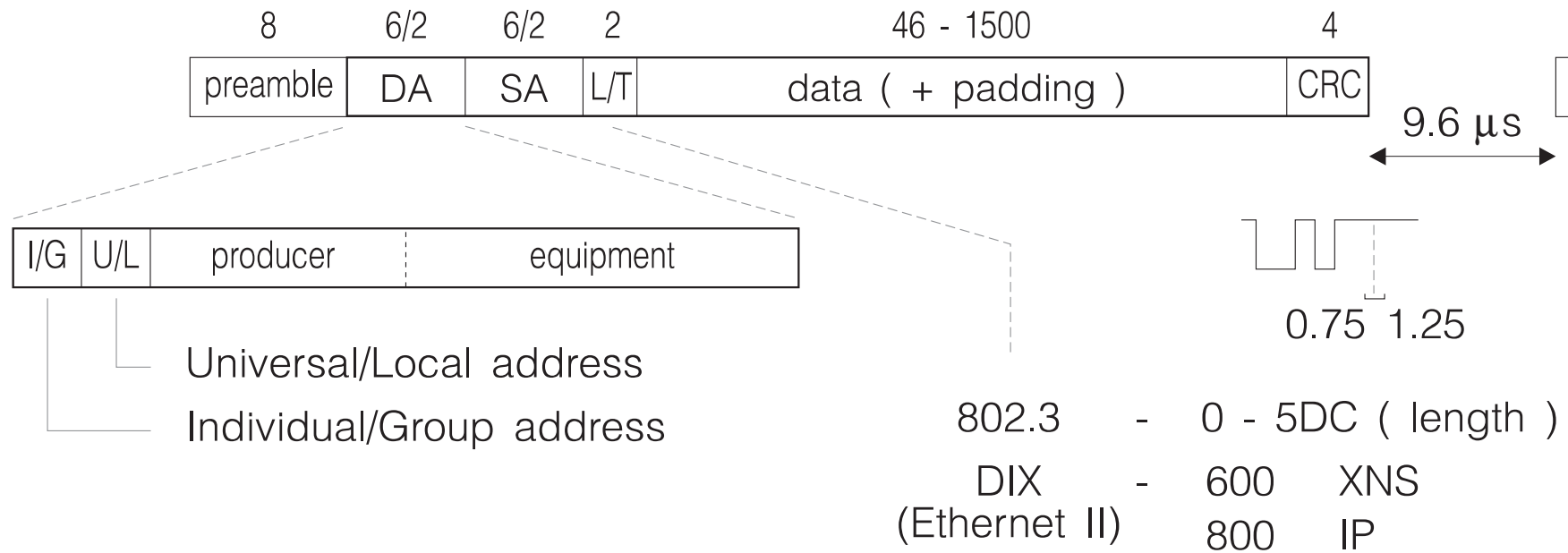
IEEE 802 standardy



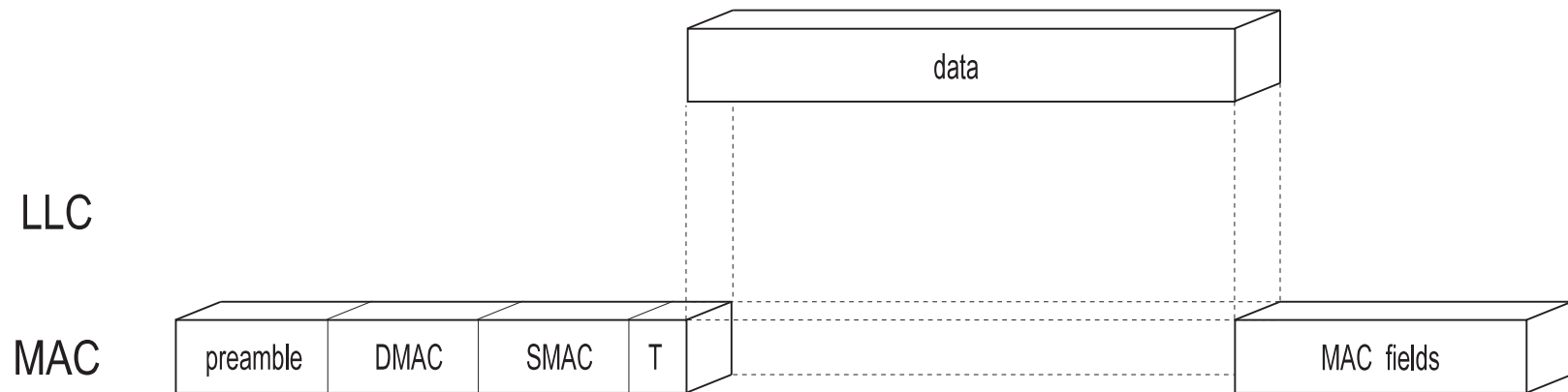
LAN - vyšší vrstvy

| | IPX/SPX | NetBIOS | TCP/IP | VINES | AppleTalk |
|-------------|---|---|---|--|--------------------------------------|
| Application | Application Programs | | | | |
| | Netware Core Protocol (NCP) | Server Message Block (SMB) | Remote Procedure Call (RPC/XDR) | Remote Procedure Call (NetRPC) | AppleTalk Filling Protocol (AFP) |
| | NetBIOS | NetBIOS | | | AppleTalk Session Protocol (ASP) |
| Transport | Sequenced Packet Exchange (SPX) | NetBIOS Extended User Interface (NetBEUI) | Transmission Control Protocol (TCP/UDP) | VINES Interprocess Communication Protocol (VIPC) | AppleTalk Transaction Protocol (ATP) |
| Network | Internetwork Packet Exchange (IPX) | | Internet Protocol (IP) | VINES Internet Protocol (VIP) | Datagram Delivery Protocol (DDP) |
| Data Link | Software Driver Network Interface Card | | | | |
| Physical | Transmission Media | | | | |

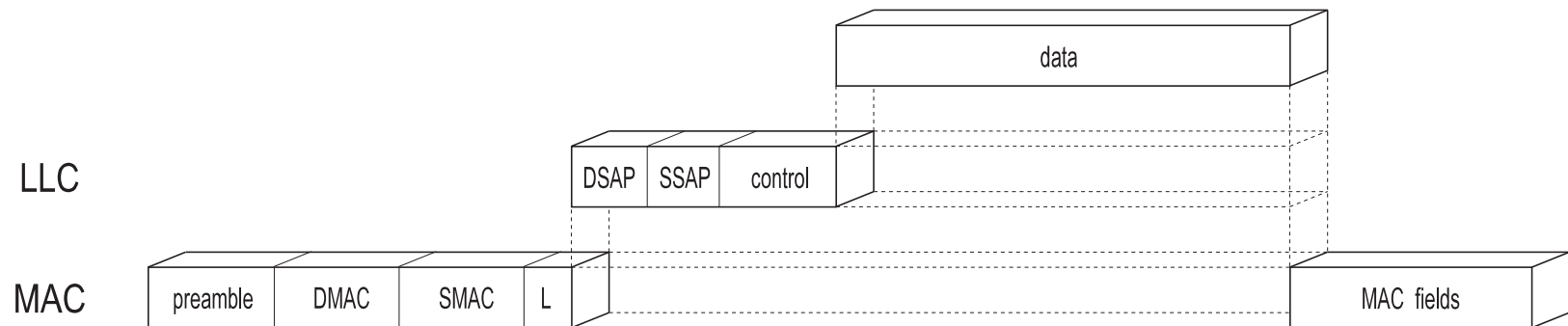
Rámec Ethernet II



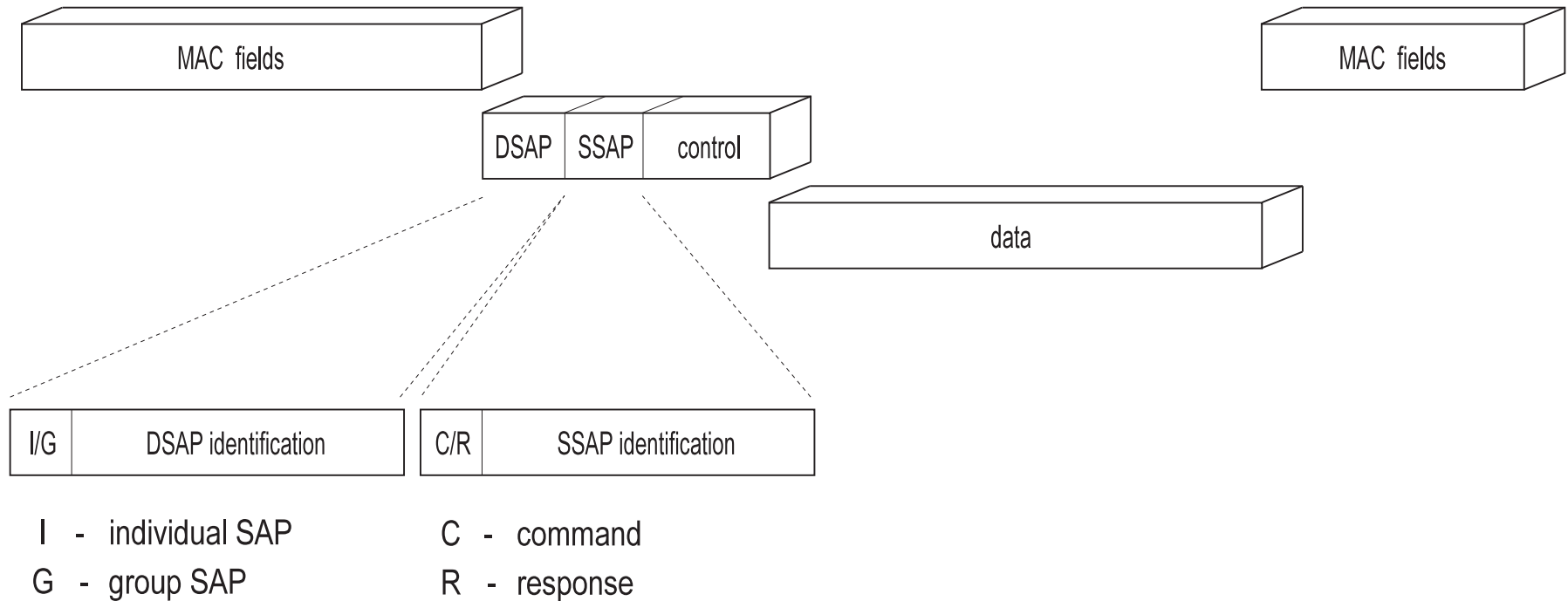
Rámec Ethernet II / IEEE 802.3



Rámec IEEE 802.2 LLC



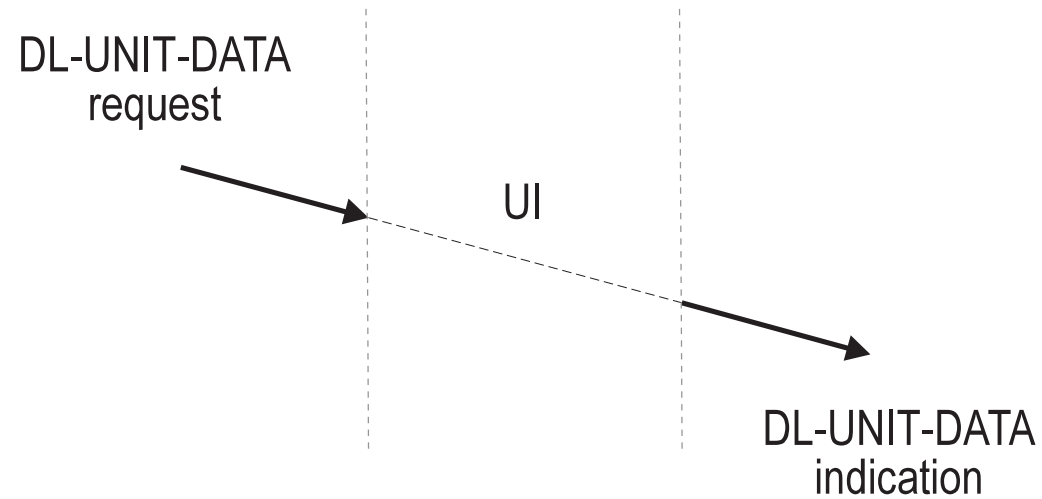
Rámec IEEE 802.2 LLC



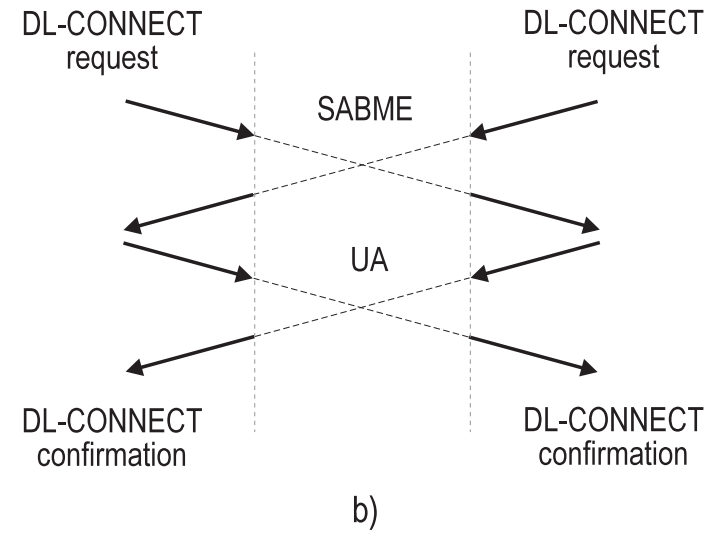
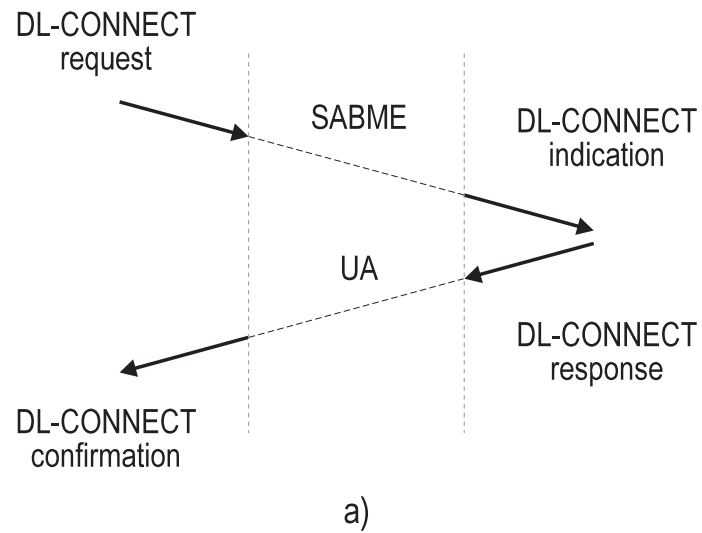
IEEE 802.2 LLC - rámce

| | | | | |
|------|-----------------|----------------------------|----------------------|-----------------------------|
| LLC1 | Unnumbered | | | |
| | UI | unnumbered information | C | data exchange |
| | XID | exchange identification | C/R | operation type, window size |
| | TEST | test | C/R | loopback test |
| LLC2 | Information | | | |
| | I | information | C/R | data exchange |
| | Supervisory | | | |
| | RR | receive ready | C/R | positive acknowledgement |
| | RNR | receive not ready | C/R | positive acknowledgement |
| | REJ | reject | C/R | negative acknowledgement |
| | Unnumbered | | | |
| | SABME | set ABM extended | C | connection request |
| | DISC | disconnect | C | terminate connection |
| | UA | unnumbered acknowledgement | R | acknowledgement |
| DM | disconnect mode | R | connection rejection | |
| FRMR | frame reject | R | frame rejection | |
| LLC3 | Unnumbered | | | |
| | AC | acknowledged information | C/R | data exchange |

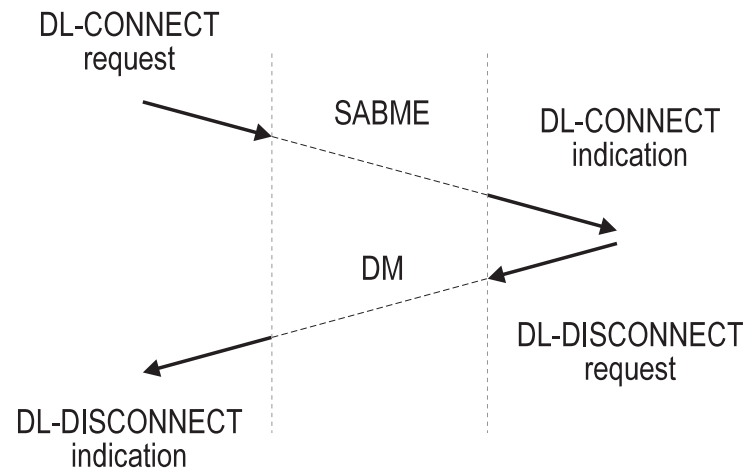
IEEE 802.2 LLC1 - přenos dat



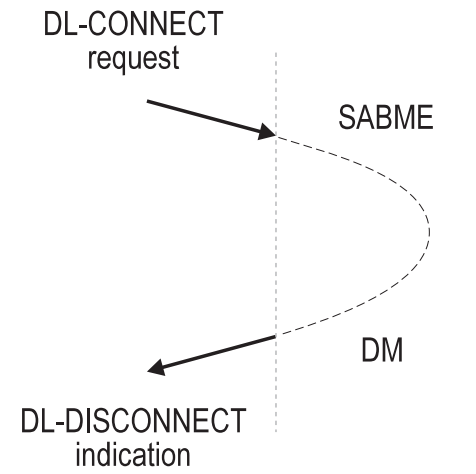
IEEE 802.2 LLC2 - otevírání



IEEE 802.2 LLC2 - otevírání

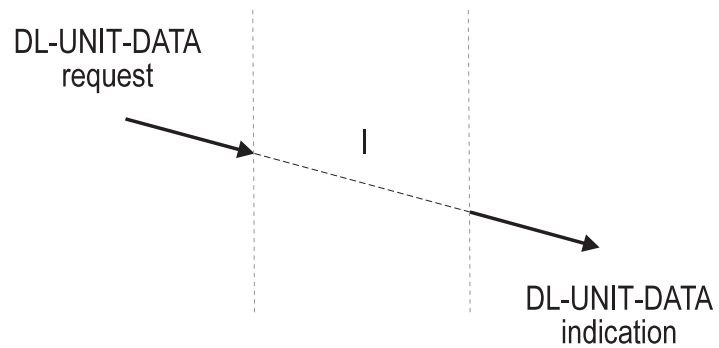


a)

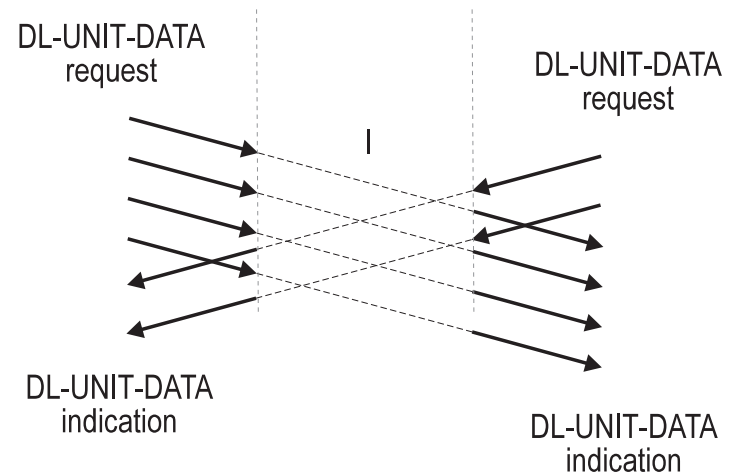


b)

IEEE 802.2 LLC2 - přenos dat

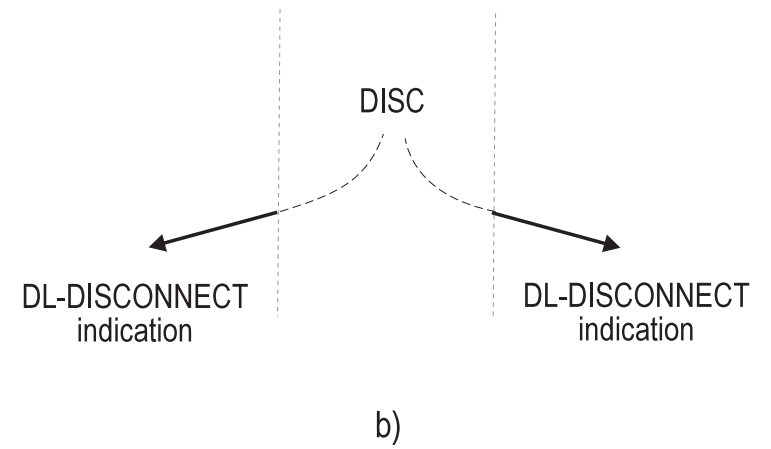
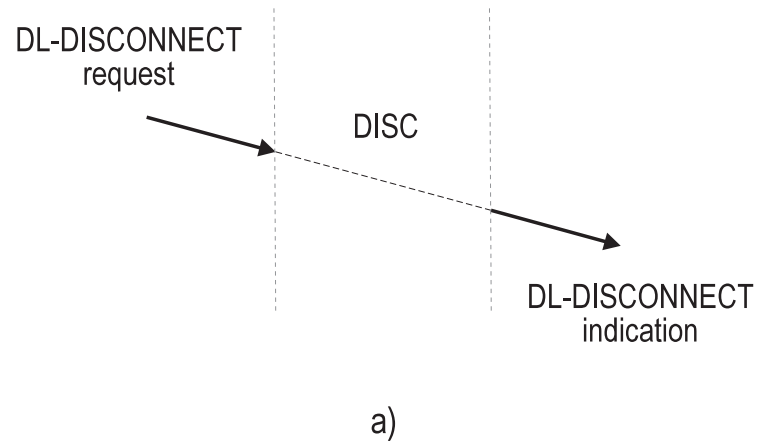


a)

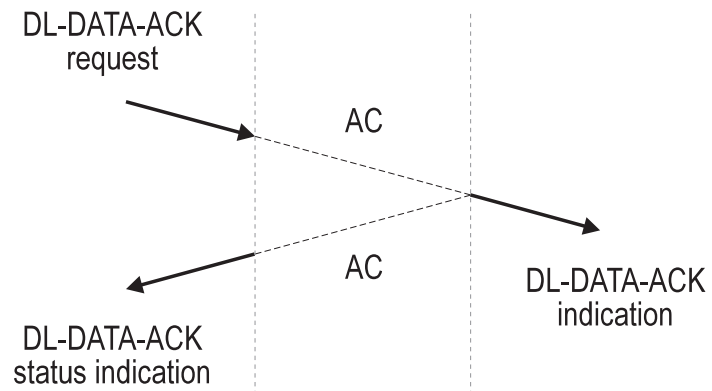


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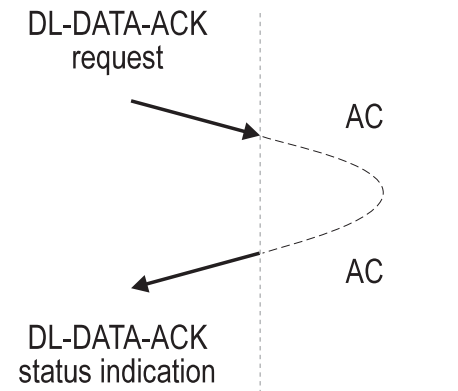
IEEE 802.2 LLC2 - zavírání



IEEE 802.2 LLC3

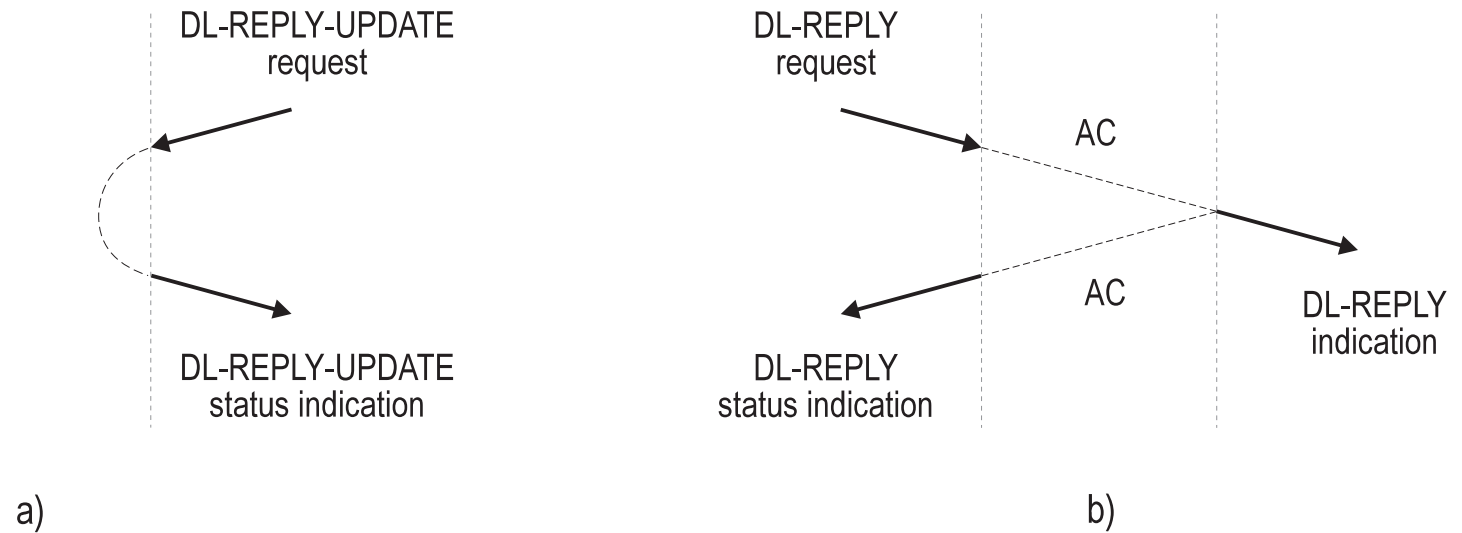


a)

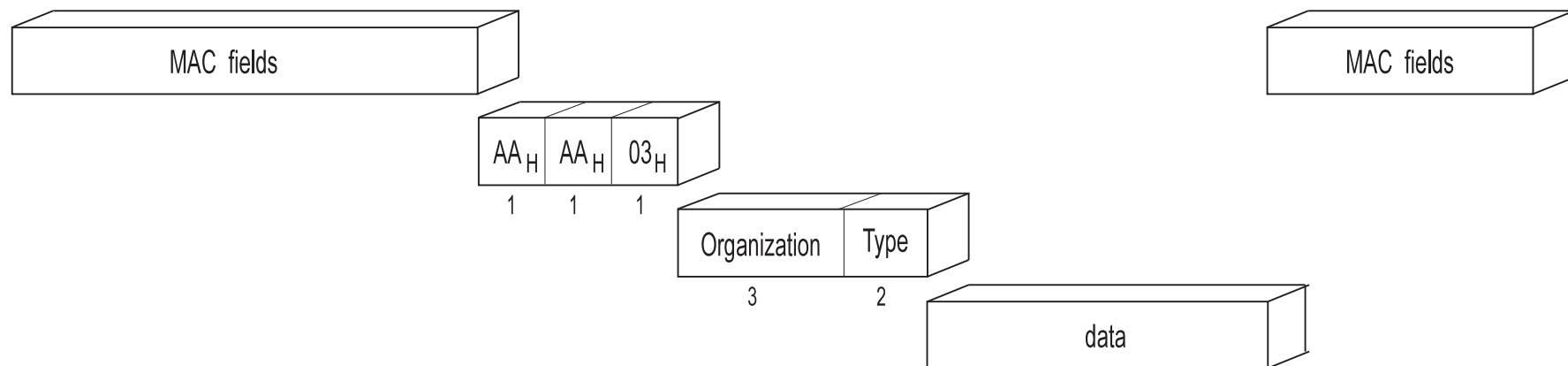


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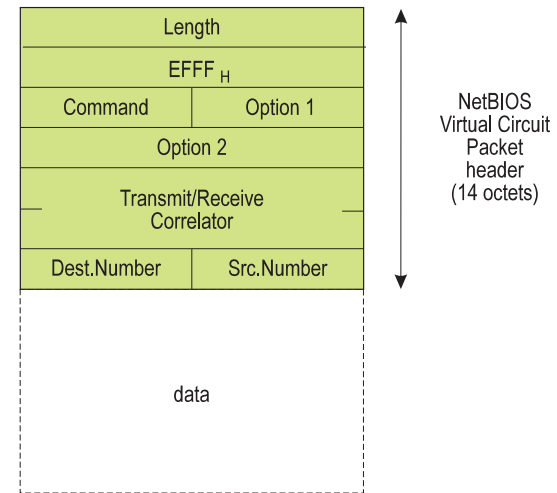
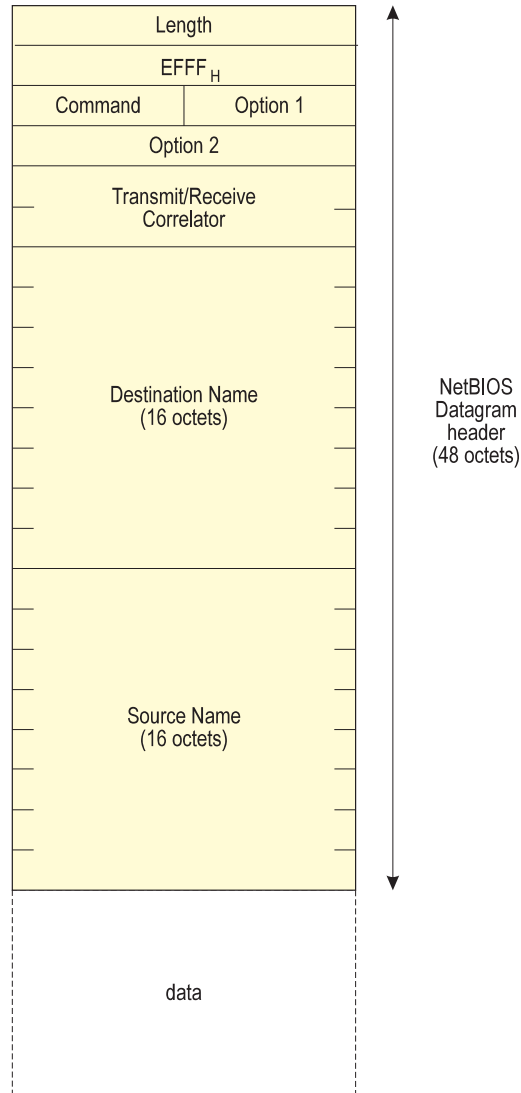
IEEE 802.2 LLC3



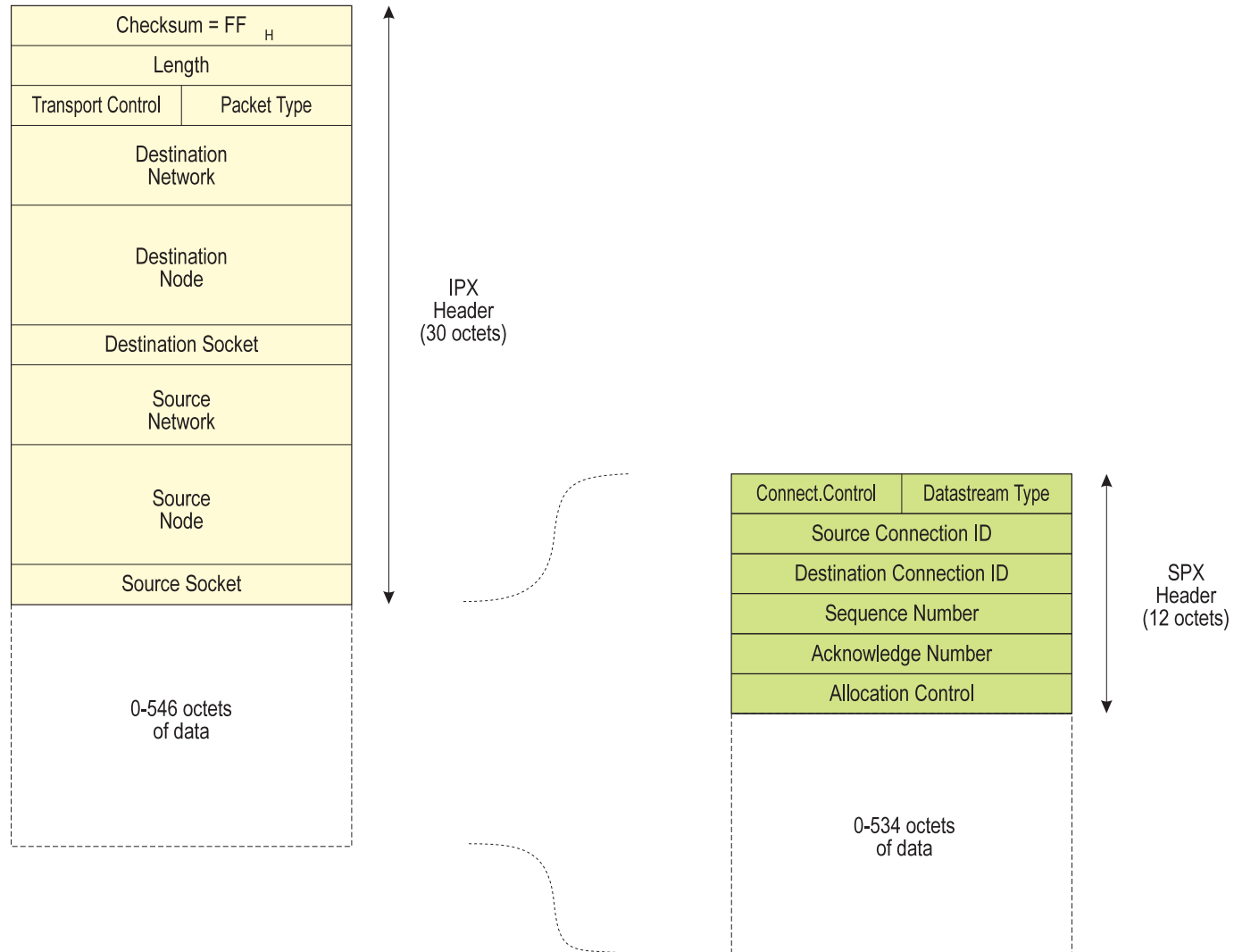
Rámce IEEE 802.2 LLC - SNAP



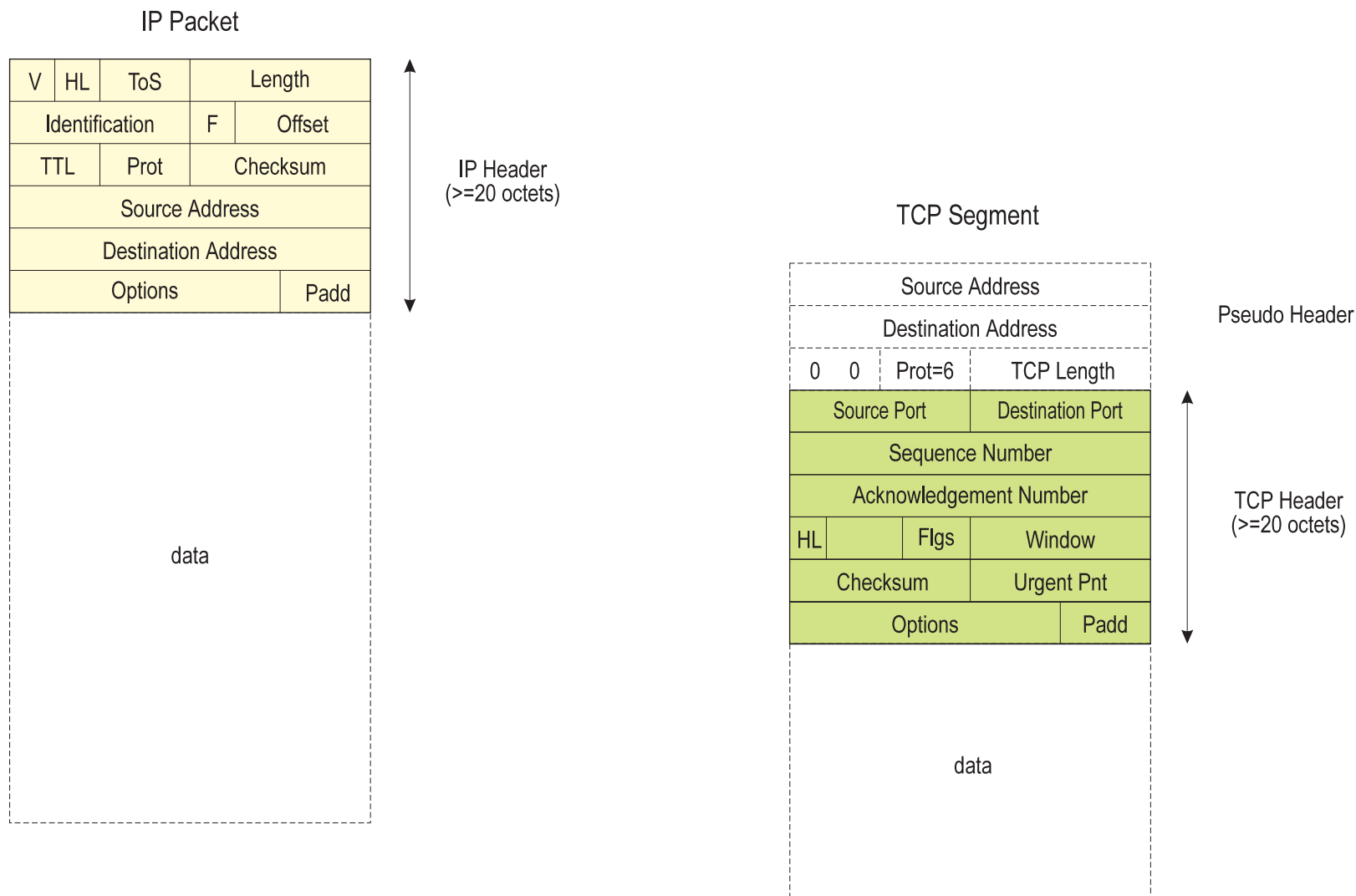
Rámce NetBIOS



Pakety IPX / SPX



Segment TCP



Datagram UDP

