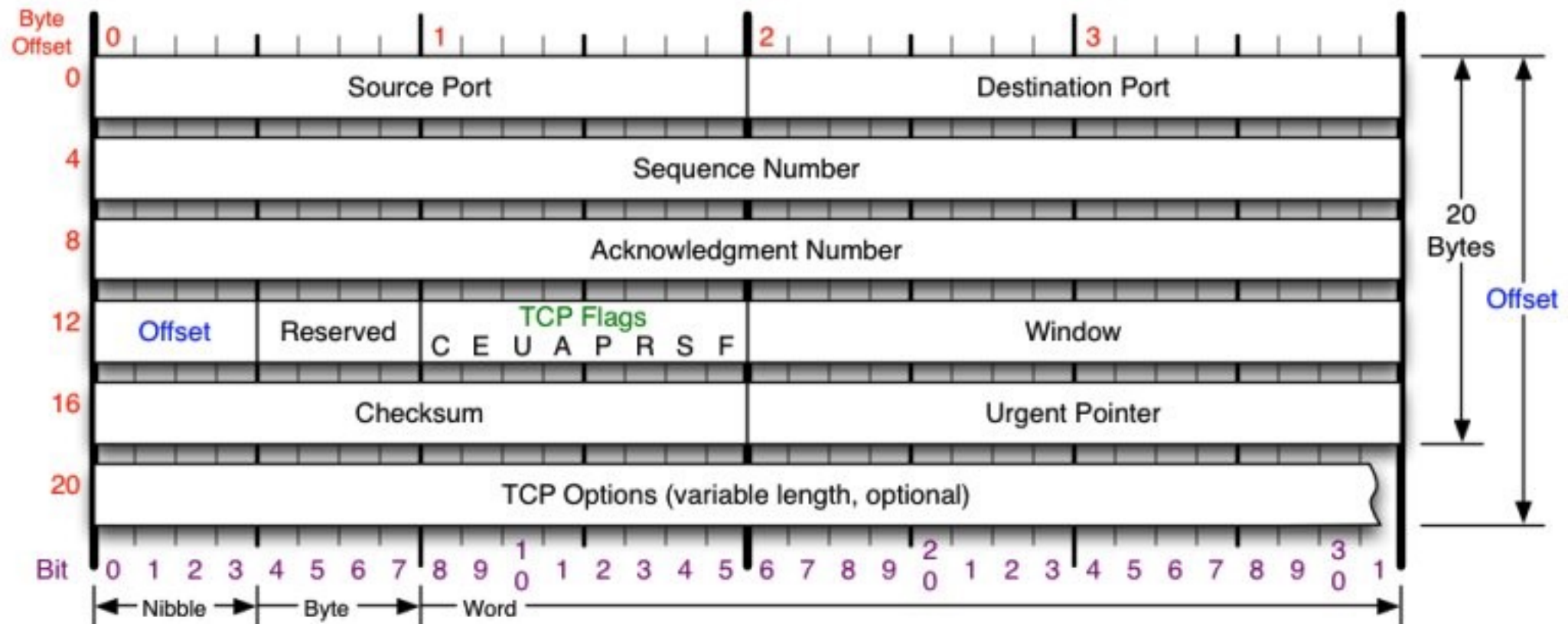


Le protocole TCP



TCP Flags	Congestion Notification	TCP Options	Offset																											
<div>C E U A P R S F</div> <p>Congestion Window</p> <p>C 0x80 Reduced (CWR)</p> <p>E 0x40 ECN Echo (ECE)</p> <p>U 0x20 Urgent</p> <p>A 0x10 Ack</p> <p>P 0x08 Push</p> <p>R 0x04 Reset</p> <p>S 0x02 Syn</p> <p>F 0x01 Fin</p>	<p>ECN (Explicit Congestion Notification). See RFC 3168 for full details, valid states below.</p> <table><tr><td>Packet State</td><td>DSB</td><td>ECN bits</td></tr><tr><td>Syn</td><td>0 0</td><td>1 1</td></tr><tr><td>Syn-Ack</td><td>0 0</td><td>0 1</td></tr><tr><td>Ack</td><td>0 1</td><td>0 0</td></tr><tr><td>No Congestion</td><td>0 1</td><td>0 0</td></tr><tr><td>No Congestion</td><td>1 0</td><td>0 0</td></tr><tr><td>Congestion</td><td>1 1</td><td>0 0</td></tr><tr><td>Receiver Response</td><td>1 1</td><td>0 1</td></tr><tr><td>Sender Response</td><td>1 1</td><td>1 1</td></tr></table>	Packet State	DSB	ECN bits	Syn	0 0	1 1	Syn-Ack	0 0	0 1	Ack	0 1	0 0	No Congestion	0 1	0 0	No Congestion	1 0	0 0	Congestion	1 1	0 0	Receiver Response	1 1	0 1	Sender Response	1 1	1 1	<p>0 End of Options List</p> <p>1 No Operation (NOP, Pad)</p> <p>2 Maximum segment size</p> <p>3 Window Scale</p> <p>4 Selective ACK ok</p> <p>8 Timestamp</p> <div>Checksum</div> <p>Checksum of entire TCP segment and pseudo header (parts of IP header)</p>	<p>Number of 32-bit words in TCP header, minimum value of 5. Multiply by 4 to get byte count.</p> <div>RFC 793</div> <p>Please refer to RFC 793 for the complete Transmission Control Protocol (TCP) Specification.</p>
Packet State	DSB	ECN bits																												
Syn	0 0	1 1																												
Syn-Ack	0 0	0 1																												
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Congestion	1 1	0 0																												
Receiver Response	1 1	0 1																												
Sender Response	1 1	1 1																												

Le protocole TCP

Les drapeaux TCP (flags)

- **SYN** : demande de synchronisation ou établissement de connexion
- **ACK** : signale que le paquet est un accusé de réception (ACKnowledgement)
- **RST** : rupture anormale de la connexion (ReSeT)
- **FIN** : demande la fin de la connexion
- **PSH** : données à envoyer tout de suite (PuSH)
- **URG** : signale la présence de données URGentes