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|  | **Stop and Wait ARQ** | **Go back N** | **Selective Repeat** | **Remarks** |
| **Efficiency** | 1 / (1+2a) | N / (1+2a) | N / (1+2a) | Go back N and Selective Repeat gives better efficiency than Stop and Wait ARQ. | |
| **Window Size** | Sender Window Size = 1  Receiver Window Size = 1 | Sender Window Size = N  Receiver Window Size = 1 | Sender Window Size = N  Receiver Window Size = N | Buffer requirement in Selective Repeat is very large.  If the system does not have lots of memory, then it is better to choose Go back N. | |
| **Minimum number of sequence numbers required** | 2 | N+1 | 2 x N | Selective Repeat requires large number of bits in sequence number field. | |
| **Retransmissions required if a packet is lost** | Only the lost packet is retransmitted | The entire window is retransmitted | Only the lost packet is retransmitted | Selective Repeat is far better than Go back N in terms of retransmissions required. | |
| **Bandwidth Requirement** | Bandwidth requirement is Low | Bandwidth requirement is high because even if a single packet is lost, entire window has to be retransmitted.  Thus, if error rate is high, it wastes a lot of bandwidth. | Bandwidth requirement is moderate | Selective Repeat is better than Go back N in terms of bandwidth requirement. | |
| **CPU usage** | Low | Moderate | High due to searching and sorting required at sender and receiver side | Go back N is better than Selective Repeat in terms of CPU usage. | |
| **Level of difficulty in Implementation** | Low | Moderate | Complex as it requires extra logic and sorting and searching | Go back N is better than Selective Repeat in terms of implementation difficulty. | |
| **Acknowledgements** | Uses independent acknowledgement for each packet | Uses cumulative acknowledgements (but may use independent acknowledgements as well) | Uses independent acknowledgement for each packet | Sending cumulative acknowledgements reduces the traffic in the network but if it is lost, then the ACKs for all the corresponding packets are lost. | |