## Example: Impact of Delay-Bandwidth Product

 $n_f$ =1250 bytes = 10000 bits,  $n_a$ = $n_o$ =25 bytes = 200 bits

	Delay × Bandwidth Product Efficiency			
Reaction time Distance	1 ms	10 ms	100 ms	1 sec
	200 km	2000 km	20000 km	200000 km
1 Mbps	10 <sup>3</sup>	10 <sup>4</sup>	10 <sup>5</sup>	10 <sup>6</sup>
	88%	49%	9%	1%
1 Gbps	10 <sup>6</sup>	10 <sup>7</sup>	10 <sup>8</sup>	10 <sup>9</sup>
	1%	0.1%	0.01%	0.001%

Stop-and-Wait does not work well for very high speeds or long propagation delays