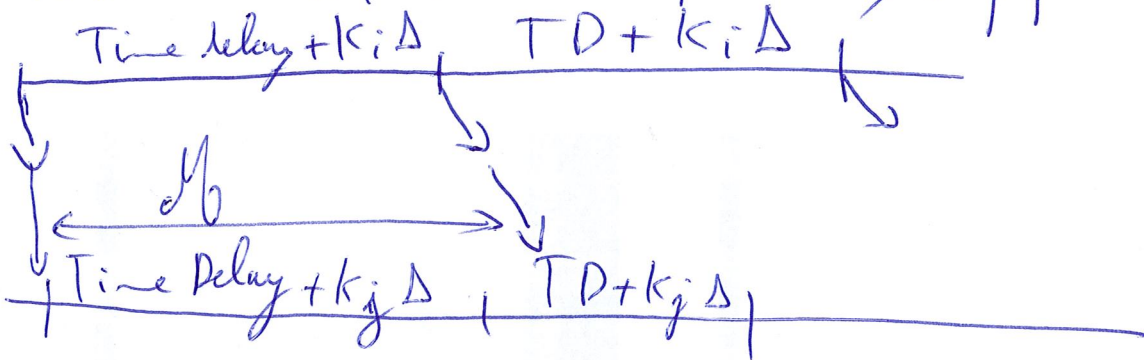


Eventually perfect failure detector

At the beginning the delay between 2 Heartbeats (HB) is Time Delay

After k failures ^{+ recovery (i.e. k times a process is detected by mistake)} the delay is \leq
 $\text{Time Delay} + k \cdot \Delta$ (

There is no bound on ~~the recovery~~ time ~~because~~ necessary to detect a failed process because there is no bound on the period because k cannot be bound. Indeed suppose there is a bound k_i on each process, suppose $k_j \leq k_i$



M_0 the maximal time between 2 HB receptions is $TD + k_i \Delta + \delta$.

and $M_0 > TD + k_j \Delta$ because $k_j \leq k_i$

thus i will be detected and recovered in j , k_j will increase... until $k_j \geq k_i$ and then

k_i will increase

THUS No bound exists