TD Etude du délais pour le réseau MIL-STD-1553

3SN parcours SEMBIIOT

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We would like to study the communication delays of the satellite network architecture case study. As it is difficult (and not interesting) to compute all the transmission delays, we only focus on HouseKeeping (HK) flows.

We consider here that all the equipments of the system are interconnected using a MIL-STD-1553. Data rate of the links are 1 Mb/s. The Bus Controller is PM.

Q1. Draw the data exchanges between the application A_0 and PM.

Q2. As the response time is 10 μs, what is the transmission delay of these data ?

Q3. Are the application constraints of A_0 respected ?

Q4. What is the transmission delay of data from A_6 ? Are this application contraints respected ?