Freiburg, the 8th June, 2016 Discussion 15th June, 2016

Exercise for the lecture Wireless Sensor Networks Summer 2016 Sheet 7

EXERCISE 8:

Consider the following graph, where the delivery ratio between nodes is displayed on the directed edges. Missing edges correspond to a delivery ratio of 0.



Е

D

S2

1. Compute the ETX rounded to multiples of 0.25, i.e. $\frac{1}{4} \left\lfloor \frac{4}{d_r \cdot d_f} \right\rfloor$, and add the edges to the following figure.

- 2. Compute the optimal Collection Tree for sinks S_1 and S_2 based on ETX computed above.
- S1 А G в С F D Е S2 S1 А G В С F

Е

D

S2

3. Compute the optimal DAG for RPL for sinks S_1 and S_2 based on the same ETX.

4. Now S_2 fails. Show the new DAG for RPL. Show the floating DAG.



Graphs for your convenience.



