

UCL Department of Computer Science CS M038/GZ06: Mobile and Cloud Computing 2010–2011, Term 2 Kyle Jamieson and Brad Karp

One-pager: ExOR (Biswas et al., 2005)

Due: Start of lecture, 23rd February 2011

Instructions: *in your own words*, answer the following questions as *succinctly* as possible (in 200–500 words total, but shorter answers within this range are encouraged). Quoting figures or text from the assigned reading or from any other source is specifically prohibited.

To schedule their transmissions, nodes running ExOR overhear others' transmissions and estimate their completion time, with the transmission tracker and forwarding timer mechanisms described in the paper. If a node cannot hear any of a higher priority node's transmissions, it assumes that the higher priority node will send for five packet durations.

Draw a node topology under which this assumption is likely to come into play, labeling loss rates in each direction between each pair of nodes. Comment on the likelihood of this topology occurring in an unplanned wireless mesh network.