Flying real-time network for disaster assistance

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© 2017, Springer International Publishing AG. Landslides and large floods are serious natural disasters that every year cause multiple deaths and loss in property around the world. When these events occur in areas like the ?favelas? or mountain regions in coastal cities like Rio de Janeiro, the situation becomes critical as buildings and infrastructures are not prepared to withstand them. Search and rescue teams in such disaster areas need to rely on real-time communication, which often cannot be adequately provided by cell or radio networks. In this paper, we argue that flying ad-hoc networks can provide the support needed in these scenarios and propose a new solution towards that goal, termed Flying Witness Units. We make our case by presenting real-time schedulability analysis of message delivery for a disaster scenario.