The benefits of using aerial base stations in cellular networks

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Funded by ANR-DEMON Project

Aerial base station

Prior works in SkyCore[1], SkyHaul[2], …

Problems to solve :
- Radio access network configuration ?
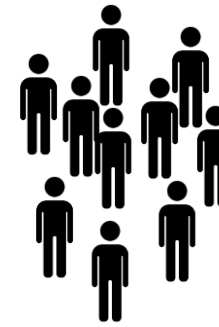- Mobility management ?

An experimental platform is expected

Rural area   Post disaster   Excessive demand

[1] M. Moradi, K. Sundaresan, E. Chai, S. Rangarajan, and Z. M. Mao. "SkyCore: Moving Core to the Edge for Untethered and Reliable UAV-based LTE Networks," In Proceedings of the 24th Annual International Conference on Mobile Computing and Networking (MobiCom '18). Association for Computing Machinery, New York, NY, USA, 2018, pp. 35–49.
[2] R. K. Sheshadri, E. Chai, K. Sundaresan, and S. Rangarajan, "SkyHAUL: A Self-Organizing Gigabit Network In The Sky," in Proceedings of the Twenty-second International Symposium on Theory, Algorithmic Foundations, and Protocol Design for Mobile Networks and Mobile Computing, Shanghai China, Jul. 2021, pp. 101–110.