Call a Drone

IoT & Sensors, Drones & Robots, Agriculture, Automotive & Transportation, Energy, Mobile & Telecommunications, Mobility

The Opportunity

Problem: Drones flying beyond visual line of sight (BVLOS) require a reliable and widely available data connection. Once BVLOS flights are allowed by the regulatory bodies, drone service provider will need a trusted and affordable connection to control and command drones.

Solution: The bandwidth of voice channels is demonstrably sufficient for this type of application. Our hardware module uses a regular SIM card and interacts with standard drone flight controllers. Even with 2G/3G, the corresponding software allows customers to reliably control a large number of drones and monitor their positions in real-time.

The High-Tech

Voice channels of the mobile network are used to transmit data via tone modulations, which allows for a robust data exchange with low latency and guaranteed quality of service (QoS). Voice channels always rely on the best possible network coverage using 2G/3G/4G/5G, while special data connection based on 4G/5G have limited coverage, are costly and require special contracts with operators to use guaranteed QoS (latency etc.).

co-founder(s) needed ~~full founding team needed~~

TEAM

- Core competencies in team: *Wireless Communications, Mobile Networks, Vehicular Communications, Drone Flight Controller*
- Future role of the current team: *Co-founding, staying at Fraunhofer as technological lead, further R&D at Fraunhofer, consulting on technology (Tom). Co-founding, searching for customers, consulting on product/market fit, working towards growth (Kim, based in NYC).*
- Offer for Pioneers: *Looking for co-founders with experience setting up a company from scratch*

TECHNOLOGY

- TRL: *6*
- Time to market: *<1 year*
- IP: *several applications pending*
- Unfair advantage*: developed special methods to exploit voice channels of the mobile network*

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VENTURE