

Exhibit 1
Narrative Statement Describing Government Project

This authorization will be used to fulfill the requirements for two US government contracts. The first contract is funded under Contract No. CCR-0121565 (A-6722) with the National Science Foundation. The focus of this research is to improve mobile wireless communications bandwidth efficiencies using broadband MIMO OFDM techniques. This authorization will be used to conduct MIMO channel measurements and to test the performance of various MIMO OFDM processing techniques.

The second contract supports the Collaborative Technology Research Alliance (CTA) in Communications and Networks sponsored by the Army Research Laboratory (ARL). Georgia Tech is funded by ARL through a sub-contract with Telcordia Technologies (Contract No. DAAD19-01-2-0011, A-6643). This authorization will be required to perform work on Task 3.1.1-Wireless Channel Modeling for Mobile-to-Mobile Communication Systems, and Task 3.2.5 – Sectored versus Adaptive Array Antenna research, as defined under the CTA. The authorization will be used to conduct channel sounding measurements and to investigate array antenna processing concepts.