

Exhibit 1:

Is this authorization to be used for fulfilling the requirement of a government contract with an agency of the United States Government?

As part of the ongoing RENEW project (<http://renew.rice.edu>), the applicant (Rice University) has designed and built custom reconfigurable many-antenna base stations. The project is funded by national science foundation and will continue until March 2023.

The RENEW project will develop and test multi-cell massive MIMO research platform on Rice University campus. The RENEW research platform consists of the following key components: (i) a highly configurable many-antenna base station, (ii) mobile terminals.

The requested license is essential in conducting experiments and testing in outdoor environment and in various frequency bands in order to make observations on wireless channel effects on Massive-MIMO communications in various bands. This research help advance state-of-the-art in wireless communications and mobile networking and its results will become public knowledge as they will be published in wireless communications journals and conferences.