ePingER on Android Scope

1. The basic goal is to develop a procedure allowing Android-based devices to be used for network monitoring given the following assumptions:
   a. Android devices (e.g., old mobile telephones) can provide sufficient computing power for PingER monitoring;
   b. The PingER program code can be easily installed on the Android OS;
   c. Android-based devices used for PingER monitoring will have access to Wi-Fi services and not use cellular networks (due to inherent latency concerns);
   d. Android-based PingER monitors will require no maintenance; device failure will be addressed by replacement with a new device (remove and replace);
   e. Android-based PingER monitors have the potential to be placed anyplace where network and power access are available;
   f. Local configuration/setup of Android-based PingER monitors will be limited to Wi-Fi setting;
   g. Android-based PingER monitors will occupy the same system status as other PingER monitors;
   h. Android-based devices will be provided by the PingER team for development, configuration, and testing;
2. It is not a goal to develop a generalized Android app interface to PingER data. Skills required for participation in the PingER project for Android:
   a. Android OS/Java programming skills;
   b. Familiarity with the PingER project infrastructure and program code;
   c. Familiarity with Git; the PingER codebase is maintained on GitHub.
3. Project outcomes:
   a. A PingER codebase for Android;
   b. Proof-of-concept (installation and testing of an Android-based monitoring device);
   c. Installation documentation for Android-based PingER monitoring devices;
   d. A conference or journal submission that documents experience and findings in Steps (b) and (c); e. Development of a strategy for soliciting participants/locations of Android-based PingER devices.