## CCi-MOBILE Research Interface for Cochlear Implant and Hearing-Aid Research Remote Experimentation Overview

Table 2. Description of Experimental Protocols with CCi- MOBILE Research Platform*		Experimenter and Participant Requirements	Experiment Test Date
Traditional Psychoacoustic Experiment	Hosted either in a sound booth or in-field at the University of Texas at Dallas Cochlear Implant Laboratory; the experiment is driven by research personnel; the participant is using CCi-MOBILE* either in real-time or pre-processed audio is presented to the participant (graphical user interface, sound booth, free-field, app, etc.)	Experimenter and participant are present in the same location and present at the same time Experimenter: In-person Participant: In-person	Scheduled
Remote Experiment	Hosted virtually: face-to-face digitally using online meeting platforms (Zoom, Teams, Skype, etc.) using a provided laptop with pre-loaded experiment data and CCi-MOBILE* routines; experiment is driven by the research personnel using 'Remote Control' feature of the provided laptop; participant communicates in real-time with experimenter virtually or responds to a graphical user interface on the provided laptop/tablet based on various tasks***	Experimenter and participant are not present in the same location, but present at the same time  Experimenter: Virtually (face-to-face online)  Participant: Virtually (face-to-face online)	<u>Scheduled</u>
Online Experiment via CCi-Evaluate ("CCi-Cloud")	Hosted online using Amazon WorkSpaces ("CCi-Cloud"); participants log onto virtual testing machine where experimenter has loaded the self-paced experiment/graphical user interface with instructions; audio (can be processed offline or in real-time) is presented through loudspeakers or Bluetooth to the implant processor and participants respond to the graphical user interface based on various tasks***	Experimenter and participant are not present in the same location nor present at the same time  Experimenter: Not-present Participant: Online-only (not virtual)	Self-paced (Can be taken on participant's own time)**

<sup>\*</sup>The CCi-MOBILE Research Platform is a research tool that enables direct connect to the participants implant (magnetic receiver) using a wired connection from the laptop (provided) to the participant, bypassing the use/need of the clinical processor





<sup>\*\*</sup>Can be scheduled in the event multiple participants are enrolled in the experiment as Amazon WorkSpaces can only host one participant at a time with specific username/password credentials; in some cases, individual credentials and WorkSpace can be created for individual participants so scheduling is not required

<sup>\*\*\*</sup>See the experimental description located on the consent form