



## Form 442 Question 7: Experimentation Description

Sterling Computers Corporation, Sterling, is developing a developer private cloud service, that allows agile development of and experimentation with advanced cellular network features, capabilities and Key Performance Indicators (KPI)s. Our solution provides the following capabilities:

- Network elements programmability (including access to the source code) to extend or change network behavior at various levels of modularity.
- Layer1 of our network architecture is GPU accelerated. By including a GPU we allow rapid simulation, prototyping and benchmarking of experimental Machine Learning based algorithms & techniques.
- Flexibility to scale (e.g., increase in number of cells, UE density, compute resources etc.)
- Both functional and performance tests at different levels of granularity and at real-world P5G OTA support.
- Open reference architecture incorporating O-RAN architecture.

Sterling will assemble and preconfigure the Commercial Off The Shelf (COTS) components in our facility. Prior to shipping the solution to our Research and Development customers we need to perform an end-to-end test over the air (OTA) between a user end point (UE) and the cell site and this is the reason why we are applying for the license. By performing the end-to-end test prior to shipment, we look to ensure that our developer end users can start experimentation faster and this will also provide us with the ability to fix issues in our environment.