ADVANCED WIRELESS SERVICES-3 (AWS-3)
SPECTRUM SHARING TEST & DEMONSTRATION (SSTD) PROGRAM
IMPROVE PROPAGATION

The AWS-3 SSTD Program is focused on ways to make aggregate interference assessments more realistic in AWS-3 spectrum sharing scenarios. A major focus area is propagation model refinements.

OBJECTIVES:

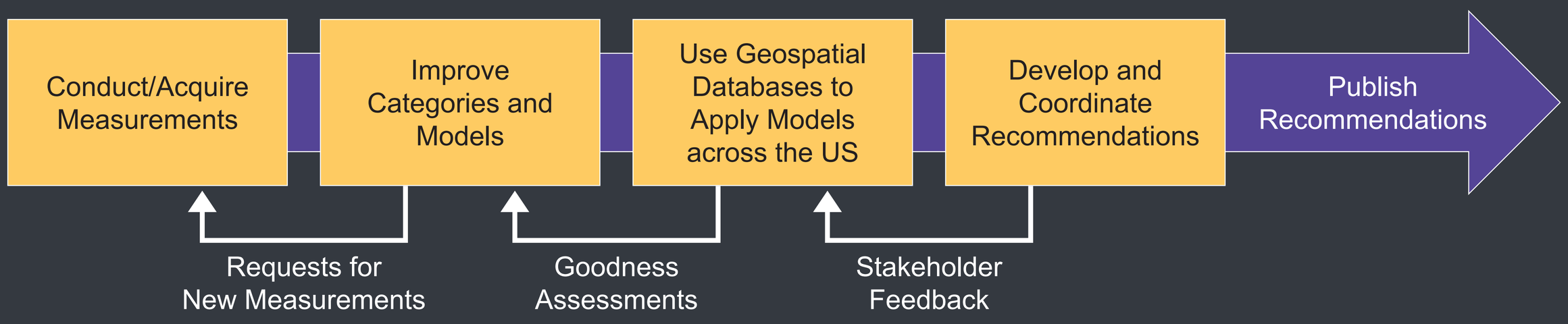
- Facilitate expedited and expanded entry (FEEE) of commercial deployments into the 1755-1780 MHz band
- Identify, assess, test/demonstrate, and operationalize (IATO) coexistence assessments, interference mitigation, and other spectrum sharing enablers that support increased sharing between LTE and incumbent DoD systems.

INITIATIVES:

- Improve Propagation
- Characterize LTE
- Characterize DoD Receivers
- Assess Aggregate Interference

APPROACH:

The SSTD Program uses a contextually-focused (AWS-3 early-entry assessments), model-based, measurement-validated, iterative approach to improve the propagation and clutter modeling used when assessing aggregate interference levels from incoming AWS-3 commercial LTE systems.



The program acquires a wide range of measurement data both from its own activities and from other published sources that is used to validate/improve situational partitioning (categories) as well as propagation and clutter models.

These models in turn are used along with geospatial data (i.e., terrain elevation and land use) to develop recommendations for improved propagation modeling in the early-entry analyses.

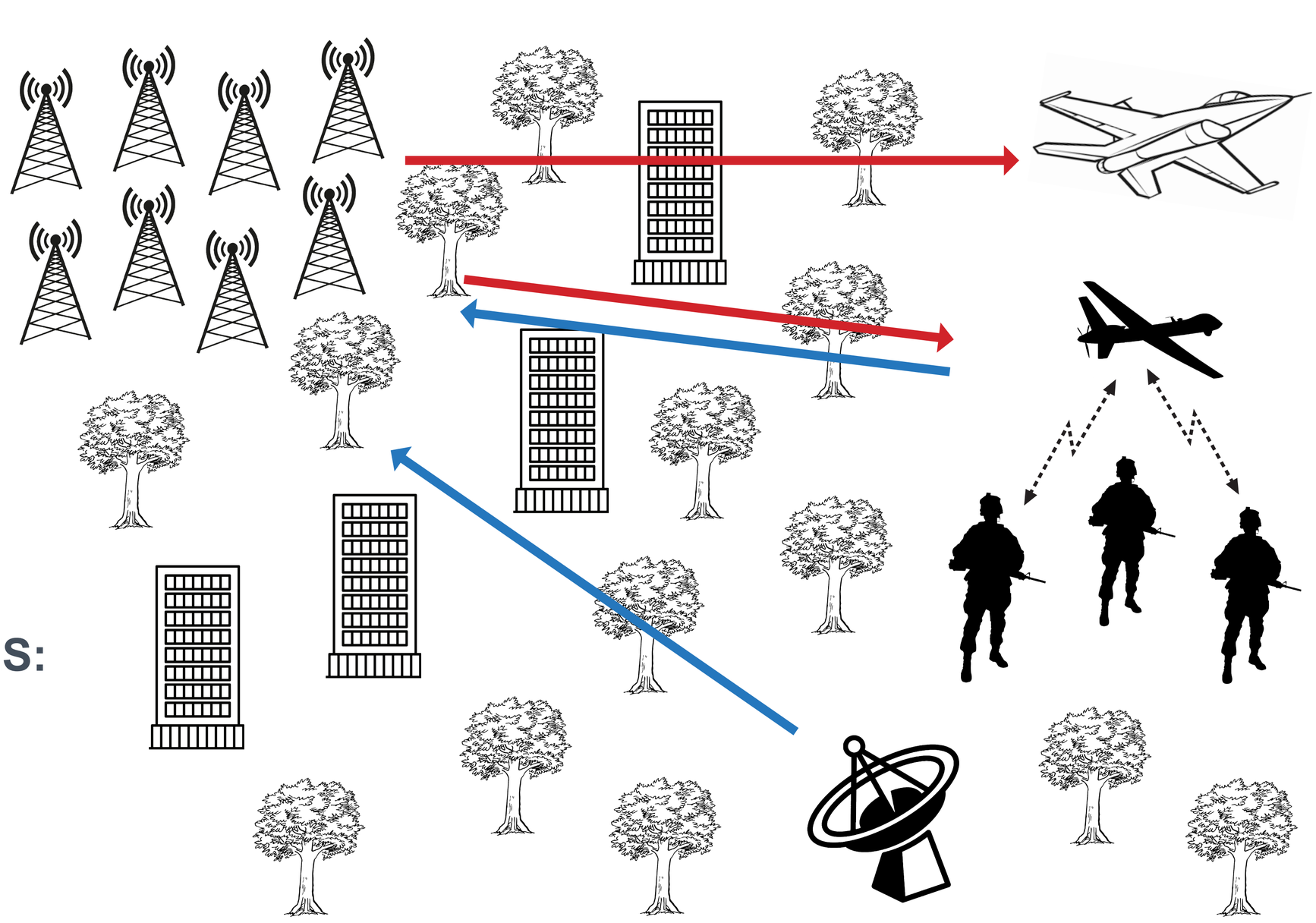
ACCURATE MEASUREMENTS:

SSTD has improved measurement accuracies using multiple techniques and a wide range of morphologies.

Measurements now include ground-to-ground and ground-to-air (aerostat and drone) links and ultra-dense urban to rural and heavily forested to barren morphologies.

REFINED CATEGORIES:

SSTD program experts factor the impacts of foliage in suburban and rural environments for atmospheric/terrain and clutter modeling.



DEFENSE INFORMATION SYSTEMS AGENCY
The IT Combat Support Agency

For additional information:
DISA/Defense Spectrum Organization, SSTD Deputy Director, Josephine Cantalupo
Email: Josephine.M.Cantalupo.civ@mail.mil
AWS-3: disa.usna.os.mbx.spo-aws-3-dsrmt@mail.mil