# Integrated Tactical Network (ITN)



There was no operational testing of the Integrated Tactical Network (ITN) in FY24. The Army is in the process of updating acquisition strategies for the tactical network based on a concept called Command and Control Fix (C2 Fix).

### SYSTEM DESCRIPTION

The ITN is an effort to rapidly prototype and field equipment to modernize Army tactical communications. It is a system of systems utilizing commercial and non-developmental items and services to supplement currently fielded program of record components in support of the Army's Network Modernization Strategy. It provides system interoperability and continuity through the procurement of enhanced tactical communication equipment, ancillaries, and related services. The ITN brings new commercial components and network transport capabilities to lower echelons within the Army's tactical network environment. The ITN products are designed around two-year product cycles called capability sets.

The first capability set (CS), known as CS 21 ITN, consists of the commercial off-the-shelf single-channel tactical radios, dual-channel headsets, variable height antennas (VHAs), highcapacity line-of-sight radios, tactical radio gateways, and mobile broadband kits (MBKs) that enable communications through Secret and sensitive but unclassified encrypted (SBU-E) enclaves. The SBU-E enclave allows commanders the flexibility to balance security and connectivity based on mission need. CS 21 provides an endto-end network design that is tailored specifically to provide an expeditionary capability to an infantry unit. The prototyping

activities for the next capability set (i.e., CS 23) tailored the CS 21, as well as emerging technologies, to support Stryker formations.

### MISSION

ITN-equipped brigade combat teams (BCTs) conduct multidomain operations in the joint operating environment with essential mission command capabilities throughout a full range of military operations. ITN-equipped BCTs conduct mission command with a network in congested and contested environments at the point of need. The CS 21 equipment is intended to provide tactical voice and data across the tactical brigade down to dismounted soldiers. The CS 23 ITN is an extension of the technologies in CS 21. CS 23 integrates many of these capabilities onto Stryker platforms and units, while CS 21 focused solely on the infantry BCT formation. Soldiers using the ITN will have additional options available for their primary, alternate, contingency, and emergency communications plans, as well as the ability to switch communications paths when faced with challenging environments.

## PROGRAM

The ITN consists of two Middle Tier of Acquisition (MTA) programs: one rapid prototyping (ITN) and the other rapid fielding (CS 21 and 23). Successful products developed during rapid prototyping have the potential to transition to the rapid fielding program. The Army transitioned tactical radios, dual-channel headsets, VHAs, gateways, and MBKs. Program Executive Office Command Control Communications – Tactical is the office of primary responsibility to integrate the systems identified by the Army's Network Cross Functional Team into the ITN.

The Army originally intended for the ITN to modernize Army tactical communications at battalionand brigade-level networks. The June 2022 DOT&E-approved TES covered CS 21 and 23. The ITN is now transitioning to support division-centric networks, and the Army is working to define those specific changes through a series of unit exercises associated with a concept they are calling C2 Fix.

The Army signed a rapid fielding acquisition decision memorandum in June 2023 to continue nonrecurring engineering efforts for the rapid fielding program until it transitions at the outcome determination in July 2025. The details of this transition are still in development as of this writing.

The Army closed out the rapid prototyping program at the outcome determination in August 2024. The Army should codify any future testing within a DOT&Eapproved TES document to support acquisition decision making.

### » MAJOR CONTRACTORS

#### MBK

 4K Solutions – Midland, Georgia  Verizon – New York, New York (cellular plan for MBK)

#### VHA

- Hoverfly Technologies Company – Orlando, Florida
- Lockheed Martin Corporation Bethesda, Maryland
- Teledyne FLIR, LLC Wilsonville, Oregon

#### Other

- General Dynamics Mission Systems- Fairfax, Virginia
- KLAS Telecom Herndon, Virginia
- PAR Government Raleigh, North Carolina
- Samsung Galaxy S7 San Jose, California
- Sierra Nevada Corporation Integrated Mission Systems – Hagerstown, Maryland
- Silvus Technologies, Inc. Los Angeles, California
- Trellisware Technologies, Inc. San Diego, California
- L3Harris Technologies, Inc. Melbourne, Florida
- Thales Group Clarksburg, Maryland

# **TEST ADEQUACY**

The Army did not perform any operational testing in FY24. Instead, in accordance with recommendations in the FY23 Annual Report, the Army leveraged the 2nd Brigade 101st Airborne Division as part of Operation Lethal Eagle, a large-scale air assault that provided the opportunity to experiment with new technologies, prototype reorganized structures, and employ multi-domain fires. The observations from Operation Lethal Eagle fed the August 2024 Joint Readiness Training Center rotation to provide the Army additional feedback on the C2 Fix. Once the Army formalizes the C2 Fix process into the pending C2 Next (a process still being refined), the Army should codify a TES to support future decision making.

## PERFORMANCE

### » EFFECTIVENESS, SUITABILITY, AND SURVIVABILITY

DOT&E is unable to assess the operational effectiveness, suitability, and cyber survivability of ITN due to the lack of operational testing by the Army.

### RECOMMENDATION

The Army is addressing the recommendations from the FY23 Annual Report and additionally should:

 Develop and submit to DOT&E a TES to support the Army's future ITN acquisition decisions.