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**Joint and Coalition Tactical Networking:
There's an App for That! Improving
Affordability and Accelerating Innovation in
Tactical Networking Using the Joint Tactical
Radio System Enterprise Business Model**

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Joint Program Executive Office Joint Tactical Radio System

Joint and Coalition Tactical Networking: There's an App for That!



17 May 2012

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Industry Engagement
JPEO JTRS

JPEO JTRS



Agenda



- ▶ Background
- ▶ How It Works
- ▶ Eliminating Barriers
- ▶ Delivering to the Battlefield
- ▶ Enduring Competition and Continuous Innovation



Background

- ▶ Joint Program Executive Office established in 2005
- ▶ Created an “App Store”, the JTRS Information Repository, to provide free access to tactical networking software applications for legitimate US government purposes
- ▶ Established goal of delivering joint and coalition tactical networking capabilities via agile acquisition processes at reduced cost

JTRS Information Repository Enables Sharing of Tactical Networking Applications



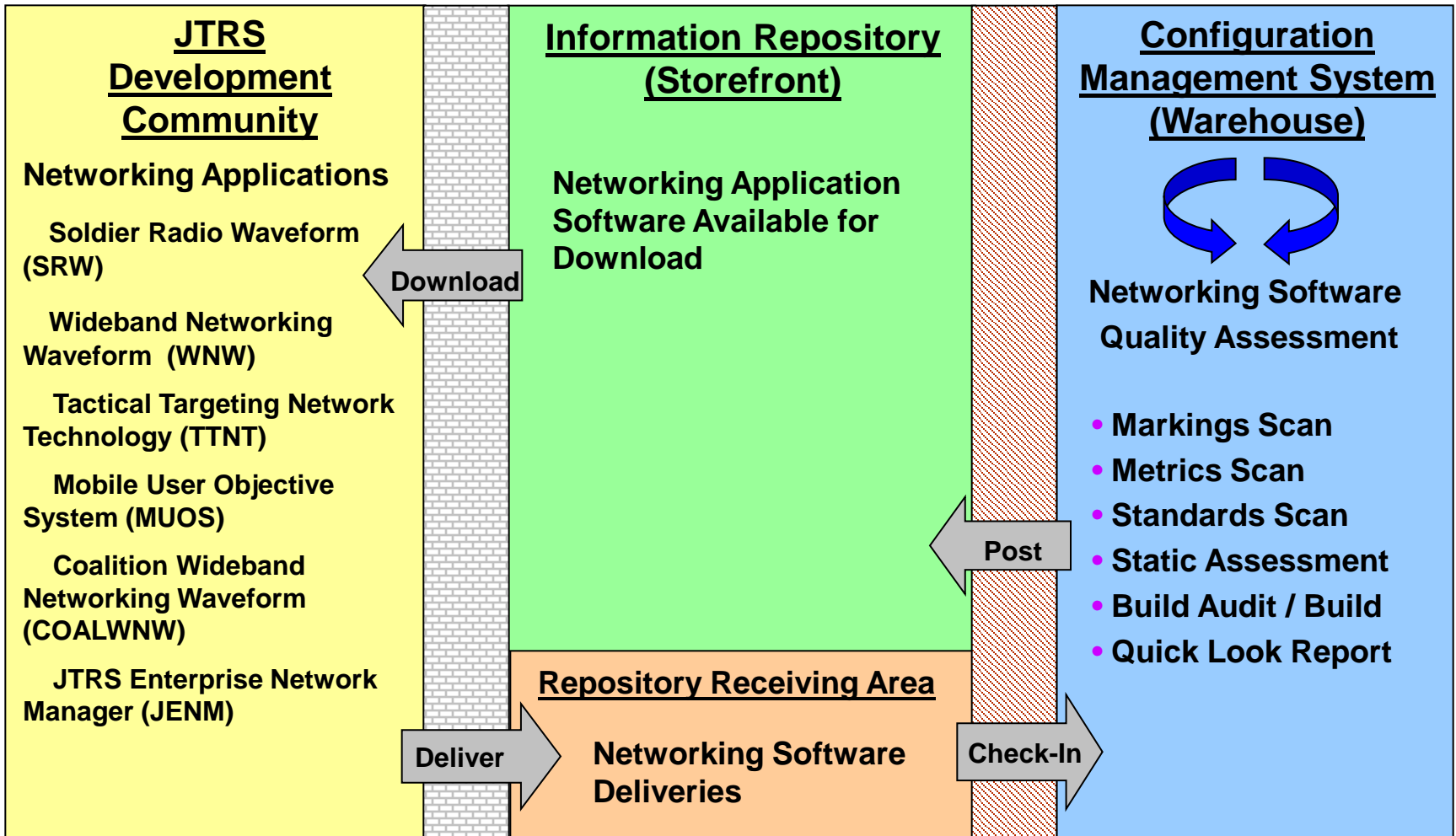
How It Works

- ▶ Ensuring interoperability requires a disciplined engineering approach
 - Common standards, architecture and interfaces
 - Dedicated systems engineering support
 - Tests and Certifications
- ▶ Sharing Networking “Apps” requires sufficient Government Purpose Rights
 - Application development contracts must support sharing of software at government discretion
- ▶ Encouraging Industry Participation
 - Access to Networking “Apps” lowers cost of entry into market
 - Common standards and interfaces reduces integration effort
 - Companies are motivated to complete integration in order to realize a return on their investment

***App Store Approach Broadens
Competitive Industry Base***



JTRS Information Repository





Eliminating Barriers

- ▶ Challenging statutory, regulatory and certification requirements exist for defense communications environment
 - Cumbersome acquisition processes
 - Security certifications
 - Interoperability certifications
 - Operational Test & Evaluation
- ▶ More agile acquisition approaches required
 - Army Network Integration Evaluation facilitates operational assessments
- ▶ Streamlined certification assessments needed
 - National Security Agency Commercial Communications Security (COMSEC) Evaluation Program (CCEP)
 - Joint Interoperability Test Command (JITC) Partnership
- ▶ Common tactical networking planning and management required
 - JTRS Enterprise Network Manager approach

App Store Approach Improves Acquisition Agility



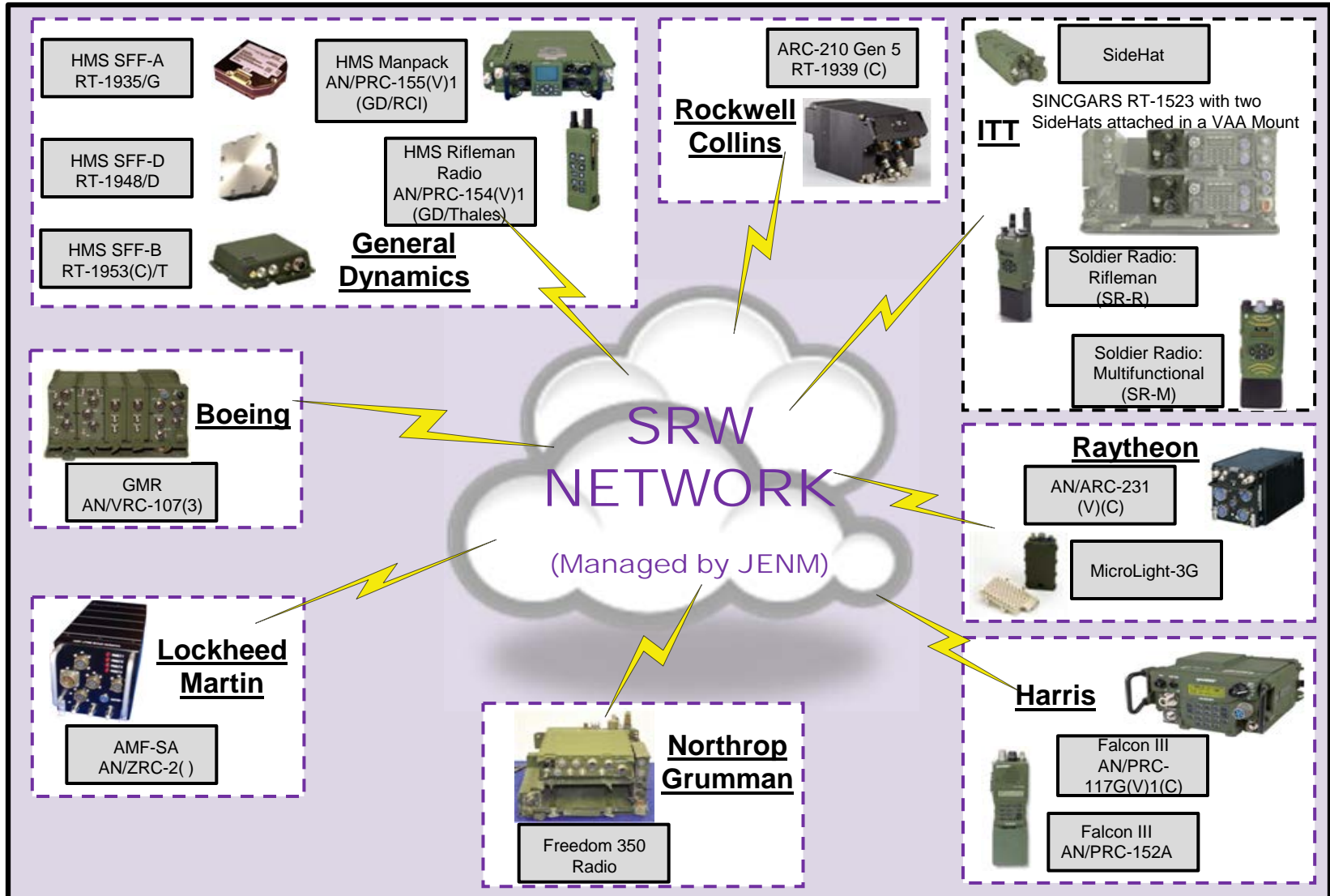
Delivering to the Battlefield

- ▶ Soldier Radio Waveform (SRW) completed qualification testing in 2009
 - Evolved from DARPA development to deliver networking capability to warfighters and unattended sensors/vehicles at the tactical edge of the battlefield
 - Electronic Warfare, Combat Communications and Telemetry Operations Modes
- ▶ “Providing both voice and data beyond line of sight communications to the fire team level, [SRW] meets operational requirements and fills a gap where no capability currently exists.” -- MG James L. Huggins, CG, 82nd Airborne Division
- ▶ National Security Agency certified SRW for deployed operations in 2011
- ▶ SRW is currently deployed to Afghanistan with US Army 75th Ranger Battalion
 - Improved ability to network and exchange key information such as position location more efficiently
 - Evaluated as effective for conducting combat operations, especially at the small unit level
 - “Near perfect example of how early engagement by the warfighter working closely with the acquisition community can deliver capability smarter and faster.” -- BG Michael Williamson, JPEO JTRS

App Store Approach Tripled Number of SRW-capable Radios at No Additional Cost to the Government



Soldier Radio Waveform Capable Radios





Enduring Competition and Continuous Innovation



- ▶ JPEO JTRS established a Joint Reference Implementation Laboratory (JRIL) in November 2011
 - Provides a facility for commercial developers to test and evaluate their products against a government-owned reference implementation
 - Knowledgeable and experienced government engineers available to assist developers in integrating JTRS tactical networking applications
 - Ensures interoperability for joint and coalition tactical networking by managing application releases and testing compliance with applicable standards
 - Provides a laboratory test bed and modeling/simulation capabilities for new networking waveform technologies to accelerate innovation and integration timelines
 - Facilitates adoption of Non-Development Item (NDI) technologies into joint and coalition tactical networks by identifying and integrating additional Apps that benefit the warfighter

JRIL Continues to Improve Acquisition Agility for Joint And Coalition Tactical Networking Capabilities

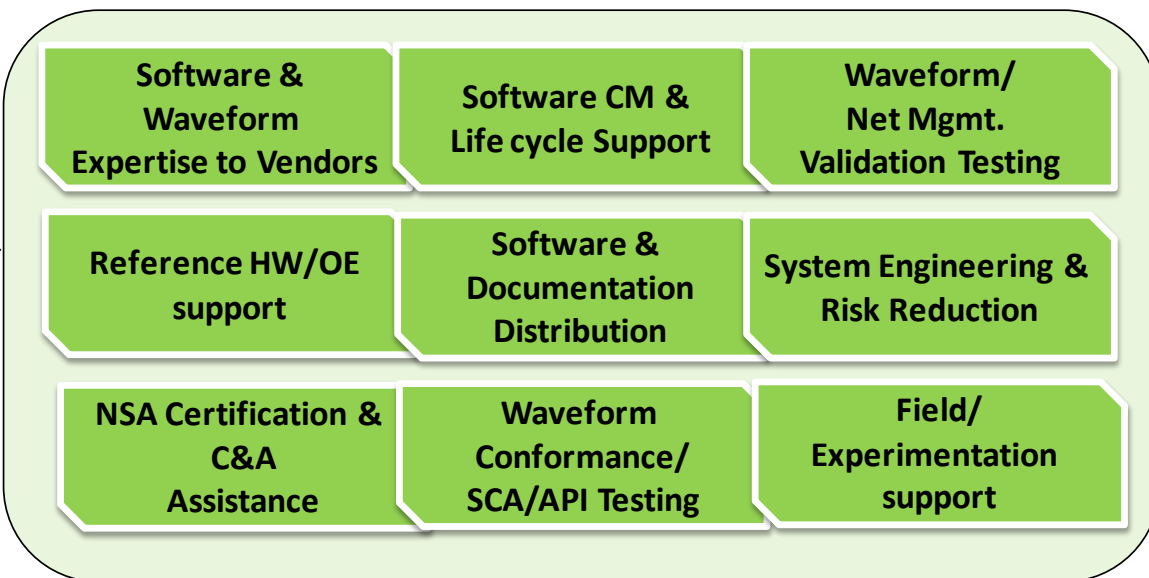
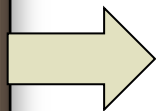


Joint Reference Implementation Lab

Core Business Functions

JTRS Functions Supporting DoD

- Establish Standards
- Perform Software Lifecycle Support
- Certify JTRS Products

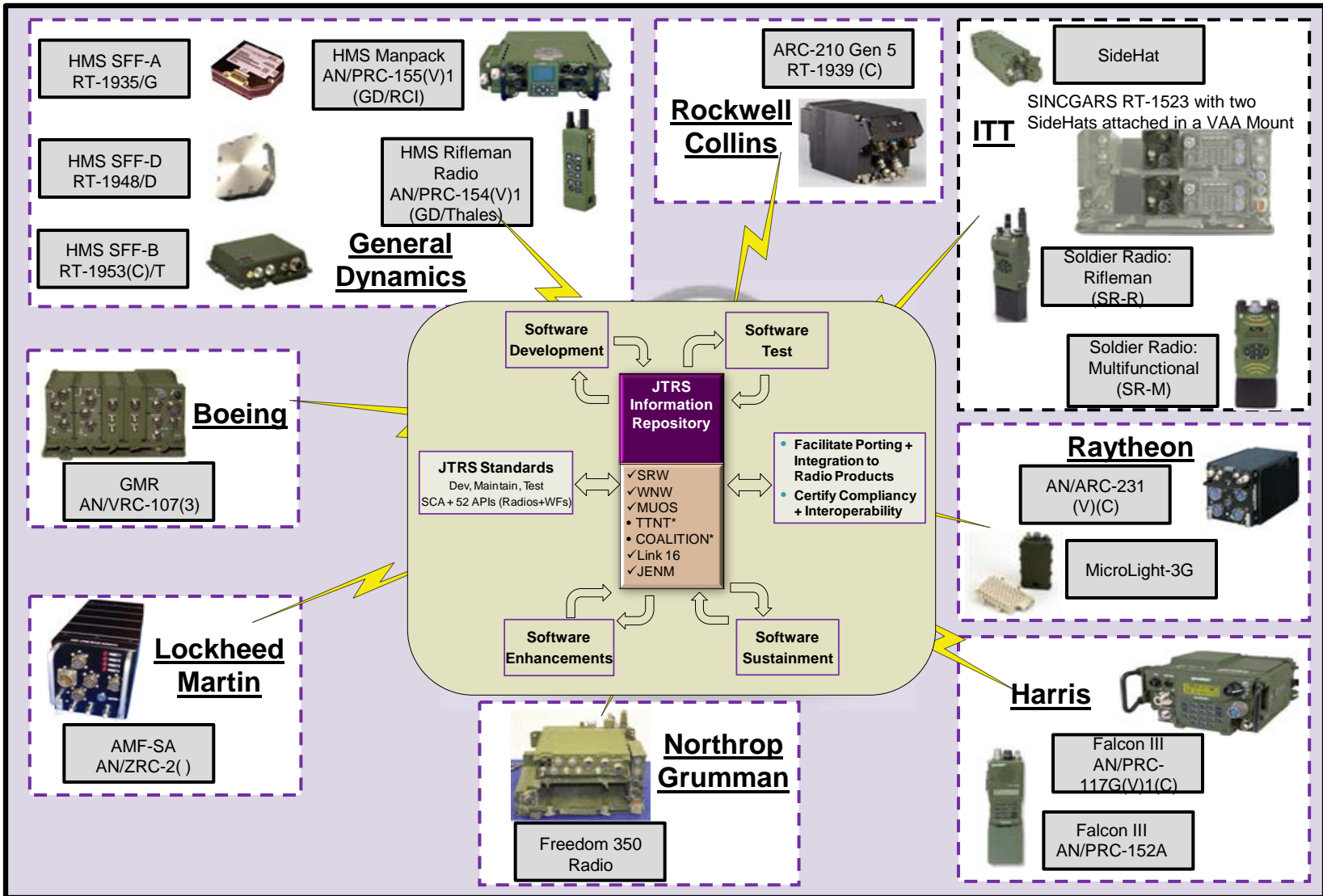


Initial Support for: SRW, WNW, MUOS, JENM

JRIL enables a competitive market for high performance, secure and interoperable tactical networking capabilities for Joint and Coalition forces



Role of the JRIL





Questions ?