



U.S. ARMY

# THE ARMY'S INTEGRATION TEAM



## Lab Based Risk Reduction

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**Distribution Statement F: Further dissemination only as directed by Director, System of Systems Integration or higher DoD authority; 03 November 2011.**

# NIE 13.1 LBRR Summary

## Phase III/IV



- 43 Systems Participated in LBRR
- Network Integration Readiness Level (NIRL) scores assigned
- 76 Test Incident Reports

### Severity Levels

- 1: Stop testing
- 2: Can continue with a work around
- 3: System works w/ an anomaly that is repeatable
- 4: System works but anomalies are not repeatable

- 13 systems provided multiple fixes (e.g., software updates)

- Examples of issues resolved in LBRR
  - WNAN NSG Gateway fix
  - WNAN PLI compatibility fix
  - Sidedalcon multicast problem
  - KG 250 configurations

- Feedback was provided to Industry and PORs

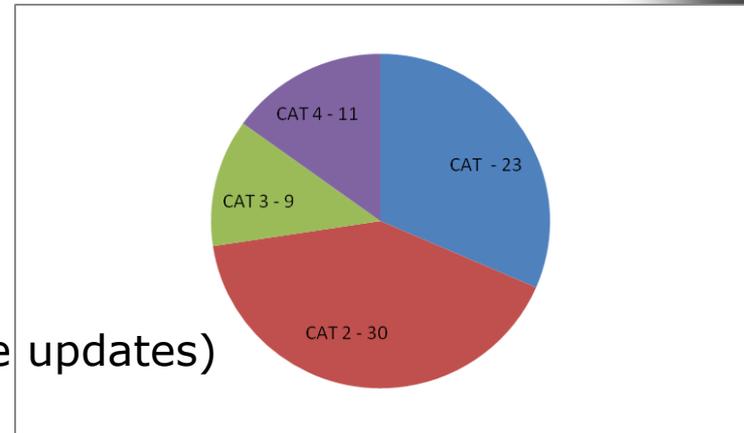
- "...the software bug identified in 1.5 hours during LBRR would have taken 3 weeks to identify in the field." – FBCB2 Team

- Lab personnel traveled to Ft. Bliss to support VALEX

- Lab personnel were the ones who determined the KG250 configuration for Maingate

- All Systems were tested in laboratory before being deployed in NIE 13.1

- Any update to the field must first be validated in the laboratory for approval



**LBRR fixed issues both before and during NIE**

# 13.1 Lessons Learned/Observations (1 of 2)



- Lab Based Risk Reduction not Lab Based Risk Elimination
- Vendors must meet the equipment delivery schedule to ensure early integration
- In order to conduct System of Systems Integration we require sufficient quantities to accurately represent the systems being sent to NIE
- Work with the architecture and thread team to verify your system in the architecture and how it will be used

# 13.1 Lessons Learned/Observations (2 of 2)

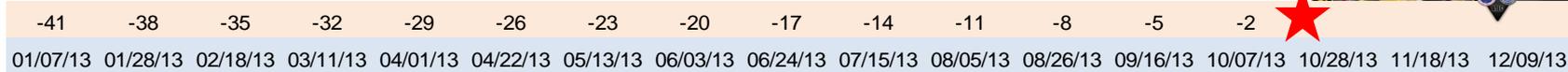


- Provide system information up front to include planned software upgrades that are expected to occur during NIE
- Configuration Management
  - Begins at "Bull Pen" and continues through VALEX
  - SW/FM/HW changes are under configuration control once DP 2 is approved
  - All changes to configurations will go through lab and Configuration Management Board for approval

# NIE 14.1 Tier 1 Schedule



Status As Of: 28-Dec-12



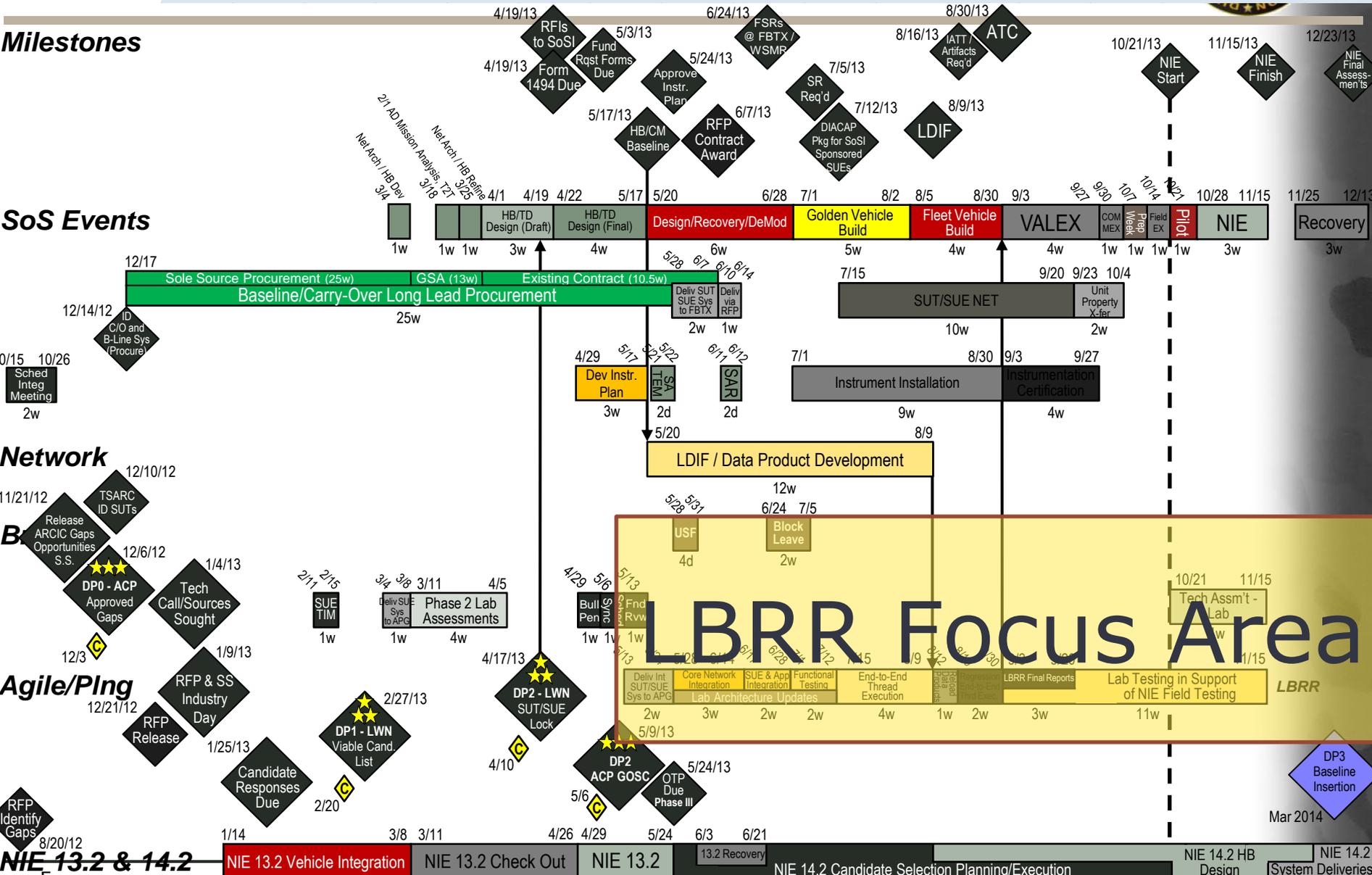
## Milestones

## SoS Events

## Network

## Agile/Ping

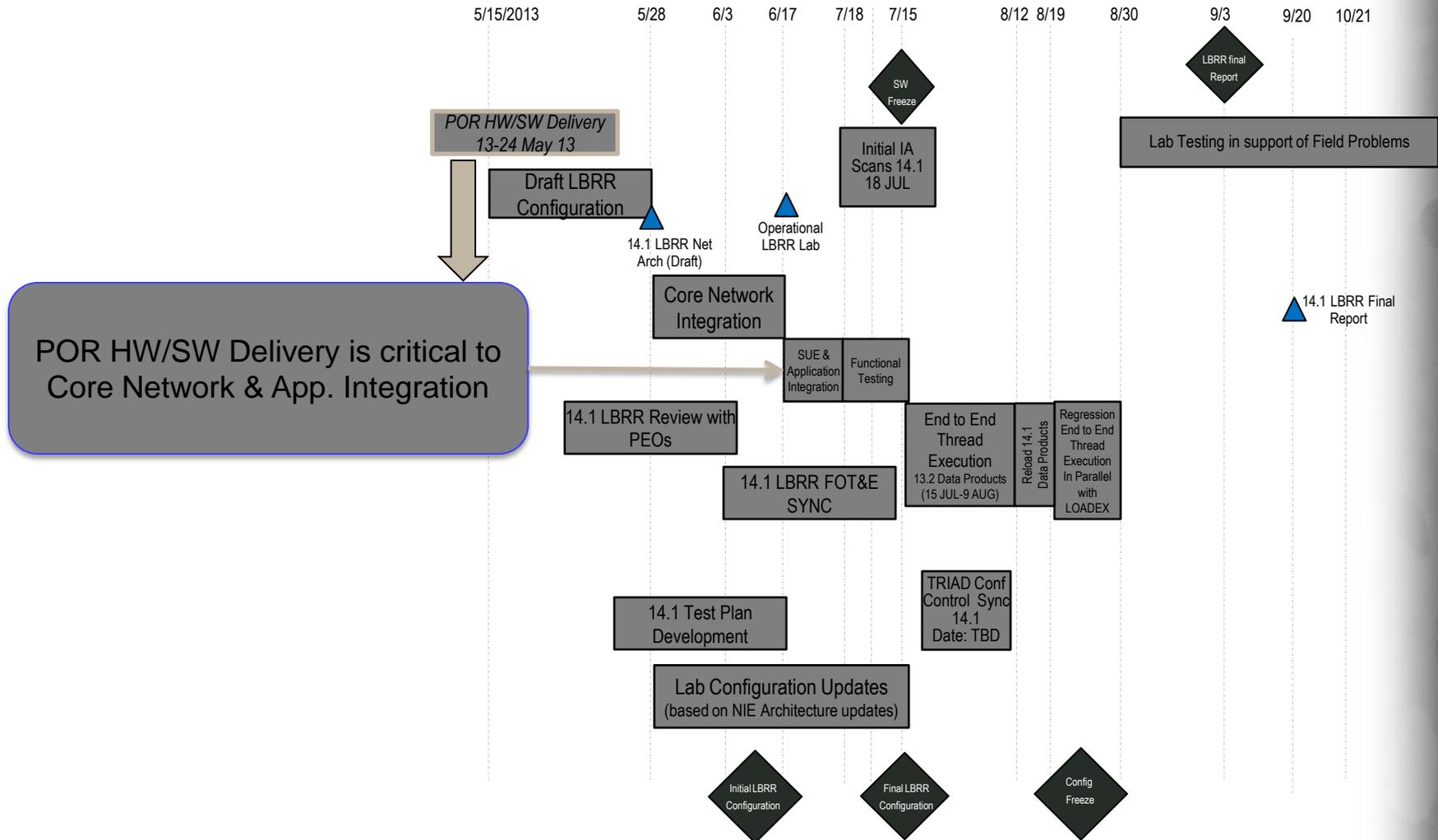
## NIE 13.2 & 14.2



**LBRR Focus Area**

USF 4d, Block Leave 2w, Deliv Int SUT/SUE Sys to APG 2w, Core Network Integration Lab Architecture Updates 3w, SUE & App Integration 2w, Functional Testing 2w, End-to-End Thread Execution 4w, LBRR Final Reports 3w, Lab Testing in Support of NIE Field Testing 11w

# NIE LBRR 14.1 Schedule (as of 8 Jan 2013)





# Path Forward

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- Continued integration with other C4ISR labs to provide a distributive testing environment (including joint and coalition)
- Increased performance testing

# POCs



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