



Spectrum Usage Measurement System (SUMS)

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Goals



- **Spectrum Usage Measurements System (SUMS):**
 - Provide capability to the DoD to better understand its spectrum usage
 - Quantify the costs of unavailable spectrum
 - Predict future DoD needs for spectrum to support test & training communities

Real-time, distributed frequency management system that gathers spectrum usage information from a variety of DoD system; performs analysis and applies metrics; and provides display, visualization, and reporting of planned, actual, and future spectrum needs, to enable more effective real-time frequency management and long-term decision-making



Challenges



- **SUMS:**
 - **Must be flexible enough to interface with multiple systems from multiple vendors and integrate data from those systems with relative ease**
 - **Must be able to provide spectrum-usage information back into the range instrumentation control chain**
 - **Must access and distribute data in real-time**



Benefits



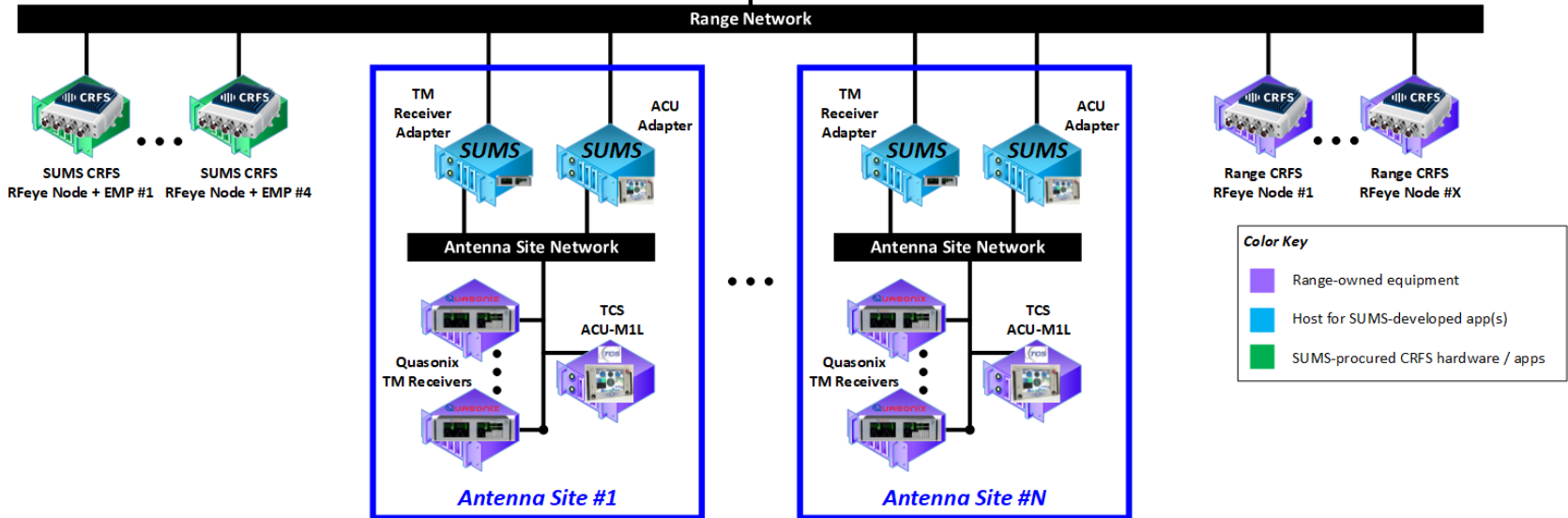
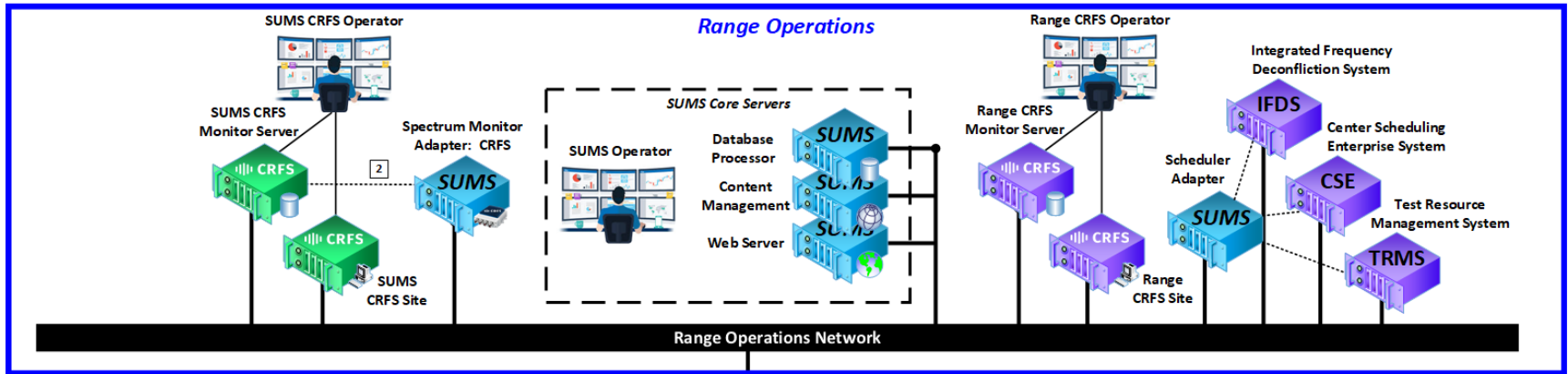
- **Addresses need for DoD to better understand its spectrum usage, to quantify the costs of unavailable spectrum, and to predict its future needs for spectrum**
- **DoD decision makers will be better positioned to articulate, and defend, DoD needs for spectrum in the face of future proposed regulatory changes**



Core Components

- **Data Acquisition**
- **Data Storage**
- **Data Transmission & Distribution**
- **Analysis, Visualization, & Reporting**

Example Implementation





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