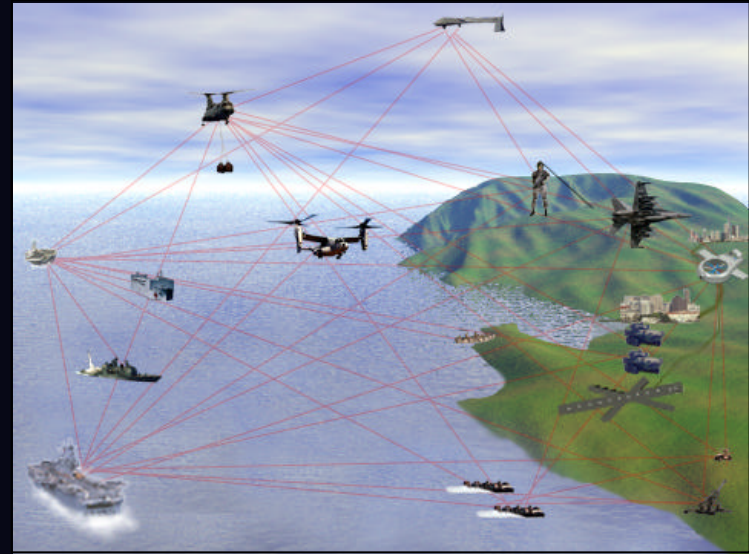


BAE SYSTEMS



**BAE SYSTEMS North America
Innovating for a Safer World**

**2003 Interoperability & Systems Integration Conference
Industry Views**

Bob Stow

**North America Group VP
Engineering, Technology, & Program Management**

April 2, 2003

Interoperability-- A Matter of Viewpoint?

View A

- Coalition Warfare
- Joint Force
- Platform Supplier
- Prime Integrating Contractor
- System Supplier
- Subsystem Supplier



View B

- Single National Force
- Independent Service
- Mission System Supplier
- Subsystem Integrator
- Subsystem Supplier
- Component Supplier



Changing Customer Requirements



Sensor:

- Persistent, timely & accurate information
- Multi-Source national / tactical convergence

Decision Makers:

- Real-time secure enterprise operations
- Ops and intelligence convergence

Shooters:

- Rapid cooperative precision engagement
- New threats and mission roles

And Let's Not Forget...

BAE SYSTEMS

Be More Flexible

Be Smaller, Cheaper

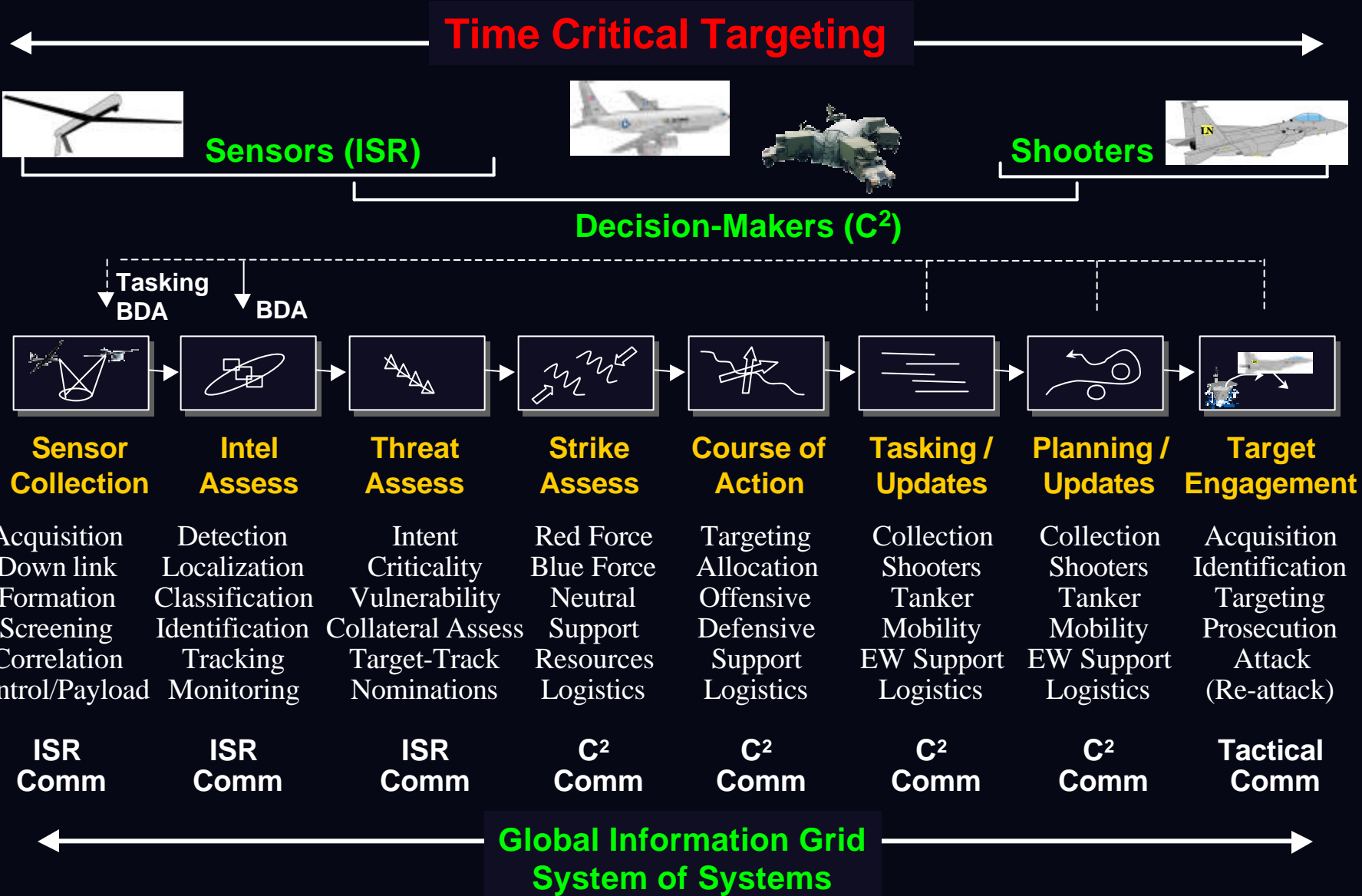
Use COTS Solutions

And Turn on a Dime



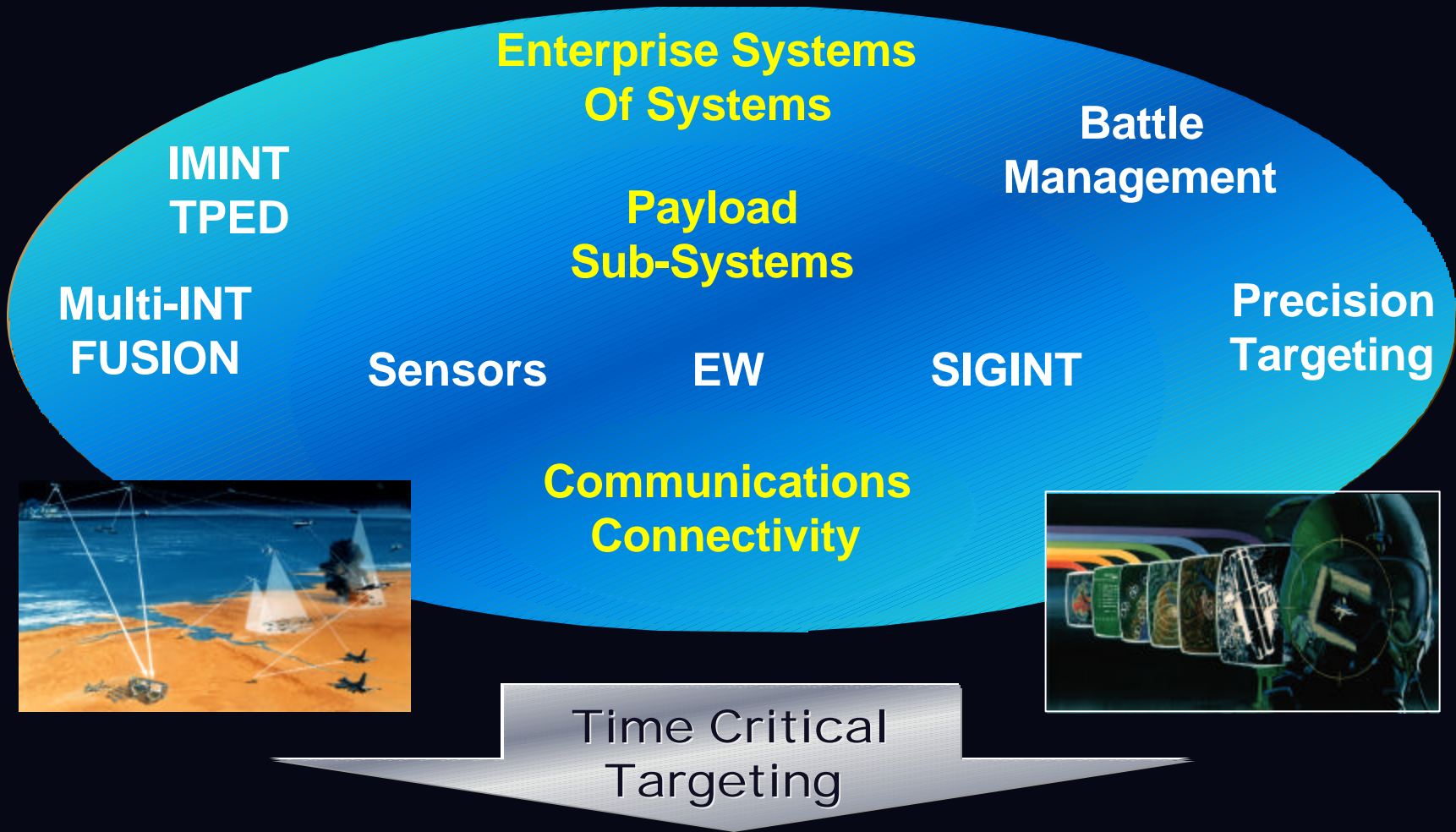
Time Critical Targeting Functional Scope

BAE SYSTEMS

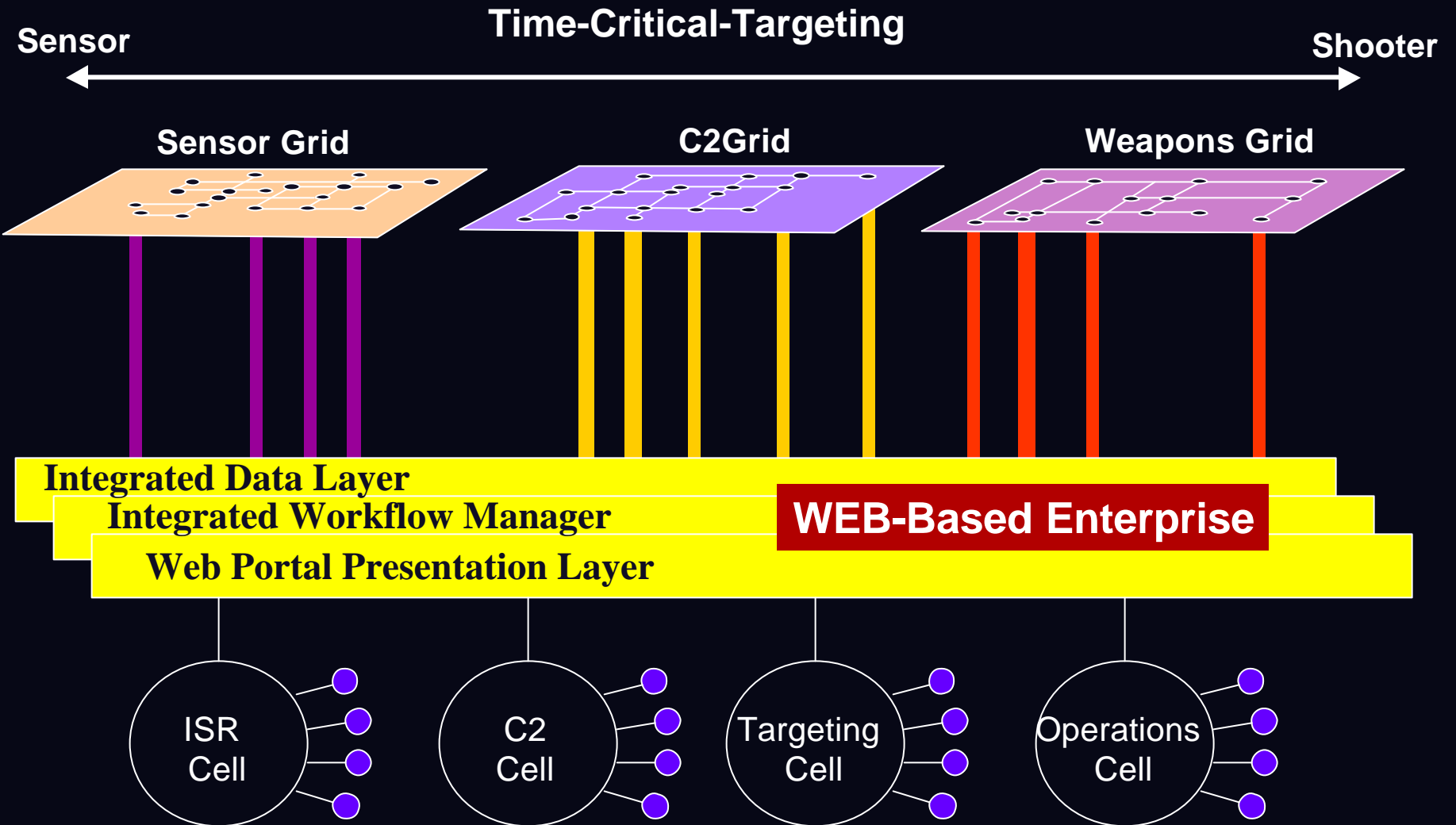


Complementary Capabilities

BAE SYSTEMS

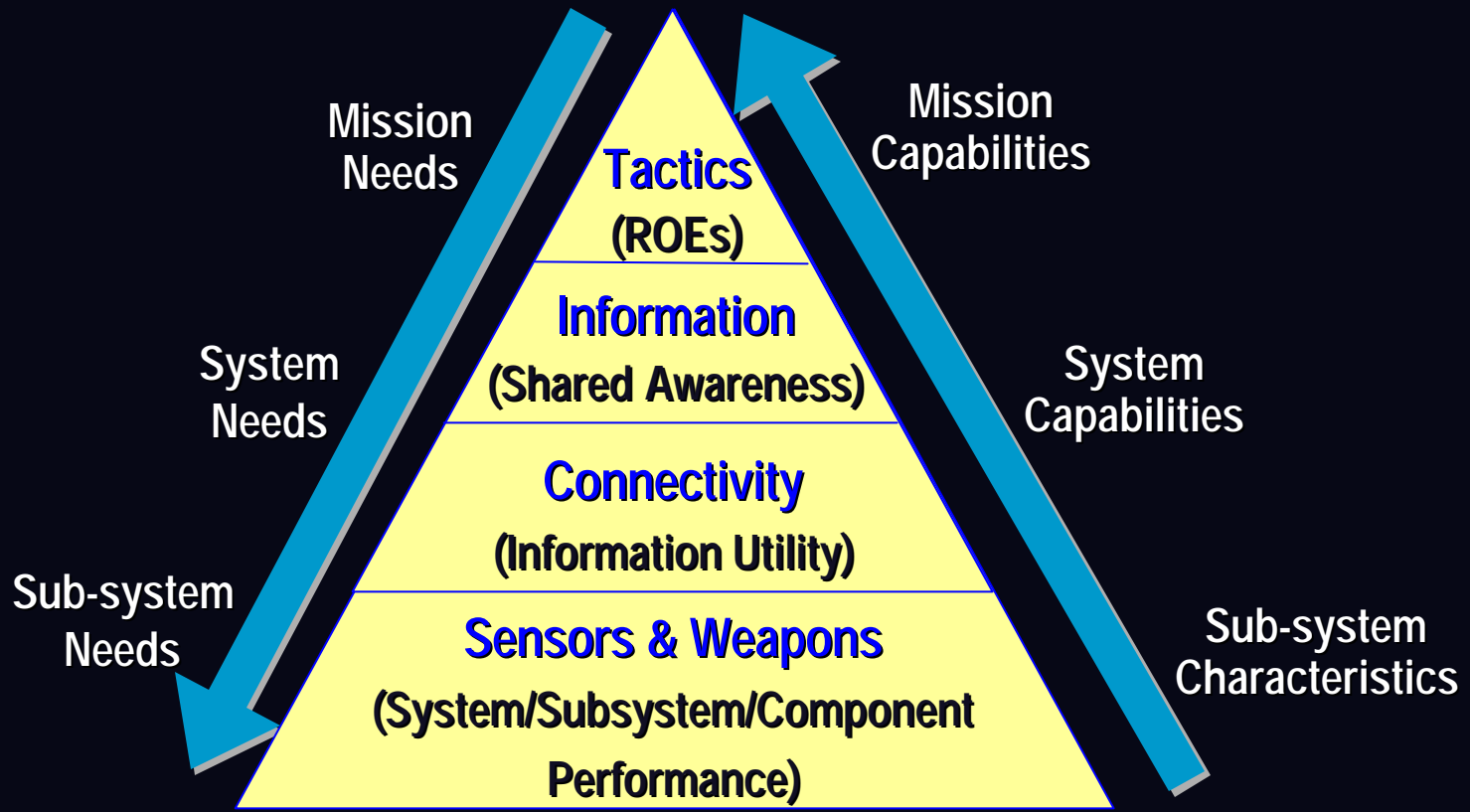


WEB-Based Architecture in support of ISR, Targeting and Strike Operations



NCW-Interoperability Hierarchy

BAE SYSTEMS



Simulation Based Acquisition

- **Tying Requirements to Military Worth**

- Instead of “What’s Technically Feasible”

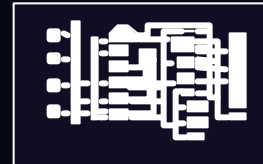


Mission Needs & Environment

Requirements Traceable to the Operational Environment

- **Allowing More Useful Engineering Trades**

- Through all phases of a Program



Evolutionary Digital System Models

Facilitate Continual Performance Assessments

- **Communicating to Our Customers**

- The Value of Our Technology
- The Value of Our Approach to Subsystem Solutions



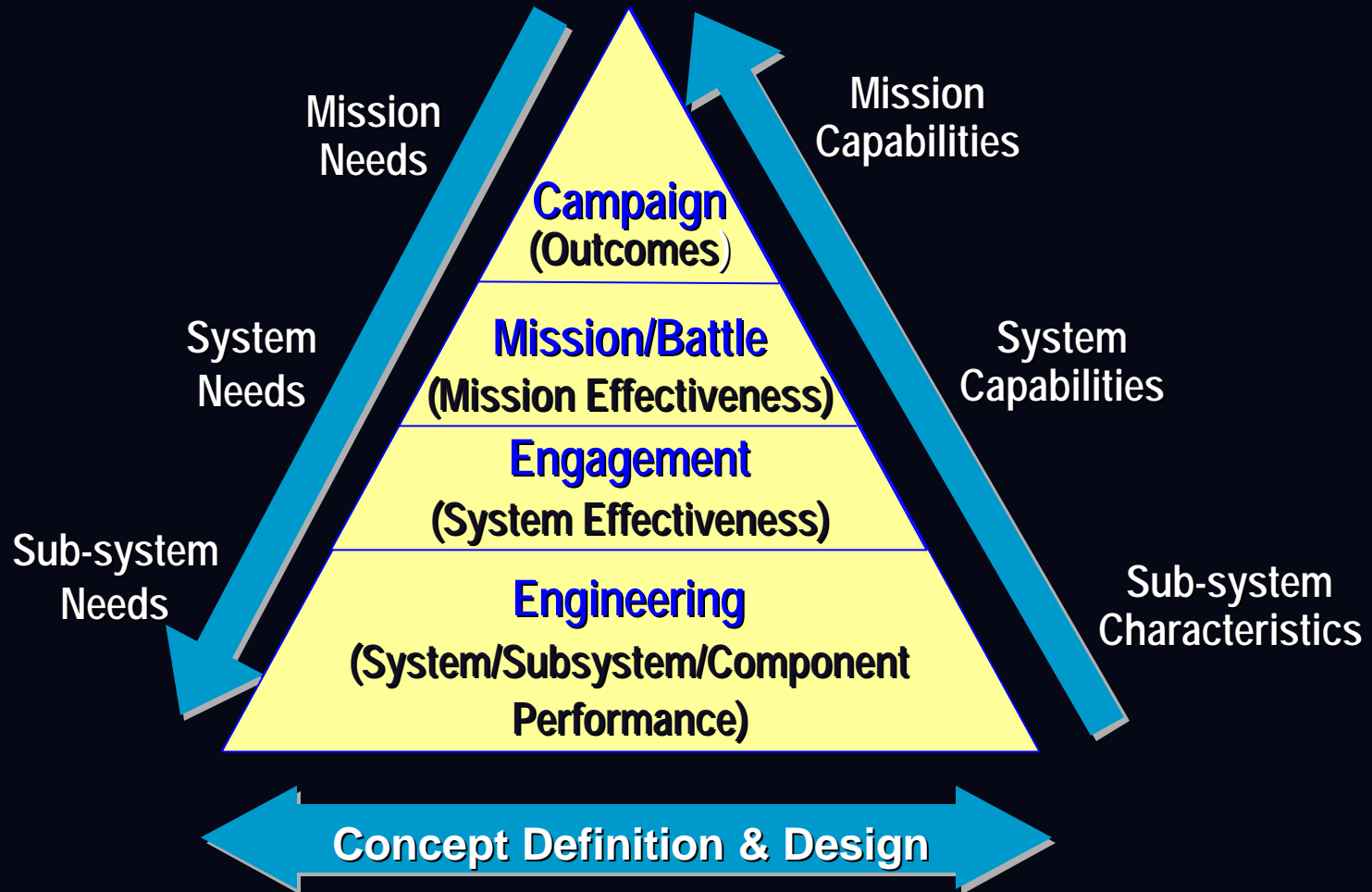
Customer Communication

Communicate with the Customer in THEIR Domain

Reducing Cost and Risk

Modeling, Simulation, Visualization, and Analysis Hierarchy

BAE SYSTEMS

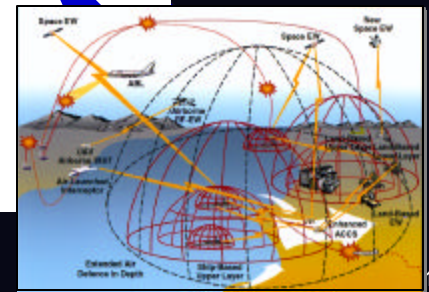
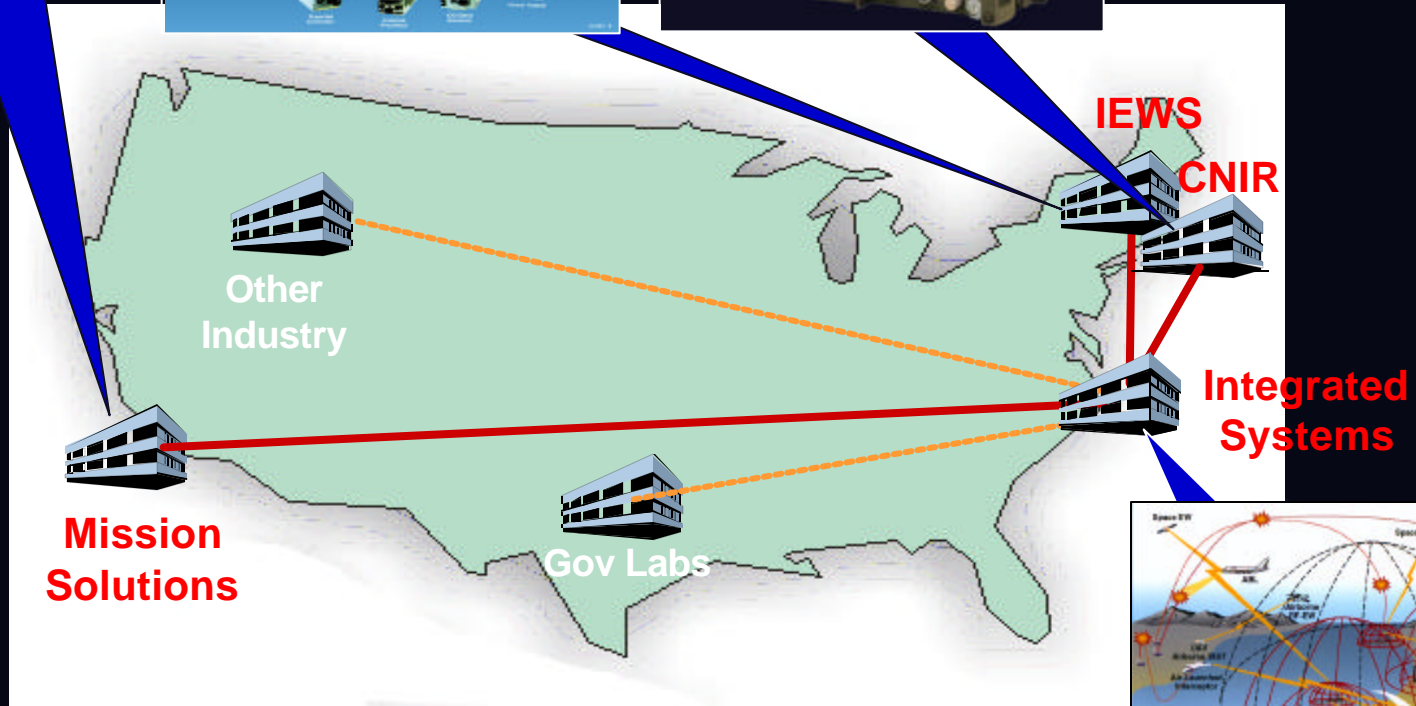


Persistent Virtual, Constructive, and Live Capability with Warfighter and Hardware in the Loop to Support CAIV Trades

BAE SYSTEMS NA Federated Capability

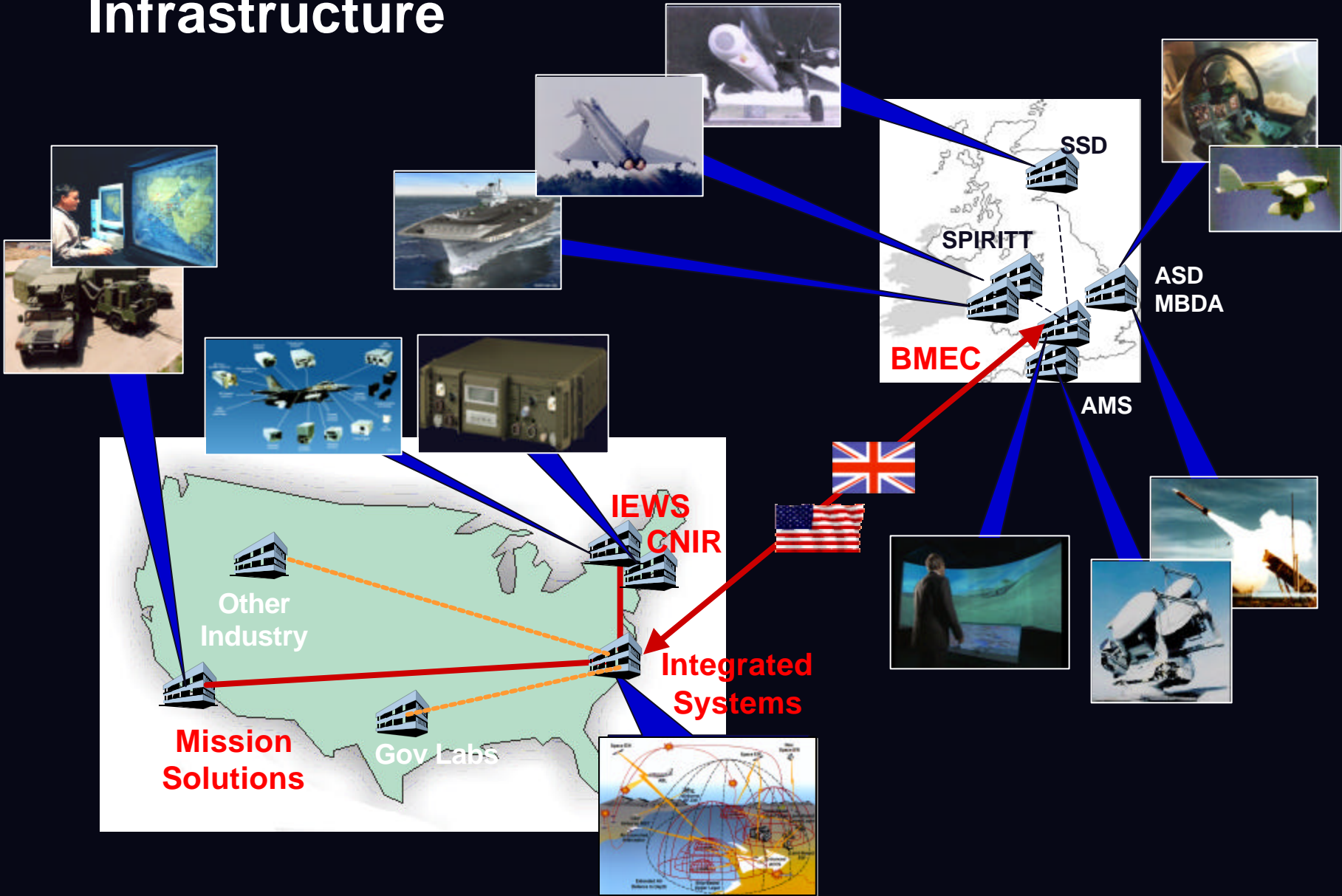
BAE SYSTEMS

Modeling, Simulation & Integration Infrastructure

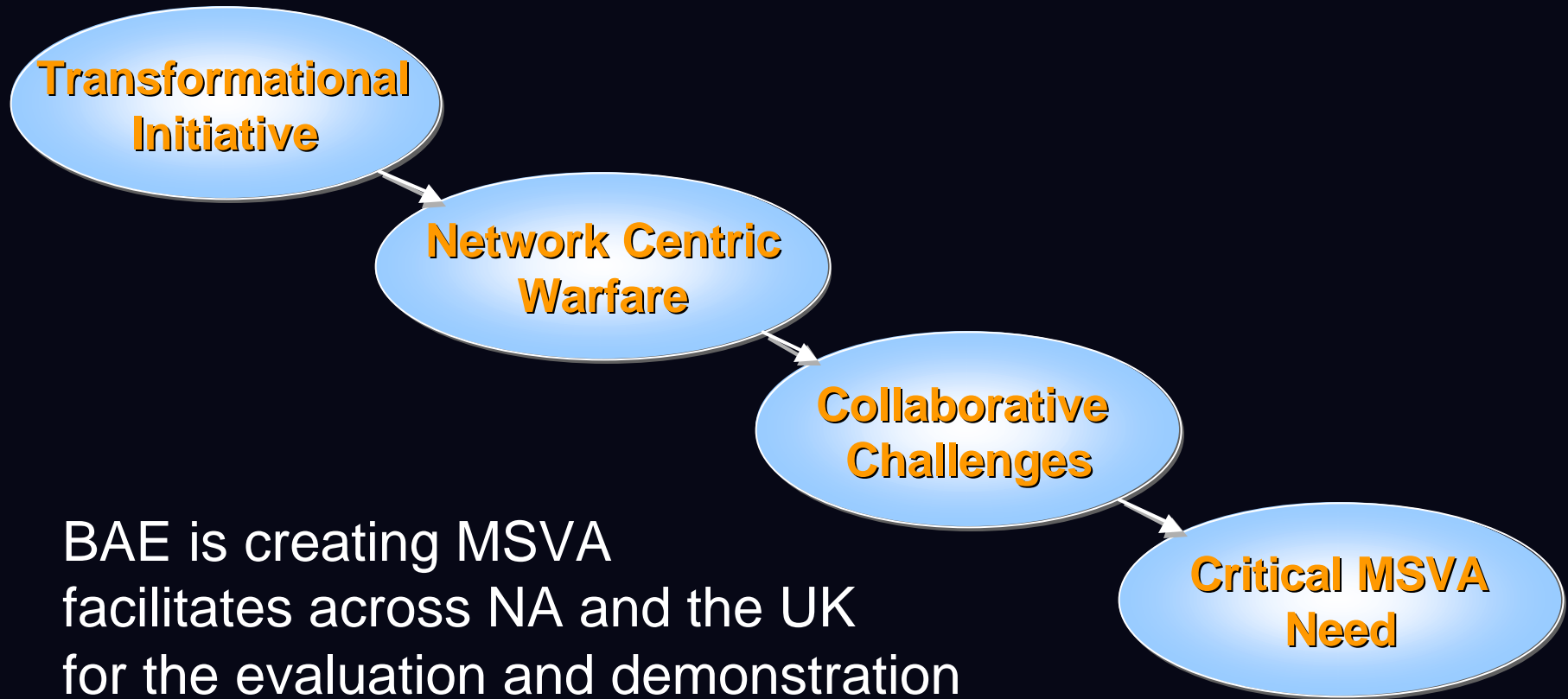


BAE SYSTEMS NA-UK Enterprise Infrastructure

BAE SYSTEMS



Recognized Need for Modeling, Simulation, Visualization, and Analysis



BAE is creating MSVA facilitates across NA and the UK for the evaluation and demonstration of campaign-mission effectiveness using collaborative network centric architectures.

Conclusions

- **Viewpoint Makes a Difference**
- **Network Centric Warfare — Interoperability Is a Complex System-of-Systems Engineering Challenge**
 - **It Is Not Just Data Linking**
 - **It Includes ROEs and Tactics**
 - **It Requires Simulation and Demonstration**
 - **It Can't Be a Secondary Performance Parameter**
- **Interoperability Can't Be an Unfunded Mandate**
 - **Resources are Not Adequately Going into NCW**
- **We Need a Process That**
 - **Can Deal with the Added Complexity**
 - **Coordinates the Total System of Systems Requirements Operationally, Functionally, & Financially**