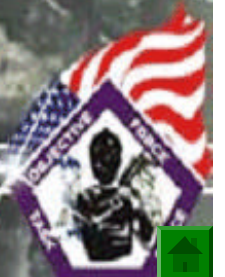




The Objective Force for Tactical Wheeled Vehicle Conference

LTG John M. Riggs
Director, Objective Force Task Force
January 27, 2003



Relevance



**LTG Riggs'
Parking Spot**



The Requirement to Transform

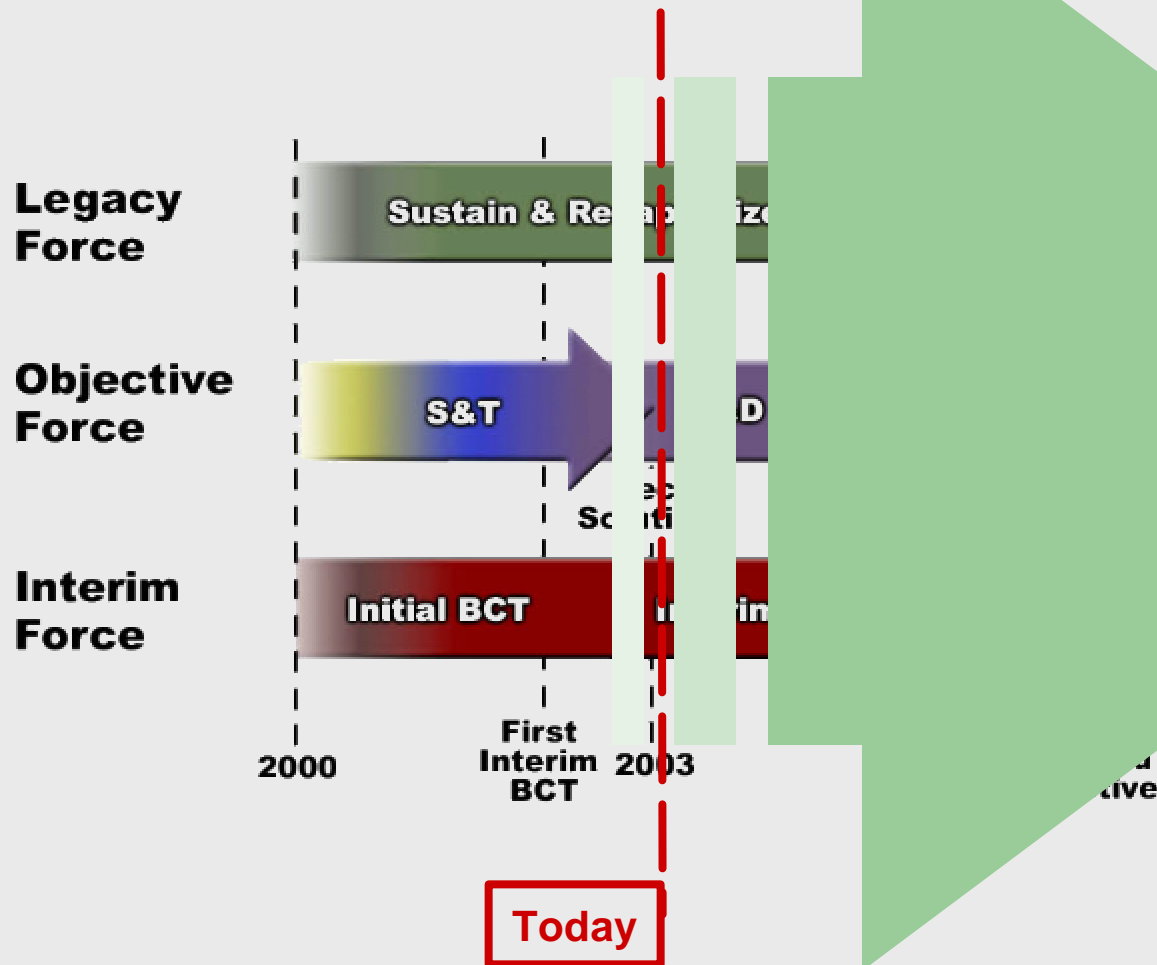


Security Challenges of the 21st Century
Pace and Proliferation of Technology
Compelling Need to Respond More Rapidly & Decisively
Across the Full Spectrum of Military Operations

The Army Has a Non-negotiable Contract with the American People to Fight & Win our Nation's Wars



Our Progress

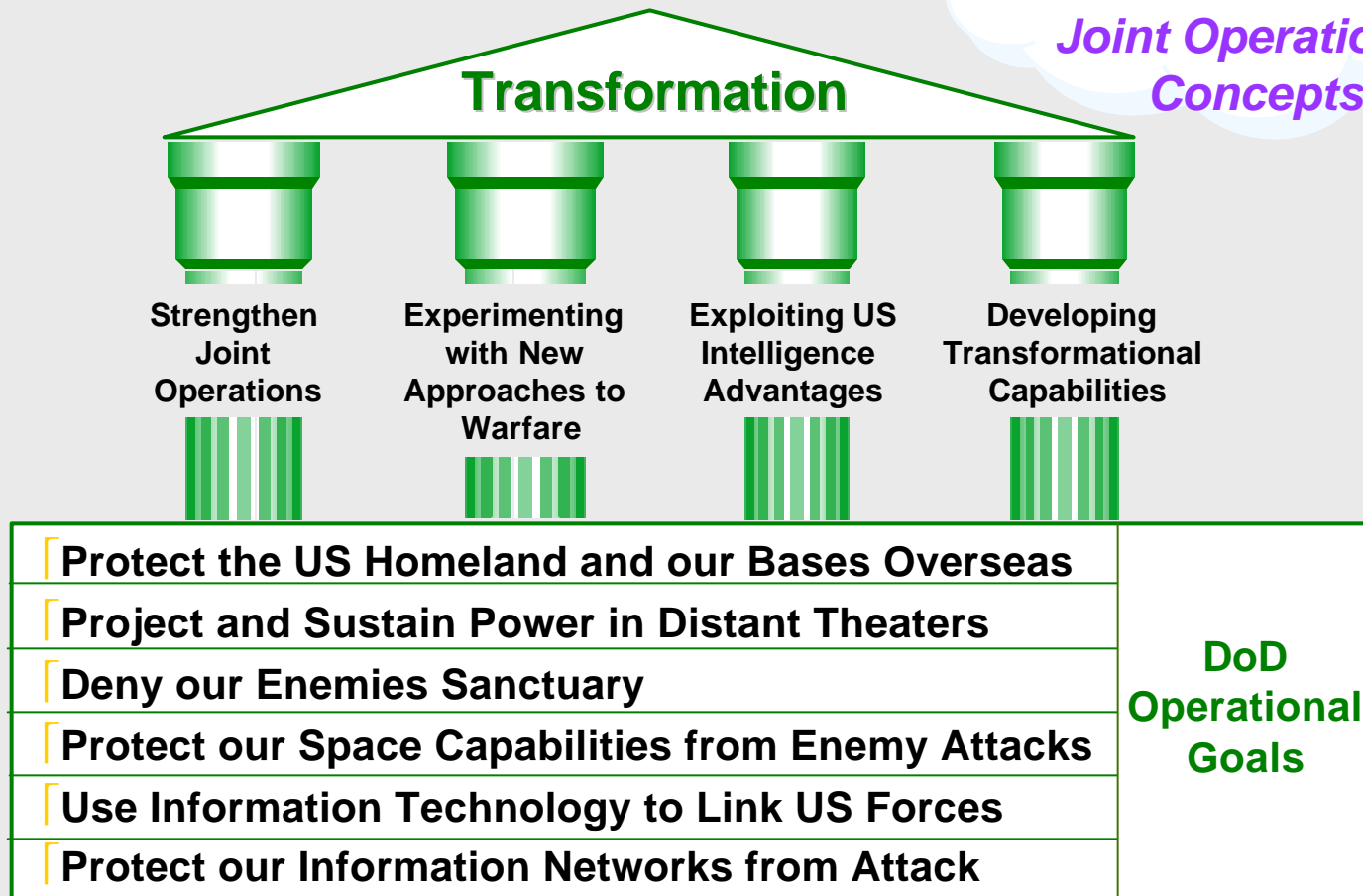


Objective Force Transformation Ongoing Now!

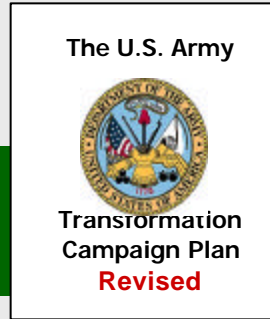
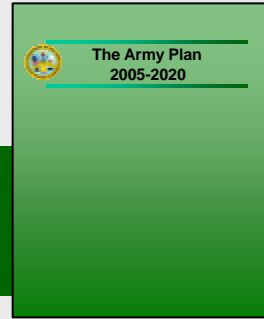
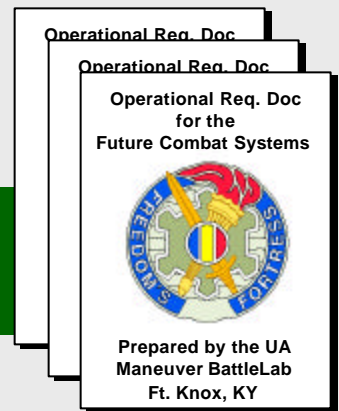
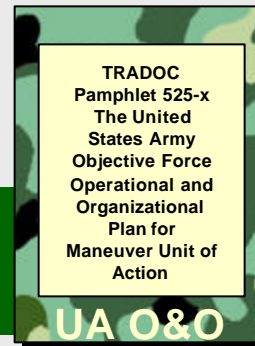
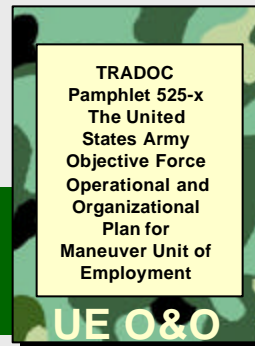
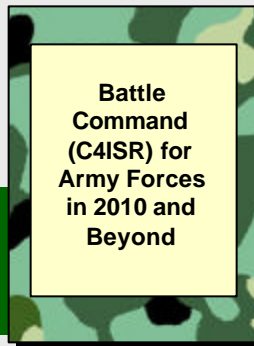
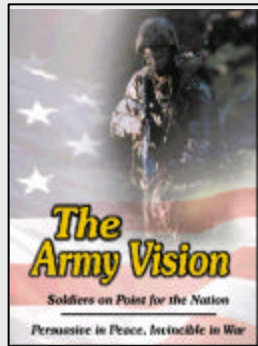


DoD Operational Goals & Transformation Pillars

*Army Capabilities
are nested in
DoD Transformation
Guidance & Emerging
Joint Operational
Concepts*



Conceptual Underpinnings for The Objective Force

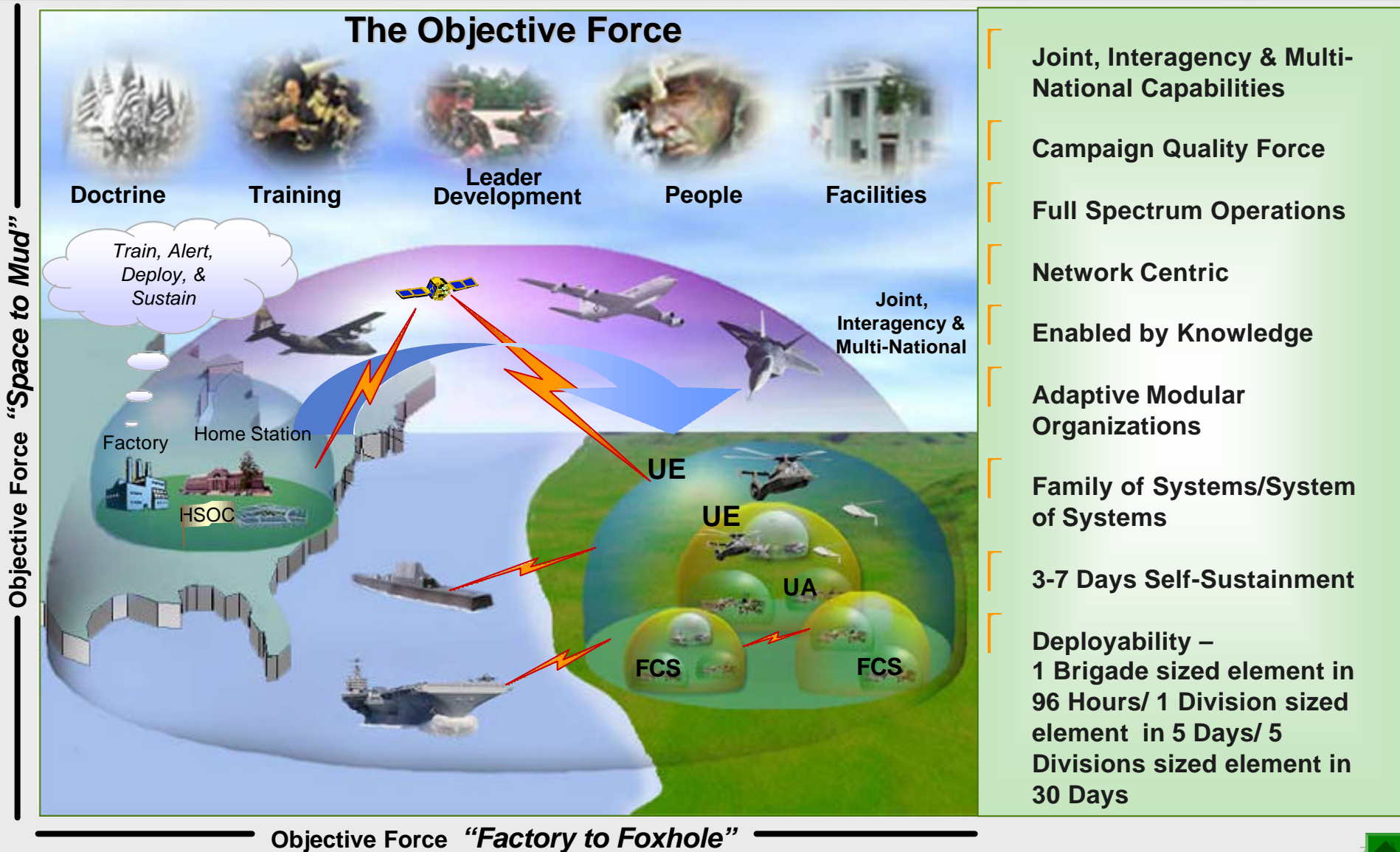


We now have the conceptual foundation for the Objective Force to guide all facets of Army Transformation



Objective Force Concept

The Objective Force



Joint, Interagency & Multi-National Capabilities

Campaign Quality Force

Full Spectrum Operations

Network Centric

Enabled by Knowledge

Adaptive Modular Organizations

Family of Systems/System of Systems

3-7 Days Self-Sustainment

Deployability –
 1 Brigade sized element in 96 Hours/
 1 Division sized element in 5 Days/
 5 Divisions sized element in 30 Days



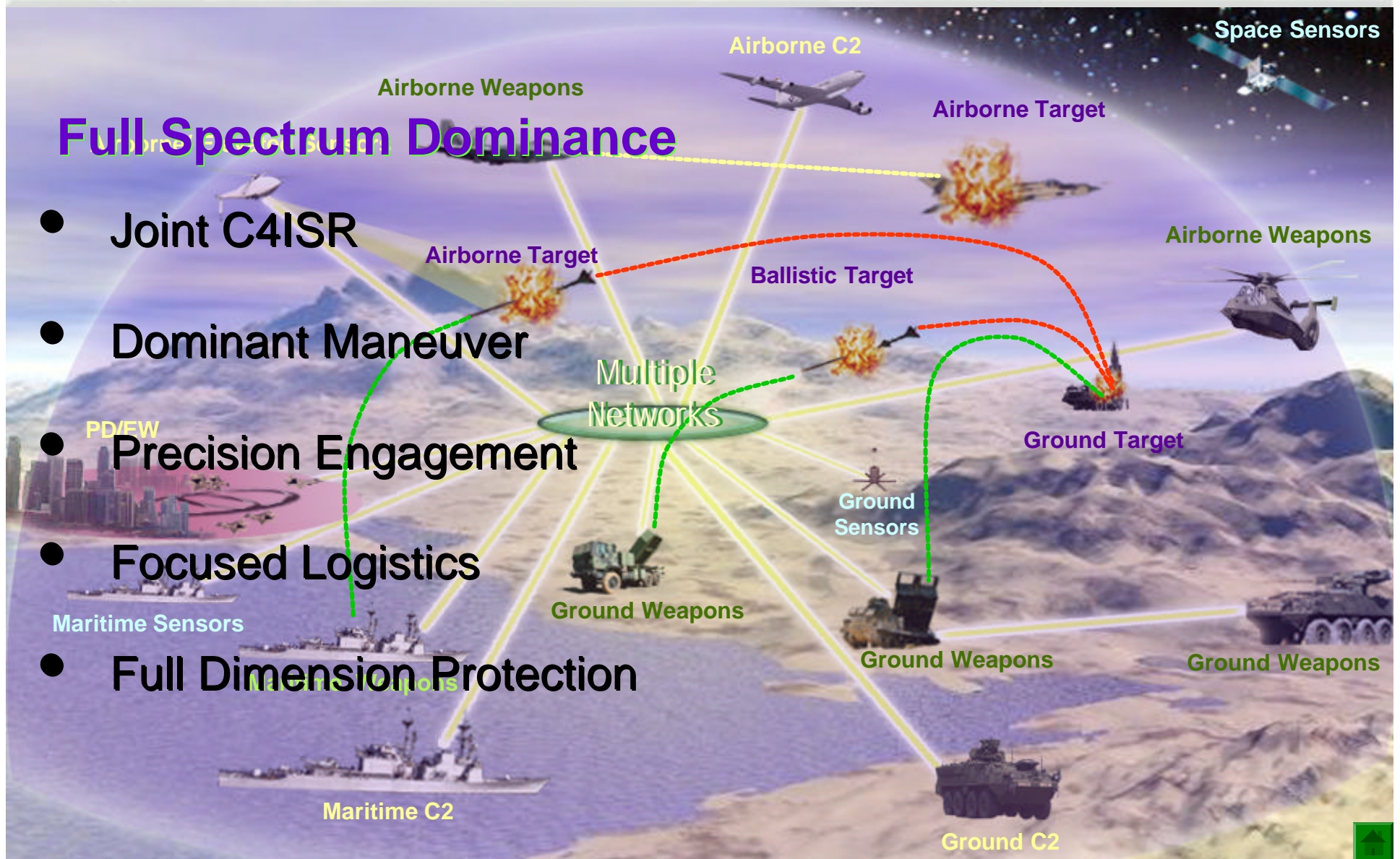
How the Objective Force Fights



The Objective Force as Part of the Joint Operational Concept

Full Spectrum Dominance

- Joint C4ISR
- Dominant Maneuver
- Precision Engagement
- Focused Logistics
- Full Dimension Protection



Objective Force Contributions to Focused Logistics

Continuous uninterrupted provision of combat service support across the full spectrum of military operations

Characterized by...

- Network-centric logistics
 - In-transit visibility
 - CROP
- Two level maintenance
- Increased use of robotics
- Reduced demand
- Reduced sustainment footprint
- New ground and aerial concepts for delivery
- Multi-modal, multi-nodal distribution
- Reach operations
- Joint medical treatment and evacuation to standard across echelons

Provides...

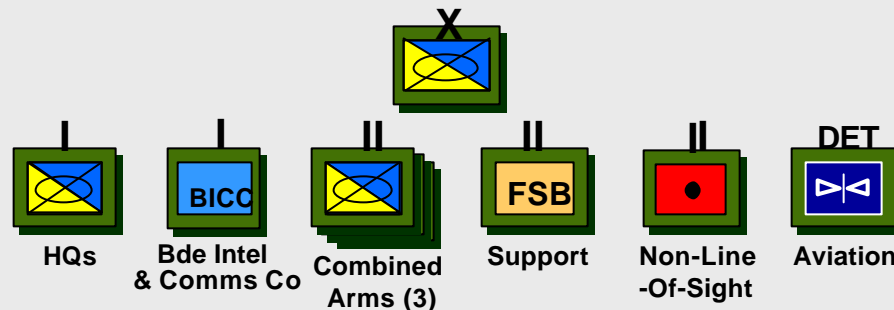
- Fewer vehicles and personnel required
- Self-sustainment – 3-7 days



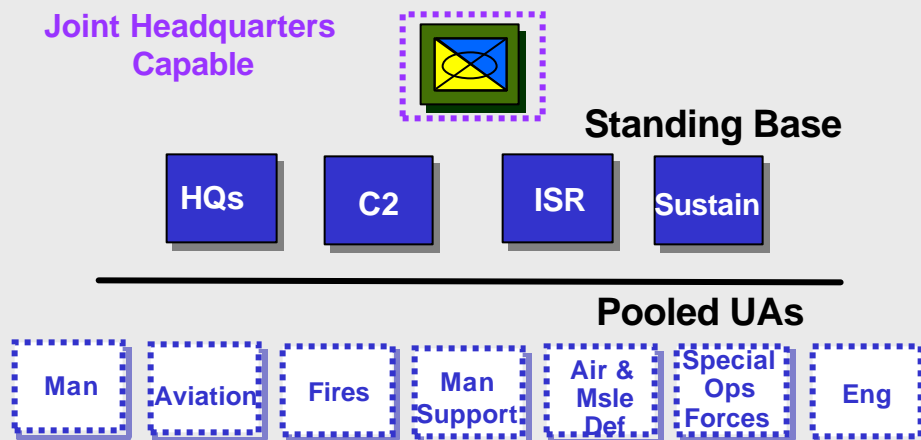
Objective Force Organizations Emerging Concepts

Modular Adaptable
Organizations

Unit of Action (UA)



Unit of Employment (UE)



Designed and trained for **Joint**, interagency and multi-national interoperability

Inherently **modular** – rapid force tailoring and teaming as required based on mission needs

Organizations designed and equipped to fulfill command and control (**C2**) functions of **Joint, interagency, and multi-national organizations**

- Army Forces Command, Joint Forces Land Component Command, and Joint Task Force
- Joint Interagency Coordination Group (JIACG)

Improved level of **competency** in leaders and Soldiers which empowers leadership to make decisions at lowest levels

Human resource functions support Joint, interagency and multi-national operations for Soldiers, civilians, families and contractors

- Increased **liaison assignments** to interagency and multi-national organizations
- **Seamless Army active and reserve component force structure**



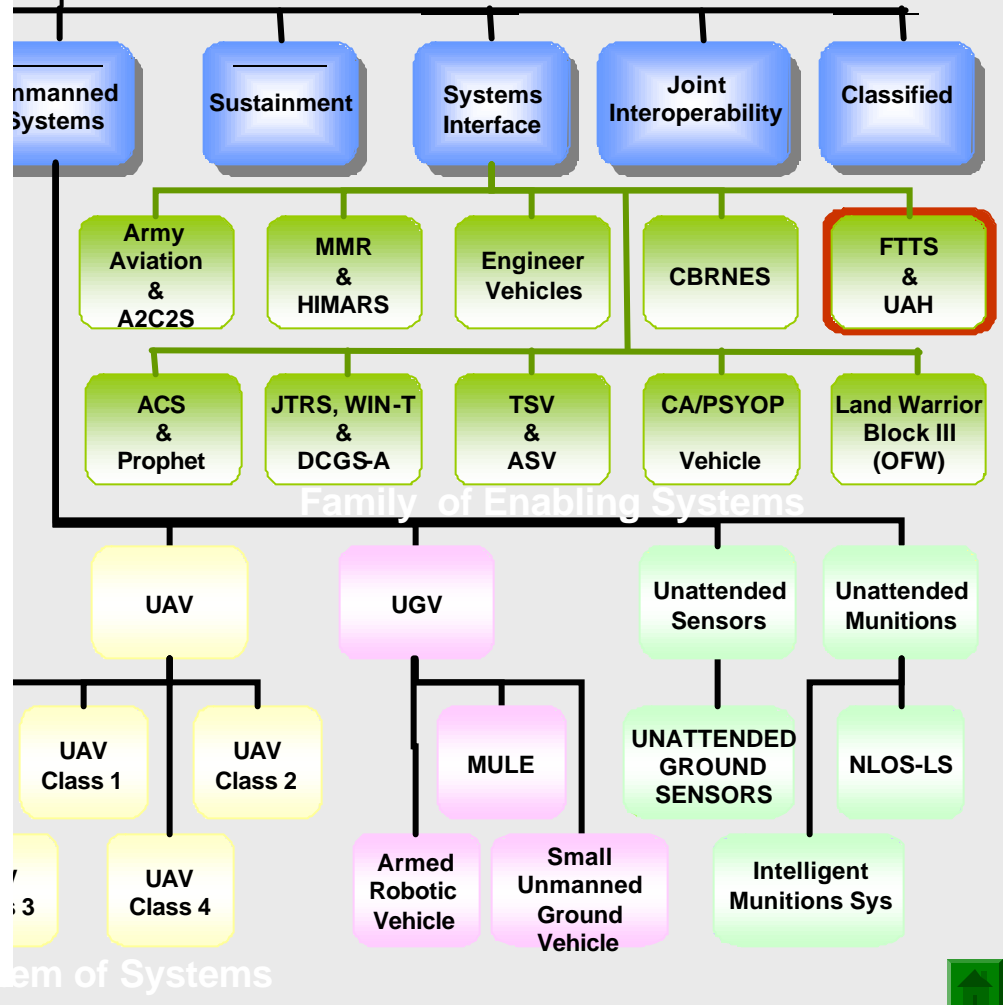
Future Combat Systems (FCS) Family of Systems

Complexity ...
+ 500 discrete requirements
= ~ 300 individual programs

FCS Family of Systems

Essential Tenets of the FTTS Program

- [-] Create opportunity for *best of industry* to participate
- [-] Leverage government *technology* base to maximum extent
- [-] *Associate* on-going enabling efforts with LSI led activity
- [-] *Collaborative environment* from design through life cycle
- [-] As a minimum, *commonality* at subsystem/component level
- [-] Design/plan for *technology integration* and insertion
- [-] Maintain and shape *industrial base* for the future
- [-] Retain *competition* throughout objective force acquisition
- [-] Appropriate *government involvement* in procurement processes
- [-] Maintain and shape *government acquisition* community
- [-] Program *affordability--balance* performance and sustainment



Future Combat Systems (FCS)

Manned Systems



The Soldier (2499)



C2V (79)



ICV (78)



Mounted Combat System (54)



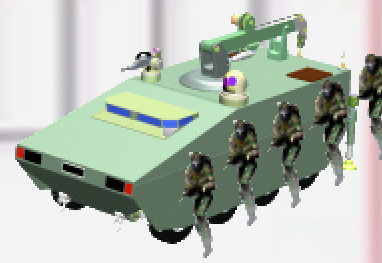
Reconnaissance & Surveillance (27)



NLOS Cannon (18)



NLOS Mortar (24)



Maintenance & Recovery (10)



Medical Treatment & Evacuation (29)

Total UA WT: <10K STONS

<h3>Unmanned Air Platforms (Systems)</h3>			Unmanned Payloads Unattended Ground Sensors Unattended Munitions
<p>UAV III (12)</p>	<p>UAV II (36) UAV I (36)</p>	<p>UAV IV A/B (16)</p>	
<h3>Unmanned Ground Vehicles</h3>			Small Man-packable UGV (45) Unattended Munitions
<p>Armed Robotic Vehicle (63)</p>	<p>Mule (59)</p>		



FTTS Threshold Capabilities

Sustainability

- Reliability – MTBF > duration of Pulsed Operations
- Maintainability – Self-reporting, no special tools, No TMDE, and No Spares

Agility

- Higher Mobility Rated Speed: 50% increase
- Must be able to go where FCS goes and bypass built up areas to deliver support

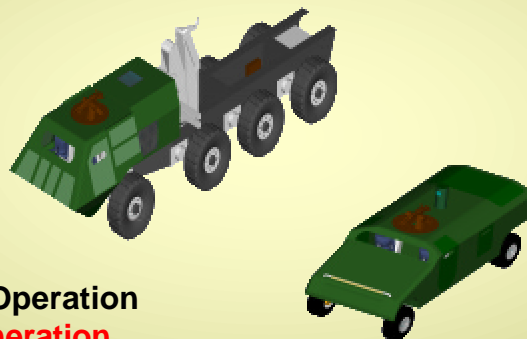
Deployability

- C130 Roll on/Roll off w/load
- Ready to support off the ramp Without vehicle preparation or Transportability waivers

Lethality

Versatility

- Advanced Load Handling
- Interchangeable/Intermodal Operation
- On Board Power & water Generation
- Deliver integrated, common, formed Packaging



Survivability

- Designed upfront to provide time definite and assured delivery
- Reduced Emissions and Signature

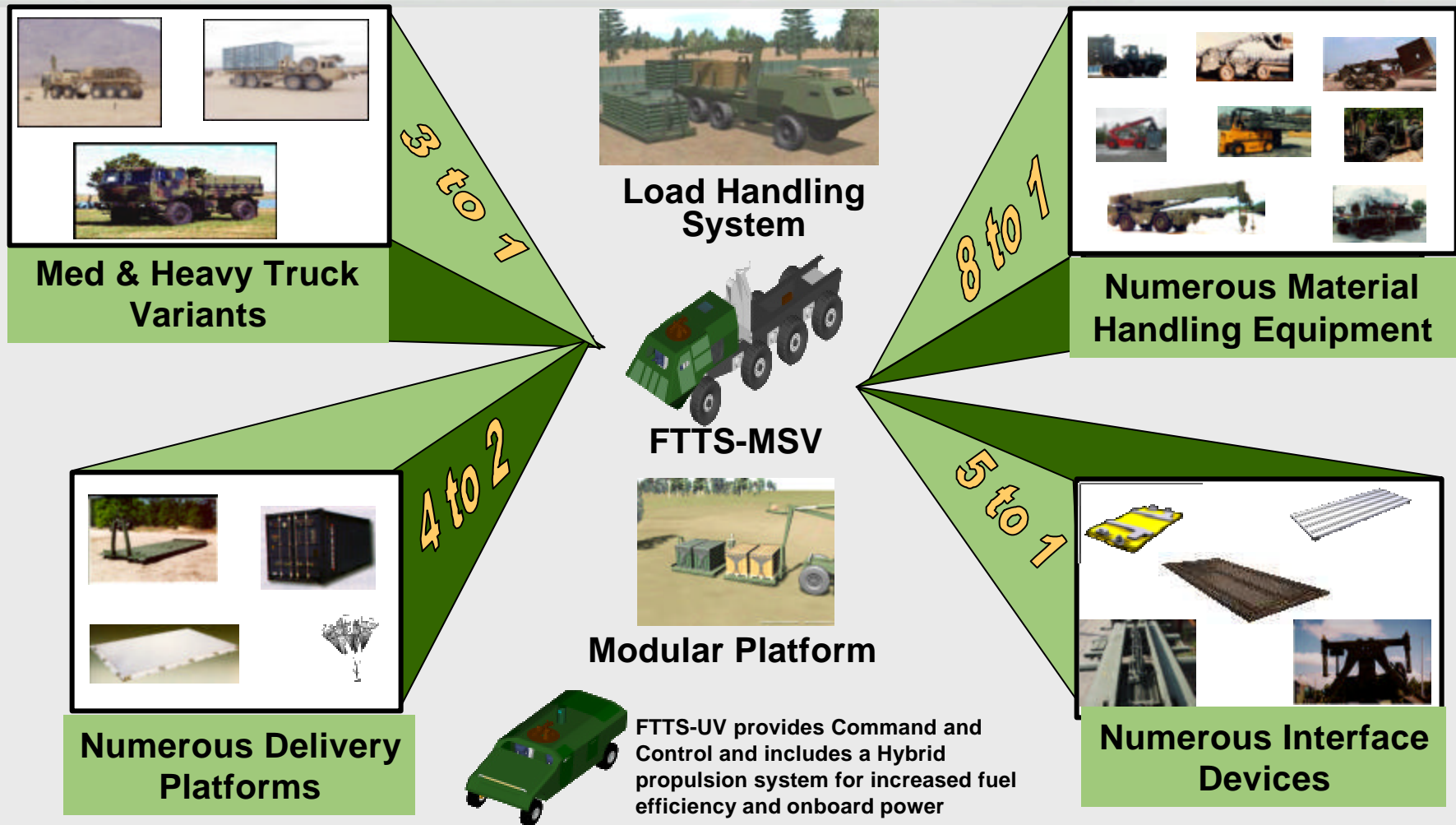
Responsiveness

- Greater Fuel Efficiency 100 - 200%
- Dynamic Movement Tracking and Re-routing
- Greater Range 600 – 900 miles
- Integrated C4ISR

ORD Starting Point



FTTS ACTD Objective

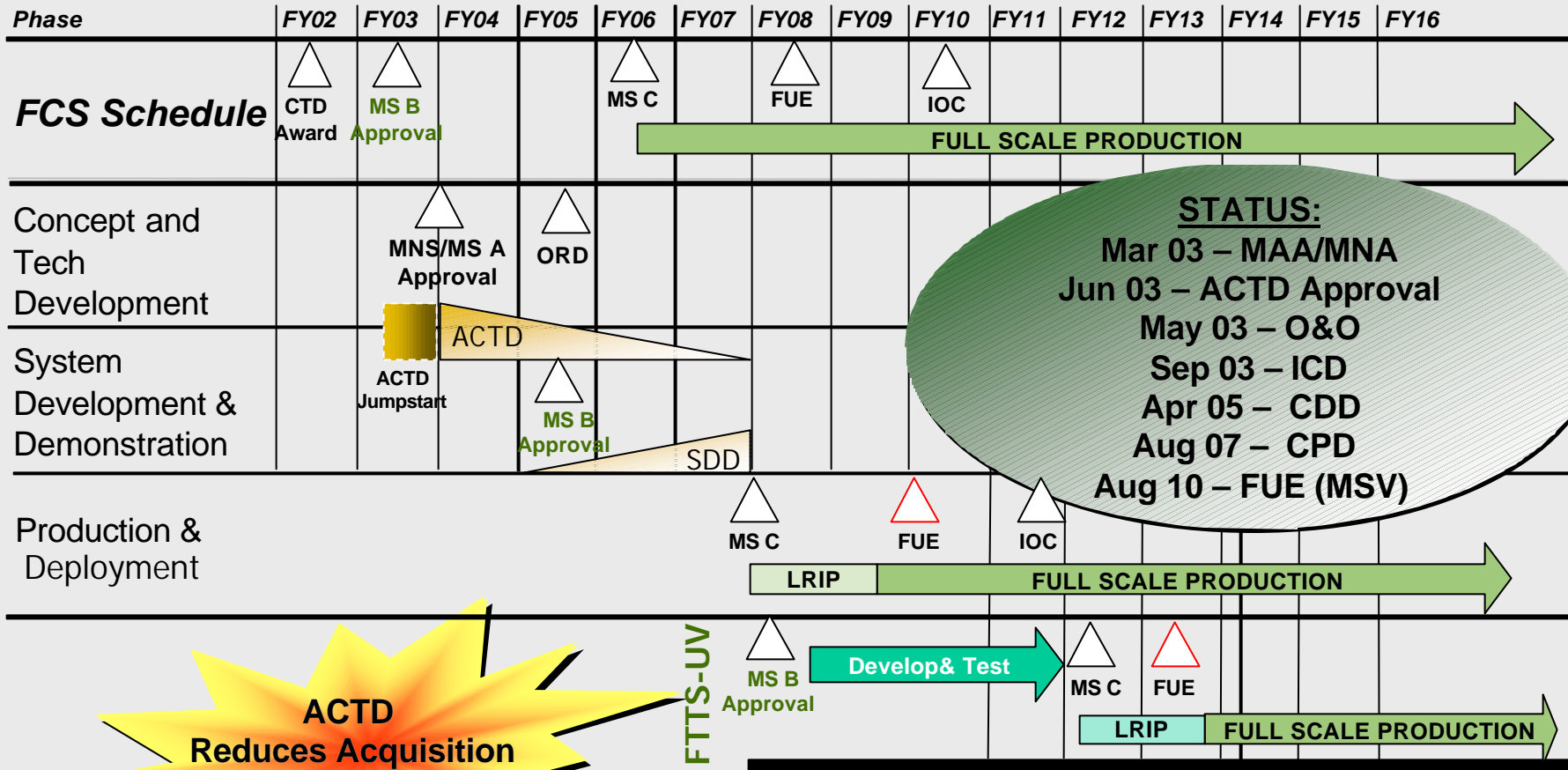


*A SEAMLESS Distribution SYSTEM built for the Obj Force
(Applied to the SBCT to evolve the TTPs, CONOPS, and doctrine)*



FTTS Transition Schedule

FTTS-MSV



△ FTTS-MSV FUE FY10 is 2 years behind FCS FUE FY08
 △ FTTS-UV FUE FY13 is 5 years behind FCS FUE FY08

FTTS Procurement Funds Begin in FY08



What We Need From “FTTS”

Systems designed for tough requirements.

- Self reporting
- No vehicles that get less than 30 mpg
- Limited repairables
- Limited spares
- No Systems w/o embedded diagnostics/prognostics

Future systems must be built with ultra reliable components that require minimal preventive maintenance, and when maintenance is required repairs and services are easily and quickly performed.

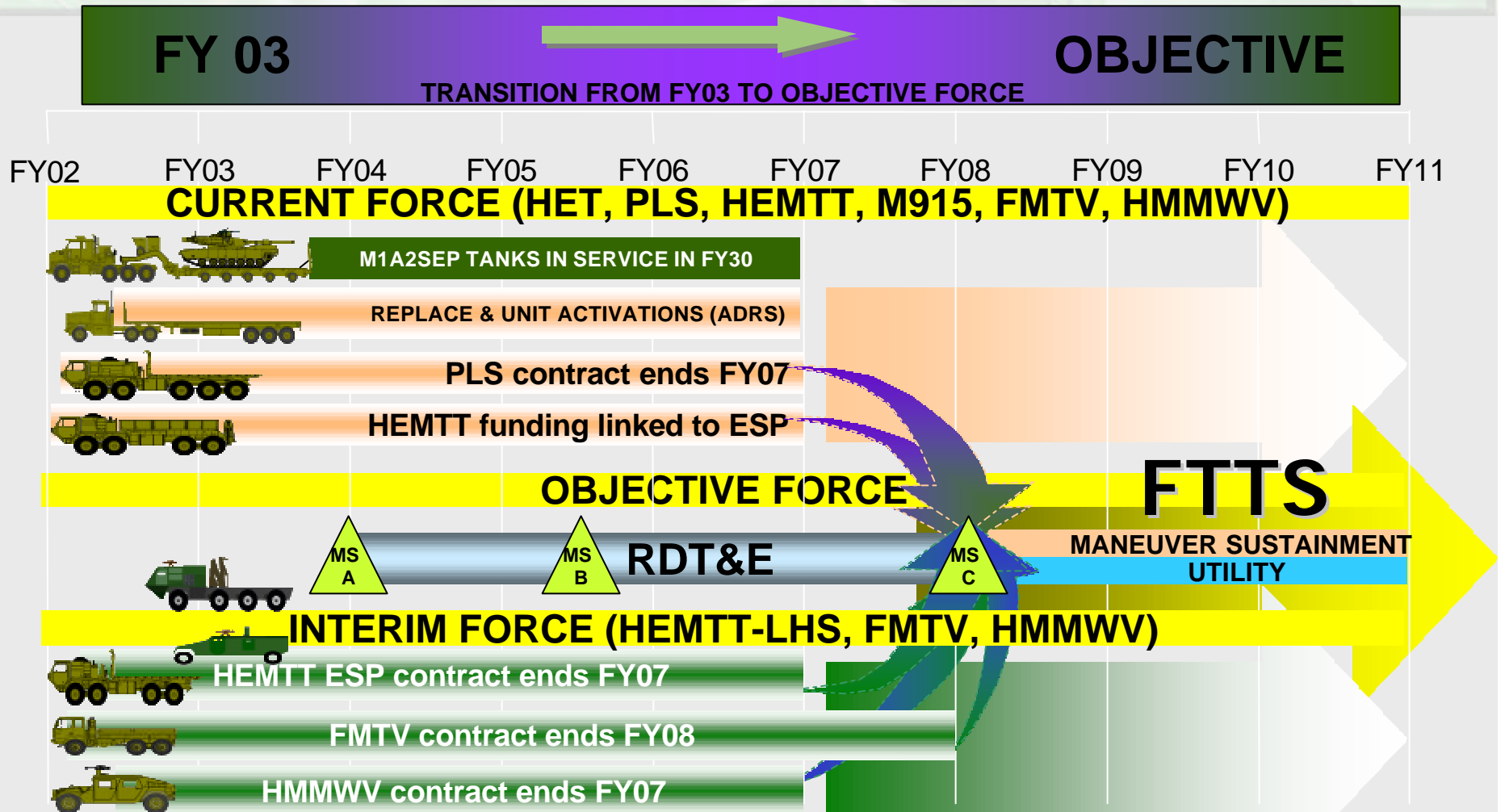
- No special tools
- No external TMDE
- Mean Time Between Failure (MTBF) > Duration of pulsed operations

We may have to pay up front for such “Ultra-reliable” systems, but our future warfighting concepts depend on them. If systems don’t perform as advertised, there should be penalties.

“Significant reduction in the logistics footprint and costs will occur when reliability, maintainability, and fuel efficiency are effectively balanced with Cost, Schedule and Performance”



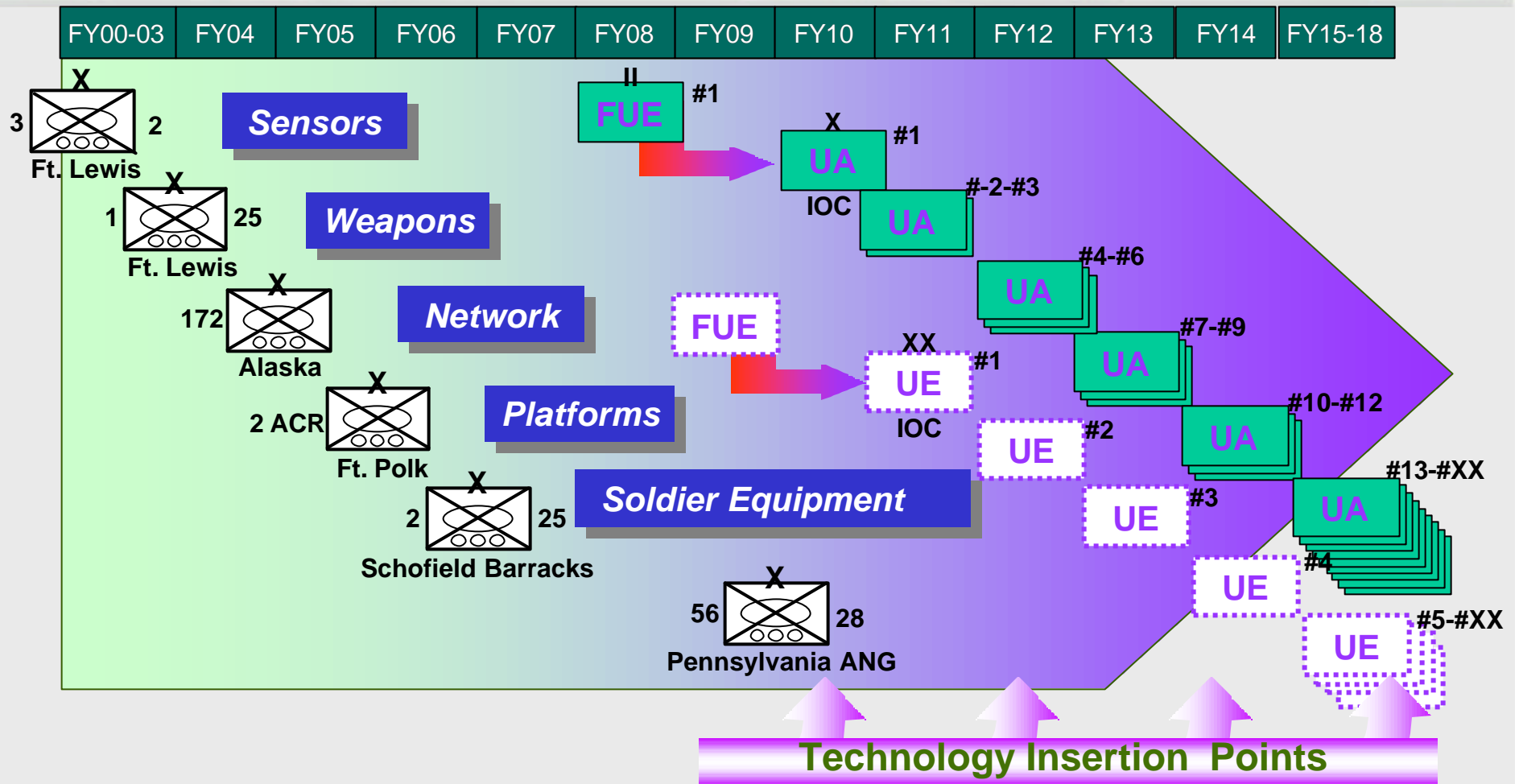
Tactical Wheeled Vehicle Vision



FTTS ... Critical Enabler of the Objective Force



Fielding an Army – Over Time



Balancing the Right Mix of Current and Stryker Forces with Fielding the Objective Force



Our Nation's Future

*The Objective Force is the
Transformation of the entire United States Army ...
the dedicated efforts of the entire
Army Team...our sister Services, industry,
academia, DoD, and Congress are ensuring
Transformation succeeds!*

A 21st Century Army for a 21st Century World

