



Paving the Roadmap for Implementation of Army Sustainability: Drivers, Inhibitors, Enablers, and Paradigm Shifts

Presented by

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at

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DOD Transformation: The Role of Environmental and Energy Programs in Sustaining Readiness

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The U. S. Army VISION is People, Readiness, and Transformation.

*In support of this vision, **Sustainability** provides unifying
and focusing business principles that will enable the
Army to:*

*...ensure **Army Readiness** today and in the future, at both
a local and a global scale,*

*...while providing the highest **Quality of Life** for its
people, and the communities that support its
installations, and*

*...achieving the strategic goals of the **Army
Transformation.***



To effectively implement Army Sustainability, three basic questions must be answered:

- *What does sustainability mean for the Army, what are its benefits, and why should the Army care about it?
(i.e., the **Drivers**)*
- *If sustainability offers so many benefits to the Army, why is it not already a way-of-life?
(i.e., the **Inhibitors**)*
- *How can the Army overcome these inhibitors and make sustainability happen?
(i.e., the **Enablers and Paradigm Shifts**)*



A Challenge

- In attempting to answer these questions, current tactics used by those who promote sustainability strive to make you feel:
 - **Scared...** (the possible outcomes)
 - **Bad...** (the statistics and blame)
 - **Guilty...** (the greater good)
 - **Confused...** (the intellectual base)
 - **Relieved...** (the technological fix)
- Although the Army needs to address all these points of view, it should avoid polarization...



Th

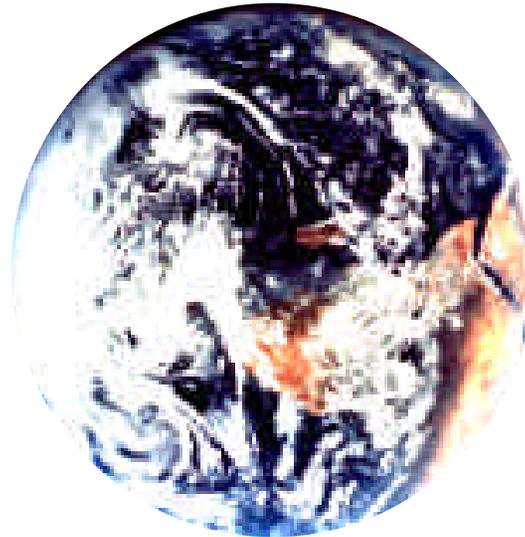
What does sustainability mean for the Army, what are its benefits, and why should the Army care about it?



Sustainability will Ensure Readiness

On both a spatial scale (from local to global),

**Ability to
Train**
(continuously)



**Ability to
Protect and
Fight**
*(when and where
necessary)*

and a temporal scale (from today to tomorrow)

Ability to Deploy
(when and where necessary)

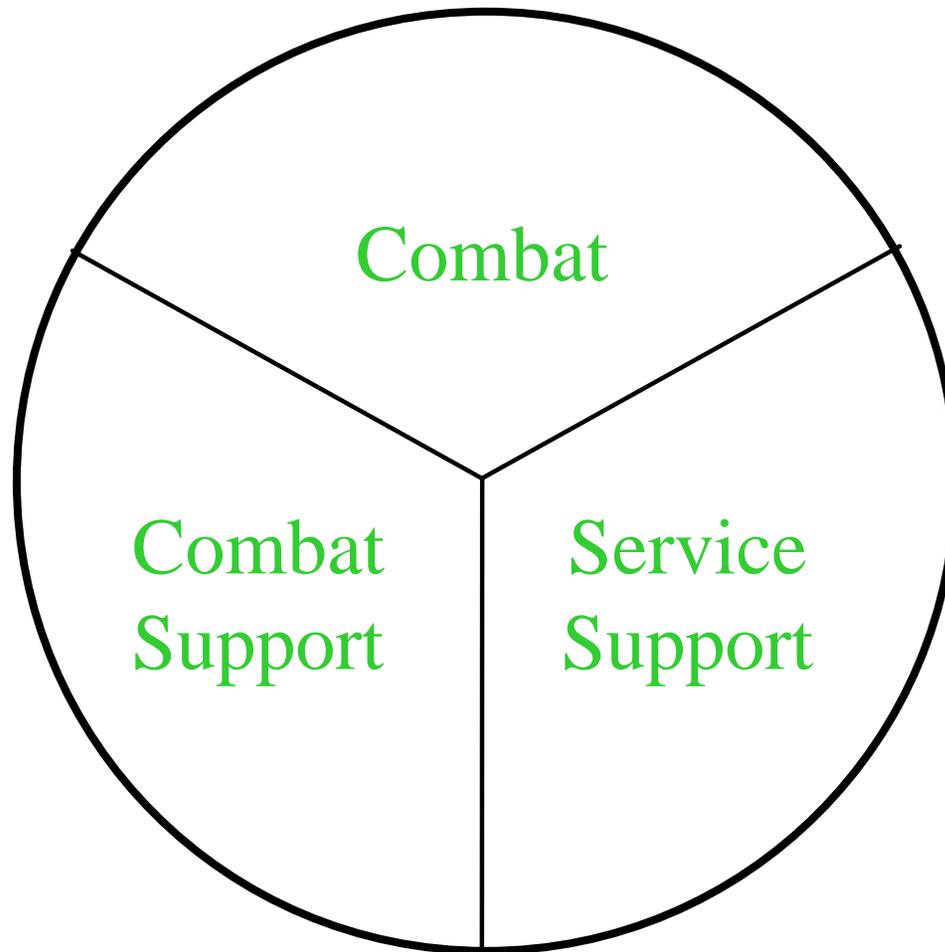


Sustainability Drivers: **External Ch**

- **To the capacity and capability of the Army's basic infrastructure...**
 - To **what** the Army is and what it wants/needs to do
- **To the compatibility and compliance of the Army's fundamental processes, practices, and operating procedures...**
 - To **how** the Army does what it does
- **To the integrity, quality, and availability of the Army's resource base...**
 - To **with what** the Army does what it does

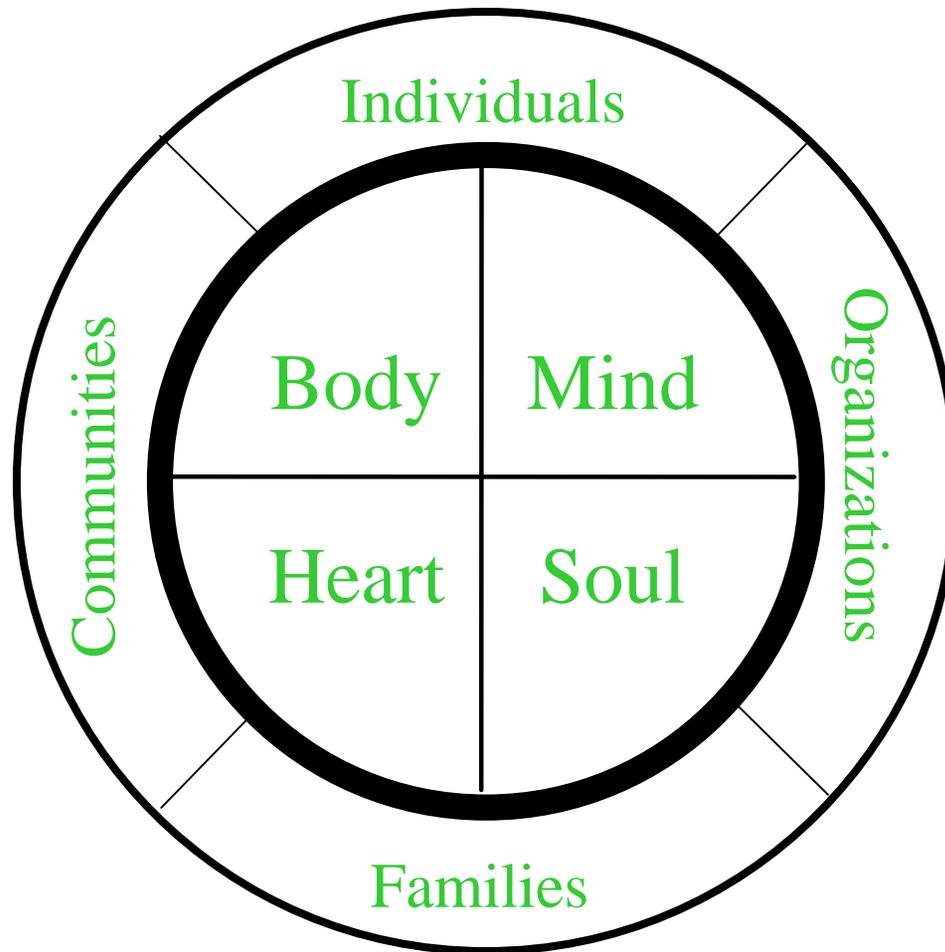


Sustainability Drivers: Readiness



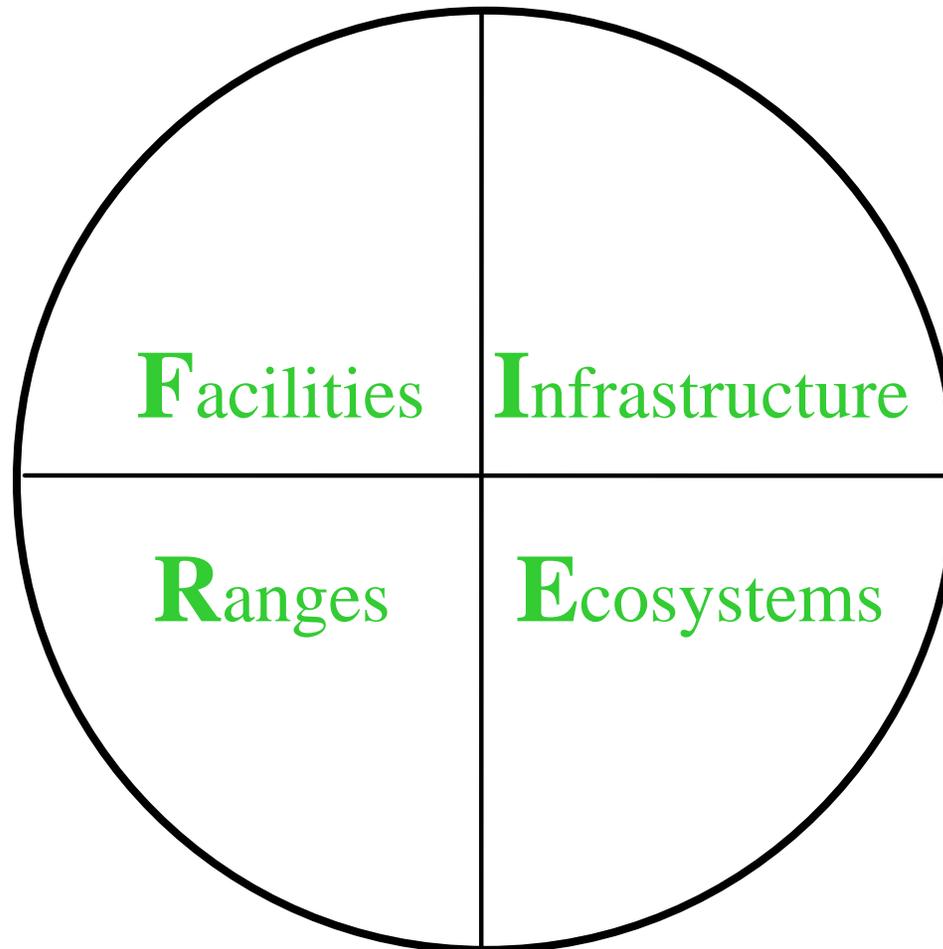


Sustainability Drivers: People (Military & Civilian)





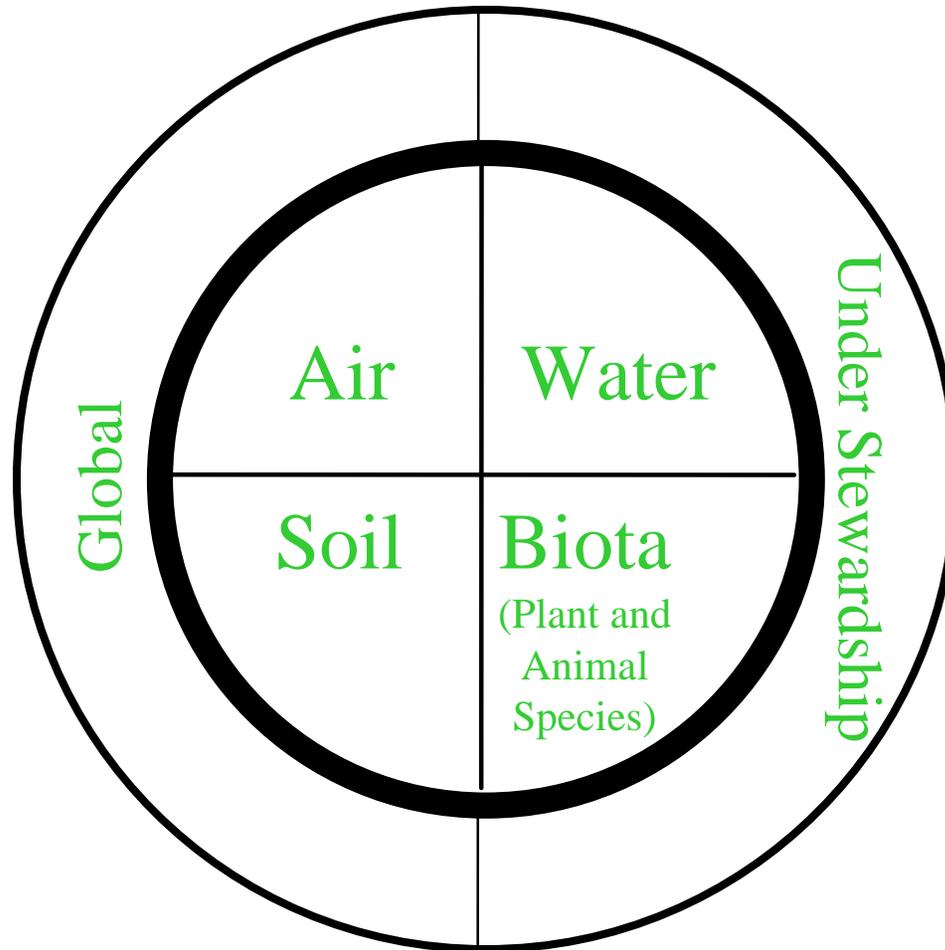
Sustainability Drivers: Army Installation Components





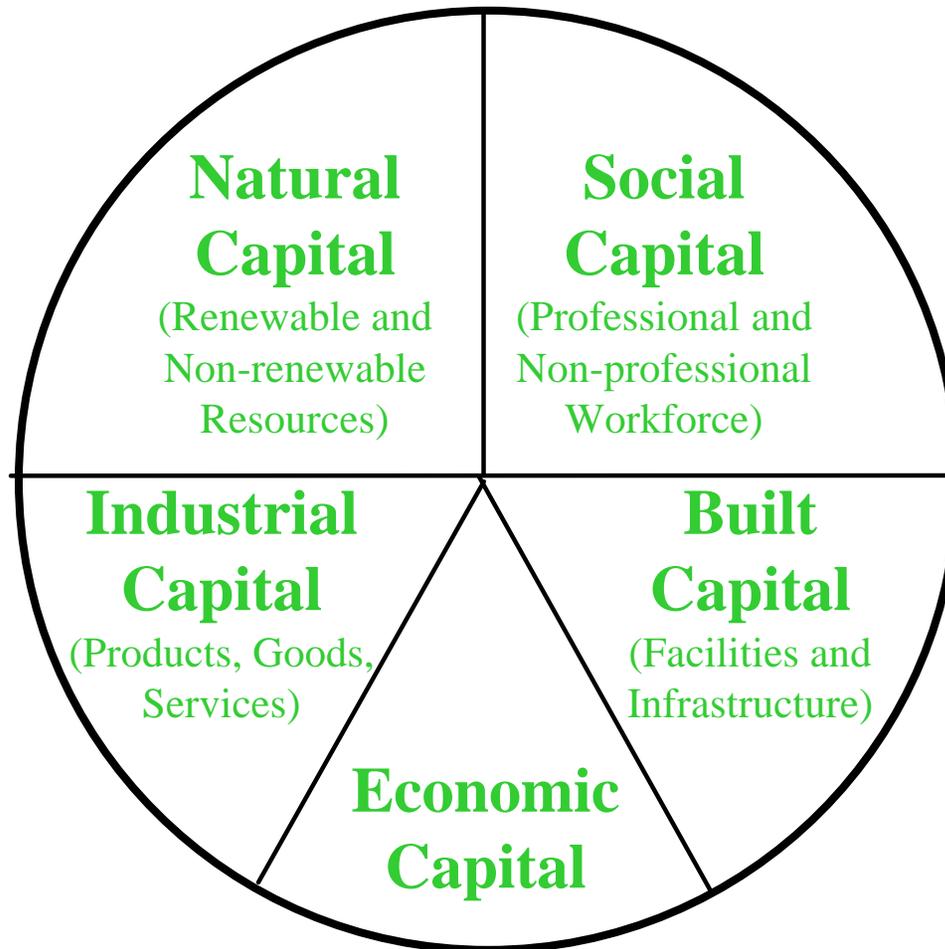
Sustainability Drivers:

Th



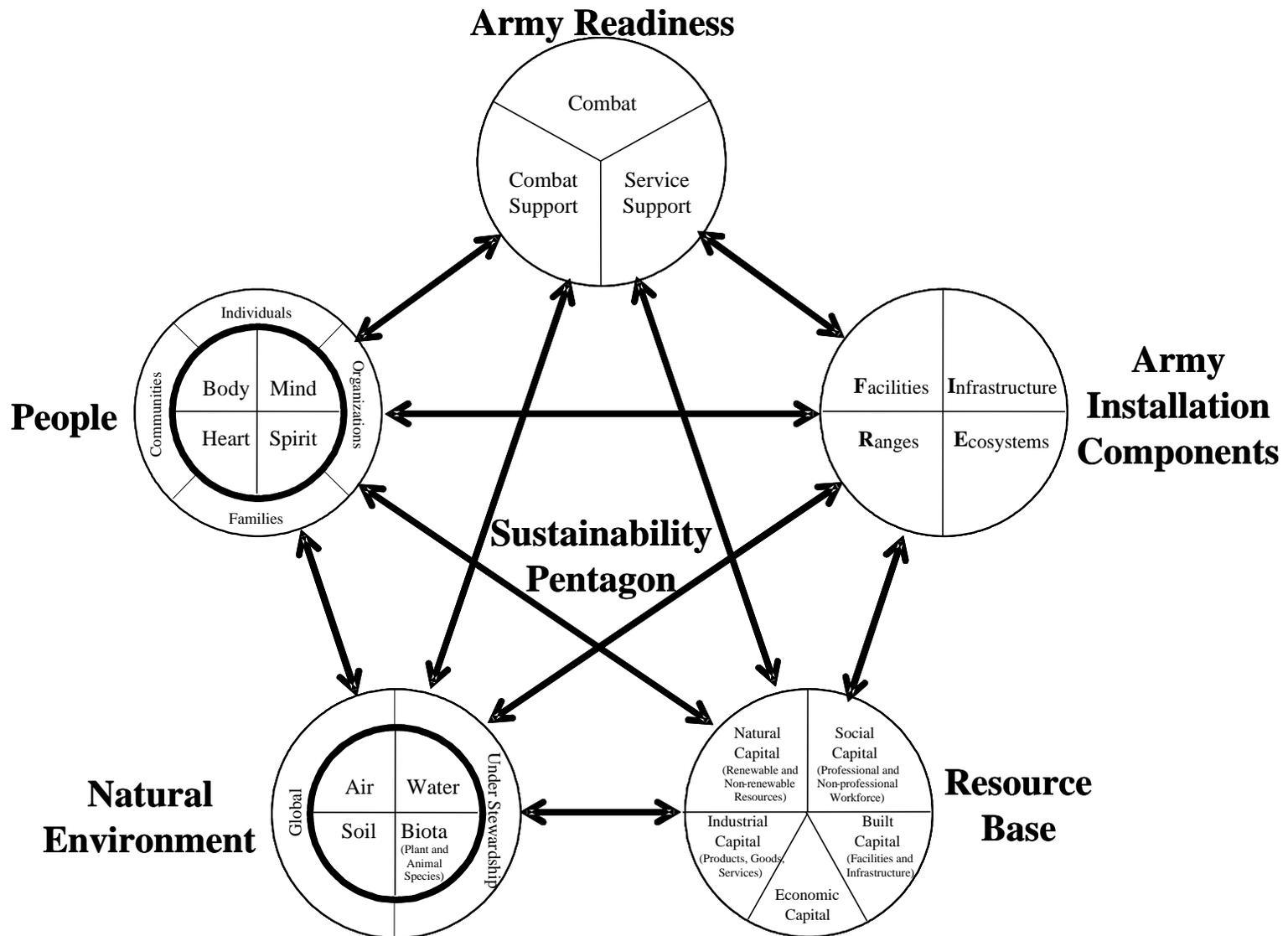


Sustainability Drivers: Th



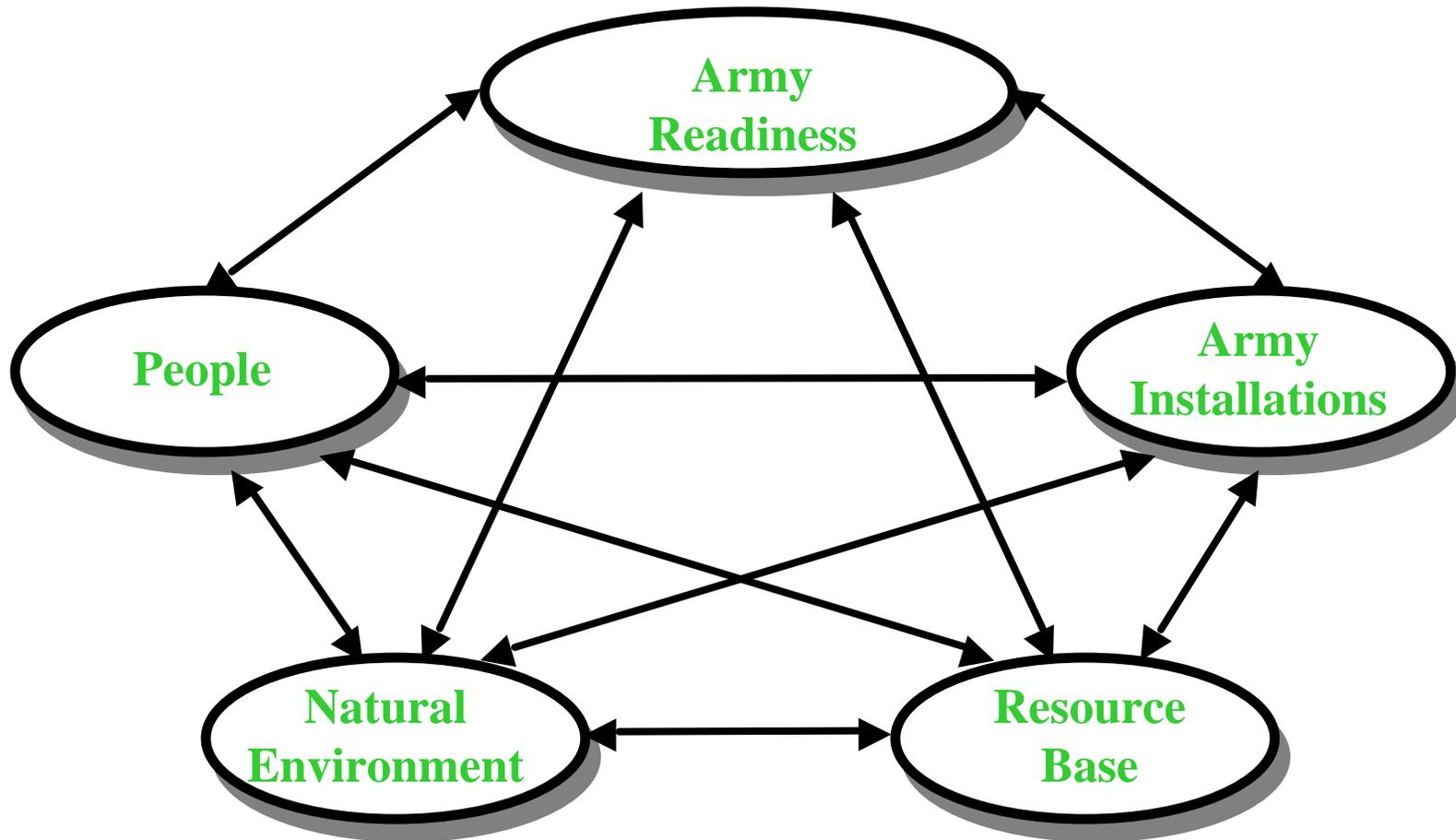


Sustainability Drivers: Army Sustainability Pentagon





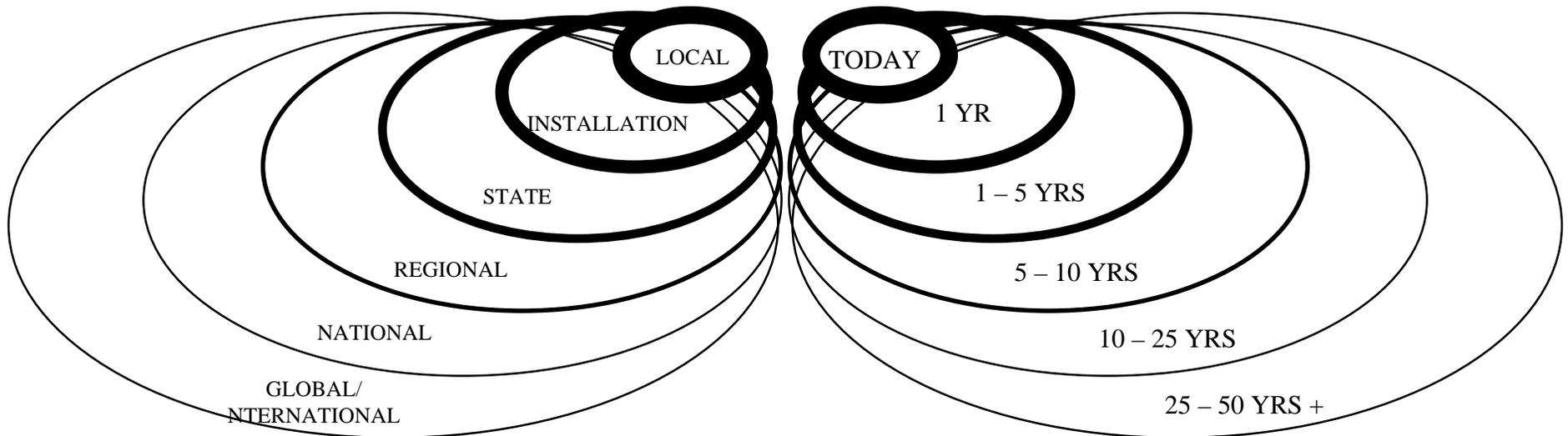
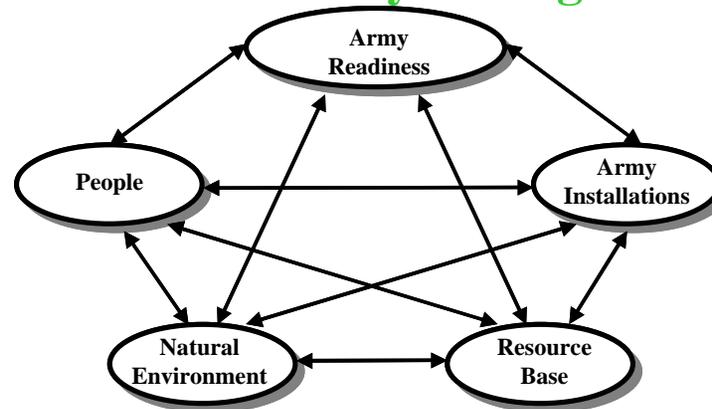
Sustainability Drivers: Army Sustainability Pentagon





Sustainability Drivers: Temporal and Spatial Scales

Sustainability Pentagon

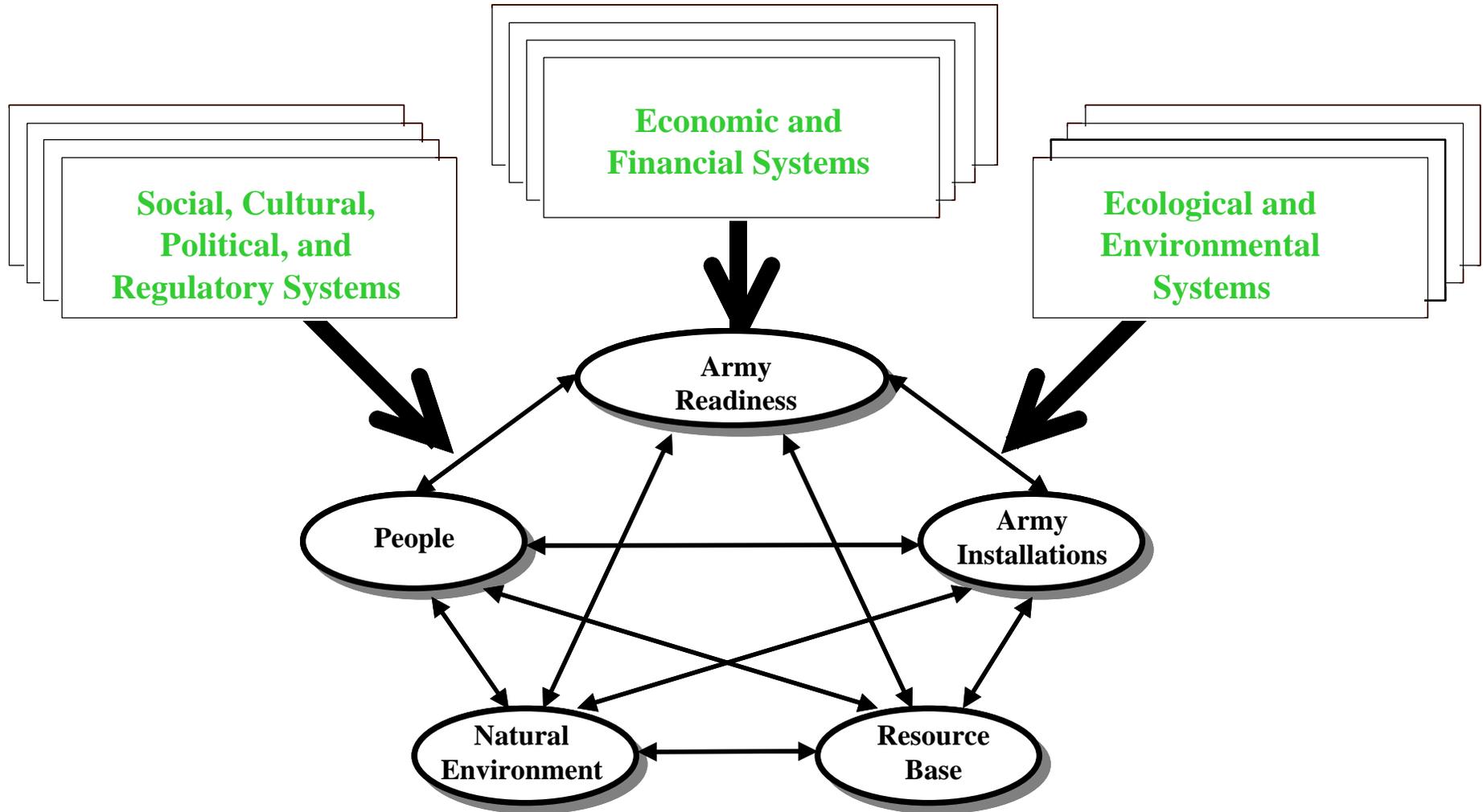


Spatial Scale

Temporal Scale



Sustainability Drivers: Influences



Sustainability Pentagon

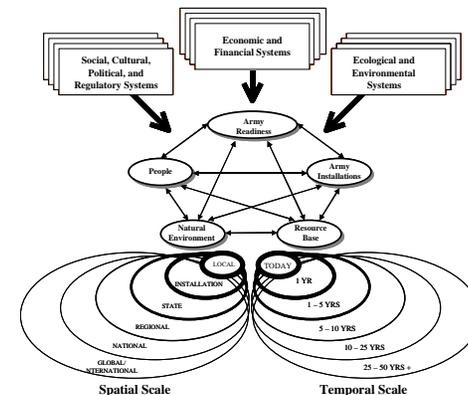


Thus, the essential driver for Sustainability within the Army is:

Given the vision, mission, requirements, goals, and objectives of the Army, and of each of its installations...



Given the reality within which they exist...



Will they have the **CAPACITY & CAPABILITY...?**
and are they:
COMPATIBLE & COMPLIANT...?

...and will they have it and be?

TODAY

TOMORROW



Th **Inh**

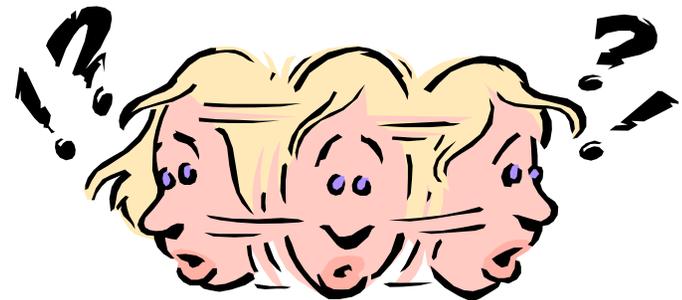
If sustainability offers so many benefits to the Army, why is it not already a way-of-life?



Lack of a Unified Theory of Sustainability

- Sustainability can be expressed in multiple forms:
 - ... Principles
 - ... Concepts
 - ... Heuristics
 - ... Strategies
 - ... Guidelines
 - ... Specifications
 - ... Standards
 - ... Processes/Tools
 - ... Best Practices
 - ... Lessons Learned

Which of these forms of Sustainability must/should/could we use?

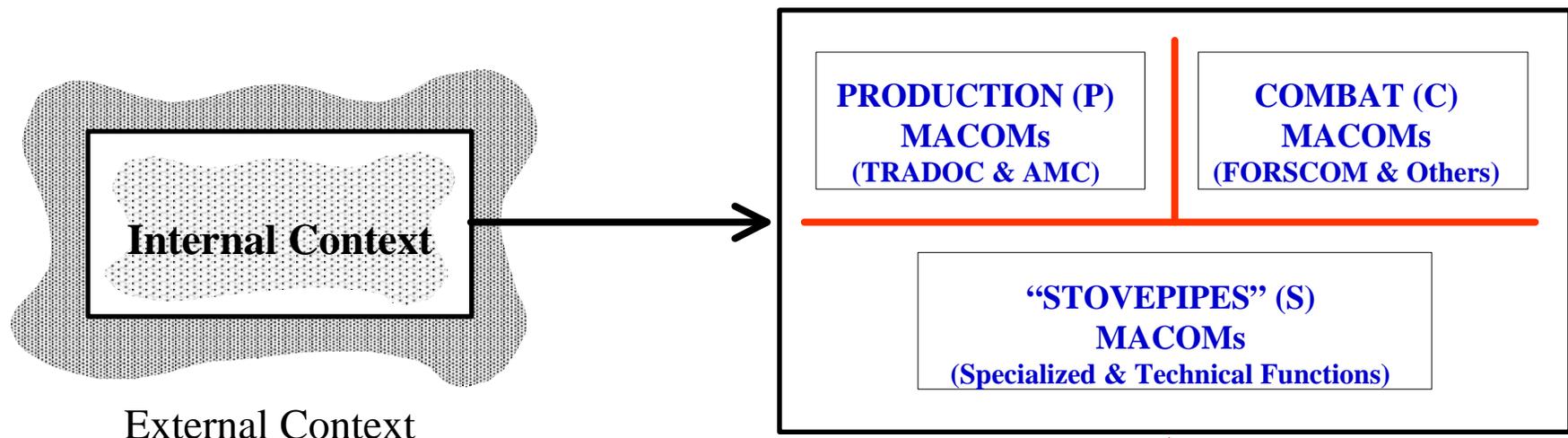




Non-systems Perspective of Army Organizational Systems

Army

Army Organizational Systems

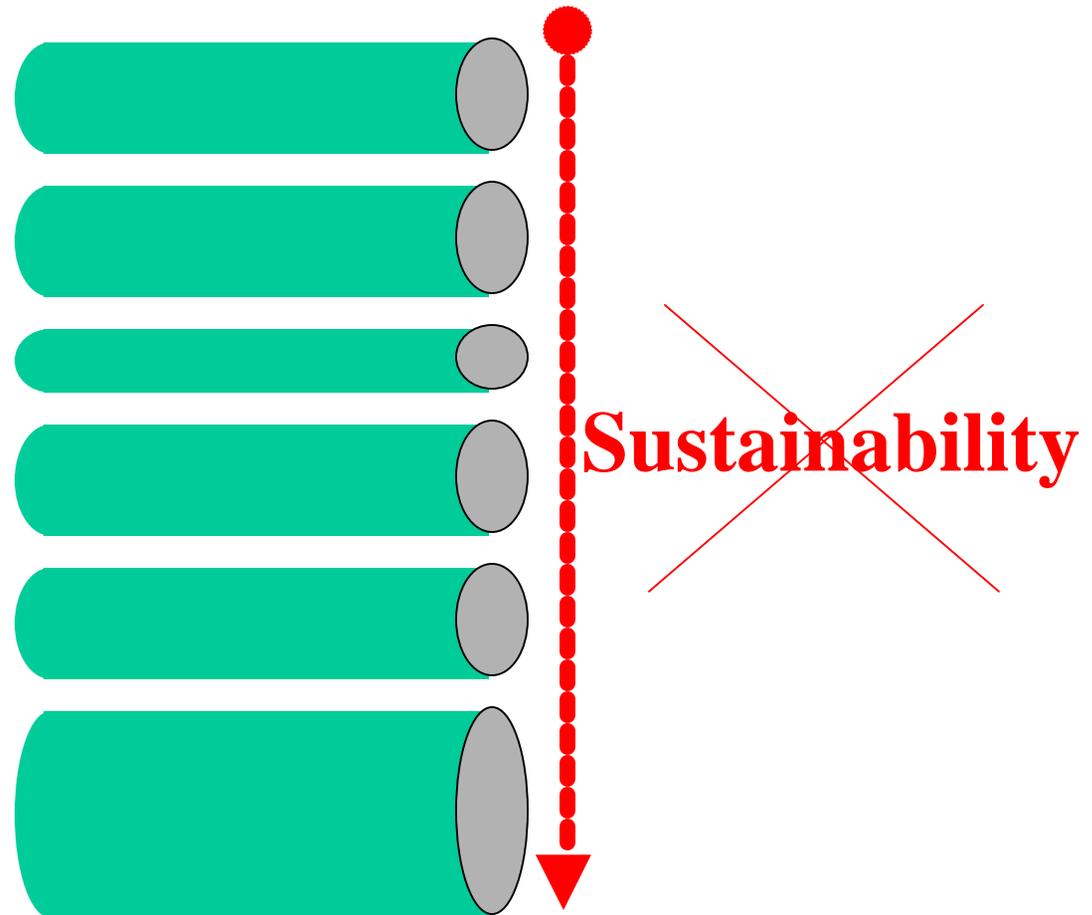


~~Sustainability~~



Tunnel Vision

- **Within**
- ... the National Security Strategy
- ... the National Military Strategy
- ... the Joint DOD Vision
- ... the global Army Vision and Plan
- ... the general Installation Management Action Plan
- ... specific Army Policies, Regulations, and Procedures for Installations

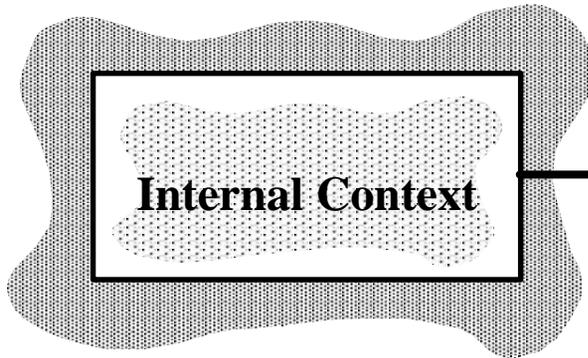




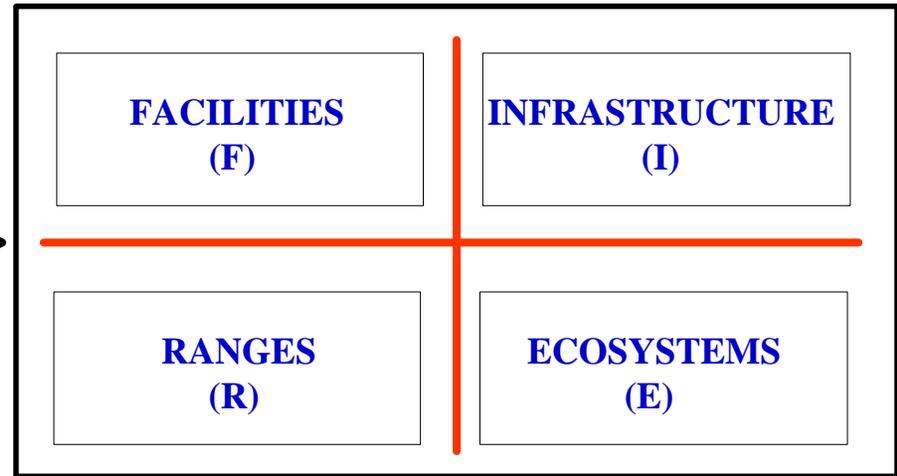
Non-systems Perspective of Army Installation Components

Army

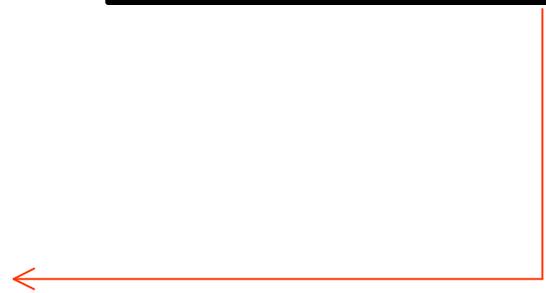
Army Installation Components



External Context



~~Sustainability~~





Non-systems Perspective of Army Installation Components

Within the **Generic Army Installation Components...**

(Fence-to-Fence):

- **Facilities (F)**
- **Infrastructure (I)**
- **Ranges (R)**
- **Ecosystems (E)**

... and the **Interfaces** among them,
(Fence-to-Fence and Over-the-Fence):

- **Internal Interfaces (I.I.)**
among components within the fence
- **External Interfaces (E.I.)**
between components within the fence and external elements

...and within the **Generic Types of Projects** in Army Installations:

- **Monitoring & Condition Assessment for Compliance**
- **New**
- **Retrofit**
- **Maintenance & Rehabilitation**
- **Disaster Recovery**
- **Historical Restoration & Preservation**
- **Environmental Remediation**
- **Decommissioning, Deconstruction or Demolition**



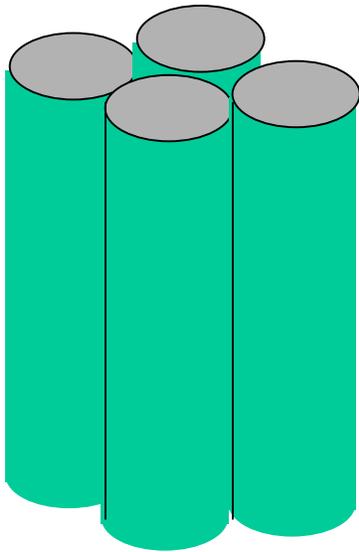
Non-systems Perspective of Army Installation Components

SPECIFIC ARMY INSTALLATION ...X						
SPECIFIC ARMY INSTALLATION B...						
SPECIFIC ARMY INSTALLATION A						
COMPONENTS				INTERFACES		PROJECT TYPES
(F)	(I)	(R)	(E)	(I.I.)	(E.I.)	
						Monitoring and Condition Assessment Projects
						Projects for the Development of New Components and Interfaces
						Retrofit Projects
						Maintenance and Rehabilitation Projects
						Disaster Recovery Projects
						Historical Restoration/ Preservation Projects
						Environmental Remediation Projects
						Decommissioning, Deconstruction or Demolition Projects

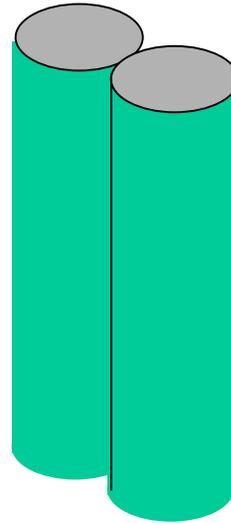


Stovepipes

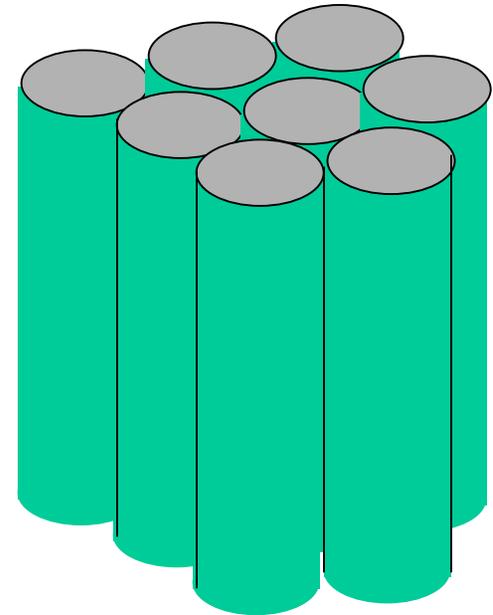
Within **Generic Army Installation Components**
(Fence-to-Fence)



... and the **Interfaces**
among them,
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...and within the **Generic Types of Projects** in
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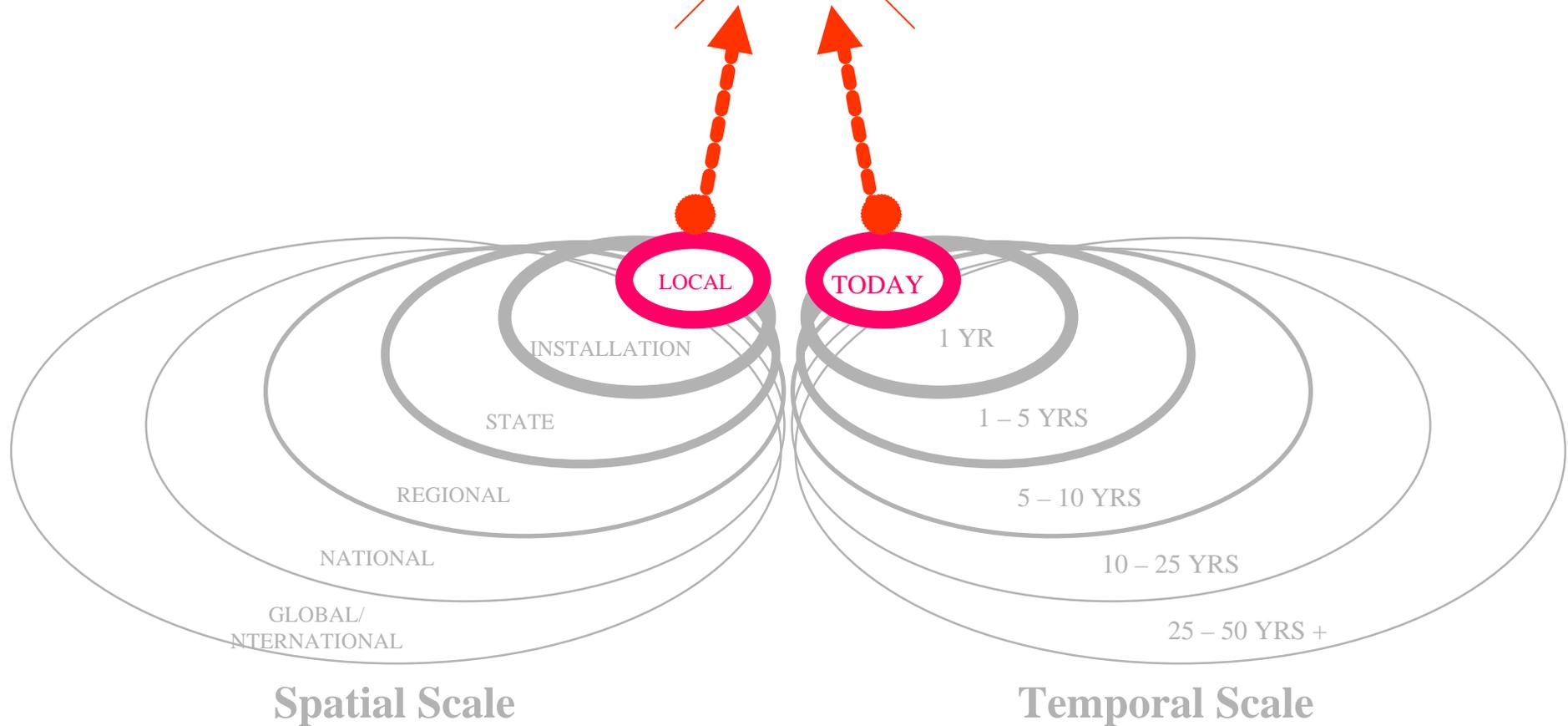


~~Sustainability~~



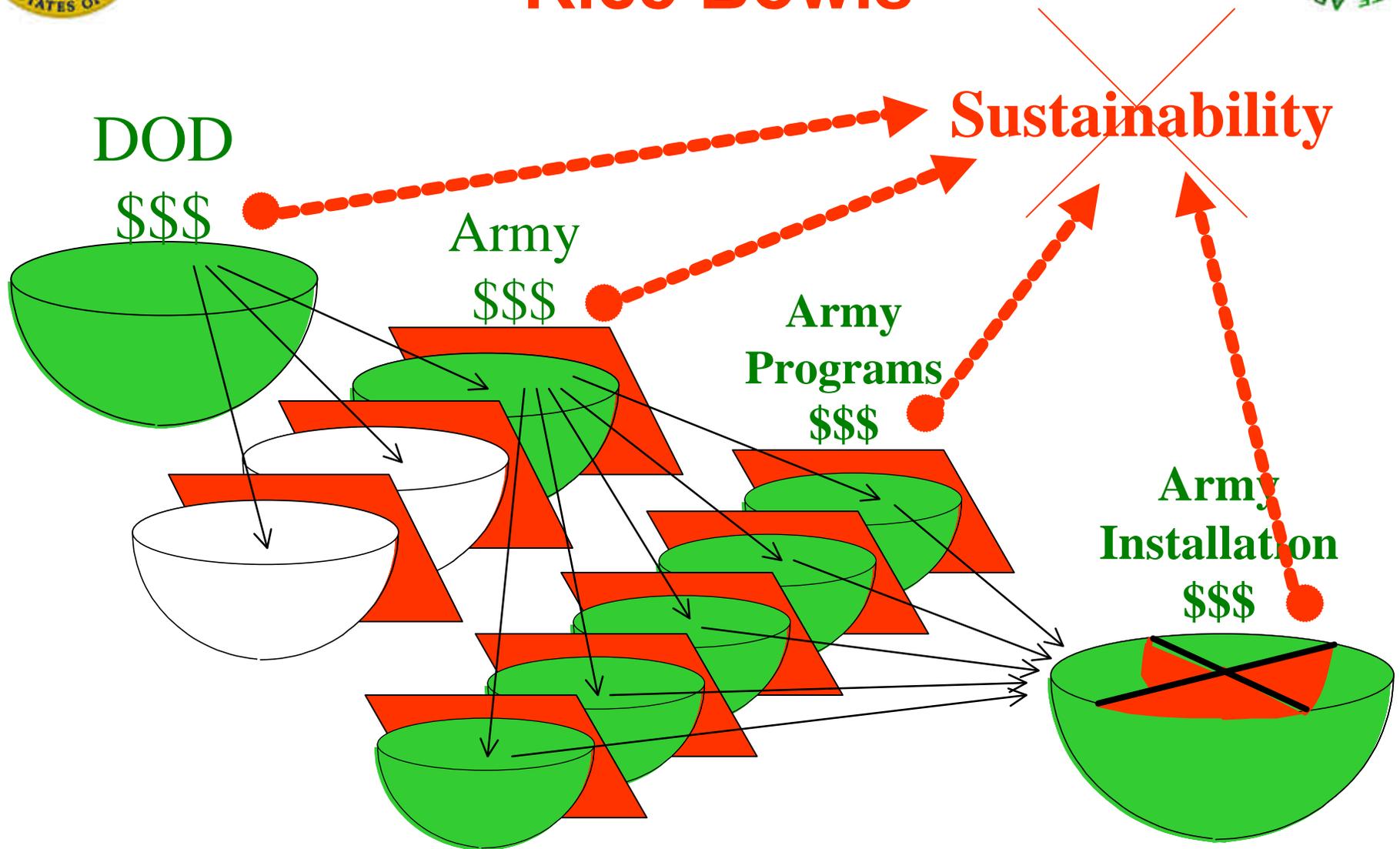
Prevalence of the Here and Now

~~Sustainability~~



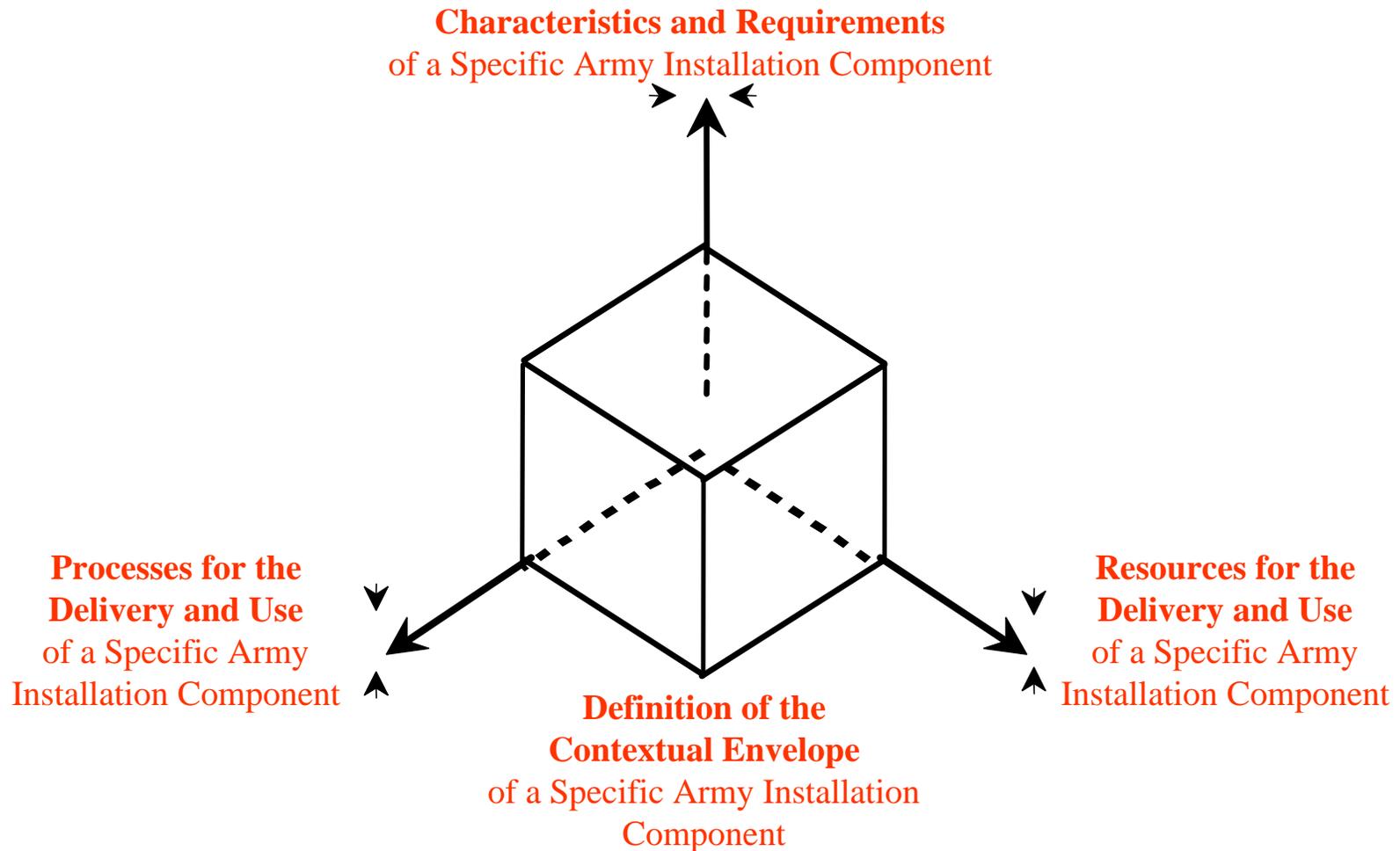


Rice Bowls



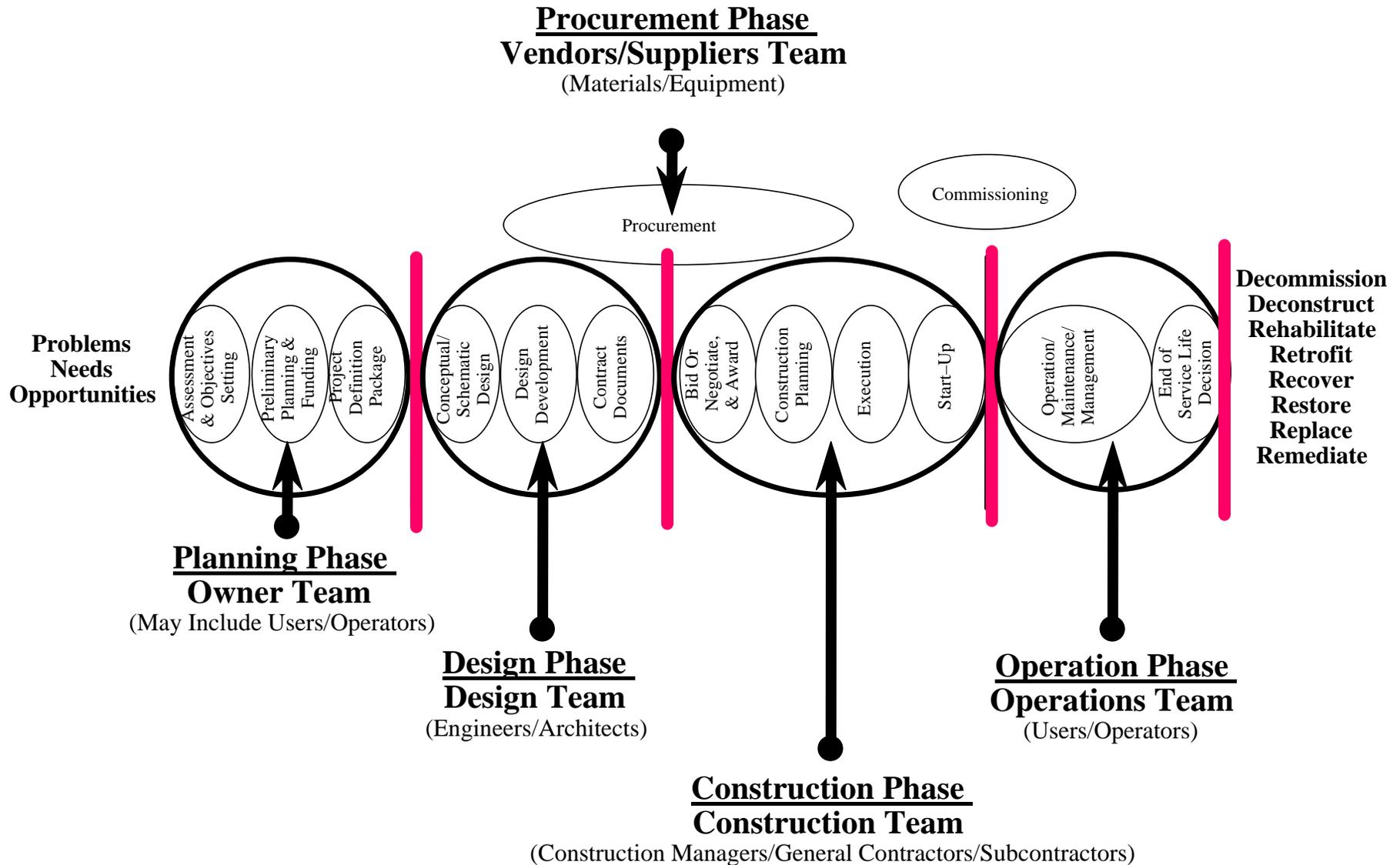


Status Quo of Army Installations Components



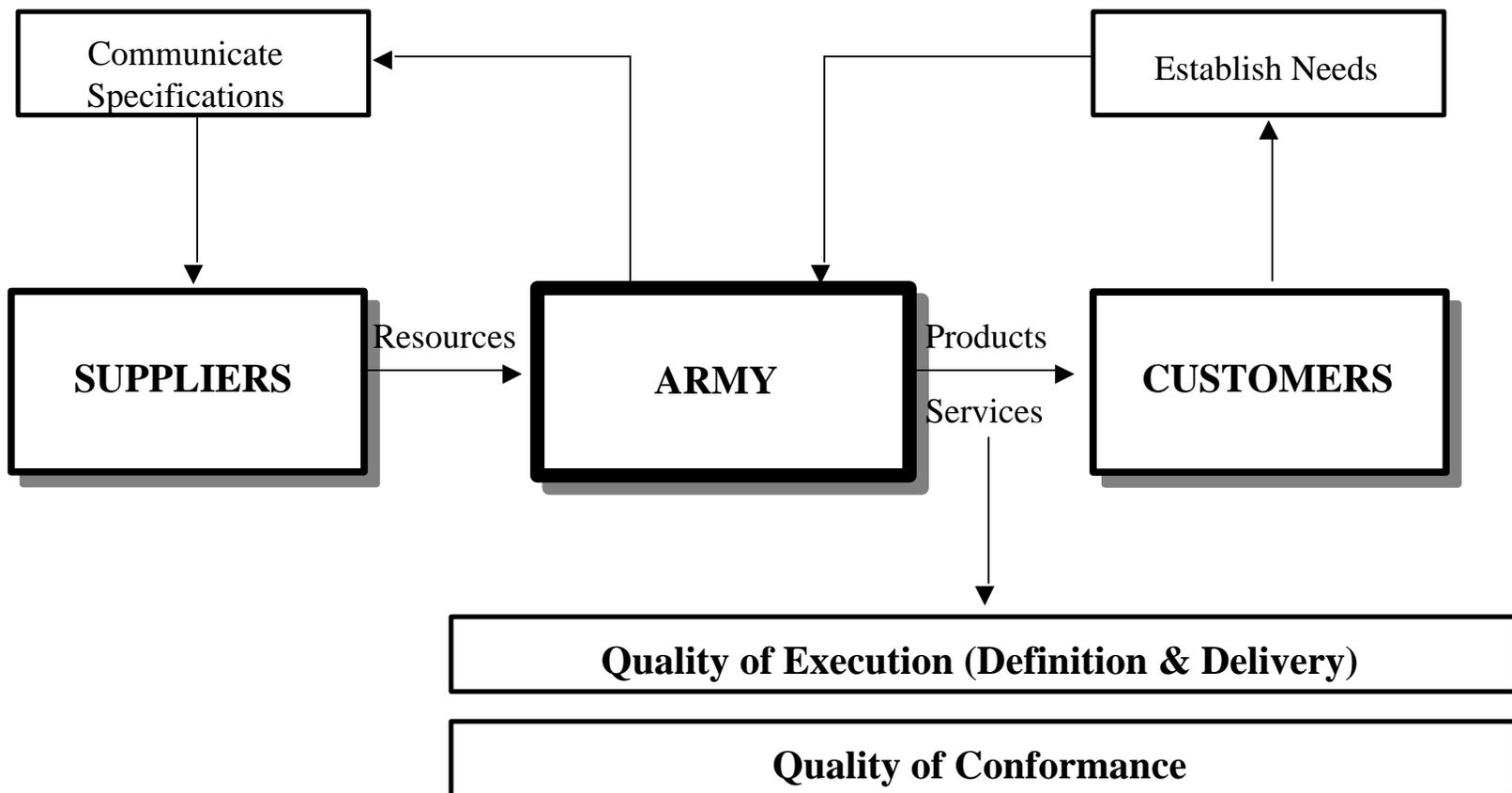


Fragmented Life Cycle of Army Installation Projects





Focus on Products and Services





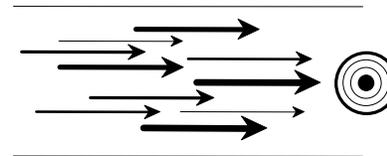
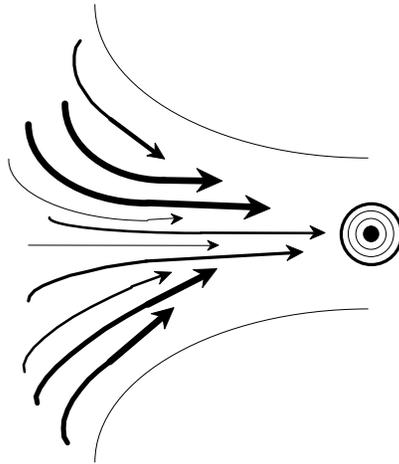
Th Enablers and Paradigm Sh

*How can the Army make sustainability
happen?*

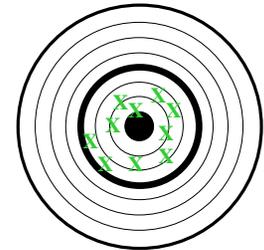


A Common Sustainability Framework and Operational Definition

- Sustainability can be expressed in multiple forms:
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- ... Strategies
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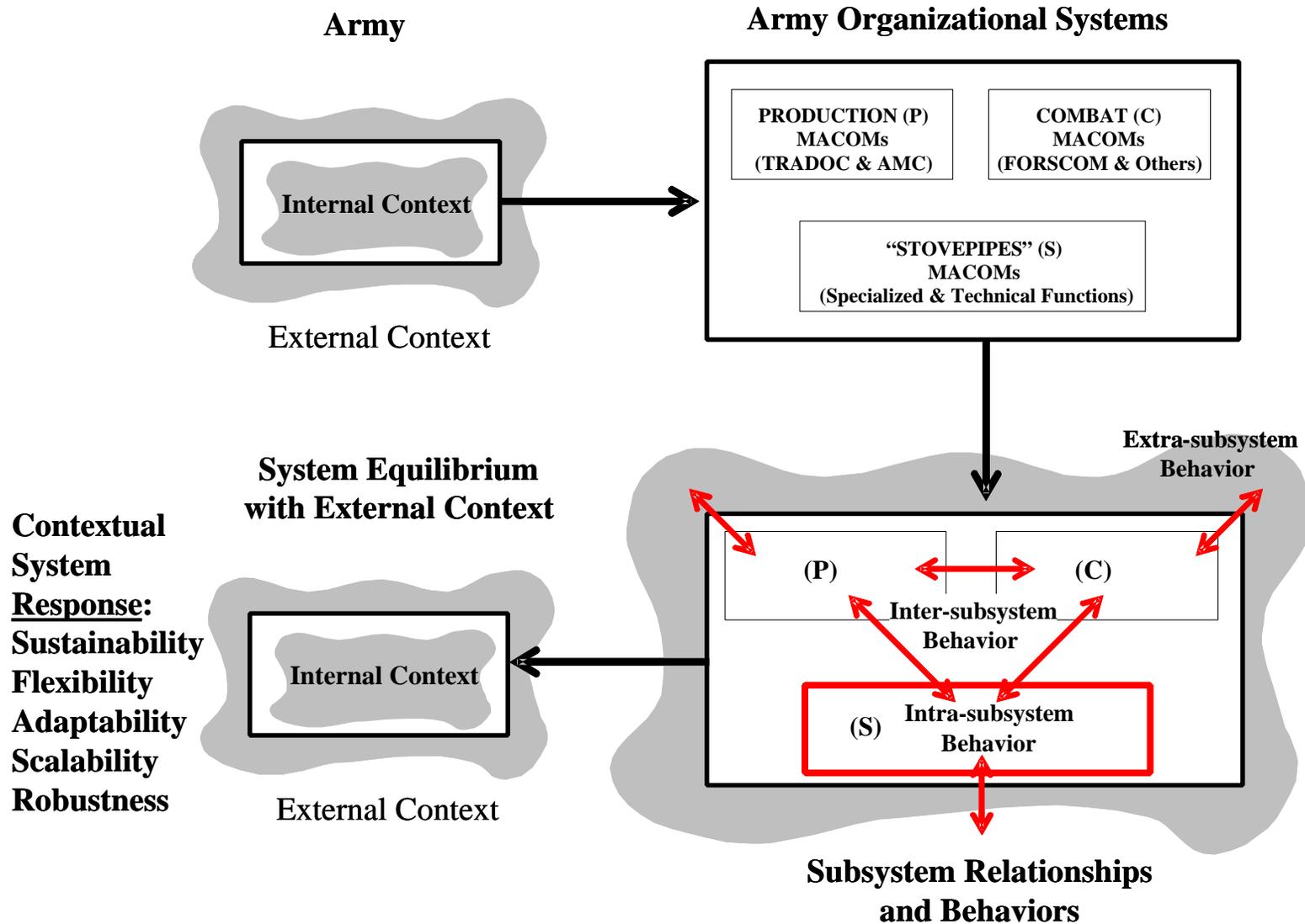
Common Framework



Common Operational Definition



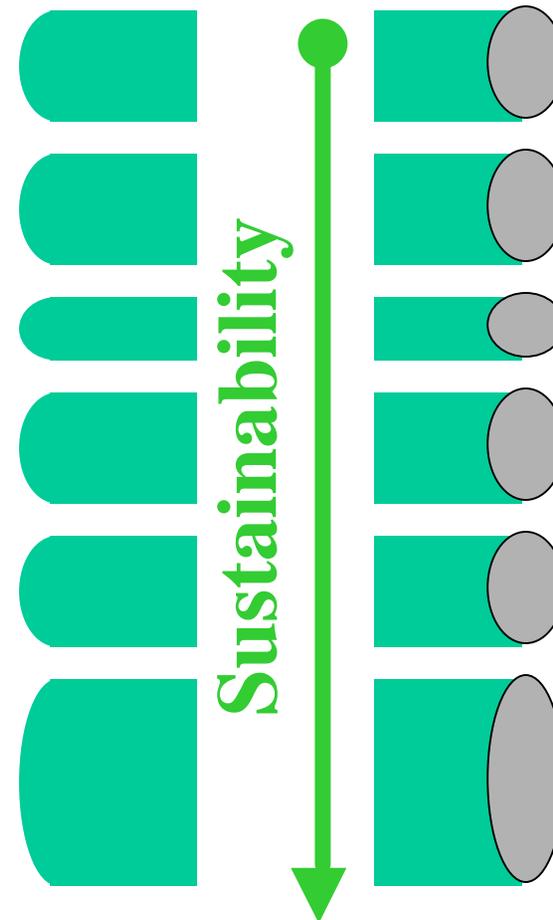
A Systems Perspective of Army Organizational Systems





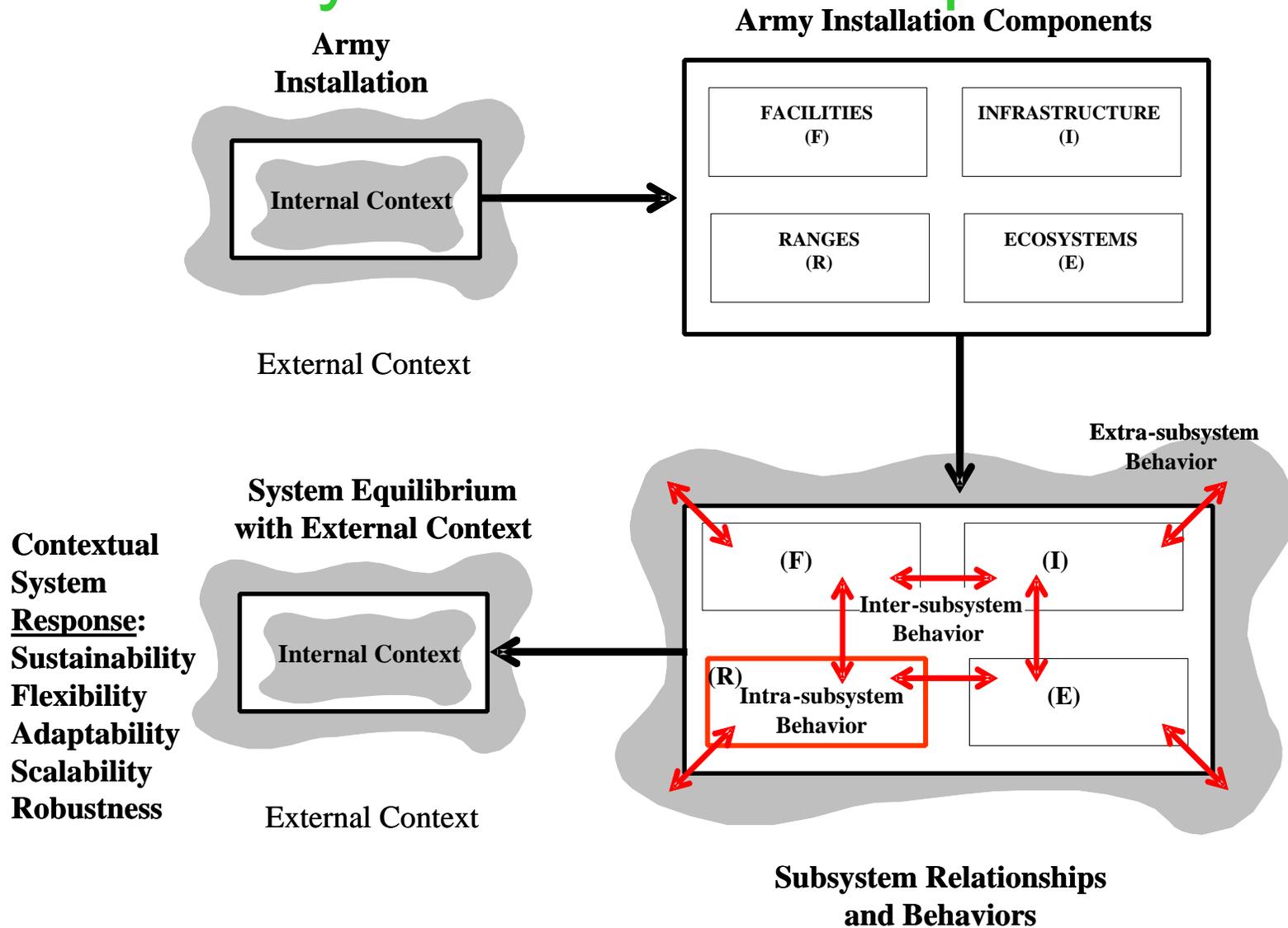
Drilling through the Tunnel Vision

- **Within**
- ... the **National Security Strategy**
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- ... **specific Army Policies, Regulations, and Procedures for Installations**





A Systems Perspective of Army Installation Components



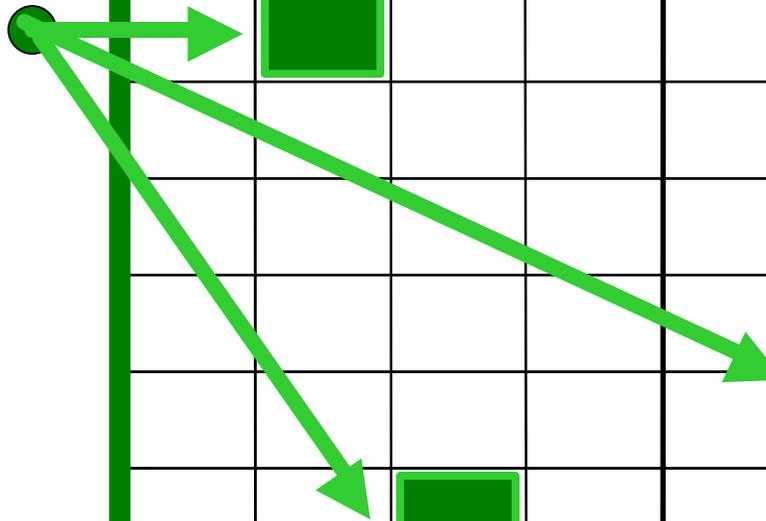


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Integration and Application of Sustainability:

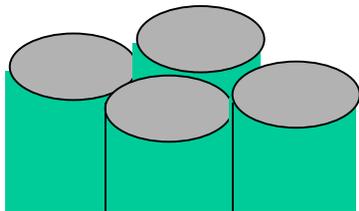
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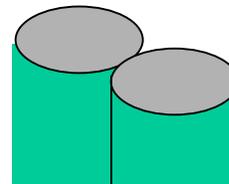


Drilling through the Stovepipes

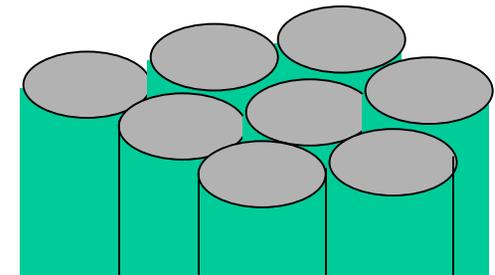
Within **Generic Army
Installation
Components**
(Fence-to-Fence)



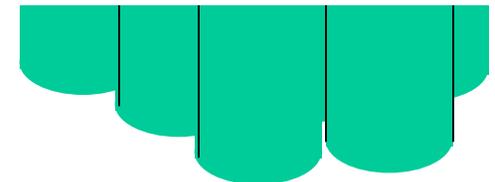
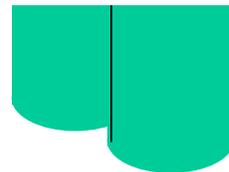
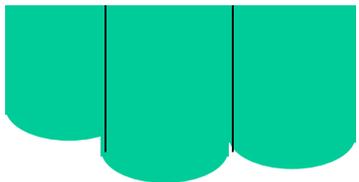
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...and within the **Generic
Types of Projects** in
Army Installations



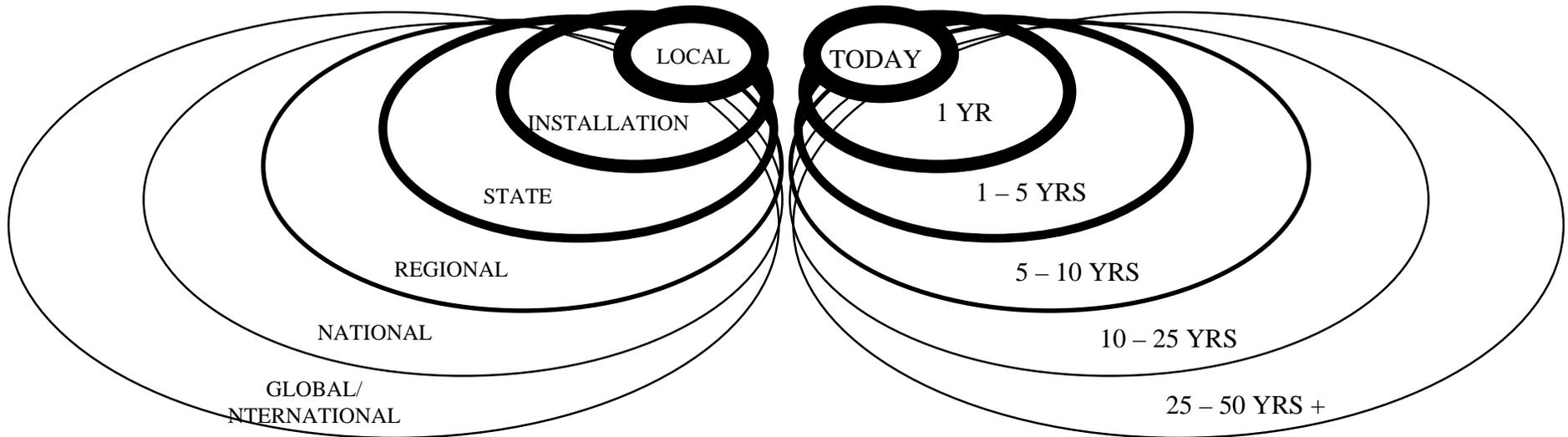
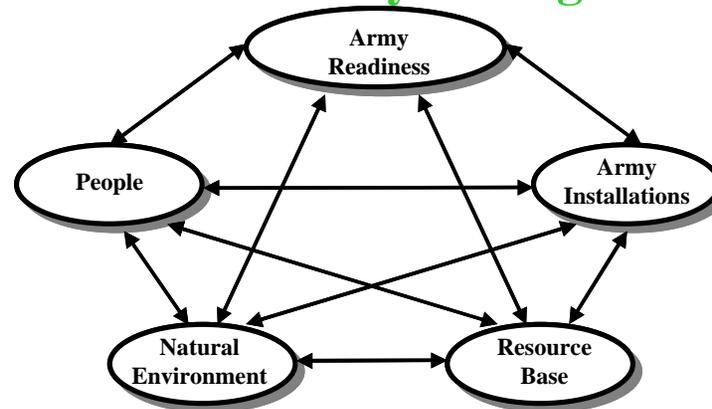
Sustainability





Incorporate Temporal and Spatial Scales

Sustainability Pentagon

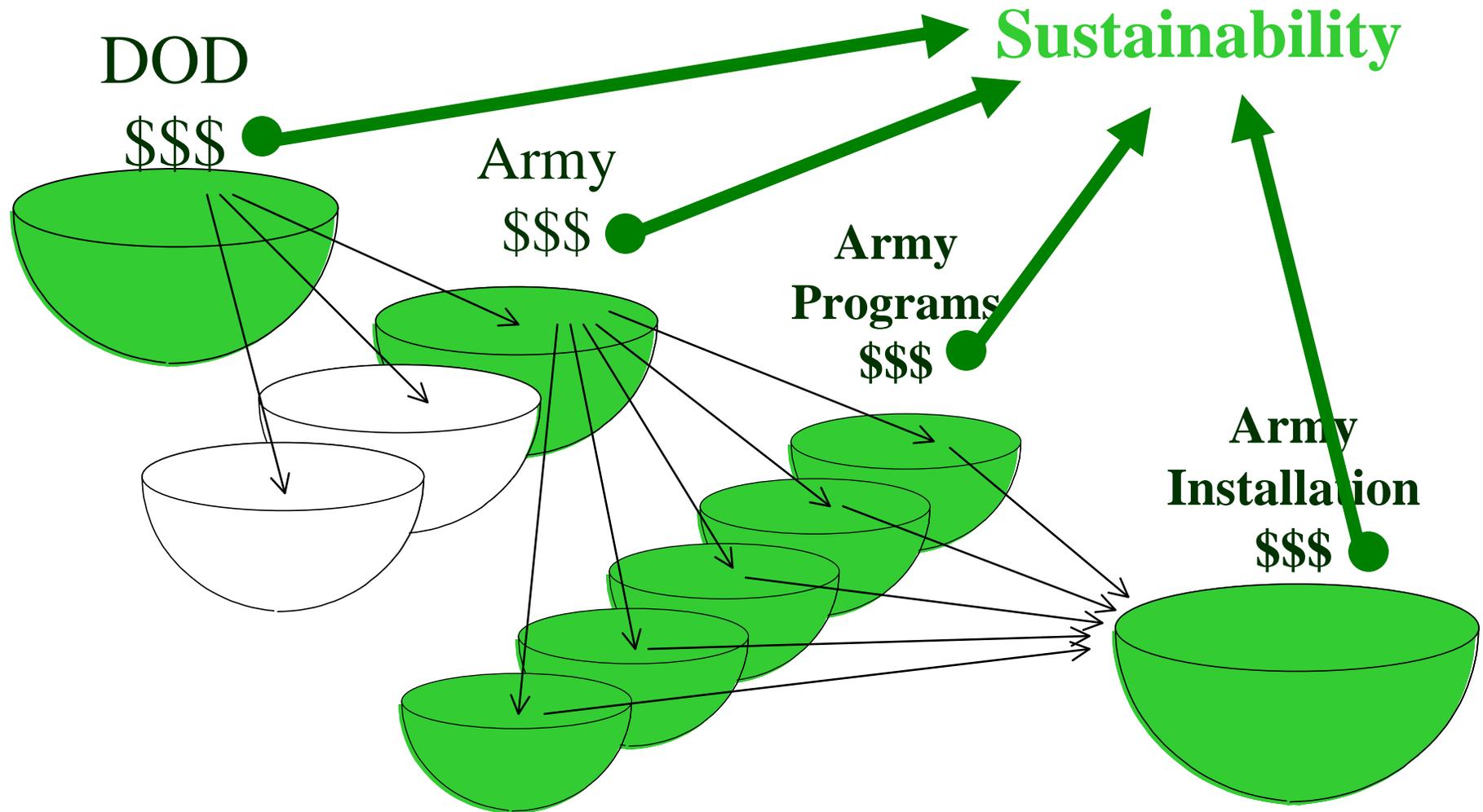


Spatial Scale

Temporal Scale

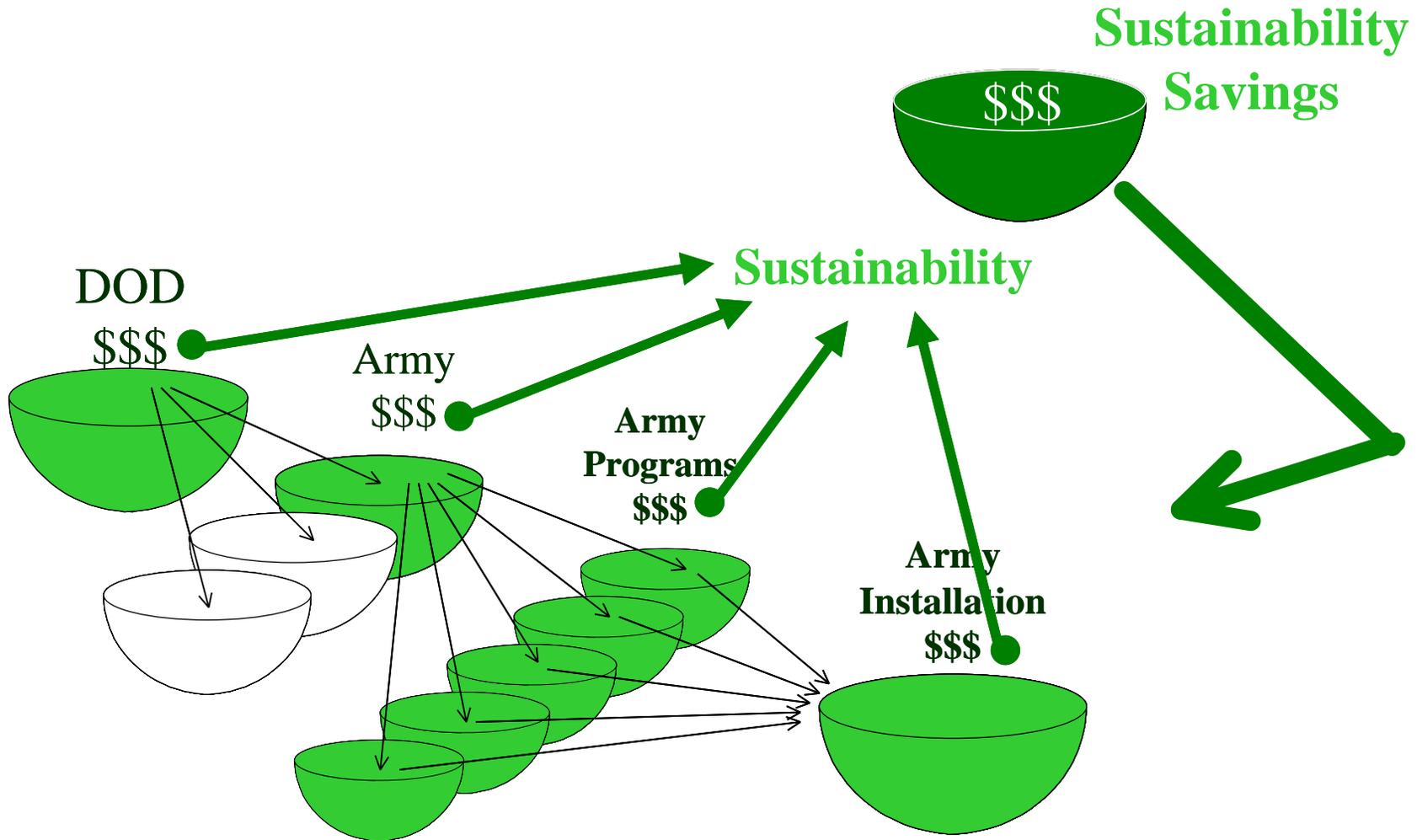


Sustainability Funding without Rice Bowls





Sustainability Savings Return



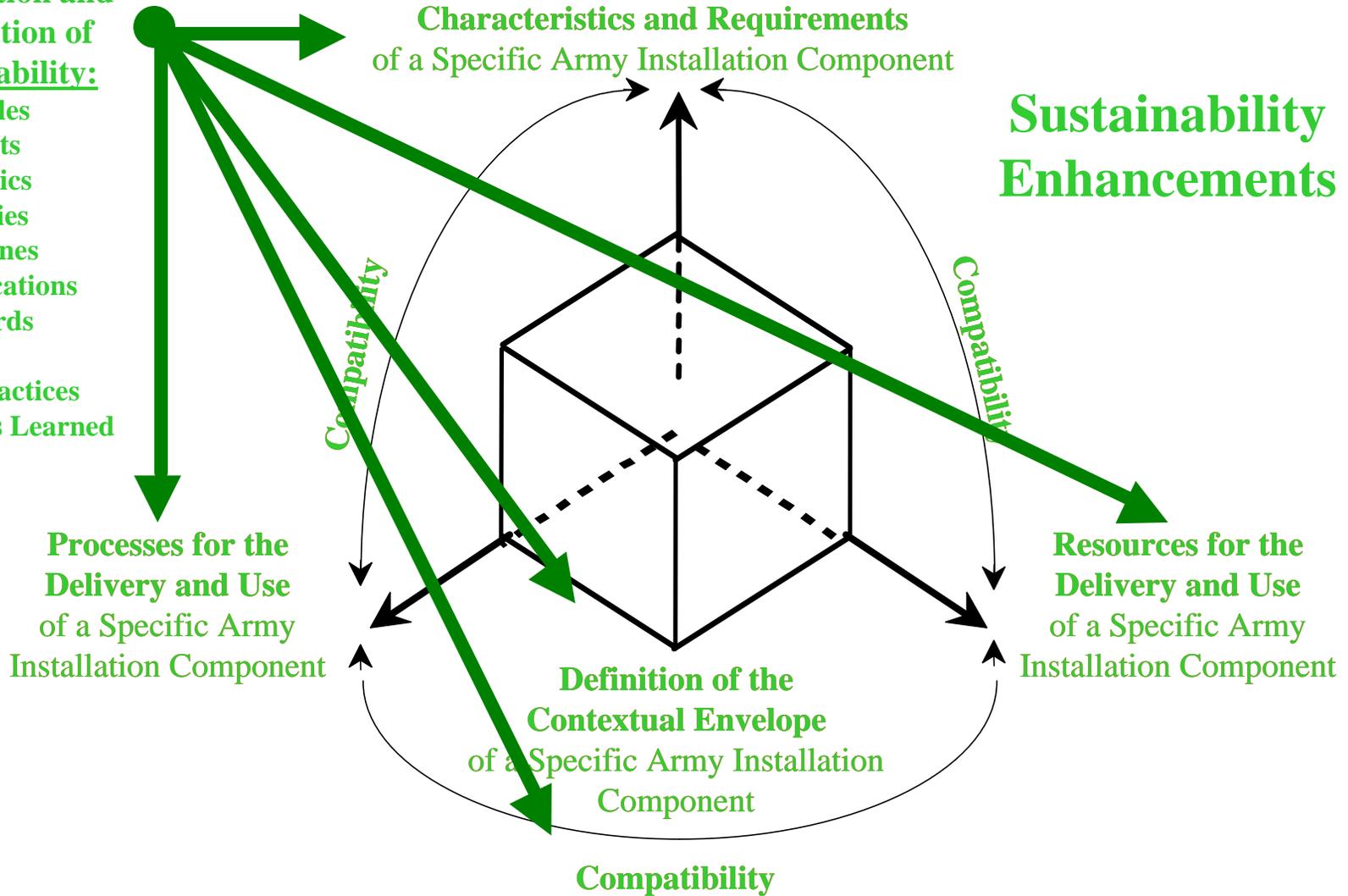


Enh

of the Status Quo

Integration and Application of Sustainability:

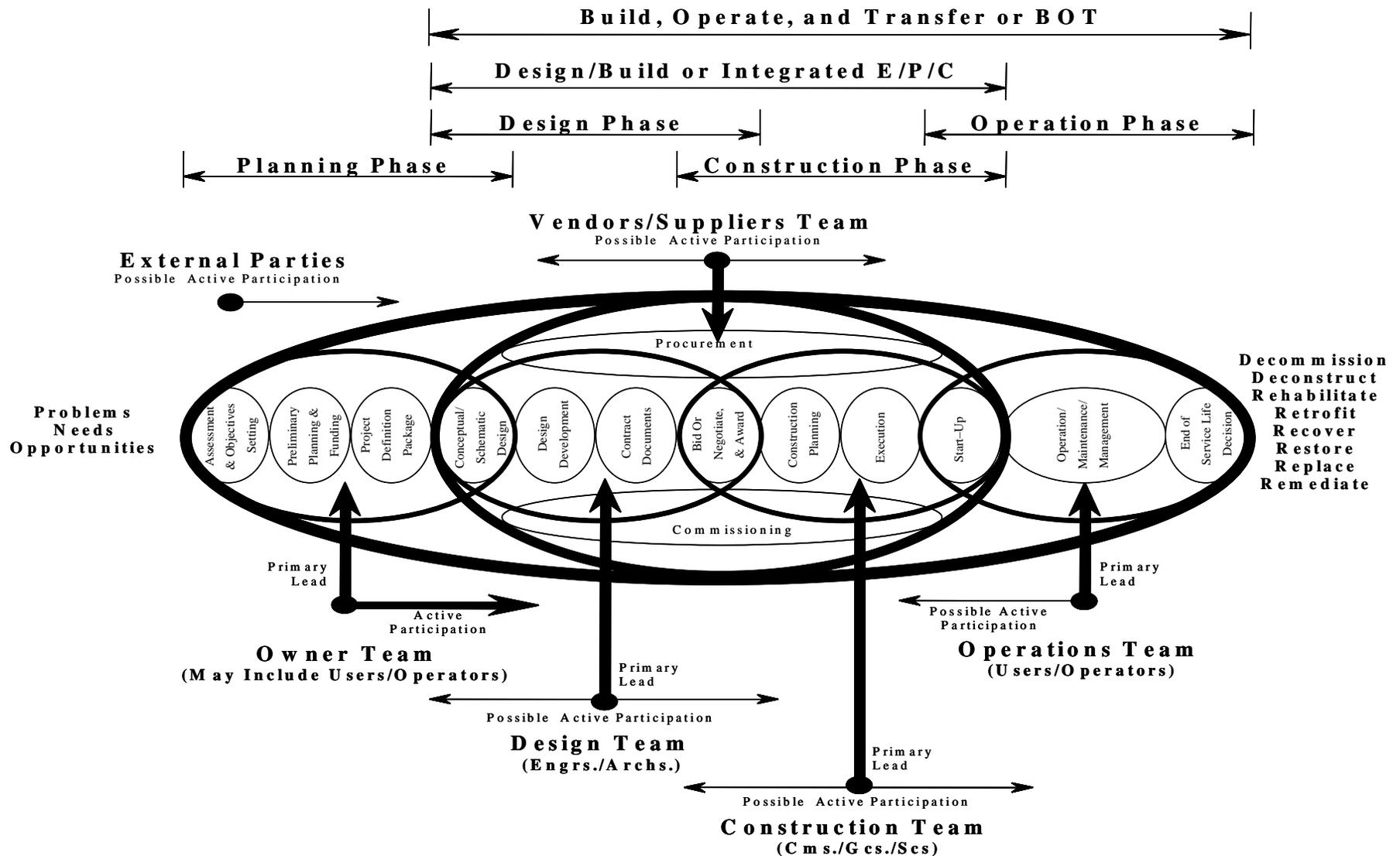
- Principles
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Sustainability Enhancements



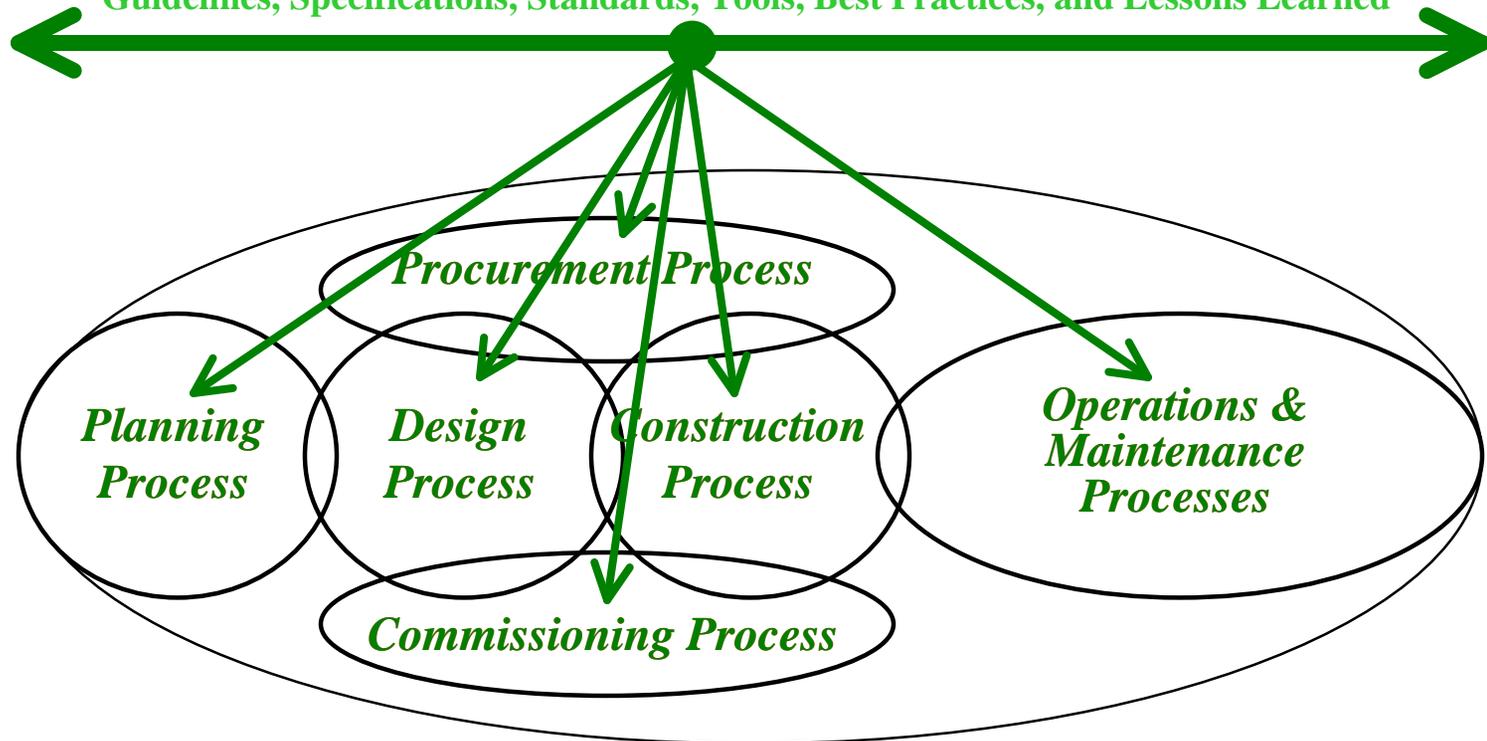
Integrate th of Army Installation Projects





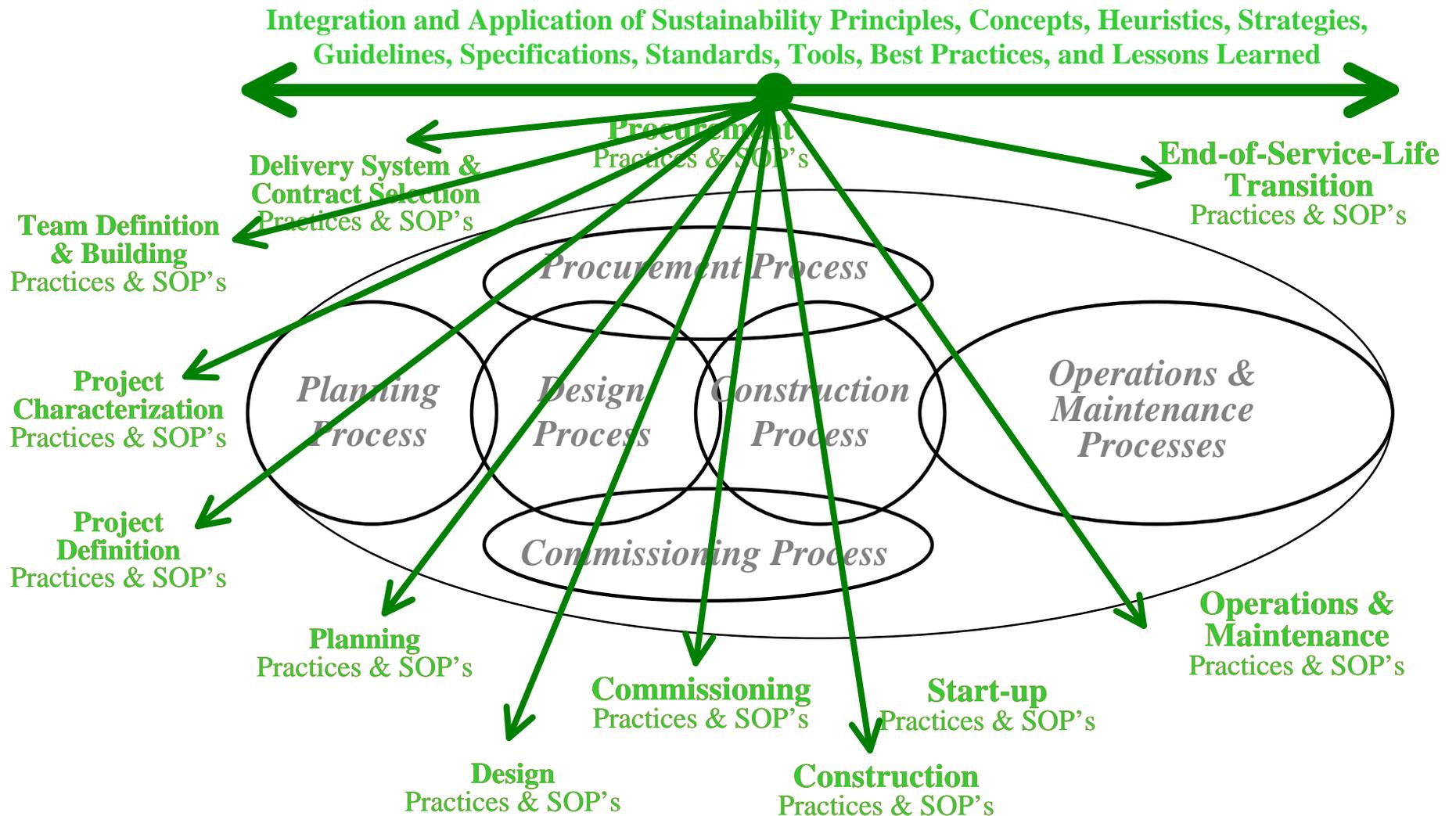
Integrate Sustainability at a Project Processes Level

Integration and Application of Sustainability Principles, Concepts, Heuristics, Strategies, Guidelines, Specifications, Standards, Tools, Best Practices, and Lessons Learned



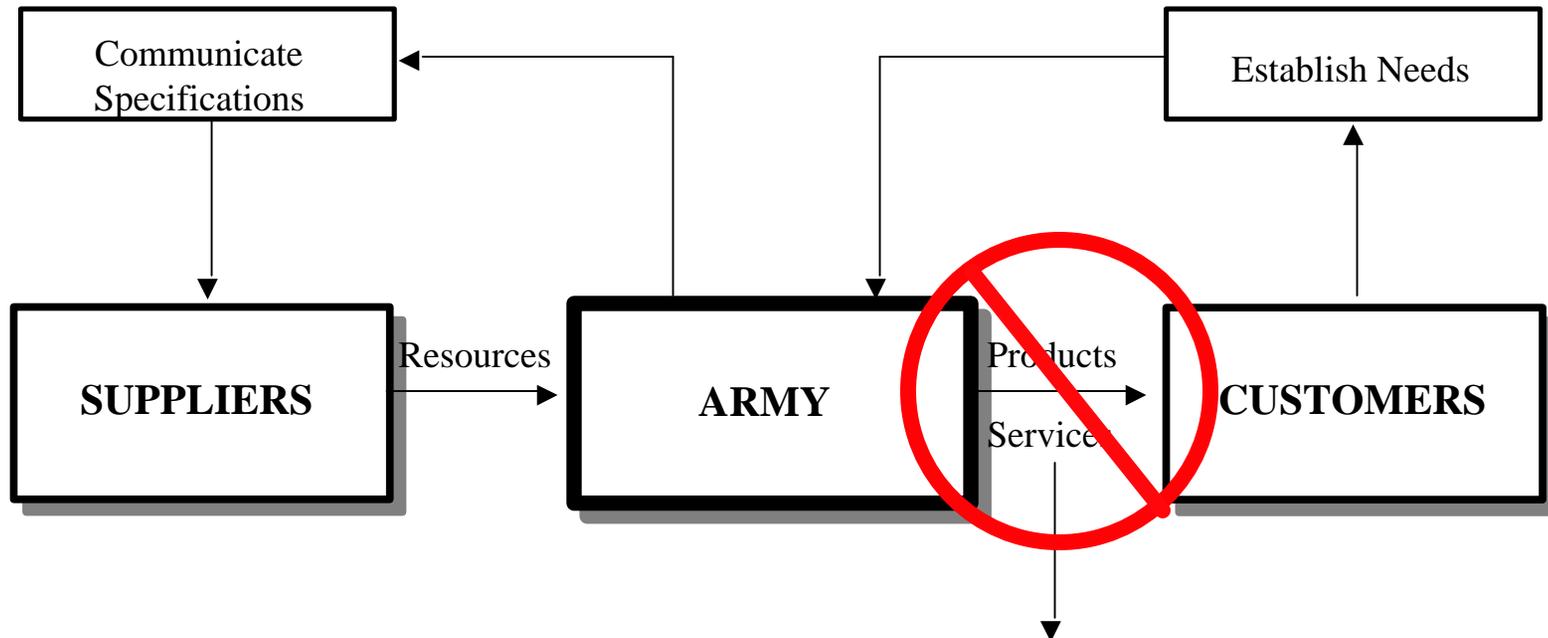


Integrate Sustainability at a Project Practices and SOP's Level





Focus on Long Term Solutions



**BETTER LONG TERM SOLUTIONS
(NOT JUST PRODUCTS AND SERVICES)
ARE WHAT IS NEEDED !**

Quality of Performance

Quality of Redesign/Improvement



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