



Harnessing Advanced Technology for C4ISTAR

A Conceptual Model for Developing C4ISTAR Solutions

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Capability Manager for Information Superiority

MOD Equipment Capability Customer

Report Documentation Page

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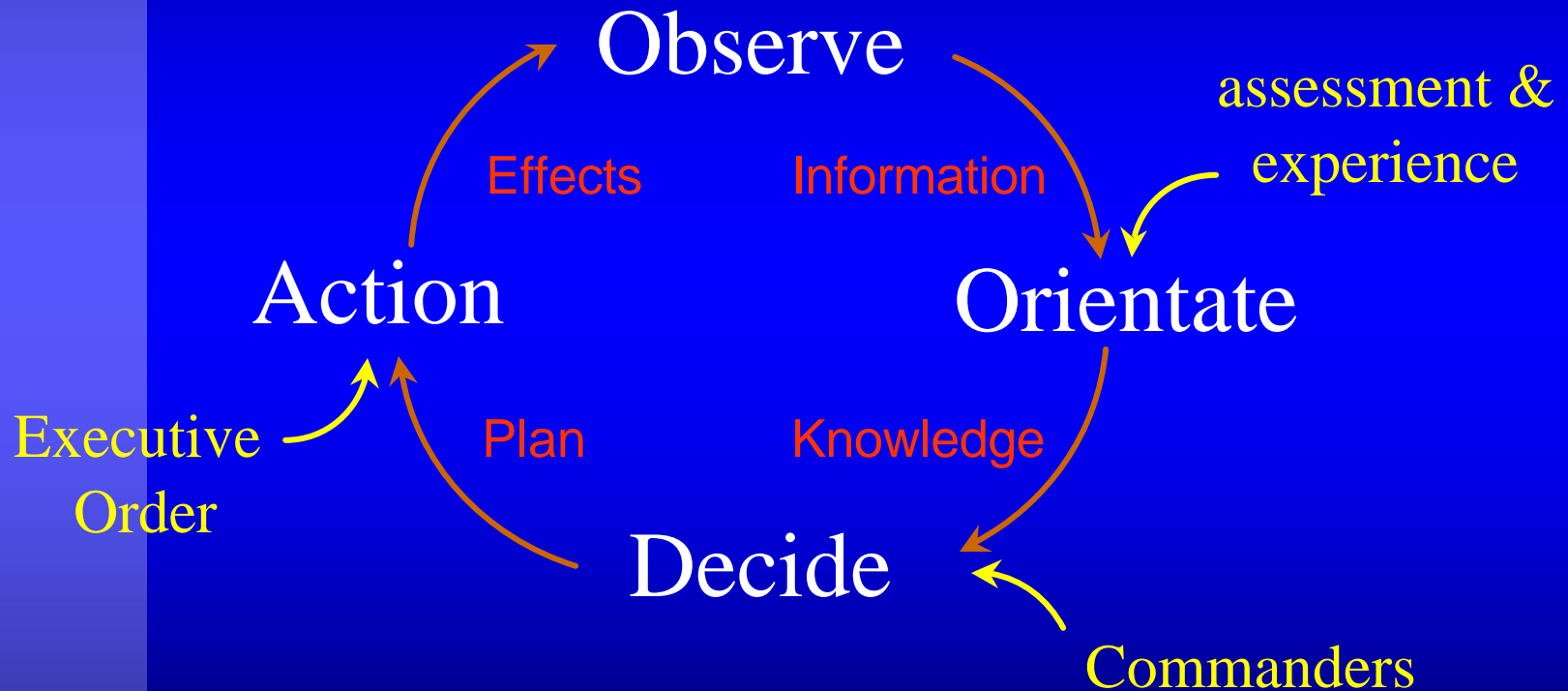
Information Superiority

“ the ability to collect, process, and disseminate an uninterrupted flow of information while exploiting or denying an adversary’s ability to do the same”

“the *right appreciation of information* by decision makers, supporting effective dialogue and mutual comprehension, and enabling commanders at all levels to reach *better decisions*”



Information, Knowledge and Decision Superiority





Information Superiority

- ❑ a fundamental military capability, not a technology
- ❑ it is both relative and transitory
- ❑ relies upon people, training, doctrine as well as equipment
- ❑ enabling *people* to make better decisions in complex and uncertain situations



The role of C4ISTAR

- ❑ Network Enabling Capability
- ❑ Must add value to the process of making *better decisions* about the required effects
- ❑ Effectiveness is measured by its contribution to Military Capability

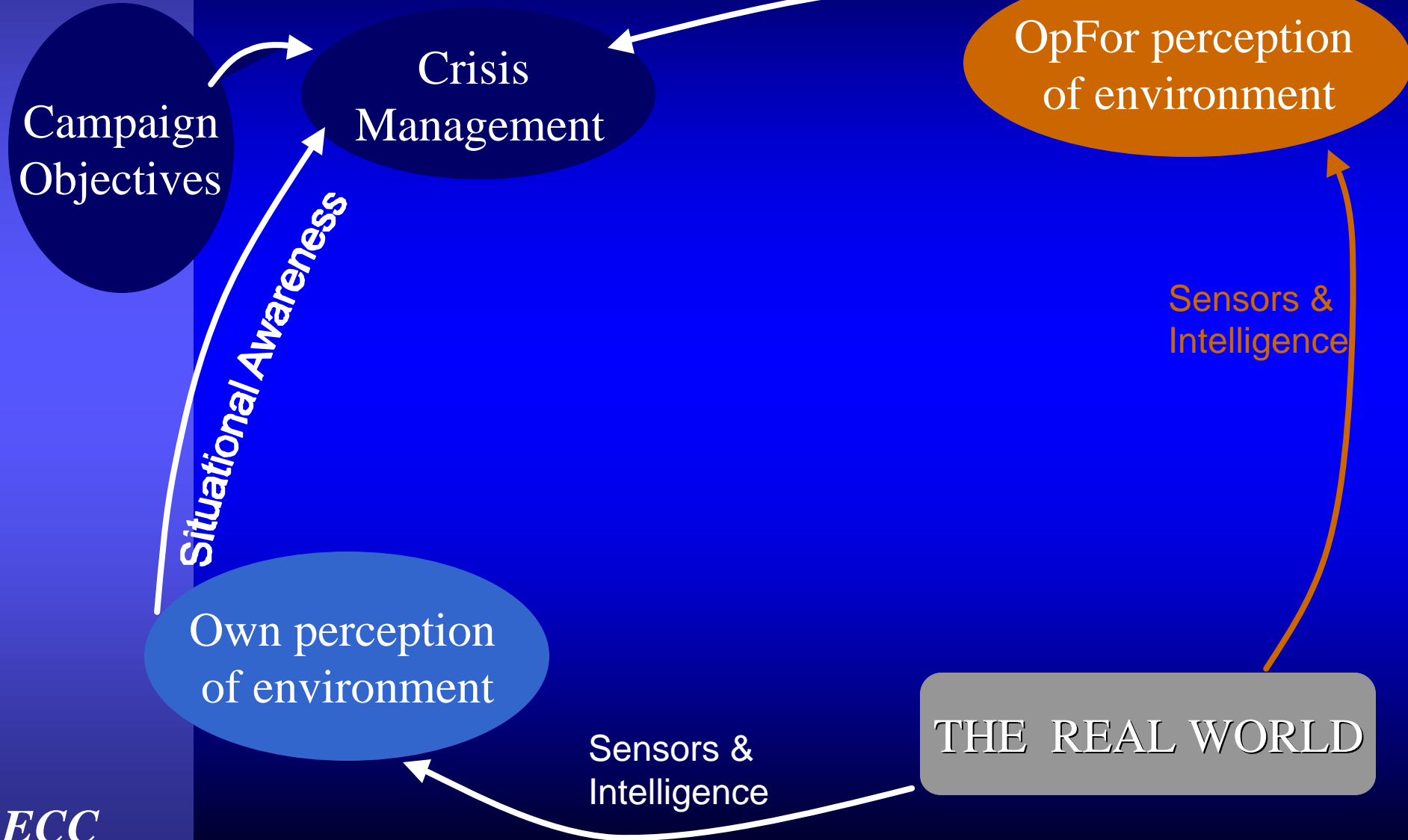


Dimension of the Framework

- The 6 Lines of Development:
 - Doctrine and Concepts
 - Structures and Processes
 - Equipment Capability
 - Personnel
 - Collective Training
 - Sustainment

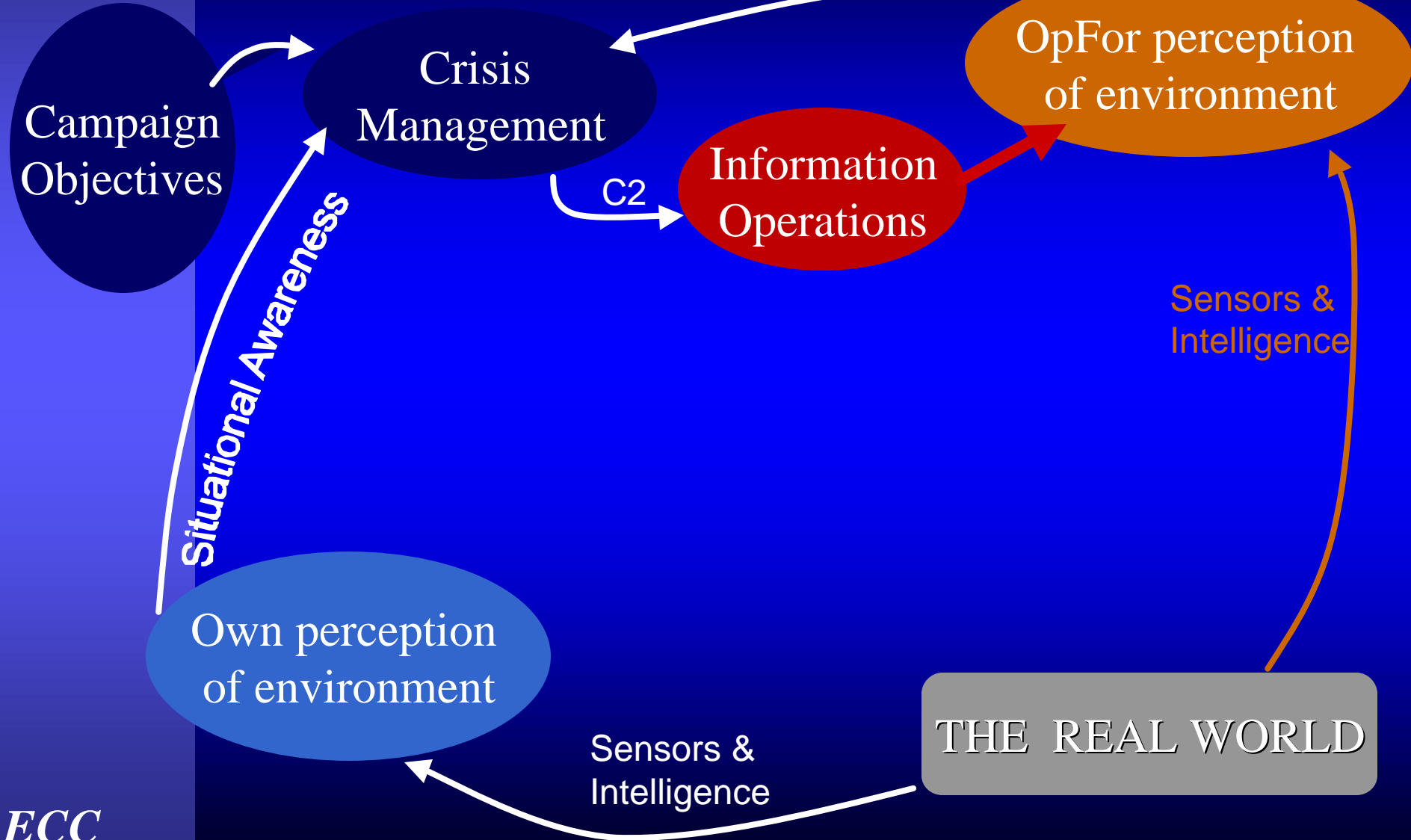


Decision Environment



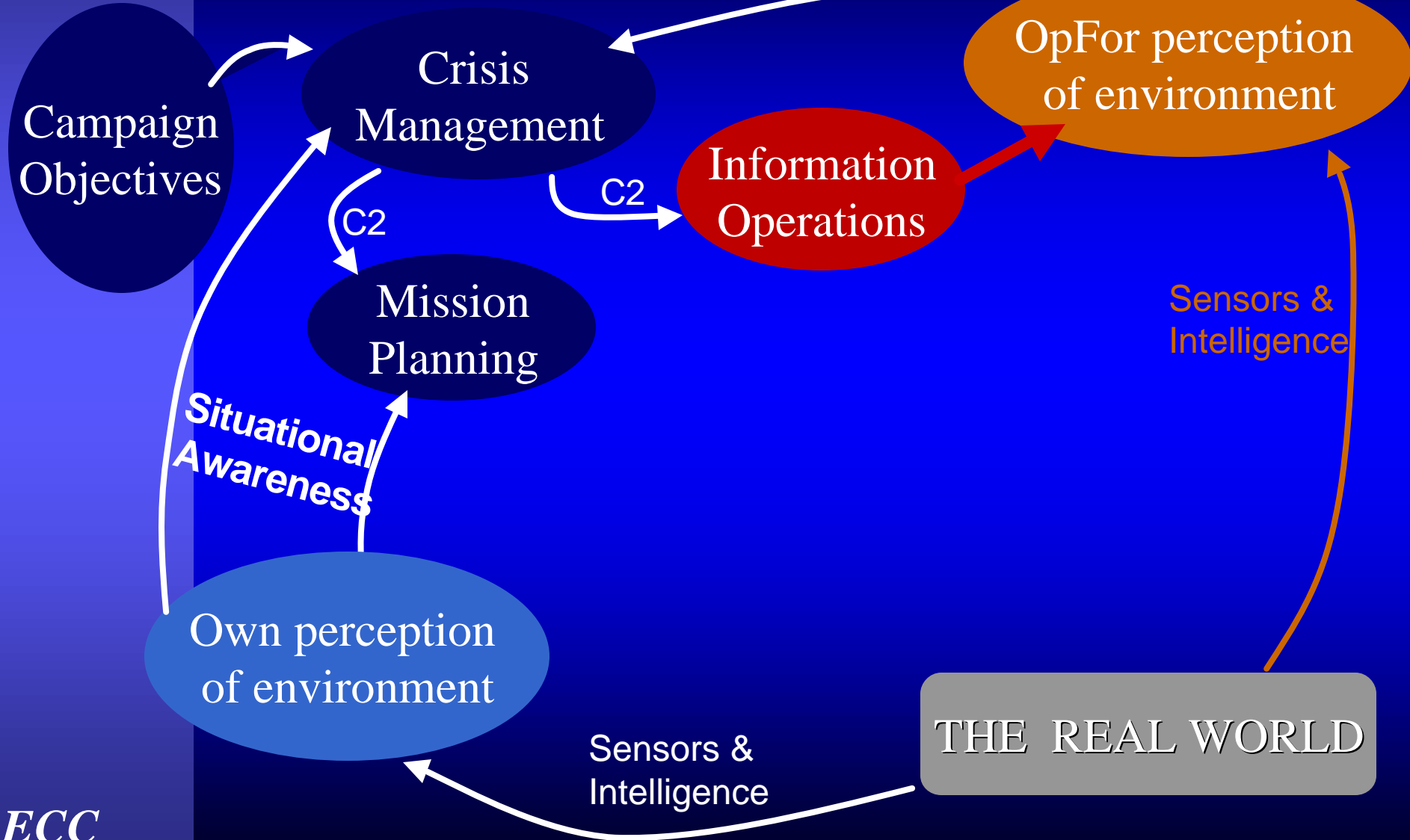


Decision Environment



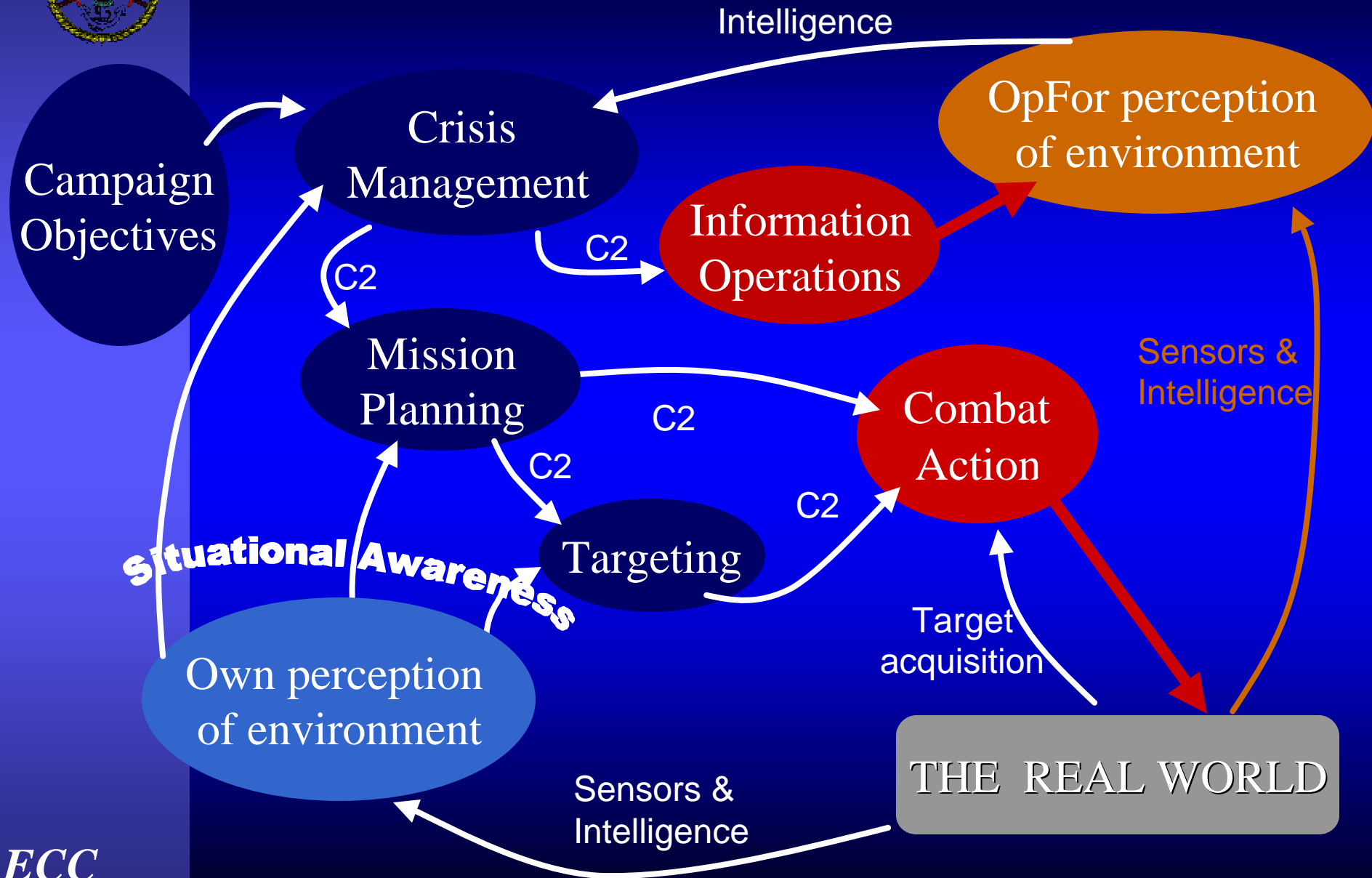


Decision Environment





Decision Environment





Delivering Required Effects

Delivering Required Campaign Effects





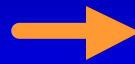
Enabler: Decision Superiority

Find:

- Capability
- Centres of Gravity
- Intentions

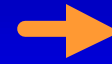


Common
JOP



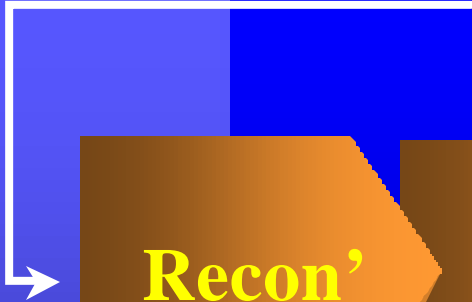
Right:

- Info
- Time
- Place
- Form



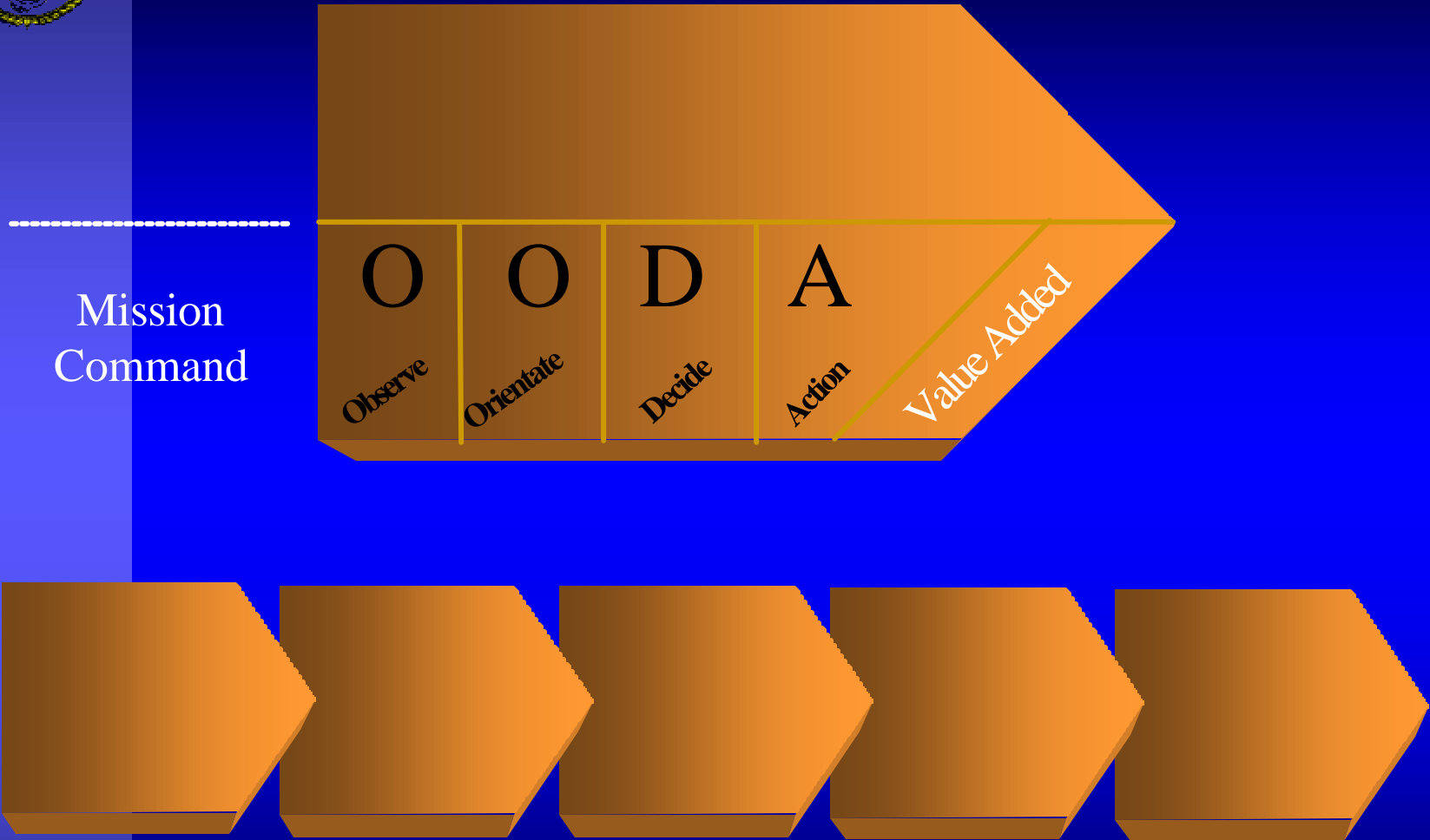
Increased Lethality
Increased Survivability
Increased Tempo

Delivering Required
Campaign Effects





The Information Value Chain





The Information Value Chain

*Lines of
Development*

Doctrine and Concepts;
Structures and Processes;
Equipment Capability;
Personnel; Training; Sustainment

Value Added

Mission
Command

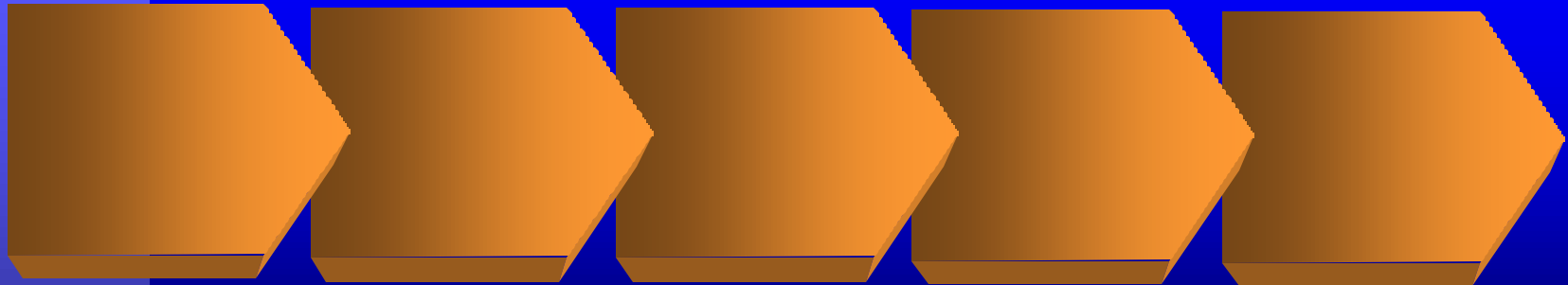
O
Observe

O
Orientate

D
Decide

A
Action

Value Added





The Information Value Chain

Lines of Development

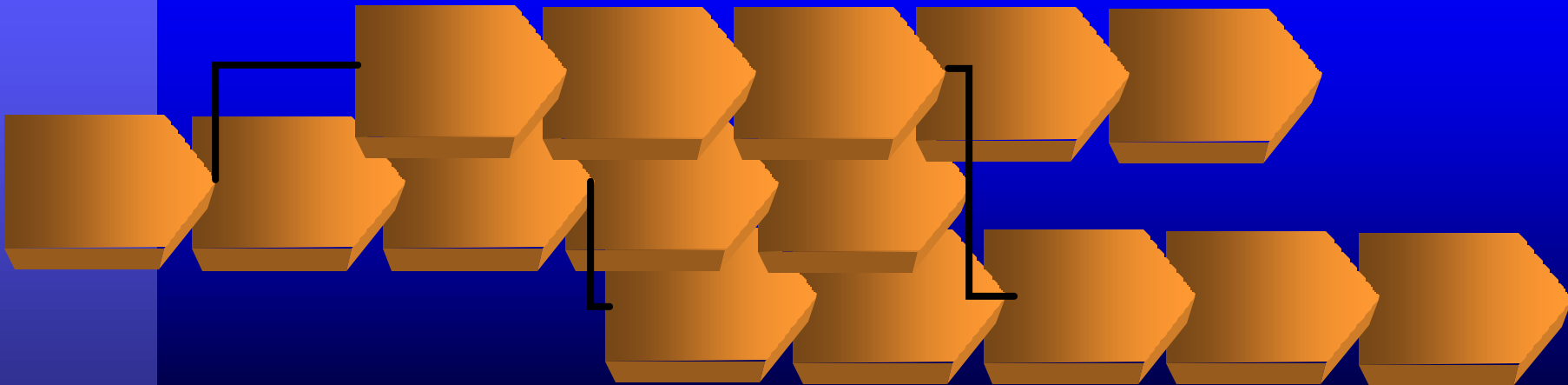
Doctrine and Concepts;
Structures and Processes;
Equipment Capability;
Personnel; Training; Sustainment

Value Added

Mission Command

O	O	D	A
Observe	Oriente	Decide	Action

Value Added



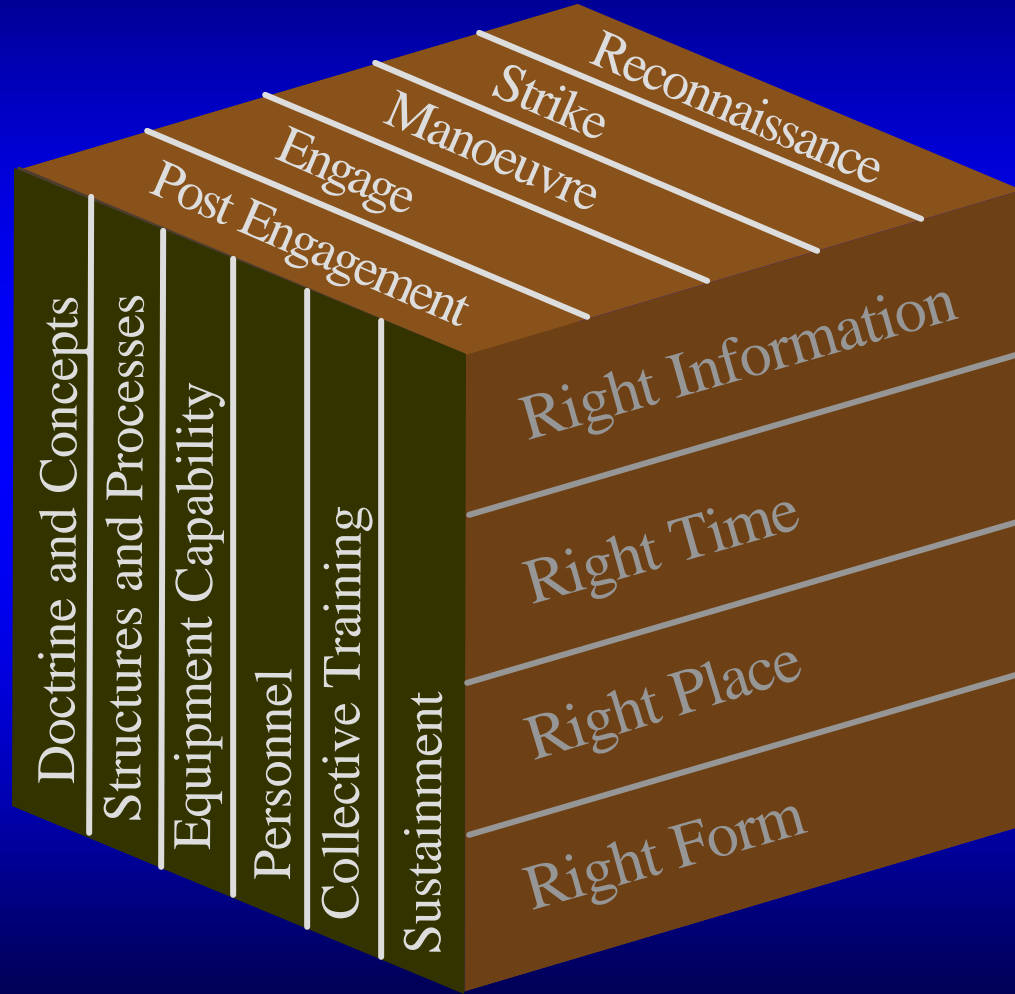


In Conclusion

- The framework for C4ISTAR solutions must:
 - span all Lines of Development
 - identify where information adds the *most* value in the process of delivering the required effect
 - aid Balance of Investment decisions based on the Value of Information
 - contribute to Decision Superiority through the coordinated development of Organisation, Doctrine and Equipment Capability



Decision Superiority



Information Superiority - The Decisive Factor