

10th ICCRTS: New Policy Developing Edge Organization Premised in Governance



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Application of Agency Theory to Transform Government Business Enterprise Governance

Applicable to large joint acquisition ACAT programs

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- **No Formal Policy Articulates Creation of The Edge Organization**
- **Hierarchies Persists in Institutional Processes**
 - **No Alternative Methodology**
 - **Blunting effectiveness & efficiency while stifling innovation**

Enact Governance Policy for Joint Acquisition:

Create Agile Edge Organization

Need for Agile Edge Organization Governance Arises from Issue of Limited Liability



- **All Liability in Major Defense Acquisition Resides with:**
 - Joint Warfighters (potent)
 - Taxpayers (diluted)
 - Agents (traditional)
 - ❖ Contractors
 - ❖ Other Performers
- **Near-zero Liability to Principals/Governors**
 - Sanctions virtually non-existent except for:
 - ❖ Criminal situations
 - ❖ Major ethics violations
- **Shift Liability to Principals/Governors:**
 - Accountable Self-Monitoring Edge Organization
 - Decisive Incentive Policy
 - ❖ Sanctioning
 - ❖ Long-term reward (strategic)

Behavioral Issues Impose Agency Costs & Degrade Programs

- **Body of knowledge prescribing a set of tradeoffs for organizing relationship/contracts between: Principals, Agents, and Stakeholders**
- **Objective: Minimize agency & governance costs while protecting the interests of the primary stakeholders (warfighter)**
- **Principal determines the work that the agent undertakes:**
 - In the face of maligned goals & imperfect (non-rational) behaviors
 - ❖ Conflict of Interest
 - ❖ Self-interest
 - ❖ Self-control issues (opportunism)

**Mitigate sunk-cost agents engender
Through a Nexus of Contracts**

Key Precepts: Primordial Errors Leading to Agency Costs



- 1) Moral Hazard – failure of integrity, in attempt to reap reward when acting unfaithfully or not putting forth maximal effort (shirking)**
 - Hidden action
 - Inefficient reward/punishment incentives

- 2) Adverse Selection – failure of agent to accurately represent ability to perform required duties**
 - Hidden information
 - Deficient Discipline – poor manager faces too low a probability in being fired, undermines monitoring
 - Distorted Discipline – good manager faces too high a probability of being fired, maximize short-term at detriment of long-term

**Behavioral issues derive from incentive structure,
more than “bad” agents**

Countervailing Agency Theory is Stewardship Theory



- **Based upon self-actualization:**
 - Need to achieve
 - Intrinsic satisfaction from performing challenging work
 - Exercise in responsibility and authority
 - Gain of Recognition (Imperative Program)
- **Critical switching factor postulated to be whether the fundamental organization is secured or jeopardized**

Robust Governance Considers Both Stewardship and Agency Theories

Non-Rational Behavioral Factors Lead to Program De-Escalation

- **Escalating commitment to a failing course of action***
 - Throwing good money after bad
- **Sunk cost effect***
 - Having too much invested to stop now
- **Completion effect***
 - Strong pull of assumed proximity to a goal
- **Groupthink***
 - Collective false belief that systematically reinforces the up-side, or problem solving routines that do not address root causes
- **Cognitive bias and alignment among stakeholders***
- **Micromanagement**
 - Default position of managing everything w/o regard to relevancy or priority

Subtle non-rational behaviors can systematically de-escalate the program

Program De-Escalation Phases*

- **Phase I**
 - Drift, confusion, lack of consensus
 - Lack of shared understanding in objectives and scope
- **Phase II**
 - Difficulties universally perceived
 - Incremental adaptation
 - Small reactive measures on symptoms
 - Periods of rationalization, justification and defense
- **Phase III**
 - True problem recognition
 - Search for alternatives
 - Exit strategy

Dwindling support leading to precipitous redirection or termination/abandonment

Role of Governance & Management as a Solution



Organizing

Planning

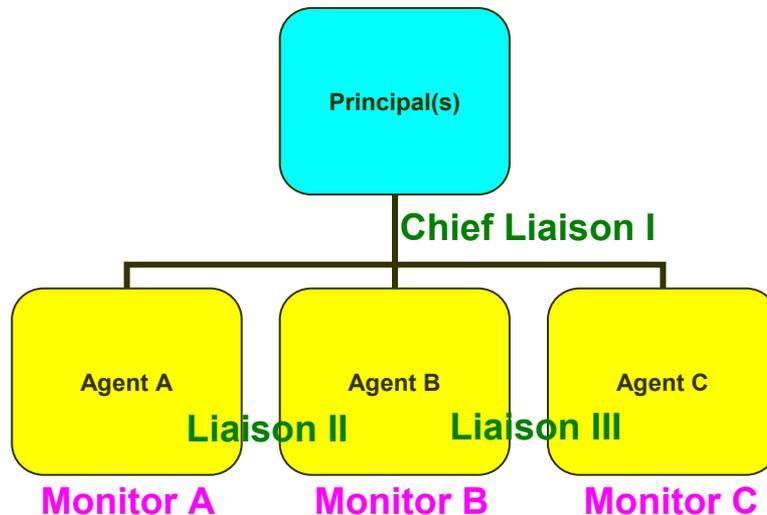
Monitoring

Governance

Controlling

**Agency Cost Mitigation Through
Monitor & Control (core)**

Governing Cost of the Hierarchical Organization



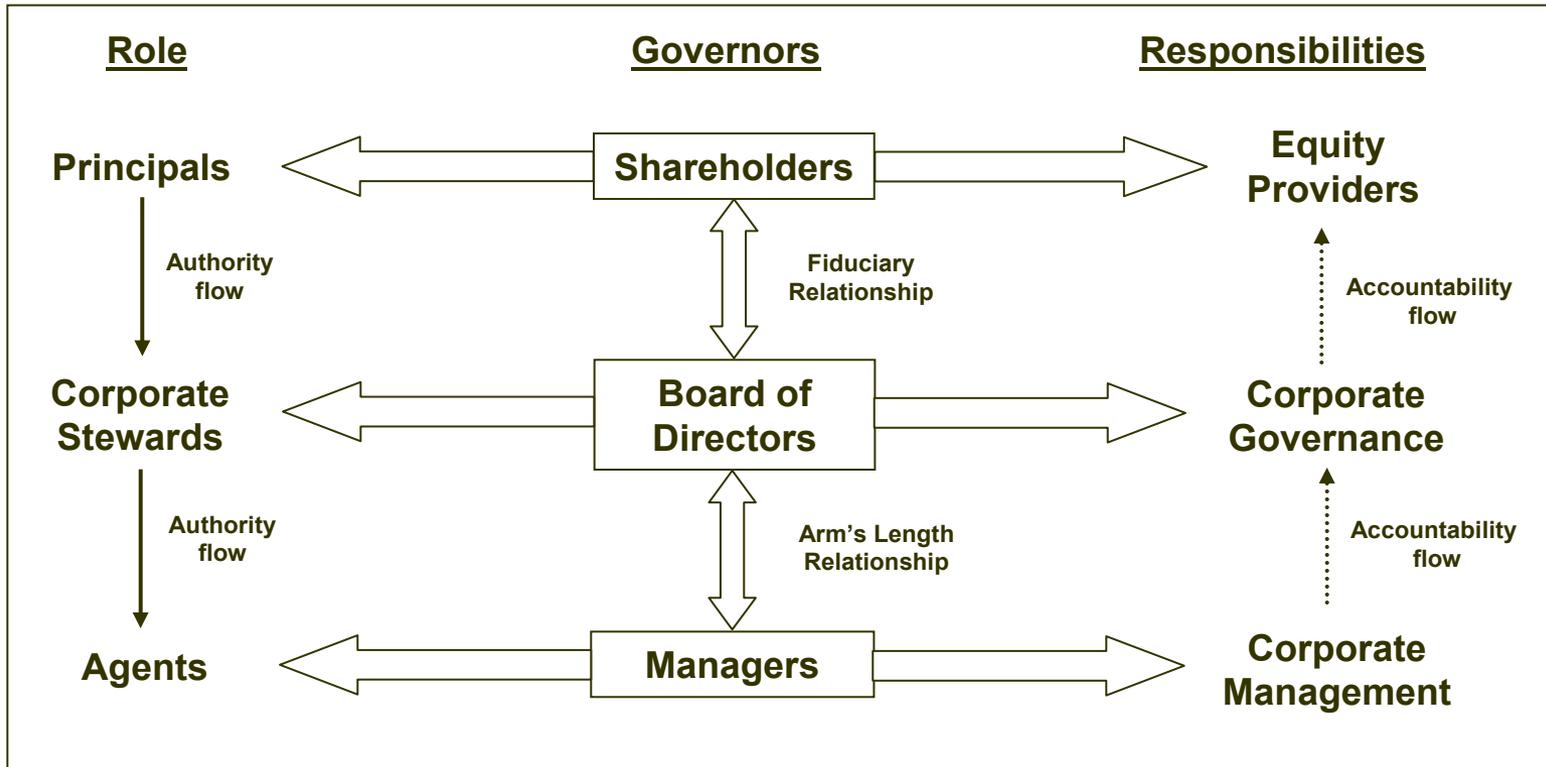
Embedded:

- Authority
- Responsibility
- Results & Outcome
- Accountability

$$\text{Governance Cost} = \sum_i \text{Monitor}(i) + \sum_j \text{Liaison}(j)$$

Governance in Agent Domain is Inefficient

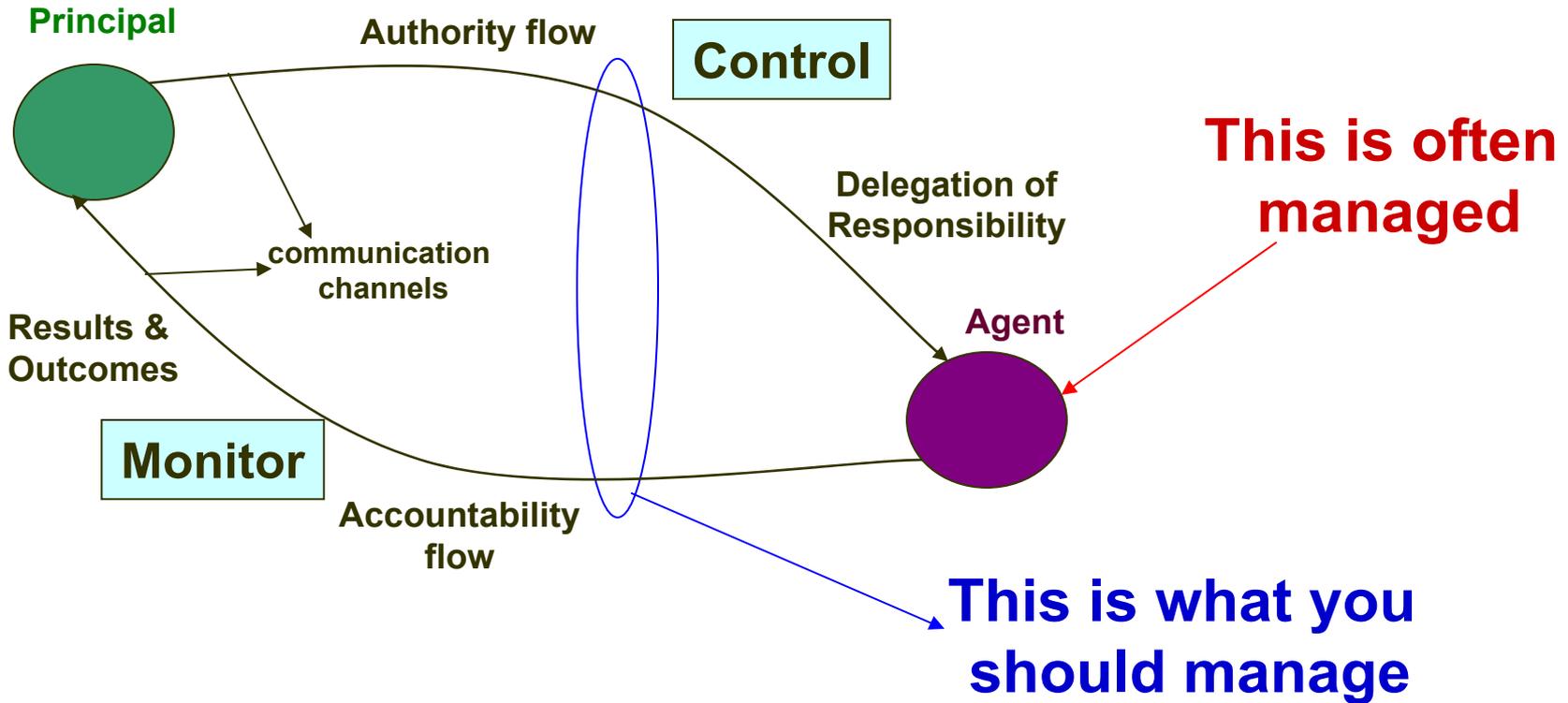
Corporate Governance Based on Theory of Agents



Source: Karim S. Rebiez, "Strategies for Corporate Governance in Engineering Corporations", *IEEE Transactions on Engineering Management*, Vol. 49, No. 4, pp. 399 November 2002.

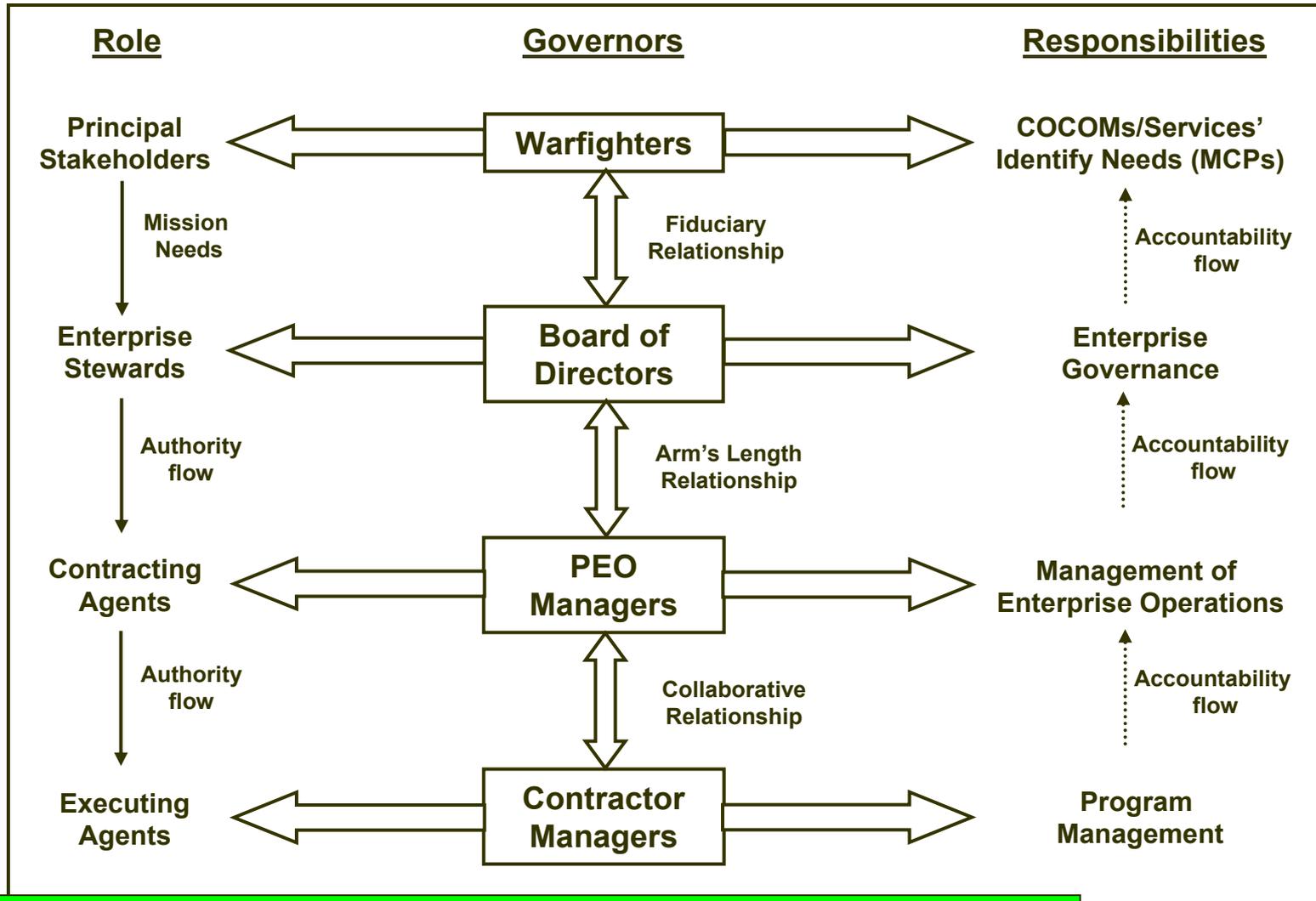
Starting Point Examines Governance of Corporate Setting (Derived from Agency Theory)

Enterprise Architecture Operational View of Governance



Operational View Model of Principal-Agent Contract

Net-Centric Governance Framework For DoD Joint Programs



Checks and Balances: Self Monitoring and Control

Primary Sections Under Corporate Governance

- **Governance Principals** – guidelines and assumptions
- **Board Independence** – definitions of
- **Director Nomination Process** – diversity and ability to stave off adverse selection
- **Code of Ethics and Conflicts of Interest** – adherence to policy and sanctions
- **Lead Director** - duties
- **Communication with the Board** - procedures
- **Stock Ownership Guidelines**
- **Policy on Shareholder Rights Plans**
- **Director Education** – training and encouragement
- **Board and Committee Evaluation Process** – assessment of board performance

These don't
apply for DoD

Eight Sections Applicable to DoD

Governance Responsibilities



- **BoD Responsibilities:**

- Sets Vision, Mission, Scope and Bounds through a strategic planning process
- Reviews & approves: acquisition strategy, and R&D funding based on mgmt recommendations
- Must be perceptive enough to foresee opportunities, and must anticipate threats as they arise
- Act independent of management to extent of exercising loyalty and care directed first and foremost to warfighters, whom are the end users (owners)

- **Management Responsibilities:**

- Monitor, control/direct, plan, and organize operations associated with production and distribution of acquisition system(s)
- Develop & recommend: acquisition strategy and R&D funding needs
- Manage technology transition and spiral development through rigorous systems engineering practices
- Manage contractor activities
- Accountable in fulfilling BoD vision, note: BoD answers to warfighter
- Report financial performance and budgeting recommendations to BoD

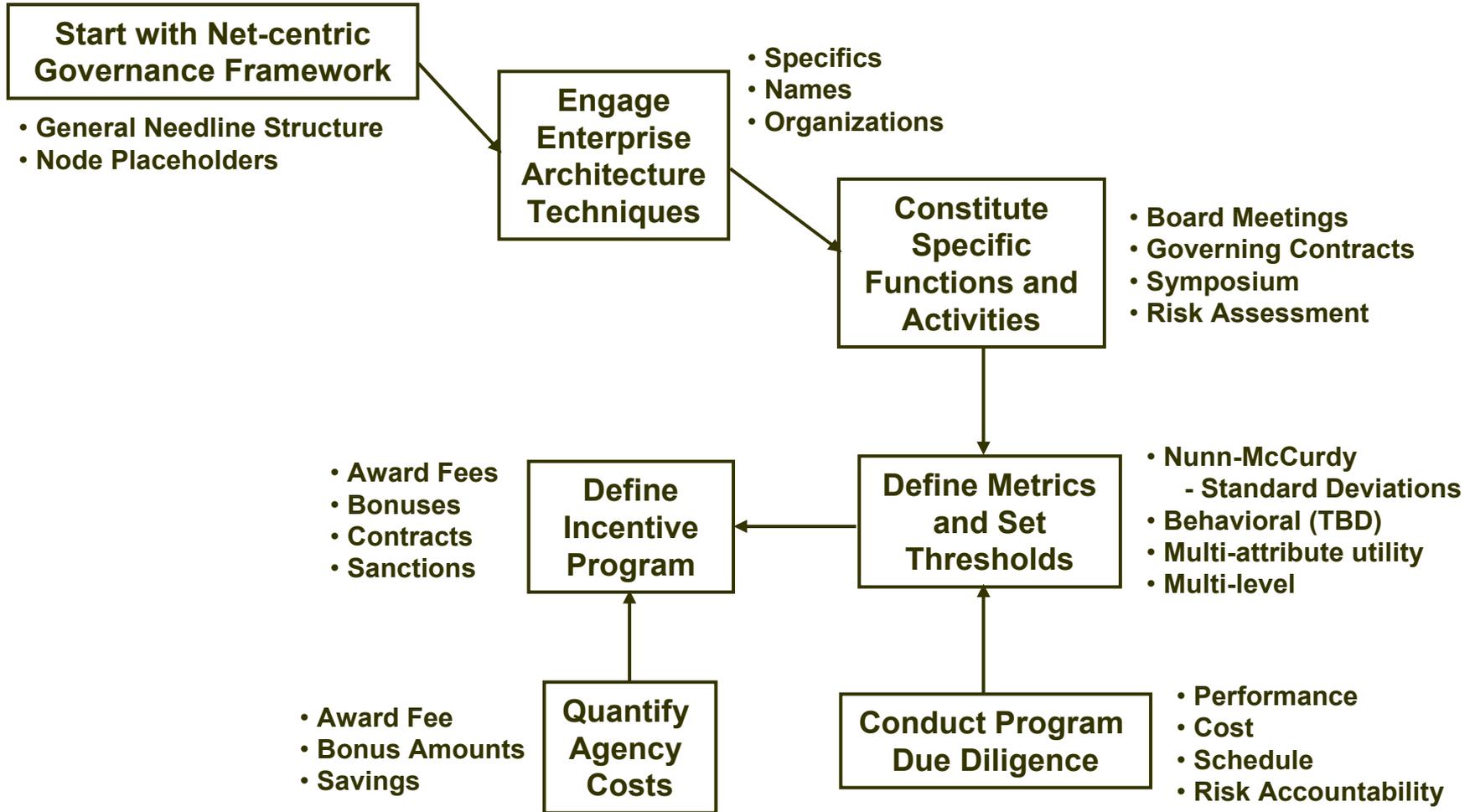
- **Warfighter Responsibilities:**

- Develops MCPs (goals and objectives to be allocated into acquisition)
- Assign Independent Lead Director for each warfighter voice
- Maintain on-going connectivity and communication throughout acquisition process

- **Dual BoD structure: 5-13 outside & inside directors for decisive decisions**
 - Inside & Outside directors – multidimensional yet small for timeliness
 - ❖ Outside independent – valuable source of innovation
- **BoD effectiveness achieves the following:**
 - Meeting preparation and attendance
 - Setting agendas and priorities
 - Overseeing processes are being followed
 - Obtaining resources
 - Reviewing relevant information & press releases
 - Asking relevant questions
 - Making timely sound difficult decisions decisively
 - Evaluating, rewarding & replacing top management/execs
 - Acting swiftly and decisively in cases of unforeseen crisis
 - Enforcing management incentive instruments

**“Fiduciary” responsibility is accountability
& conformance to warfighter needs**

7 Steps for Building Edge Governing Organization



Risk Areas Not Yet Addressed

- **Integration with existing Capability Based Acquisition (CBA) Processes**
 - Tie in with 3170 JCIDS Process
 - Role of J-8 JROC Oversight
 - Role of Functional Control Board (FCB)
 - Gaps
 - UJTLS
- **Congressional Funding Impacts**
 - Reluctance to present bad aspects on the program of record (POR)
 - GAO
 - OMB
- **Outside Influences**
 - Lobbyist
 - Think-tanks
 - Free Press

- **Applied Mathematics To Economize Agency Costs¹ – Maximizing agent-utility and pricing agent-principal contracts**
- **Incentive Structures – trade-offs: monetary/non-monetary awards/punishments, budgeting cost of governance, simultaneous operating levels (PEO, BoD, Contractors), and behavioral guides**
- **Governance Performance Measures – Program-PEO-BoD levels, quantitative/qualitative weighted aggregation, ‘causal chains’²**
- **Risk Reducing Intervention Frameworks – ‘Real Options’³ Analysis offers flexible strategic decisionmaking; the right not obligation to take long-term pre-planned strategic intervention options**

¹ Edi Karni, “Axiomatic Foundations of Agency Theory”, Department of Economics, Johns Hopkins University, Baltimore, MD, 21209.

² Ittner, C.D., and Larcher, D.F., “Coming up short on non-financial performance measurement”, Harvard Business Review, Nov 2003. pp 88-95.

³ Johnathan Mun, “Real Options Analysis”, John Wiley & Sons, Hoboken, New Jersey, 2002.

- ✓ Use Enterprise Architecture with Theory of Agents framework to build **Check and Balances** Edge Organization with disciplined accountability
- ✓ Consider **Active Incentivized Acquisition BoD** of internal/external directors for Joint ACAT Programs
- ✓ Institute on-going & rigorous cross-cutting (PEO, BoD, CNTR) **due diligence**
- ✓ Incorporate long-term and behavior-oriented **incentive structure** based on governance integrity
- ✓ **Censure principals/agents**, accountable to BoD, when persistent adverse behavior goes against best interests of primary stakeholders