



Acquisition Research Program: Creating Synergy for Informed Change

Contractors on the Battlefield: When and How? Using the U.S. Military's Risk-Management Framework to Learn from the Balkans Support Contract (BSC)

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Centuries-Long Love-Hate Relationship with Military Contractors

- Questions of “when” and “how” to use contractors date back at least as far as Revolutionary War (Shrader, 1999)
 - Romans and Tudors had issues too?
- Historical concerns ring true today, but revealed preferences suggest overriding importance and ultimate value
 - the U.S. military continues to hire contractors

How do we address concerns?....



Address “*Root Causes*”

- Resources and culture, e.g.,
 - Number of billets
 - Status of contracting officers and staff
- **Absence of adequate tools of analysis**
 - “Tractable and broadly applicable means of systematically anticipating future outcomes and harvesting lessons from the past”

Existing methodology can help fill void



Existing Methodology Can Help Fill Void

- U.S. military provides risk management framework
 - Simple, easy to use, and replicable
 - Requires little data or specialized knowledge
 - Familiar in other operational settings
 - Recasts “when” and “how” in terms more amenable to systematic analysis
 - Absolute and relative risk (e.g., contract v. USG v. HNS)
 - Mitigation options and costs
- BSC case study illustrates use and usefulness



Why the BSC?

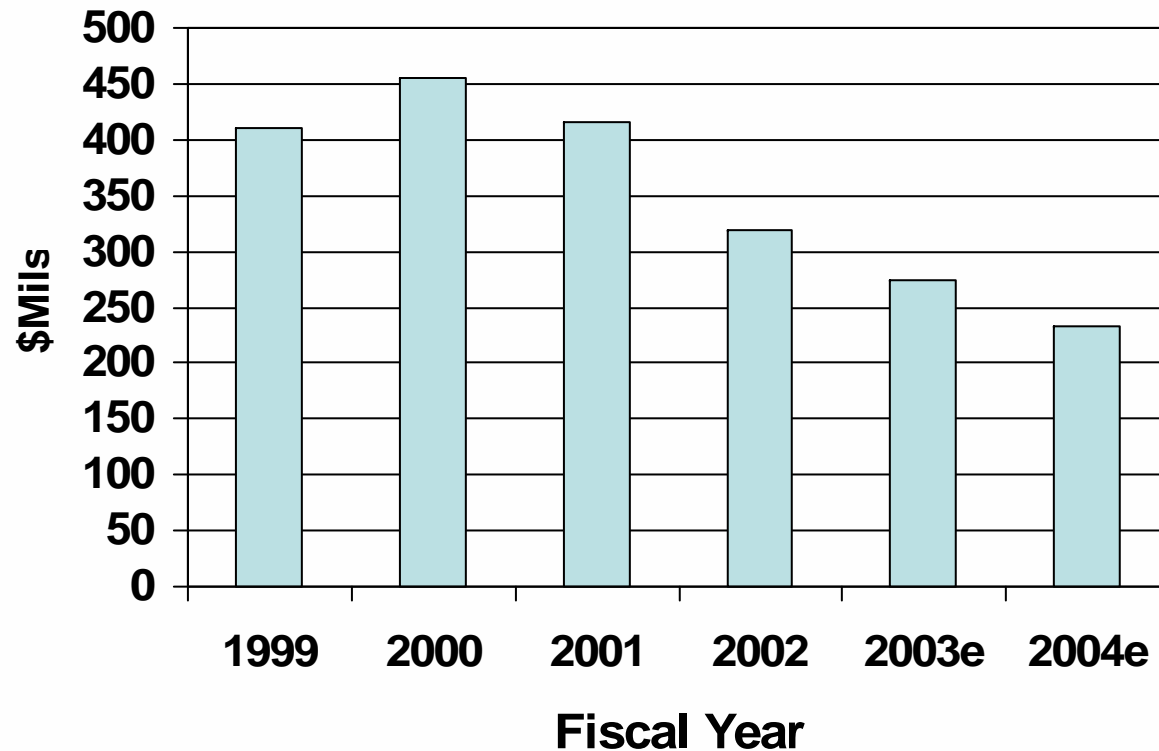
Size, Scope, Track Record (and Data)

- Hundreds of millions of dollars annually and tens of thousands of contract employees
- Broad spectrum life support, transportation, maintenance services
- Multi-year service history, with readily available information on 1999-2004 “iteration”



Total BSC Contract Costs

(+/-) 12,000 contract employees in theater previously



Source: CETAC financial records, provided May 2003.

Notes: e = estimate; 5-year spending limit on more recent USAREUR Support Contract is \$1.25 billion, but projected cost in Balkans is \$211 million over 5 years and \$54 million in first year.

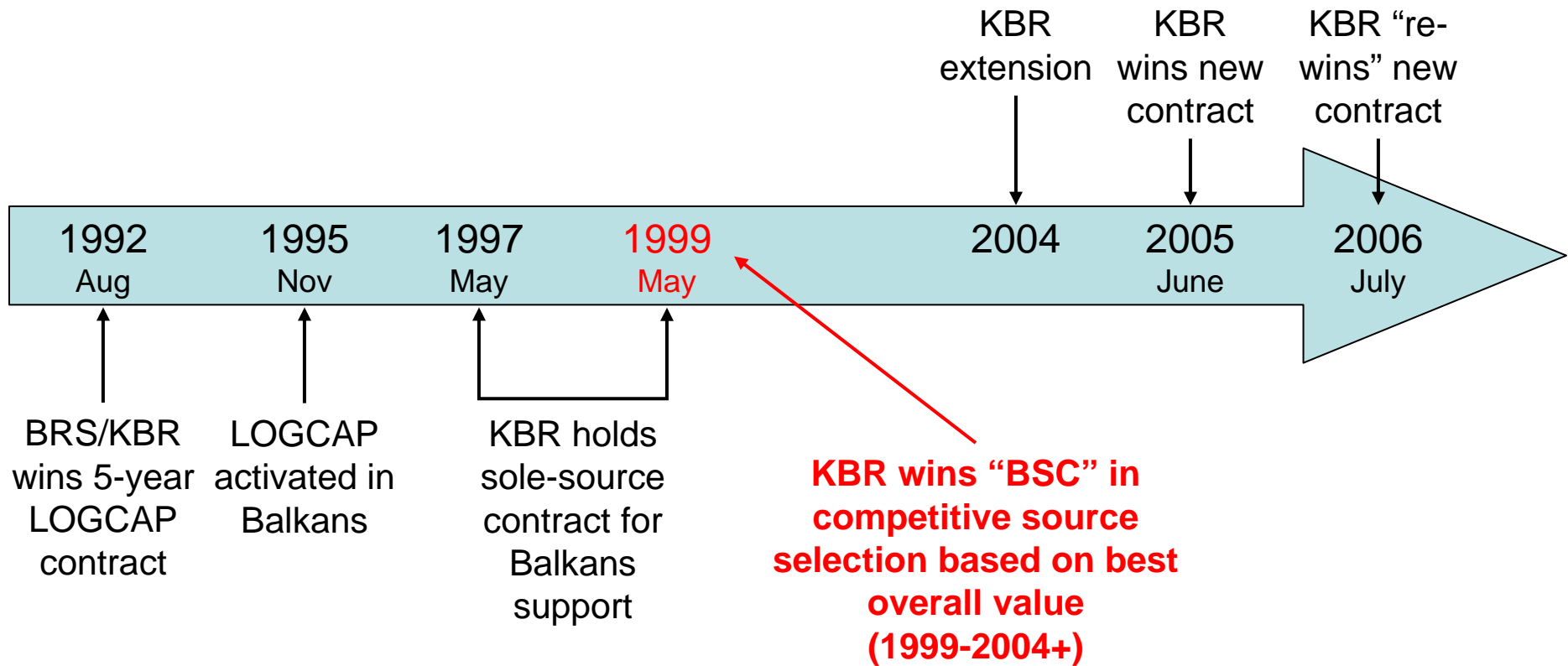


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- Introduction
- **Key Contract Characteristics**
- Risk Management Framework
- The BSC in Theory and Practice
- Lessons Learned



BSC Emerges from Previous Contracts



Notes: BRS = Brown and Root Services; KBR = Kellogg Brown and Root; LOGCAP = Logistics Civil Augmentation Program; new contract is known as "USAREUR Support Contract"

KBR Selected for Best Overall Value

Management and execution plan

Experience

Past performance



Three non-cost factors weighed equally - together, deemed “significantly more important” than cost



Cost... realism, completeness, financial capability (not level)

Performance risk considered for all four factors



Principles and Structure Mirror LOGCAP [pre-IV]

- Pre-planned umbrella contract
- Indefinite-delivery-indefinite-quantity (IDIQ)
 - Services provided through task orders
- Performance-based scope of work
 - Specifies what not how
- Cost-plus-award-fee (CPAF) payments
 - Reimburses costs, *if* allowable, allocable, and reasonable
 - Provides award fee incentives, based on negotiated *estimated* cost and performance evaluations



Participants Span Agencies and Continents

- USAREUR, Germany, bill payer+
- Operational units deployed to theater, end users
- CETAC, Winchester, VA, contract activity
- DCMA* and DCAA, administration and oversight
- KBR, Houston, contractor

*Contract authority shifts from DCMA to USACE-Europe District in September 2005

Relationships yield synergies and conflicts



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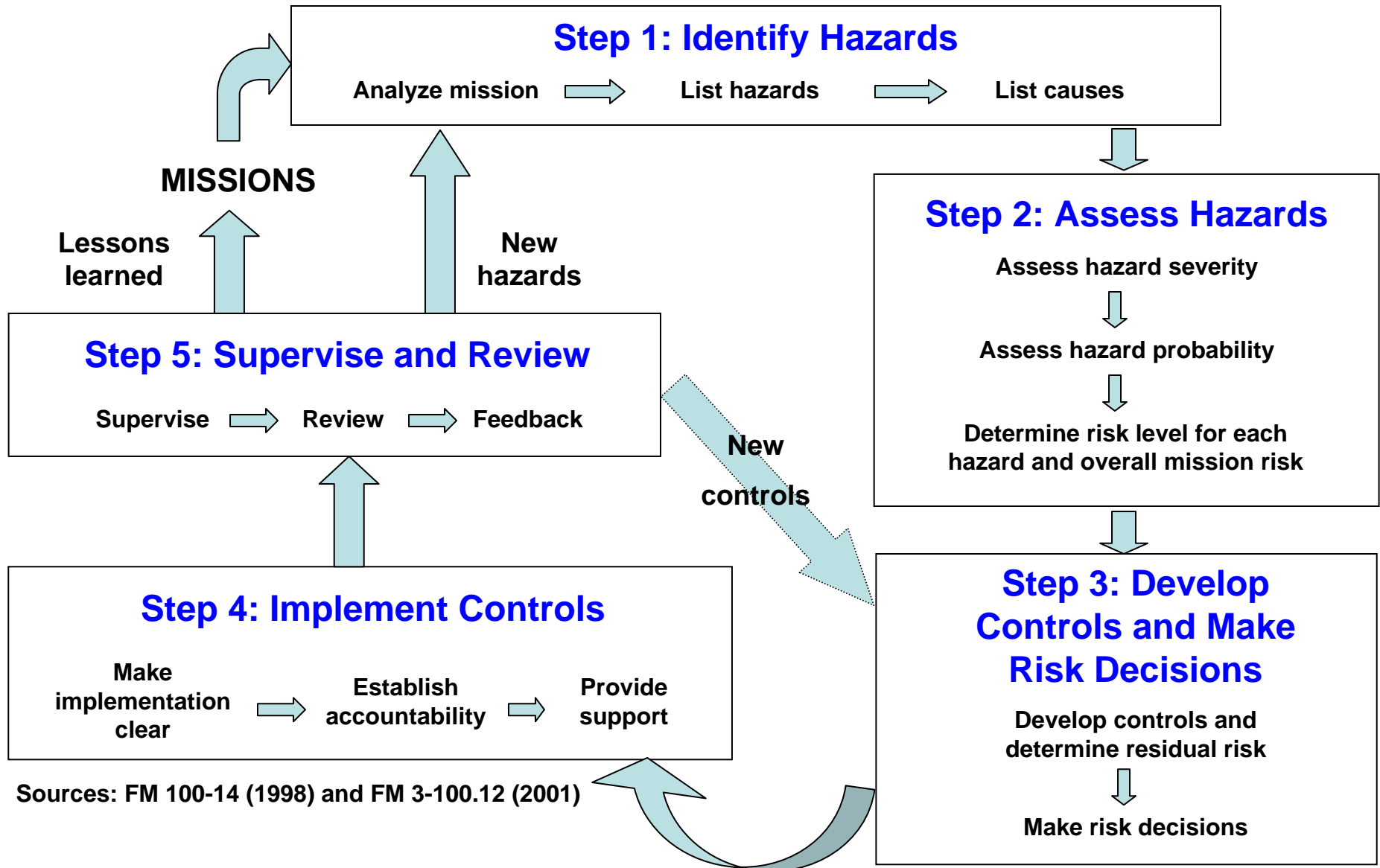


Doctrine Provides Practical Guidance for Risk Management

- Army and joint doctrine define risk
 - chance of hazard or bad consequences
 - expression of a possible loss stated in terms of probability and severity
- Doctrine is geared toward “operations,” but intended for broader application
 - 5-step continuous risk management process



5-Step Risk Management Process



Risk Assessment Matrix

	Probability				
Severity	Frequent	Likely	Occasional	Seldom	Unlikely
Catastrophic	E	E	H	H	M
Critical	E	H	H	M	L
Marginal	H	M	M	L	L
Negligible	M	L	L	L	L

E = extremely high risk, H = high risk, M = moderate risk, L = Low risk

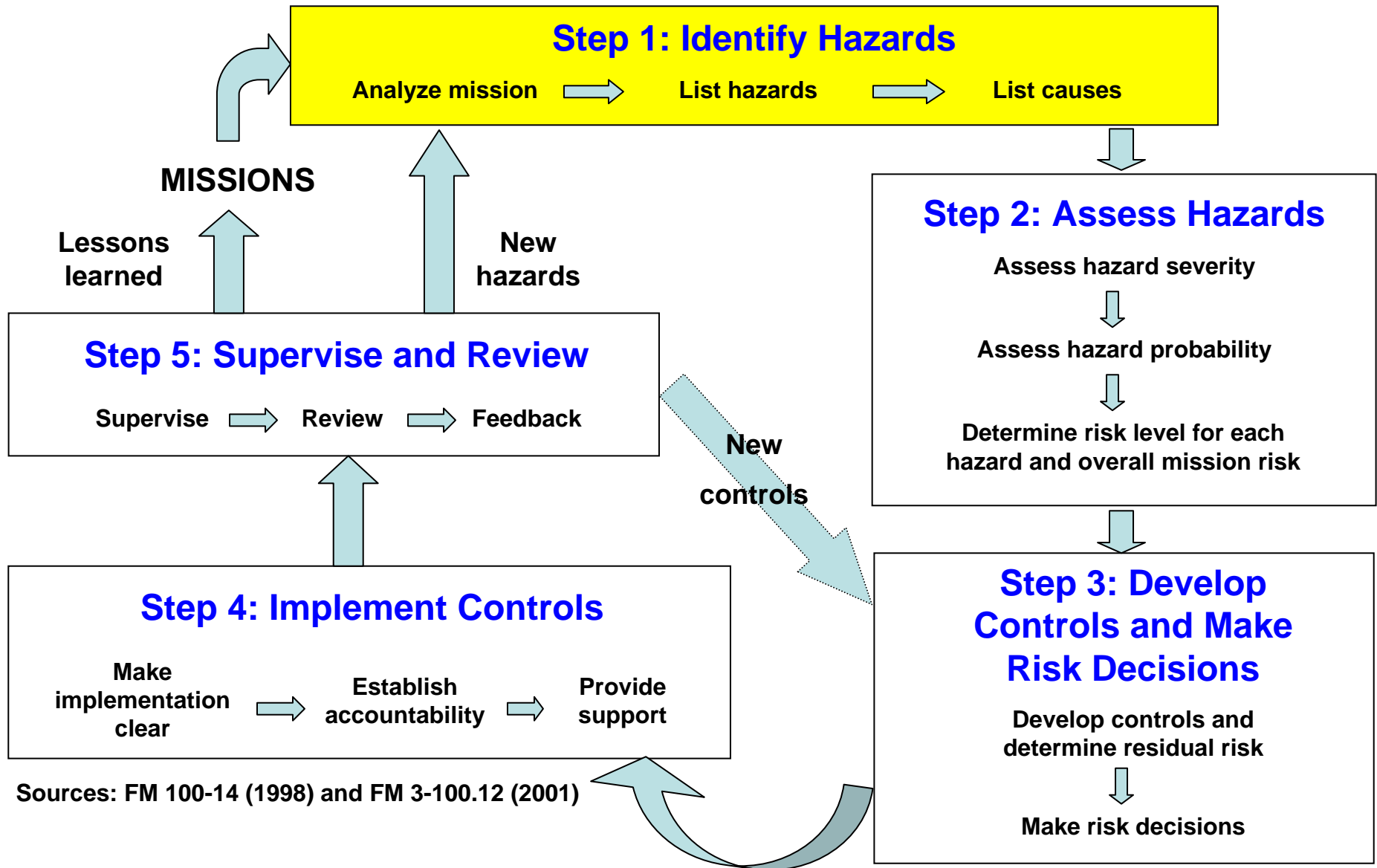


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5-Step Risk Management Process



BSC Presents Hazards in Two Broad Categories: Day-to-Day and Higher Order

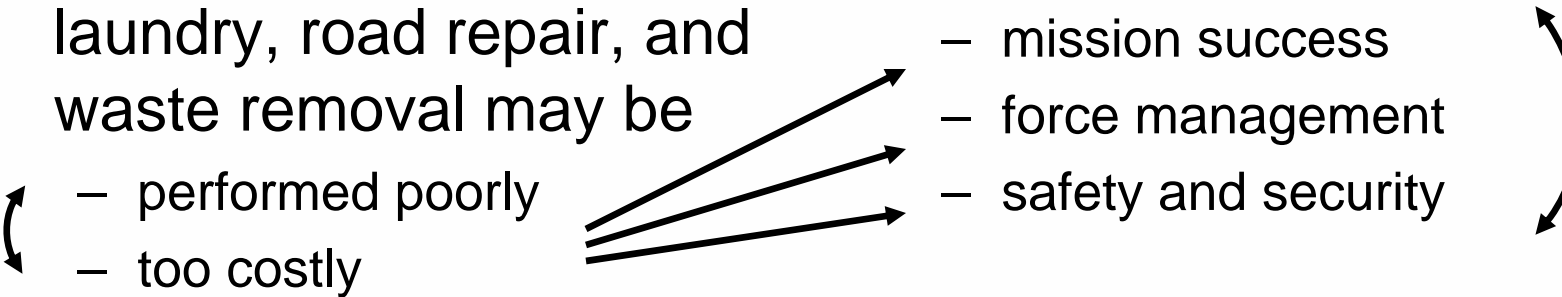
- Day-to-day activities, e.g., food preparation, laundry, road repair, and waste removal may be
 - performed poorly
 - too costly
- Higher-order concerns include
 - mission success
 - force management
 - safety and security



Scope of work and work
breakdown structure



BSC Presents Hazards in Two Broad Categories: Day-to-Day and Higher Order

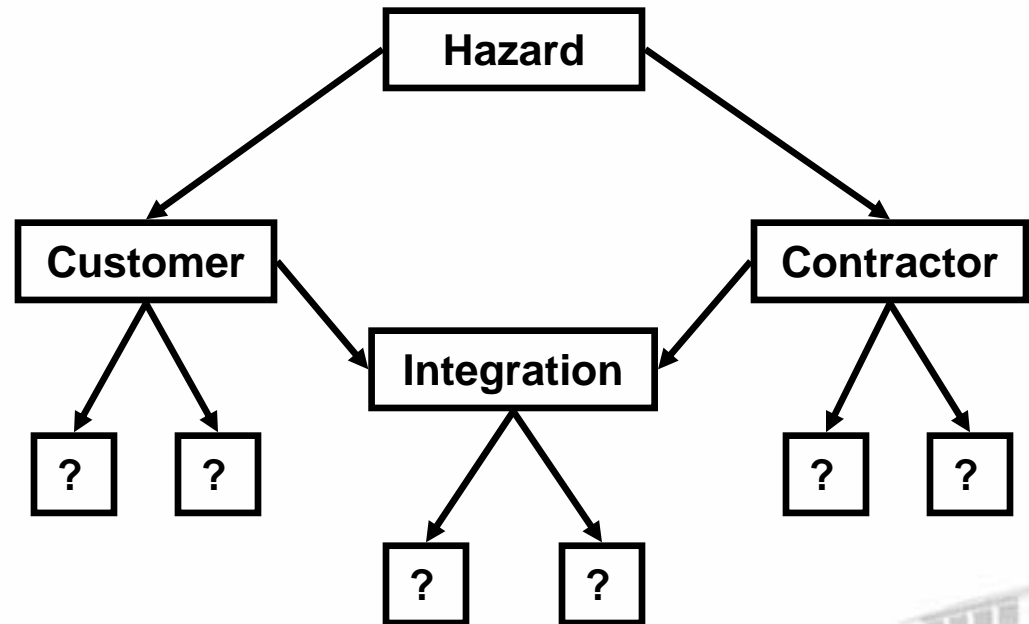
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- 

Hazards may be inter-related and involve tradeoffs across competing objectives

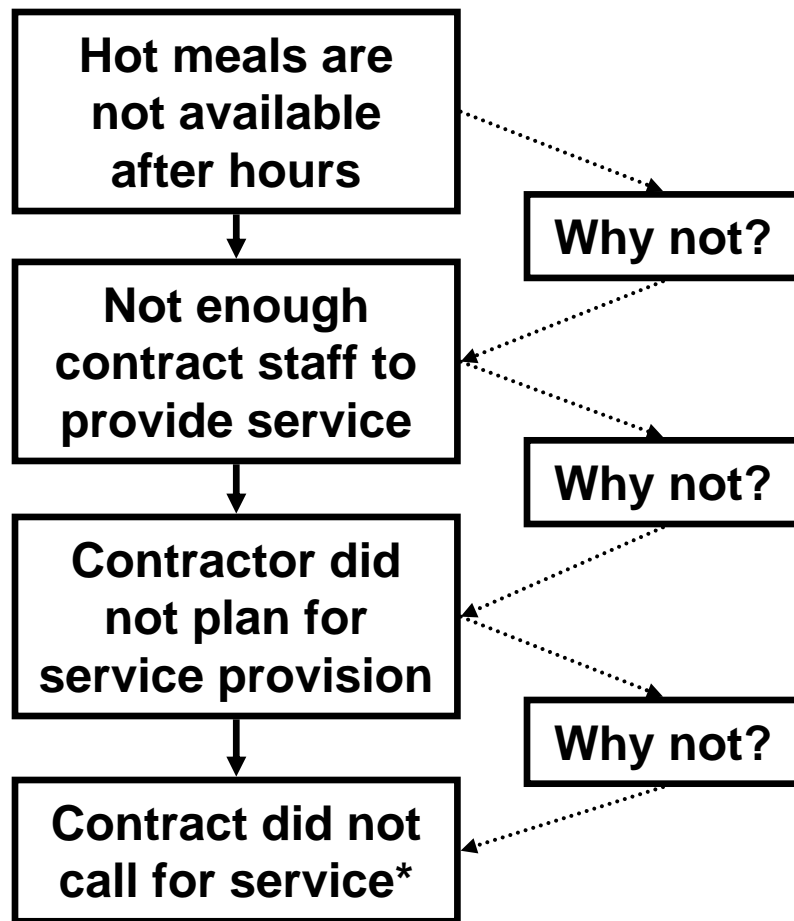


Proximate and Root Causes Differ

- Root causes may involve
 - requests for service, including standards
 - tradeoffs among objectives
 - planning, coordination, and communication
 - delineation of roles and responsibilities
 - underlying incentives
- But not necessarily contract *per se*



Consider an Anecdotal Example...



“You get what you ask for”

If controls based on proximate cause, ineffective at best

Other examples involve over provision, a.k.a. “gold plating”

*“provide limited food service during non-meal hours”

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Negligible or
marginal



Critical or
catastrophic

Probability... risk?



Risk Assessment Matrix

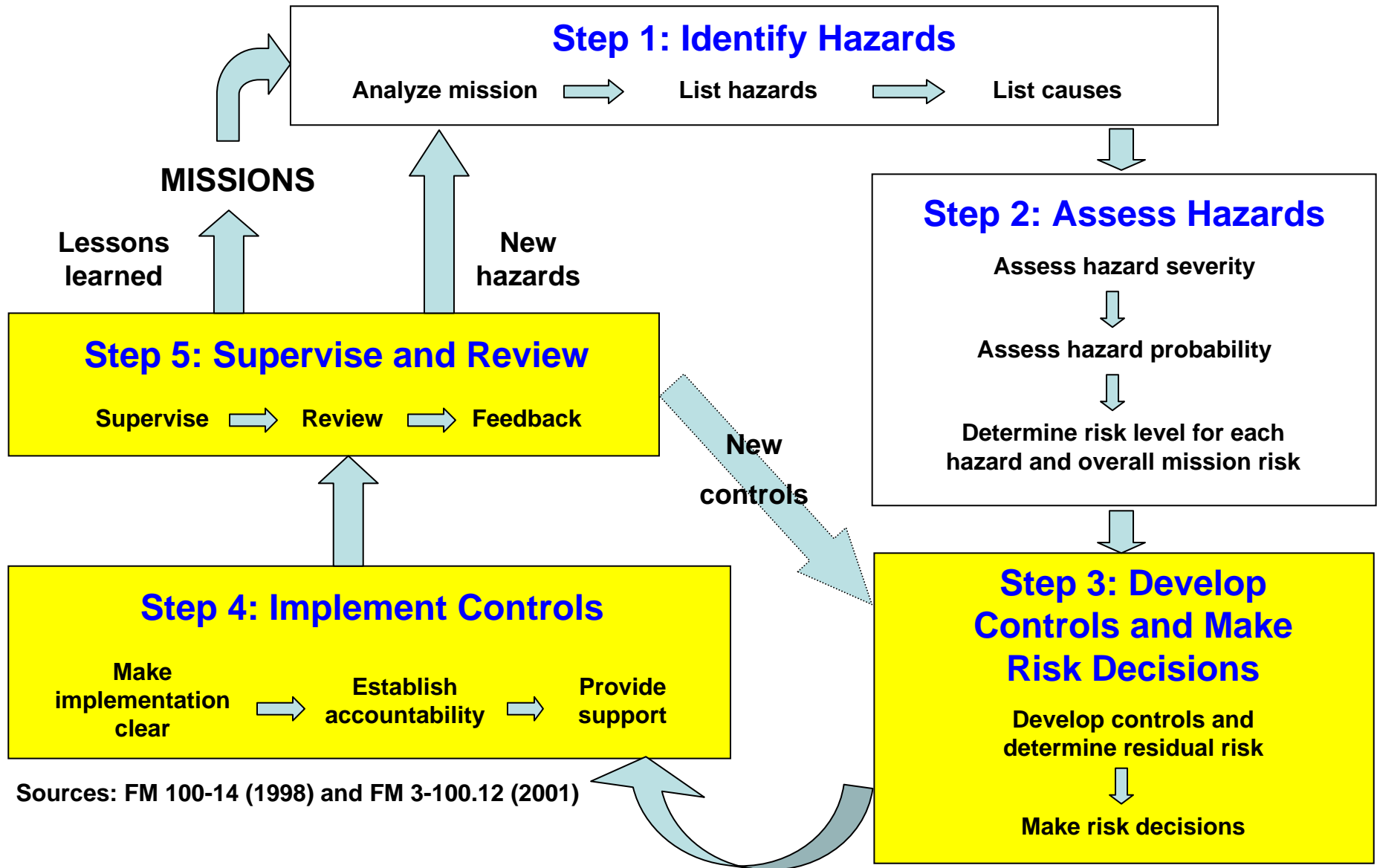
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Catastrophic	E	H			L
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Higher-order concerns
Day-to-day activities

E = extremely high risk, H = high risk, M = moderate risk, L = Low risk



5-Step Risk Management Process



Risk Control Begins with Contract Design and Source Selection...

- Structure and terms address risk
 - Flexibility promotes responsiveness
 - Task order, award fee, other processes present opportunities to evaluate and affect performance
- Source selection also addresses risk
 - Evaluation factors
 - Explicit “performance risk” assessment

...and Extends Through Life of Contract



Communication May Be a “Root Cause” and a “Root Cure”

- Broad-based participation presents challenges
 - Geographical diffusion
 - Interrelated responsibilities
 - Short-term rotations and limited training
 - Potentially conflicting interests
- Communication among participants, including “customer” and contractor—and well-established relationships—can help mitigate risk



Evidence Sheds Light on Severity, Probability, and Residual Risk

- GAO reports
 - “Army Should Do More to Control Contract Cost in the Balkans,” 2000a
 - “Quality of Life in the Balkans,” 2000b
 - “Contractors Provide Vital Services to Deployed Forces, but Are not Adequately Addressed in DoD Plans,” 2003
- Army experience and observations



GAO Addresses Cost, Quality, and Other Hazards

- GAO (2000a) focuses on cost
 - Particular instances of “excess”
 - Inadequate oversight of recurring services
- GAO (2003) addresses more general concerns
 - Failures to identify essential services
 - Lack of back up plans
 - Poor visibility
 - Insufficient training (see GAO 2000a also)
- GAO (2000b) indicates high degree of customer—specifically, end-user—satisfaction

Chain of
command
issues



GAO (2000a) Reports Cost “Excesses”

	Firefighting service	Power generation	Base camp personalization	Furniture
Proximate cause	Contractor proposed excess firefighters and equipment	Contractor provided excess redundancy and executed leases	Contractor personalized facilities, e.g., with street signs	Contractor processed and assembled unusable goods
Intermediate and root causes	Lack of agreement on (unstated) standards*; poor communication; Q-C tradeoffs; mutual incentives	Lack of agreement on (unstated) standards; poor communication; Q-C tradeoffs; mutual incentives	Customer requested personalization; Q-C tradeoffs; mutual incentives	Customer did not match purchases to requirements; planning and coordination
Severity	Staffing: \$150,000/yr	Redundancy: \$5.1 mil/yr Leases: \$85 mil	No cost data	Unspecified share of \$5.2 mil off BSC; \$377,000 on BSC

Notes: Q-C tradeoffs = quality-cost tradeoffs; *underlying issues of wages and skills



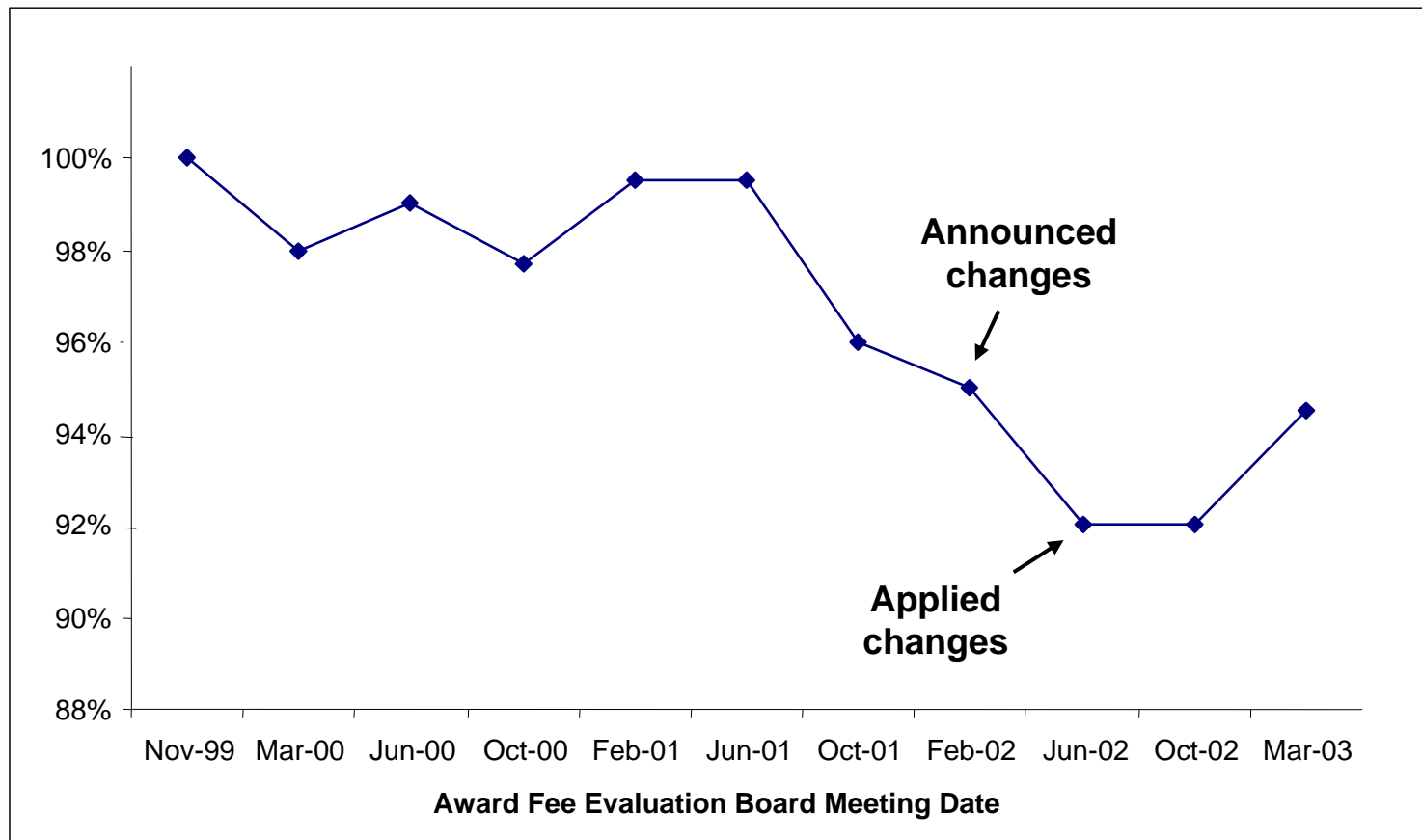
Army Experience and Observations

- “Supervise and Review” elicits change
 - Greater emphasis on cost *level* in award fee evaluations, new criteria and weights (cost increases to 40%)
 - Larger number of scoring brackets in evaluations (“outstanding” replaces “above average” as top score)
 - Explicit standards for operations (Red and Blue books)
- **Award fee evaluation results reflect process changes***
- Heightened concerns about security and presence of foreign nationals, especially following 9-11
- Contract extensions and new awards suggest ultimate satisfaction with service provision

*may reflect changes in evaluation and funding processes



KBR Award Fee Evaluation Results



Source: CETAC financial records, provided May 2003



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Risk Is Not Inherently Contractual

- Most risks are activity or environmentally based, stemming from universal “root causes”
 - Service requests
 - Quality-cost tradeoffs
 - Planning, coordination, and communication
 - Roles and responsibilities
 - Incentives
- But risks are not identical across providers
- Issue is not about contracting as general premise
 - Compare risks, controls, and costs across potential providers (contractors v. USG v. HNS)
 - make informed context-specific decisions...



Risk Is Dynamic

- Nature of activities, concerns, and hazards shifts over time with environment and requirements
 - probability and severity change
- Priorities also shift over time
 - Action takes precedent at outset
 - “getting the job done”
 - Focus turns to cost as conditions stabilize
 - GAO reported on BSC costs
 - Army modified evaluation criteria



Contract Is as Good as Its Customer

- Success hinges on design and execution, including award, management, and oversight
 - Establish and articulate needs
 - Review and judge validity of proposals
 - Conduct stringent evaluations
 - Plan, coordinate, communicate across government agencies and with contractor, responsively
- Clear understanding of roles and responsibilities and... adequate training are essential

↑
Balance
interests
↓



Risk Management Is Not Risk Elimination

- Contracts can be structured, managed, and implemented to address many risks
- But some risks—residual risks—may be appropriate or unavoidable
- Decision makers must weigh tradeoffs among risks and across competing objectives
 - with dynamic environment and requirements, mitigation choices may differ over time



Additional Material

- Selected references
- Work breakdown structure (WBS)
- CPAF specification
- Contact information



Selected References

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Work Breakdown Structure Specifies “What” Not “How”

- Base camp maintenance
 - Provide base camp operations and maintenance, which includes repair and upkeep of equipment, facilities, streets/parking areas, and utilities
 - Provide potable water delivery for kitchen and shower facilities
 - Provide daily collection, removal, and disposal of trash [and other] waste
 - Maintain power generation equipment at Taszar Airfield....
- Laundry service
 - Provide bundled laundry service (one 15lb bundle per authorized customer, twice weekly with no more that 72-hour turnaround time)
 - Exchange, wash, and repair sleeping bags....
- Food service operations
 - Provide 24-hour food service operations
 - Prepare three "A" ration meals per day utilizing Government furnished food and provide limited food service during non-meal hours



CPAF Structure Reimburses Costs and Provides Award Fee Incentives

- Reimburses “allowable, allocable, and reasonable” costs, depending on approval
- Allows award fee of up to 8 percent of *estimated* cost, depending on evaluation results*
 - Funds management and cost control (40%)
 - Performance (30%)
 - Coordination, flexibility, and responsiveness (30%)

*Guarantees base fee of 1 percent of *estimated* cost



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