Overview

Precision Engagement
Future Operations

An Industry Perspective

Challenges and Opportunities

Providing the Warfighter timely, effective and affordable Mission Solutions that span the breadth and depth of the Battlespace

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Outline and Overview: Three Macro-Trends

- Context and why it matters
  - A no-nonsense industry perspective
- Money Out of Weapons/Effectors and into ISR, Targeting and C3
- Money that does go into Weapons will go into persistent and responsive weapons
- The agility and responsiveness of DOTMLPF not pacing the modern and post-modern operating environment
Context: Ways, Means & Ends

DEPARTMENT OF DEFENSE

Training  Readiness  Weapons Stockpiles  Operational Availability  Qualified Personnel

DEFENSE INDUSTRY

Certainty Valued Over “Irrational Exuberance”

Shareholder Value = (Growth x Margin x Cash Conversion)^Goodwill

PRECISION ENGAGEMENT STRATEGIC BUSINESS AREA

- Focus on the Warfighter as Customer 1
- Turn 80% Mission Solutions fast
- Functionally span ISR, Targeting, C3 and Effects

Ends: Ensure the strength & security of the United States through Global Stability
Goodwill

• Goodwill is defined as the value of the business in excess of its owner's equity
  – The value placed on intangibles assets, such as people, knowledge, relationships and intellectual property, is now a greater proportion of the total value of most businesses than is the value of tangible assets, such as machinery and equipment
  – The creation and management of intangible assets is often essential to long-term success

• Necessary but not sufficient components of Goodwill
  – Reliability
    – Predictability
    – Reputation
    – Ethics at the bottom line
Empirical Data: Less for Weapons, More for the Rest

Growing Gap Between DOD TOA and DOD Weapons Acquisition and RDT&E
A Shift of DoD Resources From Effectors to ISR, Targeting & C3

Persistent ISR

Persistent C3

Persistent Targeting

Persistent Effects

Persistent ISR, C3, Targeting and Effects

Persistent: The degree to which the joint force is able to apply force discriminately, continuously and indefinitely to meet the commander’s intent. Persistent joint forces employ decisive force to achieve desired effects and operational objectives.

*Force Application Functional Concept, The Joint Staff*
Analysis, M&S Demonstrations and Real-World Ops Confirm Theoretical Data Supports an Accelerating Trend
Significant Per-Round Lethality Improvements

- Generate targets in theater and in volume
- Process and distribute those targets fast and forward
- Act on those targets with immediacy

Persistent ISR, C3, Targeting and Effects

SENSORS AND WEAPONS THAT ARE TRULY ‘Nodes-in-the-Network’

Bottom Line: Spend ‘The Next Dollar’ on ISR&T, C3 & Weapons Mods to Exploit
Position based solely on weapons portfolio increasingly risky

Even an enterprise focus might risk not bringing ‘Best-of-Breed-Across-the-Effects-Chain’ to the Warfighter

As most significant M&A opportunities already realized, might be entering an era of global partnerships

Cost per round must decrease (or at least level off) to reflect investment in networks

Follow the Money
Move to Responsive PE Mission Solutions

“Precision cannon artillery delivered munitions to attack hostile forces in urban areas/complex terrain while minimizing collateral damage.”
The Battlespace

Non-linear, Non-contiguous Challenge
Fire Support Opportunity: Alternatives Examined

IN IRAQ TODAY

1. A/C precision fires for the majority of operations
2. Weather and A/C availability control Time-to-Kill
3. Extended execution timelines from sensor to shooter – between 20 to 30 minutes.
4. No persistent and precise indirect fires capability.

PRECISION ENGAGEMENT MISSION SOLUTION 2005

1. Long range precision fires in adequate volumes to support real-world USMC operations.
2. Target coordinates transferred by machine to machine interface within seconds.
3. Execution timelines from sensor to shooter greatly compressed.
4. Connected to AFATDS fires network.
Results Summarized

**MOE I: MAXIMIZE IF THREAT KILLS**

- **NO IF SUPPORT**
  - Indirect Fire (IF)
  - Direct Fire (DF)
- **CURRENT 155 RND**
- **PE MS 2005**

**MOE II: MINIMIZE LOSSES**

- **NO IF SUPPORT**
- **CURRENT 155 RND**
- **PE MS 2005**

**MOE III: MINIMIZE COLLATERAL DAMAGE**

- **NO IF SUPPORT**
- **CURRENT 155 RND**
- **PE MS 2005**

**MOE IV: MINIMIZE RESPONSE TIME**

- **TACAIR**
- **CURRENT 155 RND**
- **PE MS 2005**

**Insurgent/Mortar threat situation over before TACAIR can support.**
Responsiveness Through Enhanced Persistence: Implications for Industry

• Precision
  – Decreasing Opportunities

• Measured
  – Smart fusing and in-flight re-programming

• Persistence through loiter
  – Pace advances in ISR, Targeting and C3
  – Significant third-party issues
  – Significant technical challenges

• Persistence through being there
  – Land-based focus
  – Re-think effective and affordable volume fires

Challenges are Evolving: Requires a Going Forward Perspective
DOTMLPF: Unsynchronized Transformation

The Trailing Edge of Transformation

NetFires

Government Contracts

Navigating through the complexities of government contracts requires more than a good compass and a little luck; it takes a team of attorneys with experience in representing companies in government contract matters, like the lawyers of Nelson Mullins.

The Nelson Mullins Government Contracts Group works with clients to ensure successful government contracting. The skills of Nelson Mullins attorneys are not restricted to a particular type of government or company, and firm attorneys have represented a variety of vendors in venues throughout the United States.

It is a rare opportunity for a company to spend its legal fee budget to grow revenue, but the goal at Nelson Mullins is to represent clients in their quest for more government contract awards. Group attorneys learn the strengths of a client’s business in order to offer more valuable assistance. They review solicitation documents, proposals, and bids for responsiveness, and assist in negotiations when such assistance would likely enhance a client’s chances for receiving a critical and profitable contract. Additionally, Nelson Mullins attorneys assist in negotiation and litigation when necessary to protect and serve client interests. Group attorneys serve as national counsel to clients, retaining local counsel only when necessary to protect the best interests of those clients. With a comprehensive database of state procurement laws and regulations, Nelson Mullins attorneys often provide prompt responses to client needs and inquiries.
Unsynchronized Transformation: Implications for Industry

• Opportunities
  – Performance Based Logistics (+)
  – Fee for Service

• Challenges
  – Services & Contractor: Seam between required competencies
  – Fee for Service Value Stream

Operators & Industry Partners May Have to ‘Lead-Turn’ The Money
Summary

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PSTS 2005