EXISTING TECHNICAL DATA LICENSE RIGHTS – BARRIER TO MOSA? - 18978

October 26, 2016
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AGENDA

- **Introduction**
- **Modular Open System Architecture**
- **Technical data rights (including software)**
- **Challenges of implementing MOSA on existing programs**
- **Potential paths to obtaining needed rights**

WHAT IS AN MODULAR OPEN SYSTEM APPROACH (MOSA)?

> **MOSA is a strategic "Business and Technical" acquisition approach that leverages the commercial market-place in a way to control and optimize design features to ensure that a level-field of competition provides the best valued product for our war-fighter in a timely basis.**

Key MOSA Design Features Include:

BUSINESS

- Create a Competition-focused Environment (A **CULTURE** of Competition)
  - Open Design Disclosure for All Stakeholders (Data Rights)
  - Enterprise Strategy
- Ensure Government Access to Data for Reduced Life-Cycle Sustainment Costs

TECHNICAL

- Use a Modular Design (Loose Coupling with High Cohesion)
- Use of Open Standards (Public, Published and Popular (The Three P's))

A successful MOSA implementation allows for competition and ease of change that provides the best value to our war-fighters.

SPECIFICALLY, WHAT IS AN MODULAR OPEN SYSTEM APPROACH?

MOSA 5 Core Implementing Principles:
BUSINESS (Culture of Competition)

1. Strategic Use of Data Rights to Ensure Level Competition Field
2. Enterprise investment strategies (Spend Least to Get Best)
3. Transformation of Life Cycle Sustainment Strategies (Plug and Play)

TECHNICAL

4. Modular designs with loose coupling and high cohesion
5. Lower Development Risk via System Designs (Open Design Disclosure with peer reviews by all)

Achievement of the five (5) core principles affirmatively answers the question "Can a qualified third party add, modify, replace, remove, or provide support for a component of a system, based on open standards and published interfaces for the component of that system?"

SPECIFICALLY, WHAT IS AN MODULAR OPEN SYSTEM APPROACH?

MOSA Core Implementing Principles:
BUSINESS (Culture of Competition)

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2. Enterprise investment strategies (Spend Least to Get Best)
3. Tran~~~~~~~~~~~~~~~~~~~~~~~~~~~nd Play)
4. Mod~~~~~~~~~~
5. Low~~~~~~~~~~~~~~~~~~~~~~n Disc~~~~~

- Without the license rights to the needed technical data and software, the other four principles cannot be realized
- If technical data/software is not required to be delivered by the contract, the government has no rights to use the technical data/software
- Additional contractual actions are required to obtain needed technical data/software

REALITY CHECK

- **Where are we today?**
    - C-130J – purchased initially as commercial aircraft
    - C-17 – assumed contractor maintenance
    - F-35 – PM relates we are headed for the same rock/hard place **
    - Army helicopters – CH-47, Apache
    - M-4 carbine
- **We do not have current data to perform maintenance or upgrades**
- **Commonly know as "Vendor Lock"**
- **** http://www.defense-aerospace.com/articles-view/release/3/176874/intellectual-property-rights-give-industry-total-control-of-f_35-program.html**

MAJOR CONTRACT DEFICIENCIES

Common deficiencies:
- **The data/SW deliverables do not meet the needs of the program**
  - A TDP was delivered, but at too high a level (level 3 is typical) to support PM MOSA efforts
- **The technical data/software was never required to be delivered**
- **No provisions were included in the contract for deferred ordering of data**
- **The future needs of the program were not considered when determining data/SW deliverables**
- **No provisions were made allowing for changing the life cycle support concept**

WHAT MOSA NEEDS

- **Definition of modularity to lowest levels needed [typically to line replaceable unit (LRU)]**
- **Delivery of form, fit and function data for each LRU**
- **For LRUs that will be repaired/ modified by:**
  - Gov't depots: TDP w/limited rights
  - 3rd party contractors: TDP w/gov't purpose rights
- **For software, source code and design documents will be needed for each LRU**

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THE OPTIONS

1. **Order the needed technical data/software (contract mod or new RFP)**
   1. Price quoted may be reasonable
   2. KO may be able to negotiate reasonable deal
2. **Can require delivery of all technical data/software developed with gov't $**
   1. Cost will have to be negotiated
   2. Contractor cannot refuse to deliver
3. **If question over COTS/modified COTS– burden now on government to provide data to demonstrate gov't $$ used**

THE OPTIONS

4.   KO can use negotiations for consideration as process to gain additional data rights

1. Operations, Maintenance, Installation & Training
2. Form, Fit and Function
3. Computer Software Documentation

5. Follow-on contracts, CLINs need not have same limits

6. Data Format is important!!

THE OPTIONS

7. **Design replacement component(s) or module(s)**
   - SBIR
   - FFRDC, not for profits
     - Southwest Research Institute for software
   - Government engineers
   - Careful, they cannot have access to proprietary information
   - Potentially very costly, time consuming

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DELIVERY DEFINED

- **With use of Integrated Data Environment (IDE)**
    - More commonly used
    - Some contracts equate delivery to posted to IDE
    - Often mixed CDRLs and other data
    - Configuration control very challenging
    - Data format issues common
- **Recommend all CDRLs/CLINs be delivered to KO as well as to IDE**
- **Alternative is to routinely (nightly?) clone IDE to government computer**

SUMMARY/RECOMMENDATIONS

- **The government has failed to order data it requires**
- **Problem exists in all services**
- **Recovery is challenging and usually costly**
- **Acquisition strategies and IP strategies must be done early and followed**