# Top 10 Questions Define Administrative Equipment Programme Design Structure of Supplier Communications Application

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So how does one determine how to best structure design of aircraft programmes? Whether you are Site Visit Executive, chief engineer, contracting officer, or in product support, you have to start in the same place. You begin with Deep Dives into requirements and operational solutions for the product you intend to acquire. Key to your Job is determining optimal programme structure/function so high performance is realised in acquiring specific product. Smart execution of product administrative process requirements must be most significant determinant of programme structure.

It is easy to understand because DoD is absolutely strapped for cash it wants minimal restrictions on its freedom of action. Some approaches deliver all the flexibility DoD could hope for, while offering suppliers some degree of support. So they can make appropriate preparations.

However, as a policy statement to guide the recommendations and decisions of Congress, the approach is fundamentally flawed, not least because of the circular nature of the lines of argument that it advances at the highest level of procurement strategy. It leaves to the future a situation in which almost any procurement choice will be justifiable by at least one part of the policy.

The policy offers little incentive for suppliers to invest in the future of DoD.. It offers the prospect forces will be equipped only with systems that are freely available to others and the potential for national freedom of action will evaporate. It represents a lost opportunity to well-define place of supply lines so critical to DoD missions.

The headline statement from this policy is that core position of DoD will be to buy on the basis of competition on the biggest market stage. With the aim to create opportunities to deliver much-needed direction the policy advocates for use competition as our default position, looking to markets for products that are proven, that are reliable, and that meet current needs by applying the principle of open procurement so greatest possible value for money is realised.

Instead of insisting on DoD understanding of how critical systems work being a condition of purchase, DoD appears content to rely on assurances from a contractor about the performance of the elements within the system In general, freedom of action rests on the assurance that DoD will be able to use equipment – or continue to use them –whenever required; and that when acted upon, performance will follow as required.

For DoD, freedom of action includes being able to conduct combat operations at a time and place of its choosing. Some general cases in which action is likely to be needed in the interests of national security' are of potentially great importance and so should be reported in full.

First, we examine case where there required capability fundamental to national freedom of action The leading example of this is secure information and communications transfer so DoD can conduct its business securely at the highest level, including communications with posts overseas and commanders of deployed forces. The need to protect the most sensitive information, wherever it is in the world, creates requirement to control aspects of deployment/support critical to integrity of the product.

Second, is the case where fulfillment of requirement, or operation of the resulting capability, is heavily dependent on supplier having access to highly classified intelligence information or technologies. In these circumstances, DoD is only be able to consider suppliers of equipment and support services that meet the highest standards of trust can be considered. An example of this case includes weapons and propulsion systems required for crucial deterrence polices vital to defense of the Nation.

Third, in the case where operational circumstances mandate changes to in-service capabilities that can only be met by having an assured ability to respond– particularly in terms of technical expertise and knowledge – at the highest levels of speed and agility. A leading example of this is electronic warfare and systems where the ability to update deployed capability in the light of intelligence is essential to survivability.

Finally, take as example the case where potential operational advantage when using a particular capability requires highest possible confidence in one or more aspects of its performance. Policy is not clear as to whether all the major DoD platforms and systems utilised by DoD forces are central to national freedom of action . However, policy includes overarching language that argues that operational advantage is seen to require DoD understands most, if not all the technology it is using, so that it can exploit the systems concerned to their limits.

A key issue for DoD is the ability to enure operation of critical sub-systems, to often include design and operation of complex electronics and associated features. Request assurances relating to processes and components used in build of sub-systems, as well as subsequent operation and support for entire service life. Without these assurances, DoD will be unable to judge level of operational risk or take appropriate action to mitigate mission crises.

Without assurances and knowledge transfer, DoD should not buy from an external supplier, and must be able to sustain/modify its equipment that it owns. It is questionable whether assurances are sufficient substitute for certain knowledge about such matters as operational performance. But policy goes on to add furthers qualifications, which takes things back to the beginning.

Policy dictates that even national security considerations do not enjoy absolute dominance, since it would function as constraint on future action. Policy states extent to which we choose to protection of operational advantages and freedom of action is chosen, there will always be balance of risk and opportunity cost. As with all acquisition choices, decision whether to take action depends on other factors, particularly the balance of risk, affordability, and value for money.

Policy contains an argument meant to square the circle when it asserts exposing suppliers competition, will stimulate them to become efficient and successful. Congress is concerned that if companies felt they were in a privileged position, they would lose their edge. Proponents promote notion that drivers of supplier success must be their competitiveness and if shielded from competition you actually undermine their ability to compete. This is tough love, being cruel to be kind, and so on.

But this argument focuses only on the short term. The policy fails to consider medium and long-term effects of competition in the high-technology sectors dealing with DoD. There are well-known attributes of the market in that there are only a small number of customers for highly advanced equipment and it is almost impossible to secure orders without an endorsement in the form of purchase by DoD. In several sectors, including combat aircraft and medium-range missiles, DoD places orders only rarely.

Suppliers bidding in a competition can be under significant pressure to make a highly optimistic bid in order to win the only contract that matters. Unsuccessful suppliers in competition tend to abandon their capabilities and leave the sector instead of paying for them until the next competition comes along. Finally, in the most demanding areas of DoD interactions with suppliers, including aerospace systems, the fiscal, technological and intellectual barriers to entry for new suppliers are huge.

Policy does not take account of the fact that the sustained use of competitive tendering in important sectors where there is a need for major intellectual capacity for design/production leads to number of suppliers being reduced to one. Competition is central aspect of DoD procurement policy and its impact can be assessed over a significant period of time.

DoD must take on board the notion that competitive tendering is appropriate and viable long-term only for products with a modest intellectual content and where the need for prior capital investment is modest. Acquisition covers a broad spectrum from simple repetitive/ physical purchasing all the way to complex non-repetitive/highly intellectual procurement.

Only one size or one approach does not fit all circumstances. Here, acquisition solutions must be drawn from a limited but highly skilled source. Even while competitive approach works well for repetitive products, with a choice of solutions from wide number of sources, it fails to operate effectively where the solution is unique or non-repetitive.

So DoD procurements require differentiation, destroying the policy argument for universally simple commercial competitive practise. Non-repetitive procurement depends on supplier base invested in a ‘body of knowledge’, and specialist skills, something that can only be acquired over an extended period working cooperatively with the acquiring organisation procuring the goods.

Policy surely does not provide solid ground and foundation for any effort to establish DoD procurement divisions with breathing room when considering Congressional actions. As the policy stands carte blanche is given to make choices based on short-term affordability considerations or on risks focused on initial cost, time and performance factors.

When Congress drafts binding language, frequently use is made of term ‘normally’ to ensure that a specific rule can be bypassed. Policy contains enough qualifications in its directions to ensure very wide range of common practise can be compatible with it.

Policy pins down DoD to few firm courses of action that involve significant resources, and almost any behaviour and decision could be justified by reference to its language. It might also be seen to incentivise suppliers to strive harder for efficiency and effectiveness, although it could also lead more suppliers to concluding DoD is not the best partner to do business with.

Many times for multi-dimensional and challenging problems, leaders choose clear simple answer, which is usually wrong . Policy exerts clear and simple answer to the challenges of defence procurement, to buy through open competition in the market, even while accompanied by qualifying material explaining that may not always be the sound thing to do.

In the interests of space and time limitations imposed by this report, we have not reviewed some important aspects of Policy notably research/technology spending DoD imperative to restore, preserve & strengthen its status as good customer. Some suppliers do not have muscle to lead sales efforts in which DoD affects interest. Also, we do not address requirements for suppliers with technology/integration skills to build large systems and resource base to take on significant risk. We also do not consider requirements to shape/preserve national technology base.

It can be stated with confidence that, despite concerns, procurement sections of the Policy will be implemented, simply because virtually any procurement choice will be able to be associated with some words somewhere to be found in the Policy. There is pressing need for more accountability at DoD, but the jury is still out on the prospect of policymakers who gave shape to it will still be around to take responsibility for its results when impacts are felt on missions critical to future success of the Force.

1. What advances in maturity state of product technology are possible and how much risk is involved?

2. In addition to the technology that is included, how complicated/similar is design to other products you have experience with?

3. How difficult are the integration aspects of building the product?

4. How urgently is the product needed for field-level operations?

5. How prepared are suppliers to design and build the product?

6. How much uncertainty is there about the proper balance of cost and capability?

7. What are field-level unit priorities for performance?

8. What resource constraints i.e., fiscal, supplier competition/expertise, time, will affect programme risk?

9. Is cost or schedule most important and what are the best ways to control them on this programme?

10. What is the right balance of risk and incentives to provide suppliers with so results field-level units requirements are met?