# Top 50 Best Practices Design Reliable Produce Support Work Order Quality for Contract Perform

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Contract with Product Support Logistics Providers describe level of performance the provider must deliver to meet warfighters requirement. The term "contract" is used here in a generic sense. It may be a traditional contract, a performance work statement, a statement of objectives, or status update.

Description performance levels are expressed in terms of measurable outcomes rather than prescriptive methods. The contract also describes how the outcome will be measured and evaluated, and the payment that will be linked to successful performance. The provider has considerable latitude to determine how to meet the performance objectives and quality levels spelled out by DoD, ie focuses on "what," and the provider focuses on "how."

1. Performance requirements that define the work in measurable, mission-related terms

2. Performance standards i.e., quality, quantity, timeliness tied to performance requirements

3. Quality assurance plan describes how contractor performance is measured against the performance standards

4. Determine if acquisition is either critical to mission accomplishment or requires large expenditures of funds

5. Make sure positive and negative incentives tied to the quality assurance plan measurements.

6. Focus on specific work outcomes and ensure measurable to greatest extent practicable.

7. Contractor performance quality assurance assessments focus on outcomes not contractor processes.

8. Focus on insight of contractor performance, not oversight.

9. Incentives motivate contractor to achieve high-quality performance levels consistent with economic efficiency.

10. Ensure incentives are effective reflect value both to DoD and to contractor


*Top 10 Attributes Characterise Weapons System Product Support Mission Scenario Context*

Product support is defined as a package of logistics support functions necessary to maintain the readiness and operational capability of a system or subsystem. It is an integral part of the weapon system support strategy required to write status updates as part of acquisition strategy.

The Package of Logistics Support Functions includes administration of materiel, distribution, technical refresh, maintenance, training, configuration/engineering support, repair parts allotments & reliability growth.

Site Visit Executive is responsible for laying out and executing strategic blueprint for logistics process so every part of the package is connected and contributing to the warfighters mission capability.

DoD policy requires product support strategy be updated periodically during product Service Life with greater frequency dependent on pace of technology. Site Visit Executive must balance multiple objectives in designing strategy to achieve operational effectiveness while maintaining affordability.

1. Warfighter relationships are based on performance outcomes such as flying hours or mission availability of equipment

2. Integrated supply lines focus on system readiness and warfighter support

3. Supply Lines responsive to the unique requirements of military services

4. Best-value product support providers selected from DoD partnerships

5. Mission support space maintains long-term competitive pressures on providers

6. Secure, integrated information systems across providers enable supply line complete full asset visibility

7. Continuous improvement of weapon system support

8. Reduction in operating costs by dedicated investments

9. Effective integration of transport weapon system support

10. Ensure transparent to warfighter provides total combat logistics capability


*Top 10 Test & Evaluation Steps Utilise Weapons System Reliability Metrics Required for Operations*

Weapons systems test & evaluation processes as the principal methods of ensuring achievement

of user performance requirements to provide verification and validation of the systems engineering processes to build confidence design solution is on track to satisfy the desired capabilities.

Rigorous component and sub-system test evaluation enables performance capability and reliability improvements to be designed into the system early. Test/Evaluation events should advance to robust, system-level and system-of-systems level assessments, to ensure that the system has matured to a point where it can be built to specifications, and ultimately meet operational deployment requirements.

Systems are tested under condition of intended use where two primary metrics are critical: operational effectiveness and suitability.

Operational effectiveness is the overall degree of mission accomplishment of a system when used by field-level units or expected for operational deployment of the system considering organisation, doctrine, survivability, tactics, vulnerability, and adversarial conditions.

Operational suitability is the degree to which a system can be satisfactorily placed in field use, with consideration given to reliability, availability, compatibility, transportability, interoperability, surge usage rates, maintainability, user behaviour, logistics supportability, update records and training requirements.

From support status update perspectives, weapons systems test/evaluation combine to provide metrics for both performance in terms of reliability and maintainability, and the effectiveness of the product support infrastructure and sustainment resources.

1. Establish a reliability growth or improvement strategy

2. Incorporate reliability growth potential estimates

3. Use reliability metrics to ensure growth is on track to achieve requirements.

4. Establish testing phase entrance criteria

5. Ensure reliability growth estimate stated in progress report

6. Track reliability growth estimates through system-level test until threshold is reached.

7. Ensure reliability growth estimate assumptions based on realistic system engineer inputs

8. Review adequacy of requirements to determine if achievable

9. Update reliability growth estimates if necessary

10. Ensure enough test time is resourced to support evaluation of reliability requirements

## *Top 10 Equipment Reliable, Available Maintain Engineering Process Problems*

Too Little effort was expended determining weapons system capacity to be Reliable, Available Maintain and not much Testing was conducted at the component/system level. Testing time was limited, and sample sizes were too small.

Component stress testing frequently fell short of practical utility or not conducted. Proper accelerated service life testing was not often accomplished. Adequate Reliability Programme Plans that should be designed to provide Roadmaps to achieve realisation of reliability programme objectives and requirements were not fully implemented.

1. Failure to design-in reliability early in the maturation process.

2. Inadequate lower level testing at component or subcomponent level.

3. Reliance on predictions instead of conducting engineering design assess

4. Lack of reliability improvement incentives for Service Life Expenditures

5. Inadequate planning for reliability and mission readiness

6. Ineffective implementation of Reliability Tasks in improving reliability.

7. Failure to give adequate priority to the importance of Integrated Diagnostics design influence

8. Unanticipated complex information technology integration issues

9. Lack of adequate design maturation efforts during system integration.

10. Failure to anticipate design integration problems with increment design approaches

## *Top 10 Logistics Support Functions Define Product Support Maintain Readiness/Capable*

Product support is defined as package of logistics support functions necessary to maintain the readiness and operational capability of a system or subsystem. It is an integral part of the weapons system support strategy, which is a part of the acquisition strategy. Support and engineering activities must be integrated to deliver an effective and affordable product support package. The package of logistics support functions comprises:

1.     Materiel team establish

2.     Transit/distribution

3. Info tech refresh

4. Maintenance coordinate

5. Field-level training

6. Catalogue/configuration

7. Engineering support

8. Repair parts administration

9. In-service failure reporting

10. Reliability growth.