

Supply Route Service Track Sharing for Equipment Sourcing & Deployment Work Orders

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Dispatchers have detailed directives designed to advance the system processes involved in DoD contract logistics based on equipment condition indices for supply service route track for the fleet. Simple economics dictates that the cost & work involved in procuring equipment to deploy along a single route is dependent on the service levels of the entire group of routes in the sourcing system of the fleet. Consequently, mechanisms that promote the consideration of shared route service along the same track in a systems model grouping contract quotes are of crucial interest to the advancement of DoD deployment of equipment towards meeting common work order requirements to achieve upgrade/repair simulation success.

The intent of this report is to initiate a basis for informed decisions in the consideration of service route track sharing for equipment component infrastructure, including common work order approaches to an assessment of benefits & costs to DoD forces for demonstrating current practical processes & applications of different scopes for equipment upgrade/repair simulations.

Command & control dispatch systems are a cornerstone of approved procedures used along supply service routes to avoid operational crises & actions based on mission principles are significant to creation of any shared-track operations involving groups of contract quotes. Techniques & technologies of the three major branches of dispatch operations include: equipment component control, common work order communications & Logistics Rules and Procedures—all underscoring the goals of logistics reporting redundancy & other measures to ensure efficient service route processes.

The report contains examples of service route track sharing operations & describes progress in creation of common work order requirements for action to date. A surge-based mission scenario case illustrates project viability & incremental steps to move beyond rigid temporal separation presented as evidence of dispatcher progress in service route track sharing operations. Concrete actions are proposed to help dispatchers develop shared supply route track operations for equipment deployment based on upgrade/replace condition indices.

The report suggests ways to increase the interest & potential of shared-track systems including lists of potential candidates & preferred equipment conditions for common work order demonstration projects. Efforts should highlight advantages & disadvantages of shared-track system models to broaden supply route service & and practical economic appeal along with assessments of the barriers & obstacles encountered in equipment contract grouping techniques to adoption of the shared-track concept.

Dispatch control systems must be designed from the outset with concurrent common work orders in mind, allowing dispatchers to account for high supply route service stop rates directives with design factors detailing appropriate stop lengths & signal aspects. Equipment components must be considered as one part of an integrated contract quote grouping system of dispatch controls, training, rules & procedures. Whatever dispatch technology forms the basis of the shared-track operation, it should provide some common work order capacity for meeting growth in upgrade/repair simulation events.

By using existing shared supply route track systems to initiate pilot programmes for concurrent operations, a shared-track demonstration project without temporal separation could be useful in several respects, including realisation of dispatcher experience in common work order design & system implementation. Shared supply route service system feasibility must be demonstrated & cost/benefit streams of shared-track implementation demonstrated for surge operations. Results of a demonstration will serve to offer the potential for relief from significant common work order operating constraints on current temporally-separated supply route service track operations.

Although primary interest lies in true shared-use operation of supply route tracking & equipment infrastructure, dispatcher teams reviewed parallel operations on adjacent tracks & operations on same track with temporal frequency separation to establish characteristic operating categories & parameters for surge operations. Contract grouping categories are confined chiefly to specific supply route track lines & different equipment component type & size density routes were assessed instead of relying on purely volume considerations & corridors where risk assessment & crisis mitigation would be extremely difficult for dispatchers.

Automated contract quote grouping systems for integrated surge operation contingency scenario corridors have encouraged dispatchers to work with installation receipt stakeholders involved in sourcing equipment on supply route lines sharing equipment components & infrastructure, creating operational value

for surge operations that would not be possible without cooperatively sharing scarce logistics system resources.

Busy dispatchers have provided common work orders in line with supply service route templates to guide planning of surge operations through specific steps. Unique, practical common work order cases can be built by substituting appropriate spatial installation considerations & local variables related to uniquely situated installations. However, while common work order cases are required to justify an equipment upgrade/repair simulation project based on condition indices, it is not sufficient. The case for operational security must also be made.

Dispatchers indicate shared supply route track scenarios for service route techniques & equipment upgrade/repair schedule frequency insertions may reduce the capital costs implicit in new contract grouping system designed to satisfy requirements for equipment upgrade/repair simulations based on condition indices when compared to a new separate system for surge contingency scenarios. Concurrent shared supply route track for meeting new missions provides mechanisms to offer higher levels of route service for mobile units, while keeping capital costs in check to satisfy political stakeholders.

Key issues for shared supply route track operations include compatibility of equipment upgrade/repair schedules based on condition indices with the dispatch control system creating contract quote groups at the central station. Equipment component types & sizes used on supply route branch lines can function in a dedicated surge operational capacity & be fit with upgrade/repair frequency for contract quote signal grouping apparatus developed between installations by common work orders.

Dispatch control systems ensure meeting installation spatial requirements for disparate local positions between different equipment component types & sizes. Deployment controls on board route service tracking requirements must be programmed differently to factor in common work order braking rates & operating speeds when equipment upgrade/repair simulations based on condition indices could occupy two or more track blocks for surge contingency scenarios.

In this example, congruent results of economic & security common work order cases are integral to concluding shared supply route track projects are feasible for defined surge contingency scenarios. Positive indications include but are not limited to capital cost structure terms, Conclusions identifying proposed shared track route service have different drivers with respect to operational security &

economic factors than separate/parallel stand-alone system of different equipment component types & sizes sharing a corridor with upgrade/repair simulation schedules based on evaluation of condition indices.

Dispatchers determined supply route service modifications are likely required & achievable in future operations for unanticipated surge contingency scenarios, along side automated system control features based on new technology with presence of verifiable dispatch practises can be readily deployed for future modes of upgrade/repair simulations based on evaluation of equipment condition indices. Dispatchers have performed calculations detailing reasonable cost/benefit ratios justifying investments in concrete metrics for improvement in centralised dispatch control centres charged with grouping contract specifications.

Incremental changes to contract procurement quote grouping systems employed for administration of supply route service between installations connecting via common work orders have been validated by real-world mobile operational cases for surge contingency scenarios. Techniques were deemed acceptable to dispatch operators in both scope & degree of efficacy. Progress made by current operating systems offers both guidance & confidence to prospective user-based protocols for equipment upgrade/repair simulations precipitated by evaluations of condition indices.

In this report, future growth of shared supply route track operations to meet equipment upgrade/repair simulations based on route condition indices is contingent upon shared-track service routes being economically viable & achievable without sacrificing requirements of operation overload from different types & sizes of equipment components tasked with meeting requirements of surge contingency scenarios. Future technical advances must detail more advanced common work order cases likely to enhance appeal of considering shared-track route service.

The following recommendations for DoD to conduct future investigation & action will support progress for present operations & missions being planned or considered by busy dispatch operators. At minimum, common work order demonstration projects should encourage funding & oversight for creation, evaluation, testing & documentation of models, methods & procedures to expand concurrent track sharing in service routes & involve political stakeholders. Detailed evaluations of requirements for specific types & sizes of equipment component upgrade/repair simulations must be detailed for real-world mobile operations to meet future surge contingency scenarios.

In conclusion, DoD contract grouping demonstration projects must provide for design, deployment & testing to recommend preferred approaches to creation of future common work orders designed to report on actual costs & derived benefits of extending concurrent shared-track supply route operations of the force. Template common work order creation detailing risks involved in tasking equipment upgrade/replace scheduling techniques based on condition indices must be adapted to specific candidate supply route line segments under consideration by DoD.

The methodology employed for the dispatch of this report used limited operational tactics set for purely illustrative purposes. Expanding upon this report by applying conclusions to real-world mobile systems could validate & calibrate common work order models & quantify benefits to forces, enabling installations to meet requirements of surge contingency scenarios. Described techniques will be suitable for transferring advances in equipment upgrade/repair simulation scheduling based on condition indices evaluation to other prospective contract grouping systems at DoD.