

# [Top 10 Requirements for Auto System Design of Spare Part Equipment Upgrade/Repair Jobs & Supplier Integration](#)

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Modernised automation of Spare parts supply systems plays an important role in achieving desired availability of fleet equipment components for meeting work orders at optimum cost to mission. Installations should shoot for capital intensive, deployment-oriented & integrated technology. Downtime for spare parts system integration can at times be too expensive to carry out. Dispatchers have recognised non-availability of spare parts supply at installations when required for repairs, contributing to much of total down time.

Cost of spare parts is a significant portion of the total impact of upgrade/repair activity at installations. Upgrade/repair systems face non-availability of spare parts supply to meet deployment requirements w/ fiscal costs of fleet equipment components being classified as locked up capital, signifies vital importance of automated spare parts system integration for installation work orders.

Unique work order problems faced by installations in controlling spare parts integration are characterised by elements of supply uncertainty as to when a part is required & also the quantity of upgrade/repair requirements b/c failure of a fleet equipment component due to overuse cannot be predicted accurately. Spare parts are not readily available from many suppliers since they are not fast moving items. Original suppliers deploy spares in most cases.

Dispatchers have introduced new supplier connection models to incorporate auto system design integration, phasing out stove-piped information desks in order to integrate work orders, so spares for outdated transmission models are not readily available. These factors are significant in cases of sourced fleet components since equipment design changes move at different speeds at multiple installations.

Quantity & variety of spare parts to be integrated into new supplier connection models are often times too large, making close auto system control more & more tedious. Also, there exist tendencies for work order transitions from sourcing stages of fleet equipment components to spare parts use stages. As such, requisitions for spare parts at increased number than actually required results in accumulation at installations.

Each installation must proceed systematically & establish an effective spare parts information integration system. Supplier connection codification policy helps to minimise duplication of spare parts stocking & aids in establishment of solid work order process to facilitate integration of spare parts control systems.

Auto system integration must be carried out on the basis of different characteristics of spare parts techniques to establish good work order policy such as monitor of annual consumption value, mission criticality, supplier lead time, unit cost & schedule frequency of use. Installations must direct ambitious efforts on integration & establishment of suitable policies for selective supplier control, focusing efforts on real-world mobile operation problem areas.

Good auto system controls will help to integrate supplier policies involved in sourcing procedures & achieve optimum levels of spare part cache control for work orders. In addition, installations must optimise replacement policies for selected spare parts with increased down time costs. Installations must identify required spare parts and carry out supplier connection exercises for integrating optimum replacement policies.

For sourcing expensive spare parts, it is essential to recognise useful life for equipment is extended by appropriate applications of reconditioning & upgrade/repair techniques. Installation work order efforts must be made to integrate spare parts in view of difficult sourcing processes. Installation establishment of spare parts supplier register banks goes very long way in reducing the total cost of holding expensive spare parts in stock.

For different installations, it is imperative to establish spare parts supplier register banks & suitable integrated information system for spare part exchange. Automated applications for processing of spare parts information & operation of effective spare parts control systems will assist installations with scheduling of upgrade/repair job work orders.

Objectives of spare parts system integration include ensuring spare parts are readily available from suppliers for upgrade/repair of fleet components as & when required at optimum cost. Also, there exist absolute work order requirements for spare parts to be of high quality in order to meet the requirements of subsequent deployment to meet mission requirements.

Finally work order reviews have established results indicating spare parts consumption rates for some installations are very high, while other installations experience lower consumption & varied deployment patterns, highlighting the utility of building systematic spare parts integration with supplier connection models.

Multiple actions following from establishment of supplier connection episodes are required to ensure that spare parts system integration is effective to meet mission requirements of

installations. Top 10 Mandates for systematic actions in building integrated spare parts systems are as follows:

1. Establish auto system operations control, transform service level supplier contract architecture, portfolio process & active work order monitor report
2. Solve auto system scope problems w/ directed action for supplier visibility & situational awareness, auto operations root cause, work order upgrades
3. Satisfy auto system requirements & work order goals to identify supplier solutions, establish quant for evaluation, assess ability of alternate measures
4. State auto system scope for cost estimate, work order information source & supplier risk rationale results
5. Implement supplier characteristics of high-quality, reliable auto system cost estimates, document comprehensive, accurate, credible work orders
6. Authorise auto system deploy to support supplier testing for achieving capable mission to verify with independent testing of work orders
7. Plan supplier programme requirements, budget & execute auto system process w/ work order goals conform to fiscal, security, architecture & investment areas
8. Assess current supplier reporting tool capable for auto system support, establish work order service process, design requirements, tool integration specs
9. Evaluate & validate current auto system supplier infrastructure consist of tech, assets, configuration items & work order evaluation components
10. Disclose auto system ground rules & work order assumptions for supplier register notes, tech refresh baseline & implement at installations