MK 20 Mod X Integrated Product Support and Logistics Data Requirements Summary

*Predicted data is acceptable during the proto-typing phase. Production deliverables will need to be updated with as much actual data as possible.

Technical Data Package (TDP) –Level II Development TDP required during the proto-typing and testing phase with a Level III Product Level TDP required after design is baselined and approved supporting production of the system. TDP will be updated as required due to Engineering Change Proposals (ECPs), or any deviation from the approved baseline design. The TDP shall consist of all Technical Data and Computer Software, including the models, product drawings and associated lists necessary for the re-engineering, manufacturing, in-service engineering, and logistics support of the system. These include, but are not limited to, models, engineering drawings, shop drawings, related data and lists, and descriptive specifications in accordance with MIL-STD-31000B.

Support Equipment – If required, TDP information for support equipment.

Priced Bill of Material (P-BOM) – Furnish a P-BOM to include Commercial Off The Shelf (COTS), Modified COTS, Non-Developmental Items, and Development Items identifying information. The P-BOM should be curated in an indentured list, down to the lowest line replaceable unit (LRU) to enable component level obsolescence tracking. Each system deliverable will be accompanied by an As Built Configuration List.

COTS Supply Chain Risk Management Plan - Identify any mission-critical functions or components that may result in Level I or Level II protection failures due to operational, system information, or component integrity aspects. Utilize MIL-STD 882 System Safety Program definitions of criticality to identify mission criticality.

Diminishing Manufacturing Sources and Material Shortages (DMSMS) Plan and reports – Develop a robust DMSMS tracking and reporting system to identify, analyze, mitigate, and report obsolescence affecting the system and/or components using DODI 4245.15, DODM 4245.15, the SD-22 DMSMS Guidebook and the SD-26 DMSMS for guidance.

Logistics Product Data –Complete Maintenance Task Analysis (MTA). Identify the logistics and systems engineering tasks that affect design of system hardware and software to meet mission support requirements and system RM&A, supportability, accessibility, and cost objectives, using MIL-HDBK-502 as guidance. Include Modeling and Simulation data for system reliability, maintainability, and availability (RM&A).

Reliability and Maintainability Block Diagrams and Mathematical Models - Establish a reliability program that develops, collects, interprets, and analyzes reliability data using

GEIA-STD-0009 and the DoD Reliability, Availability, Maintainability and Cost Rationale Report Manual, dated 1 JUNE 2009 as guidance, as well as guidance defined within MIL-HDBK-189C, 14 June 2011, and MIL-HDBK-781A, 01 April 1996.

Failure Modes, Effects, and Criticality Analysis (FMECA) – Comprised of the Failure Mode and Effects Analysis (FMEA), the Criticality Analysis (CA) and Risk Priority Analysis (RPA), Critical Item Analysis (CIA) and Failure Compensation Analysis (FCA), the FMECA will identify and analyze failures, identify root cause, rate severity, estimate system critical failure rates, and support mitigation of failure risks and identify alternatives.

Level of Repair Analysis (LORA) – Determine at what level the system and components of the system will be remove/replaced, repaired, and demilitarized using economic and non-economic models utilzing MIL-HDBK-1390 as guidance.

Configuration Management (CM) Plan and reports – Create a Configuration management plan using MIL-HDBK-502A and MIL-HDBK-61B as guidance. The CM Plan will identify appropriate processes, tools, and resources to maintain system and component attribute consistency per the system requirements as well as identifying roles and responsibilities of the stakeholders to support and maintain the functional, allocated, and product baselines.

Technical Manuals and Training – Provide a system level technical manual using S1000D as guidance. If the system is a COTS item, a COTS technical manual is acceptable. Provide operator training using the MIL-HDBK-29612 as guidance.