

CHARTER

Joint Defense Manufacturing Technology Panel (JDMTP) Subpanels

I. *Purpose and Scope*

A. Purpose: Each Subpanel of the Joint Defense Manufacturing Technology Panel (JDMTP) is chartered to identify and integrate requirements; conduct annual project assessments/portfolio reviews; foster joint project planning as well as identify cross-cutting manufacturing science and technology needs; coordinate the Manufacturing Technology (ManTech) requirements of the Army, Navy, Air Force, Defense Logistics Agency (DLA), Missile Defense Agency (MDA), the Office of the Secretary of Defense (OSD) and other relevant government organizations; eliminate unwarranted duplication of technical efforts; be cognizant of national and international technology developments; identify innovative and disruptive manufacturing technologies; promote dual-use technology applications between the Government and the private sector; and enhance manufacturing technology transfer/transition among the DoD components, other government agencies, industry, and academia. Each Subpanel's purpose is to serve as the DoD technical focal point for manufacturing technology within its scope.

B. Scope:

B.1 Composites Processing and Fabrication Subpanel: Includes manufacturing and related technologies for the fabrication of parts and assemblies from composite materials, to include polymer matrix composites, certain metal matrix composites (MMC) and ceramic matrix composites (CMC), carbon matrix composites, and other materials that have similar forms and/or use similar processes. The scope includes composites manufacturing technology efforts in support of both new production and sustainment/readiness activities for fielded systems.

B.2 Electronics Processing and Fabrication Subpanel: Includes manufacturing technologies for electro-optics, RF modules, power and energy sources, directed energy, electronics packaging & assembly, electromagnetic windows and domes, and lead-free electronics. The scope includes manufacturing technologies for electronic subassemblies and subsystems, as well as related modeling, processes, and testing in support of both new production and sustainment/readiness activities for fielded systems.

B.3 Metals Processing and Fabrication Subpanel: Includes manufacturing technology for metals, ceramics, optical materials, certain MMCs and CMCs, and other materials of similar microstructure. Inclusion of materials within the Metals Subpanel portfolio is driven both by the materials themselves and by the processes used to produce them and includes a range of classifications including: nano-materials, meta-materials, meso-materials, and functionally gradient materials. Processes associated with metals fabrication include: machining, casting, forging, joining, powder metallurgy, heat treatment, fabrication, surface conditioning, treatments, etc. Other associated technologies within the scope of the Subpanel include: nondestructive testing and evaluation; computational modeling and simulation of materials, materials processes, and machining processes; and nontraditional additive manufacturing processing such as: laser additive, electron beam and plasma additive manufacturing. The scope includes manufacturing technology efforts in support of both new production and sustainment/readiness activities for fielded systems to include repair activities from the field level to depot level.

B.4. Advanced Manufacturing Enterprise (AME) Subpanel: Encompasses the technologies, processes, and practices that foster rapid, superior execution of manufacturing enterprises across the life cycle. This scope includes: (a) model-based tools and approaches that optimize producibility during early design and support standard data environments for life cycle support; (b) network centric manufacturing capabilities to facilitate resilient and adaptable supply chains; (c)

intelligent manufacturing planning and factory execution; and (d) modeling and simulation capabilities advancing the above business practices. This Subpanel will address the technologies and practices to fully realize government and industry-wide use of manufacturing readiness tools and processes, including design for producibility and sustainability. Actions to assist in improving defense manufacturing infrastructure and workforce are also within scope. The AME subpanel will coordinate complementary technology development with other subpanels to facilitate effective insertion/transition.

II. Role of the Subpanels

A. Each Subpanel will report to and receive taskings from the JDMTP on ManTech issues within its respective scope.

B. Each Subpanel will identify and document customer requirements from sources such as industry, weapon system program offices, future combat planning organizations, and logistics / sustainment organizations; identify common technology needs; maintain and annually update a catalog of technology needs and identify projects addressing those needs within their assigned scope.

C. Each Subpanel will be responsible to maintain cognizance of individual ManTech projects and initiatives within its scope including objectives, approaches, key technologies, and transition opportunities. Each Subpanel will ensure an integrated and coordinated ManTech program that addresses the ManTech requirements within its assigned scope, with the projects executed by the appropriate DoD components. For projects considered to be within the scope of two or more Subpanels (for example, MMC and CMC projects within the scope of both the Metals and Composites Subpanels, or modeling and simulation projects considered within the scope of the AME Subpanel and one or more other Subpanels), the Chairpersons of the affected Subpanels will agree on which Subpanel has the primary review responsibility, as well as any other special project handling requirements. The Primary Subpanel will review the projects as they would normally, and the Secondary Subpanel(s) has/have the option to review the projects, but Secondary Subpanel comments will be considered to be for informational purposes.

D. Each Subpanel will identify and describe opportunities for investing in joint/common requirements of the DoD and related government components. Each Subpanel will consider emerging, broad-based, generic technology needs of the customers (science and technology managers, weapon system developers and sustainers), manufacturing and sustainment cost drivers, and the responsiveness of the defense industry. If requested by a Service or Agency, each Subpanel will provide a technical review of a proposed ManTech project to ensure no duplication exists and comment on joint interest on any Service/Agency proposal. Joint and cross-cutting ManTech project and initiative recommendations will be presented to the JDMTP and OSD's Defense-wide Manufacturing Science & Technology (DMS&T) Program executive agent for future funding consideration.

E. Each Subpanel will conduct an annual assessment/review of the ManTech projects within its portfolio. The annual assessment will review progress, jointness, Warfighter relevance, duplication, impact on sustainment, leveraging, proposed implementation, and other metrics as appropriate. Additional non-ManTech projects may be reviewed which are relevant to the Warfighter requirements such as SBIR, STTR, and other S&T projects. Each Subpanel will also identify best practices, significant impacts and lessons learned. The results of each Subpanel portfolio review will be presented to the JDMTP on an annual basis. Each Subpanel will recommend the most highly achieving projects in terms of transition and Warfighter impact for submission/consideration for a ManTech Achievement award, or a letter of commendation.

F. Each Subpanel will promote improved technology transition/transfer enabling broader applications of advanced technologies. This effort will include improved methods to share data

with industry, other DoD components, and academia as well as the planning and support of the annual Defense Manufacturing Conference within its scope and as directed by the JDMTP. This responsibility may include organizing a call for papers; coordinating briefings, presentations and demonstrations; inviting guest speakers; making arrangements for displays and exhibits; organizing technical sessions; and developing a presentation on the Subpanel's activities.

III. Requirements

A. Primary and Alternate Subpanel members will be appointed by their respective Service/Component JDMTP Principal. Other government, Industry, and Academic representatives will be appointed by the Subpanel chairperson.

B. Each Service will provide at least two representatives, with one designated as its primary representative, to serve as members of the respective Subpanel. DLA and MDA will provide a representative as a primary member, if appropriate to its mission, with additional members provided as needed. The primary members constitute the decision-making authority of the Subpanel. Primary members will be managers of resources (people or dollars) directly allocated from the ManTech program within their DoD components or senior technical personnel fully cognizant of ManTech requirements and projects within their DoD components. Alternate members must, at a minimum, be active participants in their DoD components' ManTech program as part of their assigned duties.

C. Representatives from other government and industry organizations may be invited to participate in Subpanel activities on an as needed basis as determined by the Subpanel Chairperson.

D. Subpanel members will be required to conduct such data collection and coordination as required within their DoD components so that they can adequately discuss the entire scope of technologies before the Subpanel and ensure that their DoD components' priorities, policies, and objectives are communicated to the other Subpanel members and that the purposes of the Subpanel may be accomplished. In addition to their Subpanel Chairperson, members will receive guidance from and report to their DoD components' ManTech Directors on ManTech-related issues.

E. Each Subpanel Chairperson may establish and monitor ad-hoc Technical Working Groups (TWGs), as necessary, for the purpose of creating collaboration between the DoD components on specific technical topics. The TWGs will be responsible for identifying and integrating requirements, conducting joint program planning, creating roadmaps, and developing a joint strategy. Each participating member should have the endorsement and support of their employing agency.

F. Each Subpanel will coordinate with the other JDMTP Subpanels and Working Groups for the purpose of planning cooperative tasks, identifying mutual objectives, reviewing proposed ManTech projects of a Service or Agency if requested, exchanging technical expertise, sharing best practices, coordinating sequential tasks, and leveraging the results of ongoing or completed developments. Coordination with other government agencies and the private sector will be conducted as necessary to fulfill the Subpanel's mission.

IV. Administration

A. The Subpanel Chairperson will be selected by the consensus of the JDMTP principals. The Chairperson will be appointed for a three-year term. Longer terms of service will be at the

discretion of the JDMTP.

B. Expenses incurred by individual Subpanel members for tasks such as program reviews will be the responsibility of the employing agency. Expenses of the Subpanel as a whole such as an annual report, brochures, workshops, meeting functions, a secretariat, and other administrative costs will be supported by the employing agency of the chairperson.

C. Responsibilities of the Chairperson include serving as the main interface between the Subpanel and the JDMTP; providing focus and direction for Subpanel activities; conducting Subpanel meetings; supervising meeting arrangements such as schedules, agendas, location, facilities, and notification of members and guests; developing a consensus on technical issues or defining points of disagreement for resolution by the JDMTP; ensuring that appropriate minutes are recorded and published; orchestrating briefings and papers for presentation to the JDMTP; allocating support resources if provided by the JDMTP; exercising staff supervision over the assignment and execution of tasks by Subpanel members; and maintaining an environment which fosters continuous improvement, cooperation, innovation, and free information exchange.

D. Each Subpanel will meet as called for by the respective Chairperson.

V. *Approval*

This Joint Charter for the JDMTP Composites, Electronics, Metals, and AME Subpanels is hereby approved on December 9, 2010.