



Mobile Electric Power Sources Joint Standardization Board (MEPS JSB)

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Chief, TMD

PM E2S2



Agenda



- DoW power standardization historical context
- Why Standard Power?
- PM E2S2 Power Portfolio
- MEPS JSB Charter
- Regulatory Framework

- Hundreds of generator makes and models in WWII created sustainment failures
- Army Service Letter (25 JAN 1946)
- War Department Memo: Engine Generators (18 AUG 1947) "All R&D of engine generators will be coordinated...to assure maximum standardization..."
- Issues repeated in Vietnam; OSD took action
- DoD Directive 4120.11, Mobile Electric Power, 10 AUG 1967 (continuously in force; revised 2025)
- Established a material developer to address issue

*Mr. Cleaver -
forward this
attached some papers
left by Col. James -
Not dated*

SUMMARY OF PROGRAM FOR DEVELOPMENT OF
ENGINE-GENERATOR EQUIPMENT FOR THE ARMY

WAR DEPARTMENT
War Department General Staff
Service, Supply, and Procurement Division
Washington 25, D. C.

WDGSP/EL 22059 18 August 1947

MEMORANDUM FOR COMMANDING GENERAL, ARMY AIR FORCES

SUBJECT: Department of Defense Directive

DOD INSTRUCTION 4120.11
MOBILE ELECTRIC POWER SYSTEMS (MEPS)

Originating Component: Office of the Under Secretary of Defense for Acquisition and Sustainment
Effective: August 24, 2018
Releasability: Cleared for public release. Available on the Directives Division Website at <http://www.esd.whs.mil/DD/>
Incorporates and Cancels: DoD Directive 4120.11, "Standardization of Mobile Electric Power (MEP) Generating Sources," April 13, 2004
Approved by: Ellen Lord, Under Secretary of Defense for Acquisition and Sustainment

Purpose: In accordance with the authority in the Department of Defense (DoD) Directive 5134.01; the January 5, 2018, Secretary of Defense Memorandum; the January 31, 2018, Deputy Secretary of Defense Memorandum; and the July 13, 2018 Deputy Secretary of Defense Memorandum, this issuance:

- Establishes policy, assigns responsibilities, and provides guidance for the development, standardization, acquisition, and management of MEPS for the DoD.
- Establishes the MEPS Program Office to coordinate acquisition of MEPS.
- Updates and incorporates MEPS procedures.
- Recognizes the MEPS Joint Standardization Board (JSB) as a forum to coordinate joint interoperability and standardization.
- Takes precedence over all DoD Components publications that contains conflicting guidance regarding MEPS.



1967-1993
1st Generation Sets
Military Standard
(MIL-STD)
(1.5kW-750kW)



1993-2010
2nd Generation Sets
Tactical Quiet
Generator (TQG)
(3kW-200kW)

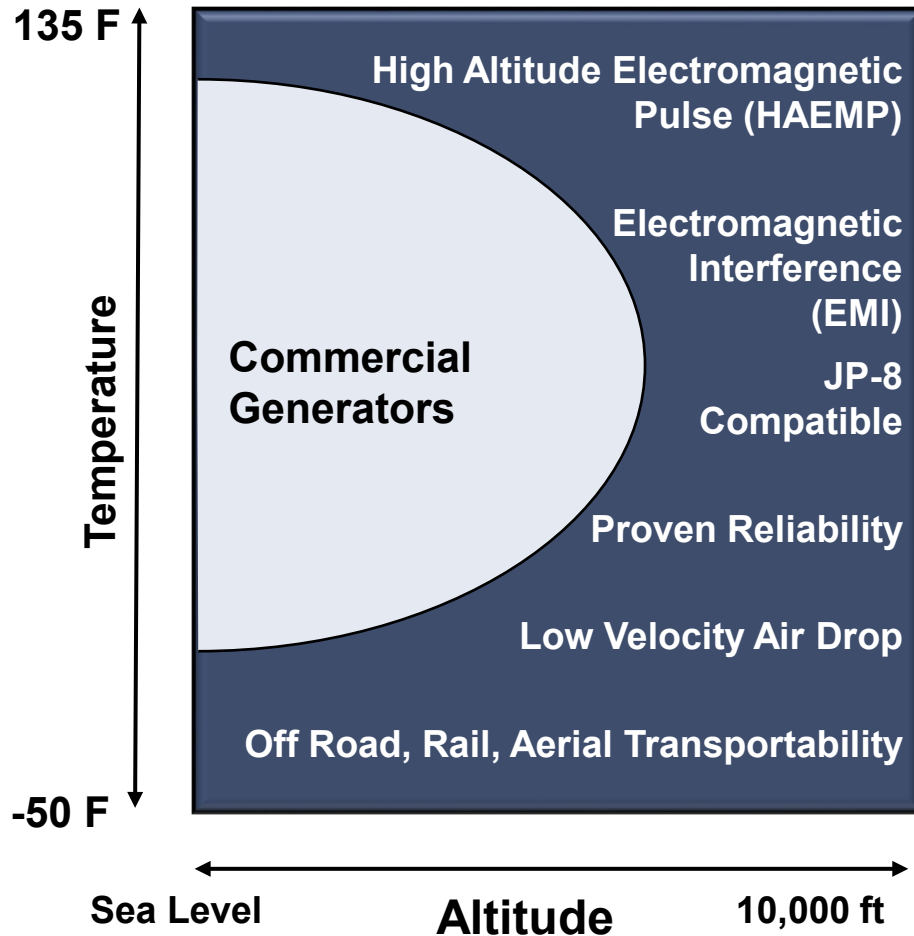


2010-Present
3rd Generation Sets
Advanced Medium
Mobile Power
Sources (AMMPS)
(5kW-60kW)

PM E2S2 is delegated Lead Standardization Activity for all Services (per DOD Instruction 4120.11)

Why Standard Power?

Military Power Requirements



- For the Army, standard power
 - reduces overall **lifecycle cost**
 - reduces reliance on **contracted logistics**
 - reduces **logistics footprint**
 - provides greater **interoperability**
- For the Soldier, standard power
 - performs in **extreme environments**
 - provides **proven reliability**
 - enables organic parts and maintenance (**faster and cheaper**)
- For the PM, standard power
 - is already **tested** for all applications
 - is already **provisioned, supported, and school-house trained**
 - is **free** through End Item Interchange
 - provides the **lowest lifecycle cost** impact to the program

Performance driven by combat environments and mission equipment needs

Small

2kW / 3kW



Small Tactical Electric Power (STEP)



PROGRAMS:

- 2kW Military Standard Gen.
- 3kW Tactical Quiet Gen.
- Small Tactical Electric Power (STEP)
- 5-60kW Advanced Medium Mobile Power Sources (AMMPS)
- Power Units/ Power Plants
- 500kW Large Tactical Power
- 900kW Deployable Power Generation and Distribution System
- Power Distribution Illumination Systems Electrical
- 5-200kW Tactical Quiet Generators

Medium

5-60kW Advanced Medium Mobile Power Sources (AMMPS)



AMMPS Power Unit (PU)



AMMPS Power Plant (PP)



AMMPS MicroGrid



Large

Large Tactical Power System (LTPS)



DPGDS PU



Distribution & Advanced Power

Power Distribution Illumination Systems Electrical (PDISE)



Universal Power Gateway (UPG)





MEPS JSB Charter



- Purpose (per July 2020 Charter): To serve as the **single, centralized body** responsible for the **development, standardization, and lifecycle management** of all Mobile Electric Power Systems across the Department of War.
- Core Mandate:
 - **Ensure Joint Interoperability:** Standardize MEPS equipment and interfaces
 - **Eliminate Redundancy:** Prevent duplicative, service-specific development
 - **Consolidate Requirements:** Act as the primary forum for all services to define, validate, and prioritize joint requirements
 - **Oversee Lifecycle Management:** Provide direction and oversight for the entire lifecycle of MEPS,
- **Bottom Line:** The Charter formally empowers the JSB to act as the DoW's authority on mobile power, making its recommendations and decisions binding across the services.



The Regulatory Framework



- Guiding Regulation (DFARS Subpart 208.70): The JSB's work directly supports the DoW's **"Coordinated Acquisition"** policy designed to streamline procurement and enhance standardization.
- How Coordinated Acquisition Works:
 - **Centralized Responsibility:** An "Acquiring Department" (e.g., a specific Program Office) is given the **sole authority to contract for specific items** on behalf of the entire DoW.
 - **Streamlined Process:** "Requiring Departments" (e.g., other services needing the equipment) procure **through the lead standardization activity**.
 - **Key Benefits:** This approach achieves **economies of scale**, ensures **standardization**, reduces **administrative burden**, and simplifies **supply chain management**. *It increases DoW buying power.*
- **Relevance to the JSB:** The JSB acts as the **coordinating body** that enables this process for mobile power. It aligns all service requirements into a **unified acquisition strategy** for the entire DoW.



Summary



- **Power standardization** has been a recognized need for **over 50 years**
- **Power standardization** across the services is **critical to warfighter success**
- **MEPS JSB facilitates:**
 - **Implementation of DoDI 4120.11** mandating Joint power standardization
 - **Coordinated acquisition** of tactical power systems across Joint Services
 - **Lifecycle sustainment coordination** across services
- **MEPS JSB** enables the Army to **modernize** standardize power sources



Discussion



Backup Slides

TMS Benefits

- Interoperability between power systems from different vendors/services
- Applicable for all services and in all environments.

Warfighter:

- *Resilience, adaptability, and efficiency* for the Warfighter
- Provides maximum flexibility for obtaining and using tactical power

PEO/DoD:

- Gets rid of vendor lock to a certain class of product
- Lowers acquisition costs and enables selecting best vendor per device
- Enables competitive procurement environment

Application and Compliance

- To be utilized in acquisition of military power systems across all services
- Compliance to be tested and verified through Army Test and Evaluation Command (ATEC)

Governance, and Participation

- Owned by PEO CS&CSS/E2S2 and governed with input from all services.
- Industry participation in shaping the future TMS

TMS Products



MIL-STD-3071
TMS



**TMS TGP Compliance
Kit** Details on how
components will be
tested



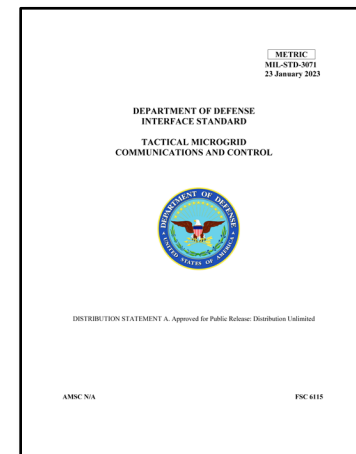
TMS TGP Test Stand
Physical and virtual
location to test
compliance



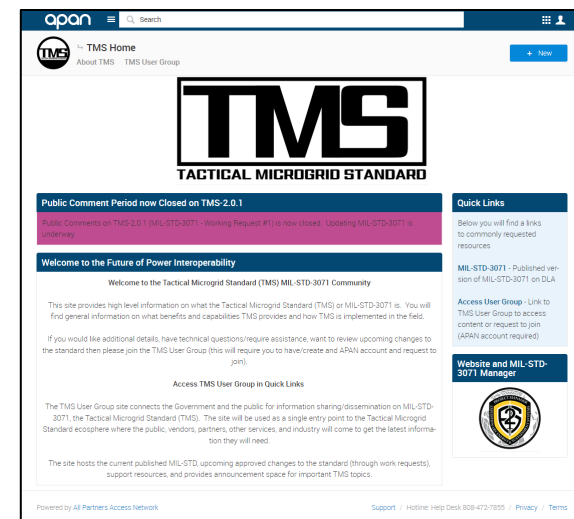
**TMS TGP Developers
Kit**
GFE to developers,
acquirers, software,
executable files



**TMS Contract
Language**
Language that you
can cut and past into
contracts

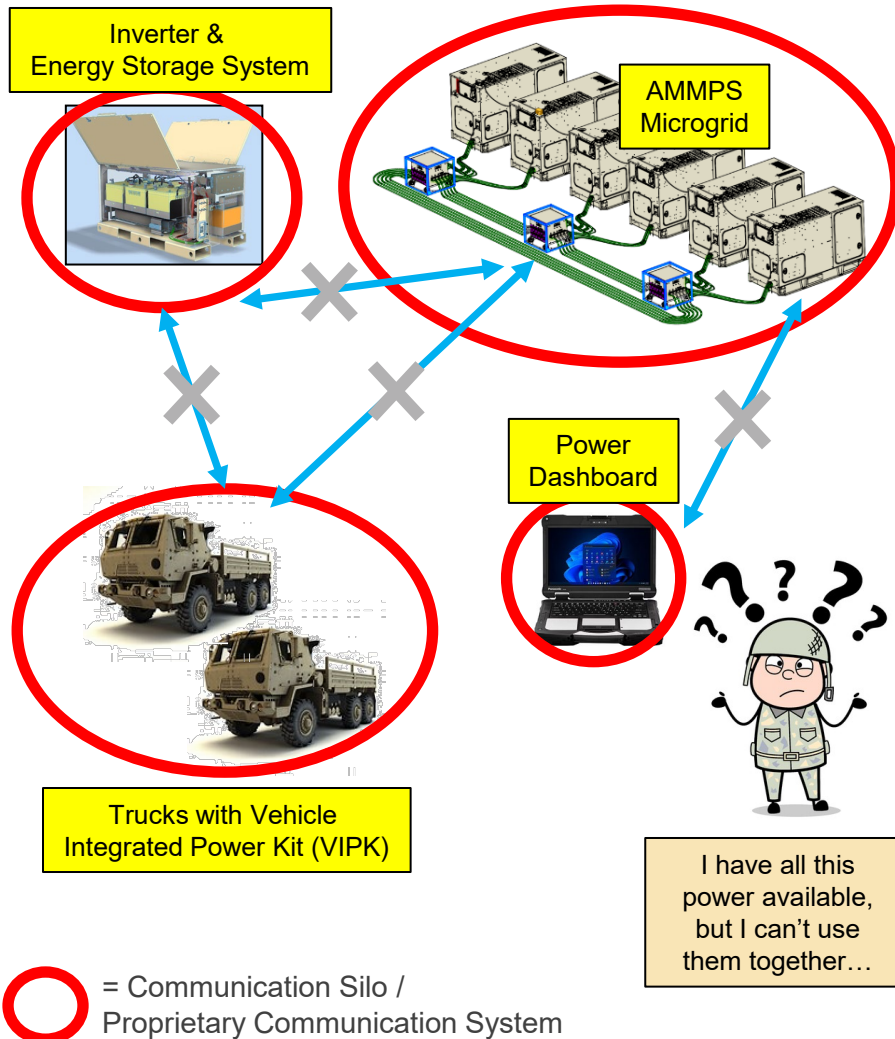


MIL-STD-3071 Document



TMS Website: <https://go.mil/TMS>

Vendor Lock / Proprietary Communication Grid:



TMS Enabled Grid

