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STRATEGY  
for the  
DEPARTMENT OF DEFENSE  
POSITIONING, NAVIGATION AND TIMING (PNT)  
ENTERPRISE  
[UNCLASSIFIED VERSION]

CLEARED  
For Open Publication  
Aug 15, 2019

Department of Defense  
OFFICE OF PREPUBLICATION AND SECURITY REVIEW

*Ensuring a U.S. Military PNT Advantage*

NOVEMBER 2018

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## FOREWORD



The National Security Strategy and National Defense Strategy issued by President Donald Trump and Secretary of Defense James Mattis, respectively, place significant emphasis on the ability of U.S. military forces to operate with lethal effect and to remain resilient in the face of increasing threats from our adversaries around the world. Capabilities provided by the DoD Positioning, Navigation, and Timing (PNT) Enterprise are integral to enabling the Joint Force to achieve those objectives. This Strategy for the DoD PNT Enterprise also serves as an essential element of the Department's Command, Control, and Communications Strategy, which in turn is a component of the even larger DoD Information Technology Strategy.

The challenge of remaining resilient in a dynamic threat environment is compounded by the need to implement new PNT capabilities both rapidly and affordably in many different DoD weapon system applications. This Strategy takes account of the operational and economic realities in play and directs coordinated, coherent actions by all DoD Components with oversight and guidance provided by a DoD PNT Enterprise Oversight Council structure. It leverages the cornerstone capabilities provided by a modernized Global Positioning System with diverse additional sources of PNT information in a modular, open-system integration approach to deliver resilient PNT effects for the Joint Force.

These actions across the DoD PNT Enterprise are necessary to meet both National and DoD Military Strategy objectives. The strategic guidance herein focuses efforts to realize those objectives now and into the future. The DoD is committed to maintaining and reinforcing a military PNT advantage for U.S. and allied forces in all warfighting domains.

This version of the PNT Enterprise Strategy is UNCLASSIFIED to enable its distribution to a broad audience within the U.S. Government and externally. Classified versions at SECRET (NOFORN) and TOP SECRET (SCI) levels are available to properly cleared personnel with Need-To-Know authorization. Contact the office of the DoD Chief Information Officer for further information.

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## INTRODUCTION



*State and non-state actors place the safety of the American people and the Nation's economic vitality at risk by exploiting vulnerabilities across the land, air, maritime, space, and cyberspace domains. Adversaries constantly evolve their methods to threaten the United States and our citizens. We must be agile and adaptable.*

*National Security Strategy, 2017*

The U.S. military continues to lead the world in the development and employment of positioning, navigation, and timing (PNT) capabilities, building upon the strengths of the Global Positioning System (GPS), combined with other sources of accurate PNT information to increase resilience and accuracy.

To advance and support U.S. national security and military strategy now and into the future, the DoD civilian and military leadership must remain attuned to the vital enabling role that military PNT capabilities play in shaping the global environment, deterring aggression, fighting and winning today's wars, and in preparing for future challenges.

The U.S. military and its allies are increasingly challenged by threats to our national security and to our PNT capabilities. The DoD must maintain a U.S. military PNT advantage across the continuum of conflict and the range of military operations.

This document presents a strategy for the DoD to provide and assure a PNT Enterprise to the United States Joint Military Force and its allies and coalition partners, ensuring that PNT services and capabilities are available to enable the full range of modern warfare.

This strategy also enables execution of the full range of Navigation Warfare (NAVWAR) Operations by Combatant Commanders to maintain a U.S. military PNT advantage in support of both national security and strategic military objectives.

The PNT Enterprise encompasses governance, capabilities, applications, and effects. It includes the sources of PNT information (global, regional, and

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local/natural and manmade), the means of distributing and regulating PNT information, the applications and implementations that exploit various combinations of PNT information, and the effects generated by the use of PNT information in the execution of NAVWAR Operations.





## STRATEGIC CONTEXT



*The Joint Force must remain capable of deterring and defeating the full range of threats to the United States. The Department of Defense must develop new operational concepts and capabilities to win without assured dominance in air, maritime, land, space, and cyberspace domains, including against those operating below the level of conventional military conflict.*

*National Security Strategy, 2017*

The National Security and National Defense Strategies rely on a well-equipped, capable, and resilient Joint Force to defend and advance U.S. national interests around the world. Elements of PNT are embedded in and are essential to the execution of all Joint Force missions.

Military PNT capabilities developed and acquired by the Services must provide a PNT information advantage to the warfighter in the execution of NAVWAR Operations across the continuum of conflict and the range of military operations in any contested environment.

These PNT capabilities must be scalable by weapon system and by operational mission requirements and then integrated across the DoD to enable the Joint Force to execute its assigned missions.

This increasingly complex security environment is defined by rapid technological change, challenges from adversaries in every operating domain, and the impact on current readiness from the longest continuous stretch of armed conflict in our Nation's history. In this environment, there can be no complacency—we must make difficult choices and prioritize what is most important to field a lethal, resilient, and rapidly adapting Joint Force. America's military has no preordained right to victory on the battlefield.

General James Mattis,  
Secretary of Defense

