



# Title III of the Defense Production Act

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# **DPA Background**



- The Defense Production Act (DPA) is the President's primary authority to ensure the timely availability of private sector resources for national defense. Title III of the DPA provides unique economic authorities to mitigate industrial base shortfalls/risks and expand U.S. production capabilities to promote the "national defense".
  - DoD is the only Federal agency with an in-place capability to execute Title III authorities
  - Other Government agencies partner with DoD to address their needs.
    - Provide funding and technical support
- The domestic industrial base is a critical element of the economic and military power of the United States.
- "National defense" includes:
  - Programs for military and energy production or construction, stockpiling, space, and any directly related activity
  - Critical infrastructure protection and restoration
  - Military or critical infrastructure assistance to foreign nations
  - Homeland security
  - Emergency preparedness



## **The Defense Production Act**

## (50 U.S.C. App. § 2061 et seq.)



#### Enacted in 1950

Provides broad authorities to the President to assure the ability of the domestic industrial base to supply materials and services for the national defense. DPA authorities delegated to Federal agencies via E.O. 12919

### Title I – Priorities & Allocations

Provides the authority to order priority performance (delivery) on defense contracts and allocate materials to meet national security requirements (DO/DX ratings)

### **Title III – Expansion of Productive Capacity and Supply**

Authorizes appropriate incentives to create, expand or preserve domestic industrial manufacturing capabilities for industrial resources, technologies, and materials needed to meet national security requirements (includes homeland security)

### **Title VII – General Provisions**

Exon-Florio (CFIUS)

Voluntary Agreements – authorizes business competitors to form alliances for disaster planning and response and provides antitrust protection for actions pursuant to voluntary agreements National Defense Executive Reserve – provides for employment of private sector experts to support Federal Government preparedness planning and disaster response programs

### DPA not permanent law – must be periodically reauthorized

Expires September 30, 2014 Under jurisdiction of <u>Banking</u> Committees



# Title III of the Defense Production Act



- Government-wide procurement authority.
  - Provides financial incentives, including credit assistance, to finance the creation or expansion of domestic production capabilities and resources.
- Title III actions stimulate private investment in production resources by reducing the risks associated with the capitalization and investments required to establish the needed production capacity. Executes projects ranging from process improvement to production plant construction.
- Objectives include:
  - Expanding/sustaining production capacity
  - Ensuring U.S. Government access to technology/resources
  - Ensuring long-term commercial viability
- Title III is not a technology development or R&D program.
- Focus is on government-wide/multi-platform applications.



# **Title III Authorities**



## Incentives to ensure viable productive capacities

- Purchases/Purchase Commitments (Sec. 303a)
  - Purchases provide direct subsidy to company to assist in establishing production capacity
    - Purchase and installation of production equipment
    - Engineering support to improve quality and yield of production facility
    - Sample quantities for process validation and customer qualification testing
    - Costs to develop business and marketing plans

### — Purchase Commitments

- Guaranteed market to incentivize companies to establish, expand or maintain production capability
- Company may use internal funding or obtain external funding i.e., loan
- Government is buyer of last resort. Some or all of funds may not be expended
- Installation of Production Equipment in Government or Privately Owned Facilities (Sec. 303e)
- Development of Substitutes (Sec. 303g)
- Loans/Loan Guarantees (Sec. 301; Sec. 302)



# Title III Statutory Requirements



#### DETERMINATION UNDER SECTION 303 (a)(5) OF THE DEFENSE PRODUCTION ACT FOR HIGH HOMOGENEITY OPTICAL GLASS

In accordance with section 303(a)(5) of the Defense Production Act, 50 U.S.C. 2093(a)(5), which authority was delegated to the Secretary of Defense by Executive Order 12919, and further delegated to me by Secretary of Defense memorandum, Subject: Delegation of Authorities and Assignment of Duties of the Secretary of Defense Under Executive Order 12919, National Defense Industrial Resources Preparedness, Implementing the Defense Production Act (DPA), dated September 28, 1994, I hereby determine that:

1. The industrial resource or critical technology item is essential to the national defense.

High Homogeneity Optical Glass (HHOG) blanks characterized as possessing a maximum refractive index variation across the entire optic of  $\pm 1.0 \times 10^{\circ}$  (industry equivalent of grade H4) or better, are critical elements of high precision optical lens systems. These lens systems are key technology enablers for defense and national security related systems and applications and are employed by a broad mix of governmental agencies including: the Department of Defense (DOE), and the National Aeronautics and Space Administration (NASA).

Of particular concern to the DoD are lens products made from large format (diameters greater than 30cm), H4 grade HHOG blanks required in optical designs for aerial, satellite and other space surveillance systems. Other HHOG-dependent DoD and national security applications include, but are not limited to: ground and airborne directed energy systems (target acquisition, missile defense, laser weapons), precision interferometric positioning (precision measuring), microlithography (semiconductor production) and fusion energy development (National Ignition Facility and other laser utilities). In support of these applications, the Production Process Technology for High Homogeneity Optical and Technical Glasses is listed within the Military Critical Technology List (MCTL) under Lasers, Optics and Sensors Technology (11.2-5, page MCTL-11-49, July 2007).

 Without action under DPA authority, US industry cannot reasonably be expected to provide the capability for the needed industrial resource or critical technology liem in a timely manner.

The existing domestic market for HHOG blanks is characterized by a limited number of suppliers, high start-up cost barriers for new market entrants, extremely long production cycle/lead times, low manufacturing yields and higher per-unit cost. Current

approach, focusing on dramatically improved manufacturing efficiencies, will result in increased supply of HHOG blanks to better meet anticipated demand.

Approved by:	ant B. Carter Date:	JUN 3 0 2009
	Ashton B. Carter Under Secretary of Defense Acquisition, Technology and Logistics	

- 1. Obtain "Presidential Determination"
  - Industrial resource or technology item is essential for national defense
  - Industry cannot/will not provide needed capacity in a reasonable time without Title III assistance
- 2. Notify Congress in writing
- 3. Wait 30 days to allow for Congressional comment



# **Title III Funds**



## • Title III appropriations are credited to Defense Production Act Fund

- Special repository in Treasury to support Title III activities
- Usually made in DoD appropriations but can be included in other appropriations bills
- By law may only be used for Title III purposes
- Title III appropriations are "no-year" procurement funds and are valid until expended
- Revolving fund permits reuse of unexpended and recovered moneys by Title III Program
- DPA contains its own authorization of appropriations
  - Funds appropriated for Title III are automatically authorized. Title III initiatives are not normally included in authorization bills for this reason.
- Annual report to Congress required on transactions from the Fund



# **Title III Organization**







## TITLE III BUSINESS PARTNERSHIP Service-Agency Partnerships





- Stakeholders provide technical insight in project planning and execution
- Facilitate insertion of Title III industry partner products into Service systems

Stakeholders Essential to Successful Technology Transition & Capability



## **Defense Production Act Title III Initiatives**



#### Radiation Hardened Electronics Capital Expansion Project

- Modernized two obsolete semiconductor foundries to maintain a critical technology for defense space & missile systems
- 0.15-micron rad hard electronics enable advanced processing & performance capabilities
- Preserves a critical domestic industrial resource needed for national security

#### **Thermal Battery Project**

- Establishing domestic manufacturing capacity for advanced thermal batteries for tactical and strategic defense systems
- Partnering with domestic providers to expand production capacities
- Significant performance advantages over current battery technology w/lower maintenance costs

#### Re-establishing Domestic Beryllium Production Capability

- Re-establishing domestic manufacturing capability for highpurity Beryllium
- Critical enabling material for defense applications including: electro-optic systems; missile guidance systems, satellites, missile defense systems, nuclear weapons, nuclear power plants



Advanced Explosives Detection Technology

- Successfully scaled up production of the Fido IED Detection device
- Provides compact, superior detection capabilities against explosives & IED threats
- Facilitates new non-military markets e.g., first responder, customs, homeland security



#### ALON Transparent Armor

- Expanded production of ALON transparent armor
- $\frac{1}{3}$  the thickness and  $\frac{1}{2}$  the weight of glass-based transparent armor.
- Improved ballistic protection, performance, and reliability for vehicles equipped with ALON.
- Stops .50 cal AP.



#### Silicon Carbide Substrates

- Established viable production base for SiC MMIC devices & accelerating insertion of SiC based technology into DoD systems
- Enabler for next-generation radar systems, electronic warfare systems & advanced communications systems
- Enabled installation of LED lighting in Pentagon & other Federal buildings
- Enabled GaN-on-SiC MMICs for next generation CREW Counter Improvised Explosive Device system



### Light-Weight Polymer Ammunition – Developing a production capability

- Developing a production capability for lightweight polymer-based ammunition.
- ~30% lighter than conventional ammunition.
   Drop-in replacement for existing systems no redesign required.
- Reduces soldier burden
- Improves battlefield mobility and survivability
- Reduces fuel consumption, improves battlefield logistics.
- Supports Lighten-the-Load Initiative

**LED Light** 





# Summary



Title III provides powerful authorities that enable the Government to rectify industrial base shortfalls

Synergy of technical and business objectives focused on long-term economic viability and technology insertion

**Broad participation enhances leverage** 

Title III Program has proven performance and innovative execution







# Defense Production Act Title III Contacts

web site: http://www.acq.osd.mil/ott/dpatitle3/

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