

## TRANSFER OF FUNCTIONS

President's Council of Advisors on Science and Technology to serve as the advisory panel identified in this section and to be known as the National Nanotechnology Advisory Panel when performing the functions of such advisory committee, see section 2(a)(iv) of Ex. Ord. No. 13539, set out as a note under section 6601 of Title 42, The Public Health and Welfare.

**§ 7504. Triennial external review of the National Nanotechnology Program**

**(a) In general**

The Director of the National Nanotechnology Coordination Office shall enter into an arrangement with the National Research Council of the National Academy of Sciences to conduct a triennial evaluation of the Program, including—

(1) an evaluation of the technical accomplishments of the Program, including a review of whether the Program has achieved the goals under the metrics established by the Council;

(2) a review of the Program's management and coordination across agencies and disciplines;

(3) a review of the funding levels at each agency for the Program's activities and the ability of each agency to achieve the Program's stated goals with that funding;

(4) an evaluation of the Program's success in transferring technology to the private sector;

(5) an evaluation of whether the Program has been successful in fostering interdisciplinary research and development;

(6) an evaluation of the extent to which the Program has adequately considered ethical, legal, environmental, and other appropriate societal concerns;

(7) recommendations for new or revised Program goals;

(8) recommendations for new research areas, partnerships, coordination and management mechanisms, or programs to be established to achieve the Program's stated goals;

(9) recommendations on policy, program, and budget changes with respect to nanotechnology research and development activities;

(10) recommendations for improved metrics to evaluate the success of the Program in accomplishing its stated goals;

(11) a review of the performance of the National Nanotechnology Coordination Office and its efforts to promote access to and early application of the technologies, innovations, and expertise derived from Program activities to agency missions and systems across the Federal Government and to United States industry;

(12) an analysis of the relative position of the United States compared to other nations with respect to nanotechnology research and development, including the identification of any critical research areas where the United States should be the world leader to best achieve the goals of the Program; and

(13) an analysis of the current impact of nanotechnology on the United States economy and recommendations for increasing its future impact.

**(b) Study on molecular self-assembly**

As part of the first triennial review conducted in accordance with subsection (a), the National

Research Council shall conduct a one-time study to determine the technical feasibility of molecular self-assembly for the manufacture of materials and devices at the molecular scale.

**(c) Study on the responsible development of nanotechnology**

As part of the first triennial review conducted in accordance with subsection (a), the National Research Council shall conduct a one-time study to assess the need for standards, guidelines, or strategies for ensuring the responsible development of nanotechnology, including, but not limited to—

(1) self-replicating nanoscale machines or devices;

(2) the release of such machines in natural environments;

(3) encryption;

(4) the development of defensive technologies;

(5) the use of nanotechnology in the enhancement of human intelligence; and

(6) the use of nanotechnology in developing artificial intelligence.

**(d) Evaluation to be transmitted to Congress**

The Director of the National Nanotechnology Coordination Office shall transmit the results of any evaluation for which it made arrangements under subsection (a) to the Advisory Panel, the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Science upon receipt. The first such evaluation shall be transmitted no later than June 10, 2005, with subsequent evaluations transmitted to the Committees every 3 years thereafter.

(Pub. L. 108-153, §5, Dec. 3, 2003, 117 Stat. 1928.)

## CHANGE OF NAME

Committee on Science of House of Representatives changed to Committee on Science and Technology of House of Representatives by House Resolution No. 6, One Hundred Tenth Congress, Jan. 5, 2007. Committee on Science and Technology of House of Representatives changed to Committee on Science, Space, and Technology of House of Representatives by House Resolution No. 5, One Hundred Twelfth Congress, Jan. 5, 2011.

**§ 7505. Authorization of appropriations**

**(a) National Science Foundation**

There are authorized to be appropriated to the Director of the National Science Foundation to carry out the Director's responsibilities under this chapter—

(1) \$385,000,000 for fiscal year 2005;

(2) \$424,000,000 for fiscal year 2006;

(3) \$449,000,000 for fiscal year 2007; and

(4) \$476,000,000 for fiscal year 2008.

**(b) Department of Energy**

There are authorized to be appropriated to the Secretary of Energy to carry out the Secretary's responsibilities under this chapter—

(1) \$317,000,000 for fiscal year 2005;

(2) \$347,000,000 for fiscal year 2006;

(3) \$380,000,000 for fiscal year 2007; and

(4) \$415,000,000 for fiscal year 2008.

**(c) National Aeronautics and Space Administration**

There are authorized to be appropriated to the Administrator of the National Aeronautics and