



CHARTER  
of the  
SUBCOMMITTEE ON THE MATERIALS GENOME INITIATIVE,  
COMMITTEE ON TECHNOLOGY,  
NATIONAL SCIENCE AND TECHNOLOGY COUNCIL

**A. Official Designation**

The Subcommittee on the Materials Genome Initiative (SMGI) is hereby re-established by action of the National Science and Technology Council (NSTC), Committee on Technology (CoT).<sup>1</sup>

**B. Purpose and Scope**

The development of advanced materials fuels many of the emerging industries that address challenges in clean energy, national security, and human welfare, among others. Recent technological progress in basic understanding of materials behavior, modeling tools, and computational power has the potential to reduce the time that a newly discovered advanced material takes to move from the laboratory to the commercial marketplace. Accelerating the process of lab to market could significantly improve U.S. global competitiveness and help ensure that the Nation remains at the forefront of the advanced materials and technology marketplace.

In June 2011, the President announced the Materials Genome Initiative (MGI) for Global Competitiveness, a multi-stakeholder effort to reduce the time to develop new materials that are ready for market by at least 50%. This effort has set strategic goals to: (1) Enable a Paradigm Shift in Culture; (2) Integrate Experiments, Computation, and Theory; (3) Facilitate Access to Materials Data; and (4) Equip the Next-Generation Materials Workforce.<sup>2</sup> The SMGI serves as an interagency forum for developing consensus and resolving issues associated with research and development (R&D) policy and programs related to MGI

The scope of the activities under the SMGI includes coordination, planning, implementation, and review of MGI projects across Federal agencies.

**C. Functions**

The SMGI will facilitate a coordinated effort across Federal agencies to identify policies for supporting the goals and implementing the recommendations outlined in the Materials Genome Initiative for Global Competitiveness whitepaper.<sup>3</sup> The SMGI will:

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<sup>1</sup> The NSTC/CoT/SMGI was previously chartered on February 10, 2012, and re-chartered on January 10, 2014.

<sup>2</sup> [http://www.whitehouse.gov/sites/default/files/microsites/ostp/NSTC/mgi\\_strategic\\_plan\\_-\\_dec\\_2014.pdf](http://www.whitehouse.gov/sites/default/files/microsites/ostp/NSTC/mgi_strategic_plan_-_dec_2014.pdf)

<sup>3</sup> [http://www.whitehouse.gov/sites/default/files/microsites/ostp/materials\\_genome\\_initiative-final.pdf](http://www.whitehouse.gov/sites/default/files/microsites/ostp/materials_genome_initiative-final.pdf)

1. Maintain and revise the strategic plan for the Initiative. This plan sets interagency milestones and goals for the MGI in the short-term (1–2 years), medium-term (2–10 years), and long-term (10+ years). The strategic plan will be updated approximately every 3 years, or as determined by the SMGI Co-Chairs.
2. Develop metrics or other approaches to measure progress toward meeting the MGI goal of reducing the time-to-market by half, including tracking MGI-related research across Federal agencies, academia, and the private sector.
3. Identify MGI-related science, engineering, and technology research areas that are not being adequately addressed by the agencies' current research programs and, subsequently, coordinate agency activities to address such research gaps.
4. Promote the development of the next-generation workforce with skills relevant to the application of MGI tools, techniques, and research products and the development of an engineering culture conducive to taking advantage of MGI opportunities.
5. Facilitate interaction with Federal agencies that are not members of the SMGI but that can utilize the research products associated with the MGI goals, including by identifying R&D that will address their needs.
6. Coordinate with other NSTC committees, subcommittees, working groups, and National Coordination Offices on policy development and issues of common interest, particularly in the areas of open access to research publications, data, and data platforms.
7. Advise the CoT on policies that influence advanced materials research and development.

In support of these functions, the SMGI may further establish and oversee Interagency Working Groups, Task Forces, and/or Fast-Track Action Committees, as needed, to facilitate focused interagency R&D activities, coordinate planning activities, task Federal agencies to gather required information and data, and coordinate with other NSTC groups.

Through its Co-Chairs, the SMGI will recommend action on Federal MGI research and development priorities, specific agency activities, expected outcomes to address those priorities, and other major policy and research and development issues to the member departments and agencies, and to others through the CoT.

#### **D. Membership**

The following NSTC departments and agencies are represented on the SMGI:

Department of Commerce;  
Department of Defense;  
Department of Energy;  
Department of Health and Human Services;  
Department of the Interior;  
Department of State;  
Department of Transportation;  
Environmental Protection Agency;  
National Aeronautics and Space Administration; and  
National Science Foundation.

The following components of the Executive Office of the President shall also be represented on the SMGI:

National Economic Council;

Office of Management and Budget; and  
Office of Science and Technology Policy (Co-Chair).

One or more agency Co-Chairs shall also be designated by the Chair(s) of the CoT. Cooperating departments and agencies shall include other Executive organizations, departments, and agencies as the SMGI Co-Chairs may, from time to time, designate. The SMGI will also strive to enhance the Federal research and development enterprise by embracing diversity, recognizing that inclusion of a broad range of backgrounds and perspectives is critical to achieving robust intellectual dialogue.

**E. Private-Sector Interface**

The SMGI may work with the members of the President's Council of Advisors on Science and Technology to secure appropriate private-sector advice, and will recommend to the CoT and/or the Director of OSTP the nature of any additional private-sector advice needed to accomplish its mission. The SMGI may also interact with and receive *ad hoc* advice from various private-sector groups consistent with the Federal Advisory Committee Act.<sup>4</sup>


**F. Termination Date**

Unless renewed by the Co-chairs of the CoT prior to its expiration, the SMGI shall terminate no later than June 30, 2017.

**G. Determination**

I hereby determine that the re-establishment of the Subcommittee on the Materials Genome Initiative is in the public interest in connection with the performance of duties imposed on the Executive Branch by law and that such duties can best be performed through the advice and counsel of such a group.

Approved:

  
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Thomas Kalil  
Chair, Committee on Technology and  
Deputy Director for Technology and Innovation  
Office of Science and Technology Policy  
Executive Office of the President

January 15, 2016  
Date

<sup>4</sup> The Federal Advisory Committee Act, 5 U.S.C. App., as amended, does not explicitly define "private sector," but the phrase is generally understood to include individuals or entities outside the Federal government such as, but not limited to, the following: non-Federal sources, academia, State, local or Tribal governments, individual citizens, the public, non-governmental organizations, industry associations, international bodies, etc.