

MEMORANDUM

TO: Committee on Science, Space, and Technology Members and Staff
FROM: Science, Space, and Technology Committee Staff
DATE: May 19, 2016
RE: Full Committee Markup

The Committee on Science, Space, and Technology will meet on **Tuesday, May 24, 2016, at 10:00 a.m.** in Room 2318 of the Rayburn House Office Building to consider the following:

H.R. ____, the “Networking and Information Technology Research and Development Modernization Act of 2016”

H.R. ____, the “Networking and Information Technology Research and Development Modernization Act of 2016” will be introduced by Rep. Darin LaHood on May 23, 2016. The legislation updates the High-Performance Computing Act of 1991.

Should you have amendments to this measure, please submit 50 copies to 2321 RHOB and email the amendment form and an electronic version of the amendment to SST.Amendments@mail.house.gov no later than 10:00 a.m. on Monday, May 23, 2016.

For questions about this markup, please contact Molly Fromm of the majority staff at 225-6371

Committee on Science, Space, and Technology
Background Summary

Networking and Information Technology Research and Development (NITRD) Modernization Act of 2016

The NITRD Program:

- Originally authorized by the High Performance Computing Act of 1991 (P.L. 102-194), the NITRD Program is the primary Federal R&D portfolio in unclassified networking, computing, software, cybersecurity, and related information technologies.
- NITRD spending across 21 Federal departments and agencies totals almost \$4.5 billion this year.
- The NITRD Subcommittee of the interagency National Science and Technology Council (NSTC) is chaired by the White House Office of Science and Technology Policy (OSTP) and is the working body for interagency planning and coordination.
- The NITRD National Coordination Office (NCO), based in the National Science Foundation, provides staff support for the NITRD Subcommittee and the Program's advisory committee and serves as the public interface for the Program.

What will this NITRD legislation do?

- Establishes a strategic planning, coordination, and review process for the NITRD investment portfolio with metrics and objectives.
- Improves communication between Federal government agencies and laboratories with industry and academia through an expert advisory council, steering groups and workshops to explore mechanisms for carrying out collaborative research and development activities, such as in data analytics, privacy protection, and human-computer interaction and systems.
 - When more than one Federal agency is working on large-scale R&D, they are directed to share costs and issue joint solicitations to industry.
- Focuses the NITRD portfolio more on large-scale, long-term, interdisciplinary research with the potential to make breakthroughs (as opposed to incremental improvements) to society and U.S. competitiveness, including R&D on human-computer interactions, visualizations, and big data.
 - The expert advisory committee recommends “Grand Challenges” of national importance for the NITRD Program to tackle.
- Defines the term ‘cyber-physical systems’ as not only computer systems, but also the physical systems monitored and controlled by those computers and makes it a priority to increase understanding of such systems’ need for high reliability, safety, and security.
- Codifies the role of the NCO in law and specifies the sources of funding for the office consistent with current practice.
- Removes outdated sections of the U.S. Code.
- Does not authorize any agency appropriations.

114th Congress Action on NITRD

- Oversight hearing of the NITRD program held last October that reviewed findings and recommendations from the recent report on the Program by the President’s Council of Advisors on Science and Technology.
- Bipartisan legislation from previous Congresses (during the 113th Congress, the NITRD bill passed the House by a vote of 406-11) has been updated to reflect the consensus from this hearing.

For additional information, see: Research & Technology Subcommittee hearing on NITRD (Oct 28, 2015):

<https://science.house.gov/legislation/hearings/subcommittee-research-and-technology-hearing-review-networking-and-information>

“Ensuring Leadership in Federally Funded Research and Development in Information Technology,” President’s Council of Advisors on Science and Technology, August 2015, available at:

https://www.whitehouse.gov/sites/default/files/microsites/ostp/PCAST/nitrd_report_aug_2015.pdf