106TH CONGRESS
1st Session
HOUSE OF REPRESENTATIVES
REPT. 106–129
Part 1

TECHNOLOGY TRANSFER COMMERCIALIZATION ACT OF 1999

MAY 6, 1999.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. SENSENBRENNER, from the Committee on Science, submitted the following

R E P O R T

[To accompany H.R. 209]

[Including cost estimate of the Congressional Budget Office]

The Committee on Science, to whom was referred the bill (H.R. 209) to improve the ability of Federal agencies to license federally owned inventions, having considered the same, report favorably thereon with an amendment and recommend that the bill as amended do pass.

CONTENTS

69–006

The amendment is as follows:

Strike out all after the enacting clause and insert in lieu thereof the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the "Technology Transfer Commercialization Act of 1999".

SEC. 2. FINDINGS.

The Congress finds that—

(1) the importance of linking our unparalleled network of over 700 Federal laboratories and our Nation's universities with United States industry continues to hold great promise for our future economic prosperity;

(2) the enactment of the Bayh-Dole Act in 1980 was a landmark change in United States technology policy, and its success provides a framework for removing bureaucratic barriers and for simplifying the granting of licenses for inventions that are now in the Federal Government's patent portfolio;

(3) Congress has demonstrated a commitment over the past 2 decades to fostering technology transfer from our Federal laboratories and to promoting public/private sector partnerships to enhance our international competitiveness;

(4) Federal technology transfer activities have strengthened the ability of United States industry to compete in the global marketplace; developed a new paradigm for greater collaboration among the scientific enterprises that conduct our Nation's research and development—government, industry, and universities; and improved the quality of life for the American people, from medicine to materials;

(5) the technology transfer process must be made "industry friendly" for companies to be willing to invest the significant time and resources needed to develop new products, processes, and jobs using federally funded inventions; and

(6) Federal technology licensing procedures should balance the public policy needs of adequately protecting the rights of the public, encouraging companies to develop existing government inventions, and making the entire system of developing government technologies more consistent and simple.

SEC. 3. COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS.

Section 12(b)(1) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(b)(1)) is amended by inserting "or, subject to section 209 of title 35, United States Code, may grant a license to an invention which is federally owned, for which a patent application was filed before the signing of the agreement, and directly within the scope of the work under the agreement," after "under the agreement,".

SEC. 4. LICENSING FEDERALLY OWNED INVENTIONS.

(a) AMENDMENT.—Section 209 of title 35, United States Code, is amended to read as follows:

"§ 209. Licensing federally owned inventions

"(a) AUTHORITY.—A Federal agency may grant an exclusive or partially exclusive license on a federally owned invention under section 207(a)(2) only if—

"(1) granting the license is a reasonable and necessary incentive to—

"(A) call forth the investment capital and expenditures needed to bring the invention to practical application; or

"(B) otherwise promote the invention's utilization by the public;

"(2) the Federal agency finds that the public will be served by the granting of the license, as indicated by the applicant's intentions, plans, and ability to bring the invention to practical application or otherwise promote the invention's utilization by the public, and that the proposed scope of exclusivity is not greater than reasonably necessary to provide the incentive for bringing the invention to practical utilization, as proposed by the applicant, or otherwise to promote the invention's utilization by the public;

"(3) the applicant makes a commitment to achieve practical utilization of the invention within a reasonable time, which time may be extended by the agency upon the applicant's request and the applicant's demonstration that the refusal of such extension would be unreasonable;

"(4) granting the license will not tend to substantially lessen competition or create or maintain a violation of the Federal antitrust laws; and

"(5) in the case of an invention covered by a foreign patent application or patent, the interests of the Federal Government or United States industry in foreign commerce will be enhanced.

"(b) MANUFACTURE IN UNITED STATES.—A Federal agency shall normally grant a license under section 207(a)(2) to use or sell any federally owned invention in the United States only to a licensee who agrees that any products embodying the invention or produced through the use of the invention will be manufactured substantially in the United States.

"(c) SMALL BUSINESS.—First preference for the granting of any exclusive or partially exclusive licenses under section 207(a)(2) shall be given to small business firms having equal or greater likelihood as other applicants to bring the invention to practical application within a reasonable time.

"(d) TERMS AND CONDITIONS.—Any licenses granted under section 207(a)(2) shall contain such terms and conditions as the granting agency considers appropriate, and shall include provisions—

"(1) retaining a nontransferrable, irrevocable, paid-up license for any Federal agency to practice the invention or have the invention practiced throughout the world by or on behalf of the Government of the United States;

"(2) requiring periodic reporting on utilization of the invention, and utilization efforts, by the licensee, but only to the extent necessary to enable the Federal agency to determine whether the terms of the license are being complied with, except that any such report shall be treated by the Federal agency as commercial and financial information obtained from a person and privileged and confidential and not subject to disclosure under section 552 of title 5 of the United States Code; and

"(3) empowering the Federal agency to terminate the license in whole or in part if the agency determines that—

"(A) the licensee is not executing its commitment to achieve practical utilization of the invention, including commitments contained in any plan submitted in support of its request for a license, and the licensee cannot otherwise demonstrate to the satisfaction of the Federal agency that it has taken, or can be expected to take within a reasonable time, effective steps to achieve practical utilization of the invention;

"(B) the licensee is in breach of an agreement described in subsection (b);

"(C) termination is necessary to meet requirements for public use specified by Federal regulations issued after the date of the license, and such requirements are not reasonably satisfied by the licensee; or

"(D) the licensee has been found by a court of competent jurisdiction to have violated the Federal antitrust laws in connection with its performance under the license agreement.

"(e) PUBLIC NOTICE.—No exclusive or partially exclusive license may be granted under section 207(a)(2) unless public notice of the intention to grant an exclusive or partially exclusive license on a federally owned invention has been provided in an appropriate manner at least 15 days before the license is granted, and the Federal agency has considered all comments received before the end of the comment period in response to that public notice. This subsection shall not apply to the licensing of inventions made under a cooperative research and development agreement entered into under section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a).

"(f) PLAN.—No Federal agency shall grant any license under a patent or patent application on a federally owned invention unless the person requesting the license has supplied the agency with a plan for development or marketing of the invention, except that any such plan shall be treated by the Federal agency as commercial and financial information obtained from a person and privileged and confidential and not subject to disclosure under section 552 of title 5 of the United States Code.".

(b) CONFORMING AMENDMENT.—The item relating to section 209 in the table of sections for chapter 18 of title 35, United States Code, is amended to read as follows:

"209. Licensing federally owned inventions.".

SEC. 5. TECHNICAL AMENDMENTS TO BAYH-DOLE ACT.

Chapter 18 of title 35, United States Code (popularly known as the "Bayh-Dole Act"), is amended—

(1) by amending section 202(e) to read as follows:

"(e) In any case when a Federal employee is a coinventor of any invention made with a nonprofit organization, a small business firm, for a non-Federal inventor, the Federal agency employing such coinventor may, for the purpose of consolidating

rights in the invention or if it finds that it would expedite the development of the invention—

"(1) license or assign whatever rights it may acquire in the subject invention to the nonprofit organization, small business firm, or non-Federal inventor in accordance with the provisions of this chapter; or

"(2) acquire any rights in the subject invention from the nonprofit organization, small business firm, or non-Federal inventor, but only to the extent the party from whom the rights are acquired voluntarily enters into the transaction and no other transaction under this chapter is conditioned on such acquisition."; and

(2) in section 207(a)—

(A) by striking "patent applications, patents, or other forms of protection obtained" and inserting "inventions" in paragraph (2); and

(B) by inserting ", including acquiring rights for and administering royalties to the Federal Government in any invention, but only to the extent the party from whom the rights are acquired voluntarily enters into the transaction, to facilitate the licensing of a federally owned invention" after "or through contract" in paragraph (3).

SEC. 6. TECHNICAL AMENDMENTS TO THE STEVENSON-WYDLER TECHNOLOGY INNOVATION ACT OF 1980.

The Stevenson-Wydler Technology Innovation Act of 1980 is amended—

(1) in section 4(4) (15 U.S.C. 3703(4)), by striking "section 6 or section 8" and inserting "section 7 or 9";

(2) in section 4(6) (15 U.S.C. 3703(6)), by striking "section 6 or section 8" and inserting "section 7 or 9";

(3) in section 5(c)(11) (15 U.S.C. 3704(c)(11)), by striking "State of local governments" and inserting "State or local governments";

(4) in section 9 (15 U.S.C. 3707), by—

(A) striking "section 6(a)" and inserting "section 7(a)";

(B) striking "section 6(b)" and inserting "section 7(b)"; and

(C) striking "section 6(c)(3)" and inserting "section 7(c)(3)";

(5) in section 11(e)(1) (15 U.S.C. 3710(e)(1)), by striking "in cooperation with Federal Laboratories" and inserting "in cooperation with Federal laboratories";

(6) in section 11(i) (15 U.S.C. 3710(i)), by striking "a gift under the section" and inserting "a gift under this section";

(7) in section 14 (15 U.S.C. 3710c)—

(A) in subsection (a)(1)(A)(i), by inserting ", other than payments of patent costs as delineated by a license or assignment agreement," after "or other payments";

(B) in subsection (a)(1)(A)(i), by inserting ", if the inventor's or coinventor's rights are assigned to the United States" after "inventor or coinventors";

(C) in subsection (a)(1)(B), by striking "succeeding fiscal year" and inserting "2 succeeding fiscal years";

(D) in subsection (a)(2), by striking "Government-operated"; and

(E) in subsection (b)(2), by striking "inventon" and inserting "invention"; and

(8) in section 22 (15 U.S.C. 3714), by striking "sections 11, 12, and 13" and inserting "sections 12, 13, and 14".

SEC. 7. REVIEW OF COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT PROCEDURES.

(a) REVIEW.—Within 90 days after the date of the enactment of this Act, each Federal agency with a federally funded laboratory that has in effect on that date of enactment one or more cooperative research and development agreements under section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a) shall report to the Committee on National Security of the National Science and Technology Council and the Congress on the general policies and procedures used by that agency to gather and consider the views of other agencies on—

(1) joint work statements under section 12(c)(5) (C) or (D) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(c)(5)(C) or (D)); or

(2) in the case of laboratories described in section 12(d)(2)(A) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(d)(2)(A)), cooperative research and development agreements under such section 12,

with respect to major proposed cooperative research and development agreements that involve critical national security technology or may have a significant impact on domestic or international competitiveness.

(b) PROCEDURES.—Within one year after the date of the enactment of this Act, the Committee on National Security of the National Science and Technology Council, in conjunction with relevant Federal agencies and national laboratories, shall—

(1) determine the adequacy of existing procedures and methods for interagency coordination and awareness with respect to cooperative research and development agreements described in subsection (a); and

(2) establish and distribute to appropriate Federal agencies—

(A) specific criteria to indicate the necessity for gathering and considering the views of other agencies on joint work statements or cooperative research and development agreements as described in subsection (a); and

(B) additional procedures, if any, for carrying out such gathering and considering of agency views with respect to cooperative research and development agreements described in subsection (a).

Procedures established under this subsection shall be designed to the extent possible to use or modify existing procedures, to minimize burdens on Federal agencies, to encourage industrial partnerships with national laboratories, and to minimize delay in the approval or disapproval of joint work statements and cooperative research and development agreements.

(c) LIMITATION.—Nothing in this Act, nor any procedures established under this section shall provide to the Office of Science and Technology Policy, the National Science and Technology Council, or any Federal agency the authority to disapprove a cooperative research and development agreement or joint work statement, under section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a), of another Federal agency.

SEC. 8. INCREASED FLEXIBILITY FOR FEDERAL LABORATORY PARTNERSHIP INTERMEDIARIES.

Section 23 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3715) is amended—

(1) in subsection (a)(1) by inserting ", institutions of higher education as defined in section 1201(a) of the Higher Education Act of 1965 (20 U.S.C. 1141(a)), or educational institutions within the meaning of section 2194 of title 10, United States Code" after "small business firms"; and

(2) in subsection (c) by inserting ", institutions of higher education as defined in section 1201(a) of the Higher Education Act of 1965 (20 U.S.C. 1141(a)), or educational institutions within the meaning of section 2194 of title 10, United States Code," after "small business firms".

II. PURPOSE OF THE BILL

The purpose of H.R. 209, as reported, is to promote the transfer and commercialization of the technology created in our Nation's system of over 700 federal laboratories, thereby increasing scientific collaboration between federal laboratories and private industry. Specifically, the bill would improve and streamline the ability of federal agencies to license government-owned inventions.

III. BACKGROUND AND NEED FOR THE LEGISLATION

For nearly two decades, the Committee has encouraged the transfer to United States private industry of unclassified technology created in our federal laboratories. Our federal laboratories have long been considered one of our greatest scientific research and development resources, employing one of every six scientists in the country and encompassing one-fifth of the country's laboratory and equipment capabilities. Effectively capturing this wealth of ideas and technology from our federal laboratories through the transfer to private industry for commercialization has helped to bolster our Nation's ability to compete in the global marketplace.

By permitting effective collaboration between our federal laboratories and private industry, new technologies can be rapidly commercialized. Federal technology transfer stimulates the American economy, enhances the competitive position of United States indus-

try internationally, and promotes the development and use of new technologies developed under taxpayer funded research so those innovations are incorporated rapidly and effectively into practice to the benefit of the American public.

To help further these goals, the Committee first reported the Stevenson-Wydler Technology Innovation Act of 1980 (Public Law 96–480). The Committee expanded on that landmark legislation with the passage of the Federal Technology Transfer Act of 1986 (Public Law 99–502), the National Competitiveness Technology Transfer Act of 1989 (Public Law 101–189), the American Technology Preeminence Act of 1991 (Public Law 102–245), and the National Technology Transfer and Advancement Act of 1995 (Public Law 104–113), among others.

In 1980, the Committee also reported the University and Small Business Patent Procedures Act, now commonly referred to as the Bayh-Dole Act (Public Law 96–517). The Bayh-Dole Act permits universities, not-for-profit organizations, and small businesses to obtain title to scientific inventions developed with federal government support. The Bayh-Dole Act also allows federal agencies to license government-owned patented scientific inventions nonexclusively, partially exclusively, or exclusively, depending upon which license is determined to be the most effective means for achieving commercialization. Additionally, the Committee reported out amendments to the Bayh-Dole Act in the Trademark Clarification Act of 1984 (Public Law 98–620), which permitted decisions on the awarding of licenses for patents to be made at the laboratory level in a Government-owned and Contractor-operated laboratory (GOCO).

Critical pressures prompted the passage of the Bayh-Dole Act. Prior to its 1980 enactment, many discoveries resulting from federally-funded scientific research were not commercialized for the American public's benefit. Since the federal government lacked the resources to market new inventions, and private industry was reluctant to make high-risk investments without the protection of patent rights, many valuable innovations were left unused on the shelf of federal laboratories.

With its success licensing federal inventions, the Bayh-Dole Act is widely viewed as an effective framework for federal technology transfer. For example, in a report submitted to the Committee, the Association of University Technology Managers (AUTM) conducted a 1996 study on the effect of the Bayh-Dole Act. AUTM concluded that the law garnered tremendous economic benefits not just for the universities and private industry directly involved in each partnership, but more importantly, for the United States economy as a whole. The AUTM report documented that the impact of the Bayh-Dole Act represented a very real gain to federal agencies and the Nation since it not only encourages the commercialization of government-owned patents that would otherwise gather dust on the shelf, but it also brings in revenues to the federal government through licensing fees.

Accordingly, the process for the licensing of government-owned patents should continue to be refined by streamlining the procedures and by removing the uncertainty associated with the licensing process. Both past and prospective private industry partners,

however, have voiced their concerns regarding the licensing process. The private sector has demonstrated strong interest in the strategic advantages of acquiring intellectual property rights by entering into a Cooperative Research and Development Agreement (CRADA) with a federal laboratory or by the licensing of government-owned technology, but they are deterred by the delays and uncertainty often-associated with the lengthy federal technology transfer process. These procedural barriers and delays are often incompatible with the private sector's need for a swift commercialization calendar and can also increase transaction costs.

The present regulations have also made it difficult for a Government-owned, Government-operated laboratory (GOGO) to bring existing scientific inventions into a CRADA even when inclusion would create a more complete technology package. A GOGO does not have the flexibility that small businesses and non-profits have in managing their inventions under the Bayh-Dole Act. Also, a GOGO, unlike a GOCO, currently faces statutory notification provisions when granting exclusive licenses, and more importantly, it cannot include existing inventions in a CRADA under the Federal Technology Transfer Act of 1986.

By reducing the delay and uncertainty created by existing procedural barriers and by lowering the transactional costs associated with licensing federal technologies from the government could greatly increase participation by the private sector in its technology transfer programs. This approach would expedite the commercialization of government-owned inventions and through royalties could reduce the cost to the American taxpayer for the production of new technology-based products created in our Nation's federal laboratories.

IV. Summary of Hearings

September 25, 1997: "Promoting Technology Transfer by Facilitating Licenses to Federally Owned Inventions"

On September 25, 1997, the Subcommittee on Technology held a hearing on "Promoting Technology Transfer by Facilitating Licenses to Federally Owned Inventions." The hearing discussed the effectiveness of our federal technology transfer laws and methods in which they may be improved, and to review The Technology Transfer Commercialization Act, which seeks to promote technology transfer by facilitating licenses to federally-owned inventions. Witnesses included, Mr. Joe Allen, Vice President, Market and Technology Assessment, National Technology Transfer Center, Wheeling, WV; Mr. C. Dan Brand, Chair, Federal Laboratory Consortium, Jefferson, AR; Mr. Dan Passeri, Vice President, Business Development and Intellectual Property, Gene Logic, Inc., Columbia, MD; Mr. John G. Mannix, Associate General Counsel, National Aeronautics and Space Administration, NASA Headquarters, Washington, DC.

Mr. Joe Allen, testifying as Vice President, Market and Technology Assessment, National Technology Transfer Center, stated that linking federal laboratories and universities with American Industry holds great promise for our future economic prosperity. Mr. Allen asserted that the passage of the Bayh-Dole Act in 1980, ini-

tially considered a bold and radical idea, is now a model that our economic competitors are emulating. The Technology Transfer Commercialization Act holds the same promise. Mr. Allen believes that in order to license government-owned inventions, the Congress must ease the current complex system which a company must endure. For example, a company must currently publish in the Federal Register its intention to pursue a federally-owned license. Companies, however, are reluctant to do this as it effectively gives away their marketing strategy. In conclusion, Mr. Allen recommended taking a well-thought out and incremental approach, such as the Technology Transfer Commercialization Act, that simplifies current procedures while retaining important safeguards.

Mr. Daniel R. Passeri, testifying as Vice President, Gene Logic, Inc., testified to the importance of streamlining the procedures and removing the uncertainty associated with the licensing determination process. In doing so, the federal government will foster an attractive environment for corporate investment and partnering efforts. Mr. Passeri believes that under the current system there is a tension between the needs of industry to rapidly respond to market demands and opportunities, and the procedural requirements of federal agencies in regards to the exclusive licensing of high risk, early state technology, He states that these procedural barriers create increased transaction costs, delays in obtaining the license, as well as the uncertainty of actually being granted the license. The barriers, however, do not exist in university technology transfer. In conclusion, Mr. Passeri welcomed the improvements in the Technology Transfer Commercialization Act to the current law and indicated that in their current form, they will address the frustrations of industry.

Mr. C. Dan Brand, testifying as Chair, Federal Laboratory Consortium, spoke of the Federal Laboratory Consortium's (FLC) importance as the nationwide network of federal laboratories that provide a forum to develop strategies and opportunities for linking government technology to the marketplace. Mr. Brand stated that in advance of this hearing, the FLC solicited and received comments from a number of their members about removing legal obstacles to license federally-owned inventions effectively. He cautioned that these comments are not "official" department or agency positions, but rather an initial assessment. Mr. Brand stated the comments received by the FLC indicated that the Technology Transfer Commercialization Act's amendments to Bayh-Dole will serve to speed the transfer and commercialization of technologies to industry, while maintaining a fair and open competitive environment. Mr. Brand further cautioned that while the initial input from member laboratories was largely positive, the subcommittee should also consider the views of the FLC Legal Issues Committee and the National Institutes of Health.

Mr. John G. Mannix testifying as Associate General Counsel, Intellectual Property, National Aeronautics and Space Administration, began by stating that neither NASA nor the Administration had an opportunity to review the proposed legislation fully so neither has had an opportunity to formulate a detailed position. Mr. Mannix highlighted the two major improvements to the federal licensing process that he has seen during his career. First, he cited

the increased personal involvement of technical experts and individuals with marketing, negotiation, and business experience in the licensing process. Second, he emphasized the importance of the statutory authority given to NASA negotiators to require written business plans and yearly status reports describing progress toward commercialization. Additionally, Mr. Mannix emphasized the importance of providing some form of notice of the availability of federally owned licenses. Without such notice, Mr. Mannix maintained, we will always be subject to claims of favoritism.

March 17, 1998: "Facilitating Licenses to Federally-Owned Inventions: A Legislative Hearing on The Technology Transfer Commercialization Act"

On March 17, 1998, the Subcommittee on Technology held a hearing on "Facilitating Licenses to Federally-Owned Inventions: A Legislative Hearing on The Technology Transfer Commercialization Act." Witnesses included: The Honorable Ray Kammer, Director, National Institute of Standards and Technology, Gaithersburg, MD; Mr. Randolph J. Guschl, Director of Technology Acquisitions, Central Research and Development, DuPont Chemical Company, Wilmington, DE; and Ms. Elizabeth Kraftician, Chief Executive Officer, Touchstone Research Laboratory, Tridelphia, WV.

The Honorable Ray Kammer, testifying as the Director of the National Institute of Standards and Technology discussed the newly reconstituted Interagency Committee on Technology Transfer and their support of the Technology Transfer Commercialization Act. Specifically, Mr. Kammer emphasized the need to pay closer attention to the output side of R&D spending. While a greater pecuniary commitment to R&D spending is laudable, enabling the end results to make its way to the marketplace is equally as important, for it can result in important societal benefits. Mr. Kammer also spoke of the Interagency Committee's suggestions regarding certain provisions of the legislation. For example, the agencies suggest that licensees be subject to the current notification requirements and that certain current requirements for licensees to submit development or marketing plans be retained. He emphasized the importance of utilizing business plans as an objective basis for deciding whether the prospective licensee is likely to bring the innovation to market quickly. Additionally, "bundling" innovations should be addressed in the legislation. Bundling similar innovations together can provide for licensees to derive maximum commercial benefit. In conclusion, Mr. Kammer indicated that industry and the government are still learning how to work together better in commercializing the American people's investment in R&D.

Mr. Randolph J. Guschl, testifying as the Director of the Technology Acquisitions, Central Research and Development, DuPont in Wilmington, DE, expressed support for the legislation and highlighted the fact that the Technology Transfer Commercialization Act puts the discoveries of Government-owned and Government-operated (GOGO) laboratories on equal terms with Government-owned, Contractor operated (GOCO) laboratories. However, Mr. Guschl indicated he had a couple ideas regarding the legislation. First, revise the requirement for United States manufacture. He suggested language to require the earliest possible deployment in

the United States, but not to require it to be manufactured substantially in this country. This would allow our nation's businesses to compete globally, thereby strengthening the U.S. components of multi-national companies. Second, he supported the bill's recognition of exclusivity. This provision has been used in GOCO labs and should also be used in GOGO labs. Third, he supported the bill's shift from 90+60 day notification process to a 30 day notification process. Fourth, retain requiring submission of a business and marketing plan. This allows an agency to determine the commitment of a prospective licensee. Lastly, empower the technology transfer directors to make quick and final decisions for their labs but also to allow for a quick appeals process. In conclusion, Mr. Guschl indicated his support for the Technology Transfer Commercialization Act and commended it as an improvement to the federal technology transfer process.

Ms. Elizabeth Kraftician, Chief Executive Officer, Touchstone Research Laboratory, offered her strong support for The Technology Transfer Commercialization Act. Ms. Kraftician believes the legislation will have a strong impact in moving federal technologies to the marketplace. Additionally, Ms. Kraftician expressed support for this legislation as a way to benefit small businesses in this technology transfer process. Small businesses have traditionally been locked out of the technology transfer arena by the slow, cumbersome, bureaucratic, and oftentimes anti-small business process used to commercialize federal inventions. Ms. Kraftician applauded the Act's notification procedures that allowed for advertising and announcements in a wider variety of venues, such as the Internet. She indicated that this would give federal laboratories greater flexibility and would no longer force small businesses to rely exclusively on the Federal Register for notice. In conclusion, Ms. Kraftician emphasized that in order for this legislation to work, public institutions must be held accountable for how they wield their new authorities and public agencies must be willing to make decisions and to take risks for successful commercialization of federal inventions.

V. Committee Actions

Congresswoman Constance A. Morella of Maryland introduced H.R. 209 on January 6, 1999 in the 106th Congress. On March 25, 1999, the Science Committee considered H.R. 209. The Committee adopted an en bloc amendment and ordered H.R. 209 reported, as a single amendment in the nature of a substitute, by voice vote.

In the previous Congress, the Technology Subcommittee held two hearings on H.R. 2544, the predecessor bill to H.R. 209 in the 105th Congress. On September 25, 1997, the subcommittee held a hearing entitled, "Promoting Technology Transfer By Facilitating Licenses to Federally-Owned Inventions." The subcommittee followed up with a second hearing on March 17, 1998, entitled, "Facilitating Licenses To Federally-Owned Inventions: A Legislative Hearing on H.R. 209, The Technology Transfer Commercialization Act."

On March 26, 1998, the Technology Subcommittee unanimously reported H.R. 209 favorably to the Science Committee, and on May 13, 1998, the committee reported the bill. The House of Represent-

atives subsequently passed H.R. 209 on July 14, 1998, and on October 20, 1998 in the waning days of the 105th Congress, passed its amended version, H.R. 4859. Both bills were unable to clear the Senate before its sine die adjournment.

VI. Summary of Major Provisions of the Bill

The goal of H.R. 209, The Technology Transfer Commercialization Act, is to remove the procedural obstacles and to the greatest extent possible within the public interest, the uncertainty involved in the licensing of federally patented inventions created in a Government-owned, Government-operated (GOGO) laboratory, by applying the successful Bayh-Dole Act provisions to a GOGO.

As a result, the Technology Transfer Commercialization Act provides federal laboratories with two important new tools for effectively commercializing on-the-shelf, government-owned inventions: (1) the bill's revised authorities of Section 209 of the Bayh-Dole Act; and (2) the ability to license technology as part of a CRADA. Both mechanisms make federal technology transfer programs much more attractive to United States private companies that seek to form partnerships with federal laboratories. H.R. 209, as amended, also makes a number of smaller adjustments to the Bayh-Dole Act and the Stevenson-Wydler Act that improve these laws and reflect a series of consensus "lessons learned" from 19 years of practical application of our current federal technology transfer laws.

VII. Section-by-Section Summary (by Title and Section)

SECTION 1. SHORT TITLE

The Act may be cited as the "Technology Transfer Commercialization Act of 1999."

SECTION 2. FINDINGS

Congress has demonstrated a commitment to foster technology transfer from our federal laboratories and to promote partnerships with industry to enhance our international competitiveness, thereby strengthening the ability of the United States to compete in the global marketplace. Federal technology licensing procedures should balance the public policy needs of adequately protecting the rights of the public, encouraging companies to develop existing government inventions, and making the entire system of developing government technologies more consistent and simple.

SECTION 3. COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS

Section 3 amends the Stevenson-Wydler Technology Innovation Act of 1980 by setting out the circumstances under which federal laboratories may license existing patented inventions as part of a Cooperative Research and Development Agreement (CRADA). The federal laboratory may grant, subject to Section 209 of Title 35 of the United States Code, a license to a federally-owned invention that was created prior to the signing of the CRADA and directly related to the scope of the work under the agreement.

SECTION 4. LICENSING FEDERALLY OWNED INVENTIONS

Section 4 rewrites Section 209, Title 35 of the United States Code to preserve existing preferences while streamlining notice and other procedural requirements.

Subsection 4(a) provides that a federal agency may grant an exclusive or partially exclusive license to a federally owned invention if granting the license is a reasonable and necessary incentive for commercialization or to promote the invention's application by the public. The federal agency must find that the public will be served by the granting of the license, as indicated by the applicant's intentions, plans, and ability to bring the invention to practical application within a reasonable time or otherwise to promote the invention's application by the public. The scope of the exclusive or partially exclusive license should not be greater than reasonably necessary to promote the invention's public application. The applicant must make a commitment to achieve practical application of the invention within a reasonable time. The granting of the license should not substantially lessen competition or create or maintain a violation of the federal antitrust laws, and in the case of an invention covered by a foreign patent application or patent, the license must enhance the interests of United States industry in foreign commerce.

Subsection 4(b) provides that licenses should be granted only to a licensee who agrees that any products embodying the invention or produced through the use of the invention will be substantially manufactured in the United States.

Subsection 4(c) provides that the first preference for the granting of exclusive or partially exclusive licenses should be given to small businesses that have an equal or greater likelihood as other applicants to bring the invention to commercialization within a reasonable time.

Subsection 4(d) provides certain terms and conditions required for licenses, as the granting agency considers appropriate. These include: retaining a nontransferable, irrevocable, paid-up license for a federal agency to practice the invention or to have the invention practiced throughout the world by or on behalf of the United States; periodic reporting on the use of the invention and commercialization efforts by the licensee, but only to the extent necessary to enable the federal agency to determine whether the terms of the license are being complied with and such reports shall be treated as privileged and confidential, not subject to the Freedom of Information Act; and providing "march-in rights" that empower a federal agency to terminate the license, in whole or in part, if it determines that the licensee is not adequately executing its commitment to achieve practical application of the invention within a reasonable time, if the licensee is in breach of the substantial United States manufacture requirement, if termination is necessary to meet the public use requirements specified by federal regulations issued after the grant of the license, or if the licensee has been found by a competent authority to have violated federal antitrust laws.

Subsection 4(e) provides that no exclusive or partially exclusive license may be granted unless public notice of the intention to grant such a license has been provided in an appropriate manner

at least 15 days before the license is granted and the federal agency has considered all comments received in response to that public notice. This subsection, however, shall not apply to the licensing of inventions made under a CRADA entered into under Section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a).

Section 4(f) provides that a federal agency may grant a license on a federally-owned invention only if the licensee has supplied a basic business plan for development or marketing of the invention. Such a plan shall be treated as privileged and confidential, not subject to the Freedom of Information Act.

SECTION 5. TECHNICAL AMENDMENTS TO BAYH-DOLE ACT

Section 5 provides that a federal agency, employing a coinventor of any invention made under a funding agreement with a non-profit organization or small business, may consolidate rights in the invention to ease commercialization of the invention. Consolidation under Section 5 may occur either by a federal agency licensing or assigning rights or by the federal agency acquiring rights related to the invention.

SECTION 6. TECHNICAL AMENDMENTS TO THE STEVENSON-WYDLER TECHNOLOGY INNOVATION ACT OF 1980

Section 6 clears up am ambiguity in current law by providing that the rights of the inventors must be assigned to the federal government in order for the inventors to share royalties and that the federal agency may retain royalty income for two succeeding fiscal years.

SECTION 7. REVIEW OF COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT PROCEDURES

Section 7 provides that federal agencies with laboratories that are engaged in a Cooperative Research and Development Agreement (CRADA) shall report to the Congress and the Committee on National Security of the National Science and Technology Council, within 90 days after the date of enactment, to review the general policies and procedures used by that agency for a major CRADA involving critical national security technology or may have a significant impact on domestic or international competitiveness. Additionally, the Committee on National Security of the National Science and Technology Council shall, within one year after the date of enactment, in consultation with relevant federal agencies and national laboratories, determine the adequacy of existing procedures and methods for interagency coordination and awareness, and establish and distribute to appropriate federal agencies specific criteria to indicate the necessity for gathering and considering the views of other agencies and additional procedures, if any, for carrying out such gathering and considering of agency views. Any subsequent procedures established shall be designed, to the extent possible, to use or modify existing procedures, to minimize burdens on federal agencies, to encourage industrial partnerships with national laboratories, and to minimize delay in the approval process for collaborative relationships with federal laboratories and private

industry. An existing CRADA or joint work statement should not be affected by any subsequent procedures established under this section.

SECTION 8. INCREASED FLEXIBILITY FOR FEDERAL LABORATORY PARTNERSHIP INTERMEDIARIES

Section 8 provides that institutions of higher education may enter into a contract or memorandum of understanding with a federal laboratory to perform services that increase the likelihood of success in the conduct of cooperative or joint activities.

VIII. COMMITTEE VIEWS

SECTION 1. SHORT TITLE

The Committee shall refer to the Act as "The Technology Transfer Commercialization Act of 1999."

SECTION 2. FINDINGS

The Committee has advocated initiatives making federal technology transfer more "industry friendly," because government-owned inventions could not be commercialized effectively without the significant resources and value-added input of private industry. This commercialization, in turn, can create new jobs would boost our Nation's ability to compete in the global marketplace. The Committee has adopted the landmark Bayh-Dole Act, that was enacted in 1980, as a successful framework for removing bureaucratic barriers and for allowing federal agencies to have greater flexibility in finding licensees for the patented inventions that are now in the federal government's patent portfolio.

SECTION 3. COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS

The Committee recognizes the success of Cooperative Research and Development Agreements (CRADA) for federal technology transfer. Since the inception in 1986 of the CRADA legislation, thousands have been signed, resulting in the transfer of technology, knowledge, and expertise back and forth between our federal laboratories and the private sector. The Committee believes that the broadening of CRADA licensing authority to include pre-existing inventions will make a CRADA more attractive to private industry and increase the transfer of federal technology.

SECTION 4. LICENSING FEDERALLY OWNED INVENTIONS

While it is the intention to eliminate any unnecessary and wasteful delays built into the process of issuing exclusive or partially exclusive licenses, the Committee also recognize the importance of public notice. Public notice should be designed equitably to alert all potential licensees that a licensing opportunity is available and provides for an opportunity to comment once a license has been granted. The Committee understands that this notice and comment period sometimes has helped federal agencies find additional or more qualified licensees than those first proposing to license a government-owned invention.

The Committee is more concerned, however, with the effectiveness of notice rather than its form. For example, the requirement for public notice should not be construed merely to require publication in the Federal Register. Other available forms of making public the intention to grant an exclusive or partially exclusive license to a federally owned invention, including electronic posting on the Internet, should also be vigorously pursued and methods of notice should be updated as communications technology advances. The Committee strongly encourages federal agencies to use the Internet, to explore new electronic mediums, and to push the frontiers of cutting-edge information technologies to meet the public notice requirement in the Act.

The Committee also recognizes that requiring a basic business plan as part of the application for a license gives the federal agencies an objective basis for selecting the private company best suited to commercialize the invention. The exercise of preparing the plan is also of considerable use in assisting companies, especially small businesses, in defining their own focus with respect to the invention; it also gives agencies valuable insights into the comparative abilities of companies competing for a single license and a more precise understanding of the specific field of use needed to execute a company's commercialization plan. The Committee strongly believes, however, the basic business plan should not be an overly burdensome bureaucratic requirement. A business plan under this section should not be required to include extraneous materials but rather should be specifically focused on providing the federal agency the information it needs to make licensing decisions and to understand the development and commercialization milestones the company plans to meet.

The Committee believes that business plans submitted by a private company in the licensing process, as well as progress reports under the license such as reports on application and application efforts should be treated by the federal agency as commercial and financial information not subject to the Freedom of Information Act and should be entitled to protection from disclosure. The Committee understands that, absent protection of its proprietary information, a private company would otherwise be very reluctant to partner with federal laboratories which would cause a chilling effect on federal technology licensing.

SECTION 5. TECHNICAL AMENDMENTS TO BAYH-DOLE ACT

The Bayh-Dole Act defines the patent rights of small business and non-profit organizations receiving federal government funding. A significant percentage of government inventions are co-invented with federally-funded parties, most commonly university researchers. It is often necessary to consolidate rights to such co-inventions, under appropriate licenses or assignments, to achieve public benefit through commercialization. Depending on the specific circumstances, it may be advantageous for the unified rights and patent prosecution responsibility to reside with either the co-inventing entity or the federal agency. The Committee believes that the Bayh-Dole Act should be amended to make it clear that both the agency and the co-inventing entity have authority to enter into license agreements with one another in these circumstances.

While Bayh-Dole currently provides specific authority for the federal government to assign its rights in a subject co-invention to the co-inventing entity, it does not mention the licensing of such rights. The Committee understands that the absence of specific authority to license in those circumstances has resulted in inconsistent rulings by federal agencies, with some approving such licenses while other reject them. Furthermore, under the Bayh-Dole Act, some small businesses and non-profits have ended up with the right to patent and license potentially valuable inventions without possessing the skills to do effectively. The Bayh-Dole Act is accordingly amended to provide a mechanism whereby the non-federal inventing entity can voluntarily transfer its rights by license or assignment to the federal agency in return for a share of any subsequent income.

The Committee understands that it is increasingly necessary for an agency to be able to offer a potential licensee access to related inventions in order to practice a government-owned invention. There is, however, no mechanism whereby an agency can "in-license" the rights to related inventions, in return for the payment of a share of any subsequent royalties, so that they can be "bundled" with a government-owned invention and licensed together for commercialization.

This section adds in such language.

SECTION 6. TECHNICAL AMENDMENTS TO THE STEVENSON-WYDLER TECHNOLOGY INNOVATION ACT OF 1980

The Committee understands that there have been widely differing federal agency interpretations regarding whether the rights of the inventors must be assigned to the federal government in order for them to share royalties. For example, some federal agencies share with all inventors even though they have not assigned their rights to the federal government, while other do not share with non-government inventors who have assigned their rights. Under this section, royalty shares will be due only after assignment of rights by the inventor or coinventor.

The Committee also understands that there is confusion on how long an agency may retain royalty income. Accordingly, the Committee clarified that federal agencies should be given two fiscal years to retain royalty income before transferring outstanding royalty income, if any, to the general treasury.

SECTION 7. REVIEW OF COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT PROCEDURES

The Committee is pleased with the blossoming of the CRADA concept into a major tool for industry-government cooperation. At the same time, in limited cases of a major, far-reaching CRADA, the Committee has heard concerns that these collaborations may now have outgrown the current CRADA approval process. As originally envisioned at the time of the passage of the Federal Technology Transfer Act of 1986, a CRADA was designed to help move individual ideas from the federal laboratories into the private sector or lead to cooperation between industry and government labs in areas of mutual interest. A common benefit of such agreements has been the acquisition by small businesses of the technological

expertise necessary to succeed that otherwise may not have been available to them. Such a CRADA, in these instances, is generally small enough that they do not raise national issues. The appropriate approval process for an average CRADA, therefore, is executed quickly without necessary high level approvals at each stage. This is the traditional federal approval method of a typical CRADA.

In recent years, however, there have been instances of CRADA involving cutting edge technology, the world's largest companies, and occasionally a consortia of federal laboratories. Some of these recent examples are important enough that they have the potential to affect the future direction of entire industries including their suppliers. Generally, such a CRADA positively benefits both the federal laboratory and the companies that participate in them. Engaging in a CRADA should continue to be encouraged, but the issues raised by a major CRADA may go beyond the expertise of a laboratory's agency if it involves critical national security technology (such as classified technology or technology subject to export controls), domestic competitiveness issues (creating a competitive advantage for market leaders), or international competitiveness (material participation by foreign companies or foreign suppliers).

The Committee understands that there are instances where foreign participation and special relations with market leaders are desirable or even essential to the success of a CRADA, but other values within the jurisdiction of other agencies, like the effect on other United States companies and the impact on present and future jobs within our National should be considered. The Committee, therefore, believes that a careful review and upgrading of existing approval procedures, if necessary, for a major CRADA with interagency consequences is in order.

In conducting this review of CRADA procedures, special care should be taken to understand the needs of private sector parties. Criteria should be developed to separate out the small minority of what would constitute a major CRADA that requires interagency review from an average CRADA that does not. For instance, it makes sense to review only a very large CRADA for domestic competitiveness issues. This review should be undertaken with the goal of understanding the procedures that currently apply to a major CRADA and the extent that they may lead to a satisfactory airing of national security, domestic competitiveness, and international competitiveness issues.

The Committee expects that the adequacy of existing procedures and the methods for interagency coordination and awareness should be reviewed and refined. Any recommended changes should solve potential problems involving a major CRADA through better interagency coordination and should not inadvertently add layers of bureaucratic review. New procedures should be recommended only to the extent that existing procedures are inadequate and to ensure that any new procedures will lead to expedited, substantive interagency decisions within the spirit of the CRADA concept.

It is the intention of the Committee that any interagency review of a CRADA, as outlined in this section, should apply only to a major CRADA, and not to an average CRADA, such as those involving United States small business partners. The Committee believes that the added time, cost, and complexity associated with

such interagency reviews could be overly burdensome for United States small businesses or could deter them from entering into a CRADA.

Additionally, the Committee does not intend to modify any statutory deadlines for CRADA approval and does not grant authority to any federal agencies to establish a review board or other new bureaucratic structure to carry out this section. The Committee also does not intend to overturn or disapprove an existing CRADA through the implementation of any procedural recommendations.

SECTION 8. INCREASED FLEXIBILITY FOR FEDERAL LABORATORY PARTNERSHIP INTERMEDIARIES

The Committee supports the current law that permits federal laboratories to interact with partnership intermediaries, such as a State or local government, or a nonprofit entity owned in whole or part by, or operated in whole or in part by or behalf of a State or local government, that assists, counsels, advises, evaluates, or otherwise cooperates with small business firms that need or can make demonstrably productive use of technology-related assistance from a federal laboratory. The Committee believes that there should be increased flexibility for federal laboratory partnership intermediaries and that institutions of higher education should qualify to be a partnership intermediary for educational or scientific purposes.

IX. COMMITTEE COST ESTIMATE

Rule XIII, clause 3(d)(2) of the House of Representatives requires each committee report accompanying each bill or join resolution of a public character to contain: (1) an estimate, made by such committee, of the costs which would be incurred in carrying out such bill or joint resolution in the fiscal year in which it is reported, and in each of the five fiscal years following such fiscal year (or for the authorized duration of any program authorized by such bill or joint resolution, if less than five years); (2) a comparison of the estimate of costs described in subparagraph (1) of this paragraph made by such committee with an estimate of such costs made by any government agency and submitted to such committee; and (3) when practicable, a comparison of the total estimated funding level for the relevant program (or programs) with the appropriate levels under current law. However, House Rule XIII, clause 3(d)(3)(B) provides that this requirement does not apply when a cost estimate and comparison prepared by the Director of the Congressional Budget Office under section 403 of the Congressional Budget Act of 1974 has been timely submitted prior to the filing of the report and included in the report pursuant to House Rule XIII, clause 3(c)(3). A cost estimate and comparison prepared by the Director of the Congressional Budget Office under section 403 of the Congressional Budget Act of 1974 has been timely submitted prior to the filing of this report and is included in Section X of this report pursuant to House Rule XIII, clause 3(c)(3).

Rule XIII, clause 3(c)(2) of the House of Representatives requires each committee report that accompanies a measure providing new budget authority (other than continuing appropriations), new

spending authority, or new credit authority, or changes in revenues or tax expenditures to contain a cost estimate, as required by section 308(a)(1) of the Congressional Budget Act of 1974 and, when practicable with respect to estimates of new budget authority, a comparison of the total estimated funding level for the relevant program (or programs) to the appropriate levels under current law. H.R. 209 does not contained any new budget authority, credit authority, or changes in revenues or tax expenditures.

X. CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, April 8, 1999.

Hon. F. JAMES SENSENBRENNER, Jr.,
Chairman, Committee on Science,
House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 209, the Technology Transfer Commercialization Act of 1999.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Kathleen Gramp.

Sincerely,

DAN L. CRIPPEN, *Director.*

Enclosure.

H.R. 209—Technology Transfer Commercialization Act of 1999

H.R. 209 would amend existing law regarding the licensing of technologies developed with federal resources. This bill would change the terms and procedures governing such licenses and would expand the scope of inventions that could be included in a license. Royalties collected by federal agencies would be available for obligation for two years after they are received rather than for the one year allowed under current law. The bill also would direct the National Science and Technology Council (NSTC) to analyze and recommend policies regarding major cooperative research and development agreement (CRADAs) within one year after enactment.

CBO estimates that implementing H.R. 209 would have no significant effect on the federal budget over the 2000–2004 period. Based on information from NSTC, we expect that preparing the report on CRADAs would involve little additional cost because most of the analyses required by the bill are being done under current law. Provisions affecting the collection and spending of royalties by federal agencies would affect direct spending, so pay-as-you-go procedures would apply to this bill, but CBO estimates that the effects would not be significant. Although receipts from royalties could increase if more licenses are issued as a result of this legislation, any additional collections would be offset by an increase in direct spending by agencies for payments to investors or for related agency programs. Likewise, giving agencies an additional year to obligate royalty income would have little effect on direct spending, because agencies obligate virtually all of the receipts within the one-year limit specified in current law.

H.R. 209 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act and would impose no costs on state, local, or tribal governments.

The CBO staff contact for this estimate is Kathleen Gramp. This estimate was approved by Robert A. Sunshine, Deputy Assistant Director for Budget Analysis.

XI. Compliance With Public Law 104–4

H.R. 209 contains no unfunded mandates.

XII. Committee Oversight Findings and Recommendations

Rule XIII, clause 3(c)(1) of the House of Representatives requires each committee report to include oversight findings and recommendations required pursuant to clause 2(b)(1) of rule X. The Committee has no oversight findings.

XIII. Oversight Findings and Recommendations by the Committee on Government Reform

Rule XIII, clause 3(c)(4) of the House of Representatives requires each committee report to contain a summary of the oversight findings and recommendations made by the House Government Reform Committee pursuant to clause 4(c)(2) of rule X, whenever such findings and recommendations have been submitted to the Committee in a timely fashion. The Committee on Science has received no such findings or recommendations from the Committee on Government Reform.

XIV. Constitutional Authority Statement

Rule XIII, clause 3(d)(1) of the House of Representatives requires each report of a committee on a bill or joint resolution of a public character to include a statement citing the specific powers granted to the Congress in the Constitution to enact the law proposed by the bill or joint resolution. Article I, section 8 of the Constitution of the United States grants Congress the authority to enact H.R. 209.

XV. Federal Advisory Committee Statement

H.R. 209 does not authorize the creation of any new advisory committees.

XVI. Congressional Accountability Act

The Committee finds that H.R. 209 does not relate to the terms and conditions of employment or access to public services or accommodations within the meaning of Section 102(b)(3) of the Congressional Accountability Act (Public Law 104–1).

XVII. Changes in Existing Law Made by the Bill, As Reported

In Compliance with clause 3 of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omit-

ted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

STEVENSON–WYDLER TECHNOLOGY INNOVATION ACT OF 1980

* * * * * * *

SEC. 4. DEFINITIONS.

As used in this Act, unless the context otherwise requires, the term—

(1) * * *

* * * * * * *

(4) "Centers" means Cooperative Research Centers established under [section 6 or section 8] *section 7 or 9* of this Act.

* * * * * * *

(6) "Federal laboratory" means any laboratory, any federally funded research and development center, or any center established under [section 6 or section 8] *section 7 or 9* of this Act that is owned, leased, or otherwise used by a Federal agency and funded by the Federal Government, whether operated by the Government or by a contractor.

* * * * * * *

SEC. 5. COMMERCE AND TECHNOLOGICAL INNOVATION.

(a) * * *

* * * * * * *

(c) DUTIES.—The Secretary, through the Under Secretary, as appropriate, shall—

(1) * * *

* * * * * * *

(11) encourage and assist the creation of centers and other joint initiatives by State [of] *or* local governments, regional organizations, private businesses, institutions of higher education, nonprofit organizations, or Federal laboratories to encourage technology transfer, to stimulate innovation, and to promote an appropriate climate for investment in technology-related industries;

* * * * * * *

SEC. 9. NATIONAL SCIENCE FOUNDATION COOPERATIVE RESEARCH CENTERS.

(a) ESTABLISHMENT AND PROVISIONS.—The National Science Foundation shall provide assistance for the establishment of Cooperative Research Centers. Such Centers shall be affiliated with a university or other nonprofit institution, or a group thereof. The objective of the Centers is to enhance technological innovation as provided in section [6(a)] *7(a)* through the conduct of activities as provided in section [6(b)] *7(b)*.

(b) PLANNING GRANTS.—The National Science Foundation is authorized to make available nonrenewable planning grants to uni-

versities or nonprofit institutions for the purpose of developing the plan as described under section [6(c)(3)] *7(c)(3)*.

* * * * * * *

SEC. 11. UTILIZATION OF FEDERAL TECHNOLOGY.

(a) * * *

* * * * * * *

(e) ESTABLISHMENT OF FEDERAL LABORATORY CONSORTIUM FOR TECHNOLOGY TRANSFER.—(1) There is hereby established the Federal Laboratory Consortium for Technology Transfer (hereinafter referred to as the "Consortium") which, in cooperation with Federal [Laboratories] *laboratories* and the private sector, shall—

(A) * * *

* * * * * * *

(i) RESEARCH EQUIPMENT.—The Director of a laboratory, or the head of any Federal agency or department, may loan, lease, or give research equipment that is excess to the needs of the laboratory, agency, or department to an educational institution or nonprofit organization for the conduct of technical and scientific education and research activities. Title of ownership shall transfer with a gift under [the] *this* section.

SEC. 12. COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS.

(a) * * *

(b) ENUMERATED AUTHORITY.—(1) Under an agreement entered into pursuant to subsection (a)(1), the laboratory may grant, or agree to grant in advance, to a collaborating party patent licenses or assignments, or options thereto, in any invention made in whole or in part by a laboratory employee under the agreement, *or, subject to section 209 of title 35, United States Code, may grant a license to an invention which is federally owned, for which a patent application was filed before the signing of the agreement, and directly within the scope of the work under the agreement,* for reasonable compensation when appropriate. The laboratory shall ensure, through such agreement, that the collaborating party has the option to choose an exclusive license for a pre-negotiated field of use for any such invention under the agreement or, if there is more than one collaborating party, that the collaborating parties are offered the option to hold licensing rights that collectively encompass the rights that would be held under such an exclusive license by one party. In consideration for the Government's contribution under the agreement, grants under this paragraph shall be subject to the following explicit conditions:

* * * * * * *

SEC. 14. DISTRIBUTION OF ROYALTIES RECEIVED BY FEDERAL AGENCIES.

(a) IN GENERAL.—(1) Except as provided in paragraphs (2) and (4), any royalties or other payments received by a Federal agency from the licensing and assignment of inventions under agreements entered into by Federal laboratories under section 12, and from the licensing of inventions of Federal laboratories under section 207 of title 35, United States Code, or under any other provision of law,

shall be retained by the laboratory which produced the invention and shall be disposed of as follows:

(A)(i) The head of the agency or laboratory, or such individual's designee, shall pay each year the first $2,000, and thereafter at least 15 percent, of the royalties or other payments*, other than payments of patent costs as delineated by a license or assignment agreement,* to the inventor or coinventors*, if the inventor's or coinventor's rights are assigned to the United States*.

* * * * * * *

(B) The balance of the royalties or other payments shall be transferred by the agency to its laboratories, with the majority share of the royalties or other payments from any invention going to the laboratory where the invention occurred. The royalties or other payments so transferred to any laboratory may be used or obligated by that laboratory during the fiscal year in which they are received or during the [succeeding fiscal year] *2 succeeding fiscal years*—

* * * * * * *

(2) If, after payments to inventors under paragraph (1), the royalties or other payments received by an agency in any fiscal year exceed 5 percent of the budget of the [Government-operated] laboratories of the agency for that year, 75 percent of such excess shall be paid to the Treasury of the United States and the remaining 25 percent may be used or obligated under paragraph (1)(B). Any funds not so used or obligated shall be paid into the Treasury of the United States.

* * * * * * *

(b) CERTAIN ASSIGNMENTS.—If the invention involved was one assigned to the Federal agency—

(1) * * *

(2) by an employee of the agency who was not working in the laboratory at the time the [inventon] *invention* was made,

the agency unit that was involved in such assignment shall be considered to be a laboratory for purposes of this section.

* * * * * * *

SEC. 22. SPENDING AUTHORITY.

No payments shall be made or contracts shall be entered into pursuant to the provisions of this Act (other than sections [11, 12, and 13] *11, 12, and 14*) except to such extent or in such amounts as are provided in advance in appropriation Acts.

SEC. 23. USE OF PARTNERSHIP INTERMEDIARIES.

(a) AUTHORITY.—Subject to the approval of the Secretary or head of the affected department or agency, the Director of a Federal laboratory, or in the case of a federally funded research and development center, the Federal employee who is the contract officer, may—

(1) enter into a contract or memorandum of understanding with a partnership intermediary that provides for the partnership intermediary to perform services for the Federal laboratory that increase the likelihood of success in the conduct of co-

operative or joint activities of such Federal laboratory with small business firms*, institutions of higher education as defined in section 1201(a) of the Higher Education Act of 1965 (20 U.S.C. 1141(a)), or educational institutions within the meaning of section 2194 of title 10, United States Code*; and

* * * * * * *

(c) DEFINITION.—For purposes of this section, the term "partnership intermediary" means an agency of a State or local government, or a nonprofit entity owned in whole or in part by, chartered by, funded in whole or in part by, or operated in whole or in part by or on behalf of a State or local government, that assists, counsels, advises, evaluates, or otherwise cooperates with small business firms*, institutions of higher education as defined in section 1201(a) of the Higher Education Act of 1965 (20 U.S.C. 1141(a)), or educational institutions within the meaning of section 2194 of title 10, United States Code,* that need or can make demonstrably productive use of technology-related assistance from a Federal laboratory, including State programs receiving funds under cooperative agreements entered into under section 5121(b) of the Omnibus Trade and Competitiveness Act of 1988 (15 U.S.C. 2781 note).

* * * * * * *

CHAPTER 18 OF TITLE 35, UNITED STATES CODE

CHAPTER 18—PATENT RIGHTS IN INVENTIONS MADE WITH FEDERAL ASSISTANCE

Sec.
200. Policy and objective.

* * * * * * *

[209. Restrictions on licensing of federally owned inventions.]
209. Licensing federally owned inventions.

* * * * * * *

§ 202. Disposition of rights

(a) * * *

* * * * * * *

[(e) In any case when a Federal employee is a coinventor of any invention made under a funding agreement with a nonprofit organization or small business firm, the Federal agency employing such coinventor is authorized to transfer or assign whatever rights it may acquire in the subject invention from its employee to the contractor subject to the conditions set forth in this chapter.]

(e) In any case when a Federal employee is a coinventor of any invention made with a nonprofit organization, a small business firm, for a non-Federal inventor, the Federal agency employing such coinventor may, for the purpose of consolidating rights in the invention or if it finds that it would expedite the development of the invention—

(1) license or assign whatever rights it may acquire in the subject invention to the nonprofit organization, small business

firm, or non-Federal inventor in accordance with the provisions of this chapter; or

(2) acquire any rights in the subject invention from the nonprofit organization, small business firm, or non-Federal inventor, but only to the extent the party from whom the rights are acquired voluntarily enters into the transaction and no other transaction under this chapter is conditioned on such acquisition.

* * * * * * *

§ 207. Domestic and foreign protection of federally owned inventions

(a) Each Federal agency is authorized to—

(1) * * *

(2) grant nonexclusive, exclusive, or partially exclusive licenses under federally owned **[**patent applications, patents, or other forms of protection obtained**]** *inventions*, royalty-free or for royalties or other consideration, and on such terms and conditions, including the grant to the licensee of the right of enforcement pursuant to the provisions of chapter 29 of this title as determined appropriate in the public interest;

(3) undertake all other suitable and necessary steps to protect and administer rights to federally owned inventions on behalf of the Federal Government either directly or through contract*, including acquiring rights for and administering royalties to the Federal Government in any invention, but only to the extent the party from whom the rights are acquired voluntarily enters into the transaction, to facilitate the licensing of a federally owned invention*; and

* * * * * * *

[§ 209. Restrictions on licensing of federally owned inventions

[(a) No Federal agency shall grant any license under a patent or patent application on a federally owned invention unless the person requesting the license has supplied the agency with a plan for development and/or marketing of the invention, except that any such plan may be treated by the Federal agency as commercial and financial information obtained from a person and privileged and confidential and not subject to disclosure under section 552 of title 5 of the United States Code.

[(b) A Federal agency shall normally grant the right to use or sell any federally owned invention in the United States only to a licensee that agrees that any products embodying the invention or produced through the use of the invention will be manufactured substantially in the United States.

[(c)(1) Each Federal agency may grant exclusive or partially exclusive licenses in any invention covered by a federally owned domestic patent or patent application only if, after public notice and opportunity for filing written objections, it is determined that—

[(A) the interests of the Federal Government and the public will best be served by the proposed license, in view of the applicant's intentions, plans, and ability to bring the invention to

practical application or otherwise promote the invention's utilization by the public;

[(B) the desired practical application has not been achieved, or is not likely expeditiously to be achieved, under any nonexclusive license which has been granted, or which may be granted, on the invention;

[(C) exclusive or partially exclusive licensing is a reasonable and necessary incentive to call forth the investment of risk capital and expenditures to bring the invention to practical application or otherwise promote the invention's utilization by the public; and

[(D) the proposed terms and scope of exclusivity are not greater than reasonably necessary to provide the incentive for bringing the invention to practical application or otherwise promote the invention's utilization by the public.

[(2) A Federal agency shall not grant such exclusive or partially exclusive license under paragraph (1) of this subsection if it determines that the grant of such license will tend substantially to lessen competition or result in undue concentration in any section of the country in any line of commerce to which the technology to be licensed relates, or to create or maintain other situations inconsistent with the antitrust laws.

[(3) First preference in the exclusive or partially exclusive licensing of federally owned inventions shall go to small business firms submitting plans that are determined by the agency to be within the capabilities of the firms and equally likely, if executed, to bring the invention to practical application as any plans submitted by applicants that are not small business firms.

[(d) After consideration of whether the interests of the Federal Government or United States industry in foreign commerce will be enhanced, any Federal agency may grant exclusive or partially exclusive licenses in any invention covered by a foreign patent application or patent, after public notice and opportunity for filing written objections, except that a Federal agency shall not grant such exclusive or partially exclusive license if it determines that the grant of such license will tend substantially to lessen competition or result in undue concentration in any section of the United States in any line of commerce to which the technology to be licensed relates, or to create or maintain other situations inconsistent with antitrust laws.

[(e) The Federal agency shall maintain a record of determinations to grant exclusive or partially exclusive licenses.

[(f) Any grant of a license shall contain such terms and conditions as the Federal agency determines appropriate for the protection of the interests of the Federal Government and the public, including provisions for the following:

[(1) periodic reporting on the utilization or efforts at obtaining utilization that are being made by the licensee with particular reference to the plan submitted: *Provided*, That any such information may be treated by the Federal agency as commercial and financial information obtained from a person and privileged and confidential and not subject to disclosure under section 552 of title 5 of the United States Code;

[(2) the right of the Federal agency to terminate such license in whole or in part if it determines that the licensee is not executing the plan submitted with its request for a license and the licensee cannot otherwise demonstrate to the satisfaction of the Federal agency that it has taken or can be expected to take within a reasonable time, effective steps to achieve practical application of the invention;

[(3) the right of the Federal agency to terminate such license in whole or in part if the licensee is in breach of an agreement obtained pursuant to paragraph (b) of this section; and

[(4) the right of the Federal agency to terminate the license in whole or in part if the agency determines that such action is necessary to meet requirements for public use specified by Federal regulations issued after the date of the license and such requirements are not reasonably satisfied by the licensee.]

§ 209. Licensing federally owned inventions

(a) AUTHORITY.—A Federal agency may grant an exclusive or partially exclusive license on a federally owned invention under section 207(a)(2) only if—

(1) granting the license is a reasonable and necessary incentive to—

(A) call forth the investment capital and expenditures needed to bring the invention to practical application; or

(B) otherwise promote the invention's utilization by the public;

(2) the Federal agency finds that the public will be served by the granting of the license, as indicated by the applicant's intentions, plans, and ability to bring the invention to practical application or otherwise promote the invention's utilization by the public, and that the proposed scope of exclusivity is not greater than reasonably necessary to provide the incentive for bringing the invention to practical utilization, as proposed by the applicant, or otherwise to promote the invention's utilization by the public;

(3) the applicant makes a commitment to achieve practical utilization of the invention within a reasonable time, which time may be extended by the agency upon the applicant's request and the applicant's demonstration that the refusal of such extension would be unreasonable;

(4) granting the license will not tend to substantially lessen competition or create or maintain a violation of the Federal antitrust laws; and

(5) in the case of an invention covered by a foreign patent application or patent, the interests of the Federal Government or United States industry in foreign commerce will be enhanced.

(b) MANUFACTURE IN UNITED STATES.—A Federal agency shall normally grant a license under section 207(a)(2) to use or sell any federally owned invention in the United States only to a licensee who agrees that any products embodying the invention or produced through the use of the invention will be manufactured substantially in the United States.

(c) SMALL BUSINESS.—First preference for the granting of any exclusive or partially exclusive licenses under section 207(a)(2) shall be given to small business firms having equal or greater likelihood as other applicants to bring the invention to practical application within a reasonable time.

(d) TERMS AND CONDITIONS.—Any licenses granted under section 207(a)(2) shall contain such terms and conditions as the granting agency considers appropriate, and shall include provisions—

(1) retaining a nontransferrable, irrevocable, paid-up license for any Federal agency to practice the invention or have the invention practiced throughout the world by or on behalf of the Government of the United States;

(2) requiring periodic reporting on utilization of the invention, and utilization efforts, by the licensee, but only to the extent necessary to enable the Federal agency to determine whether the terms of the license are being complied with, except that any such report shall be treated by the Federal agency as commercial and financial information obtained from a person and privileged and confidential and not subject to disclosure under section 552 of title 5 of the United States Code; and

(3) empowering the Federal agency to terminate the license in whole or in part if the agency determines that—

(A) the licensee is not executing its commitment to achieve practical utilization of the invention, including commitments contained in any plan submitted in support of its request for a license, and the licensee cannot otherwise demonstrate to the satisfaction of the Federal agency that it has taken, or can be expected to take within a reasonable time, effective steps to achieve practical utilization of the invention;

(B) the licensee is in breach of an agreement described in subsection (b);

(C) termination is necessary to meet requirements for public use specified by Federal regulations issued after the date of the license, and such requirements are not reasonably satisfied by the licensee; or

(D) the licensee has been found by a court of competent jurisdiction to have violated the Federal antitrust laws in connection with its performance under the license agreement.

(e) PUBLIC NOTICE.—No exclusive or partially exclusive license may be granted under section 207(a)(2) unless public notice of the intention to grant an exclusive or partially exclusive license on a federally owned invention has been provided in an appropriate manner at least 15 days before the license is granted, and the Federal agency has considered all comments received before the end of the comment period in response to that public notice. This subsection shall not apply to the licensing of inventions made under a cooperative research and development agreement entered into under section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a).

(f) PLAN.—No Federal agency shall grant any license under a patent or patent application on a federally owned invention unless the person requesting the license has supplied the agency with a plan

for development or marketing of the invention, except that any such plan shall be treated by the Federal agency as commercial and financial information obtained from a person and privileged and confidential and not subject to disclosure under section 552 of title 5 of the United States Code.

* * * * * * *

XVIII. COMMITTEE RECOMMENDATIONS

On March 25, 1999, a quorum being present, the Committee favorably reported H.R. 209, the Technology Transfer Commercialization Act of 1999, by a voice vote, and recommends its enactment.

XIX. EXCHANGE OF COMMITTEE CORRESPONDENCE

HOUSE OF REPRESENTATIVES,
COMMITTEE ON SCIENCE,
Washington, DC, May 4, 1999.

Hon. HENRY HYDE,
Chairman, House Committee on the Judiciary,
Washington, DC.

DEAR MR. CHAIRMAN: Thank you for agreeing to help us bring to the floor H.R. 209, the "Technology Transfer Commercialization Act of 1999." I appreciate your willingness to waive your Committee's right to a referral on this bill. In so doing, we recognize the Judiciary Committee's jurisdictional prerogatives regarding patent matters and by agreeing to expedite floor consideration of H.R. 209 in no way diminishes your rightful claims to the bill.

Should a conference occur on H.R. 209 or similar legislation, the Committee on Science will support your request to have conferees on this or similar legislation which falls within the Committee on Judiciary's jurisdiction.

Historically the Committees on Science and Judiciary have worked together to improve the disposition of intellectual property rights flowing from government funded research. I look forward to working together on these matters in the future.

Sincerely,

F. JAMES SENSENBRENNER,
Chairman.

HOUSE OF REPRESENTATIVES
COMMITTEE ON THE JUDICIARY,
Washington, DC, May 6, 1999.

Hon. F. JAMES SENSENBRENNER,
Chairman, Committee on Science, House of Representatives,
Rayburn House Office Building, Washington, DC.

DEAR CHAIRMAN SENSENBRENNER: Thank you for your letter of May 4, 1999, in which you address the jurisdiction of the Committee on the Judiciary as it relates to H.R. 209, the "Technology Transfer Commercialization Act of 1999."

I have reviewed the legislation and have determined that it is not necessary for the Committee on the Judiciary to conduct a markup on the bill. As you stated in your letter, the Committee on

the Judiciary does not waive any of its jurisdictional prerogative in this area.

I appreciate your cooperation with the Committee on the Judiciary and I look forward to working together on issues in the future.

Sincerely,

HENRY J. HYDE, *Chairman.*

XX. PROCEEDINGS OF THE COMMITTEE MARKUP

THURSDAY, MARCH 25, 1999, U.S. HOUSE OF REPRESENTATIVES, COMMITTEE ON SCIENCE, WASHINGTON, DC

H.R. 209, Technology Transfer Commercialization Act of 1999

Chairman SENSENBRENNER. The second item of business is the Technology Transfer Commercialization Act of 1999, H.R. 209. The Chair will recognize himself for five minutes.

In the past two decades, Congress, by direction of the Science Committee, has established a system to transfer and commercialize technology from our federal laboratories to enhance our Nation's ability to compete in the global marketplace. From the Stevenson-Wydler Technology Innovation Act of 1980 to the National Technology Transfer and Advancement Act of 1995, this Committee has strengthened and improved the process of technology transfer from our Nation's federal labs. H.R. 209 continues the Science Committee's long and rich history of advancing technology transfer to help boost United States international competitiveness. H.R. 209 is yet another important step in refining our Nation's technology transfer laws to remove existing impediments to enhanced Government and industry collaboration.

I will recognize the gentleman from California for an opening statement, if he would like to make one.

Mr. BROWN. Thank you very much, Mr. Chairman. I have a general opening statement which I would like to request be inserted at this point in the record.

Chairman SENSENBRENNER. Without objection.

[The statement of Mr. Brown follows:]

OPENING STATEMENT OF HON. GEORGE E. BROWN, JR.

Mr. Chairman, on behalf of the Democratic side of this Committee, I wish to commend you on the steps you are taking to permit the committee to establish strong legislative and oversight agendas. I think you will find, as the year goes on, that our Democratic members are a very talented group who will contribute significantly to this work and that our Democratic Subcommittee and Committee leadership stand ready to work as full partners in moving the balance of the Committee's legislative agenda through subcommittee and full committee as the Congress progresses.

I feel today's markup roster shows that we are making progress. We have an ambitious oversight agenda and three solid bills to consider today.

With regard to the oversight agenda, only so much can be fit on a single chart and many of the details appear yet to be determined. We are happy to support this chart as a general outline, and we plan to be full partners as this outline is translated into actual projects.

We appreciate the flexibility of Congresswoman Morella and her staff on H.R. 209, the Technology Transfer Commercialization Act of 1999 and Congressman Barcia for his persistence in perfecting this bill. Technology transfer is an issue that has been of great interest to me since before the days of the original Stevenson-Wydler Act, and it is a topic we have always approached bipartisanly. The bill before us does a good job of readying the Bayh-Dole Act for the 21st century and of making improvements based on almost two decades of agency and industry experience with the licensing of Federal technology. I am convinced also that the CRADA improvements,

added to this bill by Congresswoman Tauscher, will permit this form of doing business, which has worked so well for small businesses, to work smoothly on the largest of CRADAs as well.

Those of us who live in areas which are high risk for earthquakes appreciate your willingness to bring forward enhanced funding for the NEHRP program under H.R. 1184, the Earthquake Hazards Reduction Authorization Act of 1999.

We are especially pleased that you have provided nearly $170 million over 5 years for upgrades to the Advanced Seismic Monitoring System. This is a vital program which has faced chronic underfunding. Three of our Members will offer small amendments to make this good bill even better so we will save our detailed comments for later in this meeting.

Before I begin my comments on H.R. 1183, I want to thank you, Mr. Chairman, for working closely with me to address our concerns as we developed H.R. 1183 and the en bloc amendment to be offered by Mrs. Morella and Mr. Barcia. This has been a difficult process. And I want to commend the majority and industry representatives for being responsive to issues that have been raised. I would also like to commend Dr. James Hill of NIST for the thoroughness, integrity, and dedication of his work on the Commence Department's report on the FQA. I have heard nothing but praise for his efforts by industry groups for his conscientious and objective efforts.

When the Congress passed the Fastener Quality Act ten years ago, we had a significant problem with importation of fraudulent fasteners, the procurement practices of Federal agencies, and the level of quality of fastener manufacturing. Much has happened during the past ten years: Federal agencies have significantly improved their procurement practices for fasteners, and the level of quality in manufacturing has improved tremendously, even though the FQA has never been implemented. I believe that the passage of the FQA, in part, contributed to these improvements which is why I have objected to simply repealing the FQA. I am supporting H.R. 1183 and the en block amendments because I believe they update the statute to take into consideration these changes. They will reduce the regulatory burden of the original FQA, continue to encourage improved manufacturing processes, and ensure the traceability of all high-strength fasteners.

Mr. BROWN. I will just make a few brief comments. First, commending you for the expeditious way in which you have brought these three important bills before the Committee for action. I note from reading Roll Call this morning that the Speaker is anxious to demonstrate that we have a workhorse operation going on here. It seems to me that the Science Committee is making their contribution to getting the work of the Congress done.

None of these three bills are absolutely new or earth shattering, but as the Chair has said, they represent solid progress that has been made over the years. We hope to continue with that kind of progress with these three bills.

I particularly note the H.R. 209, the Technology Transfer Commercialization Act, which is in many ways a follow-on to the Stevenson-Wydler Act, which this Committee worked on a generation ago, and at that time, we went to great pains to assure that that was a bipartisan action, bi-cameral action. We have a Democratic Senator and the Ranking Republican on this Committee as the coauthors of that bill. We would like to see that kind of attitude reflected at least part of the time in the operations that we are doing today.

The action that you have taken is encouraging. I want to commend you both for the promise with which you have brought these bills up, and the comprehensive nature of the oversight plan, which of course is subject to modification, as the situation requires it. But we conformed to the rules by adopting this plan. I am happy to see us doing that.

We want to continue a program of close cooperation with the Chair. Let me say that we have a lot of new members on our side who are eager to make a contribution. Without wanting to insert

a sour note, we do have a feeling that on occasion, you may even be moving a little too fast on some of these things. The fact that we sometimes hear about a committee meeting being called from the witnesses who have already been called and we haven't heard about, indicates that our communication could be improved a little bit. We hope that we can work to achieve that. That concludes my brief remarks.

Chairman SENSENBRENNER. If the gentleman will yield, and it will be.

Mr. BROWN. Yes.

Chairman SENSENBRENNER. The Chair intends to recognize Mrs. Morella and Mr. Barcia for opening statements. Without objection, other members may place opening statements in the record at this point.

The gentlewoman from Maryland, Ms. Morella.

Mrs. MORELLA. Thank you, Mr. Chairman. I must say that I do think that this Committee has a reputation for working in a bipartisan manner. We do in our subcommittees and the full committee. I think the rest of Congress could do well to emulate it, and I appreciate what you say about communication.

As a result of technology transfer legislation advanced by this Committee, in almost two decades, the ability of the United States to compete globally has been strengthened, and a new paradigm for greater collaboration among the scientific enterprises that conduct our Nation's research and development, Government, industry, and universities, has been developed. By spinning off and commercializing technology developed in our Nation's over 700 federal laboratories, the results of our federal research and development enterprise is successfully being used today to improve our ability to compete internationally.

Given the importance and benefits of technology transfer, the Technology Transfer Subcommittee has continued to refine the technology transfer process in order to facilitate greater Government, university, and industry collaboration. Most recently, in 1996, we enhanced and simplified the process for cooperative research and development agreements with the enactment of the National Technology Transfer and Advancement Act. Many of you remember that.

Now with H.R. 209, the Technology Transfer Commercialization Act of 1999, we have attempted to remove the obstacles to effectively license federally-owned inventions which are created in Government-owned, Government-operated laboratories by adopting the successful Bayh-Dole Act as a framework.

Under the bill, agencies would be provided with two important new tools for effectively commercializing on-the-shelf federally-owned technologies, either licensing them as stand-alone inventions under the bill's revised authorities of section 209 of the Bayh-Dole Act, or by including them as part of a larger package under the CRADA, the Cooperative Research and Development Agreement. In doing so, this will make both mechanisms much more attractive to U.S. companies that are striving to form partnerships with federal laboratories.

In the past Congress, the Technology Subcommittee held two legislative hearings on this issue. Witnesses enthusiastically endorsed

the bill's intent to streamline technology licensing to make it more effective. We heard from the Administration, large corporations, small businesses, federal laboratories, technology transfer organizations, among others that these provisions will substantially improve the process to license federal technology for commercial applications and make it more attractive for industry to partner with Government.

Mr. Chairman, I am pleased that we have worked closely with the members of the minority and with the Administration, to reach consensus since the bill was originally introduced in the past Congress. Some of these consensus revisions are contained in the en bloc amendment that will soon be offered on behalf of myself and Mr. Barcia, the Ranking Minority Member of the Technology Subcommittee. This bipartisan en bloc amendment simply contains a new section of Congressional findings and a few other technical amendments.

I look forward to continue working with you, Mr. Chairman and members of the minority, as well as the Administration on having the Technology Transfer Commercialization Act signed into law in the coming months. I will make sure we are all invited to the White House for the signing. I yield back, Mr. Chairman.

Chairman SENSENBRENNER. Does that include me? [Laughter.]

The Chair notes the presence of a reporting quorum. The question is on reporting favorably the oversight plan upon which the previous question has already been ordered. All those in favor signify by saying aye.

Opposed, no.

The ayes have it, and the oversight plan is adopted.

The gentleman from Michigan.

Mr. BARCIA. Thank you very much, Mr. Chairman. I want to echo the comments of the distinguished Chairwoman of the Subcommittee on Technology with regard to the bipartisan effort on this issue. In the interests of time, Mr. Chairman, I have a statement on behalf of the Morella-Barcia amendments which I would like to submit for the record in the interests of time, and also due to the fact that I have a news conference or press conference at 10:30 in Longworth.

Chairman SENSENBRENNER. Without objection.

Mr. BARCIA. Thank you.

Chairman SENSENBRENNER. All further opening statements will be placed in the record by unanimous consent at this point.

[The information follows:]

I

106TH CONGRESS
1ST SESSION

H. R. 209

To improve the ability of Federal agencies to license federally owned inventions.

IN THE HOUSE OF REPRESENTATIVES

JANUARY 6, 1999

Mrs. MORELLA (for herself and Mr. BROWN of California) introduced the following bill; which was referred to the Committee on Science, and in addition to the Committee on the Judiciary, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

---

A BILL

To improve the ability of Federal agencies to license federally owned inventions.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Technology Transfer Commercialization Act of 1999".

SEC. 2. COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS.

Section 12(b)(1) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(b)(1)) is

amended by inserting "or, subject to section 209 of title 35, United States Code, may grant a license to an invention which is federally owned, for which a patent application was filed before the granting of the license, and directly within the scope of the work under the agreement," after "under the agreement,".

SEC. 3. LICENSING FEDERALLY OWNED INVENTIONS.

(a) AMENDMENT.—Section 209 of title 35, United States Code, is amended to read as follows:

"§ 209. Licensing federally owned inventions

"(a) AUTHORITY.—A Federal agency may grant an exclusive or partially exclusive license on a federally owned invention under section 207(a)(2) only if—

"(1) granting the license is a reasonable and necessary incentive to—

"(A) call forth the investment capital and expenditures needed to bring the invention to practical application; or

"(B) otherwise promote the invention's utilization by the public;

"(2) the Federal agency finds that the public will be served by the granting of the license, as indicated by the applicant's intentions, plans, and ability to bring the invention to practical application or otherwise promote the invention's utilization by the

public, and that the proposed scope of exclusivity is not greater than reasonably necessary to provide the incentive for bringing the invention to practical utilization, as proposed by the applicant, or otherwise to promote the invention's utilization by the public;

"(3) the applicant makes a commitment to achieve practical utilization of the invention within a reasonable time, which time may be extended by the agency upon the applicant's request and the applicant's demonstration that the refusal of such extension would be unreasonable;

"(4) granting the license will not tend to substantially lessen competition or create or maintain a violation of the Federal antitrust laws; and

"(5) in the case of an invention covered by a foreign patent application or patent, the interests of the Federal Government or United States industry in foreign commerce will be enhanced.

"(b) MANUFACTURE IN UNITED STATES.—A Federal agency shall normally grant a license under section 207(a)(2) to use or sell any federally owned invention in the United States only to a licensee who agrees that any products embodying the invention or produced through the use of the invention will be manufactured substantially in the United States.

"(c) SMALL BUSINESS.—First preference for the granting of any exclusive or partially exclusive licenses under section 207(a)(2) shall be given to small business firms having equal or greater likelihood as other applicants to bring the invention to practical application within a reasonable time.

"(d) TERMS AND CONDITIONS.—Any licenses granted under section 207(a)(2) shall contain such terms and conditions as the granting agency considers appropriate. Such terms and conditions shall include provisions—

"(1) retaining a nontransferrable, irrevocable, paid-up license for any Federal agency to practice the invention or have the invention practiced throughout the world by or on behalf of the Government of the United States;

"(2) requiring periodic reporting on utilization of the invention, and utilization efforts, by the licensee, but only to the extent necessary to enable the Federal agency to determine whether the terms of the license are being complied with; and

"(3) empowering the Federal agency to terminate the license in whole or in part if the agency determines that—

"(A) the licensee is not executing its commitment to achieve practical utilization of the

invention, including commitments contained in any plan submitted in support of its request for a license, and the licensee cannot otherwise demonstrate to the satisfaction of the Federal agency that it has taken, or can be expected to take within a reasonable time, effective steps to achieve practical utilization of the invention;

"(B) the licensee is in breach of an agreement described in subsection (b);

"(C) termination is necessary to meet requirements for public use specified by Federal regulations issued after the date of the license, and such requirements are not reasonably satisfied by the licensee; or

"(D) the licensee has been found by a court of competent jurisdiction to have violated the Federal antitrust laws in connection with its performance under the license agreement.

"(e) PUBLIC NOTICE.—No exclusive or partially exclusive license may be granted under section 207(a)(2) unless public notice of the intention to grant an exclusive or partially exclusive license on a federally owned invention has been provided in an appropriate manner at least 15 days before the license is granted, and the Federal agency has considered all comments received before the end of

the comment period in response to that public notice. This subsection shall not apply to the licensing of inventions made under a cooperative research and development agreement entered into under section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a).

"(f) PLAN.—No Federal agency shall grant any license under a patent or patent application on a federally owned invention unless the person requesting the license has supplied the agency with a plan for development and/or marketing of the invention, except that any such plan may be treated by the Federal agency as commercial and financial information obtained from a person and privileged and confidential and not subject to disclosure under section 552 of title 5 of the United States Code.".

(b) CONFORMING AMENDMENT.—The item relating to section 209 in the table of sections for chapter 18 of title 35, United States Code, is amended to read as follows:

"209. Licensing federally owned inventions.".

SEC. 4. TECHNICAL AMENDMENTS TO BAYH-DOLE ACT.

Chapter 18 of title 35, United States Code (popularly known as the "Bayh-Dole Act"), is amended—

(1) by amending section 202(e) to read as follows:

"(e) In any case when a Federal employee is a coinventor of any invention made with a nonprofit organization or small business firm, the Federal agency employing such coinventor may, for the purpose of consolidating rights in the invention and if it finds that it would expedite the development of the invention—

"(1) license or assign whatever rights it may acquire in the subject invention to the nonprofit organization or small business firm in accordance with the provisions of this chapter; or

"(2) acquire any rights in the subject invention from the nonprofit organization or small business firm, but only to the extent the party from whom the rights are acquired voluntarily enters into the transaction and no other transaction under this chapter is conditioned on such acquisition."; and

(2) in section 207(a)—

(A) by striking "patent applications, patents, or other forms of protection obtained" and inserting "inventions" in paragraph (2); and

(B) by inserting ", including acquiring rights for the Federal Government in any invention, but only to the extent the party from whom the rights are acquired voluntarily enters into the transaction, to facilitate the licensing

of a federally owned invention" after "or through contract" in paragraph (3).

SEC. 5. TECHNICAL AMENDMENTS TO THE STEVENSON-WYDLER TECHNOLOGY INNOVATION ACT OF 1980.

The Stevenson-Wydler Technology Innovation Act of 1980 is amended—

(1) in section 4(4) (15 U.S.C. 3703(4)), by striking "section 6 or section 8" and inserting "section 7 or 9";

(2) in section 4(6) (15 U.S.C. 3703(6)), by striking "section 6 or section 8" and inserting "section 7 or 9";

(3) in section 5(c)(11) (15 U.S.C. 3704(c)(11)), by striking "State of local governments" and inserting "State or local governments";

(4) in section 9 (15 U.S.C. 3707), by—

(A) striking "section 6(a)" and inserting "section 7(a)";

(B) striking "section 6(b)" and inserting "section 7(b)"; and

(C) striking "section 6(c)(3)" and inserting "section 7(c)(3)";

(5) in section 11(e)(1) (15 U.S.C. 3710(e)(1)), by striking "in cooperation with Federal Labora-

tories" and inserting "in cooperation with Federal laboratories";

(6) in section 11(i) (15 U.S.C. 3710(i)), by striking "a gift under the section" and inserting "a gift under this section";

(7) in section 14 (15 U.S.C. 3710c)—

(A) in subsection (a)(1)(A)(i), by inserting ", if the inventor's or coinventor's rights are assigned to the United States" after "inventor or coinventors";

(B) in subsection (a)(1)(B), by striking "succeeding fiscal year" and inserting "2 succeeding fiscal years"; and

(C) in subsection (b)(2), by striking "inventon" and inserting "invention"; and

(8) in section 22 (15 U.S.C. 3714), by striking "sections 11, 12, and 13" and inserting "sections 12, 13, and 14".

SEC. 6. REVIEW OF COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT PROCEDURES.

(a) REVIEW.—Within 90 days after the date of the enactment of this Act, each Federal agency with a federally funded laboratory that has in effect on that date of enactment one or more cooperative research and development agreements under section 12 of the Stevenson-

Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a) shall report to the Committee on National Security of the National Science and Technology Council and the Congress on the general policies and procedures used by that agency to gather and consider the views of other agencies on—

(1) joint work statements under section 12(c)(5) (C) or (D) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(c)(5)(C) or (D)); or

(2) in the case of laboratories described in section 12(d)(2)(A) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(d)(2)(A)), cooperative research and development agreements under such section 12,

with respect to major proposed cooperative research and development agreements that involve critical national security technology or may have a significant impact on domestic or international competitiveness.

(b) PROCEDURES.—Within one year after the date of the enactment of this Act, the Committee on National Security of the National Science and Technology Council, in conjunction with relevant Federal agencies and national laboratories, shall—

(1) determine the adequacy of existing procedures and methods for interagency coordination and awareness with respect to cooperative research and development agreements described in subsection (a); and

(2) establish and distribute to appropriate Federal agencies—

(A) specific criteria to indicate the necessity for gathering and considering the views of other agencies on joint work statements or cooperative research and development agreements as described in subsection (a); and

(B) additional procedures, if any, for carrying out such gathering and considering of agency views with respect to cooperative research and development agreements described in subsection (a).

Procedures established under this subsection shall be designed to the extent possible to use or modify existing procedures, to minimize burdens on Federal agencies, to encourage industrial partnerships with national laboratories, and to minimize delay in the approval or disapproval of joint work statements and cooperative research and development agreements.

(c) LIMITATION.—Nothing in this Act, nor any procedures established under this section shall provide to the Office of Science and Technology Policy, the National Science and Technology Council, or any Federal agency the authority to disapprove a cooperative research and development agreement or joint work statement, under section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a), of another Federal agency.

SEC. 7. INCREASED FLEXIBILITY FOR FEDERAL LABORATORY PARTNERSHIP INTERMEDIARIES.

Section 23 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3715) is amended—

(1) in subsection (a)(1) by inserting ", institutions of higher education as defined in section 1201(a) of the Higher Education Act of 1965 (20 U.S.C. 1141(a)), or educational institutions within the meaning of section 2194 of title 10, United States Code" after "small business firms"; and

(2) in subsection (c) by inserting ", institutions of higher education as defined in section 1201(a) of the Higher Education Act of 1965 (20 U.S.C. 1141(a)), or educational institutions within the

meaning of section 2194 of title 10, United States Code," after "small business firms".

○

H.R. 209, the Technology Transfer Commercialization Act of 1999

Section-by-Section Analysis

Purpose: To improve the ability of federal laboratories to license federally owned inventions.

Introduced: On January 6, 1999, by Congresswoman Constance A. Morella, Chair of the Technology Subcommittee, with Science Committee Ranking Democrat Member George E. Brown as an original cosponsor.

Jurisdiction: Referred to the Committee on Science, and in addition to the Committee on the Judiciary, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned.

Background: The base text of H.R. 209 is similar to H.R. 2544, which passed the House in the 105th Congress. The Administration supported the enactment of H.R. 2544.

SECTION 1. SHORT TITLE.

The Act shall be called the "Technology Transfer Commercialization Act of 1999."

SECTION. 2. COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS.

Section 2 amends Section 12(b)(1) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(b)(1)) by inserting "or, subject to section 209 of title 35, United States Code, may grant a license to an invention which is federally owned, made before the granting of the license, and directly related to the scope of the work under the agreement." The language permits federal laboratories to bring already existing patented inventions into a cooperative research and development agreement (CRADA).

SECTION 3. LICENSING FEDERALLY OWNED INVENTIONS.

Section 3 amends Section 209, title 35 of the United States Code.

Subsection 3(a) provides the authority for licensing federally owned inventions. It provides that a federal agency may grant an exclusive or partially exclusive license on a federally owned invention if granting the license is a reasonable and necessary incentive to produce the investment capital and expenditures needed to commercialize the invention.

The federal agency must find that the public will be served by granting the license, as indicated by the applicant's intentions, plans, and ability to bring the invention to commercialize the invention, and that the proposed scope of exclusivity is not greater than reasonably necessary. The applicant must also make a commitment to achieve practical utilization of the invention within a reasonable time frame.

The granting of the license must not substantially lessen competition or create or maintain a monopoly, and in the case of an invention covered by a foreign patent application or patent, the interests of United States industry in foreign commerce must be enhanced.

Subsection 3(b) provides that licenses should be granted only to a licensee who agrees that all products derived from the license will be manufactured substantially in the United States.

Subsection 3(c) provides that small businesses should receive first preference for the granting of licenses.

Subsection 3(d) provides certain terms and conditions required for licenses.

Licenses should contain terms and conditions which include: retaining a license for the federal agency to practice the invention or have the invention practiced throughout the world by the United States government; requiring periodic reporting on the utilization of the invention, but only to the extent necessary to enable the federal agency to determine whether the terms of the license are being complied with; and providing "march-in rights" that empower a federal agency to terminate the license in whole or in part if the licensee is not adequately executing its commitment to utilize the invention within a reasonable time or if licensee is in breach of the agreement, or if termination is necessary to meet the requirements for public use specified by federal regulations.

Subsection 3(e) provides that no license may be granted unless public notice of the availability of a federally owned invention for licensing in an appropriate manner has been provided at least 30 days before the license is granted, and the federal agency has considered all comments received in response to that public notice. This subsection, however, does not apply to the licensing of inventions made under a CRADA entered into under section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a).

Subsection 3(f) provides that a federal agency may grant a license on a federally owned invention only if the person requesting the license has supplied to the agency a basic business plan with commercialization milestones. Such a plan shall be treated by the federal agency as commercial and financial information obtained from a person and not subject to disclosure under the Freedom Of Information Act (FOIA).

SECTION 4. TECHNICAL AMENDMENTS TO BAYH-DOLE ACT.

Section 4 amends the Bayh-Dole Act (Title 35 of the U.S. Code, Chapter 18) providing for cases when a federal employee is a co-inventor, the federal agency employing the co-inventor, for the purpose of consolidating rights in the invention, may transfer, assign, or acquire the rights to the invention. Clarifies that the bundling of inventions can be done if a Federal agency finds that it would expedite the development of an invention and provides for other technical clarifications.

SECTION 5. TECHNICAL AMENDMENTS TO THE STEVENSON-WYDLER TECHNOLOGY INNOVATION ACT OF 1980.

Section 5 amends the Stevenson-Wydler Technology Innovation Act clarifying that the rights of an inventor and co-inventors must be assigned in order for them to share royalties, and that a federal agency may retain royalty income for two succeeding fiscal years after the granting of the license. Adds and corrects certain cross-references to the Stevenson-Wydler Act.

SECTION 6. REVIEW OF COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT PROCEDURES.

Provides that the Office of Science and Technology Policy's Committee on National Security of the National Science and Technology Council, and the Congress, shall conduct a review on the general policies and procedures for the creation of Cooperative Research and Development Agreements (CRADA). Provides that nothing in the Act gives authority to disapprove a CRADA.

SECTION 7. INCREASED FLEXIBILITY FOR FEDERAL LABORATORY PARTNERSHIP INTERMEDIARIES.

Clarifies that institutions of higher education may partner with Federal laboratories for educational or scientific purposes.

Chairman SENSENBRENNER. I ask that the members proceed with the amendments in the order on the roster.

The first amendment that I note on the roster is an en bloc amendment by Mrs. Morella and Mr. Barcia. The Chair recognizes the gentlewoman from Maryland.

Mrs. MORELLA. I have the en bloc amendment at the desk.

Chairman SENSENBRENNER. The clerk will report the amendment.

The CLERK. "En bloc amendment to H.R. 209 offered by Mrs. MORELLA and Mr. BARCIA."——

Mrs. MORELLA. Mr. Chairman, I ask that the amendment be accepted as read.

Chairman SENSENBRENNER. Accepted or considered?

Mrs. MORELLA. Considered. Considered as read.

Chairman SENSENBRENNER. Without objection, the amendment is considered as read and open for amendment at any point.

[The information follows:]

COMMITTEE ON SCIENCE

FULL COMMITTEE MARKUP

MARCH 25, 1999

AMENDMENT ROSTER

H.R. 209, Technology Transfer Commercialization Act of 1999

No.	Sponsor	Description	Results
1.	Mrs. Morella and Mr. Barcia	En bloc amendment	

EN BLOC AMENDMENTS TO H.R. 209
OFFERED BY MRS. MORELLA AND MR. BARCIA

Page 1, after line 5, insert the following new section:

SEC. 2. FINDINGS.

The Congress finds that—

(1) the importance of linking our unparalleled network of over 700 Federal laboratories and our Nation's universities with United States industry continues to hold great promise for our future economic prosperity;

(2) the enactment of the Bayh-Dole Act in 1980 was a landmark change in United States technology policy, and its success provides a framework for removing bureaucratic barriers and for simplifying the granting of licenses for inventions that are now in the Federal Government's patent portfolio;

(3) Congress has demonstrated a commitment over the past 2 decades to fostering technology transfer from our Federal laboratories and to promoting public/private sector partnerships to enhance our international competitiveness;

(4) Federal technology transfer activities have strengthened the ability of United States industry to compete in the global marketplace; developed a new paradigm for greater collaboration among the scientific enterprises that conduct our Nation's research and development—government, industry, and universities; and improved the quality of life for the American people, from medicine to materials;

(5) the technology transfer process must be made "industry friendly" for companies to be willing to invest the significant time and resources needed to develop new products, processes, and jobs using federally funded inventions; and

(6) Federal technology licensing procedures should balance the public policy needs of adequately protecting the rights of the public, encouraging companies to develop existing government inventions, and making the entire system of developing government technologies more consistent and simple.

Redesignate subsequent sections accordingly.

Page 2, line 4, strike "granting of the license" and insert "signing of the agreement".

Page 4, lines 9 and 10, strike ". Such terms and conditions" and insert ", and".

Page 4, line 20, insert ", except that any such report shall be treated by the Federal agency as commercial and financial information obtained from a person and privileged and confidential and not subject to disclosure under section 552 of title 5 of the United States Code" after "being complied with".

Page 6, line 10, strike "and/".

Page 6, line 12, strike "may" and insert "shall".

Page 7, line 3, strike "or small business firm" and insert ", a small business firm, or a non-Federal inventor".

Page 7, line 5, strike "and" and insert "or".

Page 7, line 9, strike "or small business firm" and insert ", small business firm, or non-Federal inventor".

Page 7, lines 12 and 13, strike "or small business firm" and insert ", small business firm, or non-Federal inventor".

Page 7, line 22, insert "and administering royalties to" after "acquiring rights for".

Page 9, lines 7, 11, and 14, redesignate subparagraphs (A), (B), and (C) as subparagraphs (B), (C), and (E), respectively.

Page 9, after line 6, insert the following new subparagraph:

(A) in subsection (a)(1)(A)(i), by inserting ", other than payments of patent costs as delineated by a license or assignment agreement," after "or other payments";

Page 9, line 13, strike "and".

Page 9, after line 13, insert the following new subparagraph:

(D) in subsection (a)(2), by striking "Government-operated".

Chairman SENSENBRENNER. The Chair recognizes the gentlewoman from Maryland for five minutes.

Mrs. MORELLA. Well, actually, the en bloc amendment is really pretty technical. It revises the granting of a license for which a patent application to an invention was filed before the signing of the agreement in CRADA. It has a few other little amendments. It exempts the reports required to be submitted by the licensee of an invention. The information in that report shall be considered commercial and financial.

So I would submit, unless there are any questions, that it really is a technical en bloc amendment.

Chairman SENSENBRENNER. Does the gentlewoman yield back the balance of her time?

Mrs. MORELLA. I yield back, Mr. Chairman.

Chairman SENSENBRENNER. Further discussion on the amendment?

Mr. ROHRABACHER. Mr. Chairman?

Chairman SENSENBRENNER. Who is seeking——

Mr. ROHRABACHER. Mr. Chairman, right here.

Chairman SENSENBRENNER. The gentleman from California.

Mr. ROHRABACHER. This is just a general question.

Chairman SENSENBRENNER. The gentleman is recognized for five minutes.

Mr. ROHRABACHER. A general question to Mrs. Morella. This hasn't of course gone through my subcommittee, so I am not fully aware of the details and I have not studied this. So I would like to just ask whether or not—of course of the purpose of this is to ensure that technology developed by our national labs receives a chance for commercialization and gets out into the private sector. Is there adequate controls to ensure that it is the American companies that are the ones who are getting a hold of this technology and commercializing?

Mrs. MORELLA. Yes, Mr. Rohrabacher, it is. It is one that deals with CRADA, the Cooperative Research and Development Act.

Now let me indicate that the base text of this bill is very similar to the one that not only passed the Subcommittee, the full Committee, passed the Floor in the last Congress. In fact, it passed the House twice. The en bloc amendment that we have added today simply includes a new section of Congressional findings and a few technical revisions made at the suggestion of the Senate Judiciary Committee. So we hope we will get it through. But indeed, yes, it is not international. It doesn't involve the technology transfer problem that we have had that the Caucus committee et al has looked into.

Mr. ROHRABACHER. But you are satisfied that as the law would be in place after the passage of this legislation that you are proposing today, that the products of our national lab are going to be commercialized by American companies and not by foreign companies?

Mrs. MORELLA. Yes, indeed. Yes, indeed. It was intended to be that way, and it will. Thank you. Thank you for asking the question.

Mr. ROHRABACHER. Thank you very much. Thank you, Mr. Chairman.

Chairman SENSENBRENNER. The gentleman yields back the balance of his time.

Is there further discussion on the technical en bloc amendment?

[No response.]

Hearing none, all those in favor will say aye.

Opposed, no.

The ayes appear to have it. The ayes have it, and the amendment is agreed to.

Are there further amendments to the bill? The gentlewoman from Illinois.

Mrs. BIGGERT. Thank you, Mr. Chairman. I would just like to submit language for the report, and ask your permission to address the Committee briefly with regard to the issue of CRADA.

Chairman SENSENBRENNER. The clerk will report the proposed report language and distribute it to members.

The CLERK. "Committee report addition. Section 6. Review of Cooperative Research and Development Agreement procedures. This legislation is intended to improve the ability of federal agencies to license federally-owned inventions, including those made under cooperative Research and Development Agreements. In doing so, it requires federal agencies to give preference for the granting of any exclusive or partially exclusive licenses to small business firms. Section 3(c). It is the intent of the Science Committee that any inter-agency review of Cooperative Research and Development Agreements"——

Chairman SENSENBRENNER. Since all of the members have got copies of the proposed report language, I ask unanimous consent it be considered as read.

[The information follows:]

59

Report Lanaguage Offered by Ms. Biggert

SECTION 6: REVIEW OF COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT PROCEDURES

This legislation is intended to improve the ability of federal agencies to license federally owned inventions, including those made under cooperative research and development agreements. In doing so, it requires federal agencies to give preference for the granting of any exclusive or partially exclusive licenses to small business firms (section 3 (c)). It is the intent of the Science Committee that any interagency review of cooperative research and development agreements, as outlined in section 6 of this legislation, should apply only to major cooperative research and development agreements, and not to minor cooperative research and development agreements such as those involving small business partners. The Science Committee believes that the added time, cost, and complexity associated with such interagency reviews of cooperative research and development agreements could be overly burdensome for small business or deter them from entering such agreements.

Chairman SENSENBRENNER. The gentlewoman from Illinois is recognized for five minutes.

Mrs. BIGGERT. Thank you very much, Mr. Chairman. The Technology Transfer Commercialization Act improves the ability of federal agencies to license federally-owned inventions, including those made under Cooperative Research and Development Agreements. In doing so, the bill requires federal agencies to give preference for the granting of any exclusive or partially exclusive licenses to U.S. small business firms. It is my understanding, based on our work on this issue, that the Science Committee intends that inter-agency reviews of CRADA should apply only to major Cooperative Research and Development Agreements, and not to minor cooperative agreements.

I would like to ask Mrs. Morella if this is her understanding.

Mrs. MORELLA. Yes, indeed. It is my understanding, Ms. Biggert.

Mrs. BIGGERT. Then I would like permission to work with the Committee and your Subcommittee to ensure that the report language included with the bill further clarifies this issue. That is the report that I have submitted, particularly the intent of the Committee that time, cost, and complexity of such inter-agency reviews are not intended to add to the burdens of our Nation's small employers and businesses.

Do you have any comment on that?

Mrs. MORELLA. Mr. Chairman, I do share the concern that has been expressed by the gentleman from Illinois, that the inter-agency reviews provided for in this act should certainly not deter businesses, large or small, from entering into these CRADAs. So I am very happy to work with the gentlewoman to insert language such as the language that she distributed to us today, and to make sure that the whole Committee's intent is fully articulated.

Mr. BROWN. Will the gentlelady yield?

Mrs. MORELLA. Yes, indeed.

Mr. BROWN. We think that we are in agreement with the suggested modifications which you have been discussing, and concur with the idea that a brief discussion between the two sides would resolve any remaining difficulties, if there are any, and I'm not sure there are any. But I just wanted to make sure that we do get a chance to look at the final product.

Mrs. BIGGERT. I think that is why I have requested that, you know, have permission to work with the Committee and this Subcommittee on the report language.

Mrs. MORELLA. And I agree too, Mr. Brown, that we can do that pretty quickly, and indeed, we always share. I yield back.

Chairman SENSENBRENNER. Does the gentlewoman yield back the balance of her time?

Mrs. BIGGERT. Yes.

Chairman SENSENBRENNER. Are there further amendments or report language suggestions?

[No response.]

Hearing none, the question is on the bill. Those in favor will signify by saying aye.

Opposed, no.

The ayes appear to have it. The ayes have it. The motion is agreed to.

The Chair now recognizes the gentleman from Michigan, Mr. Barcia, to make a motion to report the bill.

Mr. BARCIA. Yes. Mr. Chairman, I move that the Committee report the bill H.R. 209 as amended. Furthermore, I move to instruct the staff to prepare the legislative report to make technical and conforming amendments, and that the Chairman take all necessary steps to bring the bill before the House for its consideration.

Chairman SENSENBRENNER. The question is on the motion made by the gentleman from Michigan. Is there any discussion?

[No response.]

The Chair notes the presence of a reporting quorum. All those in favor will signify by saying aye.

Opposed, no.

The ayes appear to have it. The ayes have it, and the bill is reported. All members will have two subsequent calendar days in which to submit supplemental, minority or additional views on the measure. Without objection, pursuant to clause 1 of rule 22 of the rules of the House of Representatives, the Committee authorizes the Chairman to offer such motions as may be necessary in the House to go to conference with the Senate on the bill H.R. 209. Without objection, it is so ordered.

○