

Technology Transfer Mechanisms at DOE Facilities

Agreement	Use	Funding	Subject Inventions	Generated Data	U.S. Competitiveness	Cost	Highlights
Cooperative Research and Development Agreement (CRADA)	Collaborative research between DOE Labs and public and/or private entities for the mutual benefit of the parties	Private and/or Federal funds	Lab and Participant may elect their own inventions and Participant has right to negotiate exclusive license to Lab inventions	Protected for up to 5 years	Products embodying IP resulting from CRADA shall be manufactured substantially in the U.S.	Lab and Participant may share costs or Participant pays 100% funds-in	<ul style="list-style-type: none"> ✓ Collaborative research ✓ 5 year data protection ✓ Designed for multi-party collaborative research
Work for Others (WFO)	Work for businesses and other non-federal entities using highly specialized or unique DOE facilities, services or technical expertise	Private funds	Sponsor may elect title to Subject Inventions ¹	Protected as Sponsor's proprietary data w/limited exceptions ^{1,2,3}	U.S. Preference: Sponsor agrees not to grant any party exclusive right to use or sell products embodying Subject Inventions in the U.S. unless products are manufactured substantially in the U.S.	Sponsor pays full cost recovery	<ul style="list-style-type: none"> ✓ Sponsor typically retains right to elect title to subject inventions ✓ Generated data treated as proprietary ✓ Option for limited Gov. R&D license³
		Federal funds (e.g. grantee)	Lab may elect title to Subject Inventions of the Lab	Unlimited Gov. rights	U.S. Preference (see above)	Sponsor pays full cost recovery	<ul style="list-style-type: none"> ✓ Access to unique facilities and expertise using federal funds
Agreements for Commercializing Technology (ACT)	Work for businesses and other non-federal entities using highly specialized or unique DOE facilities, services or technical expertise	Private funds	Initial title to the designated IP Lead. (ACT Participant or Lab Contractor)	Protected as proprietary data w/limited exceptions ^{1,2,3}	U.S. Preference (see above)	Participant pays full cost recovery <u>plus</u> additional negotiated compensation to the Contractor	<ul style="list-style-type: none"> ✓ Flexible terms for IP, indemnity, adv. payment ✓ Optional performance guarantee ✓ Negotiable IP terms ✓ Option for limited Gov. R&D license³
Proprietary User Agreement	User may access designated facilities to conduct its own proprietary research	Private funds	User may elect title to its Subject Inventions	User may protect as proprietary	n/a	User pays approved user rate	<ul style="list-style-type: none"> ✓ Generated data treated as proprietary ✓ Merit based access to unique facilities
Non-Proprietary User Agreement	Non-proprietary research at designated facilities	n/a	Lab and User may elect their own Subject Inventions	Unlimited Gov. Rights	U.S. Preference (see above)	Each party covers own cost	<ul style="list-style-type: none"> ✓ Merit based access to unique facilities

¹ Certain exceptions or restrictions may apply (e.g. foreign WFO Sponsors may be granted the right to elect title to inventions and receive proprietary data protection but only after the approval of DOE field patent counsel and concurrence from the cognizant DOE program office).² Proprietary data protection may not be available at all facilities. ³ If the limited Gov. R&D license is utilized, data protection will be limited to 5 years.

DOE Technology Transfer Mechanisms (continued)



Non-Federal Work for Others (WFO): Non-Federal WFO Agreements permit DOE laboratories and facilities to conduct work for businesses and other non-federal entities on a reimbursable basis. A privately funded WFO Agreement typically allows the non-Federal Sponsor to own any inventions made by the Laboratory under the WFO Agreement (i.e. Subject Inventions) and to mark as proprietary and obtain ownership of data that is generated under the WFO Agreement, subject to certain terms and conditions. Although the Government typically will retain a royalty-free license in Subject Inventions for use by or on behalf of the Government (i.e. Government Use License), a more limited Government research license may be applied to WFO Subject Inventions with DOE Patent Counsel approval. The Government Research License permits the Government to use and enable others to use the WFO Subject Inventions for research purposes only. If a limited research license is applied, then the Government retains expanded rights in data. WFO Agreements require the non-Federal Sponsor to: (1) maintain at least sixty (60) days of advance funding for activities the Laboratory conducts under the WFO Agreement; and (2) in certain circumstances, indemnify the Government and the Laboratory for certain specified risks, intellectual property infringement, and products liability. The Laboratory recovers its costs of performing activities under a WFO Agreement from a non-Federal Sponsor and is prohibited from charging any fee in excess of the Laboratory's costs. WFO Agreements are "best efforts" contracts and the Sponsor receives no warranties for work performed under a WFO Agreement.

Agreements for Commercializing Technology (ACT): ACT is a pilot program under which DOE laboratories may conduct research and development for businesses and other non-federal entities. ACT agreements have terms and conditions that are negotiated between the Participant and the Contractor operating the Laboratory. In contrast to WFO and CRADAs, the Contractor negotiates the ACT agreement acting in a non-M&O capacity, and thus may share in certain risks (e.g. indemnity) that a Federal Laboratory cannot. Unlike WFO and CRADAs, the parties to an ACT agreement may choose an IP Lead (which may or may not be the Participant), and ownership of inventions made under an ACT transaction (i.e. Subject Inventions) is waived to the IP Lead. Like WFO Agreements, although the full Government use license will apply to most ACT Subject Inventions, a limited Government research license may be applied to an ACT inventions with the approval of DOE Patent Counsel. The Government Research License permits the Government to use and enable others to use the ACT inventions for Government research purposes only. ACT agreements allow the Participants to mark generated data as proprietary and obtain ownership of the data, subject to certain terms and conditions. If a limited research license is applied, the Government retains expanded rights in data. Terms requiring advance funding and indemnification are negotiable. Work may begin after the DOE reviews and approves an ACT proposal package. Unlike WFO or CRADAs, the Contractor may charge the Participant compensation in excess of its actual costs for ACT activities, and indemnity provisions are negotiable between the parties. Other terms and conditions also apply to ACT agreements depending on the business circumstances of a given transaction including the availability of performance measures or guarantees when appropriate and as mutually agreed.

Cooperative Research and Development Agreement (CRADA): A CRADA is a legal agreement between government laboratories and non-federal parties in which both participants agree to collaborate, by providing personnel, services, facilities, or equipment and pool the results from a particular research and development program. The non-federal parties must provide funds or in-kind contributions (no direct funding is provided by the laboratory). A CRADA allows the Participant to own the Subject Inventions it conceives or first reduces to practice under the CRADA. Data produced under the CRADA may also be protected from public disclosure for up to five (5) years. The Participant also receives an option for a limited period of time to negotiate a field of use limited exclusive license agreement to the Subject Inventions that the Laboratory conceives or first reduces to practice under the CRADA. As with WFO Agreements, certain terms and conditions such as the Government license apply to all CRADA Subject Inventions and data generated under the CRADA. Unless the CRADA is a "100% funds-in" CRADA, the Participant provides actual or in-kind funding for its contributions to the CRADA activities and the Laboratory obtains funding from a DOE programmatic source. The Laboratory does not charge a fee to the Participant for the Laboratory's CRADA activities. CRADA work begins after the Laboratory receives its funding, the CRADA is executed by the Laboratory and the Participant, and the DOE Contracting Officer approves the CRADA. The CRADA Participant indemnifies the Government and the Laboratory for product liability and the Government and the Laboratory disclaim all warranties to work performed under a CRADA.

User Facility Agreements (UFAs): UFAs allow access to unique facilities and equipment so that users may conduct their own proprietary or non-proprietary research. Proprietary users pay full cost recovery, own their generated data and inventions, subject to no reserved Government rights. Non-Proprietary users engage in pre-competitive research, share the costs of their research with the Government, own their inventions (subject to certain reserved Government rights), and are expected to publish data generated from the research.