Sandia National Laboratories

Industrial Partnering and Intellectual Property Principles

Presented below are principles by which Sandia National Laboratories conducts its partnering activities with private industry.

1. Sandia's foremost partnership goal is to enter into Research & Development (R&D) relationships with industry partners (start up companies to large, well established industrial businesses) that contribute to the Labs' mission of developing science and engineering solutions and applying those solutions to national security problems.
    - For national defense and national security applications, Sandia requires industrial sources of subsystems and components for incorporation into its systems
    - For homeland security applications, products comprising Sandia's technologies must be commercialized by private companies that will supply the federal government, state and local governments and others who need to detect and respond to emergency situations..
2. Another very important goal is to have Sandia's technology commercialized and used by U.S. companies for the benefit of the domestic economy.
3. Sandia's partnerships with industry most often involve the private company funding R&D at the Labs, since technology commercialization often requires active involvement of Sandia's inventors and technology experts to further develop a technology to meet a company's market applications.
4. Sandia and an industry partner may work together to jointly secure Federal funding for technical projects that would fund R&D activities at Sandia and at the partner's facilities. In most cases the partner will take the lead role in securing such funding.
5. Partnership projects must advance the technology and business interests of both the Labs and the industry partner. These interests should be shared, in writing, so that both parties have a common understanding of expectations.
6. Sandia uses several agreement mechanisms for industry partnerships: Cooperative Research and Development Agreement (CRADA), Work-for-Others/Non-Federal Entity agreement (WFO/NFE), and license agreements. The selection of mechanisms depends on the nature of the technical project and the business interests of the parties:
    - CRADAs are used when the nature of the technical project is collaborative — that is, jointly defining the scope of work (performance, cost, and schedule) and demonstrating that the partner will undertake a complementary R&D program. DOE requires that

collaborative projects include in-kind resources of the industry partner be committed to the project.

- WFO/NFE agreements are used when the character of the project is not collaborative, but rather considered "work-for-hire" in nature. This might include use of certain Sandia facilities.
- License agreements are used to convey rights to Sandia inventions, copyrights, and trademarks.

7. Sandia inventions are either *Subject Inventions* arising from a CRADA or WFO/NFE or Background Intellectual Property that was created prior to or outside the scope and term of a technical partnership project. Sandia's practice is to license both types of intellectual property, using the following guidelines:

Subject Inventions	Background Intellectual Property
Rights to Subject Inventions arising from technical work under a CRADA are governed by the Morella legislation, whereby the CRADA partner has the right to obtain rights in CRADA *Subject Inventions*, up to and including exclusive rights in a pre-negotiated field-of-use for reasonable consideration to Sandia. It is Sandia's business practice to negotiate the field-of-use based upon the scope of the CRADA Statement-of-Work and the general business interests of the partner. Sandia is committed to providing the partner with intellectual property rights necessary to commercialize the technology they helped to develop. However, it is important to understand that in many technology areas the DOE has invested millions of dollars prior to a partner's contribution, consequently Sandia will seek to negotiate a relatively narrow field-of-use. It is Sandia's business practice to ascertain reasonable consideration for rights in *Subject Inventions* partially based on the magnitude of the funds-in to Sandia and estimated value of the intellectual property in the marketplace. For instance, if a CRADA partner provides significant funding to Sandia, Sandia will consider waving up-front license fees and reducing (or eliminating) annual minimum	**Rights to Background Intellectual Property** are treated differently from *Subject Inventions*. Sandia's general practice is to license background intellectual property nonexclusively to industry partners, subject to prior encumbrances, and only to the extent that the background intellectual property is needed to practice the art of the *Subject Inventions*. This enables Sandia to partner with many companies. In certain business situations, the partner may request exclusive field-of-use rights to background intellectual property. Sandia considers these requests on an individual basis. We must be convinced that the private company has a compelling commercialization strategy for the technology. In these situations, Sandia will work with the partner to align the background intellectual property field-of-use with the negotiated S*ubject Invention* field-of-use — subject to prior encumbrances, of course. License consideration for background intellectual property rights is

Subject Inventions	Background Intellectual Property
royalty payments consistent with motivating the licensee to produce and sell commercial products. However, Sandia will negotiate a running royalty. We believe that the Labs should share in the commercial success of Sandia inventions. Also, royalty income to Sandia is valuable, in that it is used to fund technology maturation at the Labs and reward inventors and contributors. Consequently, Sandia, as a business practice, does not grant paid-up, royalty-free licenses. **Rights to Subject Inventions arising from WFO/NFE agreements** are governed by DOE policy. DOE's current policy provides that the funding partner of a WFO/NFE has the option to obtain title to inventions arising from the technical work conducted by Sandia under a WFO/NFE agreement, subject to several exceptions. These exceptions include foreign ownership, government funding, and others. The partner may waive their right to title, in favor of Sandia incurring the cost of formulating the patent application, paying filing fees, and prosecuting the patent with the U.S. Patent and Trademark Office, in exchange for licensed rights. Sandia may also decline to accept the technical work under a WFO/NFE if the Labs believe that invention ownership on the part of the WFO/NFE funding partner could impair the Labs' ability to meet its mission.	negotiated separately from any rights to *Subject Inventions*. Typical nonexclusive license consideration for background intellectual property will include an up-front fee and a running royalty. Exclusive field-of-use license consideration for background intellectual property rights will also include annual minimum royalties. Rights to background intellectual property are often negotiated with an industry partner in the absence of a CRADA or WFO/NFE relationship. In these situations the guidance provided in the preceding paragraph applies. Sandia has received guidance through several external advisory boards that the Labs' technology has commercial value, and thus companies that license technology from Sandia should expect to compensate the Labs for its use. Further, when commercialization of the technology is successful in the marketplace, Sandia and the taxpayer expect to share in that success through royalties.

8. Performance milestones are an important part of Sandia's license agreements. Sandia's licenses often include milestones for prototype development, commercial product introduction and annual commercial sales. Substantive and mutually agreed upon milestones keep the licensee focused on commercialization of the technology. Sandia expects the licensee to make the investments necessary to bring the technology to market, and to be assured that the technology does not languish.
9. License income — up-front fees, annual minimum royalty payments, and running royalties — enable Sandia to grow and maintain a strong intellectual property portfolio, which enhances the Labs' ability to enter into future industrial partnerships. License income is used to fund technology maturation at the Labs and reward inventors and contributors. Congress

intended this by allowing royalties to be retained by Sandia, instead of going to the U.S. Treasury.

10. All Sandia intellectual property is “born” with Government use rights that allow the U.S. Federal Government and its contractors access to Sandia intellectual property for Government use. Government contractors must request and obtain access to Sandia intellectual property for commercial use.
11. When Sandia grants licenses to start-up companies, equity is often part of the “bundle” of license considerations, along with up-front fees, royalties, and annual minimum royalty payments.

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