

Licensing Commercial Rights to Start-up Companies

Philosophy

As part of its Technology Transfer effort, Sandia National Laboratories licenses commercial rights in intellectual property to private companies. The goal of such commercial licensing is two-fold: (1) to enhance access to commercially proven technologies for the benefit of the Laboratories' DOE programs and (2) to encourage the adoption of Sandia technology for the benefit of the U.S. economy. Some of the intellectual property licensed has the potential to transform industries. These "disruptive" technologies are typically immature, and their commercial applications are often speculative. They are also most likely to be developed by start-up companies. The challenge, then, is to structure license deals that encourage the emergence of new companies while contributing to Sandia's mission success and providing the Laboratories with a fair return on the potential commercial value of the technology.

To this end, Sandia has adopted a business practice of combining commercialization milestones with the structuring of license consideration as a "bundle," including up-front fees, royalties, and equity (when appropriate). This practice offers a balanced approach that encourages the commercialization of laboratory technology, forms a common basis by which Sandia and the company jointly manage the risk of commercialization, and provides modest near-term license income with which to reward inventors and defray intellectual property expenses. The business practice is flexible. Depending on the perceived risk of commercialization, Sandia considers a range of license alternatives when negotiating with resource-constrained start-up companies, including the freedom to trade-off the various elements within a "bundle" of financial consideration. Start-up companies can also reduce the burden of up-front fees by agreeing to early commercialization milestones, including early product introduction.

The Morella amendment to the National Competitiveness Technology Transfer Act of 1989 clearly establishes the philosophy of "reasonable [financial] consideration" for rights to Sandia intellectual property. A "fair" return on the commercial value of the technology is arrived at through license negotiations, which are guided by the principles of comparable value in the marketplace, program benefits, and an assessment of risk (e.g., the risk the technology will sit on the shelf and lose value over time). While the government has paid for most of the inventions arising from the R&D at the Laboratories, Sandia has the responsibility to manage those assets for the benefit of the DOE, the Federal government, and the domestic economy, just as the U.S. Forest Service does with the timber and mineral assets on public lands.

The Philosophy above and much of the discussion that follows applies to large businesses as well.

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License Consideration

<u>Up-front cash payments</u> enable Sandia to realize immediate financial benefits from its licensing program while establishing a threshold that separates serious clients from those uncommitted to finalizing a deal. Financial benefits accrue to the Laboratories from distributions to inventors, authors, and Sandia's technical organizations for future R&D and technology maturation. Early financial rewards to the technical organizations, inventors, authors, and other contributors also are strongly linked to their continued support for our intellectual property management efforts. From the licensee's perspective, up-front cash payments encourage businesses to be selective about the technologies and fields-of-use they wish to license. When licensing to a start-up company, Sandia ties up its intellectual property for a relatively long period of time before the prospects of commercialization success are understood. During such time, the value of the intellectual property could erode because of competing technologies and market forces. In some cases, as with cash-strapped start-up companies, Sandia is willing to trade some of the up-front cash payments for equity. The trade-off decision is based, in part, on the strength of the business plan, the program benefits, and the perceived risk of the venture.

<u>Royalties</u> on commercial sales are another means of joining the interests of the Laboratories and the licensee by sharing risks and allowing Sandia to participate in the upside potential of successful commercialization. Despite a perception by some licensees that royalties are a cost that operates in opposition to an equity position, Sandia's philosophy is that royalties are a cost of sales since the company's obligation to pay arises only when commercial sales occur. Sandia maintains a fundamental belief that the Laboratories and the licensee should share in the commercial success of products that incorporate Sandia intellectual property.

Equity represents a long-term investment by the Laboratories in the licensee's company. When converted through a liquidation event, equity enables Sandia to generate funds for R&D and technology maturation. Equity sharing within the Laboratories also assists in retaining and attracting staff with critical skills, inspires all Sandians to support partnership and commercialization activities to accomplish their mission objectives, and contributes to an enhanced perception of the Laboratories as an exceptional place to work. To date, Sandia has taken equity in several start-up companies. When licensing technologies to start-up companies, Sandia often will trade some of the up-front cash payments and royalties for an equity interest. However, the prevailing practice at the Laboratories is to resist taking all of the license consideration in the form of equity because of the need to manage the risk. First, Sandia typically takes nonvoting founders' common stock and consequently has no say in the management of the company. Also, in an equity-only license there is a possibility that bottom-line profitability across all of the company's products will not reflect the true market success of the Laboratories' licensed technology. Further, equity in a start-up company may be illiquid for many years. Sandia's strategy of "bundling" license consideration allows it to mitigate some of these risks.

<u>Other license considerations</u> might include equipment donated or made available to Sandia and access to R&D rights to licensee technology.

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Commercialization Milestones

Sandia incorporates commercialization milestones into each license to motivate the licensee to perform in accordance with the provisions of its commercialization plan. Milestones, which may include prototype development, commercial product introduction, and sales targets, are usually adopted from the company's business plan. Minimum annual royalty payments challenge the licensee to commercialize the technology in a timely fashion and avoid overextension in terms of licensed technologies and use rights.

Conclusion

License agreements with start-up companies offer Sandia the opportunity to mature its disruptive technologies and develop reliable suppliers of commercially proven technologies to satisfy its mission requirements. Commercial licenses also generate short-term and long-term revenues that can be used to reward Sandians' intellectual creativity, support discretionary R&D, and attract and retain high quality talent. Sandia has developed a flexible, yet systematic, licensing approach that enables its licensees to succeed, satisfies various business conditions critical to both parties, and meets the Laboratories mission obligations to the DOE and NNSA.



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