



Intellectual Property (IP) At Sandia

Strategically Managing and Deploying Sandia's Research for Public Good



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*Exceptional
service
in the
national
interest*



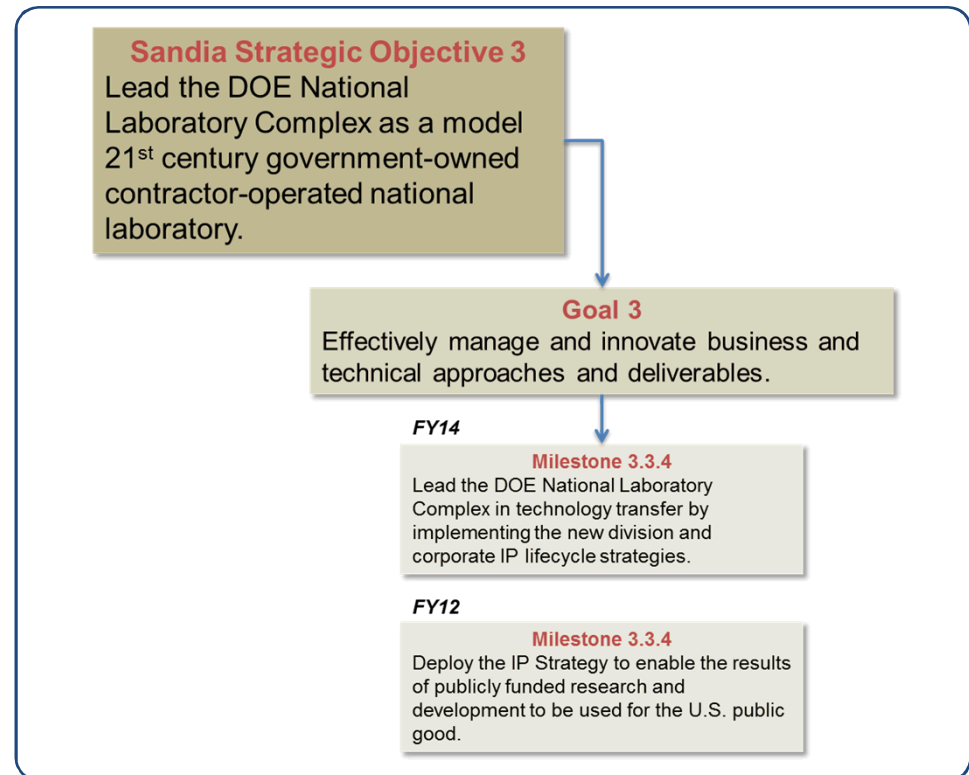
Sandia National Laboratories is a multi-program laboratory managed and operated by Sandia Corporation, a wholly owned subsidiary of Lockheed Martin Corporation, for the US Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000.

Sandia's Objective for IP

Enable the results of Sandia's publicly funded research and development to be deployed for the US public good

- **Lab responsibility to disseminate our work appropriately**
- **Disseminate = Publish (we already do this)**
 - Internal Sandia reports
 - Journals, etc.
 - IP and patents
- **In some cases, we can do more for the public good by protecting our IP**
 - Attractiveness for others to take on R&D risk
 - Encourage substantive business commitment by licensee

The objective drives which IP we create and pursue



IP Strategies Align with Sandia's Strategic Objective



Use IP to:

- **further the national security missions of the Laboratories**
 - to attract and enhance mission success with partners (e.g., DOE Programs and Other Federal Agency Sponsors, US Industry, and Universities)
 - by commercializing technologies to enhance national security

- **fulfill Sandia's technology transfer mission**
 - enhancing US industrial competitiveness
 - commercializing technologies that enhance US quality of life
 - providing special consideration to small business

- **enhance local and national economic development**

What's Changed?

Intentionality and Strategic Alignment

■ Planning and Execution of Work

- Integrating IP development and deployment strategies (and tactics) at the R&D planning stage

■ IP Reviews and Partner Selection

- IP management team to facilitate more disciplined decision-making processes while ensuring Sandia meets key requirements (e.g., fairness of opportunity)
- Line organizations provide context for decisions
- Earlier engagement of external entities in IP lifecycle process

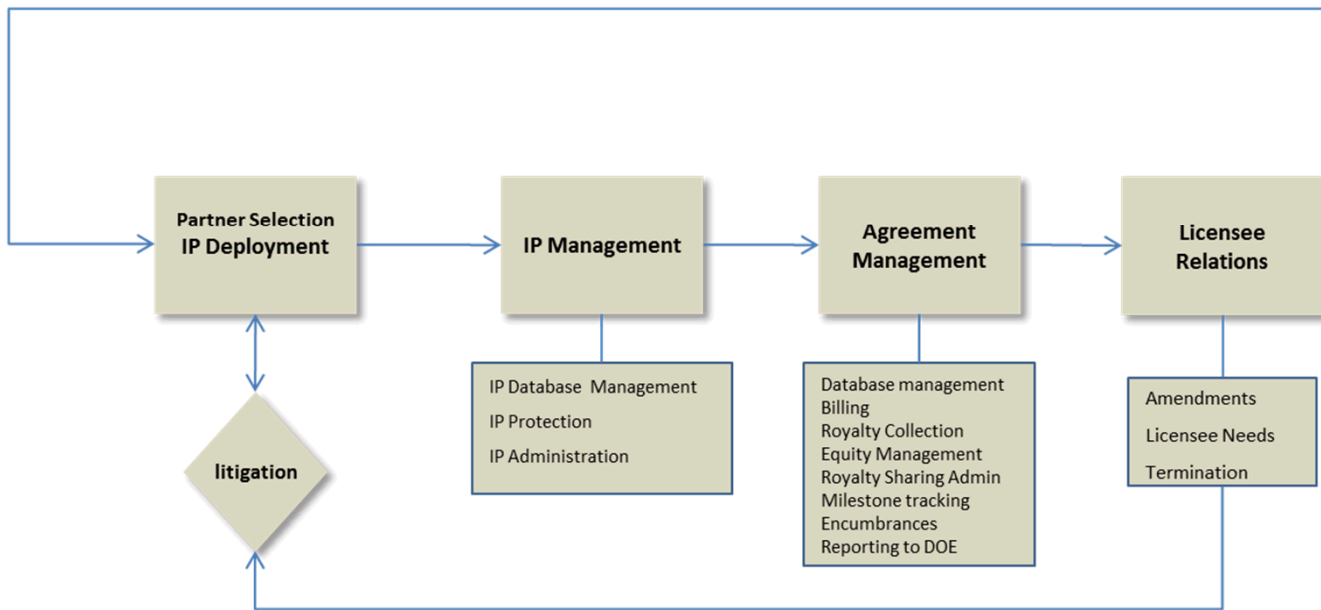
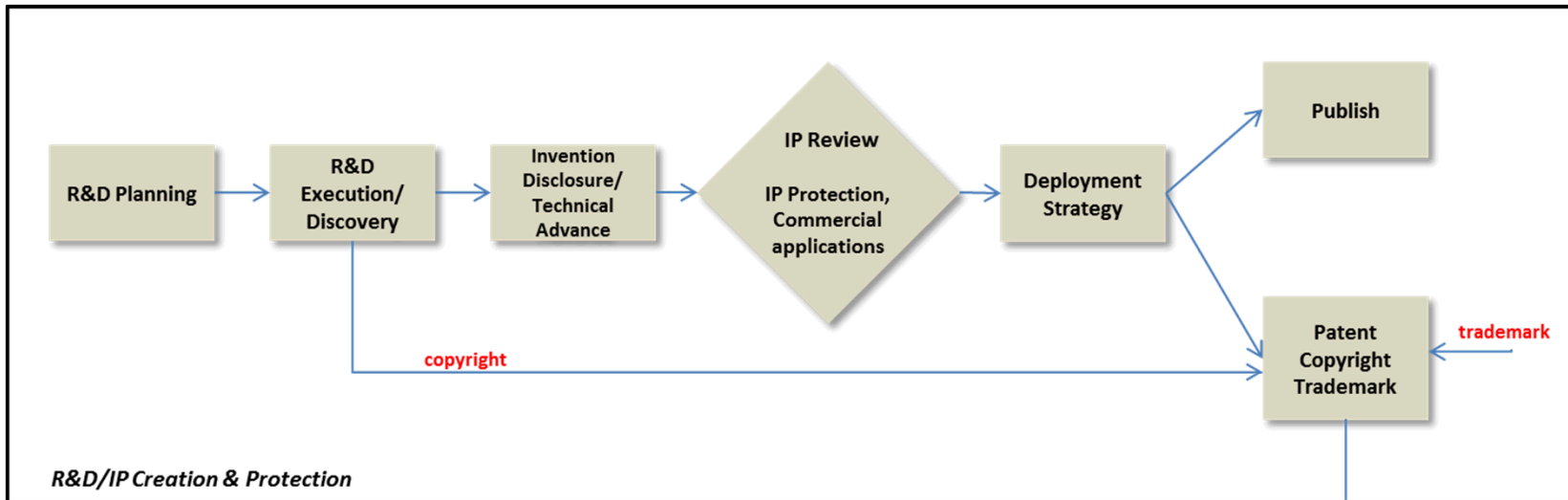
■ Disciplined Management of IP Portfolio and Commitments

- Increased leadership from CTO Office (how to think about IP)
- Increased level of professionalism and competence (accomplished IP professional staff)
- More thoughtful deployment of IP when making business arrangements
- Assurance-based management
- Metrics to track evidence of maturation of IP strategy



“first-inventor-to-file”
Changes in US patent law reinforced the need for the IP Lifecycle

Intentionality: IP Lifecycle Model



Strategic Alignment: Unified Framework Aligns IP Deployment with Sandia Priorities

Planned with Research

*IP Plans and Reviews, support the
Research Challenges*

Metrics

- Internally funded research proposal template includes consideration of IP
- Internally funded research disclosures reviewed
- Research Challenges include IP planning

Tied to Mission

*IP amplifies our national
security impact*

Metrics

- New patent applications reflect Mission Area priorities
- Capture & communicate success stories
- Use of IP for stronger proposals—(e.g. DOE Funding Opportunity Announcements)

Natural Part of the Culture

*Line organization IP strategies set
the stage for Capability
development*

Metrics

- Line organization patent portfolios mapped to capabilities and aligned with strategies; plans developed to fill gaps
- IP Review results reflect mission priorities and line organization strategies (*line-of-sight*)

Best Practices Supports the Entire Framework

Recognized as leader in laboratory IP management

Metrics

- Quarterly meetings with line organization IP POCs
- Increased number of disclosures and patents that align with strategy
- Training for researchers and others involved with IP
- DOE Technology Transfer Working Group metrics (includes licensing)

Ensuring Strategic Alignment

- **Training**
 - Initial training reached ~2000 staff
 - Increasing awareness through tailored training to managers and staff (e.g., internally funded research PI Training, classified patent training, publication strategies)

- **Disclosures and Patents**
 - Increased submissions of disclosures (26%) and patents (43%) from FY12 to FY13
 - IP reviews use line-of-sight to IP strategies

- **Commercialization Examples**
 - Deploying Sandia Cooler technology (funded by DOE Office of Energy Efficiency & Renewable Energy)
 - Deploying energy technologies to US Industry (e.g., solar glare)
 - Executing on internally funded research IP strategies

- **Portfolio Development**
 - Developing portfolios around core areas making our capabilities more robust
 - Developing IP strategic plans for mission area programs (e.g., transportation energy)

- **Strategy Maturation**
 - Implementing IP maturity model to make IP Lifecycle an integral part of how the lab operates