INTELLECTUAL PROPERTY GUIDE

Data, Data Rights, Intellectual Property, and Licensing Acquisition and Management

Office of the Under Secretary of Defense
for Acquisition and Sustainment

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1. INTRODUCTION

1.1 APPLICATION OF THIS GUIDE

Purpose

This guide is issued by the Office of the Under Secretary of Defense for Acquisition and Sustainment (OUSD(A&S)), the organization responsible for the promulgation of policy for Intellectual Property (IP). It is intended to assist DoD acquisition practitioners at the execution level with the development of program acquisition strategy elements with respect to IP, Licensing, Data, and Data Rights. While this document includes references to the controlling statutory and policy provisions for IP, the document itself is not a formal policy document. Activities seeking to award contracts should consult with legal counsel for interpretation of statutory, regulatory, and formal policy requirements. The guide is a living document and will be updated as the DoD continues to develop best practices and as new statutes and policies are implemented.

Audience

This guide is intended for two primary audiences:

a. **The Government Team**

to include Project Managers, Contracting/Agreements Officers (CO/AOs), Contracts/Agreements Specialists, Systems Engineers, Logisticians, Small Business representatives, Legal Counsel, Financial Managers

b. **Government Partners**

to include industry, academia, other federal agencies, and state and local authorities

1.2 THE DEFENSE ACQUISITION SYSTEM'S ADAPTIVE ACQUISITION FRAMEWORK

UNDER CONSTRUCTION: DoDD and DoDI 5000 series rewrites ongoing

Department of Defense Directive (DoDD) 5000.01, November 20, 2007, "The Defense Acquisition System" states, "The Defense Acquisition System exists to manage the nation's investments in technologies, programs, and product support necessary to achieve the National Security Strategy and support the United States Armed Forces. The investment strategy of the Department of Defense shall be postured to support not only today's force, but also the next force, and future forces beyond that."

Under this directed Defense Acquisition System, a 2019 update to DoD Instruction (DoDI) 5000.02 establishes the Adaptive Acquisition Framework (AAF) which defines the acquisition pathways a program can select to deliver capability to the warfighter.

Within this AAF ecosystem, the DoD collaborates with private industry to develop defense solutions and maintain a technological advantage. Subsequently, there is a need to balance the legitimate interests of both the government and industry regarding the use of IP, such as technical data, computer software, and computer software documentation. To provide capability at the speed of relevance, it is more critical than ever for the government to partner with industry early on in a program's lifecycle and maintain an open dialog throughout the acquisition strategy development process. Articulating needs for upgrade and sustainment clearly enough and early enough in the system life cycle allows industry to best respond appropriately during both early planning and competitive activities.

Solutions to DoD challenges may include ideas from government, academia, and private industry. It is critical for DoD acquisition practitioners to ensure that IP Practices deliver timely and relevant solutions to the warfighter while recognizing the importance of IP to our commercial partners. There is a balancing of fostering private innovation against DoD long term sustainment goals. The idea originators or owners must be recognized and their ownership rights protected and respected.

1.3 DATA, DATA RIGHTS, AND INTELLECTUAL PROPERTY

The three major topics in this guide are:

a. Data (D)

Data is information that describes ideas, items, processes, etc. The government has specific definitions for categories of data, including Technical Data (TD) and Computer Software (CS). See Section 3.

b. Data Rights (DR)

Data rights and the corresponding terms of use define how the government can use, modify, reproduce, release, perform, display, or disclose the data. See Section 4. To clarify, data rights is a shorthand description of the government's licensing rights under the Defense Acquisition regulations in two categories of deliverables: TD and CS. See first paragraph in "Guidance Intellectual Property Strategy and Understanding and Leveraging Data Rights in DoD Acquisitions" brochure.

c. Intellectual Property (IP)

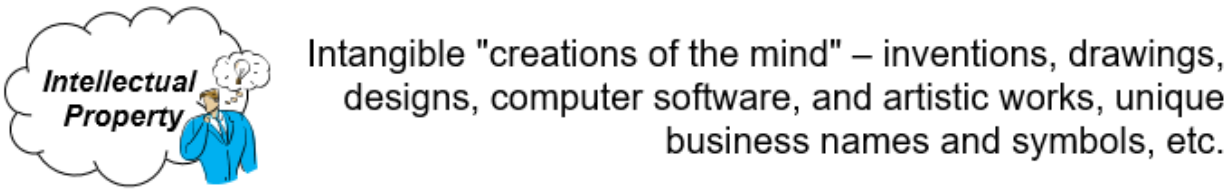
Intellectual Property refers to "intangible creations of the mind." These creations can be protected when they are in a form that can be disclosed or can enable others to recreate, emulate, or manufacture them. See Section 2.

2. INTELLECTUAL PROPERTY FUNDAMENTALS

2.1 IP / IDEA

The Defense Acquisition University (DAU) ACQuipedia defines Intellectual Property as "intangible creations of the mind – inventions, literary and artistic works, unique business names and symbols, and so forth. Owners are granted certain exclusive rights to control the use and dissemination of their intellectual properties." Figure 1 depicts IP as the idea or thought bubble.

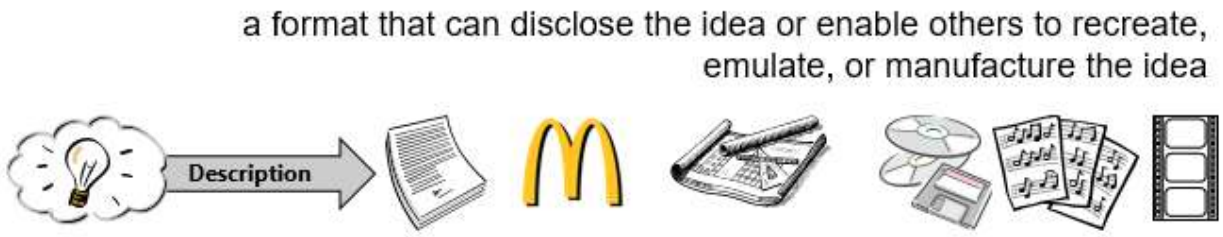
Figure 1: Intellectual Property (IP)



2.2 IDEA DESCRIPTION (TANGIBLE FORMAT)

An originator usually has to translate their idea into something others can understand. Figure 2 shows examples of how ideas are described. At this point, the originator owns the idea and its tangible format.

Figure 2: Idea Descriptions

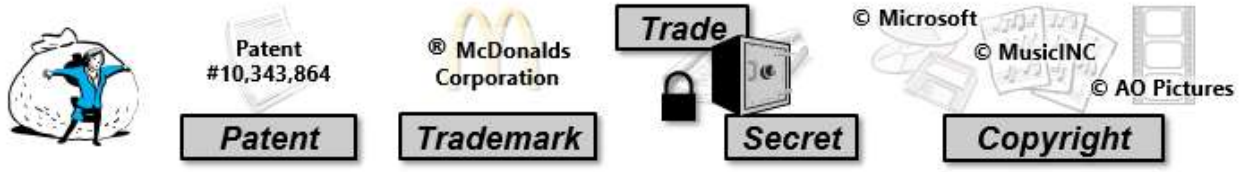


2.3 IDEA PROTECTION

Once an idea is in a form that others can use or understand, the idea owner can protect it. The customary means for protecting IP are Patent, Trademark, Trade Secret, and Copyright (Figure 3). Ownership rights include the ability to license the use of their IP by others. This is typically

done through a license agreement that defines how the recipient can use, modify, reproduce, release, perform, display, or disclose the IP in question.

Figure 3: Idea Description Protection



The customary ways to control the use and dissemination of IP are Patent, Trademark, Trade Secret, and Copyright. A quote from the United States Patent and Trademark Office (USPTO) Basic Facts Booklet summarizes how these protections differ. "Trademarks, copyrights, and patents protect different types of intellectual property. A trademark typically protects brand names and logos used on goods and services. A copyright protects an original artistic or literary work. A patent protects an invention. For example, if you invent a new kind of vacuum cleaner, you would apply for a patent to protect the invention itself. You would apply to register a trademark to protect the brand name of the vacuum cleaner. And you might register a copyright for the television commercial that you use to market the product."

The remaining sections provide additional information on the four IP protection methods. All quoted material in these sections is from the United States Patent and Trademark Office web site unless otherwise noted.

Using a new missile system as an example, the missile system may have its software and technical manuals protected from unauthorized use, copying, or distribution by copyright. The government may need to share the system software source code with a radar system, vendor for integration. The missile manufacturer may protect a unique alloy used in an engine component as a trade secret, but the government may need to disclose information about the alloy to a maintenance vendor. There may be a patent for the innovative aerodynamic shape of the missile to prevent the shape from being used or copied by other vendors. Finally, the vendor may have trademarked the name and logos for the missile system to avoid confusion with any other missile system.

2.4 PATENT PROTECTION

"A patent for an invention is the grant of a property right to the inventor, issued by the United States Patent and Trademark Office. Generally, the term of a new patent is 20 years from the date on which the application for the patent was filed in the United States or, in special cases, from the date an earlier related application was filed, subject to the payment of maintenance fees. U.S. patent grants are effective only within the United States, U.S. territories, and U.S.

possessions. Under certain circumstances, patent term extensions or adjustments may be available."

"The right conferred by the patent grant is, in the language of the statute and of the grant itself, 'the right to exclude others from making, using, offering for sale, or selling' the invention in the United States or 'importing' the invention into the United States...Once a patent is issued, the patentee must enforce the patent without aid of the USPTO."

"Infringement of a patent consists of the unauthorized making, using, offering for sale, or selling any patented invention within the United States or U.S. Territories, or importing into the United States of any patented invention during the term of the patent. If a patent is infringed, the patentee may sue for relief in the appropriate federal court."

"Utility patents may be granted to anyone who invents or discovers any new and useful process, machine, article of manufacture, or composition of matter, or any new and useful improvement thereof; Design patents may be granted to anyone who invents a new, original, and ornamental design for an article of manufacture; and Plant patents may be granted to anyone who invents or discovers and asexually reproduces any distinct and new variety of plant."

Patents are limited monopolies, in time (typically 20 years from filing) and scope, granted for inventions or discoveries that are useful, novel, and non-obvious. The inventions may be a process, machine, manufacture, composition of matter, or an improvement thereof. Inventors will file patent applications with PTO that include specialized written descriptions (patent claims) that allow one who is skilled in the particular subject area to produce the invention.

A missile system will have numerous patentable components, from its aerodynamic shape, to the engine design, to how the missile actuates its control surfaces. If these are new, they can be patented. Once an invention is patented, then anyone else that wants to use the design or make a version of the invention must license it from the patent owner. If the government wants another vendor to use the new missile system's patented features, it would need to obtain a license.

2.5 TRADEMARK PROTECTION

"A trademark is a word, phrase, symbol, and/or design that identifies and distinguishes the source of the goods of one party from those of others. A service mark is a word, phrase, symbol, and/or design that identifies and distinguishes the source of a service rather than goods. Some examples include brand names, slogans, and logos. The term 'trademark' is often used in a general sense to refer to both trademarks and service marks."
"Unlike patents and copyrights, trademarks do not expire after a set term of years. Trademark rights come from actual 'use'... Therefore, a trademark can last forever - so long as you continue to use the mark in commerce to indicate the source of goods and services. A trademark

registration can also last forever - so long as you file specific documents and pay fees at regular intervals."

Just as you will have a car title registered in the county or state of your residence, you can have a copyright registered with the Library of Congress.

Specific trademark examples include Nike's "Swoosh," McDonald's "Golden Arches," the names Coca-Cola, Starbucks, and Amazon.com.

The government, DoD contractors, and private industry all seek trademark protection for their words, phrases, symbols, and/or designs. Government trademark issues can occur with programs or systems assigned "popular names" such as Patriot, Predator, or Harpoon. Contractor registration of these popular names can adversely affect the management of a program.

The USPTO Trademark Electronic Search System (TESS) provides access to "text and images of registered marks, and marks in pending and abandoned applications."

In the missile system example, the vendor may create a brand name for the missile system to be used by itself in promotional materials when advertising the new capabilities.

2.6 TRADE SECRET PROTECTION

Trade secrets are protected by keeping them secret. 18 U.S.C. § 1839 defines a "trade secret" as information that "...a. the owner thereof has taken reasonable measures to keep such information secret; and b. the information derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable through proper means by, the public."

Generally, trade secrets are a firm's commercially used and confidential IP. Firms may wish to protect their IP as a trade secret instead of under a patent or copyright because those protections have time limitations and public disclosure requirements. A common element among numerous definitions of trade secret is that a trade secret loses its value upon public disclosure.

Some classic examples of trade secrets are the formula of Coca-Cola or Kentucky Fried Chicken's seasoning blend.

In the missile system example, a trade secret could be the process to manufacture the component alloy.

Unlike other forms of IP, trade secrets have no method for registration. Because there is no registration for trade secrets, there can be overlap with unregistered copyrights. A firm may have both copyrights and trade secret protections for some data or software.

Nondisclosure Agreements (NDAs) are typically used to protect trade secrets and control the grant of licenses for their use. In the case of the missile system, if the government needed to know the secret aspects of the alloy processing, government personnel would need to sign NDAs before the vendor discloses the trade secret. Government employees are required under criminal statute, 18 U.S.C. 1905, to protect any confidential information they receive in the course of their duties.

2.7 COPYRIGHT PROTECTION

Contractors generally retain copyright ownership of the (TD associated with a noncommercial item and noncommercial CS that they develop and deliver under DoD contracts, although they may agree under terms negotiated by both parties to assign the copyright to the government.

The circular Copyright Basics from the website www.copyright.gov defines copyright as "...a form of protection provided by the laws of the United States to the authors of 'original works of authorship' that are fixed in a tangible form of expression. An original work of authorship is a work that is independently created by a human author and possesses at least some minimal degree of creativity."

The www.copyright.gov circular Works Not Protected by Copyright highlights different types of works and subject matter that do not qualify for copyright protection. Table 1 lists examples of works and subject matter that can and cannot be protected under United States copyright law.

Table 1: Copyrightable Yes/No Examples

Copyrightable YES		Copyrightable NO
Literary works		Ideas, methods, systems
Motion pictures and other audiovisual works		Processes, concepts, principles, or discoveries
Pantomimes and choreographic works		Works that are not fixed in a tangible form
Architectural works		Titles, names, short phrases, and slogans
Pictorial, graphic, and sculptural works		Familiar symbols or designs

The circular Copyright Basics discusses copyright registration and markings. "Copyright exists automatically in an original work of authorship once it is fixed in a tangible medium, but a

copyright owner can take steps to enhance the protections of copyright, the most important of which is registering the work."

"Applying a copyright notice to a work has not been required since March 1, 1989, but may still provide practical and legal benefits. Notice typically consists of the copyright symbol or the word 'Copyright,' the name of the copyright owner, and the year of first publication. Placing a copyright notice on a work is not a substitute for registration."

The term "infringement" refers to the unauthorized use of copyrighted material. Publication of an otherwise protected work by the U.S. government does not put that work in the public domain.

Continuing with the missile system, the original vendor would have copyrights governing the use, copying, and disclosure of the software and technical manuals drafted. The government must have a license to share the source code with the radar vendor to avoid infringing the original vendor's copyright. The government must also have a license to copy the technical manuals and a license to distribute the manuals to the employees of the firm hired for sustainment. If the government eventually seeks to have another vendor upgrade the software, it needs a license to the source code if the new software is a derivative of the original. Ideally, acquisition professionals plan for and include these licenses in the initial acquisition

a. Registration & Marking (Optional)

The circular Copyright Basics discusses registration and markings. "Copyright exists automatically in an original work of authorship once it is fixed in a tangible medium, but a copyright owner can take steps to enhance the protections of copyright, the most important of which is registering the work."

"Applying a copyright notice to a work has not been required since March 1, 1989 but may still provide practical and legal benefits. Notice typically consists of the copyright symbol or the word 'Copyright,' the name of the copyright owner, and the year of first publication. Placing a copyright notice on a work is not a substitute for registration."

The term "infringement" refers to the unauthorized use of copyrighted material.

b. Fair Use

The Fair Use page on the USPTO website states: "Fair use is a legal doctrine that promotes freedom of expression by permitting the unlicensed use of copyright-protected works in certain circumstances. Section 107 of the Copyright Act provides the statutory framework for determining whether something is a fair use and identifies certain types of uses—such as criticism, comment, news reporting, teaching, scholarship, and research—as examples of

activities that may qualify as fair use." Consult an IP attorney to determine if your intended Government use of copyrighted material falls within the doctrine of fair use.

c. Government Works and Copyright

17 U.S.C. §105 states "Copyright protection under this title is not available for any work of the United States Government, but the United States Government is not precluded from receiving and holding copyrights transferred to it by assignment, bequest, or otherwise."

The general prohibition against copyright in section 105 applies to "any work of the United States Government," which is defined in 17 U.S.C. §101 section 101 as "a work prepared by an officer or employee of the United States Government as part of that person's official duties." This section also states, "Under this definition a Government official or employee would not be prevented from securing copyright in a work written at that person's own volition and outside his or her duties, even though the subject matter involves the Government work or professional field of the official or employee."

Publication of an otherwise protected work by the U.S. Government does not put that work in the public domain.

2.8 LICENSING / TERMS OF USE

License agreements describe specific terms of use by which the licensee is able to use the TD or CS. Details include descriptions the data, who can use that data, how they can use it, effective dates of the agreement, fees, definitions, and license territory (State, USA, Worldwide, etc.). See Section **Error! Reference source not found.**.

3. DATA FUNDAMENTALS

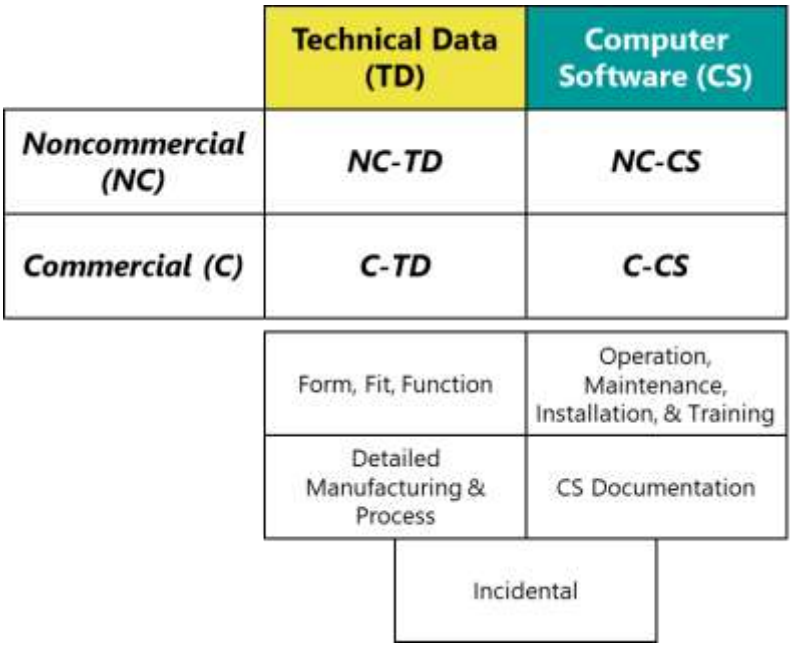
3.1 INTRODUCTION

The Federal Acquisition Regulation (FAR) defines standardized policies and procedures used or referenced in federal contracts. The Defense Federal Acquisition Regulation Supplement (DFARS) supplements the FAR with additional regulations specific to Department of Defense acquisitions. These regulations define commercial and noncommercial items, as well as TD and CS.

FAR Subpart 27.401 defines data as "...recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. TD and CS are data categories. Commercial and noncommercial are types of commercial status. This Guide further distinguishes Form, Fit, Function (FFF) data, Operation, Maintenance, Installation, and Training (OMIT) data, detailed manufacturing or process data (DMPD), and CS documentation as sub-categories of TD and/or CS.

Figure 4 depicts the organization and relationships of data.

Figure 4: Relationships of Data



3.2 CATEGORIES (TECHNICAL DATA, COMPUTER SOFTWARE, ETC.)

There are two categories of data defined by the DFARS.

a. Technical Data (TD)

DFARS 252.227-7013 defines TD as "… recorded information, regardless of the form or method of the recording, of a scientific or technical nature (including computer software documentation). The term does not include computer software or data incidental to contract administration, such as financial and/or management information." [Note the inclusion of computer software documentation and the exclusion of contract financial and/or management information.]

b. Computer Software (CS)

DFARS 252.227-7014 defines CS as "computer programs, source code, source code listings, object code listings, design details, algorithms, processes, flow charts, formulae, and related material that would enable the software to be reproduced, recreated, or recompiled. Computer software does not include computer databases or computer software documentation." This clause also defines the rights to software documentation even though this documentation is excluded from the definition of software.

If a program included a database to hold maintenance data, the data held by the database would be TD while the software that operates the database, such as Microsoft Access®, is computer software.

3.3 COMMERCIAL STATUS (COMMERCIAL, NONCOMMERCIAL)

Whether the data relates to a commercial or noncommercial item directly affects how the government can use any data associated with that item.

a. Commercial

The FAR 2.101 definition of a commercial item consists of eight sections. The first section of the definition provides a good overview of the term. It states a commercial item is "(1) Any item, other than real property, that is of a type customarily used by the general public or by non-governmental entities for purposes other than governmental purposes, and—(i) Has been sold, leased, or licensed to the general public; or (ii) Has been offered for sale, lease, or license to the general public;". Other government terms associated with commercial items include "Commercially available off-the-shelf (COTS)" and "Nondevelopmental Item."

Additionally, for "commercial computer software" the DFARS 252.227-7014(a)(1) definition expands the FAR 2.101 COTS definition to software developed or regularly used for non-government purposes which 1) has been sold, leased, or licensed to the public, 2) been offered for sale, lease, or license to the public, 3) will be available for commercial sale, lease, or license in

time to satisfy the delivery requirements of the contract, or 4) satisfies any of the criteria specified above and would only require minor modifications to meet the requirements of the contract. There is no standard clause in DFARS that establishes the government's IP rights in commercial software.

b. Noncommercial

A noncommercial item or computer software is any item or software that fails to meet any of the four (4) criteria listed above, defining a commercial item or computer software.

c. Commercial Status Determination

There are frequent government and contractor disagreements regarding whether an item is commercial or noncommercial. The government rights to use data associated with commercial items are generally more restrictive than if the item were noncommercial. The Commercial Item Determination Guide is a good reference on this topic by the Department of Defense office of Defense Procurement Acquisition Policy.

FAR Part 12 and DFARS Subpart 212.1 through 212.71 address the acquisition of commercial items. This FAR and DFARS content must be read together. Neither supersedes the other.

Note: Do not use this Guide to determine the commercial status of an item. Commercial status determination is a very complex topic. Consult all the references, contracting, and legal support.

3.4 SUB-CATEGORIES (FFF, OMIT, ETC.)

There are four sub-categories of data defined by the DFARS.

a. Form, Fit, Function (FFF) Data

DFARS 252.227-7013, -7015, and -7018 state "Form, fit, and function data" means Technical Data (TD) that "describes the required overall physical, functional, and performance characteristics (along with the qualification requirements, if applicable) of an item, component, or process to the extent necessary to permit identification of physically and functionally interchangeable items."

According to FAR Subpart 27.401, FFF data can be TD or CS. It states "'Form, fit, and function data' means data relating to items, components, or processes that are sufficient to enable physical and functional interchangeability, and data identifying the source, size, configuration, mating and attachment characteristics, functional characteristics, and performance requirements. For computer software it means data identifying source, functional characteristics, and performance requirements, but specifically excludes the source code, algorithms, processes, formulas, and flow charts of the software."

b. Detailed Manufacturing or Process Data (DMPD)

DFARS 252.227-7013 and 252.227-7018 define detailed manufacturing or process data as "**technical data** that describe the steps, sequences, and conditions of manufacturing, processing, or assembly used by the manufacturer to produce an item or component or to perform a process." DMPD is a variant of TD.

c. Operation, Maintenance, Installation, or Training (OMIT) Data

DFARS 252.227-7013, 252.227-7015, and 252.227-7018 define OMIT data as the information "necessary for installation, operation, maintenance, or training purposes (other than detailed manufacturing or process data)." OMIT data can be TD or CS. Typical items in this category are installation drawings, technical manuals, and training related data. People sometimes incorrectly group OMIT and DMPD together from a data rights perspective. The difference is the application of the data, with DMPD to be used to reproduce the item and the OMIT being used to service or use the item. Data may be similar but can be treated differently based upon the rights obtained by the government, depending on the license.

d. Computer Software Documentation

DFARS 252.227-7013, -7014, and -7018 define CS Documentation as "owner's manuals, user's manuals, installation instructions, operating instructions, and other similar items, regardless of storage medium that explain the capabilities of the computer software or provide instructions for using the software." Note the DFARS treats CS Documentation as TD.

3.5 DATA OR INFORMATION "INCIDENTAL TO CONTRACT ADMINISTRATION"

The data or information "...incidental to contract administration..." is used in both FAR and DFARS. They specify that this data is **not** included in the definition of data or Technical Data (TD). Regardless of its definition, there are **no DFARS standard license rights** in this data which includes the management data or the financial, pricing, or cost data used for contract administration. Schedule data typically is also a type of data incidental to contract administration.

FAR Subpart 27.401 defines data as "...recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. The term does not include information incidental to contract administration, such as financial, administrative, cost or pricing, or management information."

DFARS 252.227-7013 defines TD as "...recorded information, regardless of the form or method of the recording, of a scientific or technical nature (including computer software documentation). The term does not include computer software or data incidental to contract administration, such as financial and/or management information

4. DATA RIGHTS FUNDAMENTALS

4.1 INTRODUCTION

The government does not generally own data generated under a contract. Instead, the government must obtain a license to use generated data. These licenses control how the government can use, modify, reproduce, perform, display, release, or disclose the data. Data rights refer to these license terms specific to the government. DFARS clauses offer six specific types or levels of data rights and their terms of use for TD associated with a noncommercial item and noncommercial CS.

The DFARS clauses also define **which** of the six standard rights the government is **entitled** to at no additional cost. This determination is based on a range of criteria including the commercial status of the item, data category and sub-category, and who paid for the development of the item in question. The DFARS clauses do not necessarily apply to non-FAR contracting solutions. For guidance associated with non-FAR (including Other Transactions, etc.), see the OSD OT Guide here.

Modifications to the DFARS standard rights are Specifically Negotiated License Rights (SNLR). The government and the contractor may modify TD rights by mutual agreement to provide such TD rights as are considered appropriate. The SNLR shall not provide the government lesser rights than Limited Rights would. SNLR also allows the government to license IP in instances that it would normally be unable to do so – where the government will have no explicit IP rights (such as COTS TD or CS).

4.2 DATA AND DATA RIGHTS RELATIONSHIP

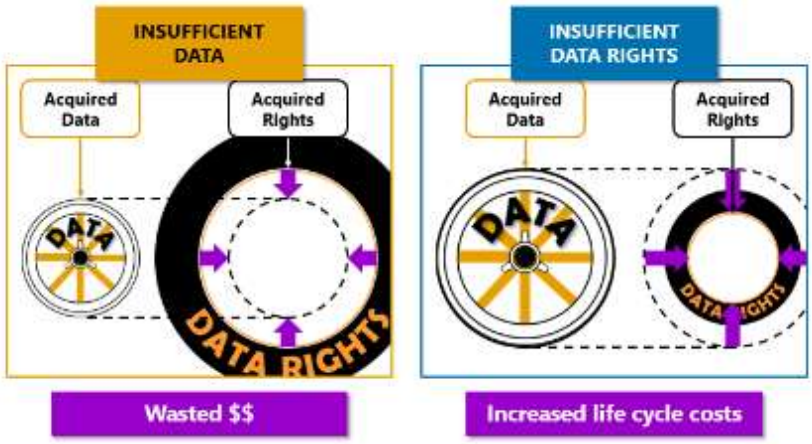
Successful program execution requires both delivery of the necessary data **and** the necessary rights in the data to support the programs strategies and plans. Even if the data exists and would help the program's performance, the rights to use the data are necessary to use the data. For example, if a guidance system was acquired for a missile system, the test data may be key to full system integration, but to use this data the right must have also been acquired in some form to facilitate this.

Think of data as a wheel and the associated data rights as a tire (Ref Figure 5). You need both, and in the matching sizes, to have a functional solution. If the sizes do not match (wheel too big, tire too small) it is impossible to join them and create a functional solution for a car. Data and data rights are similar. The acquired data and data rights must match to have a combination to support the procurement and product support of the item.

Figure 5: Data (Wheel) & Data Rights (Tire) as Complete Solution

The procurement and product support plans for each item in the system define the data and data rights "size." For example, if the program plans call for competitive procurement and product support of an item, then the size equals all the data and the rights to use the data competitively. If the government acquires the wrong size for either the data or data rights, either money is wasted, or higher long-term life cycle costs will result. (Figure 6).

Figure 6: Examples of Data/Rights Mismatch Scenarios



4.3 DATA RIGHTS TYPES (UR, GPR, ETC.)

DFARS clauses define six types or levels of government copyright and trade secret license rights in TD associated with a noncommercial item and noncommercial CS. The standard license rights in TD are unlimited rights (UR), government purpose rights (GPR), or limited rights (LR). The standard license rights in CS are UR, GPR, or restricted rights (RR). The standard license rights for data generated under a Small Business Innovation Research (SBIR) contract are SBIR rights.

By default, in FAR/DFARS-based contracts, a contractor agrees to grant the **appropriate** standard license rights to the government based on the DFARS criteria, at no additional cost, when the contract is executed/awarded. While this is the default for FAR/DFARS-based

contracts, as supplemented by the DFARS, these rights can be negotiated. When used, the applicable DFARS clauses should be included or referenced in the request for proposal (RFP) and contract to define the standard license rights terms of use. DFAR Sections 252.227-7013 through 7028 discuss government data rights entitlements. Figure 7 below lists the types of rights for data associated with noncommercial items. The figure depicts a notional organization from competitive use (top) to noncompetitive use (bottom). A summary of each of these data rights is included in the following paragraphs. These are high-level summaries. Refer to the relevant DFARS clauses for details

Figure 7: DFARS Standard License Rights (Noncommercial Only)

	Data Rights Type	General Criteria Determining Rights	Permitted Uses Within Government	Permitted Uses Outside Government
COMPETITIVE Use	Unlimited (UR)	Item developed exclusively at Government expense	No restrictions. Government can use, modify, reproduce, perform, display, release, or disclose data in any manner, and for any purpose whatsoever, and to have or authorize others to do so.	
	Government Purpose (GPR)	Item developed using mixed funds from both the Government and the contractor	No restrictions.	May release for "Government purposes" only. No commercial use.
MIX	Specifically Negotiated License (SNLR)	Mutual agreement of both parties	Specific conditions as negotiated by the parties. Similar to Limited/Restricted but with additional rights. Cannot be more restrictive than Limited or Restricted rights.	
NO Competitive Use	Small Business Innovative Research (SBIR-R)	Item developed under SBIR contract	Same as Limited or Restricted Rights.	Same as Limited or Restricted Rights during SBIR data protection period.
	Limited (LR) (Technical Data)	Item developed exclusively at private expense	May not be used for manufacturing. See DFARS 252.227-7013.	May not be released without contractor permission except for evaluation, emergency repair or overhaul. May share with CGSCs.
	Restricted (RR) (Computer Software)	Item developed exclusively at private expense	May decompile under some circumstances. See DFARS 252.227-7014.	May not be released without contractor permission except as listed in DFARS 252.227-7014(a)(15). May share with CGSCs.

NONCOMMERCIAL ONLY

CGCS = Covered Government Support Contractor

a. Unlimited Rights (UR)

UR places no restrictions on the use of the data. The government can use, modify, reproduce, perform, display, release, or disclose data in any manner, and for any purpose whatsoever. The government can also authorize others to do the same.

b. Government Purpose Rights (GPR)

Government Purpose Rights give the government the ability to reproduce, modify, perform, display, use, disclose, or release the data for government purposes without restriction. However, the government cannot release the data for any commercial purpose. These rights are essentially a middle path unique to defense contracts that offers a way for contractors to exploit

data in the commercial market for a limited time while the government also gets immediate benefits. After a specified amount of time has passed, GPR usually converts to UR. Consult an IP attorney for information related to specific program circumstances.

c. Specifically Negotiated License Rights (SNLR)

SNLR is a modification to the standard license rights for noncommercial data. SNLR describe some variation between UR or GPR and LL, RR, or SBIR rights (See Figure 8). Both parties must agree to the modified terms. The modified terms cannot be more restrictive than LR or RR.

Figure 8: SNLR Relationship to GPR, RR, LR, and SBIR Rights

d. Limited Rights (LR)

LR specifically applies to TD for a noncommercial item. The government may disclose this data with a Covered Government Support Contractor (CGSC). The government cannot use the data for competitive procurement without the owner's permission. However, the government can do so without owner permission for "emergency repair or overhaul" as described in DFARS 252.227-7013, -7014, -7015, and -7018.

e. Restricted Rights (RR)

RR specifically applies to noncommercial CS. The software is usable within the government on one computer at a time. A copy is permitted for archival purposes. The government may disclose to CGSCs. Owner permission is required to release the software to third parties. However, the government can do so without owner permission under the conditions listed in DFARS 252.227-7014(a)(15).

f. Small Business Innovation Research (SBIR) Rights

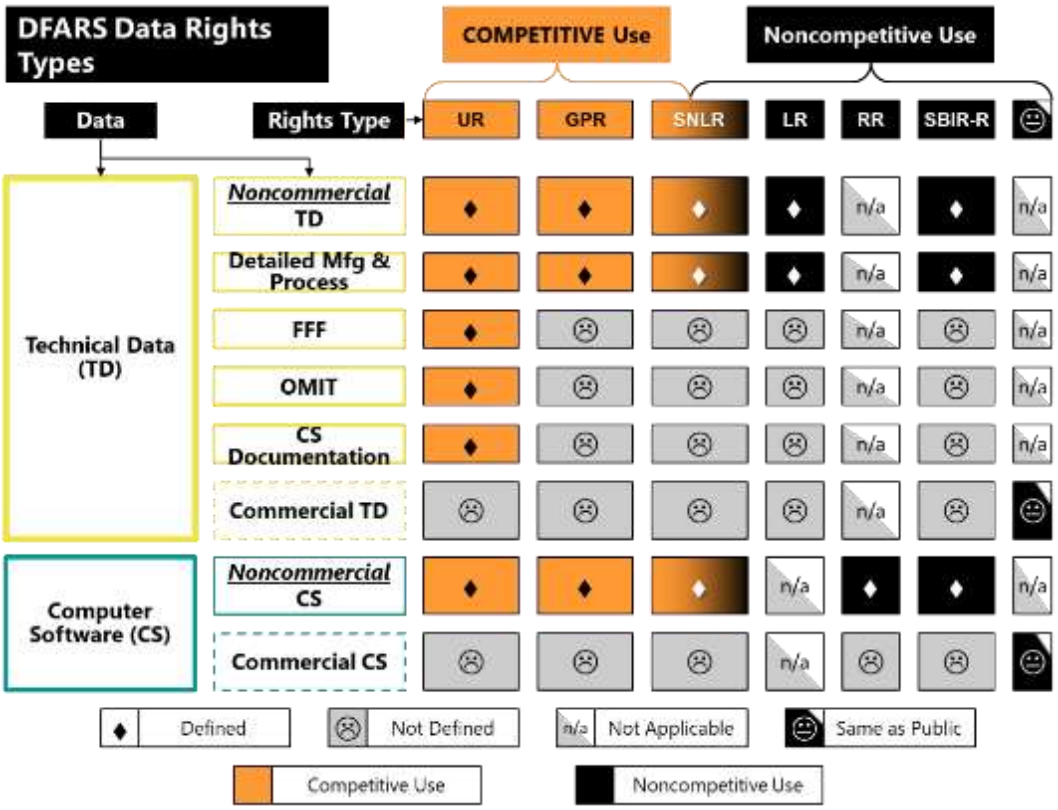
SBIR rights apply specifically to noncommercial item TD and noncommercial CS generated under a SBIR contract. SBIR rights entitle the government to LR for TD and RR for CS. SBIR rights have a defined period of time when they apply. Expiration of this period should be identified in the SBIR marking legend (See DFARS 252.227-7018).

4.4 ENTITLEMENTS (NONCOMMERCIAL) - COMMERCIAL STATUS & DATA CATEGORIES

Two DFARS data rights entitlement criteria are commercial status of the item and the data category/sub-category. Figure 9 depicts the relationships for standard license rights by commercial status, data categories, and data sub-categories. The DFARS does not define any

standard rights for TD associated with a commercial item or commercial CS. The following paragraphs discuss these relationships.

Figure 9: Data Rights Types by Commercial Status and Data Category



a. Data Associated with Noncommercial Items

DFARS clauses 252.227-7013, -7014, -7015, and -7018 define the government data rights for TD associated with noncommercial items or noncommercial CS. These are UR, GPR, LR, RR, SBIR rights, or SNLR. DMPD is a variant of TD and included in this category.

b. CS Documentation, FFF and OMIT Data

DFARS clauses 252.227-7013, -7015, or -7018 entitle the government to UR to CS documentation and all FFF and OMIT data that is not DMPD. This entitlement is only valid if the contract references or includes these clauses.

c. CS and FFF and OMIT Data

There are no DFARS provisions addressing rights to FFF or OMIT data associated with commercial or noncommercial CS. Commercial CS is described in greater detail below.

d. TD associated with Commercial Items

DFARS 252.227-7015 describes government rights to TD associated with commercial items. The government may use, modify, reproduce, release, perform, display, or disclose this data within

the government only. The clause also entitles the government UR to data necessary to install, operate, maintain, and train users on the item, and form, fit, and function data. A special license agreement is required to define any additional rights.

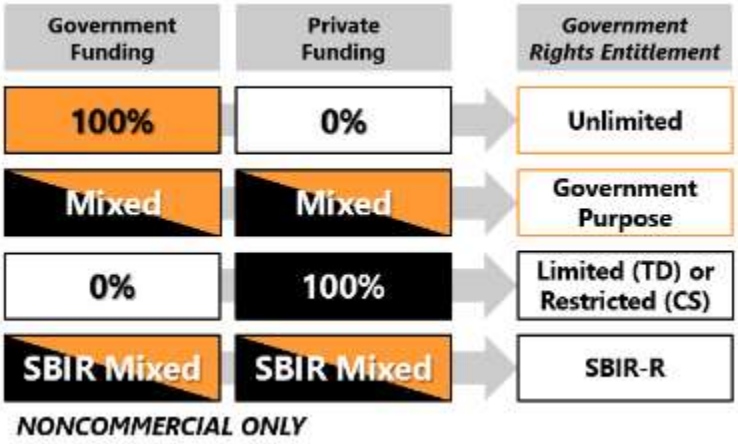
e. Data Associated with Commercial CS

There are no DFARS clauses defining rights for **commercial CS.** This includes open source software. Government rights to commercial CS are normally the same data rights customarily provided to the public. As such, it is important to have government legal representatives review all commercial software licenses to determine they meet the government and program needs as well as comply with federal procurement law.

4.5 ENTITLEMENTS (NONCOMMERCIAL) - FUNDING SOURCE

The source of funding is another DFARS criterion to determine government data rights entitlements. In general, who paid for the development of the item in question will determine which of the standard rights the government gets at no additional cost. Figure 10 shows what funding combinations result in what government data rights entitlement.

Figure 10: Data Rights by Funding Source (Noncommercial Only)



Under the DFARS data rights clauses, the government is entitled to Unlimited Rights (UR) if the TD is associated with a product that was developed exclusively with government funding or CS developed exclusively with government. If the product or CS was developed using a combination of government and private (contractor) funding in any ratio, the government is entitled to Government Purpose Rights (GPR). If a contractor can properly document the development of items, components, processes, or CS was done completely at private expense, the contractor may restrict the government's use of the relevant data by asserting Limited Rights (LR) or Restricted Rights (RR). If a product was developed as part of an SBIR contract, the government is entitled to SBIR rights regardless of the funding sources.

4.6 ENTITLEMENTS - DATA/INFORMATION "...INCIDENTAL TO CONTRACT ADMINISTRATION..."

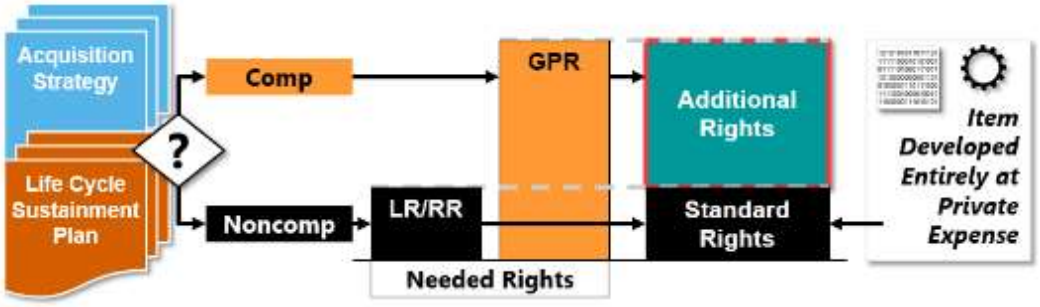
The goal of this section is to explain that data incidental to contract administration is not considered technical data under the DFARS provisions. Thus, the parties can agree to the government's right to use/modify this information in the contract.

The FAR and DFARS specifically exclude data or information "...incidental to contract administration..." the definition of data and TD. As such, there are **no DFARS standard license rights in this data.** Therefore, a special license agreement is necessary if the government needs to use, modify, reproduce, perform, display, release, or disclose this data. Both the government and contractor must agree on the special license terms, and all the agreement details must be in the contract.

4.7 ADDITIONAL RIGHTS

Needed rights are those the Integrated Product Team (IPT) members define based on the planned production and product support sourcing methods. Additional rights are the difference between the standard rights entitlements as defined in the DFARS clauses and program needed rights. Additional rights allow the government to use previously restricted rights data in more ways than defined by the standard data rights. Consider the scenario shown in Figure 11 below:

Figure 11: Needed, Standard, and Additional Rights



An item in the system was developed entirely at private expense. Following the DFARS funding test criteria, the government is entitled to LR for TD and RR for CS associated with this item. If a program defines the procurement and/or product support sourcing method goals for this item to be competitive, the government will need GPR for the TD and CS. Therefore, the government will need to acquire additional rights for the TD and CS associated with the item to align with the program goals.

4.8 LICENSE AGREEMENTS/TERMS OF USE FUNDAMENTALS

License agreements/terms of use define the specific conditions for the use of the data. They include details such as identifying the affected data, who can use that data, how that data can be used, effective dates of the agreement, fees, definitions, and license territory (State, USA, Worldwide, etc.). The terms and conditions for the rights to each data item must be stated or referenced in the RFP and contract.

DFARS clauses define the terms and conditions for government standard license rights. Terms and conditions for data or information "incidental to contract administration," Commercial items, special license, or specifically negotiated rights will likely be documents that must be included in the RFP and contract. Table 2 shows what DFARS clauses include terms of use for various data rights. The asterisk (*) or pound symbol (#) indicates additional documentation beyond the referenced or included DFARS clause is required to sufficiently define the terms of use.

Table 2: Standard License Rights Terms of Use & DFARS Clauses

		Clause	Terms of use					
Data	**Commercial Status**	**252.227 -**	**UR**	**SBIR**	**GPR**	**LR**	**SNLR**	**Other#**
TD	noncommercial	7013	x		x	x	x*	
CS	noncommercial	7014	x		x	x	x*	
TD	commercial	7015						#
CS	commercial	none						#
SBIR (TD and CS)	noncommercial	7018	x	x			x*	

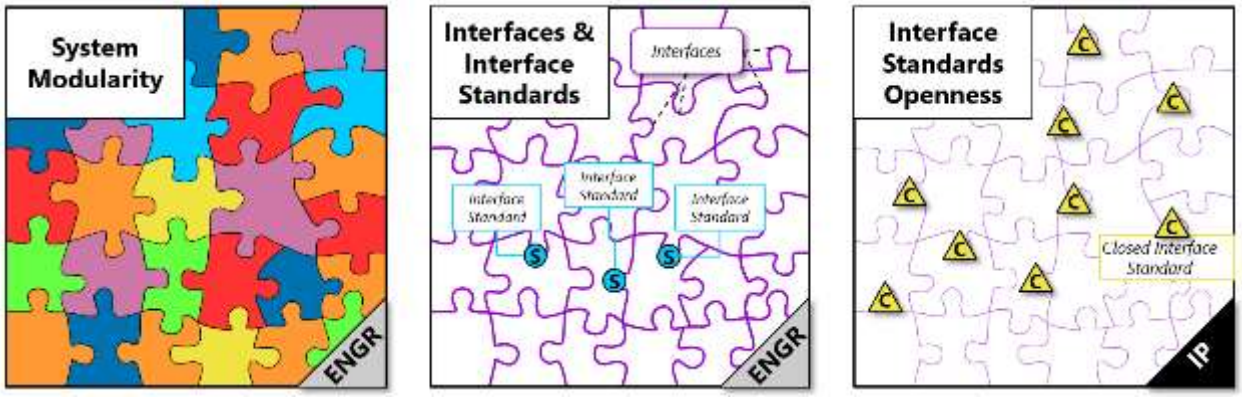
*Terms of use modification documentation also required
Terms of use documentation required

5. MOSA & INTERFACE FUNDAMENTALS

5.1 INTRODUCTION

The Defense Acquisition Guidebook (DAG) Section 3-2.4.1 states "A modular open systems approach (MOSA) is defined as an acquisition and design strategy consisting of a technical architecture that adopts open standards and supports a modular, loosely coupled and highly cohesive system structure. This modular open architecture includes publishing of key interfaces within the system and relevant design disclosure." Figure 12 depicts a MOSA and which activities relate to engineering and those that relate to IP.

Figure 12: MOSA and IP



The DAG Section 3-2.4.1 and the Space and Missile Systems Center/Judge Advocate Data Rights Handbook section IV have comprehensive discussions of a MOSA.

5.2 SYSTEM MODULARITY

The DAG CH 3–4.3.15 states "Modular design allows for modifications to systems, recombination of existing capabilities and upgrade of system elements, to enable competition, innovation, rapidly responding to a changing environment, etc. Designing for modularity is a key technical principle for implementing a modular open systems approach (MOSA) and is a complementary piece to the open system practices in contracting." The design and engineering team defines the extent of system modularity.

5.3 INTERFACES

The Defense Acquisition University (DAU) Glossary describes an interface as "the functional and physical characteristics required to exist at a common boundary or connection between persons,

between systems, or between persons and systems." The design and engineering team identifies and defines the interfaces between system modules.

Interface functions include physical connection, energy flow, mass flow, and information flow. An interface can perform combinations of these functions. Key interfaces are those important to achieving a program's business and/or technical objectives including those that affect interoperability, maintainability, upgradeability, life cycle supportability, and/or life cycle cost.

5.4 INTERFACE STANDARDS & OPENNESS

Interface standards describe the characteristics of an interface and validation steps to ensure compliance. These characteristics include form, fit, and function requirements and methods to verify the interface complies with the standard. The design and engineering team defines these standards for each system module interface.

IP aspects of MOSA focus on the "openness" or rights to use the interface standards. An open interface standard is widely supported, consensus-based, and the standard requirements and validation information are available without a licensing fee. A closed interface standard may also be widely supported and consensus-based, but the standard requirements and validation information is only available by purchasing a copy of the standard, paying to become a member of the standard management consortium, and/or paying a royalty fee based on the number units produced that include the patented or otherwise controlled technology.

6. PROGRAM MANAGEMENT FUNDAMENTALS (DATA/RIGHTS PERSPECTIVE)

6.1 INVOLVE THE ENTIRE IPT

Program success depends on listening to input from a wide spectrum of subject matter experts. Assemble the Integrated Product Team (IPT) with representatives from all the specialty areas that contribute to successfully developing, producing, using, and supporting the product. Figure 13 lists many of the specialty areas that one should consider for representation on the IPT. IP attorneys are particularly important resources when securing data, data rights, and IP. They usually have a combination of technical and legal expertise, which makes them best equipped to understand the technology involved and interpret the DFARS clauses and IP policies for specific program circumstances.

Figure 13: Potential IPT Subject Matter Experts (SMEs)

Systems Engineering
Configuration Management
Environment, Safety, and Occupational Health
Hardware Design
Human Factors
Maintainability
Modeling & Simulation
Obsolescence
Producibility
Quality Assurance
Reliability
Software Design
x...other

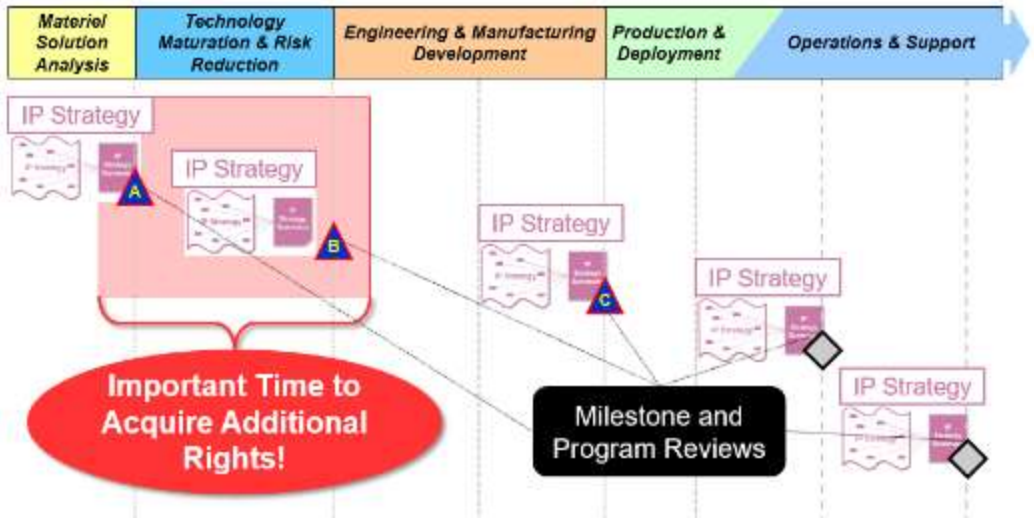
Product Support / Logistics
Computer Resources
Design Interface
Facilities , Infrastructure
Maintenance Planning & Management
Manpower / Personnel
Packaging, Handling, Storage &Transport
Product Support Management
Supply Support (Provisioning, Spare/Repair Parts)
Support Equipment
Sustaining Engineering
Tech Data (Manuals, Spare Parts)
Training & Training Support
x...other

Program Support
Contracting
Contracts Attorney
Cybersecurity
Demil/Disposal
IP Attorney (Technical and Legal SME)
Financial
Information Security
Maintenance Engineering
Production Engineering
Program Attorney
Program Management Staff
Test & Evaluation
x...other

6.2 DEFINE RIGHTS EARLY!

It is important to identify any privately funded and developed technology that may be included in the end product. Acquiring additional data rights to use the data associated with this technology early in a development effort is better than later. The government has the strongest bargaining position during these early phases of a program. As such, the cost to acquire additional data rights is normally lower than later in the life cycle. Rights restrictions can significantly affect the cost-effective execution of the Production & Deployment and Operation & Support phases.

Figure 14: Important Time in Life Cycle to Acquire Additional Rights



6.3 DELIVERY VERSUS ACCESS

Delivery of data/software versus access to data/software is a hot topic at the moment. Historically, the DoD bought a company's software (i.e., send me the CD with the code). However, in this new ecosystem, industry has disrupted the old model and the trend is more towards the government's need for ensuring sufficient exploitation of rights/access in order to enable the execution of the key elements of the Acquisition Strategy (architecture, sustainment, etc.).

Programs can take delivery of all TD and CS as part of a contract. However, this should be a case-by-case tailoring based on the Acquisition Strategy and long-term sustainment strategy as approved by the Decision Authority. Delivery is the best way to confirm possession, quality, and data rights status of the acquired data. The government must properly require data to be delivered in order to enforce the data rights marking requirements and empower the

government to validate and/or challenge restrictions on data. Requiring access alone does not secure the government's license rights.

No DFARS clauses address provisions for data that is accessed by the government. If the government only requests "access," there are no default requirements for data rights, data markings, or inspection related to this data. Furthermore, the government's ability to access this data is completely controlled by the contractor and only exists for the duration negotiated in the contract. Additionally, data stored only in a contractor repository has the risk that the government may be denied access to the data should there be a disagreement between the two parties.

In a non-FAR based contracting activity, the government and industry have more freedom to negotiate access (there is nothing explicit in statute preventing FAR/DFARS-based contracting activities from negotiating access – it would be a special provision written into the contract).

6.4 RIGHTS NEEDED FOR DELIVERY

The government does not have to acquire additional rights to take delivery of data. The government should order and take delivery of all relevant data regardless of the data rights restrictions. The cost for **delivery** of data without additional rights is minimal, and the benefits are potentially significant to the overall program.

There are many legal and valuable government uses for data with DFARS standard Limited or Restricted Rights such as internal (non-manufacturing) uses or simply having the data in hand should it be needed for certain emergency situations. For example, it is a good idea to order LR TD if there might be a future need for "emergency repair or overhaul." This circumstance releases the government from abiding by the restrictive markings. Consult an IP Attorney for more information.

The government does not have to pay for additional data rights just to take delivery of privately developed data as long as the use restrictions are honored.

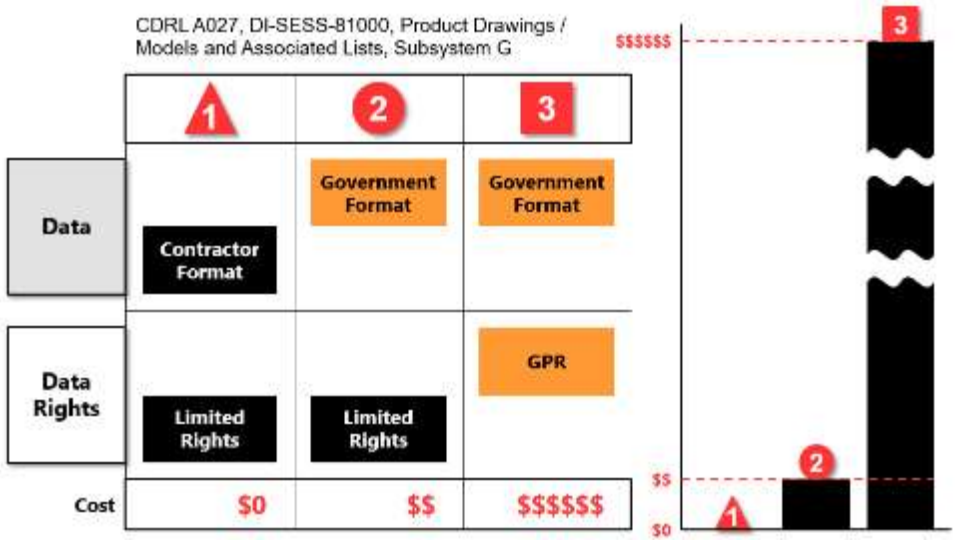
6.5 COSTS FOR DATA DELIVERY VERSUS COSTS FOR ADDITIONAL RIGHTS

The cost for data delivery is separate from the cost for additional rights. When someone says, "we can't afford the data," they probably mean "we can't afford the data rights." The base cost for data delivered under contract includes the government standard rights defined by clauses included in the contract.

For example, in Figure 15, the standard rights for data delivered per CDRL A027 is LR. Scenario 1 shows zero cost to acquire the data with LR and in contractor format. Scenario 2 shows some additional costs for the contractor to format the data per government requirements. Scenario 3

shows the costs to acquire GPR for the A027 data. In general, the costs for additional rights will usually exceed any formatting costs by a wide margin.

Figure 15: Data Format Versus Additional Rights Cost (Notional)



UNDER CONSTRUCTION: Valuation of IP is a future topic