

NDIA SYSTEMS ENGINEERING DIVISION MEETING

OVERVIEW OF THE DoD INTELLECTUAL PROPERTY CADRE



January 25, 2022



DISCLAIMER

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AGENDA

- **Introduction to DoD and OSD IP Cadre**
- **IP Cadre Current Efforts**
- **NDIA SE Division Opportunities for Collaboration**
- **Hot Topics...**
- **Questions?**

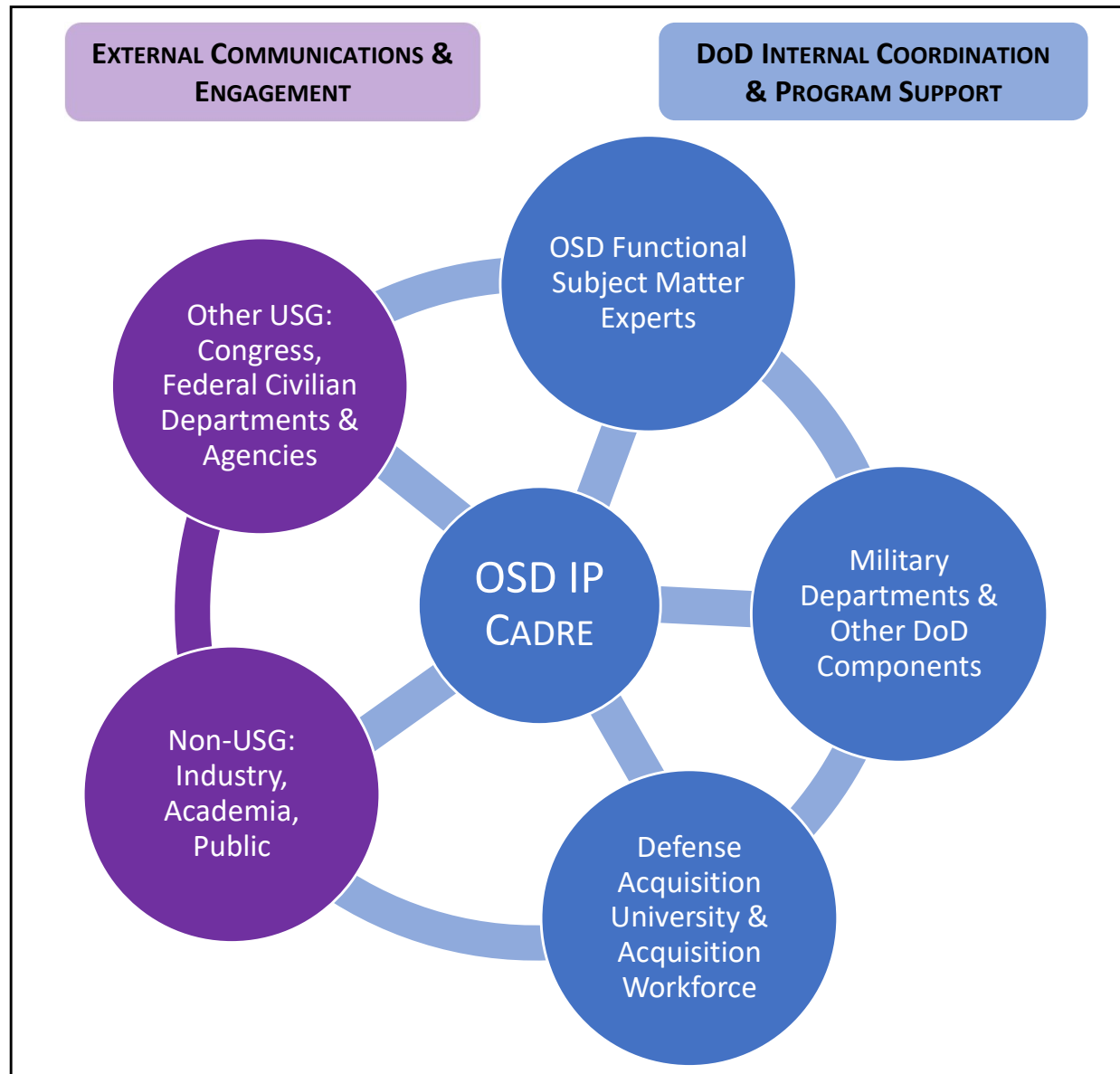


THE DoD INTELLECTUAL PROPERTY CADRE

- **DoDI 5010.44 “IP Acquisition & Licensing”** → implements 10 USC 2322 (FY18 NDAA)
- **DoD-Wide IP Cadre Structure – supporting and supported elements throughout DoD**
 - The **OSD** Intellectual Property Cadre Structure
 - OSD IP Cadre – new small, dedicated office/function within the OUSD(A&S) / A / AE / AAM
 - Cross-Functional: Includes coordination with all of the other OSD Functional Subject Matter Experts (SMEs)
 - The Rest of the **DoD** Intellectual Property Cadre -- Military Depts, Defense Agencies, etc.
 - Designated POC/Liaison for “IP Cadre” coordination (e.g., AF Smart IP Cadre)
 - Program Offices – functional SMEs as both customers and service providers
 - Functional SMEs . . . Wherever they may be → Heads-up: IP Credential/Badge
- **Mission & Operational Model**
 - Policy & Guidance [and Law]: DoD-wide coordination & repository of knowledge
 - Program Support: Service Provider – “Hire an Expert” ... for Free!
 - Sustainment & Technical Data Management – Execute Now! On the long-term life cycle support plan
 - Workforce Training & Community of Practice – across the entire Department
 - Outreach to Mission Partners – industry, academia, Congress & other USG



THE DoD-WIDE IP CADRE





THE OSD IP CADRE OFFICE

UNDER SECRETARY OF DEFENSE FOR ACQUISITION & SUSTAINMENT

Assistant Secretary of Defense (Acquisition)

Principal Deputy Assistant Secretary of Defense (Acquisition Enablers)

Director, Acquisition Approaches and Management

OSD INTELLECTUAL PROPERTY CADRE

Director
Richard M. Gray

Counsel;
Law, Regulations,
and Policy
Azza Jayaprakash

Program
Management &
Implementation
Joanne Johnson

Sustainment &
Technical Data
Management
Rosemary Solomon

Communications,
Knowledge, and
Performance Management
George O. Winborne

Contracted Support (Functional Subject Matter Expertise; Administrative)



CURRENT EFFORTS

- Section 801* Pilot Program – IP Evaluation & Valuation
- Modular Open Systems Approaches (MOSA)
- IP Guidebook
- GAO Review – DoD Implementation of IP Policy / Cadre
- DFARS “Early Engagement” – public meetings & comments

* FY 2020 NDAA → a multiple year effort through FY 2023



OVERVIEW: SEC. 801 PILOTS ON IP EVALUATION & VALUATION

- **Sec. 801 of the FY 2020 NDAA**
- **OSD & MILDEPs joint pilot program to assess IP evaluation techniques & commercial valuation methods' benefits on--**
 - IP Strategies
 - Management of IP costs throughout lifecycle,
 - Use of commercial & nondevelopmental tech, vice new dev't for USG.
- **Specific activities authorized--**
 - Establish a Team of experts (incl. IP Cadre) to make recommendations
 - Assessment of:
 - commercial valuation methods;
 - agency-level oversight;
 - contracting mechanisms;
 - acquisition planning for IP/rights for life-cycle (sustainment)
 - Industry engagement on IP requirements, strategies, valuation methods
- **Joint Report to Congress: Annually through 2023**
 - Second annual report is in formal routing
 - Includes - Government data call, Industry RFI, AIRC report



IMPLEMENTING MODULAR OPEN SYSTEMS APPROACHES

- **Implementing MOSA Tiger Team – NDAA FY21, Section 804(c) actions:**
 - Work with MILDEP stakeholders to establish interface repositories for Modular System Interfaces (MSI) and provide joint visibility
- **Enterprise Knowledge Model (EKM) Development:**
 - Develop a domain ontology for Intellectual Property (and MOSA) in the DoD
 - Will address systems engineering/acquisition decision support questions such as, “What IP is required to enable a modular open system approach for program x to reduce life cycle costs?”
 - Goal is to build out this initial EKM Ontology in CY 2022.
 - Will leverage MOSA Terms already coordinated through NDIA
- **Contracting for MOSA Tiger Team:**
 - Working with stakeholders to improve management of MOSA and IP considerations during acquisition activities
- **Industry “Enhanced Engagement” for IP Acquisition Regs (DFARS)**
 - Publish “early” discussion draft → Public Meeting(s) & written comments/edits
 - Coming in CY22: The MOSA Case (DFARS Case 2019-D005)



Intellectual Property: A Strategic and Tactical Guidebook:

- Part of overarching effort: Guidance supporting the Adaptive Acquisition Framework (separate topic-specific guidebooks as successor to the DAG (Defense Acq Guidebook))
- Will include:
 - Fundamental Concepts
 - Data rights, return-on-investment, delivery, licenses, etc.
 - Development and execution of IP Strategies
 - IP source selection issues
 - Special/Emerging topics
 - MOSA
 - Tools and Resources
- IP Guide Publication: Anticipated by end of Q2 of FY22
- Note: also underway separately – update of DoD Manual 5010.12 “Procedures for the Acquisition and Management of Technical Data” (5/14/1993; minor update 2018)

Major milestone in IP guidance, but will evolve



- **"DEFENSE ACQUISITIONS: DoD Should Take Additional Actions to Improve How It Approaches Intellectual Property", dated Nov. 30, 2021**
- **Recommendations:**
 1. The Under Secretary of Defense for Acquisition and Sustainment should ensure that DoD's planned **guidebook on IP clarifies how DoD personnel can pursue detailed manufacturing or process data.**
 2. The Secretary of Defense should determine the **collaboration, staffing, and resources** needed, both within the Office of the Secretary of Defense and across the components, to execute DoD's proposed federated approach for the IP Cadre.
 3. The Assistant Secretary of Defense for Acquisition should ensure that the Director of the IP Cadre **collaborates with the President of DAU to prioritize IP-related tasks** that DAU should undertake between 2023 through 2025.
 4. The Assistant Secretary of Defense for Acquisition should ensure that the Director of the IP Cadre **develops additional guidance** to help component heads and DACMs **identify the DoD personnel in key career fields.**
- The Department concurred with the four recommendations in the draft report, and identified planned actions to address them.



ENGAGEMENT OPPORTUNITIES FOR NDIA SE DIVISION (AND NDIA'S NEW IP TEAM?)

- **NDIA can facilitate engagement with Industry partners. Facilitate open lines of communication between DoD and Industry to better understand:**
 - DoD's and Industry's greatest IP issues and challenges and potential solution areas
 - If joint resolution and/or technical solutions, esp WRT MOSA are feasible to Industry stakeholders
 - Common ground – shared perspectives on IP and the systems engineering/acquisition business processes associated with DoD IP goals and objectives
- And address Industry Perspective:
 - MOSA implementation – design/architecture informed/affected by IP/Data rights considerations?
 - Innovation in Technical Data Delivery/access in a commercial Digital Engineering environment
 - Licensing and other IP related systems engineering/acquisition processes
 - Digital Engineering – systems engineering transformation/evolution and IP process in the digital thread
- **Possible “Workshop(s)” or Panels in 2022 to identify and discuss these issues?**
 - Consider some form of piggyback or teaming with the annual “**AIA/NDIA Technical Data Rights Forum**”?
 - Consider an IP/[MB]SE/DE/MOSA-focused panel or similar at other planned SE forum/event(s)?
 - Sync with NDIA SE Division on Digital transformation in systems engineering, and key innovative uses for IP management and business processes – with Industry perspective/lessons-learned etc...
- **“Formal” Requests for Public Comments**
 - **DFARS “Enhanced Engagement”** – multiple pending revisions – including MOSA expected in CY 22!
 - **Request(s) for Information (RFIs):** For example: 2021 RFI published in support of the Sec. 801 Pilot Program on IP [E]Valuation

EARLY & consistent effort to identify IP problems + working together to resolve → a mutually beneficial IP environment, allowing for robust competition and business opportunities



HOT TOPICS FOR DISCUSSION

- **Digital Engineering/Digital Acquisition and IP/contractual issues**
 - (e.g. Digital Delivery modes vs. Physical Delivery; Data rights)

- **Including IP considerations in the evolution to Digital Systems Engineering**

- **MOSA implementation and interface rights & access/delivery**
 - Interface Repositories & Index -- FY21 NDAA, Sec. 804(c)
 - DFARS Case 2019-D005 – draft revisions coming in CY22

- **Advanced/Automated manufacturing** (e.g. “Additive Manufacturing”) technical data and rights issues (e.g. "Maker files" - digital mfg "scripts" (data)).

- **How is System Engineering *affected* by IP? And Vice Versa?**
 - *Affected ... influenced ... informed ... dependent upon ...??*



QUESTIONS?

OSD IP CADRE CIVILIAN LEADERS & CONTACT INFO

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BACKUP SLIDES





THE OSD IP CADRE

POCs FOR THE CONTRACTOR SUPPORT TEAM

■ Rob Popovitch (Lead)

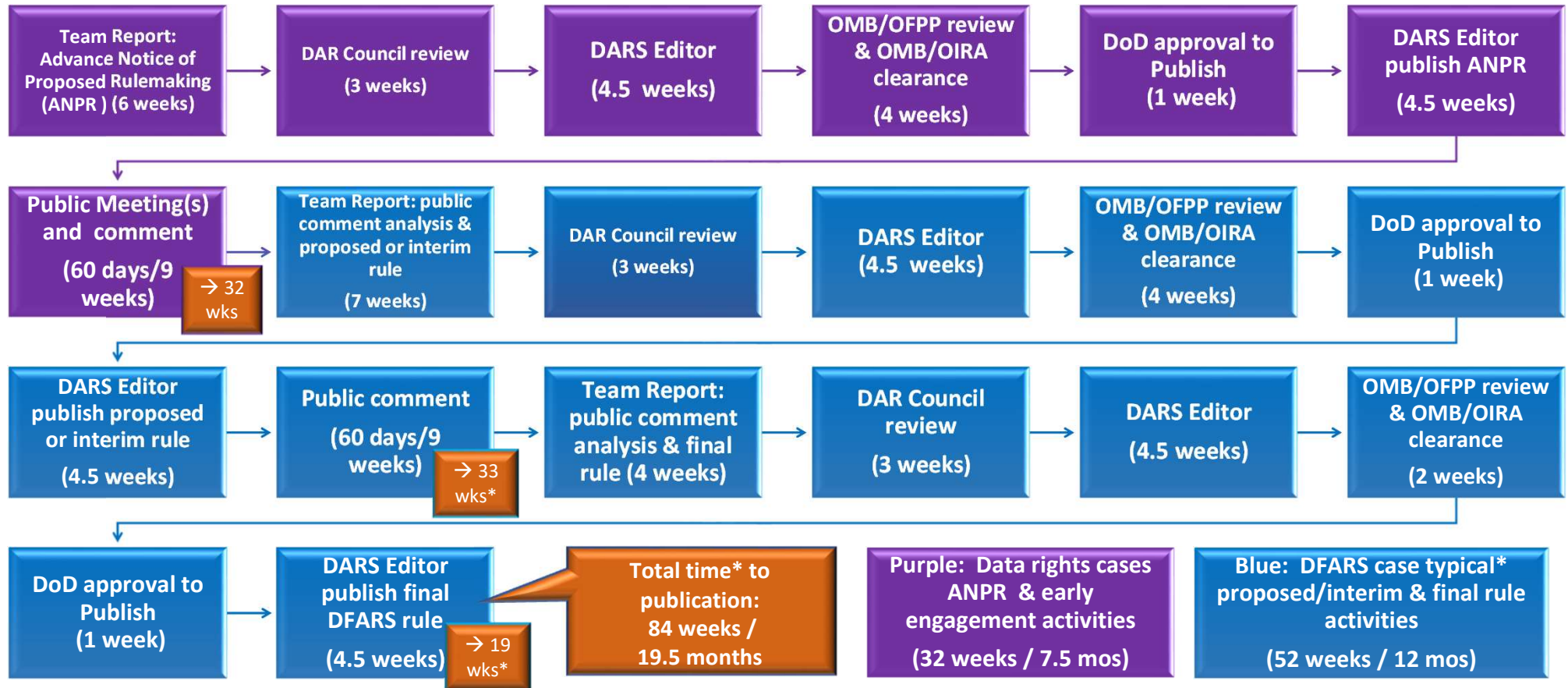
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DFARS Data Rights Cases Enhanced Engagement Expanded Time Line

NOTE: Individual cases may have longer or shorter timelines, depending on the complexity of the case.



* It is not yet clear whether the early engagement activities will reduce the time required for some elements in later stages of rulemaking



DoD INTELLECTUAL PROPERTY IMPLEMENTING POLICY – RELATED TO SYSTEMS ENGINEERING

Policy:

- The Department released its first **policy** on IP to support more effective approaches for acquisition and licensing of IP in October 2019 - **DoDI 5010.44**.

IP Cadre:

- A **cadre of IP experts** was established to facilitate the development of a competent and consistent approach across the Department for IP acquisition, licensing, and management.

Workforce:

- DAU is establishing an IP Community of Practice, doing a top-down review and update of IP coverage in existing curriculum, identifying needs for new IP content, and recently published an IP Credential for multiple career fields

Industry Engagement -- DFARS (Statutory) Revisions:

- Working seven DFARS statutory-revision cases in parallel, including publication of drafts and holding public meetings [to allow industry participation in the rule *drafting* stage](#)

IP Evaluation/Valuation Pilots:

- Coordinating OSD and MILDEP strategic planning for joint pilots to develop and assess mechanisms for IP evaluation, including use of commercial IP valuation models (Sec. 801, FY20 NDAA)
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IP CADRE KEY FOCUS AREAS

- **Modular Development & Licensing → Modular Open Systems Approaches (MOSA) . . . And if you don't have a crystal ball:**
 - DoD-Funded Development → Require Delivery Now, unless you have a clear, definitized, reason not to so do (~ business case analysis)
 - Privately-Funded Development → consider priced contract options, escrow, subscriptions or other access-only arrangements (be careful!)
- **Communicate and Negotiate with Industry**
 - Earlier, more frequently, and more robustly
 - Preferably during competition!!
- **Evaluate IP Deliverables and Rights during Source Selection → And during all sole source negotiations!**
- ***Theme: Time is of the Essence!*** *Government: You snooze, you lose. True story.*



IP CADRE KEY FOCUS AREAS

■ Technical Enablers: System Engineering

- Functional & Operational – Architecture & Modularity
- Digital Data Artifacts: Tech Data, Software design

The diagram illustrates a cyclical relationship between three key focus areas. A central red rounded rectangle is labeled "Work Breakdown Structure". A large red curved arrow originates from the left side of this rectangle and points upwards and to the left towards the "Technical Enablers" section. Another large red curved arrow originates from the right side of the rectangle and points downwards and to the right towards the "Business & Legal Enablers" section.

Work Breakdown Structure

■ Business & Legal Enablers: Intellectual Property

- Investment in technology development
- Return on Investment: through exclusive IP rights



ENTERPRISE KNOWLEDGE MODEL

- Tier 1 will enable Enterprise Knowledge Modeling
- The Enterprise Knowledge Model consists of agnostic modular domains (AAF, R&E, Joint Staff, OUSD Cyber, OUSD Intel, DCAPE, etc.) that are secure, tailored, and interoperable. APIs are used to transfer and share data between domains or between tiers (based on approved access) to conduct data analyses to support knowledge driven decision making.

