NIEM MILOPS

STAKEHOLDER ENGAGEMENT

Wednesday, 13 April 2022

AGENDA

Time	Topic	Presenter
1000-1010	Opening Remarks	Mrs. Katherine Escobar
1010-1020	Domain Way Forward	Mrs. Katherine Escobar
1020-1030	NMO Status	Mrs. Katherine Escobar
1030-1040	NBAC Status	Mr. Kamran Atri & Mr. Thomas Krul
1040-1050	NTAC Status	Mr. Tom Carlson
1050-1110	NASA use of NIEM	Mr. David Yergensen
1110-1125	Open Discussion	All
1125-1130	Closing Remarks	Mrs. Katherine Escobar

OPENING REMARKS / INTRODUCTIONS

Katherine Escobar

DOMAIN WAY FORWARD

- Transition from APAN to GitHub
- Domain Governance review
- Membership (audit and criteria)

NMO STATUS

Katherine Escobar

- Continue OASIS Transition
- NIEM Training – April 12-14 Sold Out
- National Defense University Presentation (4/4/22)
- State of Arizona Executive NIEM Brief (4/18/22)
- UAI ATT Presentation 4/21/22)
- DAMA Portland Chapter (5/19/22)
- National Science Foundation Open Knowledge Network Sprint (Mar – Jul 2022)
- Next ESC – June TBD
- MEP Builder Tool IOC
  - https://sourceforge.net/projects/niem-mep-builder/

NBAC STATUS

Kamran Atri & Thomas Krul

2022 CONTINUOUS PROGRESS

NBAC March 2022 Action Tracker

2022 NBAC ACTION TRACKER as of 03/08/2022

Priority Category	WBS	Action	Points of Contact	Due Date	Status	New/ Update
	4.1.4	Develop professional Asynchronous Technical Training Materials	KEscobar, TCarlson	Q2 & Q3 CY 22	Planned	New Mar 22
	4.2	NIEM as a Standard Designation/OASIS Transition Planning	Katherine Escobar			
	4.2.7	Develop OASIS Transition POA&M	Beth Smalley	CY 22	In Progress	
	4.2.8	Draft NIEM OASIS Charter	Shunda Woodhouse/Transition TT	CY 22	Draft Complete	
	5	NBAC/NTAC Colaboration	NBAC-NTAC Co-Chairs, NMO			
	5.1	Schedule Recurring Meetings	SSullivan	Q1 CY 22	Complete	Carry over from CY 21
5. Emerging Technolo	5.1	Revisit Status & Conduct Planning for CY 22	NBAC Co-Chairs & NMO			
	6.1	Define ET3 "Next Steps"	NBAC Co-Chairs/NMO	TBD	Planned	
6. Inte		Plan ITT 2021 Activiites/Deliverables	Thomas Krul, Katherine Escobar			
	6.1.1	Develop POA&M	Thomas Krul	TBD	Planned	
	6.1.2	Identify Satakeholers and conduct Meeting	Thomas Krul	TBD	Planned	
	6.1.3	Identify Next Steps - Western Canada Tiger Team	Thomas Krul	Q1 CY 22	Planned	
7. State Local Tribal Tiger Team (SL		Plan SLTT 2021 Activiites/Deliverables	SLTT Co-Chairs, Katherine Escobar, SSullivan			
	7.1	Develop 2021 Workplan	Wormeli/Phillips	Q1 CY 22	Planned	
8. NIEM Community Governance		Plan & Execute 2022 Annual Meeting	NBAC Co-Chairs NTAC Katherine Escobar, SSullivan			
	8.1.1	Schedule Planning Meeting	NBAC Co-Chairs, KEscobar, SSullivan	Q2 CY 22	Planned	
	8.1.2	Propose tentative dates	NBAC Co-Chairs, KEscobar, SSullivan	Q2 CY 22	Planned	
	8	Develop & publish POA&M	SSullivan	Q2 CY 22	Planned	
	8.2	NBAC 2022 Annual Report	Katherine Escobar, Ssullivan, NBAC Co-Chairs			
	8.2.1	Schedule Planning Meeting	NBAC Co-Chairs, KEscobar, SSullivan	Q4 CY 22	Planned	
	8.2.2	Develop & publish POA&M	SSullivan	Q4 CY 22	Planned	
	8.2.3	NMO, NTAC Co-Chair, NBAC Co-Chair, Lead Dev section 1st draft due to NMO/Sullivan	SSullivan	Q4 CY 22	Planned	
	8.2.4	Domain Inputs due to NMO/Sullivan	SSullivan	Q4 CY 22	Planned	
	8.2.5	Prepare 1st Draft	SSullivan	Q4 CY 22	Planned	
	8.3	Best of NIEM 2022	Katherine Escobar, SWoodhouse			
	8.3.1	Schedule Planning Meeting	NBAC Co-Chairs, KEscobar, SSullivan	6/1/22	Planned	
	8.3.2	Develop & publish POA&M	SWoodhouse	6/30/22	Planned	
	8.4	Update NBAC Governance Docs	NBAC Co-Chairs			
	8.4.1	Update NBAC SOP in prep for OASIS Transition	NBAC/NMO	CY 22	Planned	
	8.4.2	Update NBAC Charter in prep for OASIS Transition	NBAC/NMO	CY 22	Planned	
	8.4.3	Update DSA Template in prep for OASIS Transition	NBAC/NMO	CY 22	Planned	
	8.4.4	Update Domain Charter Template in prep for OASIS Transition	NBAC/NMO	CY 22	Planned	
9. 2022 W	9.1	Plan NBAC 2023 Workplan	NBAC Co-Chairs			
	9.1.1	Schedule NTAC-NBAC, NMO Work Plan Collaboration	NBAC, NTAC, NMO	Q2 CY 22	Planned	
	9.1.2	Present NBAC Workplan to	NBAC, NTAC, NMO	Q2 CY 22	Planned	
10. NBAC OASIS TRANSITION	10	Conduct Transition Planning & Execute	NBAC, NMO			
	10.1.1	Identify Tasks	NBAC/NMO	Q1 CY 22	Planned	
	10.1.2	Develop POA&M	NBAC/NMO	Q1 CY 22	Planned	
	10.1.3	Establish a Tiger Team for Transition Planning and Governance Docs	Co-Chairs	2/22/22	Planned	

- Briefed DHS Biometrics Executive Committee (BEC), ICE, TSA, USCG, DHS HC (OBIM). Biometrics domain.
- OASIS OPEN
- Transition Activities
- Assisting NIEM PMO in working through several activities.
- OASIS-NIM FAQ, Charter.
- Continue adding NIEM Domains Content through regular NIEM Releases…
- Reevaluating the IP Domain with the DHS CISA office IP taxonomy is being architected.
- Continue exploring SLTT through the tiger team. Next meeting is April 18th.

Tiger Team

Canada canada revenue agency

IHS Domain organization known as Employment and Social Development Canada (ESDC) Preparing to present at International Social Security Association (ISSA), in Estonia.

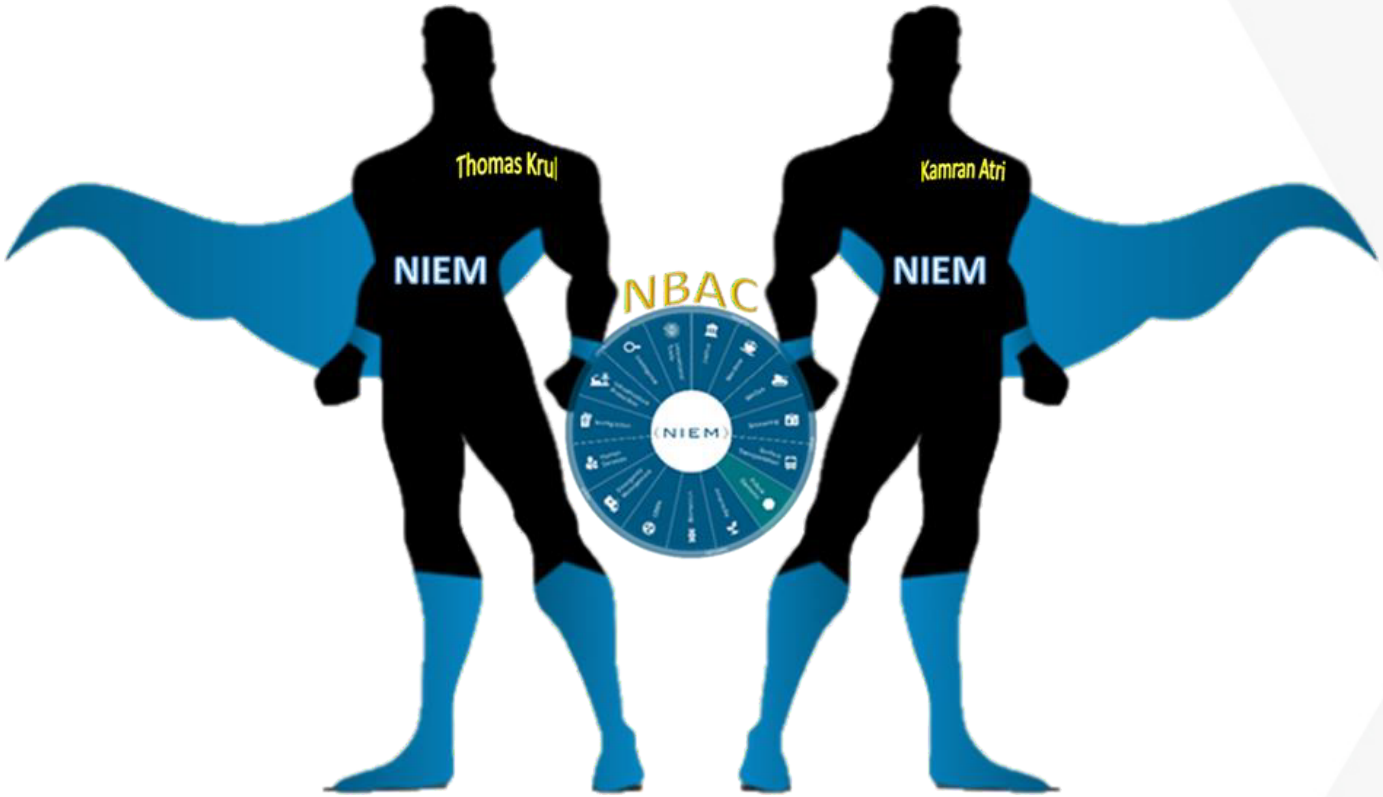
NBAC 2022 PRIORITIES

- Continue Maturing
  - IP Domain, IHS Domain, L&D Domain …
  - Strategy to Manage Mature Domains
  - Action Tracker, Manage releases, Advance NIEM Adoption, Support Domain Growth, Improve NIEM implementation,
  - Tiger teams, NIEM Community Governance, 2022 Work Plan, NBAC OASIS Transition.

- Leveraging Tiger Teams
  - Internationalization (continue discussion with NTAC and how best to approach internationalization)
  - USA State, Local, & Tribal (Onboarding Canada SLTT)

- Ensure NIEM Data Model Maturation

QUESTIONS



Canada

A4SAFE

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NTAC STATUS

Tom Carlson

CURRENT ACTIVITIES

- Common Model Format (CMF)
  - Multiple technology support (XML, JSON, RDF, ...)
  - Provide open-source CMF tools for developers
- NIEM 6 Architecture improvements
- These are interrelated topics
  - Changes to one impact the other and vice versa

NIEM COMMON MODEL FORMAT (CMF)

- Goal: Technology independence for data models
  - Before: Data models are represented as XML Schema documents
  - After: Data models are represented in the *Common Model Format (CMF)*
  - Unshackling NIEM from XML Schema's eccentricities
- Benefits
  - The NIEM model (core & domains) can be used by developers working with many data formats (JSON, RDF, etc.), and not just XML
  - A single message model can support many message formats
  - A NIEM message in one format can be translated into some other formats (XML to JSON, JSON to XML, etc.)

CMF STATUS & 2022 WORK PLAN

- Refine the metamodel / CMF as tool development proceeds
  - Iterative, one informs the other and vice versa
- Developing free, open-source metamodel / CMF tools
- Working now:
  - Metamodel / CMF version 2 or so
  - Convert NIEM-based XML schema to CMF
  - Convert CMF to NIEM XML schema documents
- Planned for 2022:
  - Convert CMF to ontology formalism (RDFS+OWL)
  - Convert CMF to JSON Schema
  - Convert CMF to UML diagrams (XMI)
  - Convert UML diagrams to CMF (limited by lack of XMI standardization)
- Other technologies, eventually: Google Protocol Buffer, Apache Avro, YAML, etc.

NIEM 6 ARCHITECTURE

- Major architectural changes happen only with a major release
- Next major release is NIEM 6.0 in 2023 (if so directed)
- Several significant changes in the works:
  - Replace XML Schema with CMF as the NIEM model representation
  - Simplify or replace metadata attributes
  - Handle ordered, repeated properties (replace @sequenceID)
  - Currently 14 other proposals
- For each proposal: consider, test, consult NBAC
- Looking good for a NIEM 6.0 release

NIEM MESSAGE SPECIFICATIONS

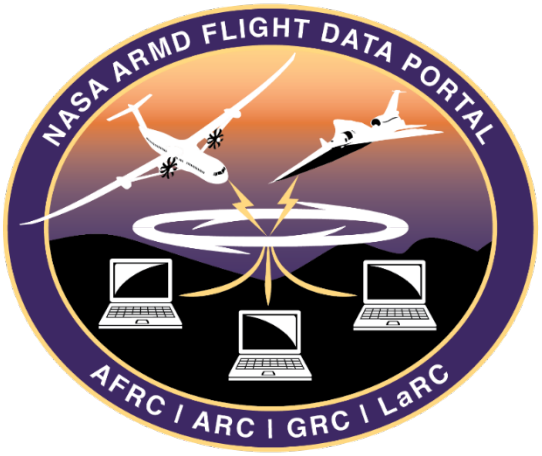
- Currently on hiatus currently, as CMF and related NIEM 6 architecture issues are swamping our bandwidth
- Simplified next generation of IEPDs
  - Convention over configuration
  - Simple cases made simple, while complex cases still supported
- *Guidance for NIEM Message Specifications* in preparation now
  - A “how-to” guide, not a technical specification
  - Formal specification to follow, if needed

NASA USE OF NIEM

David Yergensen

NASA – Armstrong Flight Research Center (AFRC)

ARMD Flight Data Portal (AFDP)



An Overview of NIEM CUI Metadata in AFDP

April 13, 2022

David Yergensen
AFDP Data Management Lead
michael.d.yergensen@nasa.gov
NASA Armstrong Flight Research Center

ARMD Flight Data Portal (AFDP) Project

The ARMD Flight Data Portal (AFDP) project is a capabilities challenge sub-project that is designed to directly support Flight Demonstrations and Capabilities (FDC) goals by enhancing flight research and test capabilities by improving the management of its flight test data.

AFDP Metadata Requirements

The **AFDP Metadata Specification (AMS)** XML Schema set is compliant with the NASA, government agency and industry requirements identified below.

- Executive Order (EO) 13556 – Controlled Unclassified Information (CUI)
- NASA Interim Directive (NID) 2810.135 – establishes Agency-wide requirements for the protection of Controlled Unclassified Information (CUI).
  - NPR 2810.XXX (will replace NID 2810.135)
  - NPD 2810 (new version pending)
- NASA Procedural Requirements 1441.1E, NPR 1441.1E, January 29, 2015, NASA Records Management Requirements.
- NASA Procedural Requirements 2200.2D, NPR 2200.2D, September 07, 2016, Requirements for Documentation, Approval and Dissemination of Scientific and Technical Information (STI).
- World Wide Web Consortium (W3C)
  - W3C XML Schema Definition Language v1.0 (Part 1: Structures, Part 2: Datatypes)
  - W3C XML Schema Versioning
  - W3C XLink v1.1

AMS XML Schema Set – Structure of Core and Extensible Metadata Layers

At a high level, the AMS model is composed of a core-layer and an extensible-layer. These layers reference several industry and government standards. The AMS model is shown below.

The top-level metadata categories for the AMS core layer and extended layer are shown here.

The AMS metadata categories leverage many industry and government standards; some of which include the following:

- XML Data Encoding Specification for Information Resource Marking (IC_IRM), Intelligence Community Technical Specification.
  - IRM was previously known as the DoD Discovery Metadata Specification [DDMS].
  - The Dublin Core Metadata Initiative (DCMI) is adopted in the IRM core layer.
  - The IC-IRM core structure is adopted and extend by the AMS (which inherits the Dublin Core standard).
- XML Data Encoding Specification for Access Rights Handling (IC-ARH), Intelligence Community Technical Specification.
- XML Data Encoding Specification for Information Security Markings (IC-ISM), Intelligence Community Technical Specification.
- XML Data Encoding Specification for Need To Know (NTK), Intelligence Community Technical Specification.
- National Information Exchange Model (NIEM) version 5.0 for Controlled Unclassified Information (CUI).
- International Standard ISO/IEC 11179-3:2003, Information Technology Metadata Registries – Part 3: Registry metamodel and basic attributes, published by the International Standard Organization.
- World Wide Web Consortium [W3C] – for Date and Time

AMS – Core Layer Categories	Standards
Security *	IC-ARH, IC-ISM, IC-NTK, NIEM CUI
MetacardInfo *	ISO: Dublin Core, IC-IRM
Identifier – *not required for AFDP Phase 1*	ISO: Dublin Core, IC-IRM
Language	ISO: Dublin Core, IC-IRM
Document Info *	ISO: Dublin Core, IC-IRM
Project Info *	NASA
Center Info *	NASA
Date Info	W3C: Date & Time
Contacts * [person, organization, company, unknown]	ISO: Dublin Core
Media	ISO: Dublin Core, IC-IRM
Keyword Info	ISO: Dublin Core, IC-IRM
STI *	NASA
Records Management *	NASA
AMS – Extended Layer Categories	

▪ AFRC
  ▪ Flight Test Data - source
  ▪ Flight Test Data - synthetic
  ▪ Platforms
▪ ARC
▪ GRC
▪ LaRC
	The AMS extended layer allows for Communities of Interest (COI) to reference metadata defined in other namespaces.
	
	* Denotes metadata that is mandatory or conditionally mandatory.

SECURITY METADATA - XML STRUCTURE

The `arh:Security` category has been modified to reference the NIEM `cui:DocumentMarkingMetadata` category, as shown in the image.

The `arh:Security` category provides the following capabilities:

`cui:DocumentMarkingMetadata`

This category contains the metadata used to identify

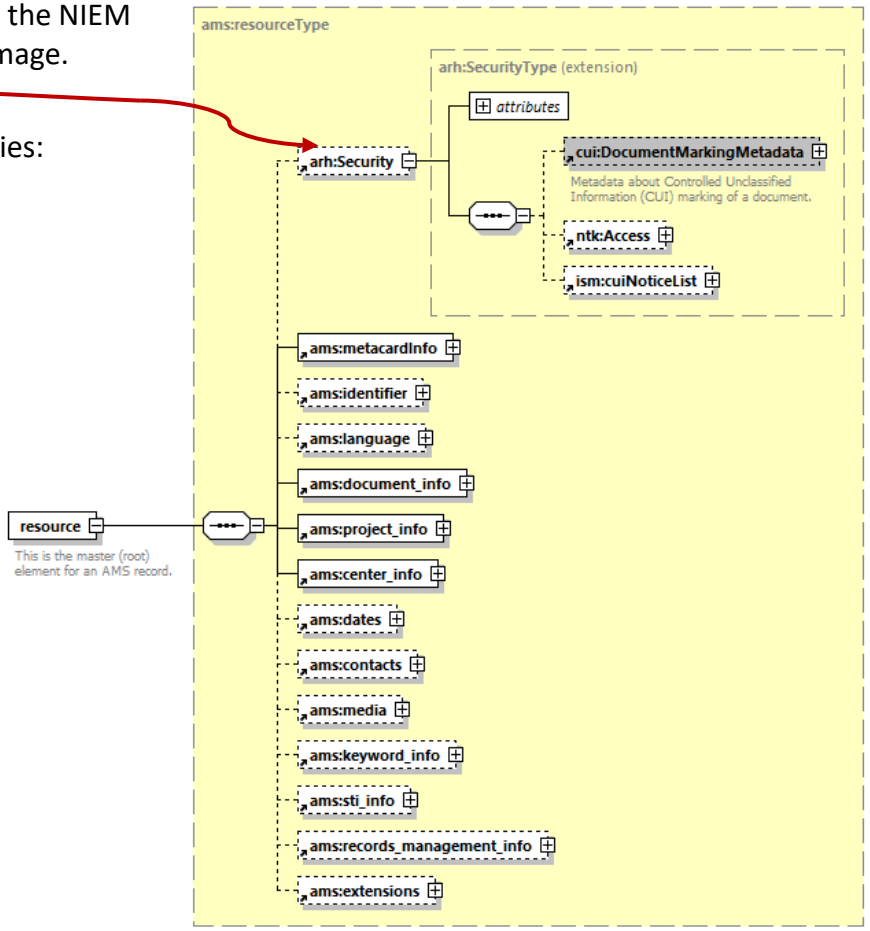
- CUI Banner Markings
- Designated Entity (controller)
- Decontrol Date

`ntk:Access`

- This is a future capability *(not implemented in AFDP Phase 1)*!
- This category may be used to assign group access to future document-types.

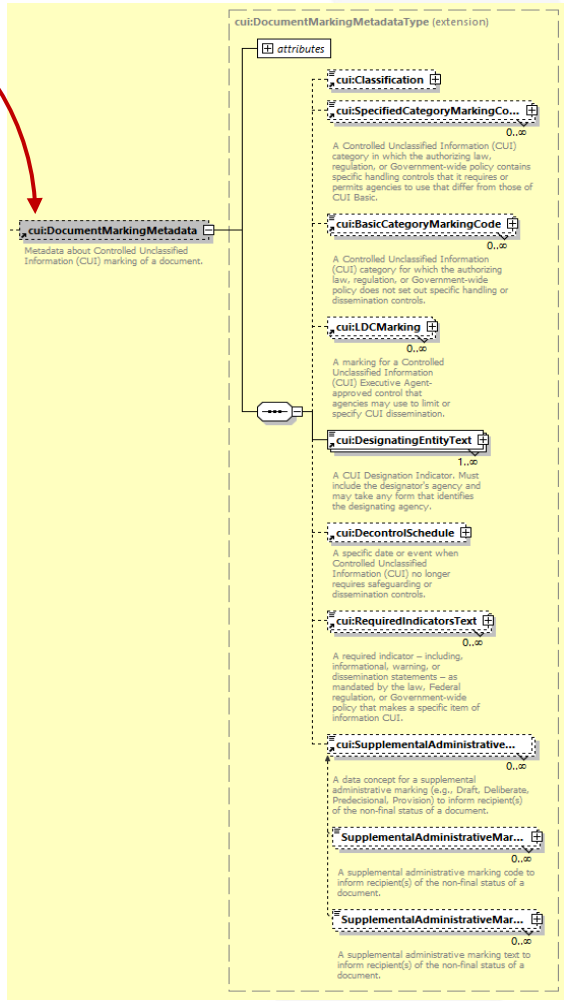
`ism:cuiNoticeList`

This category contains the metadata used to identify a CUI Notice, which contains a *warning* statement, *distribution* statement, and a *decontrol* statement.



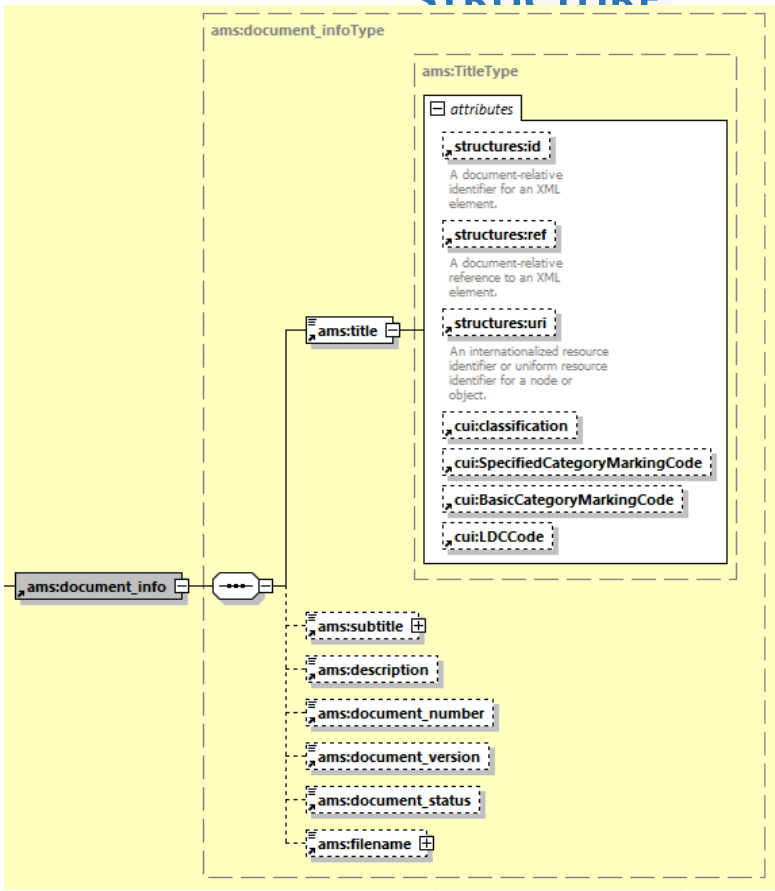
NIEM CUI DOCUMENT MARKING METADATA - XML STRUCTURE

The NIEM `cui:DocumentMarkingMetadata` category has been modified to include a *designation* element titled '`classification`. The values can be "U" Uncontrolled or "CUI" Controlled Unclassified Information.



CUSTOM NIEM CUI PORTION MARKING FOR AMS ELEMENTS - XML STRUCTURE

Child elements defined within each of the AMS core-layer metadata categories contain custom attributes for CUI portion marking.



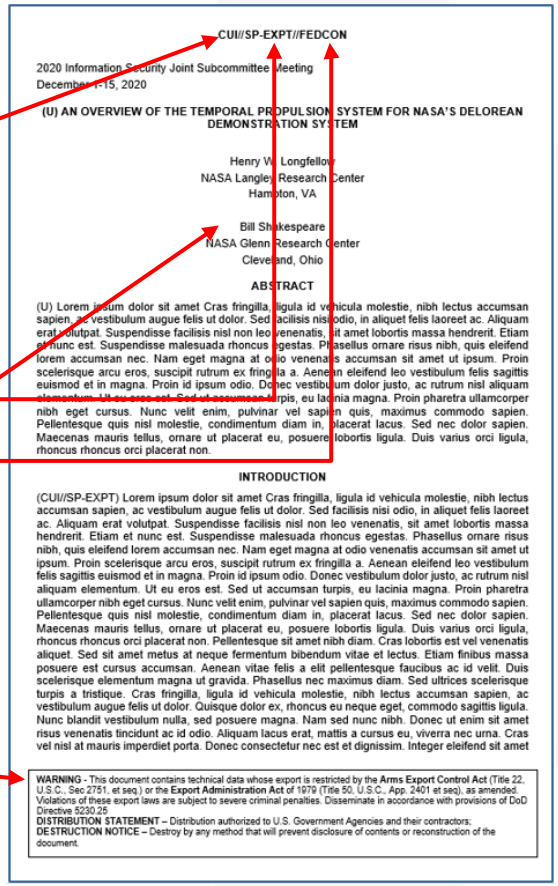
CUI BANNER AND ISM NOTICE METADATA

NIEM CUI Document Marking Metadata and ISM Notice Metadata

Required metadata is highlighted and used as follows:

- Yellow = CUI Indicator
- Green = CUI Type (Specified or Basic) and Category (SP-EXPT or EXPT)
- Blue = Limited Dissemination Control Marking (LDCM)
- Grey = Designated Entity
- Orange = Decontrol Date
- Purple = Notice

```
<arh:Security>
    <cui:DocumentMarkingMetadata>
        <cui:Classification>CUI</cui:Classification>
        <cui:SpecifiedCategoryMarkingCode>SP-EXPT</cui:SpecifiedCategoryMarkingCode>
        <cui:BasicCategoryMarkingCode>PROPIN</cui:BasicCategoryMarkingCode>
        <cui:LDCMarking>
            <cui:LDCCode>FEDCON</cui:LDCCode>
            <cui:LDCCountryCode>USA</cui:LDCCountryCode>
        </cui:LDCMarking>
        <cui:DesignatingEntityText>Last, First  X-59 PM email: projectPOC@email.com </cui:DesignatingEntityText>
        <cui:DecontrolSchedule>
            <cui:DecontrolDate>2041-12-31</cui:DecontrolDate>
        </cui:DecontrolSchedule>
    </cui:DocumentMarkingMetadata>
    <ism:cuiNoticeList>
        <ism:cuiNotice
            ism:noticeType="DoD-Dist-C"
            ism:noticeReason="EXPORT CONTROLLED">
            <ism:cuiNoticeText>
"WARNING - This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22. U.S.C., Sec
2751, et seq.) or the Export Administration Act of 1979 (Title 50. U.S.C. App. 2401 et seq), as amended.  Violations of these
export laws are subject to severe criminal penalties.  Disseminate in accordance with provisions of DoD Directive 5230.25.2
DISTRIBUTION STATEMENT - Distribution authorized to U.S. Government Agencies and their contractor;
DESTRUCTION NOTICE - Destroy by any method that will prevent disclosure of contents or reconstruction of the document."
            </ism:cuiNoticeText>
        </ism:cuiNotice>
    </ism:cuiNoticeList>
</arh:Security>
```



CUI//SP-EXPT//FEDCON

2020 Information Security Joint Subcommittee Meeting
December 1-15, 2020

(U) AN OVERVIEW OF THE TEMPORAL PROPULSION SYSTEM FOR NASA'S DELOREAN DEMONSTRATION SYSTEM

Henry W. Longfellow
NASA Langley Research Center
Hampton, VA

Bill Shakespeare
NASA Glenn Research Center
Cleveland, Ohio

ABSTRACT

(U) Lorem ipsum dolor sit amet Cras fringilla, ligula id vehicula molestie, nibh lectus accumsan sapien, ac vestibulum augue felis ut dolor. Sed facilisis nisi odio, in aliquet felis laoreet ac. Aliquam erat volutpat. Suspendisse facilisis nisl non leo venenatis, sit amet lobortis massa hendrerit. Etiam et nunc est. Suspendisse malesuada rhoncus egestas. Phasellus ornare risus nibh, quis eleifend lorem accumsan nec. Nam eget magna at odio venenatis accumsan sit amet ut ipsum. Proin scelerisque arcu eros, suscipit rutrum ex fringilla a. Aenean eleifend leo vestibulum felis sagittis euismod et in magna. Proin id ipsum odio. Donec vestibulum dolor justo, ac rutrum nisl aliquam elementum. Ut eu eros est. Sed ut accumsan turpis, eu lacinia magna. Proin pharetra ullamcorper nibh eget cursus. Nunc velit enim, pulvinar vel sapien quis, maximus commodo sapien. Pellentesque quis nisl molestie, condimentum diam in, placerat lacus. Sed nec dolor sapien. Maecenas mauris tellus, ornare ut placerat eu, posuere lobortis ligula. Duis varius orci ligula, rhoncus rhoncus orci placerat non.

INTRODUCTION

(CUI//SP-EXPT) Lorem ipsum dolor sit amet Cras fringilla, ligula id vehicula molestie, nibh lectus accumsan sapien, ac vestibulum augue felis ut dolor. Sed facilisis nisi odio, in aliquet felis laoreet ac. Aliquam erat volutpat. Suspendisse facilisis nisl non leo venenatis, sit amet lobortis massa hendrerit. Etiam et nunc est. Suspendisse malesuada rhoncus egestas. Phasellus ornare risus nibh, quis eleifend lorem accumsan nec. Nam eget magna at odio venenatis accumsan sit amet ut ipsum. Proin scelerisque arcu eros, suscipit rutrum ex fringilla a. Aenean eleifend leo vestibulum felis sagittis euismod et in magna. Proin id ipsum odio. Donec vestibulum dolor justo, ac rutrum nisl aliquam elementum. Ut eu eros est. Sed ut accumsan turpis, eu lacinia magna. Proin pharetra ullamcorper nibh eget cursus. Nunc velit enim, pulvinar vel sapien quis, maximus commodo sapien. Pellentesque quis nisl molestie, condimentum diam in, placerat lacus. Sed nec dolor sapien. Maecenas mauris tellus, ornare ut placerat eu, posuere lobortis ligula. Duis varius orci ligula, rhoncus rhoncus orci placerat non. Pellentesque sit amet nibh diam. Cras lobortis est vel venenatis aliquet. Sed sit amet metus at neque fermentum bibendum vitae et lectus. Etiam finibus massa posuere est cursus accumsan. Aenean vitae felis a elit pellentesque faucibus ac id velit. Duis scelerisque elementum magna ut gravida. Phasellus nec maximus diam. Sed ultrices scelerisque turpis a tristique. Cras fringilla, ligula id vehicula molestie, nibh lectus accumsan sapien, ac vestibulum augue felis ut dolor. Quisque dolor ex, rhoncus eu neque eget, commodo sagittis ligula. Nunc blandit vestibulum nulla, sed posuere magna. Nam sed nunc nibh. Donec ut enim sit amet risus venenatis tincidunt ac id odio. Aliquam lacus erat, mattis a cursus eu, viverra nec urna. Cras vel nisl at mauris imperdiet porta. Donec consectetur nec est et dignissim. Integer eleifend sit amet

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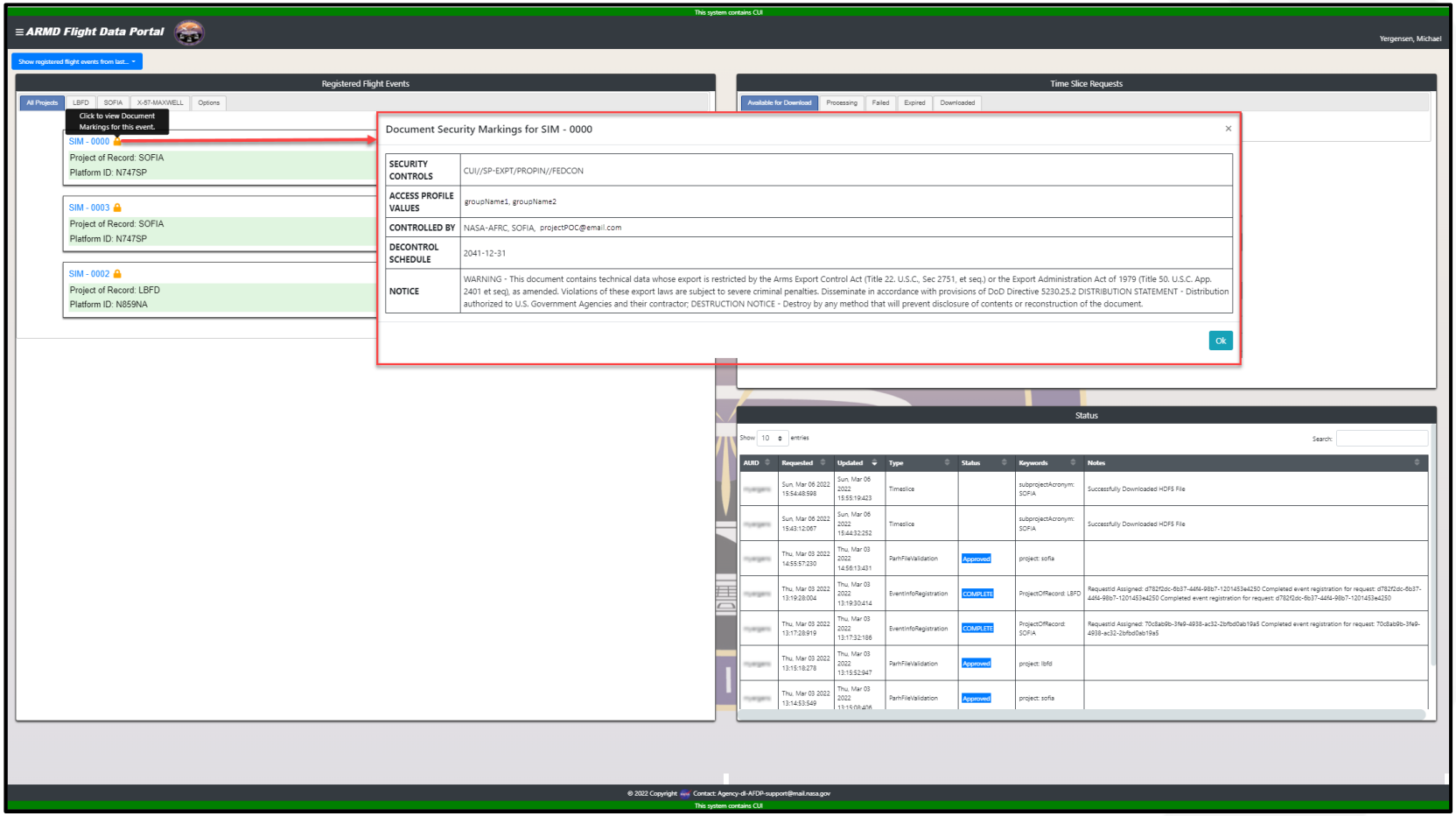
DISTRIBUTION STATEMENT – Distribution authorized to U.S. Government Agencies and their contractors;
DESTRUCTION NOTICE – Destroy by any method that will prevent disclosure of contents or reconstruction of the document.

EXAMPLE: HOW CUI DOCUMENT MARKINGS AND NOTICE ARE RENDERED IN AFDP

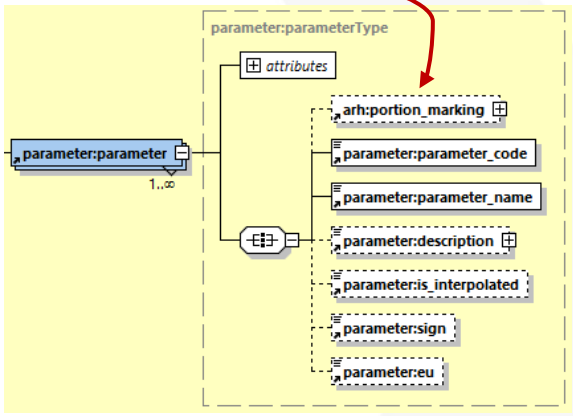
The image below provides an example showing how AFDP renders CUI Document Markings for flight events.



PARAMETER ACCESS RIGHTS HANDLING (PARH)

AFDP implements PARH to appropriately mark and restrict access to sensitive flight test parameter data.

The *custom* `arh:portion_marking` category provides the following capabilities:



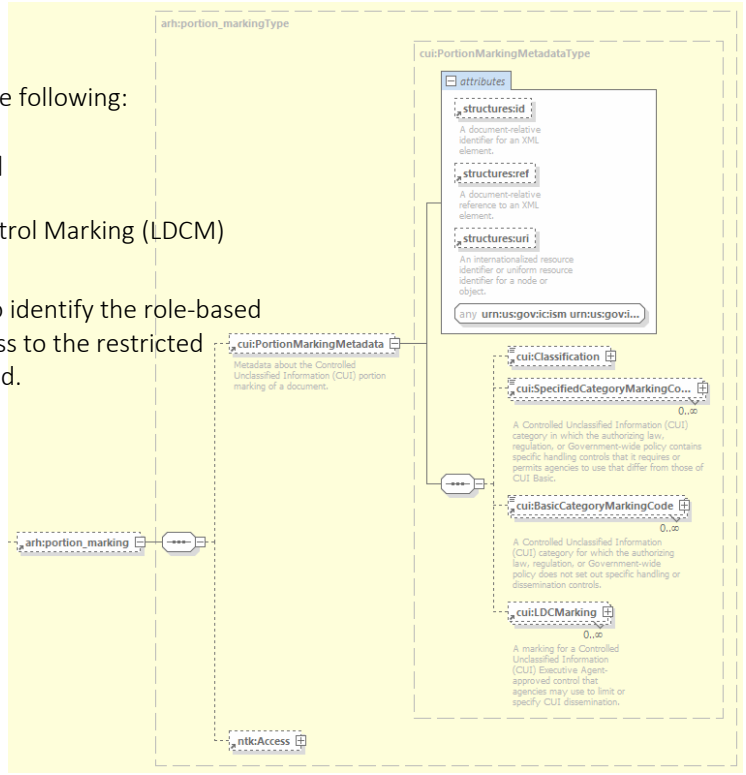
`cui:PortionMarkingMetadata`

This category contains metadata used for the following:

- CUI indicator
- Identify the CUI type [Basic | Specified]
- Identify CUI category
- Identify the Limited Distribution Control Marking (LDCM)

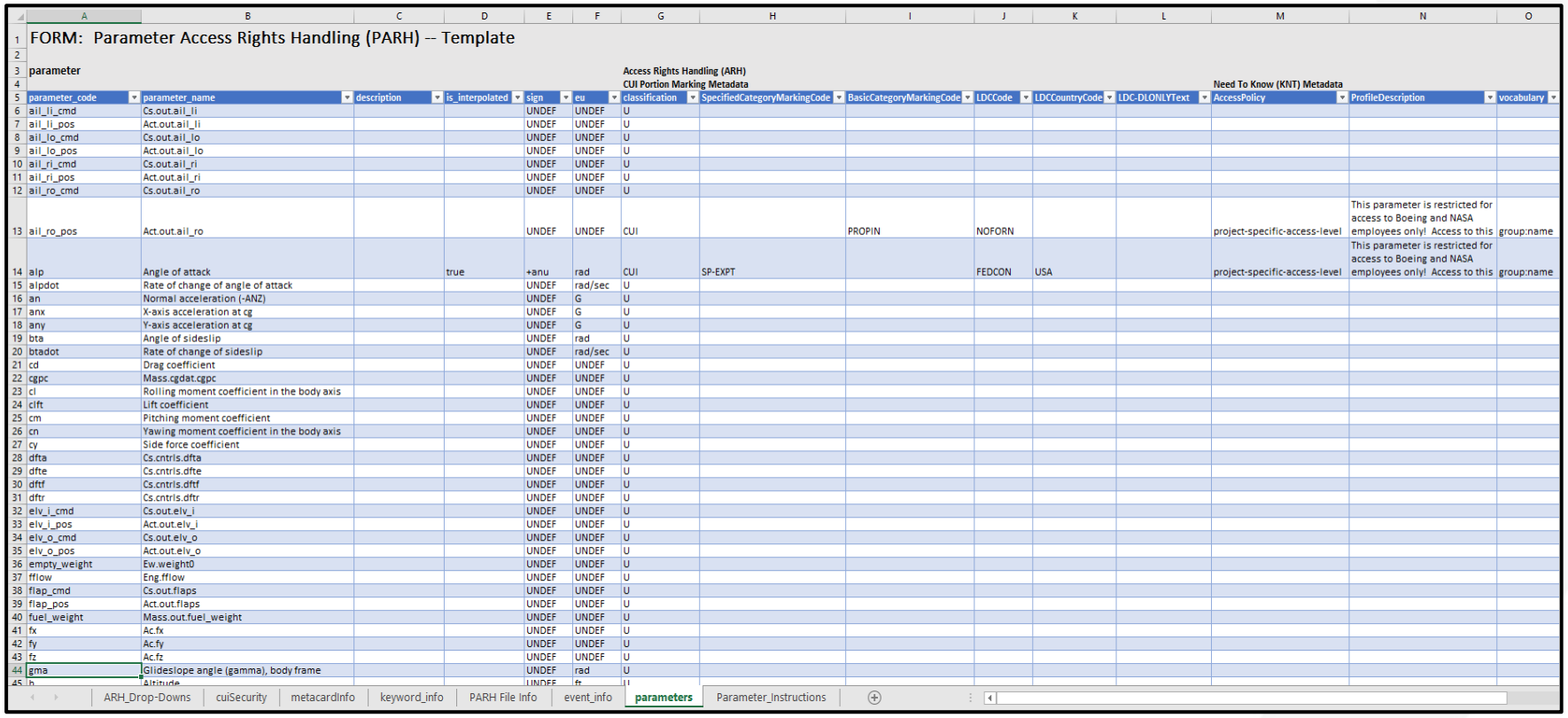
`ntk:Access`

This category contains the metadata used to identify the role-based access control (RBAC) group to receive access to the restricted parameter to which this metadata is assigned.



PARH MS EXCEL TEMPLATE

A **Parameter Access Rights Handling (PARH) Template** was developed in MS Excel. This provides an easy method for Project Managers to identify all flight parameters to be used for a project (aircraft/platform), to assign appropriate CUI portion marks, and to assign the appropriate role-based access control (RBAC) group to be granted permissions to access data for the restricted parameter.



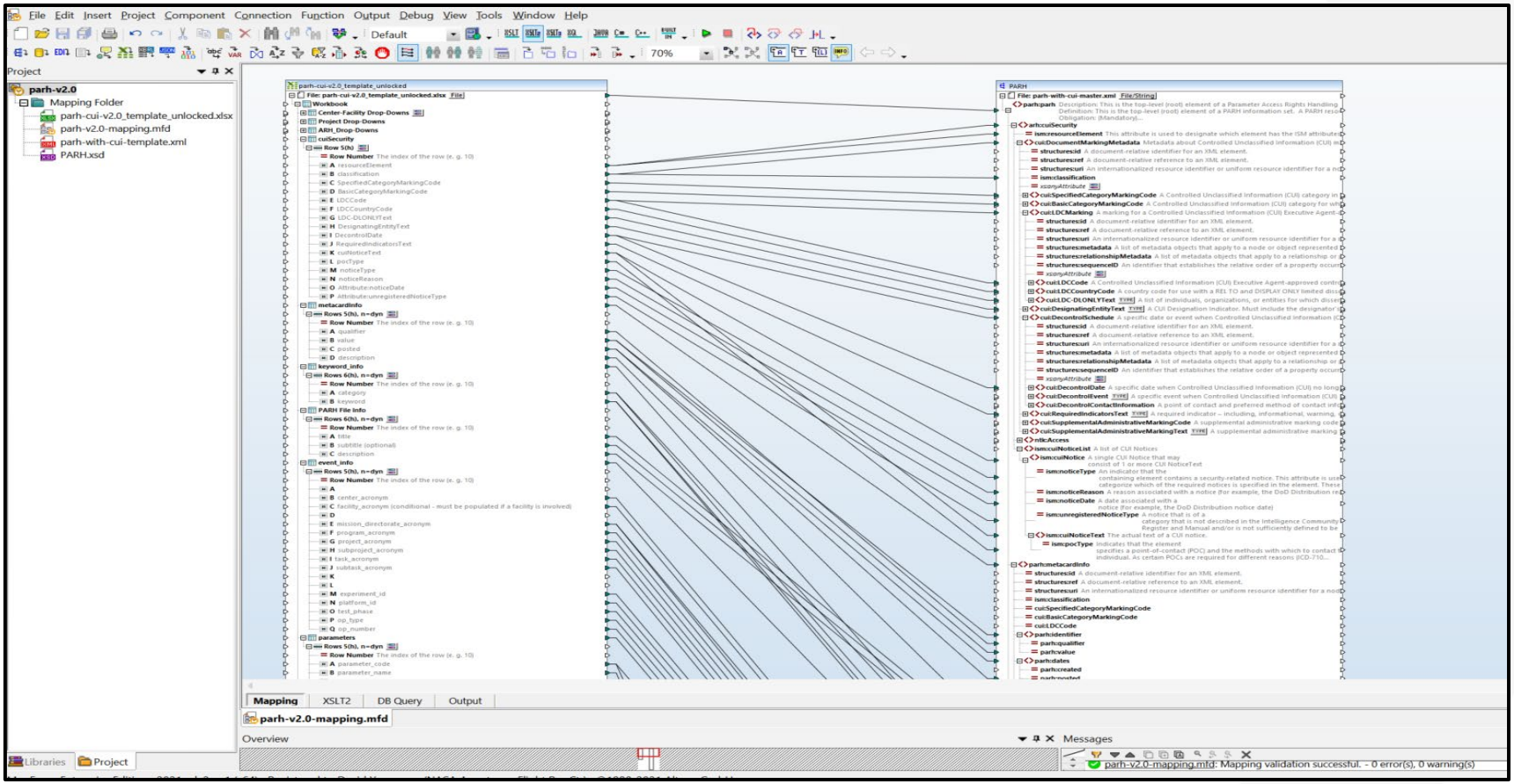
FORM: Parameter Access Rights Handling (PARH) -- Template

	parameter						Access Rights Handling (ARH) CUI Portion Marking Metadata						Need To Know (KNT) Metadata		
5	parameter_code	parameter_name	description	is_interpolated	sign	eu	classification	SpecifiedCategoryMarkingCode	BasicCategoryMarkingCode	LDCCode	LDCCountryCode	LDC-DLONLYText	AccessPolicy	ProfileDescription	vocabulary
6	ail_li_cmd	Cs.out.ail_li			UNDEF	UNDEF	U								
7	ail_li_pos	Act.out.ail_li			UNDEF	UNDEF	U								
8	ail_lo_cmd	Cs.out.ail_lo			UNDEF	UNDEF	U								
9	ail_lo_pos	Act.out.ail_lo			UNDEF	UNDEF	U								
10	ail_ri_cmd	Cs.out.ail_ri			UNDEF	UNDEF	U								
11	ail_ri_pos	Act.out.ail_ri			UNDEF	UNDEF	U								
12	ail_ro_cmd	Cs.out.ail_ro			UNDEF	UNDEF	U								
13	ail_ro_pos	Act.out.ail_ro			UNDEF	UNDEF	CUI		PROPIN	NOFORN			project-specific-access-level	This parameter is restricted for access to Boeing and NASA employees only! Access to this	group:name
14	alp	Angle of attack		true	+anu	rad	CUI	SP-EXPT		FEDCON	USA		project-specific-access-level	This parameter is restricted for access to Boeing and NASA employees only! Access to this	group:name
15	alpdot	Rate of change of angle of attack			UNDEF	rad/sec	U								
16	an	Normal acceleration (-ANZ)			UNDEF	G	U								
17	anx	X-axis acceleration at cg			UNDEF	G	U								
18	any	Y-axis acceleration at cg			UNDEF	G	U								
19	bta	Angle of sideslip			UNDEF	rad	U								
20	btadot	Rate of change of sideslip			UNDEF	rad/sec	U								
21	cd	Drag coefficient			UNDEF	UNDEF	U								
22	cgpc	Mass.cgdat.cgpc			UNDEF	UNDEF	U								
23	cl	Rolling moment coefficient in the body axis			UNDEF	UNDEF	U								
24	clft	Lift coefficient			UNDEF	UNDEF	U								
25	cm	Pitching moment coefficient			UNDEF	UNDEF	U								
26	cn	Yawing moment coefficient in the body axis			UNDEF	UNDEF	U								
27	cy	Side force coefficient			UNDEF	UNDEF	U								
28	dfta	Cs.cntrls.dfta			UNDEF	UNDEF	U								
29	dfte	Cs.cntrls.dfte			UNDEF	UNDEF	U								
30	dftf	Cs.cntrls.dftf			UNDEF	UNDEF	U								
31	dftr	Cs.cntrls.dftr			UNDEF	UNDEF	U								
32	elv_i_cmd	Cs.out.elv_i			UNDEF	UNDEF	U								
33	elv_i_pos	Act.out.elv_i			UNDEF	UNDEF	U								
34	elv_o_cmd	Cs.out.elv_o			UNDEF	UNDEF	U								
35	elv_o_pos	Act.out.elv_o			UNDEF	UNDEF	U								
36	empty_weight	Ew.weight0			UNDEF	UNDEF	U								
37	fflow	Eng.fflow			UNDEF	UNDEF	U								
38	flap_cmd	Cs.out.flaps			UNDEF	UNDEF	U								
39	flap_pos	Act.out.flaps			UNDEF	UNDEF	U								
40	fuel_weight	Mass.out.fuel_weight			UNDEF	UNDEF	U								
41	fx	Ac.fx			UNDEF	UNDEF	U								
42	fy	Ac.fy			UNDEF	UNDEF	U								
43	fz	Ac.fz			UNDEF	UNDEF	U								
44	gma	Glideslope angle (gamma), body frame			UNDEF	rad	U								
45	h	Altitude			UNDEF	ft	U								

ARH_Drop-Downs | cuiSecurity | metacardInfo | keyword_info | PARH File Info | event_info | parameters | Parameter_Instructions

PARH MAPFORCE – TRANSFORMATION MAP FILE

This screenshot shows a diagram of the mapping of metadata between the PARH MS Excel Template and the XML Schema. This will transform the MS Excel data to XML format; for assignment to flight events in AFDP.



EXAMPLE: TRANSFORMED PARH XML OUTPUT

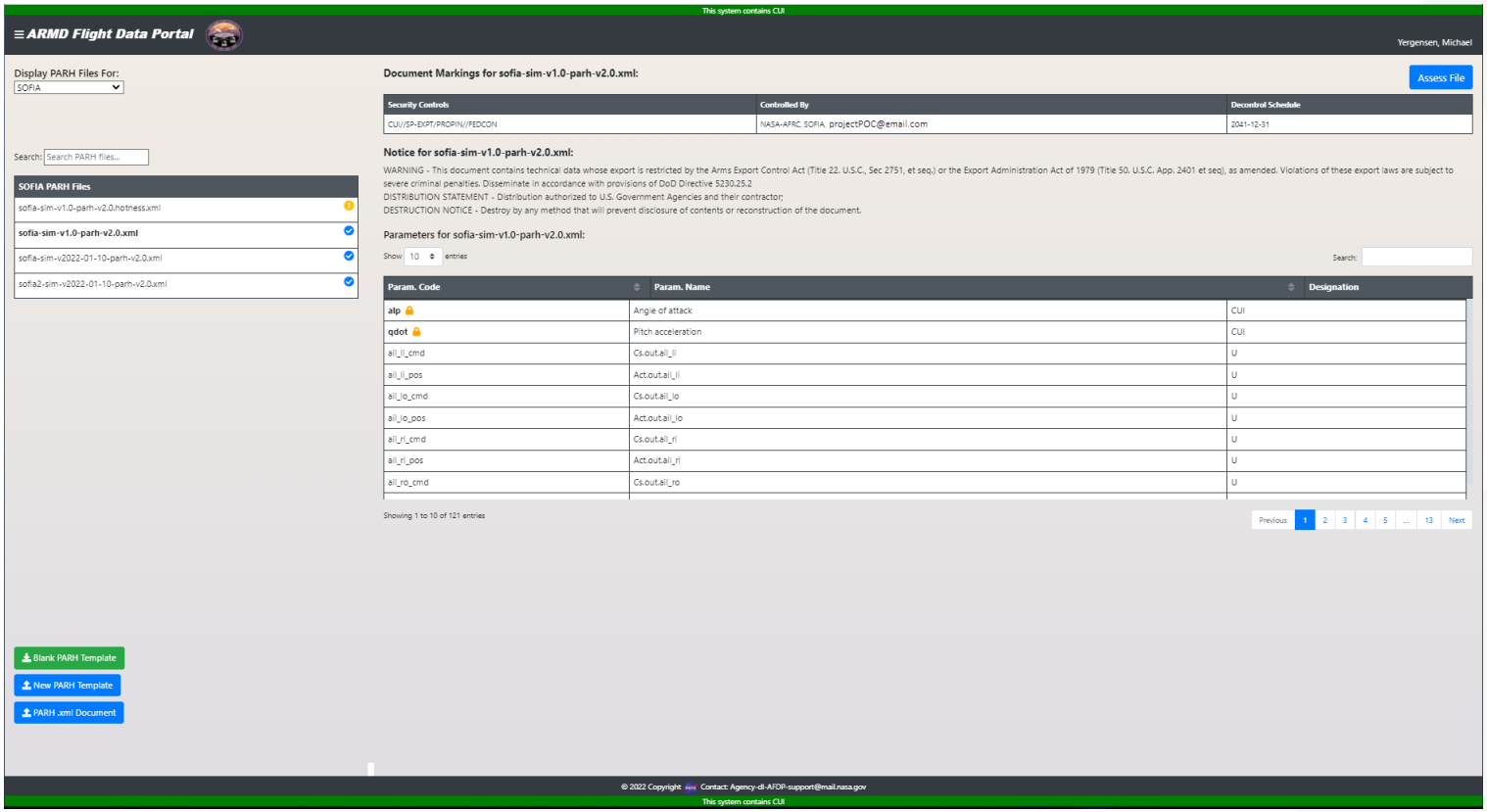
Below is a snippet of the PARH XML output from the MapForce application. This is an example of the XML metadata identifying a restricted flight parameter "Angle of attack (alp)". In this example, we see the following:

- CUI portion marking metadata
- Need To Know (NTK) Access metadata
- Parameter details metadata

```
<parh:parameter>
   <arh:portion_marking>
      <cui:PortionMarkingMetadata>
         <cui:Classification>CUI</cui:Classification>
         <cui:SpecifiedCategoryMarkingCode>SP-EXPT</cui:SpecifiedCategoryMarkingCode>
         <cui:LDCMarking>
            <cui:LDCCode>FEDCON</cui:LDCCode>
         </cui:LDCMarking>
      </cui:PortionMarkingMetadata>
      <ntk:Access>
         <ntk:RequiresAnyOf>
            <ntk:AccessProfileList>
               <ntk:AccessProfile>
                  <ntk:AccessPolicy>project-specific-access</ntk:AccessPolicy>
                  <ntk:ProfileDes>This is an example parameter designated with CUI SPECIFIED category of: Export Controlled.
                  This parameter is restricted for viewing by members of the test group named:  groupName1</ntk:ProfileDes>
                  <ntk:AccessProfileValue ntk:vocabulary="group:name">groupName1</ntk:AccessProfileValue>
               </ntk:AccessProfile>
            </ntk:AccessProfileList>
         </ntk:RequiresAnyOf>
      </ntk:Access>
   </arh:portion_marking>
   <parh:parameter_code>alp</parh:parameter_code>
   <parh:parameter_name>Angle of attack</parh:parameter_name>
   <parh:sign>+anu</parh:sign>
   <parh:units>rad</parh:units>
</parh:parameter>
```

PARH REGISTRATION

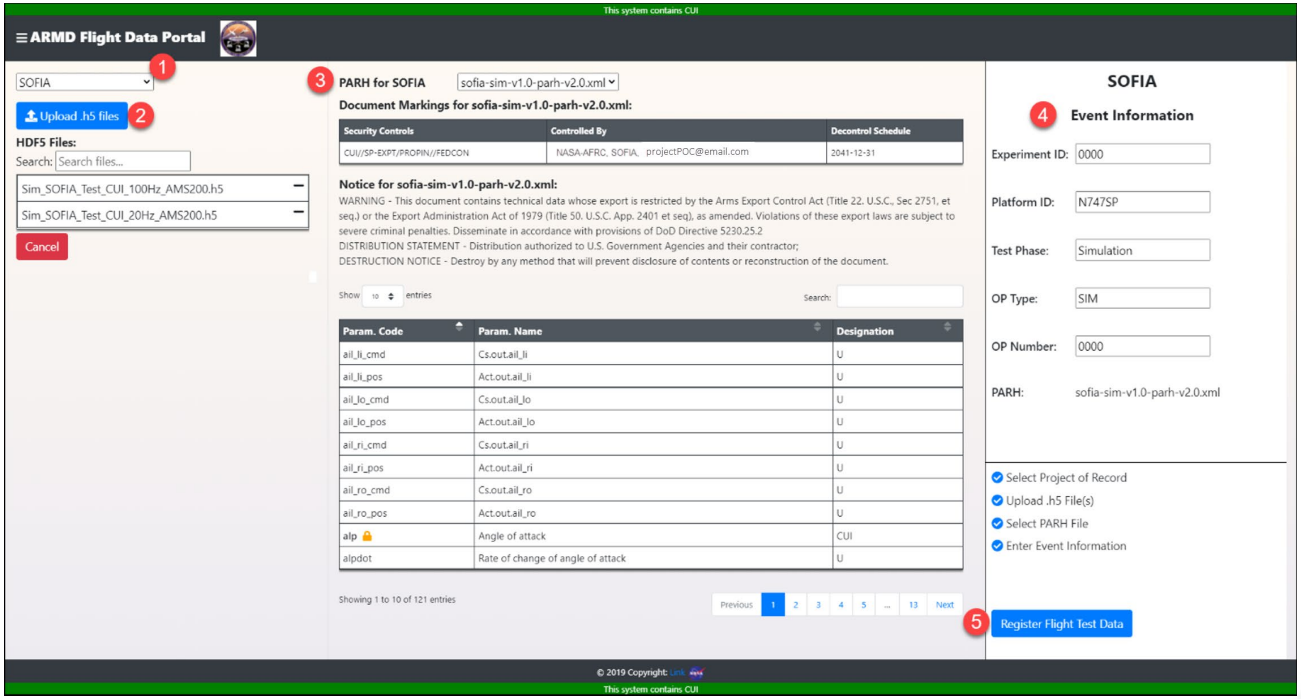
A PARH XML must be registered for each project of record. The example below shows how AFDP renders a registered PARH XML file. This online rendering is much easier (than viewing XML) for a Project Manager to view, understand, and verify for use.



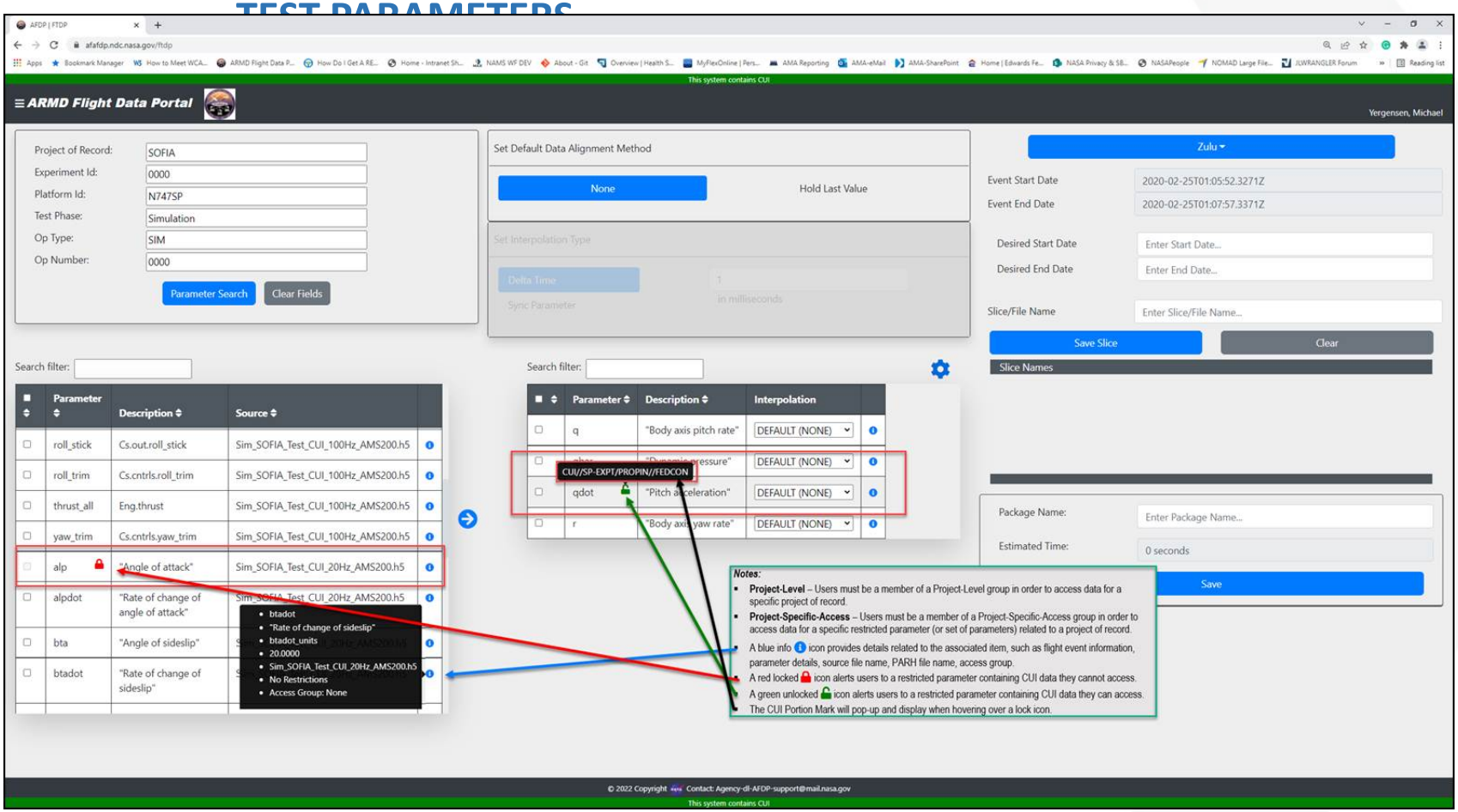
EVENT INFORMATION REGISTRATION

Flight data is stored in Hierarchical Data Format (HDF5) files. A single HDF5 data file can contain many GBs of data. Flight Event Registration consists of the following:

1. **Project of Record** – Select the project of record associated with the flight event and flight test data (FTD) files being registered.
2. **Flight Test Data (FTD)** – Select the FTD files to be registered with the flight event.
3. **Parameter Access Rights Handling (PARH)** – Select the PARH file to be assigned to the flight event and associated FTD files for data validation and implementation of required security markings and access rights handling.
4. **Event Information** – Enter the Event Information values for the flight event.
5. **Register Flight Test Data** – Click the button to complete the process.



EXAMPLE: HOW AFDP RENDERS CUI PORTION MARKS AND IMPLEMENTS ACCESS RIGHTS HANDLING TO DATA IN RESTRICTED FLIGHT TEST PARAMETERS



OPEN DISCUSSION / CLOSING REMARKS

Next Meeting Wednesday May 11, 2022 @ 1000

Closing Remarks

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