External Data Interface Standards (EDIS) Exchange

Collaboration Session #2

January 20, 2010

U.S. Citizenship and Immigration Services

EDIS Exchange Meeting Objectives

Ms. Mary Herrmann, Office of Public Engagement

1. Review the concept of operation and the development and delivery schedule of EDIS

2. Introduce the immigration benefit request intake process

3. Understand the system registration process and security requirements

4. Discuss the NIEM IEPD Process and Artifacts

5. Collect feedback and input from stakeholders on all the topics discussed

> *We encourage you to ask questions and provide comments at any time during this meeting.*

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Review:
What is USCIS Transformation and EDIS Effort?

Ms. Karen White

USCIS Office of Transformation Coordination / Case Management

U.S. Citizenship and Immigration Services

What is the USCIS Transformation effort?

- A multi-year effort to improve the way USCIS operates by moving the organization from manual, paper-based processes to an easy-to-use, electronic system.

- More transparent organization that simplifies the process of applying for and delivering benefits.

- Updated IT systems to deliver enhanced customer service.

- Enhanced way to deliver services to immigration benefit seekers, reducing the burden on stakeholders.

- These changes will be developed and rolled out incrementally over several years, but the development of standards start now.

USCIS Transformation will change the way the Agency does business to create a more transparent, efficient and customer focused organization.

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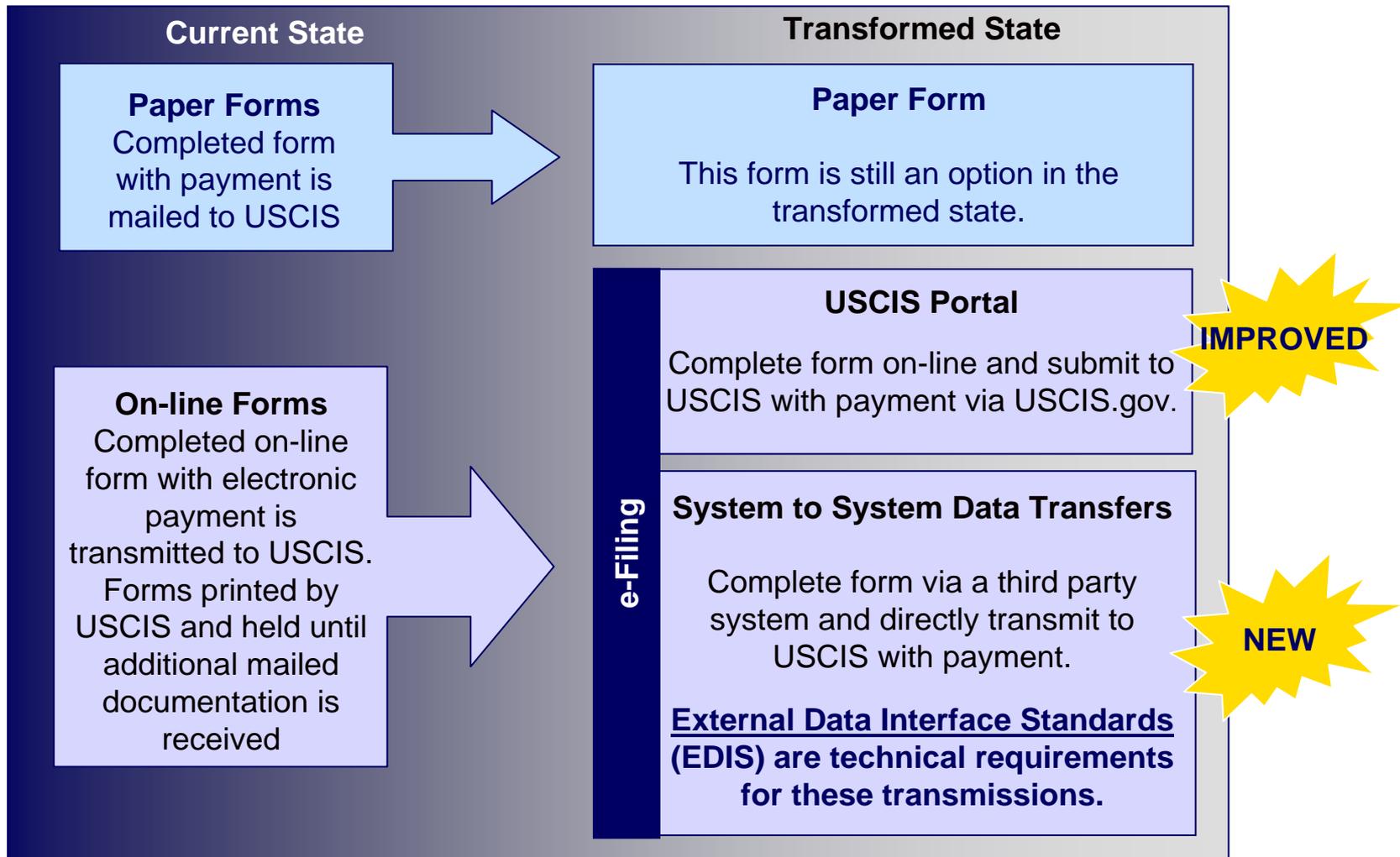
What are the benefits of Transformation?

- **Flexible:** Allows customers to submit, manage, and track their benefit applications in one place through secure, personalized accounts.

- **Secure:** Increased precision with identity management. Electronic submission of applications increases security.

- **User-Friendly:** The new system is designed around user (e.g., customer and employee) needs and preferences.

- **Automated:** Many of today's manual processes will be revised to reduce the burden on stakeholders (e.g., customers, employees).

- **Transparent:** Users will have easier access to important information in the new system

- **Integrated:** The new system will connect with other agency (e.g., DOS, DOL) systems to exchange and validate data.

USCIS Transformation will strengthen the Agency's mission and meet the demands of the changing immigration environment.

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Under USCIS Transformation, third parties can directly submit forms through system to system interfaces.

Current State	Transformed State

Paper Forms
Completed form with payment is mailed to USCIS

→

Paper Form

This form is still an option in the transformed state.

e-Filing

USCIS Portal

Complete form on-line and submit to USCIS with payment via USCIS.gov.

IMPROVED

On-line Forms
Completed on-line form with electronic payment is transmitted to USCIS. Forms printed by USCIS and held until additional mailed documentation is received

→

System to System Data Transfers

Complete form via a third party system and directly transmit to USCIS with payment.

External Data Interface Standards (EDIS) are technical requirements for these transmissions.

NEW

External Data Interface Standards (EDIS) provide guidelines for system to system e-Filing transmissions.

Understanding the Concept of Operations for EDIS and its Schedule
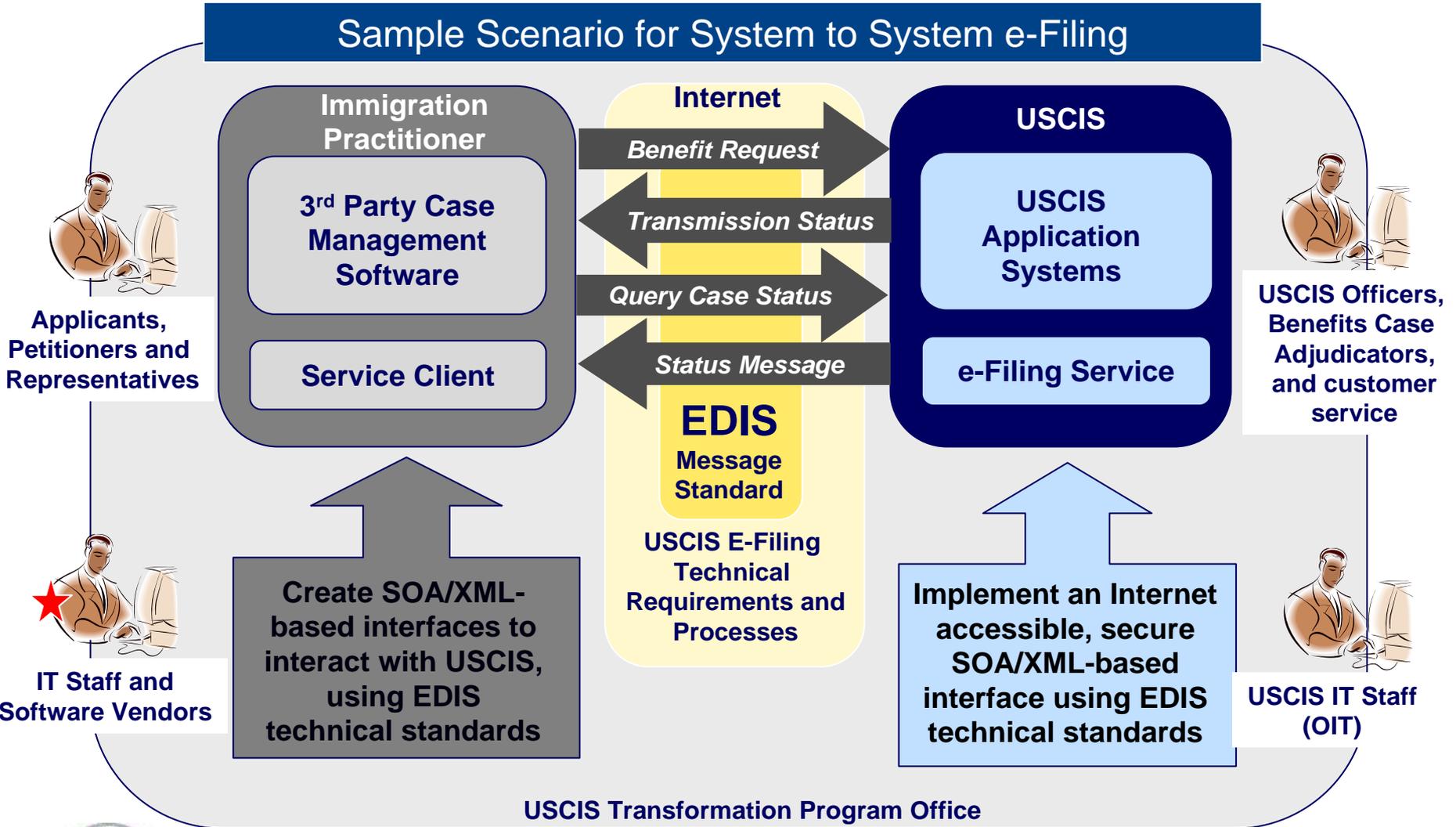
Ms. Karen White

USCIS Office of Transformation Coordination

Case Management

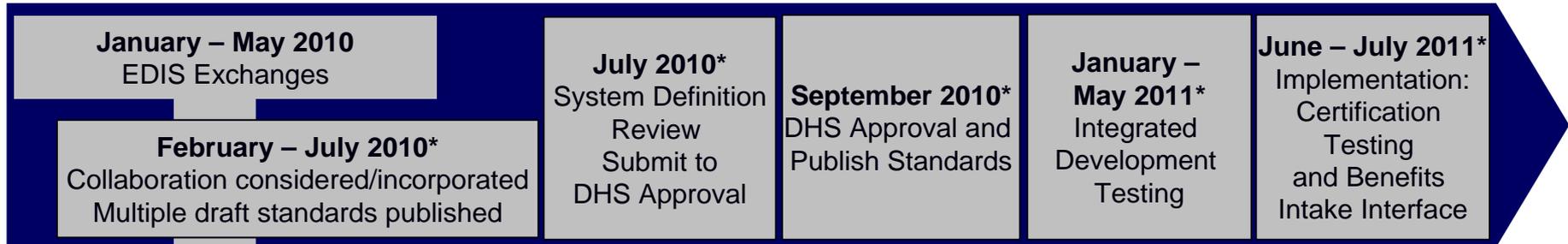**U.S. Citizenship and Immigration Services**

Software vendors are the primary customers for collaboration sessions and development of EDIS.

Sample Scenario for System to System e-Filing

Applicants, Petitioners and Representatives

IT Staff and Software Vendors

Immigration Practitioner

3rd Party Case Management Software

Service Client

Create SOA/XML-based interfaces to interact with USCIS, using EDIS technical standards

Internet

Benefit Request →

← *Transmission Status*

Query Case Status →

← *Status Message*

EDIS Message Standard

USCIS E-Filing Technical Requirements and Processes

USCIS

USCIS Application Systems

e-Filing Service

Implement an Internet accessible, secure SOA/XML-based interface using EDIS technical standards

USCIS Officers, Benefits Case Adjudicators, and customer service

USCIS IT Staff (OIT)

USCIS Transformation Program Office

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★ **Primary "Users" as the focus of these Exchange Sessions**

Collaboration sessions wrap up in May and implementation is targeted for July 2011.

January – May 2010 EDIS Exchanges	July 2010* System Definition Review Submit to DHS Approval	September 2010* DHS Approval and Publish Standards	January – May 2011* Integrated Development Testing	June – July 2011* Implementation: Certification Testing and Benefits Intake Interface
February – July 2010* Collaboration considered/incorporated Multiple draft standards published				

Dates and Topics for EDIS Exchanges (2010)

January 20	February 18*	March 22*	April 21*	May 19*
Stakeholder Roles	EDIS IEPD Exchange Model	Business Rules	Supporting Schemas	IEPD Review
Business Processes and Forms	Service Architecture	Core Schema	IEPD Packaging	Certification Testing Processes and Registration
Registration and Security		NIEM Standard Mappings		Schema Validation
NIEM Artifacts and Process				

*All dates subject to change.

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Understanding the System to System Benefit Request Intake Process
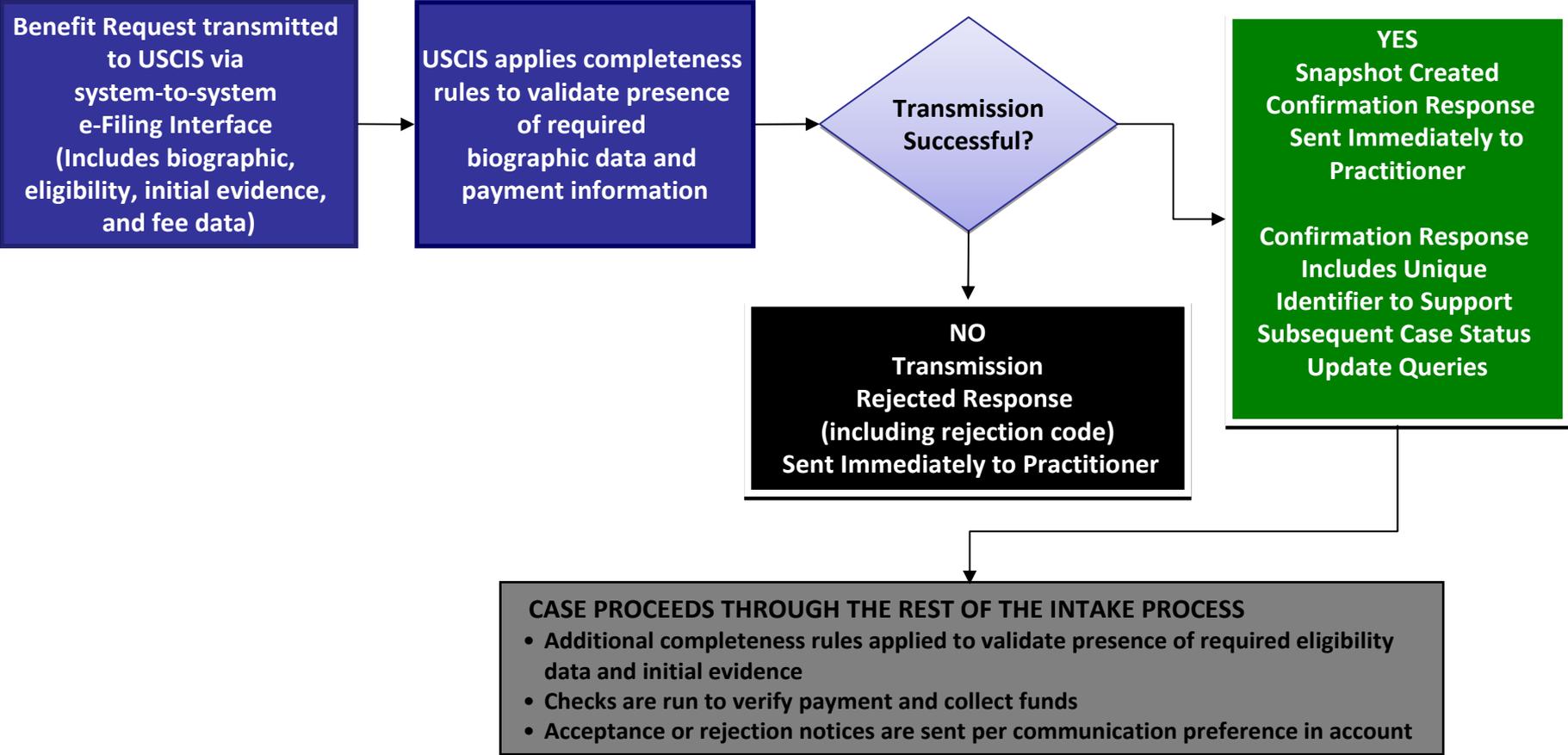
Ms. Diane Kuhla

Office of Transformation Coordination

Solutions Architect Team

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System to system e-Filing applies to the intake of benefit requests and the communication of specific status messages.

Benefit Request transmitted to USCIS via system-to-system e-Filing Interface (Includes biographic, eligibility, initial evidence, and fee data)

→ **USCIS applies completeness rules to validate presence of required biographic data and payment information**

→ **Transmission Successful?**

YES
Snapshot Created
Confirmation Response Sent Immediately to Practitioner

Confirmation Response Includes Unique Identifier to Support Subsequent Case Status Update Queries

NO
Transmission Rejected Response (including rejection code) Sent Immediately to Practitioner

CASE PROCEEDS THROUGH THE REST OF THE INTAKE PROCESS
- Additional completeness rules applied to validate presence of required eligibility data and initial evidence
- Checks are run to verify payment and collect funds
- Acceptance or rejection notices are sent per communication preference in account

Post Intake

Status request transmitted to USCIS via system-to-system e-Filing Interface
↔ **Status queried and result message transmitted back to Practitioner**

Note: System "Use Case Models" and "Exchange Models" reflecting these processes are in development at this time.

Benefit request types and supporting information scheduled to be included in initial USCIS Transformation release

- Application for Replacement/Initial Non-immigrant Arrival-Departure Document (I-102)
- Temporary Protected Status (TPS); initial and re-registration filings (I-821)
- Application for Employment Authorization Document (EAD); for all categories, and both initial and extension filings (I-765)
- Application to Extend/Change Nonimmigrant Status; all categories, including those dependent upon an I-129 and provided the data interface is available for related I-129 filings, when applicable (I-539)
- Application for Waiver of the Foreign Residence Requirement; electronic DS-3035 recommendations from DOS only (i.e. "no objection" letters) (I-612)
- Application for Travel Document: all filings (I-131)
    - Advance Parole, Re-entry permits, Refugee Travel Documents, Humanitarian Parole
- Affidavit of Support (in support of Humanitarian Parole I-131s) (I-134)
- Replacement of Permanent Residence Card; all filings, including renewals, replacements and card corrections (I-90)
- Application for Action on an Approved Application or Petition; only those related to benefit requests that fall within the release (I-824)
- Notice of Appeal or Motion; only those related to benefit requests that fall within the release (I-290 B)
- Application for Waiver of Grounds of Inadmissibility; only those related to benefit requests that fall within the release (I-601)
- Waiver of Rights, Privileges, Exemptions and Immunities (Under Section 247(b) of the INA); only those related to benefit requests that fall within the release (I-508)
- Change of Address (AR-11)
- Attorney/Representative Authorization (G-28)
- Inter-Agency Record of Request – A, G or NATO Dependent Employment Authorization or Change/Adjustment to/from A, G or NATO status; supporting evidence document only (I-566)
- Certificate of Eligibility for Nonimmigrant Student Status; supporting evidence document only (I-20)
- Certificate of Eligibility for Exchange Visitor Status; supporting evidence document only (DS-2019)

(Denotes current form number)

Benefit request types schedule to be included in second USCIS Transformation release

- Petition for a Nonimmigrant Worker (I-129)
- Nonimmigrant Petition Based on Blanket L Petition (I1-129S)
- Application for Waiver of Foreign Residence Requirement (J Nonimmigrant visa holders); all remaining filings (i.e. other than "no objection letters") (I-612)
- Application for Authorization to Issue Certification for Healthcare Workers (I-905)
- Application for T Nonimmigrant Status (including supporting supplements) (I-914)
- Petition for U Nonimmigrant Status (including supporting supplements) (I-918)
- Application for Advance Permission to Enter as a Nonimmigrant; limited to those filing in support of the I-914 and I-918 (I-192)
- Inter-Agency Alien Witness and Informant Record (I-854)
- Request for Premium Processing Service (or its equivalent under Benefit Request Redesign); only those related to benefit requests that fall within the Release (i.e. for eligible Form I-129 classifications only). (I-907)
- Petition for Qualifying Family Member of a U-1 Nonimmigrant (I-929)

DRAFT LIST

(Denotes current form number)

Discussion

- Do the data and messages being passed make sense?

- Does the interface sound helpful?

- Do you understand the boundaries of EDIS within the benefit request intake process?

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Understanding the Registration Process and Security Measures

Mr. Eric McKim

Office of Transformation Coordination

Solutions Architect Team

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Security and privacy regulations are based on existing federal laws, regulations, and best practices.

- Office of Management and Budget, Circular A-130, Appendix III
- Federal Information Security Management Act (FISMA)
- NIST SP 800-53, Revision 3, Recommended Security Controls for Federal Information Systems and Organizations.
- DHS Sensitive Systems Policy Publication 4300A v7.1
- Federal Enterprise Architecture Security and Privacy Profile (FEA SPP) V2
- DHS Fair Information Practice Principles (FIPPs): The Framework for Privacy Policy at the Department of Homeland Security

USCIS is considering the Interconnection Security Agreement (ISA) as the first step in participation.

What is an ISA?

- Required by Federal and Department of Homeland Security (DHS) policy*

- Agreement between the external system owner and USCIS that describes a secure connection to serve as a sound basis for approving a system-to-system connection

- Establishes individual and organizational security controls and responsibilities for the protection and handling of unclassified information

- Typically Contains Interconnection Statement of Requirements, Systems Security Considerations, Topological Drawing, and Signatory Authorities

Who is involved?

- External system owner needs to identify an "Authorizing Official" to sign the ISA

- Network engineering/support team, Security Engineers and Authorizing Officials should be involved in the development and approval of the ISA

DHS Sensitive Systems Policy Publication 4300A v7.1

NIST SP 800-53, Revision 3, Recommended Security Controls for Federal Information Systems and Organizations

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System registration is required before any type of interaction with USCIS Systems.

- External system needs to register for a USCIS active directory account before any type of interaction can occur with a USCIS system.
  - Registration for an active directory account is a one time activity and is required for both Certification Testing and Production (two different USCIS Environments).
    - NOTE: Only anonymized test data can be used in the Certification Testing Environment.

- All external systems must create a WS-Security compliant (X.509 Certificate Token Profile (1.1)) credential for their system which must be provided to USCIS as part of system registration.
  - All external system users need to have unique user identifiers, which must be sent along with the external system credential. This is simply for accountability purposes.
  - Creation and management of individual user accounts on the external system is not an USCIS responsibility.

- The next time the external system accesses a USCIS system, USCIS validates system credentials and unique user identifiers and makes authentication and authorization decisions.

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Interaction between external system and USCIS Transformation System is layered with enterprise level security measures.
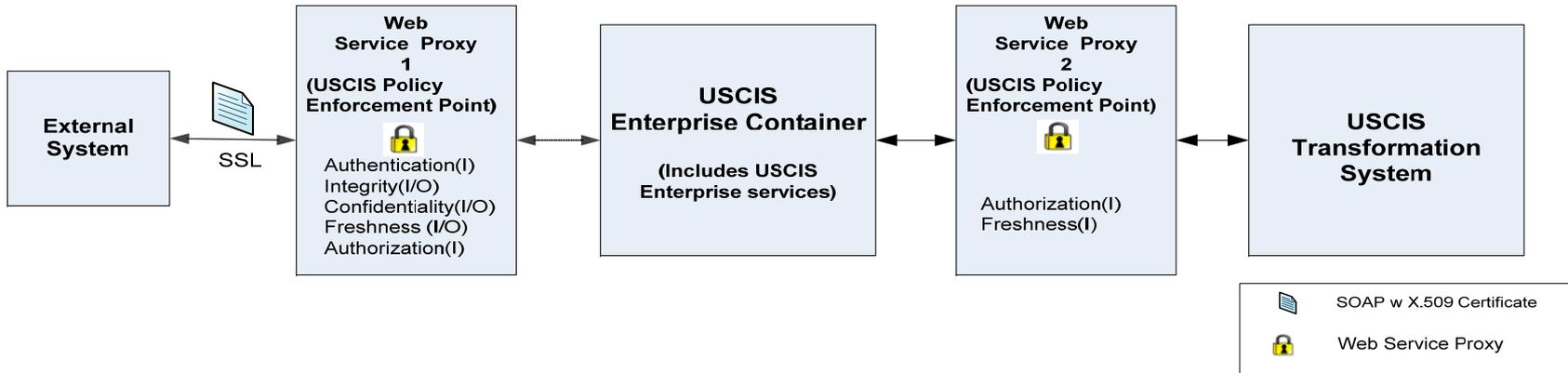
- All external system connections to USCIS systems will occur over one-way SSL.

- The X.509 certificates sent to the USCIS policy enforcement point must be issued and digitally signed (SHA-1 hash algorithm) by the external system's trusted 3rd party Certificate Authority (CA).

- External system's authorizations will be based on a least privilege/need-to-know basis.

- All systems must ensure that wsu:timestamp and a message ID are provided as a part of messages sent to the USCIS policy enforcement point.

Web Service Proxy	Transport Encryption	Authentication	Authorization	Integrity	Message Confidentiality	Replay Attack Prevention / Validity Period
1	One-Way SSL Certificate (AES-256 Encryption)	X.509 Certificate and Digital Signature	Role Based	Digital Signature with SHA-1 Hash Algorithm	None	wsu:Timestamp w/ Message ID

Discussion

- Has anyone had prior experiences with ISAs?

- Does everyone understand the registration process?

- Do you think you can meet the security requirements discussed?

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Understanding the NIEM IEPD Process and Artifacts

Mr. Srinivas Cheela

Office of Information Technology

Systems Engineering Division

EDIS is in the infancy stage of the NIEM.gov IEPD Development Process.

Inputs

- JIEM & Ref Model
- Business Model
- Modeling Tool
- Other IEPs
- Search Tool
- Mapping Tool
- Subschema Generator
- Forms
- XML Editor
- IEP Dev Tool
- All IEP Artifacts

We Are Here

| Exchange Inception | Exchange Modeling | Standards Mapping | Schema Building | Test via Validating | Packaging & Posting |

Outputs

- Use Case Model
- Exchange Model
- UML Domain Model
- Business Rules
- NIEM Mapping
- Wantlists
- Subset Schema
- Document Schemas
- Extension Schemas
- Constraint Schema
- XML Instance
- Sample Style Sheet
- Support Doc
- Metadata
- IEPD Posting

IJIS Institute

Discussion

- Is anyone involved in other IEPD related activities?

- If you have experience with creating or using IEPDs, can you share any lessons learned?

Meeting Wrap Up

- Understand and Concerns Heard:
    - Concept of operations for the system to system benefit request intake process
    - Registration process and security measures
    - EDIS IEPD development

- USCIS will discuss and consider the input received today in the next steps for the draft standards.

- Audience Next Steps:
    - Meeting minutes / materials posted in the next few days
    - Register for February 18th session. Invite to be posted in the next 2 weeks.

- Send questions and comments to Transform.EDIS@dhs.gov

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Questions?

E-Mail Transform.EDIS@DHS.gov