



NCUA
National Credit Union Administration

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Enterprise Solution Modernization (ESM) Update

NCUA Board Briefing
June 21, 2018

Agenda

- **ESM Program – Current and Future Projects**
- **Examination and Supervision Solution & Infrastructure Hosting (ESS&IH) Contract Award**
- **Credit and Deposit Analytics Strategy**
- **Loan & Share Data Standardization and Expansion**
- **Data Strategy and Framework Initiative**

ESM Program – Current Projects

Examination and Supervision Solution

- Aires Replacement, Central User Interface, Secure Transfer, ESM Infrastructure
- Aligned to Strategic Goals and Objectives 1.1, 1.2, 3.2, and 3.3
- Board approved funding through 2019: \$20.4 million
- Capital funds obligated through April 2018: \$2.6 million

Credit & Deposit Analytics

- Replacement and improvement of current analytic tools
- Future Predictive Analytics
- Aligned to Strategic Goals 1.1, 1.2, and 3.2
- Board approved funding through 2019: \$250,000
- Capital funds expended through April 2018: \$50,000

Loan & Share Modernization

- Standardize and modernize the member loan and share download for examination
- Aligned to Strategic Goals and Objectives 1.1, 1.2, and 3.2

Data Strategy & Framework Initiative

- Data governance, enterprise analytic strategy, and education
- Aligned to Strategic Goals and Objectives 1.2, 3.2, and 3.3
- Board approved funding to date: \$0.8 million
- Capital funds expended through April 2018: \$0.45 million

ESM Program – Future Projects

Data Collection and Sharing Solution

- CU Online, FOMIA, and GENISIS Replacement
- Logging, workflow, records management, and document management capabilities
- Board approved funding through 2019: \$3.1 million
- Capital funds expended through April 2018: \$0.68 million

Other Legacy Application Replacements

- Time Management System
- Management Automated Resource System
- National Supervision Policy Manual Tools
- Management Information System
- Cybergrants
- RATE

Additional Capabilities

- Examination Scheduling
- Reference Materials



ESS&IH CONTRACT AWARD

ESS&IH Procurement Timeline



Contract Award Details

- **Partner Selected: Deloitte.**
- **Scope:** Full system development and integration support and operations/maintenance services. Key solution components include:
 - **Infrastructure Hosting** – secure, cloud-based infrastructure (IaaS) for future exam-related solutions 
 - **Central User Interface** – common platform for access to mission-essential applications 
 - **Examination and Supervision Solution** – tool to manage the examination process (i.e. AIREs replacement)

MetricStream

Governance, Risk, Compliance and Quality Management Solutions



ESS&IH Contract Costs

Funding approved by the NCUA Board in the capital budget through 2019 is sufficient to implement and deploy the ESS&IH solutions. Operations and maintenance costs, projected at \$12.6 million, will be requested during the appropriate budget cycles.

Approved Capital Funding 2015-2019	\$20.4 Million
Net Obligations as of 4/2018: Planning, Market Research, Alternatives Analysis, Procurement and Contract Competition	\$2.6 Million
Remaining Capital Funds as of 4/2018:	\$17.8 Million
Planned Spending Obligations:	
Development and implementation of ESS (recent Deloitte award):	\$11.5 Million
Program Management Support Services:	\$3.3 Million
Project Management Reserve:	\$3.0 Million

Year One Contract Activities

Discovery Phase – project ramp-up and collaborative sessions with NCUA business and technical stakeholders

- Functional and technical specification documentation
- Agile Plan
- Security plan
- Master schedule
- Stakeholder communication plan

Iteration 1 – establish and maintain the secure, cloud-based infrastructure hosting platform

- Infrastructure as a Service setup and security authorization
- MetricStream installed
- System architecture and design

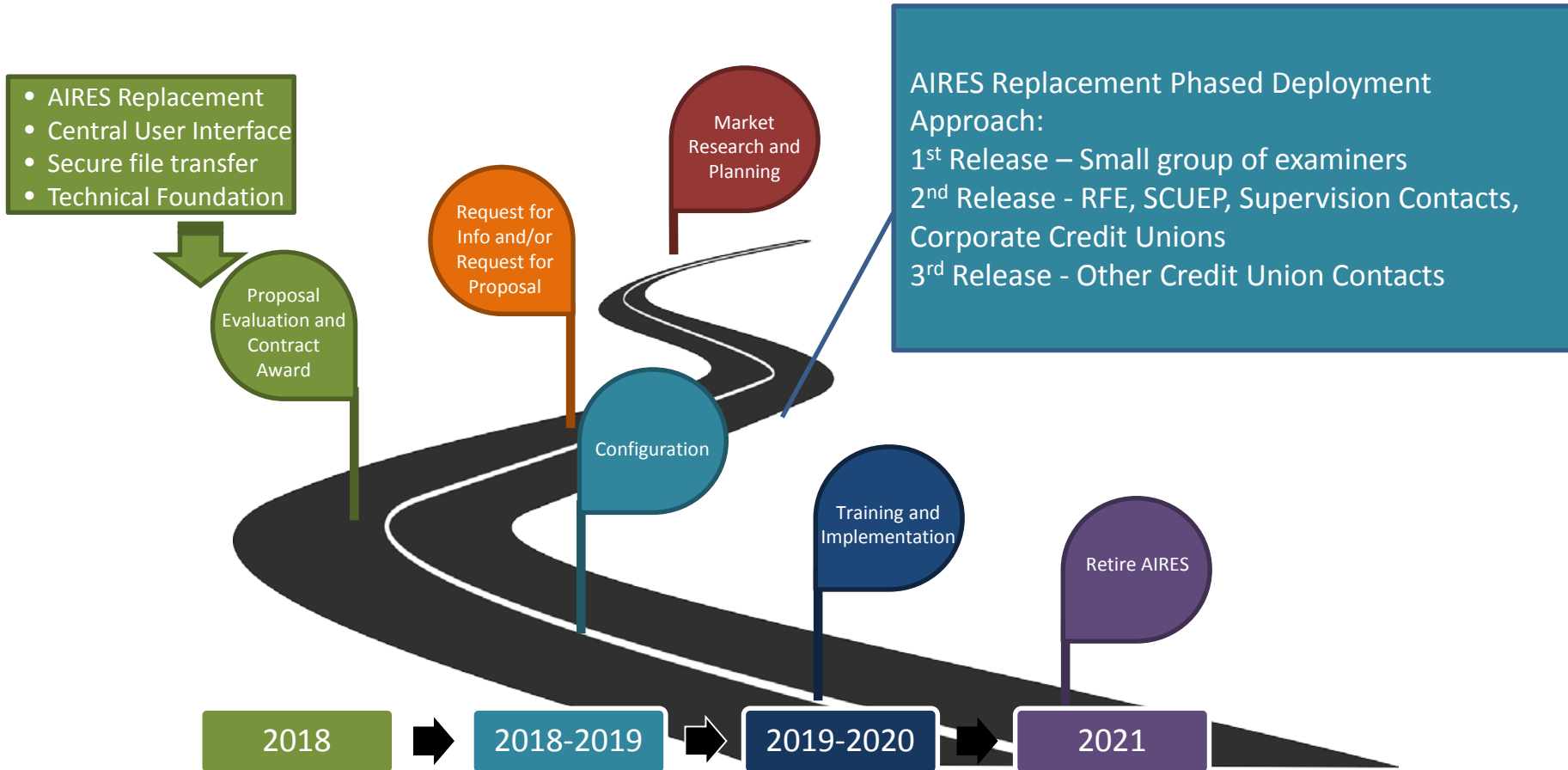
Iteration 2 – establish the Central User Interface (CUI) and secure transfer capabilities

- Set-up and configure CUI and SFT
- User interface design
- Integrate with existing identity/access management services and implement single sign on for staff

Iteration 3 – configure ESS and deploy to small subset of examiners

- Requirements configuration
- User acceptance testing
- Training and stakeholder communication

ESS&IH Projected Timeline





CREDIT AND DEPOSIT ANALYTICS STRATEGY

Credit and Deposit Analytics Solution (CDAS)

Purpose:

- Replace the loan and share query functions in AIREs with a user friendly tool
- Provide an alternative to custom built analytic tools by examiners
- Promote consistency and efficiencies on examinations

Activities:

- Issued a Request for Information in July 2017
- Conducted market research and vendor demonstrations
- Initiated an analytic survey to NCUA field staff
- Contracted MITRE to review the acquisition strategy and approach

CDAS Market Research Results & Next Steps

Market Research Results

- Limited market of vendors
- Most federal agencies custom build analytics
- Standardized and expanded data is critical to fully utilize analytic options and enhance analytic capabilities

Next Steps

- Replace existing AIRES functionality with improved reports, queries, and dashboards in ESS
- Offer custom query capabilities
- Explore potential for trending analysis of loan/share data
- Conduct additional market research and determine analytic solution options if the agency pursues a standardized and expanded data set



LOAN & SHARE DATA MODERNIZATION

Exam Data Collection Expansion

- **October 2017 – Request for Information (RFI) published in the Federal Register**
- **Expansion and standardization of the loan, deposit, and investment fields collected during the examinations**
- **Goals of this expansion include:**
 - More consistent examination process
 - Efficient use of examiner time
 - Reduce on-site examination time
 - Improved data reliability and quality
 - Enhanced objectivity and data analysis

RFI Comments & Outreach Efforts



Written Comment Period

11 Total Responses with over 100 comments

- 5 Trade Groups
- 5 Credit Unions
- 1 State Supervisory Authority (SSA)

Outreach Calls (2/2018 – 3/2018)

25 Participants with over 300 comments

- 15 Credit Unions
- 5 Core Data Processors
- 5 Offline Vendors



RFI Response Common Themes

**Data
security/PII**

Data availability

Vendor reliance

**Implementation
timeline**

**Burden on small
credit unions**

**Additional
outreach**

Loan/Share Modernization Next Steps

- **Address challenges/concerns from comment letters and stakeholder calls**
- **Refine the field list to support modernization strategy**
- **Determine data collection, cleansing, and storage options**
- **Prepare alternatives and recommendation for NCUA Board**



DATA STRATEGY AND FRAMEWORK INITIATIVE

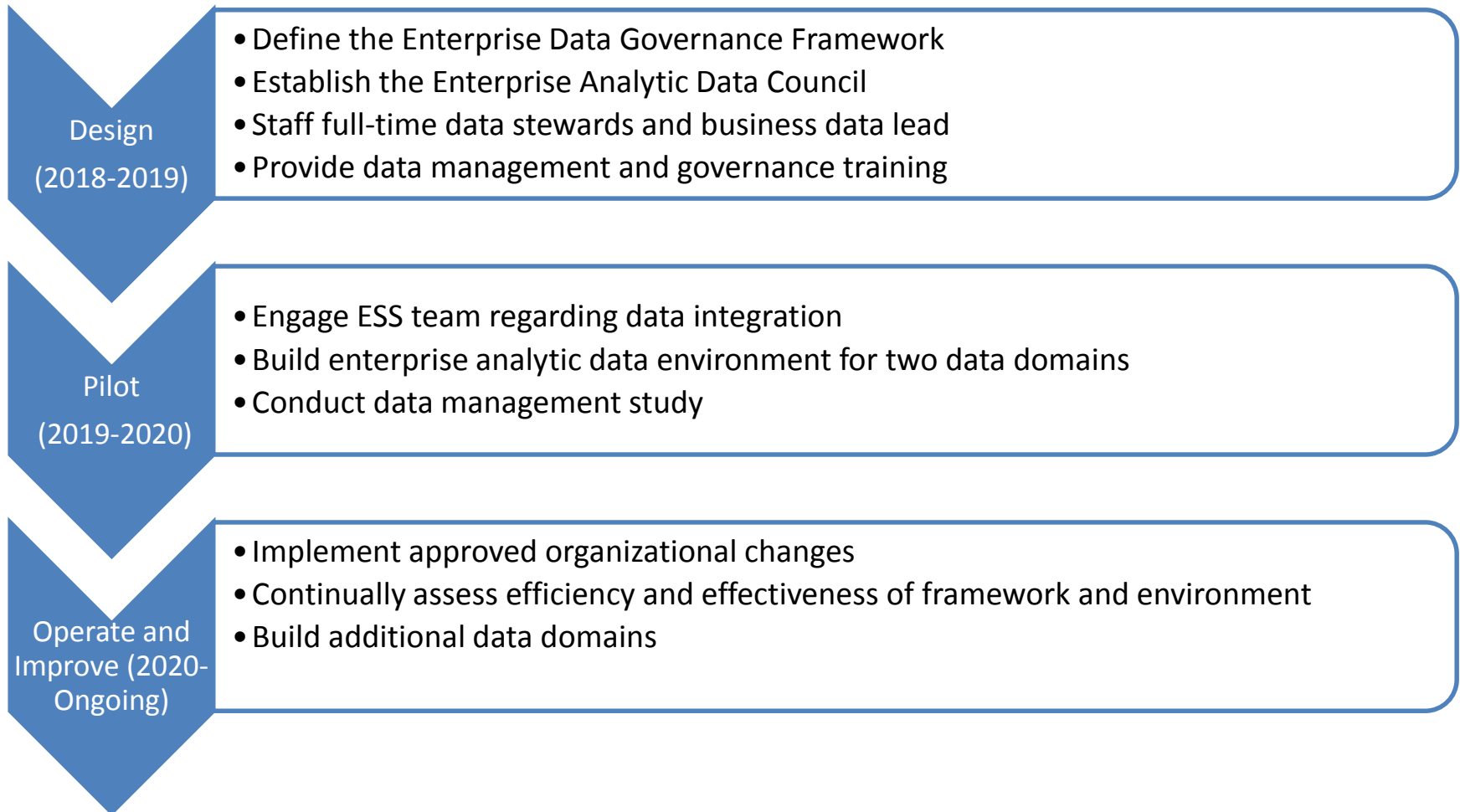
Discovery Results

- **Data structures are designed to optimize the collection of information, but not consumption and analysis.**
- **Data collected is good quality, but rules for its use and analysis are poorly understood.**
- **Data management practices are informal and ad hoc, dependent on “heroes” and heroic efforts to perform data integration, manipulation, validation, transformation, and quality control activities.**
- **An enterprise-wide data governance program to improve data quality and data management was unanimously recognized by agency staff.**

Benefits of the Enterprise Data Governance Program

- **Generates accurate, accessible and reliable data**
- **Improves agency-wide understanding of data definitions and sources and less reliance on individual knowledge**
- **Establishes centralization of common data for analytics facilitating better use of analytic tools and consistent, repeatable results**
- **Reduces time preparing the data for analysis resulting in more time analyzing the data**
- **Establishes foundational data governance critical for ESS implementation to ensure new and legacy data is properly integrated for analytic and reporting purposes**
- **Sets the stage for future analytic opportunities through CDAS and for the virtual examination**

Enterprise Data Governance Program Roadmap





QUESTIONS?