



Data Extracts or Web Services from CCR/FedReg, ORCA, and EPLS

▶ Upcoming Changes

May 2012

Today

- ▶ **Siloed** – Separate systems, each with a separate login
- ▶ **Redundant** – Overlapping data creates opportunity for error and complicates changes
- ▶ **Separate** – Multiple contractors at many hosting locations, managed separately with varying levels of service



Future

- ▶ **1 Login!** – Functionality accessible at one online location to streamline the process
- ▶ **1 Data Source!** – Centralized, normalized data to eliminate potential for conflicting values and improves agility to deal with future changes
- ▶ **1 Host!** – Consolidated hosting to reduce O&M costs



Existing capabilities, streamlined for efficiency.



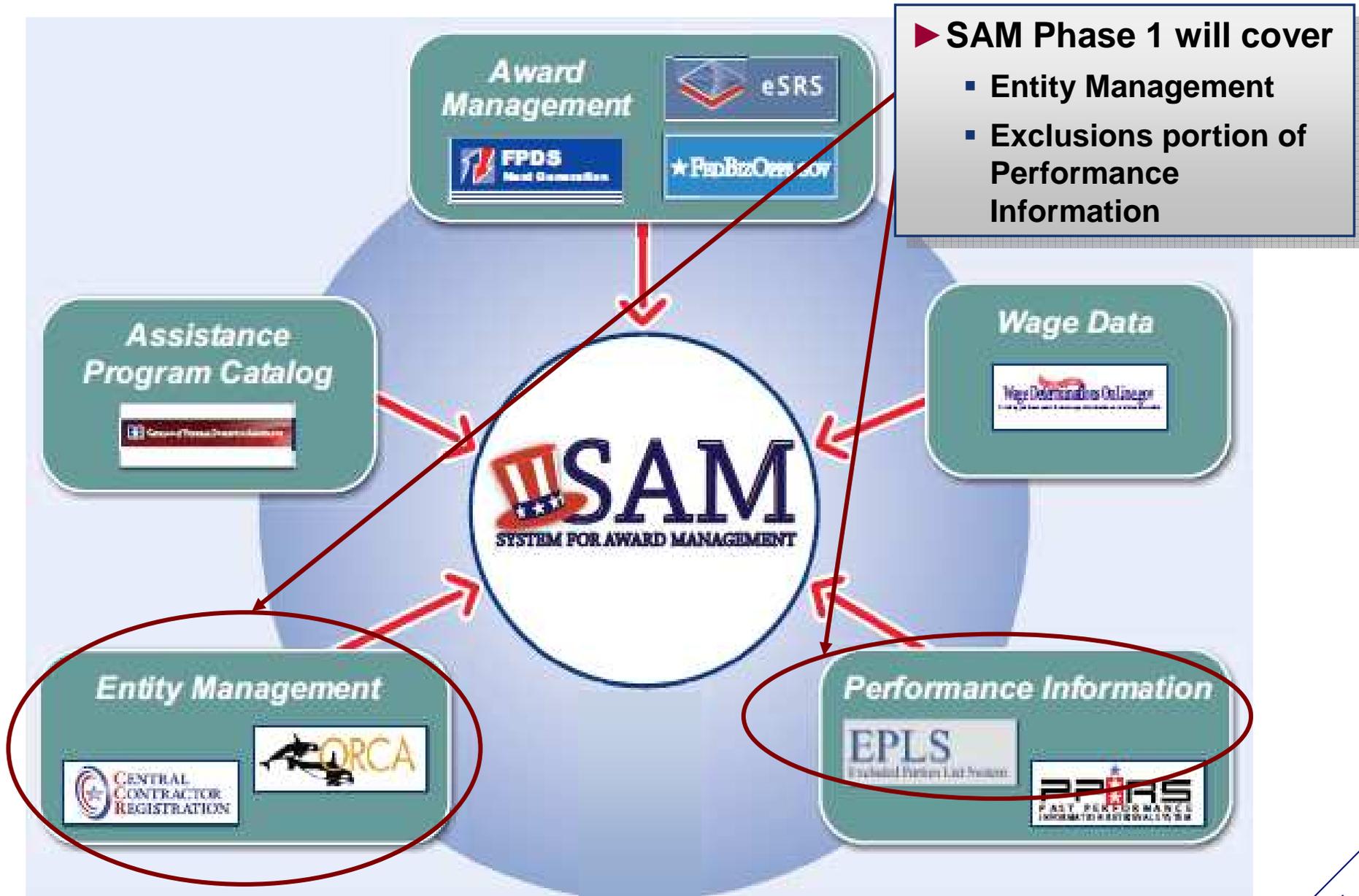
How Will the New System Be Organized?



▶ IAE system capabilities notionally have been organized around six key functional areas

Functional Area	Capabilities	Legacy Systems
Entity* Management	<ul style="list-style-type: none"> • Manage entity core data • Manage certifications/representations 	<ul style="list-style-type: none"> • CCR/FedReg – Central Contractor Registration/Federal Agency Registration • ORCA – Online Representations and Certifications Application
Award Management	<ul style="list-style-type: none"> • Post solicitation and award data • Maintain government-wide contract award data • Manage government-wide subcontractor data 	<ul style="list-style-type: none"> • FBO – Federal Business Opportunities • FPDS-NG – Federal Procurement Data System-Next Generation • eSRS/FSRS – Electronic Subcontracting Reporting System/FFATA Subaward Reporting System
Wage Data	<ul style="list-style-type: none"> • Access wage determinations 	<ul style="list-style-type: none"> • WDOL – Wage Determinations Online
Performance Information	<ul style="list-style-type: none"> • Manage/maintain past performance information • Manage exclusion list 	<ul style="list-style-type: none"> • PPIRS/CPARS/FAPIIS – Past Performance Information Retrieval System • EPLS – Excluded Parties List System
Assistance Program Catalog	<ul style="list-style-type: none"> • Create/maintain assistance program catalog 	<ul style="list-style-type: none"> • CFDA – Catalog of Federal Domestic Assistance
Support	<ul style="list-style-type: none"> • Provide security/access control • Provide reporting/communications support • Provide internal controls 	

* For the purposes of this capability area, *Entity* refers to prime contractors, organizations or individuals applying for assistance awards, those receiving loans, sole proprietors, corporations, partnerships, and any Federal government agencies desiring to do business with the government





What Are Phase 1 Benefits?



▶ Contracting/Grants Officers

- **Streamlined Process – One login provides access to entity core data, representations and certifications, and exclusions information**

▶ Entities

- **Streamlined Process – One login allows entities to create or update their registration as well as their representations and certifications**
- **Update Date Alignment – Capabilities in one location aligns CCR and ORCA record updates**
- **Registration Purpose – A question at the start of the process allows grantees to avoid vendor-specific content**

▶ System Owners/Administrators

- **Fewer system-to-system connections – Consolidation reduces maintenance challenges and costs**



- ▶ **SAM is merging multiple systems into one database**
- ▶ **Consolidation of databases eliminates data redundancy across the systems**
- ▶ **In some cases, merging databases requires normalizing like items, such as field length or format**

Your Extracts and Web Services Will Change!



Will Related Systems Be Ready?



- ▶ **Every system that uses data extracts or web services from CCR/FedReg, ORCA or EPLS today must make changes in order to continue with business as usual**
- ▶ **Groups impacted include contract/grants writing systems (processing awards), financial systems (paying awardees), business warehouses (creating reports), etc.**
- ▶ **Impacts of not aligning with the SAM data model and updating your system to obtain extracts or web services from SAM include not being able to update your systems that award contracts or grants and those that pay awardees**

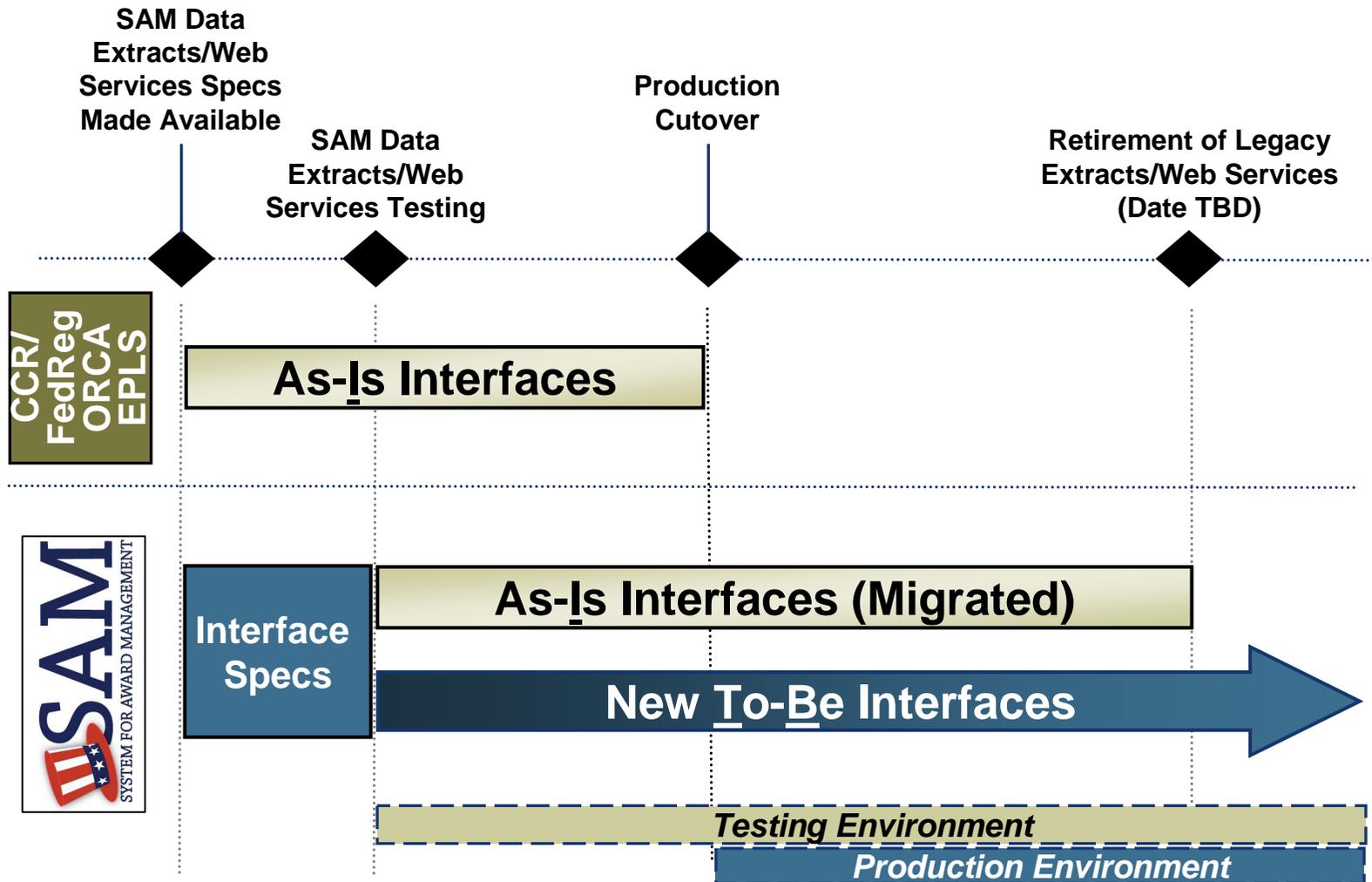


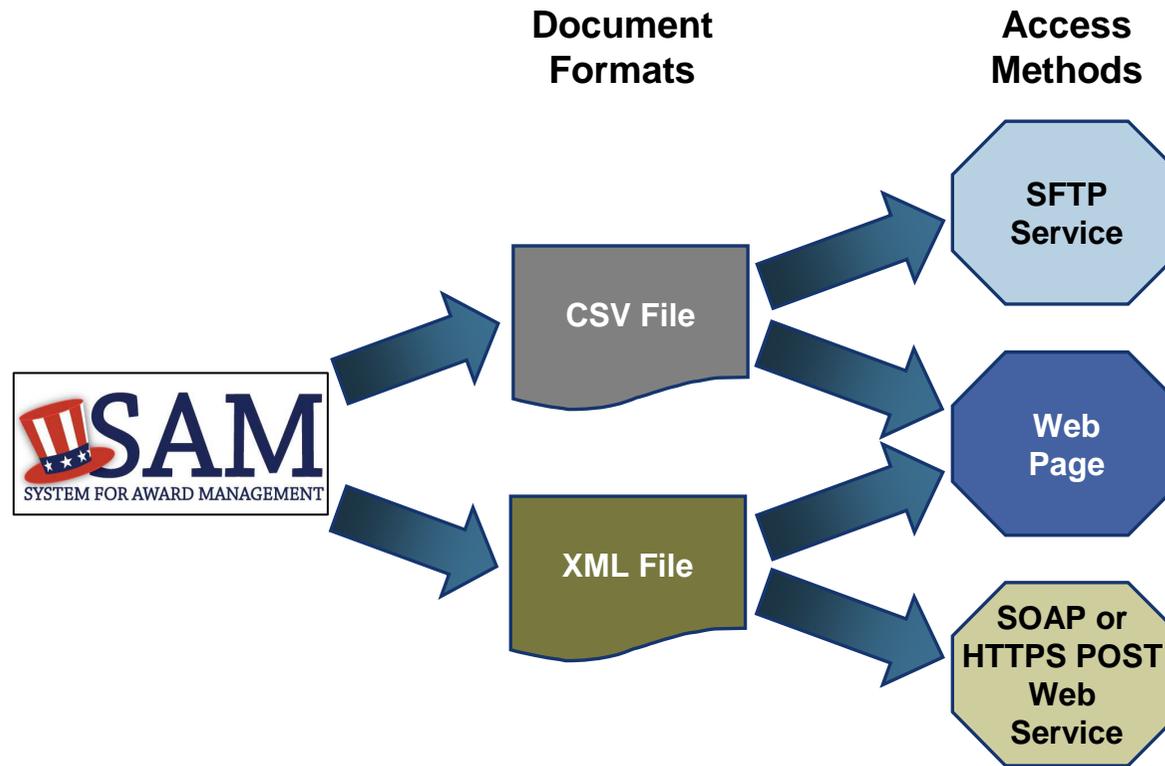
How Was Migration Planned?



- ▶ **Identified and evaluated as-is CCR/FedReg, ORCA, and EPLS extracts and web services**
- ▶ **Verified and grouped data by function**
- ▶ **Evaluated sensitivity-level divisions and associated data**
- ▶ **Realigned functional data by sensitivity level**

What Are the Migration Phases?





- ▶ **Data will continue to be provided in multiple ways to meet various needs:**
 - **Extracts – Data is provided as a flat file (i.e., CSV) via a web page or SFTP download**
 - **Web Services (i.e., XML) via SOAP or HTTPS POST**
- ▶ **Changes to the data that are coming in SAM will necessitate changes to the receiving database, regardless of method of transmission**



How Will Data Be Provided? (cont'd)



- ▶ **To-Be extracts and web services will be based on functional area and data sensitivity level**
- ▶ **Each Functional Area will have a set of records available in increasing levels of sensitivity:**
 - **Public**
 - **For Official Use Only**
 - **Sensitive**
 - **System Only**
- ▶ **The existing CCR, FedReg, and ORCA extracts and web services will be merged into the four Entity Management extracts and web services**
- ▶ **If you have the correct permissions for that level of data, you have access to all the data at that level, through various means, including web or FTP access to a flat file and web services access to XML**



Which Extracts Will Be Migrated?



As-Is Interface Name	SAM To-Be Interface Name	Protocol	Data Format
CCR Extract – Complete	Entity Management Extract – System-only	sFTP, HTTP-website, SOAP/HTTPS	XML, CSV
CCR Extract – FOIA	Entity Management Extract – Public	sFTP, HTTP-website, SOAP/HTTPS	XML, CSV
CCR Extract – Sensitive	Entity Management Extract – Sensitive	sFTP, HTTP-website, SOAP/HTTPS	XML, CSV
CCR Extract – FOUO	Entity Management Extract – FOUO	sFTP, HTTP-website, SOAP/HTTPS	XML, CSV
CCR Extract – MPIN	Entity Management Extract – MPIN	sFTP, HTTP-website	CSV
NA	ORCA Extract	sFTP, HTTP-website	CSV
CCR XML – Non-Proprietary	Functional CCR XML included in Entity Management Extracts		
CCR Extract – Proprietary	CCR will be merged into SAM Austin Tetra data will be provided in the Entity Management Extract – Sensitive Functional CCR XML included in Entity Management Extracts		
CCR XML – Proprietary	Functional CCR XML included in Entity Management Extracts		
CCR XML – Sensitive	Functional CCR XML included in Entity Management Extracts		
FedReg Extract	FedReg will be merged into SAM Entity Management Extracts		
ORCA XML	ORCA will be merged into SAM Entity Management Extracts		

Interface will be kept

Interface will be eliminated



Functional Changes



- ▶ **POCs underwent a full review and were reduced**
 - **Some POCs were eliminated because SAM has a role that does this function:**
 - CCR POC, CCR POC Alternate: these become an Entity Administration role
 - Certifier POC, Certifier Alternate POC: these become the Entity Registration Representative role
 - **Some POC types were eliminated because they were not really POCs:**
 - Corporate POC: Replaced with E-Business POC and Government POC
 - Remit Info POC is really the “Attn line” for the Remit address
 - Mailing Address POC is really “mailing address line 2”
 - Owner Info POC/Sole Proprietor POC is the answer to a FAR clause in ORCA
 - Previous Business Name POC is actually the previous business name (not a person name)
 - Domestic Ultimate POC, Global Ultimate POC, Gov Parent POC, HQ Parent POC: these were misnamed in the extract documentation, they are actually D&B linkage information
 - **All Alternate POCs are now optional (eases the burden for small businesses)**



Functional Changes (cont'd)



- ▶ **POCs will be provided as strings**
 - POCs will be associated with data sensitivity level
 - “POC type” field will specify the type of POC

- ▶ **POC collection is moved to the end of the process and is based on what data is entered by the registrant, so only the POCs relevant to that entity’s business purpose are required**

Data Sensitivity Level	Legacy System	Type
“Public”	CCR	Electronic Business
	CCR	Government Business
	CCR	Past Performance
“FOUO”	FedReg	Accounts Receivable
	CCR	EDI
	ORCA	Party Performing Certification
	CCR	Proceedings
	CCR	Sole Proprietorship
	FedReg	Eliminations
	FedReg	Sales
	FedReg	Accounts Payable
“Sensitive”	N/A	(none at this time)



Functional Changes (cont'd)

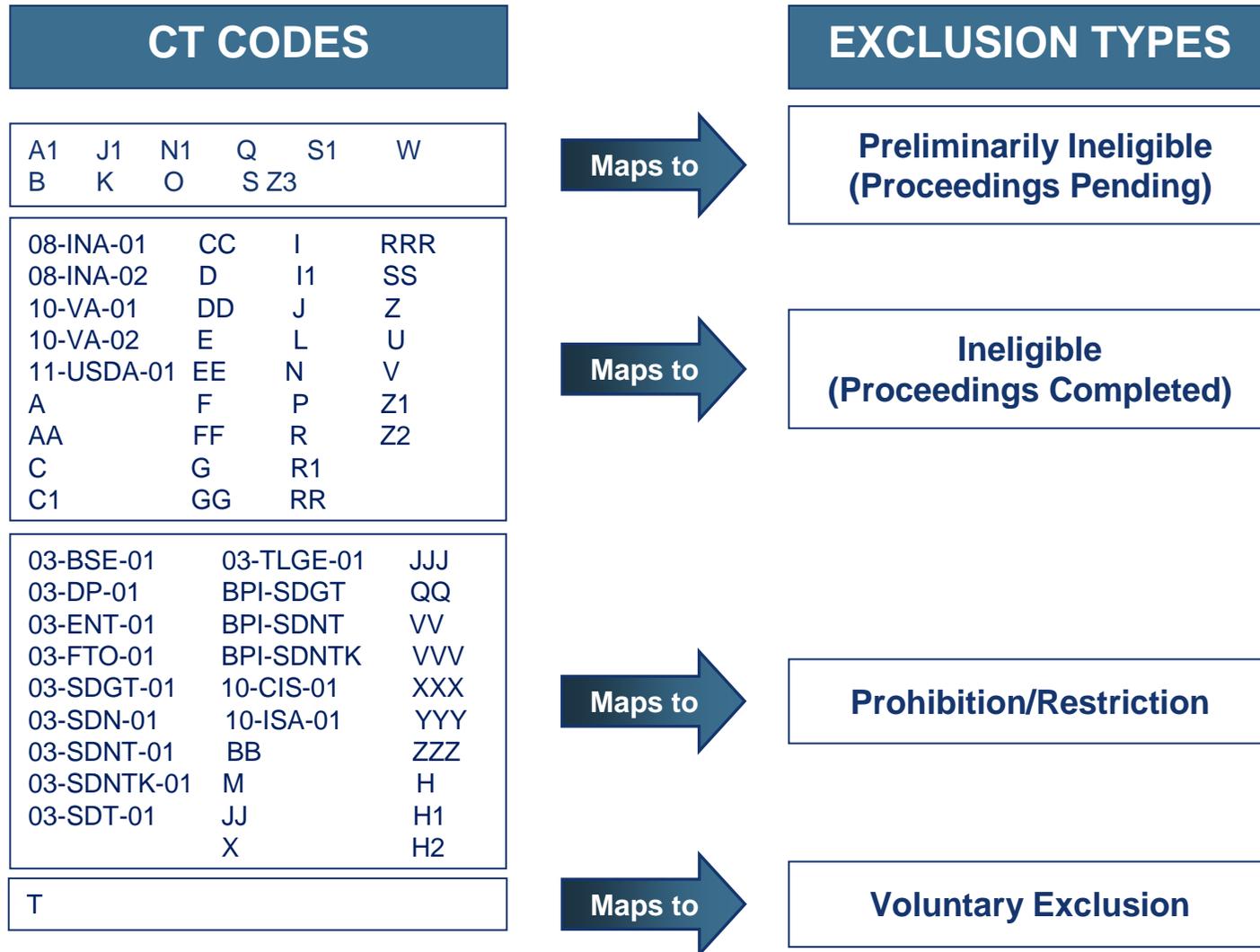


- ▶ **Elimination of Counters from To-be Extracts and Web Services**
 - Data will be provided in CSV/nested XML tags format
 - Example
 - Product Service Codes – If there are multiple PSCs for a DUNS, they will be made available as a single string with carat (^) separation, bound by “” in CSV file and nested XML tags in web service
 - PSC COUNTER – Eliminated from to-be extracts and web services

- ▶ **Standardization of address formats**
 - Added address line 3 and 4
 - Added Zip+4
 - Added Congressional District

- ▶ **Field Length Changes**

- ▶ Exhaustive list of Cause and Treatment (CT) Codes will be replaced with four “Exclusion Types”





Extracts – Technical Changes



- ▶ **In moving the CCR Extracts to SAM, a total of 317 elements are affected. Of those:**
 - **58 were eliminated**
 - “Counters” were eliminated (counters are numbers placed in an extract file just prior to a string, telling how many items are in that string) – not needed due to different CSV file format
 - The universe of CCR POCs was reduced to just those needed
 - Austin Tetra number eliminated – no longer used
 - SIC codes eliminated – no longer used
 - NAICS string eliminated that was redundant in CCR
 - **4 changed length due to database normalization**
 - DBA Name
 - Highest Employee Security Level
 - Parent Legal Business Name
 - Agency Parent City
 - **133 format change due to database normalization**
 - Converted individual POC elements to strings
 - Normalized format of several fields across the three legacy formats



Extracts – Technical Changes (cont'd)



- ▶ **In moving the FedReg Extracts to SAM, a total of 124 elements are affected. Of those:**
 - **21 were eliminated**
 - Counters
 - POCs
 - D&B hierarchy elements
 - **3 changed length due to database normalization**
 - NAICS Code String
 - PSC Code String
 - SAM City
 - **70 changed format due to database normalization**
 - Converted individual POC elements to strings (see slide 8)
 - Normalized format of redundant fields
- ▶ **EPLS – There is no EPLS extract (exclusions data is included in web services)**
- ▶ **ORCA – We are creating a new extract, so for the first time, the full set of representations and certifications data will be available via an extract**



Web Services – Technical Changes



▶ Web Services Changes

- Data structure is changed to accommodate merging of the CCR/FedReg, ORCA and EPLS data models into a single integrated data model
- Web service operations must change to accommodate the new structure
- Some terminology is changed due to merging of functions

▶ Level of Effort for Web Services Changes – We cannot estimate level of effort for making the necessary changes on the consuming system side due to differences in technology environment, skills, lifecycle method, and key scenarios relevant to the context



Where Can I Get More Information?



- ▶ **The SAM.gov web site contains the following information**
 - **SAM Extracts and Web Services Overview Briefing – This briefing**
 - **Extract Mapping Spreadsheet – Details the as-is and to-be data elements and provides a mapping**
 - **Consolidated SAM Interfaces Q&A – Answers questions users have posed about implementing the extracts and web services changes**

- ▶ **Once you have reviewed the above information, please feel to write to askSAM@gsa.gov with any questions you may have**

- ▶ **Sample files and WSDLs will be posted at a later date**

▶ **Data Format**

- Describes the data type to include any single character or boolean values

SAM Extract Element List	Datatype	Data Format	Length	CSV or XML
Account Type	STRING	C or S	1	BOTH
ACH Email	STRING	STRING	80	BOTH

- Describes the date format – MMDDYYYY
- ^Separated – Refer to the worksheet “SAM To-Be STRING Clarification”

▶ **Data Length**

- Provides the length of the element



- ▶ **SAM Numerics Code String**
 - **Bonding Level Value + Local # Employee + Local Ann. Revenue + Total Assets + Megawatt Hours + Barrels Capacity**

- ▶ **Disaster Response String**
 - **Geographic Area Served: County + Geographic Area Served: Metropolitan Statistical Area + Geographic Area Served: State**

- ▶ **Bus Type String**
 - **Government Type + Other Business or Organization Qualifiers + Other Entity Qualifiers + AbilityOne Flag + Registration Purpose**

- ▶ **DNB Linkage String**
 - **Parent Address + HQ Parent Address + Domestic Parent Address + Global Parent Address**

- ▶ **SBA Business Types String**
 - **SBA Business Types + SBA Cert Exp Date**



► Explanation of String concatenation

- Values separated by single ^
- List Values separated by double ^^
- e.g.: “. . . ^^GL^123456789^555551212^123 Main Street^NULL^NULL^NULL^Arlington^USA^VA^99999^0001^01012011^^. . .”



Will Certification Be Required?



- ▶ **Certification will not be required for Phase 1**
- ▶ **There will be a new process for requesting access to SAM data via an extract or web service**
 - **Determination of business need for the data**
 - **Government POC approval (may also require security officer approval)**
 - **SAM PMO approval**
- ▶ **To submit data into SAM (which will be available in Phase 2b), systems will go through a certification process**



Data Access Roles



- ▶ **For Phase 1, SAM has following Data Access Roles**
 - **Public Data Viewer – No approval needed**
 - **FOUO Entity Management Data Viewer – No approval needed for users with a .gov, .mil, or .si.edu email account**
 - **FOUO Exclusions Data Viewer – Approval required**
 - **Sensitive Entity Management Data Viewer – Approval required**
 - **Sensitive Exclusions Data Viewer – Approval required**
 - **System Only Entity Management Data Viewer – Approval required**
 - **MPIN Data Viewer – Approval required**

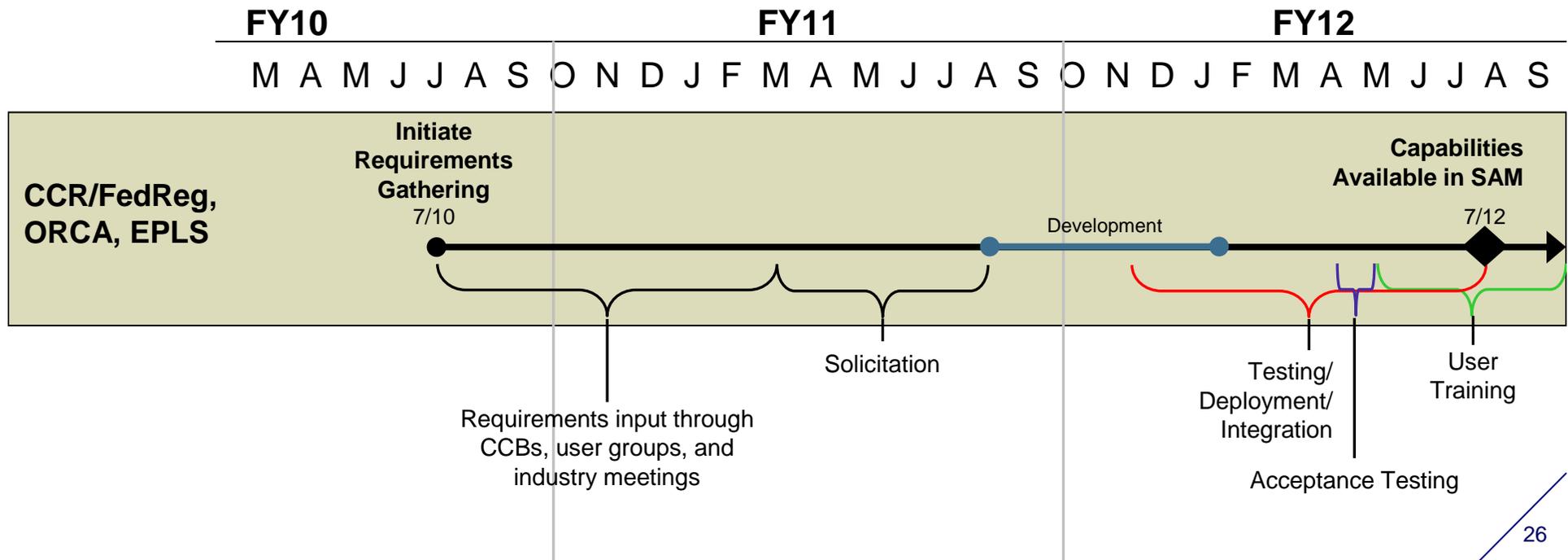
- ▶ **Users from .gov, .mil or si.edu domain, or users with a SAM U.S. Federal government role, will automatically have Entity Management – FOUO Data Access, replacing CCR Tools**



What's Next?



- ▶ SAM Phase 1 is scheduled to be available to users in late July 2012
- ▶ Initially, systems should plan to consume data in the legacy format from the new location in SAM
- ▶ Extract/Web Service points of contact will be provided with ongoing updates regarding the timeline for moving to the SAM-formatted extracts and web services





Next Steps for You



- ▶ **Plan for Changes**
 - Estimate and budget for changes to your system
 - Include plans for system changes in release schedules
 - Development
 - Testing
- ▶ **Use documentation available on sam.gov to plan and code**
- ▶ **Stay Informed**
 - Check the sam.gov website for new information
 - Write to askSAM@gsa.gov and ask to receive emails when new information about extracts and web services becomes available
- ▶ **Communicate with us about pain points (send email to askSAM@gsa.gov)**