

ICBS-R Frequently Asked Questions

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(Please note: significant updates are shown in red text)

The following frequently asked questions are grouped into various categories. To go to a specific topic in the document, use your “find” function. If you’re viewing a PDF version of this document, click on the binoculars icon.

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OVERVIEW:

What is ICBS?

The “Interagency Cache Business System” is an inventory management system used by NFES National Interagency Support Caches. ICBS is a customized version of a commercial-off-the-shelf product called Sterling Warehouse Management System® (WMS). ICBS replaced a legacy “ICBS” Oracle Forms® application as well as other inventory management systems used in local area and national caches.

Why was the “legacy ICBS” application “re-engineered?”

The three key reasons for re-engineering ICBS were:

- To move to a system architecture that allows the application to be used at local area caches so that the overall national cache inventory system could be utilized more efficiently;
- To meet essential cache business needs (e.g. improved reporting, ability to interface with other systems, etc.)
- To exchange data with the Resource Ordering and Status System (ROSS)

What is ICBS-R?

“ICBS-R” refers to the ICBS Re-engineering Project, which was chartered by the National Wildfire Coordinating Group in March 2003 to accomplish the above system re-engineering goals.

IMPLEMENTATION SCOPE:

Which caches use the re-engineered application?

All national, local area and remote caches meeting National Fire Equipment System (NFES) standards are within the implementation scope of the ICBS-R Project.

The following are the thirteen National Interagency Support Cache locations. All facilities have made the transition to the re-engineered ICBS system):

- Rocky Mountain Area Incident Support Cache
- Southwest Area Prescott Incident Support Cache
- Southwest Area Silver City Incident Support cache
- Southern Area Incident Support Cache
- Northeastern Area Incident Support Cache
- Northern California Incident Support Cache
- Southern California Incident Support Cache
- Northwest Area Fire Cache
- Northwest Area -Wenatchee Satellite Cache
- Northwest Area - LaGrande Satellite Cache
- Northern Rockies Area Incident Support Cache
- Great Basin area Incident Support Cache
- Alaska Incident Support Cache

The following Local Area Support Caches (LASCs) have implemented ICBS:

- Coeur d’Alene Interagency Fire Cache (uses the re-engineered ICBS)
- Billings Fire Cache (uses the re-engineered ICBS)

Initial attack caches (or “local caches”) are not targeted for using the re-engineered application.

What is a national interagency support cache?

According to the NFES Cache Management Plan (please see ICBS-R “Project Reference Materials” link on project website), a national interagency support cache (also called “national cache” or “geographic area cache”):

- Is the primary servicing Cache for a specific established Geographical Area as defined in the National Interagency Mobilization Guide.
- Serves multiple customers across governmental, agency, administrative and geographical boundaries.
- Follows established NFES standards in operating procedures (SOP), refurbishment and kit configurations.

There are eleven national caches in the NFES system, including two satellite cache locations of the Northwest Area Cache (in LaGrande, OR and Wenatchee, WA). The

Alaska and Great Basin Caches are hosted by the DOI Bureau of Land Management. All other national caches are hosted by the USDA Forest Service.

What is a local area support cache?

According to the NFES Cache Management Plan, a local area support cache (“LASC” or “local area cache”):

- Provides direct support to more than one agency and generally covers more than a single administrative management unit within a Geographic Area. Boundaries are determined by the cooperating agencies and agreements.
- Follows established NFES standards in operating procedures (SOP), refurbishment and kit configurations.

The NWCG Fire Equipment Working Team (FEWT), now called the Equipment Technology Committee (ETC), designated twenty-one current local area caches, hosted by a variety of federal and state NWCG agencies.

What is a remote cache?

According to the NFES Cache Management Plan, a remote cache:

- Is a cache established on a temporary basis, to meet extraordinary supply logistics needs. As an extension of a national cache, the servicing cache provides program oversight.
- Is managed by qualified personnel from national caches.

What is required in the new ICBS to stand up a remote cache?

When remote caches are established, a new cache “node” can be built in the system as a generic copy of a national cache (i.e. using the “high volume” ICBS template). Once computer and network equipment are installed, zone and location layout is mapped out, shelving is labeled, networked printers configured and installed, and the facility is staffed and stocked, a physical inventory completed, any “local items or suppliers” created, and users and user groups assigned, it can be up and running.

This has not yet been attempted, however, so the actual timeframe and effort required to do this are currently untested. If wireless bar code scanning is desired (for a remote cache that is expected to be used for a long period of time), several additional steps would need to be completed (e.g. install wireless local area network – WLAN, obtain scanning guns and network access accounts, networked label printers, etc.).

What is an initial attack cache (or “local cache”)?

According to the NFES Cache Management Plan, an initial attack cache:

- Generally provides single agency support to one administrative unit. It may provide interagency support based on local agreements.
- Cache inventory mainly is restricted to local use only and is not generally available for large-scale mobilization.

Initial attack/local caches are not within the implementation scope of the ICBS-R Project.

FOUNDATION PRODUCT:

Was the new ICBS built from scratch or is it based on a commercial product?

The application is based on a commercial-off-the-shelf (COTS) product known as Sterling WMS (Warehouse Management System®) version 8x.

What other enterprises rely on the Sterling WMS® product?

Well known Sterling WMS® clients include: FedEx, DHL, Target, Northrop-Grumman, Sysco, Lockheed-Martin, Motorola, Cabelas and Texas Instruments.

Why was a commercial off-the-shelf (COTS) application chosen to replace the existing ICBS?

All federal departments and agencies are required to evaluate and consider COTS (and Government off-the-shelf “GOTS”) applications before building any new information technology systems. For that reason, the ICBS-R design solicitation was open to both approaches: develop from scratch or COTS/GOTS approaches.

The commercial grade COTS Sterling WMS® product was selected by an interdisciplinary panel to replace the current ICBS. Extensive business requirements and design work was completed to identify the customization needed for the Sterling WMS® product to meet the cache system’s unique requirements. Design, product customization, testing, and implementation support work was performed by Sterling Commerce under a GSA task order awarded to Manugistics® Corporation (now JDA®). Actual custom configuration and development work began in May 2006.

Is the application support being provided in-house or by a commercial vendor?

Customization of the commercial software is currently performed by a commercial vendor (Oxford Consulting® in partnership with IBM®). The Oxford “ICBS-R Team” works in collaboration with an interagency group of government cache subject matter experts (SMEs). Ongoing operations and maintenance support continues to be provided by this group.

Will the customized application need to be rewritten when future versions of Sterling WMS® are released?

A number of system parts will require some programming work in order to carry over in future COTS upgrades. To the extent possible, the Sterling WMS® product has been modified and configured in such a way as to avoid the need for future programming work when the COTS application is upgraded.

FEATURES AND FUNCTIONALITY:

What features and functions does ICBS have?

The core Sterling WMS® product has a lot of inherent capability that most of the current cache applications it replaces didn’t have. The most significant of these are: Automated Identification Technology or “AIT” (which means the ability to perform warehouse activities with a bar code scanning devices); discrete location level inventory (for real-time shelf-level accuracy); user-defined or “Ad Hoc” reporting; and a wealth of built-in logic that help cache managers optimize their warehouse operations.

What’s the key difference between previous cache systems and the new ICBS?

A significant aspect of the new ICBS is that the national cache system is transitioning from numerous distributed databases and systems to a single centralized automated system.

Now that all of the main caches are on the new system, the cache community has begun realizing increased system-wide efficiencies. To fully realize the benefits of the new system, standardization from cache to cache (e.g. numbering, nomenclature, kit configuration, packaging, operational practices, etc.) is necessary.

Is this a big transition for the caches?

Because of the centralization, application logic and the AIT component, this is a very big transition. Making the shift to the new system is not always easy or comfortable for cache personnel used to performing processes that have been developed and evolved at their cache over the course of several years.

The Sterling WMS® product has been configured to support current cache processes with an eye toward introducing additional functions that support warehouse best practices in future phases. So, although there will be big changes, we’re not trying to accomplish them all at once.

Since the system “tells” an individual what item to pick and what location to pick it from, does it also direct them to pick the heavy items first to place on the bottom of the pallet?

The system will not direct the users to put heavy items on the bottom of the pallet, but there are strategies that cache managers can use to lay out their cache to facilitate this (e.g. storing heavier items in lower-numbered locations within a storage zone). This strategy also works for heavy, bulky or flat items.

Does the person pulling the order have to pick from the location that ICBS designates?

The user can always override the suggested location for picking and put-away tasks. If the warehouse is laid out correctly, and the cache “node” in the system has been configured to optimize this layout, ICBS should send personnel on the most efficient path to pick and put away items.

Does the re-engineered system resemble the retired legacy ICBS application?

The system supports current cache processes, but the application screens that users see are Sterling WMS® screens modified as necessary for the cache community. Users have not expressed a great deal of frustration with the different screens as long as they can grasp the processes involved.

Moving to a more centralized architecture; AIT technology; and exchanging data with ROSS and other systems requires new screens and processes that didn’t exist in the legacy ICBS application.

How will a single application work for the largest national cache and the smallest local area cache?

A high volume template of the new system is being used by the national caches and the largest and busiest of the local area caches. In order to accommodate the needs of the smaller/less active local area caches, the ICBS-R team plans to develop and test a “low volume” template.

What has the ICBS-R Team done to ensure the product will meet the needs of the local area caches?

The team has done several things:

- During the business requirements phase of the project, three-person teams of cache personnel visited a number of local area caches and documented their processes and requirements for an automated warehouse management system.
- The ICBS-R Project Team recruited two team members who are full-time local area cache employees. These team members provide input on a continuous basis as members of the ICBS-R Business Requirements Team, and were very involved in application beta testing. One was also the leader of the ICBS-R Implementation Team.
- Each ICBS-R Team Member is responsible for reaching out to local area caches and serving as a project point of contact for information dissemination and responding to questions.

In May 2006, personnel from seven local area caches visited the ICBS-R “demo cache” in Lakewood, Colorado to learn about the new system and to participate in a focused one-day local area cache requirements session. Users gave the team positive feedback on the prototype and expressed a desire to use the new system.

PROCESS STANDARDIZATION:

Does the new ICBS require standardization of business processes from one cache to the next?

The ICBS-R project team recognizes that business processes vary from cache to cache. Because we’re moving to a centralized data base to be shared by all caches, some business process standardization is necessary.

The project team has identified opportunities for standardization throughout the design process so that the national cache managers and project sponsors can implement standard processes wherever possible. Some variance is necessary due to different agency requirements, building size/shapes, staffing, etc. These are being accommodated in the new system on a case-by-case basis.

What about standard warehouse zones?

The COTS Sterling WMS® comes with extensive built-in logic. A number of “zones” within a warehouse are built into Sterling WMS® - each having specific functionality and relationships with other zones (e.g. Storage, Bulk Storage, Returns, Receiving, Shipping, etc.). The inherent logic determines how products move between zones in the warehouse.

The ICBS-R Business Requirements Team and the national cache managers adopted a standard set of zones to best fit the needs of the caches. This common set of zones – some customized for the cache system like “Medical” – enable the application to be implemented as expediently as possible at each cache, without the need for custom programming at each site. If a cache has a unique requirement for a zone that a standard zone won’t satisfy, it can be configured as part of the implementation process at that cache, but that has been necessary only in a couple of cases.

What about a standard location numbering scheme?

A couple of benefits to using a standard location numbering scheme across all caches are: less variation results in quicker implementation at each cache, and cache personnel are familiar with the location numbering scheme when they take assignments at other caches (since previously there was no standard scheme in the cache community).

The ICBS-R Business Requirements Team and the national cache managers have adopted a standard numbering scheme for the caches and have used it at each cache. It allows for the different shelving, building configuration and other factors that vary from site to site.

What’s the importance of the location numbering?

An example of the Sterling WMS® built-in logic is that it optimizes the picking (and put-away) of orders/items by determining the shortest picking/put-away sequence in the facility. This is done through inherent algorithms that run behind the scenes in the application. In essence, the locations that are closest to the shipping area in each cache zone are typically identified by the smallest numbers.

How are location numbers derived at each cache?

In order for the system to function correctly, storage and bulk storage locations are identified by an eight-digit number following a zone identifier (e.g. STOR1-10030203, referring to Aisle 10; Bay 03; Level 02 and Bin 03). This system was approved by the National Cache Managers for the new ICBS in 2006.

Some of the other types of locations (e.g. shipping, returns, etc.) are numbered somewhat differently based on the particular needs of the zone (e.g. SHIP-SORT 1; RET-1; etc.).

What’s the process for entering a specific cache’s locations into ICBS?

When the new ICBS is implemented at each cache, project team members assist cache personnel in laying out the location scheme. In some cases, items that are shipped most often are moved closer to the shipping area in lower numbered locations. Or, if pallets are usually built with heavy, bulky or flat items at the bottom it’s often advantageous to move these items closer to the shipping area so they’ll be sequenced first in typical picking tasks.

Can a warehouse worker make a pick other than at the location the system suggests?

Yes. On the scan gun's retrieval screen the user will see displayed the locations where the requested NFES items are located (up to 6 locations at a time). They are displayed in the sequential pick order suggested by ICBS. The user can pick the issue sequentially by clicking on the first location displayed, then the next location, and so on.

Alternatively, the user can click on any location displayed on the screen (for example to pick heavier or bulkier items first for a pallet or to build up a cart load).

TERMINOLOGY:

Is terminology in the new ICBS the same as that in the current ICBS?

Users of the new system include cache personnel who have used a variety of applications (the legacy ICBS, InProTrac, Cache Tracker, WRAP, to name a few), and terminology was not consistent between those applications.

The ICBS-R Business Requirements Team has become familiar with the commercial sector warehouse management terminology found in Sterling WMS® and has tried to strike a balance between embracing more industry-standard terminology vs. using terms that are more relevant to the cache community as a whole.

Cache terminology has been used wherever possible; especially in cases where the team has determined that a term or acronym in Sterling WMS® would present a significant barrier to comprehension by cache users. The Sterling Team has advised the ICBS-R Project Team of those cases in which industry terminology is “hard coded” into the system. In these situations, changing a term throughout the application would be extremely cost prohibitive and would affect whether or not future releases of the COTS Sterling WMS® product would require software coding to retain customizations made specifically for the cache community. For example, the Sterling COTS application uses the term “UOM” for Unit of Measure. This has been adopted in the re-engineered ICBS to replace the similar term “UOI” Unit of Issue used previously in the legacy ICBS.

Cache personnel have pointed out that different terminology has been adopted each time a new application has been implemented in the cache community, therefore making the transition has not been a huge obstacle for system users.

How can I familiarize myself with terminology that is new to me?

A terminology reference is included in the self-directed eLearning tool, is used for training. The terminology used in the application, as well as a lot of cache terminology that might be helpful for new cache employees, is posted on the ICBS-R website as part of the online “ICBS eLearning” tool: <http://icbs.nwccg.gov/Traininig/elearning/>

By clicking a “Learn the Terms” link on the eLearning page, users will find a “Job Aid” with a document listing this terminology, as well as a “Let Me” button that allows the user to test their knowledge by completing an interactive puzzle.

USER ROLES:

What roles do users have in the new ICBS?

ICBS is configured to define certain roles (or permissions) to each user in order to access the appropriate processes needed for them to accomplish their responsibilities. “User groups” in ICBS restrict and enable the permissions of the user belonging to that group. Several user groups are defined in ICBS for both the NWCG (or “enterprise”) level (i.e. system-wide) and at the Cache level (i.e. for a particular cache).

The following is a description of the current user groups in ICBS.

User Group	Org. Level	Permissions	Configurator Access?
NWCG_ALL	NWCG	Add/modify/delete rights to high level business rules, customers and units, item master catalog, process model and user profiles.	Yes
NWCG Inquiry (Reports)	NWCG	Read/write access to all reports screens	No
Cache System Administrator	Cache	Read/write access to all cache-level configuration	Yes
Cache Account Administrator	Cache	Cache account profile administration	Yes
Supply Tech	Cache	Add/modify/delete access to transaction screens including all orders and issues	No
Order/Issue Entry	Cache	Add/view access to orders/issues	No
Cache Manager	Cache	View access to all cache-level screens and cache-level configuration. Typically assigned to Cache Managers and Assistant Cache Managers	Yes
Receiving Supervisor	Cache	Read/write access to receiving screens	No
Supply Supervisor	Cache	Read/write access to inventory screens	No
Procurement Supervisor	Cache	Read/write access to inbound screens	No

User Group	Org. Level	Permissions	Configurator Access?
Mobile User	Cache	Read/write access to mobile consoles (AIT devices). Ad Hoc Move/Force Move ability would be restricted	No
Help Desk	NWCG	Read/write access to NWCG screens	Yes

Who assigns cache personnel to the user groups they need?

Cache personnel are assigned user groups by a Cache Account Administrator (CAA) at their cache so that they have the application permissions to perform their job. The CAA uses the ICBS Configurator to do this.

Who has the “NWCG_ALL” user group?

The “NWCG_ALL” user group is only assigned to a small group of NWCG System Administrators.

What is the “Help Desk” user group used for?

The “Help Desk” user group is only assigned to the contracted ICBS Helpdesk agents so they can assist users with trouble-shooting and problem solving.

What role does the "National Interagency Support Cache Coordinator" (NISCC) need when that position is activated at NIFC?

There isn't a specific NISCC user group, but a person assigned to the Cache System Administrator (CSA) user group at their home cache can perform all the queries and reporting functions that the NISCC position entails. If a person without the CSA role is assigned to the NISCC role, they will be temporarily assigned to that user group to enable them to perform their duties.

Can users have multiple roles?

Many users belong to more than one group and therefore have various permissions within the new system.

Some users, particularly those involved in administering the system or data at the NWCG or cache level, will need to be trained in the use of Sterling WMS® Configurator in order to perform their role(s). This is a tool that allows a user to make changes to the program without having to be a Java programmer, and is used for changing settings such as: locations, zones, inventory rules, etc.

Please Note: user groups and their associated permissions are occasionally modified due to changes in security policies, changes in the cache business processes, etc.

REPORTS and QUERIES:

Does the new system have the same standard reports that the legacy ICBS had?

Yes. In collaboration with legacy ICBS and InProTrac report users, ICBS-R Business Requirements Team analyzed each existing ICBS and InProTrac report. They determined which ones needed to be recreated in the new system; were not being used and were not needed; and those that were recreated in the new system but with changes. In some cases, two or more legacy system reports have been combined into one report that can be used for multiple purposes.

In addition to these specific cache reports, users also have a number of “out-of-the-box” reports that have proven valuable to other Sterling WMS® users in the commercial sector.

Am I able to build custom reports in the new system?

Users will have an interface that allows them to build their own “ad hoc” reports through the use of the Cognos® report writing tool. If desired, users can save these reports and run them whenever needed.

To reduce the risk of detrimental system performance caused by multiple users running large reports at the same time, the ICBS-R Team has not yet turned on this feature for users. Before deploying ad hoc reporting, the ICBS-R Team needed to complete an extensive system performance analysis and tune-up. This was done in early 2011. The next step will be for a small group of users to complete Cognos report writing training.

How will future standard reports be built?

The ICBS-R Team suggests that users trained in Cognos reporting can develop standard reports that can be used by all ICBS users.

What sort of queries can a user perform in the new system?

Sterling WMS® has extensive inherent search and query capabilities.

CACHE HARDWARE, LICENSING AND NETWORKS:

What sort of hardware do caches need to provide in order to use the new system?

A cache or its host agency will need to provide one or more suitable Pentium® PCs from which the user will access a host server at the National Information Technology Center (NITC). The project has published a document outlining user computer specifications called: “ICBS Hardware/Software Requirements.” It’s posted on the Reference Materials page of the ICBS-R website: http://icbs.nwcg.gov/project_reference_materials.html

Greater real-time inventory accuracy can be gained if system users input data for some warehouse processes (e.g. kit building) via a PC in the warehouse, rather than making notes on a system-generated form for later input by a supply technician in the office. For this reason, several caches have added PCs at strategic locations in the warehouse to give warehouse floor personnel the ability to enter data close to where the processes occur.

Do caches need to purchase user licenses for the new software?

No. The government has purchased a license that allows use of the system by any NWCG agencies, so user licenses for individual caches will not be required.

What sort of network does a cache need to run the ICBS application?

The Sterling WMS® system (application, data base and associated software components), is hosted on computers at NITC (the USDA's National Information Technology Center). The cache needs an agency network or an internet connection in order to access the system. To use wireless bar code scanning devices, a Wireless Local Area Network (WLAN) is also be required. This topic is addressed below.

PRINTING:

Are users able to use existing cache printers to print ICBS reports?

For the most part, ICBS reports and forms print on existing printers, but because print jobs are generated by the centralized application, only networked printers are used.

Forest Service and Bureau of Land Management caches use slightly different network architectures to perform printing. USDA, NITC, Forest Service and BLM network specialists have established and tested the printing architecture for each cache that uses the new ICBS. A solution for any caches on state networks will need to be developed on a case-by-case basis.

Are all printer makes and models supported?

Cognos® report writer and Loftware® label making software, hosted at NITC, are the actual applications that enable report, form and label printing. Network printers must be supported by these applications in order for users to print reports. There are at least twenty-five different label and inkjet printers currently in use in the national and local area caches.

ICBS reports have been tested on many different laser printers, using the Cognos and Loftware software, as part of ICBS-R beta testing and implementation processes. To date, all networked laser printers have worked suitably with ICBS reports. As new makes/models are introduced by the host agencies (e.g. FS, BLM, state) a representative group of reports can be tested with a given printer to determine whether or not it will support ICBS printing outputs.

Modifying existing reports to work with a particular printer make/model or driver is not a desired approach because any change would require testing on all printer makes/models already in use.

Does the ICBS-R Project recommend supported printer models?

With over a dozen caches implemented to date, all makes and models are performing fine with the Cognos® report writer and Loftware® label tool. If the ICBS-R Project Team encounters cache printers that aren't supported, we will recommend printers that are

currently working well and might be available through various agency procurement sources.

Having a relatively small number of printer types will simplify the printer support model for the agencies and caches.

What printers are required to produce bar code labels, and will they be provided by the ICBS-R Project?

The project evaluated several printers and selected an industrial grade networked label printer (the Zebra Z4M+ and its newer version the Zebra ZM400+) to be used with ICBS.

This printer works with the two key software programs (Sterling WMS® and Loftware®) and enables cache personnel to print location bar code labels and box labels (“SKU labels”) with bar codes for NFES items. The project procured label printers and label stock for the national caches and a few of the largest local area caches. These have been distributed to the caches that will use AIT.

Because each type of label needs to be configured in Loftware for the printer that will print it, the networked Zebra Z4M+ and ZM400+ printers are the only label printers that the project plans to support for label printing. In the long term, it is less expensive for the government to procure additional Zebra ZM400+ printers from GSA schedule vendors than it is to support a variety of different label printers in the caches. This also simplifies the label printer support model for the caches.

Does a cache need more than one label printer?

Most caches that have implemented the new ICBS have purchased a second printer so that they can print standard 4” x 4” NFES box labels on one printer while printing 4” x 6” box labels for items with trackable ID numbers on the second printer. This eliminates the need to change label stock rolls when changing the type of print job.

Larger caches, or those with multiple spread-out operations, usually require more than two networked Zebra Z4M+ or ZM400+ label printers. The two models are pretty much interchangeable and share the same software driver.

How are bar-coded inventory/box labels printed?

Inventory (i.e. box or “SKU”) labels are printed using the inherent Sterling WMS® (ICBS) application. The out-of-the-box label has been modified slightly to include the NWCG cache identifier and a place for notes to be written if desired.

How are bar-coded location labels printed?

There is no “out-of-the-box” location label printing functionality in Sterling WMS®. Commercial enterprises that use the Sterling WMS® product either use a separate stand-alone bar code location label software product, or they order location labels from a third party provider for the initial and subsequent location labels for their warehouse/distribution centers.

During the initial cache start-up, Sterling ICBS-R Team members used the cache location spreadsheets filled out by cache personnel to generate location labels for the cache. If new or replacement location labels are needed afterwards, the application now has a customized screen that allows the user access the Loftware® software at NITC to print individual location labels for their cache.

Location labels are printed on 1" x 3", and 3" x 6" label stock to fit the majority of shelf sizes in the cache system.

What type of label stock do I need to print bar coded box and location labels?

There are two types of label stock that the Zebra Z4M+ and ZM400+ label printers can use:

The first is **direct thermal** label stock. This type of label is the easiest type to print, and produces a good quality label initially. However, it is subject to fading in time, much like old style thermal fax machine paper (especially when exposed to strong sunlight or high heat).

The second type is **thermal transfer** label stock. This type is a bit more complicated to use because it requires an ink ribbon (similar to the old IBM electric typewriters), but the bar code and printing is very resistant to fading in sunlight. For this reason, most caches are using this type of label stock.

What size label stock do I need to print bar coded box and location labels?

Caches use 4" x 4" label stock for most NFES box labels; and 4" x 6" box labels for those items with trackable ID numbers. The Zebra Z4M+ and ZM400+ label printers require rolls of label stock. The ICBS-R Project provided several rolls of direct thermal label stock, purchased for this purpose, to each cache to get it started.

Can you provide sources and catalog numbers for the label stock and ribbon we'll need to print labels?

Personnel at any cache currently using the Zebra printers can recommend box and location label stock, and thermal transfer ribbons for producing labels. While the Project does not endorse any particular brand of label stock or ribbons, here are two sources and product descriptions/catalog numbers that some caches have used:

Uline:

Thermal Transfer Ribbon: S-6258 and S-6259

Thermal Transfer Location Label: 3"x1" S-5951

Thermal Transfer Location Label: 3"x 6" S-8360

Thermal Transfer Box Label: 4"x 4" S-6254

Thermal Transfer Box Label: 4"x 6" S-5037, S-7413 (no Perforation) and S-8433 (weatherproof)

Direct Thermal Box Label: 4"x 4" S-8375

Direct Thermal Box Label: 4"x 6" S-6264

LabelMaster:

Thermal Transfer Location Label: 3"x 1" TTR620177

Thermal Transfer Location Label: 3"x 6" none listed

Thermal Transfer Box Label: 4"x 4" TTR620605

Thermal Transfer Box Label: 4"x 6" TTR620706

Direct Thermal Box Label: 4"x 6" DTR510118 (perforated) or DTR10107 (non-perforated)

BAR CODE SCANNING:

Does the re-engineered ICBS system involve bar code or other types of scanning?

Use of Automated ID Technology, or "AIT," is a requirement of the re-engineered application. A task group of cache SMEs developed AIT standards in the areas of labeling, scanning hardware and cache processes. The project utilizes the "code 128" (one dimensional) bar code to identify cache supply items.

Can other NWCG systems use the bar codes on cache supply labels?

The ICBS-R AIT Task Group collaborated with representatives of other projects to ensure that ICBS use of bar codes is compatible with other systems in use or being developed for use in the incident arena.

Most significantly, the Incident Based Automation (IBA) Project has followed the lead of the ICBS-R project in utilizing an identical bar code labeling/scanning scheme so that the same bar code labels may be scanned at a cache and at an incident to input data into the appropriate tracking system.

In 2010, the San Dimas Technology and Development Center (SDTDC) evaluated a simple commercial off the shelf (COTS) inventory management system called CORE IMS in a pilot test for possible use in smaller local area support caches and local/initial attack caches. It's the hope of the ICBS-R Team that bar code scanning will be incorporated in whatever system emerges from that pilot so that the same labels can be used by both systems.

Can shipments with GSA NSN bar codes be scanned into the new ICBS?

It is possible that a cross-reference table could be included in ICBS to allow cache users to scan GSA labels for encoded NSNs (national stock numbers) to facilitate the receiving function. This functionality has not yet been developed.

Is use of AIT mandatory, or can a cache get by using system printouts, notes and after-the-fact data entry as they currently do with ICBS and other systems?

The customized version of Sterling WMS® that has been deployed is a hybrid AIT/forms model, which will allow caches to do business with scanners or in a paper-based mode. However, to realize the greatest benefit from the Sterling WMS® product, implementing AIT is essential. All national caches are expected to use AIT.

Some of the local area caches may see benefits in implementing AIT, and others may not. Use of AIT in all but the largest of these caches will be looked at on a case-by-case basis during implementation. The project team plans to beta test the use of AIT at a low volume cache in order to evaluate the potential benefits in those facilities.

What is RFID?

Radio Frequency Identification (RFID) is a form of AIT, which is coming into its own in the commercial world. Most notably, WalMart® requires its suppliers to provide RFID chips in products it sells. On the government side, the Department of Defense (DOD) has implemented RFID in a phased manner.

Why isn't RFID being implemented now?

RFID technology is still maturing and there is some question as to which standard(s) will rise to the top and become the most widely accepted in commercial or government sectors. RFID chips can carry much more data than a 1 dimensional or 2 dimensional bar code label, but that capacity comes at a higher cost. The ICBS-R Project and national cache managers are implementing bar code scanning first, before considering RFID technology.

Are the caches' current scanners RFID-ready?

The scanning devices that ICBS-R procured for the caches are not RFID capable, but after-market accessories are available to retrofit the devices should the caches opt to implement RFID in the future. If and when that decision is made, a cost benefit analysis would be needed to determine whether retrofitting or replacement would be the best option for the cache community.

How would RFID be implemented in the cache system?

Looking ahead, ICBS-R team members and Sterling experts feel that perhaps the most logical use of RFID in the future might be to tag sensitive, high value or trackable inventory, because of the increased amount of data that can be stored on RFID tags. A complete maintenance record for a pump or radio, for example, could theoretically be stored on an RFID tag, and could be viewed by any cache where the item was returned for refurbishment.

Will the ICBS-R project provide scan guns for any future caches?

The ICBS-R Project provided bar code scan guns to equip the fifteen caches implemented to date, with at least one cache electing to purchase additional devices. Only a handful of extra units remain in the ICBS-R pool of spare scan guns.

Providing scan guns for any additional caches that implement ICBS will have to be addressed on a case-by-case basis and will be dependent on the availability of remaining scan guns.

How was the Symbol Motorola MC9090G scan gun evaluated and chosen?

Team members and other specialists evaluated industrial grade wireless mobile computer (scanning) devices from three leading vendors and selected the Symbol Motorola MC9090G because it best meets the requirements of the cache system. In 2006 the project purchased 200 of these devices and related accessories to initially outfit the national caches and a few of the largest local area caches.

If a cache determines it needs additional AIT equipment, how will it obtain it?

Additional equipment can be purchased by the host agencies of the caches. This equipment may be available for purchase via GSA schedule. To reduce the complexity of installing, configuring and supporting the equipment, caches must purchase the same make/model device (or subsequent upgrades) as the project initially purchased.

Vendors might also make AIT equipment available on a lease basis. This could help caches that experience only an occasional need to greatly expand their staffing, or to equip remote caches.

What is the expected life cycle of the AIT equipment?

The Symbol AIT devices that have been purchased for the caches are very durable and versatile, and will easily accept software upgrades in the future. The project expects these devices to be serviceable for at least eight to ten years.

How do caches obtain repair or replacement service for the AIT devices?

At time of purchase, the project obtained a 3-year service plan from the vendor covering each device. In 2010 a new repair/replacement plan was purchased by the project to extend coverage. **If a device fails, and is shipped to the service vendor, it may be repaired or replaced for only the cost of shipping. Users should contact the ICBS-R Helpdesk or ICBS-R Team Member if they have a scan gun needing repair.**

What benefits does the introduction of AIT bring to the caches?

AIT brings greater real-time accuracy of the inventory and therefore enhanced efficiency. In other warehouse/distribution centers, introducing AIT has greatly increased inventory visibility throughout the supply chain, allowing enterprises to reduce the size of their inventory and reduce overhead costs.

The Alaska Interagency Cache has used bar code scanning for several years and has found that the number of personnel hours needed to conduct an annual physical inventory count is significantly reduced.

Cache managers also have the option to run cycle counts on specific locations in the cache, or throughout the cache on a random or selected basis. Experience in other facilities has shown that when regular cycle counting is used (e.g. to count the complete

cache every 3, 6 or 12 months), inventory accuracy improves dramatically and inventory loss is significantly reduced.

What changes are required in caches in order to implement AIT?

In order to realize the benefits of AIT, many processes that used to be input after-the-fact in a cache office are performed on the warehouse floor using a scan gun. This requires greater discipline on the part of warehouse personnel. Every time an item is moved to or from a location, a box label (or “SKU label”) bar code and a location bar code must be scanned and the quantity entered on the device. This is how real-time inventory visibility is achieved.

During the transition period, workers usually prefer to use hard copy printouts and keep notes as a back-up method, until they build confidence in the new AIT-based system. Experience at commercial warehouse/distribution facilities and in fire caches has shown that people adapt to the new technology very quickly.

Are all cache processes supported by AIT?

When first deployed, almost all cache processes were AIT-enabled in the new ICBS. The most significant exception was the returns processes, for which there was no AIT module. **ICBS AIT Returns functionality was deployed in January 2011.**

What are the benefits of AIT-enabled returns processes?

Scanning returns from incidents tells managers immediately what supplies are in the pipeline and available for restocking or refurbishment. This should reduce instances of unnecessary restock orders to GSA or other vendors to meet incident needs.

How does the AIT Returns process work?

Generally speaking, the user separates returned items into the four condition categories: RFI, NRFI, UNS and UNSNWT, and by NFES item. He or she then inputs all the RFI items by scanning the NFES item number, entering the quantity, and then completing the return. This is repeated for NRFI, UNS and UNSNWT items. At that point, the user accesses move tasks in the Menu option on the scan gun, and moves the items to their appropriate locations.

When logging into the scan gun, why do I have to choose an Agency? Can it default to the user's agency?

Selecting an agency name is part of the network authentication/authorization process outside of the ICBS mobile application. Unfortunately there is nothing we can do a change the authentication process.

On the ICBS mobile login screen, the user needs to select the Login field, backspace, and then scan their login ID. Is there a way to auto-move the cursor to the Login field and clear the field?

This is a device/platform limitation. However, here is quicker way to enter your login ID: after clicking on the Login field, press **SHIFT, BLUE, ***.

This will select the value in the field. When you scan in your Login ID, it'll replace the existing value with your Login ID.

When a user selects the task(s) from the menu, can the cursor auto skip to the field where they need to start the work?

On all screens, the ICBS mobile application is designed to place the cursor in the first field on the screen.

The Retrieval Criteria screen is a generic screen which is designed for use in the majority of warehouses (e.g. commercial warehouses). Typically, a warehouse worker will identify:

Equipment #: the sorter, cart or forklift the worker has. The warehouse can be configured where some move tasks can only be completed with the right equipment.

Task List #: identifies the batch the worker is working on.

Start Location: identifies where the worker is located, in relation to the pick sequence configured for the warehouse.

For more flexibility, NWCG caches were not configured to require equipment #, which makes this field unnecessary (for now).

An enhancement change request can be submitted to ICBS-R Change Management Board (CMB) suggesting removal of unwanted fields.

On retrieval tasks for issues (picking) is there a way to enter the start location and the stop location for each user so that when two people meet they are not jumping over each other to complete the tasks?

Pick tasks are assigned to a worker based on:

1. The batch (task list) # they are working on
2. The zones the user is allowed to work in
3. The start location of that user
4. The pick location sequence

Most caches' pick location sequences should be configured such that picking starts farthest away from the shipping dock (e.g., Aisle 1) and ends close to the shipping dock (e.g., Aisle 38).

To avoid "leapfrogging," one worker can scan in his or her start location in Aisle 1, while the other can scan in his or her start location halfway through the warehouse, perhaps in Aisle 17. Due to the picking sequence, the first worker should be assigned pick tasks starting in Aisle 1 moving towards the shipping dock, while the second worker will be assigned pick tasks in Aisle 17 moving towards the shipping dock. Ideally, by the time the first worker gets to Aisle 17, the second worker will have completed pick tasks for the second half of the warehouse.

Another way to avoid leapfrogging is by splitting the pick locations into two zones, and configuring each user to allow them access in only one zone each. For example:

Worker 1: Assigned to Zone 1 STOR1 -> Aisles 1-17

Worker 2: Assigned to Zone 2 STOR2 -> Aisles 18-38

For ICBS, this is NOT recommended since this will systematically prevent a worker from performing pick tasks outside of his or her assigned zone. Configuration at this level requires administrative access and would not be configurable on a daily or even weekly basis.

On the 'Deposit All' screen for retrieval, can the cursor default to the "SHIP-SORT-01" field?

Entering the deposit location is required because it's part of the move verification (i.e. it forces the user to "tell the system" each time exactly where he or she is depositing items). This step nearly eliminates entry of incorrect location information and improves inventory accuracy.

On the **Deposit** screen, the cursor is initially placed in the **Item ID** field so that the worker can specify the item being deposited if desired. It is also a 'checkpoint' which forces the worker to validate the item before completing the deposit. Please note that this is the SAME deposit screen used during putaway.

Can you make the 'GO' button larger and take out the two fields next to it?

Unfortunately, this was researched before, and the GO button cannot be made larger. The other two fields: "**Deposit**" and "**Back**" have relevant functions as well, which come in handy if you: a) need to stop picking and deposit your current load, or b) need to back out of a process to change something.

WIRELESS NETWORKS:

Will the project provide wireless networks in the caches to support the AIT devices?

In FY2007 the project received a limited amount of funding to procure wireless local area network (WLAN) equipment for all national caches and a few large LASCs. Working with agency telecommunications specialists, a three-person "ICBS-R Wireless Team" installed WLANs at each of the national caches and three of the local area caches that will use AIT.

The ICBS-R Project is not funded to install WLANs at any additional caches, so it will be up to the host agencies to fund any wireless implementations going forward.

What agency security requirements do the WLANs and AIT devices need to meet?

The project received USDA, Forest Service, DOI and Bureau of Land Management approval to install and use WLANs and wireless AIT devices in caches.

All appropriate security requirements (e.g. WAP2, IEEE 802.11i and FIPS 140-2) are being adhered to. Agency network specialists actually connect the WLANs to the agency networks so that the devices can communicate with ICBS.

Some differences have emerged in how the FS and BLM configures and control cache wireless networks to meet their specific requirements. Also, AIT users in FS and BLM caches log-in to the network slightly differently.

FEDEX AND UPS SHIPPING:

Will there be any changes in how small parcels are shipped by caches?

At this point, business is largely done how it was done in the legacy ICBS. In 2011 the ICBS-R Project **received** some additional funding from the BLM to invest in a third party software application called Pierbridge® that will allow a cache to integrate the ICBS shipping function with external shippers like FedEx and UPS. The project team plans to implement this at the Great Basin Cache, which does the overwhelming majority of parcel and LTL shipments each year.

Assuming a successful pilot test, will other caches be able to take advantage of this?

Site licenses for this software are the most significant expense. Assuming that the GBK pilot test is successful, the ICBS-R Steering Group might support a special project funding request to provide this functionality at other caches.

Will caches need new FedEx or UPS accounts in order to take advantage of this?

We believe that caches with existing FedEx and UPS accounts will be able to use the third-party software with their current accounts, but this will be explored when we get closer to doing the integration.

Will I need to replace my current parcel scale to use this function?

In 2006 the ICBS-R Project purchased Mettler-Toledo® manifest station scales for each of the main caches for use with integrated shipping software.

INTERFACE WITH ROSS:

What changes has the interface with ROSS brought to ICBS users?

A phase 1 interface between the two systems was deployed in 2008. This is the NFES catalog interface. It's a one-way interface that allows the same catalog – stored in ICBS – to be used by dispatchers when generating supply orders in ROSS.

The Phase 2 interface with ROSS, which allows caches to receive and process requests electronically (without having to manually enter them into ICBS), was deployed in December 2010. The interface includes current processes such as forwarding single, partial or multiple requests to other caches; back-ordering; substitutions; consolidations; full and partial UTF (Unable to Fill); etc.

Are cache personnel now required to use ROSS to process supply requests?

No, cache personnel continue to use ICBS for supply requests. **Some caches have opted to receive ROSS training and user accounts so that they can search in ROSS for incidents (since an incident has to be created in ROSS before an incident order/issue can be created in ICBS for that incident).**

How are requests received from ROSS?

The ROSS-ICBS interface receives the request(s) from ROSS and creates an alert for one or more ICBS users in the cache. The ICBS user clicks the hyperlink for an alert, which brings up the “Issue Details” screen. The user then processes the issue pretty much the same way they’ve always completed an ICBS issue.

Can caches still process “direct orders” for supplies?

Yes, many caches receive a significant number of supply orders/requests directly from incidents, and they still have the ability to process these today. These are referred to as “ICBS-initiated issues” to differentiate them from “ROSS-initiated issues.”

Since requests can now be entered by ROSS users and ICBS users, how are we preventing the same request numbers from being used in both systems?

Request numbers are still provided by the incident that places the order directly with the cache. Now that ROSS and ICBS are interfaced, request numbers for any “ICBS – initiated issues” must fall in the range from S-100000 to S-199999. This is called the “incident to cache request number block.” ICBS will not allow the ICBS user to enter numbers outside of this range.

Note: For more information specific to the ROSS-ICBS interface, please see the “ROSS-ICBS Interface FAQ” document on the ICBS-R “User Support & QRG” page (http://icbs.nwecg.gov/user_support.html). This document is updated regularly.

OTHER INTERFACES:

What other systems will the re-engineered system interface or exchange data with?

In addition to the interface with ROSS, the ICBS-R Project charter specifies an interface with the BLM’s Collection and Billing System (CBS).

What’s the status of an ICBS-CBS Interface?

The ICBS-R and NBC teams have collaborated on a high level solution design featuring an interface between ICBS and Pay.gov, with ICBS posting data for the CBS to retrieve. In September 2007, this approach was approved by NIFC BLM IT Management. The ICBS-R Team **received BLM funding for this work in 2011 and plans to proceed with this work in 2012.**

Will ICBS interface with financial or property management systems?

The ICBS-R charter requires the new system to have the *capability* to share finance, accounting and property management data with external systems, although data exchange with those systems has not been funded or added to the project scope at this time.

ICBS generates a monthly fire stores report which is manually entered into the DOI's FBMS system. Users would prefer an automated interface, but up to this point, no low-risk cost-effective solution has been identified.

DATA MANAGEMENT:

Why is data management important?

Moving to a centralized database within the cache system *and* interfacing with external systems such as ROSS make the importance of data integrity critical.

What sort of data preparation was done while implementing the caches?

Due to the decentralized nature of the legacy ICBS and InProTrac databases, data cleanup and rationalization has been a huge job. "Data cleanup" refers to making sure the data is valid, and "rationalization" is the process of identifying the commonalities among data in several different databases, and changing the data or structures to reach a standard meaningful set of data.

The ICBS-R Business Requirements Team worked through this process in close collaboration with a primary system user from each cache as part of the cache's implementation process.

Was data in the legacy ICBS system migrated to the re-engineered system?

Some preexisting reference data was migrated from the legacy ICBS and InProTrac to the new ICBS. Transactional data (e.g. receipts, issues, returns, work orders, inventory moves, inventory adjustments, etc.) was not migrated to the new system.

Will historical transactional data be available for running reports, etc.?

Historical transactional data for all caches that used the legacy ICBS has been captured for future use in an NWCG "data warehouse." There is no target date yet for when that data repository will be developed.

Once the NWCG Data Warehouse is available, the next step will be for the ICBS-R Team to work with the National Enterprise Service System (NESS) Project Team to design/develop/deploy a solution that will allow authorized personnel to access the legacy data for purposes of reporting and analytics.

How is data managed in the new ICBS?

With the legacy ICBS and InProTrac systems, users have enjoyed the luxury of managing and working from their own cache-specific databases. As we have moved to a centralized model, data management likewise has had to be more centralized in order to ensure data integrity across the cache enterprise.

The ICBS-R Project Team, working with input from the Sterling ICBS-R Team, has developed a data management model which provides a high level of system-wide data integrity, and provides users with the data they need to perform their work.

How is catalog data managed?

Several alternatives were explored for managing the item master catalog in the new ICBS. A huge investment was made in catalog cleanup and rationalization prior to implementing the new system.

A very small group of “NWCG Catalog Administrators” (two to three people) have been trained to administer the ICBS item catalog. This helps ensure that users have consistent and accurate catalog to work with when they use ICBS. For this centralized model to be effective, the NWCG Catalog Administrators need to provide very responsive service to the ICBS users.

What about cache-specific catalog attributes?

Another ICBS user role, “Cache Catalog Administrator,” is available to cache personnel. This role has the authority to add, modify, and delete cache-specific attributes of the item master catalog items. This role is necessary due to the requirement in some caches – specifically state-hosted facilities – to track some cache-specific costs and other attributes for each catalog item.

How are local items managed?

A concern of ICBS users is the management of cache-specific or “local items.” To ensure data integrity and eliminate redundant items in the new centralized system, all catalog items, including what were known as “local items” in the legacy ICBS, are managed by “NWCG Catalog Administrators.”

How is organizational (NWCG customer) data managed in the new system?

To answer this question, we need to provide some background on the new NESS system. The new ICBS is one of several fire and aviation systems that make up the National Enterprise Service System (NESS) architecture at NITC. Other systems include ROSS (Resource Ordering and Status System), FAMWEB, FAM Data Warehouse, I-Suite, and the NWCG OIS (Organizational Information System).

One aspect of NESS is for these closely related “fire” applications to share data (like organizations) that is common to more than one system. This ensures data integrity between systems and reduces the overall costs of system hardware. For example, rather than having a record of the “Boise National Forest” and all its attributes (e.g. NWCG Unit ID, agency, region/area, shipping address, billing address, geographic location, etc.) in the database of each application, one copy can be housed in NESS and each application can use the same record for its purposes.

As part of the long-term strategy to move toward a centralized NESS organizational repository, which provides this data to several information systems, organizational data will need be centralized and tightly managed in ICBS.

Currently in the new ICBS, users access organizational data in the ICBS database because the NWCG OIS (Organization Information System) has not yet been deployed at NITC. The ICBS database has been populated with master data on as many

organizations (e.g. customers, vendor/suppliers, etc.) as is available. This includes data for most all wildland agency organizations for which the NWCG has information.

How valid and how complete is this organizational data?

Just prior to ICBS being deployed in 2008, it was loaded with a base set of customer and vendor/supplier records. As part of the preparation to bring each cache online, any additional local customer and vendor/supplier records are entered by an NWCG System Administrator.

Is the organizational data I need in the new system?

Because the ICBS and ROSS systems are interfaced and sharing organizational data, it's critical that valid and consistent data is used in the two systems. Management of organizational data in the ROSS and ICBS systems is limited to a very small number of users ("NWCG Catalog Administrator" user group) to ensure data integrity between the two systems.

How will the OIS affect ICBS?

Under the direction of the NWCG, an OIS team is building a master database of organizational information gleaned from several existing "fire" systems databases. This database currently contains over 1,900 organizations. A large data cleanup and rationalization process, similar to that which ICBS users have been doing, is being performed by the OIS team to ensure that the highest quality data is available. This data preparation work has been underway for over four years.

The OIS will replace the current NWCG Unit ID Repository, and will be much more robust; however ICBS users will have to provide some attributes that currently are incomplete in the database (e.g. shipping addresses).

The OIS will not contain vendor organizations. In the future, another repository which is focused on Vendor Information will be developed.

Who will maintain OIS data?

Data corrections to organization data will be through a single point of contact. Information on how this will be done has not yet been finalized.

CONTINUITY OF OPERATIONS AND DISASTER RECOVERY:

How do caches continue to operate ICBS if they lose their network connection?

Generally speaking, if a cache has a separate high speed connection available (such as DSL, cable, wireless air card, other-agency network) users can continue to access the system if their primary agency network is out.

For BLM caches, the network specialist at NIFC suggests there could be several alternatives (e.g. dial-up from stand-alone-PCs, back-up connectivity provided for co-located coordination centers, wireless air cards, etc.). She recommends that BLM cache personnel contact the network support staff at their respective state office for advice. The

network staff should know what is available and be able to offer alternatives for the specific sites. Likewise, for state agency caches, an agency network specialist should be able to develop cache-specific alternatives.

If a cache completely loses connectivity, accessing the ICBS system would require some employees to relocate to an alternate site (e.g. a hotel, library, school, other office, etc.) to access the internet and the ICBS application. As for the wireless scanning guns they will not work if the agency network goes down, so tasks will need to be completed using just the ICBS console.

Those caches with access to the internet via more than one network should test each one and identify opportunities for backup connectivity. Each cache should document and test their specific backup capability as part of its preparation for implementing ICBS.

What about going back to paper-based processes?

Operating with paper forms as a contingency is another option. Many caches are familiar with this option because they used it when the legacy ICBS or previous systems were temporarily unavailable.

The Implementation Team has developed a Continuity of Operations Plan (COOP) template, in the ICBS-R Implementation Plan. As part of its pre-implementation process each cache completed a COOP identifying various contingencies. Team members are available to assist in this process.

TESTING:

How is and was the re-engineered application tested?

The system developer conducts comprehensive configuration management and internal testing. Once internal testing has been completed on each portion of the application, cache SMEs conduct beta testing of that portion using realistic scenarios and data.

Project team members, who are fulltime cache personnel, developed several hundred test cases for beta testing. Each test case was run in a “double blind” manner with two or more testers. Defects were then noted, corrected and retested – again in a “double blind” manner. The product was put through extensive structured testing prior to being implemented in the cache community. As additional functionality is developed, the same structured testing methodology is used.

Performance testing has also been done to ensure that the servers on which the application is installed are sized and tuned for maximum system performance and responsiveness. This was repeated as more caches came onboard the system, and an extensive system-wide performance analysis and tune-up effort was performed in early 2011.

TRAINING:

How is training on the re-engineered application being provided?

Ready access to high quality training has always been a big issue for the cache community. The ICBS-R Project Charter requires the project to develop formal and online user training. Various options have been explored for best preparing ICBS users.

Because caches have an ongoing need to train users (e.g. seasonal/AD/EFF employees coming on board at different times of the year), the Implementation Team has determined that on-demand “e-learning” will best meet the needs of ICBS users. This type of training product can be updated as needed and available to anyone with an internet connection.

The Sterling Parcel Carrier Adapter® product itself comes with standard eLearning modules. Because caches are using a highly modified version of this, the project invested in a customized version of the eLearning tool.

The eLearning module can be accessed pretty much whenever a user needs training by clicking the “Training” link on the ICBS-R Project website:

<http://icbs.nwcg.gov/Traininig/elearning/> An “E-Learning” button on the ICBS application itself will also take a user to the training module.

Will the eLearning module be updated?

Yes, now that several business releases have been deployed, including the phase 2 ROSS-ICBS interface, a major effort is underway to totally revamp the ICBS eLearning module.

The ICBS-R Team expects this to be completed by the spring of 2012.

Is classroom training also an option?

The project team knows that most Cache Managers prefer formal classroom style training sessions provided for their users, so this type of training has also been included in the implementation process at each cache. Classroom lesson plans, PowerPoint presentations, the eLearning tool, access to the ICBS “Training” instance, along with PCs with an internet connection and wireless scan guns connected to the WLAN, are the basis for this training.

USER SUPPORT:

What sort of support is available for users?

A user support organization, operated by IBM in Boulder, Colorado, has been staffed, trained and supporting ICBS users since the summer of 2010 when it took over for the previous Helpdesk contractor.

How do I contact the ICBS Helpdesk?

The primary method for contacting the ICBS Helpdesk is by phone (1-866-224-7677). The Helpdesk website (<http://www.interagencyhelpdesk.com/index.html/>) has a “Knowledge Base” of solutions to common user problems. To access this information, click the “Knowledge Base” link at the bottom of the main Helpdesk page.

IMPLEMENTATION SCHEDULE:

When and how will local area caches be implemented?

The Coeur d'Alene and Billings local area caches were implemented in 2009 and 2010. Following successful implementation of the Alaska Fire Service Cache, ICBS will be rolled out to additional local area support caches as prioritized by the ICBS-R Steering Group and as funding is made available. During that phase, national cache personnel who are familiar with ICBS can help coach users in the LASCs.

CACHE PREPARATION:

What can a cache manager do to prepare his or her cache for implementation?

The advanced work (“pre-implementation activities”) requires close coordination with the ICBS-R Implementation Team. Some specific types of pre-implementation tasks include:

- Working with the ICBS-R Team to develop a specific zone and location numbering plan based on the scheme that the national cache managers have adopted
- Providing information to the team on the networked printers that will be used with the new system, such as: make and model and IP address
- If the need for new or additional printers is identified, working with agency procurement personnel to purchase the printers
- Working with the team and local IRM specialists, if any, to test the wireless local area network (WLAN) that will support wireless bar code scanning
- Identifying the need for any additional wireless scanners, and procuring them through agency procurement personnel

What sort of things does a cache need to do just prior to implementation?

As we get closer to rolling out the new system at your cache, contractor and government team members will need to work with your personnel to prepare the cache for implementation.

This will involve: providing the team with information on your storage locations, what items you store in each location; location and inventory labeling; setting up zones and locations for your cache in the ICBS database; entering cache-specific inventory rules in ICBS; making any desired inventory movements prior to implementation; conducting a complete physical inventory of each location in your cache just prior to “going live;” testing networked laser printers; configuring and testing label printers; and deploying and testing scanning devices on the WLAN.

A big part of the implementation process that cache personnel perform is filling in spreadsheets with data that will be loaded into the system prior to implementation (e.g. local items, local suppliers, inventory data, etc.).

Will we need to move any of our inventory around in the warehouse?

We don't anticipate the need for caches to have to move their inventory prior to implementation. However, within any given storage zone, cache managers typically choose to move some of their fast moving (“high velocity”) items, and items that they

like to load first on pallets (e.g. heavy, bulky or flat items) to lower-numbered picking locations.

The new ICBS system generates tasks based on most efficient picking and put-away locations, so this strategy can help maximize the potential of the system. We have learned more on how to take advantage of this as we've brought the national caches onboard the new system. The ICBS-R Implementation Team will share these "best practices" with personnel from each subsequent cache as it's implemented.

What else can we do to prepare?

Future users of the new ICBS can keep in touch with ICBS-R team members in their geographic area and visit the ICBS-R website (<http://icbs.nwcg.gov/>) on a regular basis to keep up on project developments.

What can we do to help bring other caches implement the new system?

After cache personnel have been trained and become familiar with the use of the new ICBS, it will be very helpful if those with the talent for instructing and coaching can assist the ICBS-R Implementation Team in training and assisting personnel in the local area caches.

What can we do to help support other caches that are using the new system?

Cache personnel who have been trained and have become proficient in the use of the new ICBS can they can share this knowledge and help their co-workers in other caches. It is particularly helpful for trained users to be available for assignments in caches that are experiencing high incident support activity.

Similarly, personnel from local area caches that have not yet implemented ICBS are encouraged to take cache assignments at those caches already using ICBS so they can begin learning the new system.

CHANGE MANAGEMENT and LONG-TERM MAINTENANCE

What are the plans for long-term support of ICBS?

Operation and maintenance (O & M) of the system has to be provided throughout its life span. Because ICBS is based on a commercial product, the core product will be maintained by the IBM parent company that owns the product, however fixes, patches, and periodic upgrades will have to be tested and applied to the "NWCG version" of the product, which is ICBS.

The Project Team has projected a ten year budget plan to operate and maintain ICBS. Approval of this budget each year is the responsibility of the NWCG "managing partner agency," which is the Forest Service.

What does Operations and Maintenance (O & M) entail?

Operations and Maintenance include such items as day-to-day systems administration, which is the responsibility of the contracted IBM NESS Administration Team; testing

and applying fixes, upgrades and new releases, which is the responsibility of an ICBS O&M contractor (Oxford/IBM); and routine data administration, which is the responsibility of ICBS users with those roles (i.e. NWCG and Cache Data Administrators; NWCG and Cache System Administrators; and Cache Account Administrators). O & M also includes change management activities.

How are change management items addressed?

During development of the system, the ICBS-R Project Team, mainly comprised of cache personnel, was responsible for determining which change requests (“CRs”) were high or low priority. The team addressed just those items within the project scope, as outlined in the ICBS-R Charter.

Prioritizing out-of-scope change items, including enhancements, is the responsibility of the ICBS-R Steering Group. These change requests are compiled by the ICBS-R Project Team and presented to the Steering Group. If funding beyond what has been budgeted is required to complete this work, the Steering Group is charged with obtaining it from the appropriate agency.

Any change/enhancement request that is approved and funded by the government is developed, tested and deployed by the ICBS-R O & M contractor in collaboration with government subject matter experts (SMEs).

How can ICBS users submit change requests to the project?

A “Suggestions/Change Requests” link has been posted on the ICBS-R Project website (http://icbs.nwcg.gov/change_management.html) for users to submit change requests.

Now that ICBS has been implemented in the Cache Community, who is responsible for change management?

The ICBS-R Change Management Board (CMB), with representatives from the cache community, has been launched by the ICBS-R Steering Group, and that board is responsible for prioritizing any non-urgent/non-emergency change requests (emergency/urgent CRs are typically required to keep the system healthy and available to users, so those CRs are processed in an expedited manner by the ICBS-R Team).

A member of the ICBS-R Team serves as the Change Management Coordinator (CMC) to receive, review and log CRs submitted by users. The CMB periodically reviews all CRs that have been received and approves and prioritizes, or disapproves the CRs. Approved changes are then handed off to the ICBS-R Team to implement by working with the O&M contractor.

The ICBS-R Deputy Project Manager serves as a member of the CMB. The NISC Representative from the Steering Group acts as a liaison to the CMB.

The Change Management Board meets at least twice a year and is required to report to the Cache Managers at least once a year.