

Interagency Cache Business System Re-engineering Project (ICBS-R)
Field Visit Summary
10/12/2004

Executive Summary

During May 2004, field visits were conducted at nineteen National and Local Area Caches in an effort to validate and update the cache's business requirements as required by the ICBS-R project charter. The field visit teams were comprised of cache personnel representing a cross-section of geographic areas and cache business expertise.

Over 90% of the caches visited reported the need for the following major additions or changes to their existing system:

- Centralized database
- Interface with ROSS (Resource Order and Status System)
- Interface with Financial Systems
- Incorporate AIT (automated identification technology)
- Above/below minimum analysis – quick and easy display
- Archive and restore capability
- Standard label program.

Most of the caches visited use the ICBS (Interagency Cache Business System) to manage their cache inventory and business. When asked what could make ICBS more effective or efficient, the majority of the responses centered around the following general issues:

- Improved training opportunities
- More comprehensive user manual
- Improvements to reporting and querying
- Ability to set preferences and customize menus
- Use of Cache terminology on screens (e.g. “NFES Number” instead of “Cache Item,” “Survey” instead of “Unservicable,” etc.)

The areas of ICBS reportedly needing the most extensive modifications include:

- Procurement
- Transfer Cache Items
- Processing Returns
- Redistribution
- Account Transaction, Billing Information, Cache Item Transaction, and Stock History Reports

Detailed results of the cache visits were compiled into a fifty plus page business requirements table that has been incorporated into the Statement of Work (S.O.W.) for a software design contract to re-engineer ICBS. To supplement the information collected by cache field visit teams, a small number of task groups have been formed to gather specific information and develop recommendations for the ICBS-R Project Team. The following pages provide more details about the field visit process and results.

Background

An existing legacy system, the Interagency Cache Business System (ICBS), has served most of the National Caches since it was implemented in 1999. In addition to ICBS, a handful of other automated systems are used by National and Local Area Caches. This results in data inconsistency for national reporting and an inability to share information.

The ICBS Re-engineering Project (ICBS-R) was chartered in 2003 by the National Wildfire Coordinating Group (NWCG) as a partnership between the USFS, BLM and the National Interagency Support Cache (NISC) Managers. The overall objective of the project is to produce an improved cache business application to be used by all National Caches, Local Area Caches and Remote Caches.

The three key goals for the ICBS-R Project are:

1. Introduce an improved system architecture that will allow the use of ICBS not only by National Caches, but also by Local Area and Remote Caches.
2. Satisfy the essential business needs of the nationwide cache system:
3. Exchange data on a real-time basis with the Resource Ordering and Status System (ROSS).

The ICBS Re-engineering Project Charter requires the project to "...review and validate the current cache business processes that have been automated through ICBS and InPro Trac (system used by the Alaska Incident Support Cache), and discover/document business processes that could potentially be included in the re-engineered system." The charter also requires the re-engineered system to contain provisions for Automated Identification Technology (A.I.T.) such as bar code or smart card scanning.

During April and May 2004, field visits were conducted at National and Local Area Caches in an effort to validate and update the cache's business requirements.

Field Visit Overview

Six field visit teams each with three cache personnel were assembled from throughout the country. Each team represented a cross-section of National/Local Area caches from diverse geographic areas (See Appendix A for details). The teams visited a total of nineteen caches including:

- 11 National Caches
- 2 Northwest satellite locations
- 6 local area caches

Automated systems used by the caches visited were as follows:

- 14 used ICBS
- 1 used Inpro Trak
- 1 used WRAP
- 3 used no automated system

The teams, in collaboration with one or more local representative at each facility, documented the current processes used to conduct business – how business is done today. The teams were not there to review or judge the cache processes; rather they were there to document them.

In addition to documenting current business processes, the teams asked cache personnel to identify those areas in which a new ICBS architecture and interface might benefit specific steps

in the cache processes (e.g. the ability to view another cache's inventory prior to forwarding an order to that cache, the ability to use incident "header" information previously entered by another cache, etc.).

To supplement the information collected by cache field visit teams, a small number of task groups have been (or will be) formed to gather specific information and develop recommendations for the ICBS-R Project Team. Task groups include the following focus areas: A.I.T. requirements; expired item tracking; interface requirements between ICBS, ROSS and other systems; finance, accounting and property management; infrastructure requirements; etc. An additional task group is developing pre- and post-project performance measures, which will be used for cost benefit analysis.

Tools and approach

The teams used a Microsoft Access-based data collection tool developed from cache processes identified in the 1993 cache model, the 1997 ICBS design and the existing ICBS application. An outline of cache business processes was pre-loaded into the tool around which a series of standard questions were formulated. The tool helped in the consistent and standard collection of data. Once the data was collected, the tool contributed to efficient analysis capabilities and reliable results. The cache business processes were divided into the following five main areas with many sub-processes defined in each are.

1. Process order requests
2. Process Incoming Cache Items
3. Perform Warehouse Activities
4. Procure Items
5. Generate Reports

For each business process the tool guided the interviewers and interviewees through six main areas:

1. Used - is the process used at the cache.
2. Data - where the data comes from to support the process.
3. System - what automated or manual system is used to support the process including any desired changes.
4. Reports - is a report needed or used to support the process and any desired changes
5. Other Caches Data - is it useful to see other caches data for this process and how.
6. AIT - is automated identification technology useful for the processes.

In addition, thirty-five specific questions were asked addressing areas such as disaster recovery, hardware/network issues, training and support issues, and other more general cache questions.

Field Visit Results

The overall goal of the field visits was to help answer the following questions:

1. What could make ICBS more effective, efficient or friendly?
2. Are there processes that are not included in ICBS (or InPro Trak, etc.) that should be in the re-engineered system?

3. Were processes identified in the model that are not in ICBS (or InPro Trak, etc.) still needed?
4. Are any functions/processes in ICBS not needed?
5. Are there cache processes included in ICBS that should be moved to a different area of the application?
6. In what ways do various caches use ICBS in different ways (e.g. using different functions) to perform identical cache processes; and what are the reasons and ramifications of these differences.
7. What areas of ICBS would require the most changes?

In summary, the answers to each of the questions are provided below:

1. What could make ICBS more effective, efficient or friendly?
 - Over 80% of the caches visited, that use ICBS, reported the following major items that would make ICBS more effective, efficient or friendly. This list does not include the specific business requirements addressed in the next question.
 - Training and User Manual
 - Training available on an on-going basis
 - Computer-based training available
 - On-line help incorporated into the system
 - Improved User Manual - comprehensive, business driven, up-to-date, include examples
 - Reporting and Querying
 - Ad-hoc reporting capability
 - Better tie between information displayed on the screen and reports
 - Ability create report output electronically so documents can be sent via email instead of faxing or mailing hard-copy
 - Improvements in canned report formatting.
 - Eliminate calculation discrepancies between various canned reports.
 - Ability to easily query other caches data from within the application
 - User Interface Design
 - Ability to set cache preferences by customizing menu options and system parameters
 - Language on screens reflect cache business (i.e. NFES Number instead of Cache Item, survey instead of unservicable)
2. Are there processes that are not included in ICBS (or InPro Trak, etc.) that should be in the re-engineered system?
 - a. Over 90% of the caches visited reported the need for the following major additions or changes to ICBS.
 - i. Centralized Database
 1. View other caches inventory/item availability
 2. Master order, customer and supplier information to be shared.
 - ii. Interface with outside systems
 1. ROSS
 2. Financial systems
 3. Process credit card orders

- iii. Incorporate AIT (automated identification technology) into system such as bar code scanning.
 - iv. Quick/easy display of above/below minimum analysis
 - v. Archive and Restore capability
 - vi. Standard label program
- 3. Were processes identified in the 1993 model that are not in ICBS (or InPro Trak, etc.) still needed?
 - a. All caches visited reported still needing following processes that were modeled in 1993.
 - i. Archive and Restore
 - ii. BLM Stores Reporting
 - iii. Ad Hoc Reporting
- 4. Are any functions/processes in ICBS not needed?
 - a. The following ICBS modules/reports were not used by any of the caches visited.
 - i. Process Issue Shortage Notice
 - ii. Some of the separate options in "Process Requisition"
 - iii. "Parts List" option of workorder
- 5. Are there cache processes included in ICBS that should be moved to a different area of the application?
 - a. The field visit results were analyzed to see which parts of ICBS the caches were using to perform the various functions. The analysis looked for trends in caches using different parts of ICBS to perform the same functions or reported difficulty using an ICBS module to accomplish a process. The following major areas were identified from the responses:
 - i. Transfer Process could be re-engineered to function like an issue
 - ii. Billing Process needs to become separate module not just a report
 - iii. Stock Status information should be readily available from any place in application.
- 6. In what ways do various caches use ICBS in different ways (e.g. using different functions) to perform identical cache processes; and what are the reasons and ramifications of these differences.
 - a. Return/Refurbishment Cache and Workorder Process
 - i. [add explanation]
 - b. Receipt Function
 - i. [add explanation]
 - c. Backorder Process
 - i. [add explanation]
 - d. Create Distribution List
 - i. Even though this module exists in ICBS, the caches use a manual process to manage redistribution of items. This module will be re-engineered.
- 7. What areas of ICBS would require the most extensive changes?
 - a. Procurement
 - b. Transfer Cache Items
 - c. Processing Returns

- d. Redistribution
- e. Account Transaction, Billing Information, Cache Item Transaction, and Stock History Reports

APPENDIX A

Table 1 – Caches Visited and Teams

Team	Caches Visited	Team Members
1	New Hampshire Cache, Arkansas-Oklahoma I/A Cache, Southern Area Cache (SAK)	Ed Plapp-PFK (Leader) Deb Bruyere-NEK Stephanie Barth- NWK
2	Alaska (AKK), Coeur d'Alene I/A Cache, Northern Rockies Cache (NRK)	Dave Milbrat-NCK (Leader) Karen Mason-NWK Jeri Billiard-GBK
3	Billings I/A Cache, Rocky Mtn Cache (RMK), Northeastern Cache (NEK)	Matt Cnudde-AKK (Leader) Cameron Hughes-CDK Kevin Staley-GBK
4	Great Basin Cache(GBK), Alaska State (Fairbanks), Elko Interagency Cache	Dave Levesque-NRK (Leader) Sean Phelan-LSK Joanne Waller-AKK
5	Prescott Cache (PFK), Logistics Support Cache (Ontario-LSK), LaGrande Cache	Tom Staydahor-NEK (Leader) Tom Olson-SFK John Robertson-RMK
6	Wenatchee I/A Cache, Northwest Cache (NWK), Silver City Cache (SFK)	Bob Behrner-NEK (Leader) Justin Muhlhauser-CDK Marie Johnson-PFK
ICBS-R Team	Northern California (NCK)	Jeri Billiard – GBK (Leader) Stephanie Barth - LGD Andy Gray

Table 2 – Caches Visited and Automated System in Use

Cache	Automated System
NCK - Redding, CA	ICBS
SAK – London, KY	ICBS
NEK - Grand Rapids, MN	ICBS
GBK - Boise, ID	ICBS/BLM
NRK – Missoula, MT	ICBS
RMK - Lakewood, CO	ICBS
LSK - Ontario, CA	ICBS
CDK - Coeur D'Alene, ID	ICBS
PFK – Prescott, AZ	ICBS
Wenatchee IA, Wenatchee, WA	ICBS
EKD – Elko, Nevada	NONE
BFK – Billings, MT	ICBS
AOICC - Arkansas/Oklahoma	Cache Tracker (not yet implemented)
SFK - Silver City, NM	ICBS
AKK – Fort Wainwright, AK	InPro Trak
AKS - State of AK - Fairbanks, AK	WRAP
LAG – LaGrande, OR	ICBS
NWK – Redmond, OR	ICBS
New Hampshire	NONE