

Discussion Paper – NWCG Data Standard

UNIT IDENTIFIER

January 5, 2005

This document provides assumptions, rationale, clarifications, examples, or background related to this data standard.

Assumptions

The following assumptions were made:

- 1. Unit Identifiers were initially implemented to provide a common, short-cut method for entering interagency organizational units for manual and automated systems used by the wildland fire community.*
- 2. A Unit Identifier is a common data element between many interagency wildland fire systems and therefore requires standardization to ensure accuracy and consistency between those systems.*
- 3. Unit Identifiers are not intended to duplicate agency-specific organization codes; however, there is a need to map to those organization codes.*
- 4. Unit Identifiers are primarily issued to wildland fire government organizational units; however, there may be a need to assign a Unit Identifier to other government organizational units such as those in FAA, DOD, etc.*
- 5. Unit Identifiers were created by the interagency wildland fire community, and NWCG is the standards organization for the interagency wildland fire community, the responsibility for maintaining the data standard for Unit Identifier rests with NWCG.*

Facts:

- 1. The Geographic Area Coordination Groups manage the assignment of Unit Identifiers within their geographic area with respect to the number of tiers and the naming convention of the Unit Identifier. Data custodian for each Geographic Area were identified at the National Coordinator's meeting in December 2001.*
- 2. The NICC Unit Identifier data steward will facilitate the decision-making process for issues regarding the Unit Identifier data standard with input from the NWCG Data Administration Working Group.*
- 3. The NICC Unit Identifier database will serve as the official system of record for Unit Identifiers*
- 4. The system of record for Unit Identifiers will serve as the authoritative source for valid Unit Identifiers for all NWCG systems. By creating a data standard, it is assumed that NWCG systems must ensure that Unit Identifiers are not added, modified, or deleted without a matching transaction to the system of record.*
- 5. The data steward and data custodians will develop a change process for the Unit Identifier meta-data definition and system of record by July 10, 2002.*

Business Rules

The following discussions provide additional clarification for each business rule.

Business Rule 1: A Unit Identifier is designated for government (federal, state, and local) units and NWCG-approved non-government wildland fire cooperators.

Observation 1:

Some offices use an abbreviation using the same format as the Unit Identifier as a short-cut method for identifying vendors or contractors.

Discussion:

Within the data standardization process, it is not practical to attempt to maintain a system of record of interagency, national organizational units that includes private organizations. While the list of government organizational units stays fairly stable, the list of private organizations is constantly changing. Because Unit Identifiers are a core data exchange element, it is important that the system of record and the affected systems are able to easily synchronize on the Unit Identifier. If any mismatches occur between the system of record and any of the NWCG systems, data migration efforts may fail.

On the other hand, it makes sense to provide the user the opportunity to use abbreviations for private organizations. System designers may allow users to create and use locally assigned identifiers for private organizations; however, the system must be designed so that the official, national Unit Identifiers can be easily distinguished from the locally assigned identifiers so that only national NWCG Unit Identifiers will be included in data synchronization efforts.

In 2004, a proposal to assign unit identifiers for private organizations that function as a wildland fire cooperator (e.g. The Nature Conservancy) was approved. Other private organizations may not be assigned Unit Identifiers unless approved by the NWCG parent group.

Decision:

Private organizations will not be assigned a national NWCG standard Unit Identifier. Any exceptions to this rule must be recommended by the DAWG and approved by the NWCG parent group.

Business Rule 2: Any specific unit identifier can only be assigned to one distinct organizational unit.

Observation 1:

Some offices assign a single Unit Identifier to designate the type of organization (e.g. OR-PRI to designate a privately-owned resource), resulting in a single Unit Identifier being used as the identifier for many private organizations and individuals.

Discussion:

This practice mixes apples and oranges. In one situation, in the case of government-owned resources, the Unit Identifier is used to identify the organizational unit that has administrative jurisdiction for wildland fire resources, for which a single, unique Unit Identifier is assigned. However, in the case of privately-owned resources, the Unit Identifier is used to identify the type of procurement, for which a single Unit Identifier is used for resources that are owned by many different organizations. In computerized systems, it is important identify the business need and apply the same logic in all cases. While it makes sense to be able to identify a privately-owned resource, it doesn't make sense to use the Unit Identifier as the way to do it. In addition, using a generic "PVT" designator does not support reporting requirements to associate the employee with an organization for the purpose of emergency contacts or contract administration. During data exchange between systems, the mis-match of data will certainly cause major problems if one Unit Identifier is shared between many private organizations.

Decision:

The Unit Identifier will only be used as a designator for an organizational unit, not as a way to identify privately-owned vs. government-owned resources.

Observation 2:

Some geographic areas use a single Unit Identifier to designate an entire state's government. For example, MN-MNS represents all of the state of Minnesota's organizational units, resulting in many organizational units with the same Unit Identifier.

Discussion:

This practice meets the reporting needs for federal reporting; however, it does not support the state governments' multi-tiered organization. Assigning one Unit Identifier will not allow the states to provide detailed reporting at lower levels of the state organization.

Decision:

Assignment of Unit Identifiers should meet the needs of the entire wildland fire community, including state and local governments. The state wildland fire organizations should be consulted regarding their reporting needs, and, if necessary, state organization units should be assigned individual Unit Identifiers.

Business Rule 3: An organizational unit can have only one distinct unit identifier.

Observation 1:

A need has been expressed to assign two Unit Identifiers to a single organizational unit in cases where the organizational unit's jurisdiction covers two state boundaries.

Discussion:

The purpose of the Unit Identifier is used to identify the office that has administrative jurisdiction over events and/or resources. While it is true that a unit can have administrative jurisdiction over an area that crosses state boundaries, it is improper use of the Unit Identifier to attempt to use it as a reference for geographic boundaries. The geographic boundaries of an

organizational unit should be defined in a relationship to jurisdiction recorded in other parts of the system, but are not a function of the Unit Identifier.

Decision:

An organizational unit whose jurisdiction crosses state boundaries will use the State Code of the state within which the main office is physically located.

Observation 2:

It has been suggested that an interagency organizational unit (such as NICC, GACCs, or other interagency offices) can have several Unit Identifiers.

Discussion:

An interagency organizational unit is an office that has no exclusive administrative affiliations to a government department or agency. The interagency office may have a relationship with an agency for facility support, but the operations of the office are interagency, and, as a duty station, the office should have only one Unit Identifier. The employees of that unit have two relationships: 1) with the interagency office in a duty station relationship; or 2) with the department/agency hiring office in an administrative relationship. Within the context of the wildland fire business model, it is important to be able to provide reports from both perspectives. For communication documentation, the duty station relationship is important; likewise, for resource utilization reporting, the agency administrative relationship is necessary. Database designers will need to support both types of relationships. For example, NICC serves as the duty station for employees of BLM and USFS. Each NICC employee has an agency affiliation through the organizational unit that hired him/her; but all employees share the same duty station, which is NICC.

Decision:

An interagency office will have only one Unit Identifier. An interagency office can be the duty station, but cannot be the employing office of a government employee. An interagency office can serve as the duty station, but cannot be the contracting office for privately-owned resources.

<i>Employee</i>	<i>Duty Station</i>	<i>Employing Office</i>
<i>Neal Hitchcock</i>	<i>ID-NIC</i>	<i>ID-FCF</i>
<i>Kim Christensen</i>	<i>ID-NIC</i>	<i>ID-FCD</i>
<i>Doug Shinn</i>	<i>ID-NIC</i>	<i>ID-FCF</i>

<i>Privately-owned Resource</i>	<i>Duty Station</i>	<i>Contracting Office</i>
<i>NIFC Jet</i>	<i>ID-NIC</i>	<i>ID-FCF</i>
<i>Mobile Catering Unit</i>	<i>OR-PRF</i>	<i>ID-FCF</i>

Business Rule 4: An organizational unit whose jurisdiction crosses state boundaries should use the state code of the state within which the main office is physically located.

Observation/Discussion/Decision:

See Business Rule 3, Observation 1.

Deleted Business Practice: Unit Code Naming Convention

Observation 1:

The last four characters of the Unit Identifier are known as the Unit Code. In the past, it was required that the third characters of the Unit Code identify the agency (e.g. F = Forest, D = BLM district, S = State). At the same time, this code was used to identify the wildland fire role (e.g. K = Geographic Area Cache, C = Coordination/dispatch centers). The reason for placing this code inside the Unit Code was to help the user identify agency affiliations and wildland fire roles in one quick look at the Unit Identifier.

Discussion:

This practice causes some confusion in reporting. For example, using a “C” or “K” does not make it possible to identify the agency in cases where a dispatch center or cache is solely administered and staffed by a single agency.

This system worked for federal agencies, but did not meet the needs of the state organizational units as they establish Unit Identifiers for the multiple tiers of their organizations. While this naming convention within the Unit Code was useful, it is not possible to apply it as state organizations enter multiple tiers. The Unit Identifier database identifies agency affiliations and wildland fire roles in separate fields as illustrated below:

Unit Identifier	State Code	Unit Code	Unit Name	WF Role (Optional)	GACC Unit ID	Agency	Agency Type	Parent Unit ID
CO		RMC	Rocky Mountain Area Coordination Center	Coordination Center	CO-RMC	(N/A)	Interagency	-
CO		RMK	Rocky Mountain Area Fire Cache	Fire Cache	CO-RMC	USFS	Federal	CO-R02
CO		DSP	Dinosaur NP	-	CO-RMC	NPS	Federal	CO-IMP
CO		CRC	Craig Interagency Dispatch Center	Dispatch Center	CO-RMC		Interagency	-
OR		GRT	Grande Ronde Reservation	-	OR-NWC	Confed. Tribes of Grande Ronde	Tribe	-
DC		WOB	Washington Office	-	GA-SAC	BLM	Federal	-
OR		ORS	State Headquarters	-	OR-NWC	Oregon Dept. of Forestry	State	-
OR		JK3N	Fire District #3	-		Jackson County	County & Local	-
AZ		NTC	National Training Center	Training Facility	NM-SWC	BLM	Federal	DC-WOB
WA		FAA	Minneapolis Air Route Traffic Control Center	ARTCC	WI-EAC	FAA	Federal	-

Decision:

There are no naming conventions associated with the 4-character Unit Code. In most cases, there will be no change to the existing Unit Identifiers. Unit Identifiers with a three-character Unit Code should not be changed solely to make use of the fourth character.

Data Management Rules and Principles

By creating and publishing a data standard, certain data management rules must also be applied. The following data management rules apply to this particular data standard:

Data Management Rule #1: A primary key must be unique.

Observation 1:

Change proposals have been submitted requesting that an archived Unit Identifier be assigned to a new organizational unit. The user assumes that because the former organizational unit no longer exists, there will be no conflict.

Discussion:

The Unit Identifier System provides a historical record of all Unit Identifiers. Organizational units that no longer exist are archived, but never deleted. The reason for this rule is to maintain the integrity of the Unit Identifiers over time. Even though the unit no longer exists, there is a need to maintain the Unit Identifier for historical reporting and records management purposes. If the Unit Identifier is issued to a different unit, two organizational units would share the same Unit Identifier code and it could result in a reporting conflict when retrieving data for extended periods of time.

Decision:

Archived Unit Identifier codes can not be re-issued.

Data Management Rule #2: The data value of a primary key can never be changed.

Observation 1:

Change proposals have been submitted requesting a change to the Unit Identifier Code. The reasons for the requests are usually 1) a change in the name of the Unit, or 2) an attempt to apply a standardized set of codes within the Unit Identifier code field.

Discussion:

The Unit Identifier code is the a primary key that is shared between wildland fire systems. Standard data principles do not allow changes of any kind to a primary key. The reason for this rule is to maintain a stable set of data values over time. A Unit Identifier code can be compared to a Social Security Number (SSN). At one time, the first three digits of the SSN could be used to identify the region of the person's birth (e.g. a person whose SSN begins with "518" were born in Idaho. When a person was born, a Social Security Number was issued; but if that person moved to a different location, the SSN did not change, which invalidated the location code in the first three digits; therefore, the location code is no longer used in newly issued SSNs. In addition, if that person gets married, the SSN remains the same. To change the SSN would cause a ripple effect of problems throughout the multiple systems that use SSNs as the key identifier for a person. Like the SSN, the Unit Identifier serves as the key identifier for an organizational unit. To change a Unit Identifier would cause a major disruption across the wildland fire systems that would result in loss of historical data, inaccurate reporting, and costly modifications.

Decision:

While the name or address of a unit may change, the Unit Identifier code may not be changed.

Data Management Rule #3: A key identifier cannot be deleted.

Observation 1:

Change proposals have been submitted requesting a change to the Unit Identifier Code. The reasons for the requests are usually 1) a change in the name of the Unit, or 2) an attempt to establish a standardized set of codes to be used within the Unit Identifier code field.

Discussion:

The Unit Identifier code is the key identifier that is shared between wildland fire systems. Standard data principles do not allow changes of any kind to a key identifier. The reason for this rule is to maintain a stable set of data values over time.

A Unit Identifier code can be compared to a Social Security Number (SSN). When a person is born, a Social Security Number is issued; but if that person moves to a different location, the SSN does not change; if that person gets married, the SSN remains the same. If a person could change their SSN, all the systems that used the old SSN would need to be changed (e.g. bank accounts, medical records, paychecks, credit cards, credit reports, employment records, school records, etc.) It is easy to see how this could escalate into a major maintenance problem. Like the SSN, it is important to maintain the integrity of the use of Unit Identifiers across systems by ensuring that the codes remain consistent.

Decision:

The Unit Identifier code may not be changed. This is necessary to maintain the integrity of data records of systems that have used the Unit Identifiers across the wildland fire enterprise. The name of an organizational unit can be changed, but the Unit Identifier Code cannot be changed.