

ADIS 08-1 FEATURES, ISSUES AND RESOLUTIONS

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I. Summary of ADIS 08-1

The 2008-1 version of the Address Data Interchange Specification (ADIS) continues to support all the features of its 07-1 predecessor and is consistent with Mail.dat 08-1.

In order to ensure that ADIS can work well in conjunction with Mail.dat, the ADIS fields used to identify a Mail.dat file have been brought together in the production group header, which is a logical place for them. An ADIS file only needs multiple production groups if the label block “rectangle” changes, as might occur with domestic versus international names and addresses. This means that the scope of a Mail.dat file is typically represented in ADIS by one production group, and the information needed to identify the Mail.dat is found in the production group header. A few fields have been assigned new codes in order to accomplish that. Other than that, there are no structural changes to ADIS 08-1.

The changes in 08-1 provide for eighteen new fields in ADIS, and no fields have been removed. Converting an ADIS 07-1 to the 08-1 format is a very simple process, though the version number must be updated. Therefore, we have proposed to treat this as a minor upgrade, as long as the work group supports this approach, and there have been no objections to this procedure.

II. Specific Enhancements in ADIS 08-1

Fields Added

Name	Code	Size	Comment
maildatVersion	A00.0410	4	Document version when linked with Mail.dat
maildatLicenseCode	A00.0420	4	Document Mail.dat User License Code

licensedUserJobNumber	A00.0430	25	Document Licensed user job number from Mail.dat
verificationFacilityName	A00.4800	30	Used by PostalOne!
verificationFacilityZipPlusFour	A00.4810	9	Used by PostalOne!
mailFacilityIdentifier	A00.4900	10	Used by PostalOne!
sasIndicator	A00.5000	1	Seamless Acceptance and/or Service Performance
longFourStateMailerID	A50.8207	9	Alternate Form of IMB
shortFourStateMailpieceID	A50.8208	6	Alternate Form of IMB
replyMailBarcodeContents	A50.9000	31	IMB For Reply Piece
parcelBarcodeContents	A50.9100	34	Non-Four-State Piece Related Barcode Contents
cqtDatabaseIdentifier	A60.6600	8	Mail.dat key field
walkSequenceNumber	A60.2910	5	Number of Piece In Actual Sequence
wastedPieceIndicator	A60.6700	1	Y if piece not produced
machineId	A60.6800	4	Id of machine printing barcode
mailerIdOfMailOwner	A60.6900	9	Id of Mail Owner when not already in IMB
mailerIdOfBarcodeApplicator	A60.7000	9	Id of party that applied IMB
moveUpdateComplianceMethod	A70.0606	1	USPS Approved Method

III. USPS and International Address Hygiene Applications

ADIS 08-1 supports recently available address quality applications such as OneCode Confirm and OneCode ACS through its ability to represent IMB data. These applications

are critical to mailers for both address hygiene and service performance measurement. There will be more applications of this kind; for example, address accuracy can be improved using the same methods now used for move updating and mail tracking.

Further applications could include documentation of address hygiene performance for postal services in many countries. Consider the case of supplying a standard name and address file format as used on a mail piece and as placed in escrow with a secure hash function retaining the SHA digest to validate the rendition and an electronic postmark to verify the date and database in performance of address hygiene. This approach may be used for postal validation either before or after a mailing. If it is after the fact, it is part of a process of verification. If it is before the fact, it could be used in the process of list certification. To develop this validation capability, it can be defined as an ADIS project file, a defined subset of fields, with or without a dictionary actually present.

Consider a different project, such as an electronic return service from a Post to a list owner for address changes (and address correction) information, and a similar capability can be used. In fact, this can be done with two ADIS project files. These and other applications can be developed using XML files validated against an ADIS 08-1 schema.

IV. Increased Usefulness of Extended Fields

One other modification already made in ADIS 07-1 that may become more useful now involves dedicating a code range for another method of extending ADIS data fields. Until 2007, ADIS supported predefined extended fields, user extended fields and user defined fields. Predefined extended fields use multiple instances and parts where they are known to be needed, for example, if they are part of a recognized standard such as UPU S42. User extended fields use multiple instances and parts where they are needed for a particular purpose. A second form of user extended field is achieved through the use of segment replication, which allows multiple names to be associated with a single address in ADIS. The advantage is that the meaning of a user extended field is clear even though the receiver may not have seen that field before. User defined fields have meaning only in the context of a particular user or an agreement between users, so that other users may have a different meaning for the code.

A further scenario that was supported in 2007 relates to common user defined fields, and using this could reduce the amount of time and resources that must be taken up in the work group with periodic updates to ADIS. This is the reason for another category of field, which provides for reserved commonly agreed upon user defined fields. This scenario presumes that multiple work groups within IDEAlliance may want to agree on the meaning of a field and an assigned code for a purpose that had not been anticipated and does not merely extend an existing element. Such requests may need an approval procedure which extends beyond the ADIS work group itself. Instead a procedure can be set up which involves showing consensus among multiple groups and final approval by David Steinhardt. Should such a consensus be obtained, the nominated fields and their associated codes could then be published as a reserved field in the ADIS section of

the IDEAlliance web site. Part of the premise behind this procedure is that adding new fields does not harm existing users nor cause them to make any changes to existing files. If used, this procedure may somewhat alleviate the need for interim updates to ADIS during a period in which frequent changes may be expected to the infrastructure of electronic communications among mailers, suppliers and the Postal Service.

V. UPU S42-5 Compatibility

An important feature of ADIS has been compatibility with UPU S42, which includes an international definition of name and address elements that is further recognized by other standards bodies such as CEN in Europe, and defines country based templates in the Postal Address Template Description Language (PATDL) for representing the different address formats within a country.

Use of templates calls for a PATDL rendition engine, such as has been developed by Allies Computing in the UK. A PATDL rendition engine can provide dynamic optimal address presentation within a defined (rectangular by convention) imaging space. It uses one or sometimes more than one template for each country to guide the results. There may be other ways to provide optimal presentation of names and addresses in a varying set of differently sized rectangular spaces than to use a database of standardized elements with a template capability and a rendition engine. But this approach has been included as part of the UPU standard “International Postal Address Components and Templates”, now at version S42-5, as approved by the UPU Standards Board in February, 2006.

UPU S42 can validate addresses if there is a delivery point data base for a country by making sure that the template can reproduce all the valid addresses. To do this, the addresses must be consistently structured, or the template becomes more complex in an avoidable way. Without a delivery point database, addresses cannot be known to be valid, but many invalid addresses can be detected. Checking against move update files is also possible, leading to the issue of using addressing standards to develop international COA capabilities. This can now be shown to be technically feasible, even without exchanging or giving out address data, though politically challenging.

The UPU has expressed interest in defining a way to communicate international address information and assigned this topic to the Addressing Project Group TC led by Ruth Jones of USPS. Considering this issue separately from international COA, this issue is also as much a political as a technical challenge. Few countries would allow even the detailed description of the delivery points, not to mention the address change information, to be exchanged on a cross border basis. But there is the possibility for domestic address changes to be specified within the territory of a UPU member in a standard way. Further, it may be that addresses can at least be ruled out as a way of reaching parties, avoiding wasted mail, even if the new address cannot be provided. Alternatively, a system could be put in place for business addresses but not for consumer addresses.

ADIS achieves compatibility with UPU S42 by including its elements, though sometimes under local names. For example, there is a ZIP Code element in ADIS; in fact, there are several variants for different lengths and with different check digits. There is also a Postcode element that can be used for an undifferentiated international postcode. Elements can have codes, but also definers and descriptors. In other words, there can be a code, an official name, and an unofficial name or explanation that may have local significance. Elements have parts and instances, which have a fixed small finite number of occurrences in UPU S42, but can be extended in ADIS in the ways described earlier.

The ADIS element code structure is useful in several ways. In its tree structure, it can correspond to programming objects which, for example, could contain a formal name, an everyday name, and a casual name all in a name object. The fact that items of information have instances and parts and form segments that can be replicated is mundane, but representing it makes the code structure dynamic and extensible. In an international context, the code structure also helps by reducing the dependence on written language.

In general, UPU S42 support is a significant feature for ADIS, which extends it beyond its North American context in supporting USPS and Canada Post to a global horizon. It is important to have standard ways to transmit name and address data, and to make different standards interoperable, whether to make ordinary commerce more effective, or to increase cross border mailing efficiencies.

VI. Work Group Participants and Process

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The workgroup follows IDEAlliance rules on standards process and intellectual property. ADIS is available on a royalty-free basis. David Steinhardt of IDEAlliance can be called to clarify any matters of this sort.

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