ADIF Proposals Issue 56, 16 July 2024

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Changes from Previous VersionChanges from the previous version of this document are shown by highlighting, with deleted text shown by strikethrough.

Status Key

otatus 110j	
Awaiting comments	There is a minimum 1-week comment period following publication in this document.
Ready for inclusion	The comment period has ended; this is an uncontroversial item that will be included in a draft specification without a poll unless there are adverse comments.
Awaiting sponsors	For a proposal needing a poll, at least two members of the ADIF Voting group must support it beforehand.
Ready for poll	The comment period has ended; a poll can now be initiated.
Poll: Approved	There was a majority of votes for inclusion of the item, which will be included a draft specification
Poll: Rejected	There was not a majority of votes for inclusion of the item, which will be taken no further.
Work in progress	Further work is needed before the item can be considered for inclusion in a draft specification.
Withdrawn	No further action.
Included in a.b.c	Included in proposed specification version a.b.c

Awaiting sponsors

Item 11: Add REP DMP Award

Item 154: Revisions to III.B.17 QSL Via Enumeration

Items which will have a Poll

Item 47: Add JARL awards to Credit enumeration

Item 58: Remove FIPS 6-4 US County Link

Item 80: Clarifications on the fields BAND, BAND RX, FREQ, & FREQ RX

Item 107: Add Support for Extended Character Sets

Item 129: Mode/Submode support for GMSK, FSK and FSK-W

Item 143: Add fields for Castles on the Air

Item 144: Add download date/status fields for QRZ.com

Item 151: Add QSO field to represent a Morse code key

Item 157: Add QSO fields to support the DARC DCL online service

Item 158: Add QSO Fields QSLMSG_RCVD and QSLMSG_RCVD_INTL

Items which have been approved by a Poll

None.

Items which have been rejected by a Poll

None

Items which will not have a Poll

Item 62.2: Update Primary Administrative Subdivision for Country Code 224 (Finland)

Item 81: Replace "Y" in Deleted columns with "Deleted"

Item 83: Remove Digit, Character, and IntlCharacter from Data Types table

Item 85: Add Primary Administrative Subdivision for Norway

Item 88: Minor Changes and Corrections #3

Item 97: Add Clarifications on ADIF to Introduction Section

Item 112: Minor changes and corrections #5

Item 114: Register ADIF media (aka MIME) types

Item 135: Review the ADIF specification w.r.t. importing unexpected data

Item 145: Provide an optional register of PROGRAMID values

Item 146: Provide read-only announcements of new proposed & released ADIF Specifications

Item 147: Updates to Add new Contest IDs

Item 148: Correct the Region enumeration's African Italy entry

Item 149: Add primary administrative subdivisions for DXCCs 324, 11, 142 & 70

Item 150: Minor changes and corrections #9

Item 152: Extend (MY)VUCC GRIDS to 6-character locators

Item 153: Review naming of Application-defined files

Item 155: Kosovo Region / Country

Item 156: Revise POTA data types and field definitions

Item 159: QSLMSG-related clarifications

Item 160: Add New Zealand Regions award to S.A.S. enumeration

Item 161: Review modes implemented by fldigi

Items which have been withdrawnNone

Items that have been included in proposed version 3.1.5

Item 161: Review modes implemented by fldigi

☐ Status: Work in progress

There are discrepancies between the modes supported by fldigi and ADIF; details have been forwarded to Dave W1HJK for review.

Ref. https://groups.io/g/adifdev/message/9724

Item 160: Add New Zealand Regions award to S.A.S. enumeration ☐ Status: Awaiting comments

Secondary Subdivision / Country Code / DXCC Entity / Number of secondary subdivisions / Award / Subdivision List / Award Sponsor / Sponsor Defined Code Format / Examples

NZ Regions / 120 / New Zealand / n / NZR / NZART Awards

https://www.nzart.org.nz/assets/activity/awards/Awards-NZART-2023.pdf / NZART / <Region> COMMA <District> / Bay of Plenty,Kawerau

Ref. https://groups.io/g/adifdev/message/9721

Item 159: QSLMSG-related clarifications

☐ Status: Awaiting comments Work in progress

☐ Add a note to COMMENT and COMMENT INTL fields:

"For a message for the contacted station's operator to be incorporated in a paper or electronic QSL, use the QSLMSG or QSLMSG INTL field"

Ref. https://groups.io/g/adifdev/message/9426

☐ Change the description of the QSLMSG and QSLMSG INTL fields from:

"QSL card comment"

to

"a message for the contacted station's operator to be incorporated in a paper or electronic QSL"

Ref. https://groups.io/g/adifdev/message/9426

Item 158: Add QSO Fields QSLMSG_RCVD and QSLMSG_RCVD_INTL

☐ Status: Awaiting comments Work in progress

Field Name / Data Type / Enumeration / Description

QSLMSG_RCVD / MultilineString / - / a message addressed to the logging station's operator incorporated in a paper or electronic QSL

QSLMSG_RCVD_INTL / IntlMultilineString / - / a message intended for the logging station's operator incorporated in a paper or electronic QSL

Sponsors: G3ZOD, NY4I, AD1C

Ref. https://groups.io/g/adifdev/message/9357

Item 157: Add OSO fields to support the DARC DCL online service

☐ Status: Awaiting comments Work in progress

☐ Add to QSO fields including links to DCL https://www.darc.de/en/der-club/referate/committee-dx/diplome/darc-community-logbook-dcl/

Field Name	Data Type	Enumeration	Description
			date QSL received from DCL
DCL QSLRDATE	Date		
DCL_Q3ENDATE	Date		(only valid if DCL_QSL_RCVD is Y, I, or V)
			(V import-only)
			date QSL sent to DCL
DCL_QSLSDATE	Date		
			(only valid if DCL_QSL_SENT is Y, Q, or I)
			DCL QSL received status
DCL_QSL_RCVD	Enumeration	QSL Rcvd	(V import-only)
			Default Value: N
			DCL QSL sent status
DCL_QSL_SENT	Enumeration	QSL Sent	
			Default Value: N

Sponsors: AA6YQ, G3ZOD

Ref. https://groups.io/g/adifdev/message/9420

Item 156: Revise POTA data types and field definitions

☐ Status: Work in progress

t.b.s.

Ref.

Item 155: Kosovo Region / Country

☐ Status: Awaiting comments Work in progress

In section III.B.20 Region Enumeration, change:

Region Identity Code / DXCC Entity Code / Region / Prefix / Applicability KO / 296 / Kosovo / Z6 / CQ, WAE

to:

KO / 296 / Kosovo (for contacts made before 2018-01-21) / Z6 / CQ, WAE

Ref. https://groups.io/g/adifdev/message/8881

Item 154: Revisions to III.B.17 QSL Via Enumeration

☐ Status: Awaiting sponsors Work in progress

Change values from:

B bureau

D direct
E electronic

M (import-only) manager (import-only)

to:

B bureau

C Club Log OQRS

D direct F file-based

P PayPal "Direct" OQRS
E (import-only) electronic (import-only)
M (import-only) manager (import-only)

Add a footnote that examples of F / "file-based" are image and PDF files

NOTE: No sponsors have come forward, so this item will be removed in the next version of this document.

Ref. https://groups.io/g/adifdev/message/9334

Item 153: Review naming of Application-defined files

■ Status: Awaiting comments Work in progress

Include rules for naming Application-defined fields.

Ref. https://groups.io/g/adifdev/message/9324

Item 152: Extend (MY_)VUCC_GRIDS to 6-character locators

✓ Status: Awaiting comments Work in progress

Extend the definition of (MY_)VUCC_GRIDS to include 6-character locators to bring them into line with LoTW and include in examples.

Ref. https://groups.io/g/adifdev/message/8851

Item 151: Add QSO field to represent a Morse code key

☐ Status: Work in progress

Add QSO fields:

Field Name	Data Type	Enumeration	Description
MORSE_KEY_INFO	String		details of the contacted
			station's Morse key (e.g.
			make, model, etc).
MORSE_KEY_TYPE	Enumeration	Morse Key	the contacted station's Morse
		<mark>Type</mark>	key type (e.g. straight key,
			bug, etc).
MY_MORSE_KEY_INFO	<mark>String</mark>		details of the logging station's
			Morse key (e.g. make, model,
			etc).

MY_MORSE_KEY_TYPE	Enumeration	<mark>Morse Key</mark>	the logging station's Morse
		<mark>Type</mark>	key type (e.g. straight key,
			bug, etc).

Add enumeration Morse Key Type:

Abbreviation	Meaning	Characteristics	Morse Composition	Examples
<mark>SK</mark>		a single lever which actuates a	a human makes the dits and dahs and builds characters	Lionel J-38
<mark>SS</mark>	Sideswiper	a single lever which actuates a single switch when moved in one direction and actuates a single switch when moved in another direction. Both switches are wired in parallel.	a human makes the dits and dahs and	W1SFR Green Machine Torsion Bar Cootie
BUG	Mechanical semi- automatic keyer or Bug	opens and closes a switch when	a machine makes the dits and a human makes the dahs and builds characters.	Vibroplex Blue Racer Deluxe
FAB	Mechanical fully- automatic keyer or Bug	either of two directions actuates a spring and pendulum mechanism	human makes the	GHD GN209FA fully- automatic bug
SLP	Single-Lever Paddle	a single lever which closes a switch when moved in one direction and closes a separate switch when moved in another direction.	a machine makes the dits and the dahs and a human builds the characters.	American Morse Mini- B
DLP	Dual-Lever Paddle	two levers which each close an	a machine makes the dits and the dahs and a human builds the characters.	Begali Sculpture
CPU	1	closing of the switch.	a machine makes the dits and dahs to build the characters.	N1MM+ Logging Software

Ref. https://groups.io/g/adifdev/message/8931 https://groups.io/g/adifdev/message/9443

https://groups.io/g/adifdev/message/9600

Item 150: Minor changes and corrections #9✓ Status: Awaiting comments Work in progress

☑ Add explanation of Import and Export.

Insert a new section before "I.C. Applicability":

I.C. Terminology

Export: Saving data from an application or service into ADIF format. Import: Loading data in ADIF format into an application or service.

Change the first line in the current section "I.C. Applicability" from:

ADIF's purpose is to enable the reliable transfer of amateur radio information from one application or service to another.

to:

ADIF's purpose is to enable the reliable transfer of amateur radio information from one application or service ("export") via an intermediate form (ADIF) to another application or service ("import").

Ref. https://groups.io/g/adifdev/message/8838

☑ In section III.B.6 Continent Enumeration, change the name "Oceana" to "Oceania".

Ref. https://groups.io/g/adifdev/message/9207

☑ In section III.A.1 Maidenhead Locators, change the examples so that the same locator occurs in all of them. Also add a note:

"If both GRIDSQUARE and VUCC_GRIDS are exported in a QSO record, the locator in GRIDSQUARE should be consistent with the locators in VUCC_GRIDS. Similarly, MY_GRIDSQUARE should be consistent with MY_VUCC_GRIDS.

For example, the following is consistent because the locators in VUCC_GRIDS have four characters and the first four characters in GRIDSQUARE are the same as those in one of the locators in VUCC_GRIDS:

<MY_GRID_SQUARE:6>EM97AB <VUCC_GRIDS:19>EN98,FM08,EM97,FM07"

☑ In section "IV.A.6. ADI Records" correct "the the".

☑ In the POTARef datatype definition, change the example:

K-10000, 5-digit park numbers are reserved for future use

to

K-10000, Power City State Fish and Wildlife Area

Ref. https://groups.io/g/adifdev/message/9323

☑ For clarity in the QSO fields VUCC_GRIDS, MY_VUCC_GRIDS, USACA_COUNTIES and MY_USACA_COUNTIES, add to the start of the description:

"a comma-delimited list of"

☑ Bring the DXCC III.B.8 DXCC Entity Code Enumeration back in line with the ARRL list. Ref. https://groups.io/g/adifdev/message/9355

☑ Corrections/updates to the Primary Administrative Subdivisions.

https://www.iso.org/obp/ui/#iso:code:3166:AR DXCC 100 Argentina

https://www.iso.org/obp/ui/#iso:code:3166:BR DXCC 108 Brazil

https://www.iso.org/obp/ui/#iso:code:3166:CL DXCC 112 Chile

https://www.iso.org/obp/ui/#iso:code:3166:DE DXCC 230 Germany

https://www.iso.org/obp/ui/#iso:code:3166:ES

DXCC 281 Spain

DXCC 21 Balearic Is.

DXCC 29 Canary Is.

DXCC 32 Ceuta & Melilla

https://www.iso.org/obp/ui/#iso:code:3166:FR DXCC 227 France

https://www.iso.org/obp/ui/#iso:code:3166:IE DXCC 245 Ireland

https://www.iso.org/obp/ui/#iso:code:3166:MX DXCC 50 Mexico

https://www.iso.org/obp/ui/#iso:code:3166:NL DXCC 263 Netherlands

https://www.iso.org/obp/ui/#iso:code:3166:NZ DXCC 170 New Zealand

https://www.iso.org/obp/ui/#iso:code:3166:PG DXCC 163 Papua New Guinea

https://www.iso.org/obp/ui/#iso:code:3166:PH DXCC 375 Philippines

https://www.iso.org/obp/ui/#iso:code:3166:PY DXCC 132 Paraguay

https://www.iso.org/obp/ui/#iso:code:3166:IT DXCC 225 Sardinia

https://www.iso.org/obp/ui/#iso:code:3166:RO DXCC 275 Romania

https://www.iso.org/obp/ui/#iso:code:3166:SE DXCC 284 Sweden

https://www.iso.org/obp/ui/#iso:code:3166:UY DXCC 144 Uruguay

Ref. https://groups.io/g/adifdev/message/9355

https://groups.io/g/adifdev/message/9418

Item 149: Add primary administrative subdivisions for DXCCs 324, 11, 142 & 70 *Status:* Awaiting comments Work in progress

☑ I propose that we add enumerations for Primary Administrative Subdivisions in India (country code 324), Andaman and Nicobar Islands

(country code 11), and Lakshadweep Islands (country code 142) to the next version of ADIF (3.1.5) using the names defined by ISO 3166:

☑ I propose that the Primary Administrative Subdivisions for Cuba (DXCC country code 70) be added to ADIF based on the information in... ISO 3166.

Enumeration for Country Code 11 (Andaman & Nicobar Is.)

Code Primary Administrative Subdivision

AN Andaman and Nicobar Islands (Union territory)

Enumeration for Country Code 70 (Cuba)

Code Primary Administrative Subdivision

- 15 Artemisa (province)
- 09 Camagüey (province)
- 08 Ciego de Ávila (province)
- 06 Cienfuegos (province)
- 12 Granma (province)

- 14 Guantánamo (province)
- 11 Holguín (province)
- 99 Isla de la Juventud (special municipality)
- 03 La Habana (province)
- 10 Las Tunas (province)
- 04 Matanzas (province)
- 16 Mayabeque (province)
- 01 Pinar del Río (province)
- 07 Sancti Spíritus (province)
- 13 Santiago de Cuba (province)
- 05 Villa Clara (province)

Enumeration for Country Code 142 (Lakshadweep Is.)

Code Primary Administrative Subdivision

LD Lakshadweep (Union territory)

Enumeration for Country Code 324 (India)

Code Primary Administrative Subdivision

- AP Andhra Pradesh (state)
- AR Arunāchal Pradesh (state)
- AS Assam (state)
- BR Bihār (state)
- CH Chandīgarh (Union territory)
- CG Chhattīsgarh (state)
- DL Delhi (Union territory)
- DH Dādra and Nagar Haveli and Damān and Diu (Union territory)
- GA Goa (state)
- GJ Gujarāt (state)
- HR Haryāna (state)
- HP Himāchal Pradesh (state)
- JK Jammu and Kashmīr (Union territory)
- JH Jhārkhand (state)
- KA Karnātaka (state)
- KL Kerala (state)
- LA Ladākh (Union territory)
- MP Madhya Pradesh (state)
- MH Mahārāshtra (state)
- MN Manipur (state)
- ML Meghālaya (state)
- MZ Mizoram (state)
- NL Nāgāland (state)

- OD Odisha (state)
- PY Puducherry (Union territory)
- PB Punjab (state)
- RJ Rājasthān (state)
- SK Sikkim (state)
- TN Tamil Nādu (state)
- TS Telangāna (state)
- TR Tripura (state)
- UP Uttar Pradesh (state)
- UK Uttarākhand (state)
- WB West Bengal (state)

Sponsors: AA6YQ

Ref. https://groups.io/g/adifdev/message/8821 https://www.iso.org/obp/ui/#iso:code:3166:IN

https://groups.io/g/adifdev/message/8877 https://www.iso.org/obp/ui/#iso:code:3166:CU

Item 148: Correct the Region enumeration's African Italy entry

✓ Status: Awaiting comments Work in progress

In section III.B.20 Region Enumeration's African Italy, change WAE to CQ.

Ref. https://groups.io/g/adifdev/message/8806

https://groups.io/g/adifdev/message/6782

Item 147: Updates to Contest IDs

✓ Status: Work in progress

Add the following to the Contest ID enumeration:

ARI Italian Activity Contests (IAC):

Italian Activity Contest (VHF); ARI-IAC-VHF Italian Activity Contest (UHF); ARI-IAC-UHF Italian Activity Contest (6m); ARI-IAC-6M Italian Activity Contest (23cm); ARI-IAC-23CM

Italian Activity Contest (13cm+); ARI-IAC-13CM

DARC:

DARC FT4 Contest; DARC-FT4

PCC:

https://www.procontestclub.ro/PCC%20Rules.html

PCC Pro CW Contest: PCC

Correct the description for CVA-DX-SSB, which says "CW" rather than "SSB".

Ref. https://groups.io/g/adifdev/message/8804

https://groups.io/g/adifdev/message/8809 https://groups.io/g/adifdev/message/9293

Item 146: Provide read-only announcements of new proposed & released ADIF Specifications

☐ Status: Work in progress

Consider providing read-only announcements of new proposed and released ADIF Specifications that can be subscribed to without the need to receive other traffic from the "adifdev" / "adifvoting" Groups.io groups.

Possibilities are

- Use "special" messages in the adifdev group (but requires that no other use is made of "special" messages, which cannot be guaranteed (e.g. there is more than one owner/moderator and there may be other circumstances a "special" message is needed)).
- Add a subgroup to the "adifdev" group (need to check if subgroups can be made to be announcements-only).
- Add a completely new group e.g. "adifannouncements" or "adifnotices" or ... "adifreleases" or ...

Ref. https://groups.io/g/adifdev/message/8787

Item 145: Provide an optional register of PROGRAMID values

☐ Status: Work in progress

Consider adding an optional register of PROGRAMID values used in the PROGRAMID and APP_PROGRAMID_FIELDNAME fields. This could help avoid name clashes and also be informative. This could be incorporated in the ADIF Specification, or probably better to have a website page and a link to the page in the Specification.

Ref. https://groups.io/g/adifdev/message/8785

Item 144: Add download date/status fields for QRZ.com

☐ Status: Awaiting comments Work in progress

☐ Add to Enumerations "QSO Download Status"

Status, Description

Y, the QSO has been downloaded from the online service

N, the QSO has not been downloaded from the online service

I, ignore or invalid

☐ Add to QSO Fields:

Field Name, Data Type, Enumeration, Description

QRZCOM_QSO_DOWNLOAD_DATE, Date, -, date QSO downloaded from QRZ.com logbook

QRZCOM_QSO_DOWNLOAD_STATUS, Enumeration, QSO Download Status, QRZ.com logbook QSO download status

Sponsors: G4POP, AA6YQ

Ref. https://groups.io/g/adifdev/message/8759

Item 143: Add fields for Castles on the Air

☐ Status: Work in progress

Update 2024-07-16: This has proven problematic due to there not being a single, universally accepted list of locations and references, i.e. different countries have variations. It seems there are two approaches, neither of which is desirable: (1) have separate field for each amateur radio organization concerned or (2) have a single field that can contain distinct references for each country concerned. Although (2) seems tidier, it's not obvious that different countries' references can be confirmed to be equivalent.

t.b.s.

Ref. https://groups.io/g/adifdev/message/7767

Item 135: Review the ADIF specification w.r.t. importing unexpected data □ *Status: Work in progress*

Update 2024-07-16: No suggestions for specific changes have been made, so it's likely that the most that can be achieved is to bear this topic in mind when adding new fields or changing existing ones.

The specification rarely discusses how to deal with import of unexpected data that is conforming to a later version of ADIF. E.g. if the (MY_)GRIDSQUARE fields had long ago specified that any characters beyond 8 should be silently ignored, then the current issue over allowing longer locators in them would not have arisen.

Ref. https://groups.io/g/adifdev/message/8608

Item 129: Mode/Submode support for GMSK, FSK and FSK-W

☐ Status: Work in progress

Add FSK as a Submode of MFSK. Add GMSK as a Submode of PSK.

FSK-W can be logged as FSK, so I don't see need at this stage for adding an FSK-W Submode.

Ref. https://n1mmwp.hamdocs.com/manual-operating/digital-modes/ https://groups.io/g/adifdev/message/8225

Item 114: Register ADIF media (aka MIME) types

□ Status: Work in progress

2024-07-16: This has not been pursued as yet in order to avoid having mime types added then subsequently having to change them due to potential changes related to supporting international characters.

Register ADIF media (aka MIME) types.

Document them in the ADIF specification.

Ref: https://groups.io/g/adifdev/message/8121

Item 112: Minor changes and corrections #5

□Status: Work in progress					
Note: the following two items were moved from Item 106					
☐ The Asiatic Russia entry:					
PM Perm` (Permskaya oblast) - for contacts made on or after 2005-12-01	140	17			
needs changing to:					
PM Perm` (Permskaya oblast) - for contacts made on or after 2005-12-01 an	nd made	hefore			
2011-12-02 140 17 30	ia iliaac	Belore			
2011 12 02 110 17 30					
A new European Russia entry needs adding:					
PM Perm` (Permskaya oblast) - for contacts made on or after 2011-12-02	140	17			
30	140	1,			
☐ The Asiatic Russia entry:					
KO Republic of Komi 90 17 20					
needs changing to:					
KO Republic of Komi - for contacts made before 2011-12-02 90	17	20			
Republic of Rollin Tol contacts made seroic 2012 12 02	_,	20			
A new European Russia entry needs adding:					
KO Republic of Komi – for contacts made on or after 2011-12-02 90	17	20			
Republic of Rollin for contacts made on of after 2011-12-02-30	1,	20			
"It looks like the PM, KP and KO entries should just be moved en-bloc from Asiatic Russia	a to Furd	nnean			
Russia without any date demarcation."					
Russia Without any date demarcation.					
Note: awaiting clarification from ARRL.					
Note. awaiting claimeation from ANNL.					
Ref: https://groups.io/g/adifdev/message/7798					
nei. iittps://gioups.io/g/duituev/filessage/7730					

Item 107: Add Support for Extended Character Sets

□Status: Awaiting comments

While added with the best of intentions, in retrospect the following is highly impractical for reasons including, but not limited to, the need for all the character sets to be available on every platform/runtime environment concerned, the level of skill required to program it and incompatibility with the current version of all applications that import ADIF.

[a] Add an Encoding enumeration with the following values:

Encoding, Description

WINDOWS-1252, Western European (Windows)

US-ASCII, American Standard Code for Information Interchange

ISO-8859-1, Latin-1 Western European

ISO-8859-2, Latin-2 Central European

ISO-8859-3, Latin-3 South European

ISO-8859-4, Latin-4 North European

ISO-8859-5, Latin/Cyrillic

ISO-8859-6, Latin/Arabic

ISO-8859-7, Latin/Greek

ISO-8859-8, Latin/Hebrew

ISO-8859-9, Latin-5 Turkish

ISO-8859-10, Latin-6 Nordic

ISO-8859-11, Latin/Thai

ISO-8859-13, Latin-7 Baltic Rim

ISO-8859-14, Latin-8 Celtic

ISO-8859-15, Latin-9

ISO-8859-16, Latin-10 South-Eastern European

[b] Add a footnote to the above table that ISO-8859-12 does not exist.

[c] Add an ENCODING header field:

Field Name: ENCODING Data Type: Enumeration Enumeration: Encoding

Description: ADI files:

the character encoding used in the file.

If an application needs to convert from the encoding specified in ENCODING to a different encoding and one or more characters are unavailable in the new encoding, one option is to substitute the unavailable characters with a question mark "?".

The ENCODING field is mandatory in ADI files from version 3.2.0 onwards.

ADX files:

the ENCODING field is optional in ADX files and if present, is ignored.

[d] Change the Character type description from:

"an ASCII character whose code lies in the range of 32 through 126, inclusive"

to:

"an extended ASCII printable character whose code lies in the range of 32 through 255, inclusive. When importing ADIF that does not contain a HEADER or whose HEADER does not specify an ENCODING

field, the encoding is treated as being WINDOWS-1252."

[e] Change the description of the following fields:

PROGRAMID, USERDEFN, CALL, CONTACTED_OP, EQ_CALL, GUEST_OP, OPERATOR, OWNER_CALLSIGN, STATION_CALLSIGN, CONTEST_ID, SUBMODE to add:

"Only ASCII characters whose code lies in the range of 32 through 126, inclusive, are allowed."

[f] In section "IV.A.4. Application-defined Fields" add to the definitions of PROGRAMID and FIELDNAME: "Only ASCII characters whose code lies in the range of 32 through 126, inclusive, are allowed."

[g] In section "IV.A.6. ADI Records" change:

"If the first character of an ADI file is <, it is presumed to be the first character of the the first QSO-Data-Specifier of the first QSO Record of an ADI file that does not include a Header.

"If the first character of an ADI file ***with a version earlier than 3.2.0**** is <, it is presumed to be the first character of the first QSO-Data-Specifier of the first QSO Record of an ADI file that does not include a Header."

[h] In section "IV.B.2. Application-defined Fields" add to the definition of PROGRAMID and FIELDNAME: "Only ASCII characters whose code lies in the range of 32 through 126, inclusive, are allowed."

[i] Add to the description of the ADIF VER field:

"The ADIF_VER field is mandatory for ADIF version 3.2.0 onwards".

[j] In section "IV.A.3. ADI Header" change:

"If the first character in an ADI file is <, it contains no Header."

to:

"If the first character in an ADI file prior to version 3.2.0 is <, it contains no Header."

[k] In section "IV.A.2. ADI File Structure" change:

"...begins with an optional Header..."

to:

"...begins with a Header..."

and add:

"Note: prior to ADIF version 3.2.0, a Header is optional"

[I] Change the example in section "IV.A.3. ADI Header"

to include the new ADIF version number (3.2.0) and add an ENCODING field:

<ENCODING:12>WINDOWS-1252

[m] Change the example in section "IV.A.7. Sample ADI File" to include the new ADIF version number (3.2.0) and add an ENCODING field:

<ENCODING:12>WINDOWS-1252

Sponsors: AA6YQ, G3ZOD

Ref. https://groups.io/g/adifdev/message/7752

Item 88: Minor Changes and Corrections #3

□Status: Work in progress

□In "III.B.11 Primary Administrative Subdivision Enumeration" add a "Deleted Date" column. For deleted items, this will contain the date on which the item was deleted, and for other items will be blank.

□In "III.B.11 Primary Administrative Subdivision Enumeration" some of the Primary Administrative Subdivision column values contain comments in addition to a name, e.g.

Ust'-Ordynsky Autonomous Okrug - for contacts made before 2008-01-01 To make the actual names machine-readable and consistent with other tables in the specification, surround the comments in parentheses, e.g. change the above to:

Ust'-Ordynsky Autonomous Okrug (for contacts made before 2008-01-01)

□In "III.B.11 Primary Administrative Subdivision Enumeration", a few entries are marked as "import-only" (deprecated). These should instead be marked "deleted" because they are still correct for QSOs prior to the date their use ceased.

☐ The ADIF HTML files currently use "windows-1252" encoding; change this to UTF-8.

□"We have the "Delete date" for the ON province change and "From date" for the new ON sections but there are no dates for WTX and WCF which were added in the 1980's I think (fuzzy in the mind now). Seems like there was another one that was added sometime about then but it escapes me at the moment. 73, Larry W6NWS"

Ref. https://groups.yahoo.com/neo/groups/adifdev/conversations/topics/7078

☐ In III.C.1.b QSO Fields, for consistency with the other enumerations that have values depending on another field, change:

Submode (function of MODE field's value)

to:

(Submode, function of MODE field's value)

Item 87: Correct HFSK submode

□Status: Work in progress

In ADIF 3.0.4, HFSK was thought to be an FSK Hell mode and consequently moved from the Mode table into a submode of HELL. It's been pointed out that the FSK submode of Hell is FSKHELL. From messages some years ago, HFSK is believed to be "high speed FSK" and it is noted that then, and now, no known software specifies HFSK as a mode.

No recent progress on this due to being unable to assess the impact, i.e. how much this may have been used.

Ref. https://groups.yahoo.com/neo/groups/adifdev/conversations/messages/7018

Item 85: Add Primary Administrative Subdivision for Norway ☑ Status: Awaiting comments

Add a Primary Administrative Subdivision enumeration table for the 19 fylke (counties) in Norway (see https://en.wikipedia.org/wiki/ISO_3166-2:NO_).

Note that code 13 does not exist (it belonged to the city of Bergen, which was merged with 12 Hordaland in 1972).

Also the system is due to change to into 11 regioner (regions) but this is forecast to take place between 2018-2020, so the existing fylke should be added then subsequent changes can be made once the new system is in place.

Enumeration for Country Code 266 (Norway)
Code Primary Administrative Subdivision

```
Østfold
     Akershus
03 Oslo
<del>04 Hedmark</del>
05 Oppland
<del>06 Buskerud</del>
07 Vestfold
08 Telemark
   Aust-Agder
10 Vest-Agder
   Rogaland
12 Hordaland
14 Sogn og Fjordane
15 Møre og Romsdal
16 Sør-Trøndelag
17 Nord-Trøndelag
18 Nordland
19 Troms / Romsa (se)
20 Finnmark / Finnmárku (se)
```

Category	<mark>Code</mark>	<mark>Name</mark>	DXCC	DXCC Name
county	<mark>42</mark>	<mark>Agder</mark>	<mark>266</mark>	NORWAY
<mark>county</mark>	<mark>34</mark>	<mark>Innlandet</mark>	<mark>266</mark>	NORWAY
<mark>county</mark>	<mark>15</mark>	Møre og Romsdal	<mark>266</mark>	NORWAY
<mark>county</mark>	<mark>18</mark>	<mark>Nordland</mark>	<mark>266</mark>	NORWAY
<mark>county</mark>	<mark>03</mark>	<mark>Oslo</mark>	<mark>266</mark>	<mark>NORWAY</mark>
<mark>county</mark>	<mark>11</mark>	Rogaland	<mark>266</mark>	<mark>NORWAY</mark>
<mark>county</mark>	<mark>54</mark>	Troms og Finnmark	<mark>266</mark>	<mark>NORWAY</mark>
<mark>county</mark>	<mark>50</mark>	<mark>Trøndelag</mark>	<mark>266</mark>	<mark>NORWAY</mark>
<mark>county</mark>	<mark>38</mark>	Vestfold og Telemark	<mark>266</mark>	<mark>NORWAY</mark>
<mark>county</mark>	<mark>46</mark>	<mark>Vestland</mark>	<mark>266</mark>	<mark>NORWAY</mark>
<mark>county</mark>	<mark>30</mark>	<mark>Viken</mark>	<mark>266</mark>	NORWAY
arctic region	<mark>22</mark>	<mark>Jan Mayen</mark>	<mark>118</mark>	<mark>JAN MAYEN</mark>
arctic region	<mark>21</mark>	<mark>Svalbard</mark>	<mark>259</mark>	SVALBARD

Ref. https://groups.yahoo.com/neo/groups/adifdev/conversations/messages/7084 https://www.iso.org/obp/ui/#iso:code:3166:NO https://groups.io/g/adifdev/message/7054

Item 83: Remove Digit, Character, and IntlCharacter from Data Types table \square Status: Work in progress

Background: although Digit, Character, and IntlCharacter appear in section "III.A. Data Types", they are not used in any ADIF-defined fields nor can they be used in user-defined or application fields.

In the table in section "III.A. Data Types":

• Remove the rows for Digit, Character, and IntlCharacter.

- Change the definition of String to:
 - "a sequence of ASCII characters whose code lies in the range of 32 through 126, inclusive"
- Change the definition of MultilineString to:
 - "a sequence of ASCII characters whose code lies in the range of 32 through 126, inclusive, and line-breaks, where a line break is an ASCII CR (code 13) followed immediately by an ASCII LF (code 10)"
- Change the definition of IntlString to:
 - "a sequence of Unicode characters (encoded with UTF-8) excluding line break CR (code 13) and LF (code 10) characters"
- Change the definition of MultilineString to:
 - "a sequence of Unicode characters (encoded with UTF-8) and line-breaks, where a line break is an ASCII CR (code 13) followed immediately by an ASCII LF (code 10)"
- In the definition of Location, change "Character" to "character" and remove the hyperlink.
- In the definition of SOTARef:
 - (a) change "a sequence of Characters" to "a String"
 - (b) change "a / Character" to "a / character"
- Replace occurrences of "Digit" and "Digits" by "ASCII digit" and "ASCII digits" and remove the hyperlinks.

In section "IV.A.1. ADI Data-Specifiers", remove "IntlCharacter," from "Fields of type IntlCharacter, IntlString, and IntlMultilineString cannot be used in ADI files."

In section "IV.A.4. Application-defined Fields", remove:

", which can be for any Data type except Digit and Character"

In section "IV.A.5. User-defined Fields", remove:

", which can be for any Data type except Digit and Character"

In section "IV.B.2. Application-defined Fields", remove:

", which can be for any Data type except Digit, Character, or IntlCharacter"

In section "IV.B.3. User-defined Fields", remove:

", which can be for any Data type except Digit, Character, or IntlCharacter"

Ref. tbs

Item 82: Add section describing the meaning of Deleted ### Status: Included in 3.1.4

Add a new section that will appear after the "Deprecation" section:

"II.C. Deletion

Deleted enumeration values are those that are only valid for QSOs that occurred within a specified time range in the past. They shall only be accepted when importing QSOs that occurred within that time range, and shall only be emitted when exporting QSOs that occurred within that time range."

Ref. tbs

Item 81: Replace "Y" in Deleted columns with "Deleted"

□Status: Awaiting comments

A number of tables in the ADIF specification have a "Deleted" column that are blank or have the value "Y" in for a deleted item.

Change the "Y" values to "Deleted" so that they are more prominent, especially for larger tables that flow over more than one page / screen.

Ref. https://groups.yahoo.com/neo/groups/adifdev/conversations/messages/6837

Item 80: Clarifications on the fields BAND, BAND_RX, FREQ, & FREQ_RX□ Status: Work in progress

- (1) Add the examples <FREQ:5>7.035 to the FREQ and FREQ_RX field descriptions and <BAND:3>40m to the BAND and BAND_RX field descriptions.
- (2) Add the following at the start of the Band enumeration section:

"Although the FREQ and BAND fields are discussed in this section, the same considerations apply to the FREQ_RX and BAND_RX fields.

FREQ contains a frequency in MHz and must only contain digits and at most one decimal point character '.' (ASCII code 46). In particular, NOT ALLOWED is the use of a comma character instead of a '.' and NOT ALLOWED is the use of thousands separators.

BAND contains a band from the Band enumeration below. It must not contain spaces.

The following are guidelines for use of band and frequency in records representing QSOs.

- (a) If both FREQ and BAND fields are exported, their values must be consistent according to the values in the Band enumeration table in this section.
- (b) If in an imported record:
- FREQ and BAND are inconsistent, use FREQ and ignore BAND.
- FREQ is invalid and BAND is present, use BAND and ignore FREQ.
- FREQ is invalid and BAND is absent or invalid, reject or ignore the record.
- BAND is invalid and FREQ is present, use FREQ and ignore BAND.
- BAND is invalid and FREQ is absent or invalid, reject or ignore the record.
- (c) Applications should try to help users avoid mistakenly recording VHF and higher frequencies when they intended HF; this can happen when frequencies in different bands are multiples of 10 apart and can be entered erroneously due to the difference being in the position of a decimal point. For example, 10.105000 MHz (30m) and 10105.000 MHz (3cm)."

Ref. https://groups.yahoo.com/neo/groups/adifdev/conversations/messages/6995

Item 71: Make ADIF test files available

Status: Work in progress

Update 2024-07-16: Test files, although not perfect, are provided for each new release of ADIF and documented in the Groups.io group. The reason that their existence is not yet incorporated in the ADIF

specification / resource documents is the desirability of tidying up the software prior to making it available on GitHub.

Over the years there have been requests for ADIF files that can be used to test applications' handing of ADIF.

Within a test QSO, the fields need to have compatible values so that applications being tested don't reject them for reasons such as BAND incompatible with FREQ, DXCC incompatible with CALL, CONT incompatible with CALL, QSO_DATE after the DXCC in a QSO was deleted, etc. Additionally, each QSO needs a minimum set of fields. The most useful / representative minimum set is likely to be:

QSO_DATE, TIME_ON, TIME_OFF, CALL, FREQ or BAND, and MODE.

The simplest approach would be, for each ADIF release, to hand-craft two files (one for ADI and one for ADX) containing a set of QSOs where each individual field in the specification is included in at least one QSO. At ADIF 3.0.5, this represents around 150 QSOs because some QSO fields will necessarily be included in more than one QSO. For example:

- The fields listed in the paragraph above will be in every QSO.
- All the header fields can be included in the header.
- A QSO testing the STATE field needs to have a DXCC for context.

Additional considerations are that:

- 1. QSO_DATE / TIME_ON / CALL / BAND or FREQ in different QSOs need to be such that applications don't reject a QSO due to being a "duplicate".
- 2. QSO_DATE for "Deleted" items (such as deleted DXCC entities) needs to be before the item was marked as "Deleted".
- 3. QSO_DATE for fields and enumerations marked as "Import-only" (deprecated) needs to be before the item was deprecated.
- 4. Taking [2] and [3] above further, in some cases QSO_DATE also needs to be after an item appeared in an ADIF specification and/or became valid. For example, a QSO containing a DXCC field cannot have a QSO_DATE that is before the date that a DXCC entity code was created.

The ~150 QSOs would however only provide a minimal test because the QSOs would not exercise the wide range of enumeration values in the specification. Ideally, there would be a QSO that tests every value of every enumeration, which would require thousands of QSOs. Hand-crafting and maintaining (between ADIF releases) such a set of test QSOs becomes even more difficult and time-consuming because there are 2,869 different enumeration values in ADIF 3.0.5, requiring more than 2,869 QSOs because more than one field can use a single enumeration; for example, both DXCC and my MY_DXCC use the DXCC Entity Code enumeration, which has 403 values (including 0),requiring 806 QSOs to cover DXCC Entity Code fully (although in this case, a single QSO could test both DXCC and MY_DXCC in a single QSO).

The potential provision of an XML file containing a representation of the ADIF specification (if "Item 70: Make files exported from the ADIF Specification" is incorporated) makes creating test files more practical than it has been in the past because it enables automation of a significant part of the work required to create test QSOs. This reduces the effort required both initially and ongoing when a new version of the ADIF specification is released.

So, it is proposed that an application is provided that:

- Creates ADI and ADX files.
- For pairs of _INTL/non-INTL fields, only includes the _INTL fields in an ADX file and the non-_INTL field in an ADI file. (While both the _INTL and non-_INTL fields are permitted in ADX files and even within a single QSO record in an ADX file, this is not expected usage.)

- Has the ability to generate basic QSO records with dates / times that move forward in time and varying values for CALL, BAND/FREQ, & MODE to avoid "duplicate QSO" and similar problems, and to allow a basic QSO to have fields under test added to it.
- Creates test QSOs by iterating through the header fields, QSO fields, and enumerations listed in the ADIF specification.
- As far as possible, automatically generates compatible fields in a QSO. For example, by allowing a configuration file to specify a DXCC entity code, allows automatic creation of a QSO that contains an appropriate CALL.
- Allows manual configuration where necessary for each field and enumeration value.

Since the "raw" data should be available in the XML file (all.xml) exported from the ADIF specification, an approach that requires least coding effort would be to use XSLT (Extensible Stylesheet Language Transformations) to transform the XML file into test QSO files.

In order to integrate the use of additional software to (for example) generate basic QSOs automatically such that fields and enumeration values under test can be added to a basic QSO, a library of user functions can be provided that can be invoked from an XSLT file.

The XSLT file(/s) can iterate through the all header and record fields in the specification and provide specific transformations appropriate for each field. Where a field is based on an enumeration (e.g. BAND and BAND_RX), the transformation for that field will recursively iterate through the enumeration. E.g. for BAND_RX, a test QSO will be generated for every band along with a random FREQ_RX within that band. An exception to this is the Secondary Administrative Subdivision enumeration table, which is unlike nearly all other enumeration tables in that the values are external to the specification; in this case, some test QSOs will be "hand-crafted" in the XSLT file. (This will also apply to the DARC_DOK field if it is incorporated in ADIF 3.0.6 or later.)

A situation where some hand-crafting will be required is in the use of the Credit enumeration, where the test QSOs within the file must be consistent. For example, QSOs that have "<CREDIT_SUBMITTED:4>DXCC" must each have a unique value in their DXCC fields along with a CALL field that is consistent with the DXCC field.

A starting point is to provide a single pair of files (fields.adi and fields.adx) that cover all fields and enumerations as far as is practical.

There may be issues if applications apply in-depth checking of fields that goes beyond the ADIF specification such that the QSO is valid according to the ADIF specification but not according to the application. For example, where Contest ID values appear in QSOs that have values in the QSO_DATE, TIME_ON, BAND, MODE, and other fields that do not conform to the rules of the contest concerned. Where possible, this can be mitigated by trying to make the values as realistic as possible e.g. where a CONTEST_ID value contains an identifiable reference to a band, set the BAND field accordingly. For example, some Contest IDs have "160" in, representing the 160m band. Another mitigating factor in contests is that (probably) a logging application should not really refuse to allow a user to log "wrong" values for a contest since the user could genuinely make a mistake and rejecting such a QSO is more the province of contest-entry applications than logging applications.

Where applications' checking becomes an issue, which will only become clear after some trials with test files, consideration can be made to providing primary test files (fields.adx and fields.adi) that omit the problematical values and instead the values concerned are tested in separate test files. For example, if contests do turn out to be an issue, separate contest_id.adi and contest_id.adx files could be provided and the Contest Id values in fields.adx and fields.adi be restricted to one or two authentic contest QSOs.

The fields.adi and fields.adx files can provide some testing of file format, particularly for ADI files, such as:

- including comments (represented as text between fields in ADI files and XML comments in ADX files).
- having one field per record.

Additionally, it is proposed that separate files (no_header.adi & no_header.adx) with a few QSOs be provided that (as allowed by the ADIF specification) do not include a header. (In an ADI file with no header, the first character in the file must start with a chevron (<) that is a QSO field, and in an ADX file with no header, the <HEADER> element is present but has no children.) These files can also include one field per record to further test the structure.

The first version will not cover items that are:

- Import-only (deprecated)
- Deleted

This is because they add a significant complication in that QSO dates in the files would need to correspond to dates before the items became import-only or deprecated, some of which would require a lot of effort trying to track down dates. In mitigation, it is better to have some test file coverage than the present situation of having none at all.

The directory & file structure in "Item 70: Make files exported from the ADIF Specification" can be extended to include:

tests_{version}.zip A ZIP file containing all the files and directories listed below

where {version} is the ADIF version number without dots, e.g.

tests_306.zip

tests Directory for sub-directories based on file type (e.g. .adi).

tests/adi Directory for ADI (.adi) files. tests/adi/fields.adi ADI file focussing on fields.

tests/adi/no_header.adi ADI file containing without a header record.

tests/adx Directory for ADX (.adx) files.
tests/adx/fields.adx ADX file focussing on fields.
tests/adx/no_header.adx ADX file without header records.

tests/xslt Directory for the XSLT files used to generate the test ADI and ADX

files.

tests/xslt/fields.xslt XSLT file that generates the fields test files. tests/xslt/no_header.xslt XSLT file that generates the no_header test files.

The source code and executable files required to generate the test files will be made available on the adif.org.uk website and the ADIF Development (ADIFDev) Yahoo group's Files area.

Limitation: applications being tested should normally **not** attempt to upload test QSOs to services such as Club Log, eQSL, and LoTW. Similarly, they should not attempt to verify QSO fields such as upload statuses using online services because the QSOs will be unknown to the online services.

Ref. https://groups.yahoo.com/neo/groups/adifdev/conversations/messages/6868

Item 70: Make files exported from the ADIF Specification available Status: Work in progress

Update 2024-07-16: Exported files are provided for each new release of ADIF and documented in the Groups.io group. The reason that their existence is not yet incorporated in the ADIF specification / resource documents is the desirability of tidying up the software prior to making it available on GitHub.

As part of the release of new ADIF versions, a set of machine-readable files for data types, enumerations, and fields will be generated from the ADIF Specification HTML file and included as part of the release. The files will streamline incorporating ADIF items into software and databases.

File types will be: TSV (.tsv), CSV (.csv), XML (.xml), Excel (.xlsx), and OpenOffice Calc (.ods).

The contents will be a generic and fairly literal representation of the tables with header rows including the titles from a table followed by the rows in the table. This includes the structure in the XML which has a generic schema for the tables with a <header> element and subsequent <record> elements that contain <value> records. Why do this rather than have more "type-specific" elements in the XML? It makes the structure of the XML compatible with the structure of the other files and reduces the amount of effort required to exploit the XML in software because the structure is predictable for any "type" of table.

An XML Schema (.xsd) file for the exported XML files may be added at a future release after experience has been gained using the XML files.

An early example of the files for ADIF 3.0.5 is available from: http://adif.org.uk/working/adifexports 2017 04 21.zip

Add the following section to the ADIF Specification:

V.C. Exported Files

The data types, enumerations, and fields tables are exported to a variety of machine-readable files for use in software development. Details are available in the ADIF Resources document section "Exported Files".

Add the following sections to the ADIF Resources document:

IV. Exported Files

The ADIF Specification's data types, enumerations, and fields tables are exported to a variety of machine-readable files for use in software development.

The files comprise CSV, TSV, XML, Excel (.xlsx), and OpenOffice Calc (.ods).

There are separate files for data types, enumerations, and fields. Enumerations are also exported to individual files (i.e. a file per enumeration). Additionally, one of the XML files (all.xml) contains all data types, enumerations, and fields. It is anticipated that this and the other XML files will be particularly useful with XSLT transformations to generate (for example) programming language source files and SQL statements.

Warning: Do not use the CSV and TSV files with spreadsheet software such as Excel and OpenOffice Calc. Instead use the Excel (.xlsx) or OpenOffice Calc (.ods) files. This is because by default, spreadsheet software will change CSV and TSV enumeration values that look like numbers and contain leading zeros and values that look superficially like dates and / or times. E.g. 00123 in a CSV or TSV file will end up as 123

in a spreadsheet, whereas the Excel and OpenOffice Calc files are created with all cells set to be of type text, which stops the spreadsheet software guessing the data types of cells.

IV.A. Directory and File Structure

The exported files are stored in subdirectories within the directory that contains the source ADIF Specification XHTML file (e.g. for ADIF version 3.0.6 the directory name is 306):

exports_{version}.zip A ZIP file containing all the files and directories listed below

where {version} is the ADIF version number without dots, e.g.

exports_306.zip

exports Directory for sub-directories based on file type (e.g. .csv).

exports/csv Directory for CSV (.csv) files.
exports/csv/datatypes.csv CSV file containing the data types.
exports/csv/enumerations.csv CSV file containing the enumerations.

exports/csv/fields.csv CSV file containing the fields.

exports/tsv Directory for TSV (.tsv) files.
exports/tsv/datatypes.tsv TSV file containing the data types.
exports/tsv/enumerations.tsv TSV file containing the enumerations.

exports/tsv/enumerations_{name}.tsv TSV file containing the enumeration with the name {name}.

exports/tsv/fields.tsv TSV file containing the fields.

exports/xlsx Directory for Excel (.xlsx) files.
exports/xlsx/datatypes.xlsx Excel file containing the data types.
exports/xlsx/enumerations.xlsx Excel file containing the enumerations.

exports/xlsx/enumerations_{name}.xlsx Excel file containing the enumeration with the name {name}.

exports/xlsx/fields.xlsx Excel file containing the fields.

exports/ods Directory for OpenOffice Calc (.ods) files.
exports/ods/datatypes.ods OpenOffice Calc file containing the data types.
exports/ods/enumerations.ods OpenOffice Calc file containing the enumerations.

exports/ods/enumerations_{name}.ods OpenOffice Calc file containing the enumeration with the name

{name}.

exports/ods/fields.ods OpenOffice Calc file containing the fields.

exports/xml Directory for XML (.xml) files.

exports/xml/all.xml XML file containing the data types, enumerations, and fields.

exports/xml/datatypes.xml XML file containing the data types. exports/xml/enumerations.xml XML file containing the enumerations.

exports/xml/enumerations_{name}.xml XML file containing the enumeration with the name {name}.

exports/xml/fields.xml XML file containing the fields.

The enumeration file names for individual enumerations are lowercase and have spaces replaced by underscores. E.g. the ARRL Sections table is exported as the CSV file enumerations_arrl_sections.csv

IV.B. Encoding in Files

The CSV, TSV, and XML files are encoded as UTF-8 with a byte order mark (BOM) of 0xEF, 0xBB, 0xBF at the start of the file. These 3 bytes can be ignored but are required for compatibility with Microsoft software.

CSV file values are enclosed by double quotes (") and any double quotes embedded within the value are encoded as a pair of double quotes. E.g.

"This value contains a double quotes "" character"

TSV file values are separated by tab characters. A tab character will never occur within a value.

XML file values are encoded in the same way as in the TSV files because these correspond to XML Schema 1.0 data types https://www.w3.org/TR/xmlschema-2/#built-in-datatypes with the following exceptions:

- Y (yes) values are encoded as the XML Schema boolean data type https://www.w3.org/TR/xmlschema-2/#boolean value "true".
- Date values are encoded as the XML Schema date data type https://www.w3.org/TR/xmlschema-2/#date UTC values, e.g.
 2017-05-22Z

IV.C. Exported Data

The tables in the ADIF Specification are exported with all their columns. Any sequences of whitespaces are replaced by a single space. Formatting is stripped out. Some additional columns not found as such in the specification are included - see IV.D. Additional Columns.

In CSV, TSV, and spreadsheet files, the first record contains a header and this is followed by values records.

Enumeration names have spaces replaced by underscores but the original case of the names is preserved, e.g. ARRL_Section

Files other than XML files that contain multiple enumerations have multiple header records. When reading these files, the header records can be identified by looking for the text:

Enumeration Name

in a record's first value.

In the files containing enumerations, the first value in value records contains the name of the enumeration, e.g. ARRL_Section

In the ADIF specification, different Primary Administrative Subdivision enumeration tables have different columns. In the exported files, each enumeration has the full set of columns, even though some tables in the specification don't include all of the columns. The columns concerned are: "Oblast #", "CQ Zone", and "ITU Zone".

In the files containing fields, where a field's value is taken from a set of enumerations depending on the value of a different field, the enumeration name will be suffixed by '[' followed by the name of the other field followed by ']'. E.g. for the STATE field, the specific Primary_Administrative_Subdivision enumeration depends on the value of the DXCC field, so the enumeration name will be included as:

Primary_Administrative_Subdivision[DXCC]

Depending on the progress of related ADIF specification proposals, files exported from ADIF version 3.0.6 may contain a subset of Secondary Administrative Subdivision data covering Canada and the USA.

"Deleted" columns will either have blank values or contain "true" in XML files or "Deleted" in other file types.

The Sponsored Award enumeration is not exported because its values are not defined within the ADIF Specification. However, the table of sponsor names is exported with the name "Award_Sponsor".

In the Contest ID enumeration, Contest- ID values are always exported as uppercase, e.g. VIRGINIA QSO PARTY

In the Credit enumeration, the value "EWAS" SATELLITE" is exported without the embedded space.

In the DXCC Entity Codes enumeration, the first column is exported with the title "Entity Code".

In the Modes enumeration, the Submodes column values are exported without the spaces after commas. E.g. CHIP64,CHIP128

The Propagation enumeration is exported with the name "Propagation_Mode". In line with this, the PROP_MODE field is exported with its Enumeration column set to "Propagation_Mode".

In the QSL_Upload_Status enumeration, the first column title "Via" is exported as the title "Status".

In the CREDIT_SUBMITTED and CREDIT_GRANTED fields, the data type is exported as "CreditList, AwardList", where the first data type in the list (CreditList) is current and the second item in the list (AwardList) is import-only (deprecated).

IV.D. Additional Columns

There are some generated columns that don't exist in the ADIF Specification as such:

"Import-only":

Values will be blank or contain the value "false" in XML files and "Import-only" in other file types if the specification indicates somewhere within a table row that the item the row refers to is import-only (deprecated).

"Comments":

Sometimes the table cells with names in (e.g. data type names) contain additional information along the lines of "xxx (import -only; use yyy instead)". In these cases, the text within the parentheses is moved into the "Comments" field.

"ADIF Version" and "ADIF Status":

All tables in all files except for the XML files include these columns, which contain the ADIF Specification version (e.g. 3.0.6) and status (Draft, Proposed, or Released).

"Minimum Value" and "Maximum Value":

The data types and fields files include these columns. They contain the minimum and maximum allowed numeric values for the data type or field or are blank.

Note that this does not include all numeric types and fields because ADIF does not specify the minimum or maximum allowed values for number types as imposed by data types within programming languages.

"Header Field":

The ADIF fields files contain this, which is "Y" for ADIF header fields and blank for ADIF record fields.

"DXCC Entity Code":

All the Primary Administrative Subdivision tables in the specification are combined and this column is exported to differentiate between them.

Similarly, any Secondary Administrative Subdivision tables in the specification are combined and this column is exported to differentiate between them.

"Contained Within":

Some of the Primary Administrative Subdivision tables include rows that span all columns in the table and contain the name/details of a locality that encloses the Primary Administrative Subdivisions defined within the following records. These enclosing names/details are exported in this column.

"Deleted":

Any entries within the Primary Administrative Subdivision tables that include the text "for contacts made before" will cause the Deleted column to contain "true" (XML files) or "Deleted" (other file types).

IV.E. File Structure

IV.E.1. XML File Structure

The all.xml file has this structure:

```
<?xml version="1.0" encoding="utf-8"?>
<adif version="{version}" status="{status}" created="{date}">
 <dataTypes>
   <header>
     <value>Data Type Name</value>
     <value>{data type title 2}</value>
   </header>
   <record>
     <value name="Data Type Name">{data type name 1}}</value>
     <value name="{data type title 2}">{data type value 1.2}}/value>
    </record>
    <record>
     <value name="Data Type Name">{data type name 2}</value>
     <value name="{data type title 2}">{data type value 2.2}/value>
   </record>
 </dataTypes>
 <enumerations>
    <enumeration name="{enumeration name 1}">
     <header>
        <value>Enumeration Name</value>
        <value>{enumeration title 2}</value>
        . . .
      </header>
      <record>
       <value name="Enumeration Name">{enumeration name 1}</value>
        <value name="{enumeration title 2">{enumeration value 1.2}/value>
      </record>
      <record>
        <value name="Enumeration Name">{enumeration name 1}</value>
        <value name="{enumeration title 2">{enumeration value 2.2}
        . . .
     </record>
    </enumeration>
    <enumeration name="{enumeration name 2}">
   </enumeration>
 </enumerations>
  <fields>
    <header>
     <value>Field Name</value>
      <value>{field title 2}</value>
    </header>
```

where

- {version} is the ADIF version. E.g. 3.0.6
- {status} is Draft, Proposed, or Released
- {date} is the UTC date and time the file was created in XSD date time format, e.g. 2017-04-22T07:42:58Z
- {data type title 2} is the title of the second column in the data types table, etc. E.g. Data Type Indicator
- {data type value 1.2} is the value of the second column of the first row in the data types table, {data type value 2.2} is the value of the second column of the second row in the data types table, etc. E.g. A
- {enumeration name 1} is the name of the first enumeration, {enumeration name 2} is the name of the second enumeration, etc. E.g. Ant_Path
- {enumeration title 2} is the title of the second column in the first enumeration table, etc. E.g. Abbreviation
- {enumeration value 1.2} is the value of the second column of the first row in the first enumeration table, {enumeration value 2.2} is the value of the second column of the second row in the first enumeration table, etc. E.g. G
- {field title 2} is the title of the second column in the two fields tables combined, etc. E.g. Data Type
- {field value 1.2} is the value of the second column of the first row in the two fields tables combined, {field value 2.2} is the value of the second column of the second row in the two fields tables combined, etc. E.g. ADIF_VER

Where a value is blank (zero characters in length), the <value name=...> tag will be omitted.

All the XML files have the same overall structure as the all.xml file, the differences being that:

- The datatypes.xml file omits the <enumerations> and <fields> elements.
- The enumerations.xml and named enumeration XML files omit the <dataTypes> and <fields> elements.
- The fields.xml file omits the <dataTypes> and <enumerations> elements.

IV.E.2. Spreadsheet File Structure

The Excel and OpenOffice Calc files have the font in header records set to 'bold'. The work sheet names are set as appropriate to:

- "Data Types"
- "Enumerations"
- "{name} Enumeration" truncated to the Excel work sheet name limit of 31 characters.
- "Fields"

where {name} is the enumeration name e.g. "ARRL_Section Enumeration".

The files include some document and custom properties:

```
Title: "ADIF Specification Export of {item}, Version {version}, Status {status}"
```

Author: "ADIF Development Group"

ADIF Version: "{version}"
ADIF Status: "{status}"

where

{version} is the ADIF Specification version, e.g. "3.0.6".

{status} is the ADIF Specification status of "Draft", "Proposed", or "Released". {item} is "Data Types", "Enumerations", "Enumeration {name}", or "Fields".

{name} is an enumeration name, e.g. "ARRL_Section".

E.g.

Title: "ADIF Specification Export of Enumeration ARRL Section, Version 3.0.6, Status

Proposed"

Author: "ADIF Development Group"

ADIF Version: "3.0.6"
ADIF Status: "Proposed"

IV.F. Forwards Compatibility Considerations

Future versions of the ADIF Specification may include changes in the structure of the tables such as:

- a change in a column's title.
- a change in the order of columns.
- additional columns.
- removal of columns.

As far as possible, these types of changes will be avoided, but if they do occur, the files' contents will reflect them.

To cater for this when accessing the CSV, TSV, and spreadsheet files with software, it is recommended that the titles in the header records are used to determine which column is which rather than relying on a column being the "nth" column between successive versions of ADIF.

Failing this, software that assumes that the "nth" column has a particular data item in should at least check that the header record contains the expected title for that column.

IV.G. Transforming Exported XML using XSLT

While the CSV and TSV files can be read by software to create programming language source files and SQL statements, using XSLT with the exported XML files provides a very convenient alternative.

The following is an example of using XSLT on the fields XML to create C# string constants:

This is the first part of the output it creates:

```
const string FIELD_ADIF_VER = "ADIF_VER";
const string FIELD_CREATED_TIMESTAMP = "CREATED_TIMESTAMP";
const string FIELD_PROGRAMID = "PROGRAMID";
const string FIELD_PROGRAMVERSION = "PROGRAMVERSION";
const string FIELD_USERDEFn = "USERDEFn";
const string FIELD_ADDRESS = "ADDRESS";
const string FIELD_ADDRESS INTL = "ADDRESS INTL";
```

```
const string FIELD_AGE = "AGE";
const string FIELD_A INDEX = "A INDEX";
```

To select (for example) only the fields that are not header fields, the <xsl:for-each> element's select attribute can be altered to include only the <record> elements that do not have a <value> element with a name attribute set to "Header Field":

```
select="adif/fields/record[not(value[@name='Header Field'])]"
```

The following example shows how an individual C# class could be created for each field:

Here is the first part of the output:

```
public class FIELD_ADIF_VER
{
    public const string name = "ADIF VER";
    public const bool header = true;
public class FIELD CREATED TIMESTAMP
    public const string name = "CREATED TIMESTAMP";
    public const bool header = true;
public class FIELD PROGRAMID
    public const string name = "PROGRAMID";
    public const bool header = true;
public class FIELD PROGRAMVERSION
    public const string name = "PROGRAMVERSION";
   public const bool header = true;
public class FIELD USERDEFn
    public const string name = "USERDEFn";
    public const bool header = true;
public class FIELD ADDRESS
    public const string name = "ADDRESS";
   public const bool header = false;
```

Here is XSLT that will create equivalent SQL INSERT statements for the fields:

Here is the first part of the output:

```
INSERT fields (fieldname, header) VALUES ('ADIF_VER', 1)
INSERT fields (fieldname, header) VALUES ('CREATED_TIMESTAMP', 1)
INSERT fields (fieldname, header) VALUES ('PROGRAMID', 1)
INSERT fields (fieldname, header) VALUES ('PROGRAMVERSION', 1)
INSERT fields (fieldname, header) VALUES ('USERDEFn', 1)
INSERT fields (fieldname, header) VALUES ('ADDRESS', 0)
INSERT fields (fieldname, header) VALUES ('ADDRESS_INTL', 0)
INSERT fields (fieldname, header) VALUES ('AGE', 0)
INSERT fields (fieldname, header) VALUES ('A INDEX', 0)
```

Finally, here is a slightly more realistic (and lengthier!) example that converts the Modes enumeration into instances of a C# class:

```
<?xml version="1.0" encoding="UTF-8"?>
<xsl:stylesheet version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
    <xsl:output method="text" encoding="UTF-8"/>
    <xsl:template match="/">using System;
using System.Collections.Generic;
using System.Windows.Forms;
namespace Adif
   public class AdifMode
        private string name;
       private string[] submodes;
        private bool importOnly;
        private string description;
        public string Name
            get { return name; }
        public string[] Submodes
            get { return submodes; }
        public bool ImportOnly
            get { return importOnly; }
        public string Description
```

```
get { return description; }
               public AdifMode(
                  string name,
                   string submodes,
                  bool importOnly,
                   string description)
                   this.name = name;
                   this.submodes = submodes.Split(new char[] { ',' },
      StringSplitOptions.RemoveEmptyEntries);
                   this.importOnly = importOnly;
                  this.description = description;
                  AdifModes.Add(name, this);
              public static Dictionary<string, AdifMode&gt; AdifModes = new
      Dictionary<string, AdifMode&gt;();
               public static void Initialize()
                  MessageBox.Show("ARDOP is " + AdifModes["ARDOP"].Description);
                  {\tt MessageBox.Show("CHIP has " +}\\
      AdifModes["CHIP"].Submodes.Length.ToString() + " submodes");
                  MessageBox.Show("CLO is " + (AdifModes["CLO"].ImportOnly? "" : "not")
      + " import-only");
              }
         </xsl:template>
      </xsl:stylesheet>
Here's a cut-down version of the output:
      using System;
      using System.Collections.Generic;
      using System.Windows.Forms;
      namespace Adif
          public class AdifMode
              private string name;
              private string[] submodes;
              private bool importOnly;
               private string description;
              public string Name
                  get { return name; }
              public string[] Submodes
                   get { return submodes; }
               public bool ImportOnly
                  get { return importOnly; }
               public string Description
                   get { return description; }
```

```
public AdifMode(
            string name,
            string submodes,
            bool importOnly,
            string description)
            this.name = name;
            this.submodes = submodes.Split(new char[] { ',' },
StringSplitOptions.RemoveEmptyEntries);
            this.importOnly = importOnly;
            this.description = description;
            AdifModes.Add(name, this);
        public static Dictionary<string, AdifMode> AdifModes = new
Dictionary<string, AdifMode>();
        public static void Initialize()
            new AdifMode("AM", "", false, "");
            new AdifMode("ARDOP", "", false, "Amateur Radio Digital Open
Protocol");
            new AdifMode("ATV", "", false, "");
            new AdifMode("CHIP", "CHIP64, CHIP128", false, "");
new AdifMode("CLO", "", false, "");
            new AdifMode("CONTESTI", "", false, "");
            new AdifMode("CW", "PCW", false, "");
            new AdifMode("DIGITALVOICE", "", false, "");
            new AdifMode("DOMINO", "DOMINOEX, DOMINOF", false, "");
            // etc. etc.
            MessageBox.Show("ARDOP is " + AdifModes["ARDOP"].Description);
            MessageBox.Show("CHIP has " +
AdifModes["CHIP"].Submodes.Length.ToString() + " submodes");
            MessageBox.Show("CLO is " + (AdifModes["CLO"].Import ReadOnly ? "" :
"not") + " import-only");
        }
    }
```

When the Intialize method is run, three message boxes will be displayed showing the following:

ARDOP is Amateur Radio Digital Open Protocol CHIP has 2 submodes CLO is not import-only

IV.G. Implementation

Generation of the exported files exploits some meta data included in ADIF Specifications from version 3.0.6 onwards:

- A <meta> tag with the name "adifversion" and content of the ADIF version (e.g. "3.0.6").
- A <meta> tag with the name "adifstatus" and content of "Draft", "Proposed", or "Released".
- The data types table has an id attribute of "Data_Types".
- The Primary Administrative Subdivision enumeration tables have an id attribute of "Enumeration_Primary_Administrative_Subdivision_{DXCC}" where {DXCC} is the DXCC entity code, e.g. for Canada the id is "Enumeration_Primary_Administrative_Subdivision_1"
- All other enumeration tables have an id attribute of "Enumeration_{name}" where {name} is the enumeration's name with spaces replaced by underscores, e.g. "Enumeration_Ant_Path"
- The fields tables have ID attributes of "Field_Header" and "Field_QSO".

Data types and fields that have greater than or minimum, and / or maximum values specified in their descriptions have the values surrounded by tags with the title attribute set to "GreaterThan", "Minimum", or "Maximum" e.g. 99999999 GreaterThan is used where the text in the Specification feels more natural using it rather than a Minimum value. The GreaterThan value must be an integer and is converted to a Minimum value by adding 1. "GreaterThan" is not currently used with values containing a decimal point; "Minimum" can be used instead.

The software source and executable files used to create the files are available from the adif.org.uk website and the ADIF Developers Group files area.

Ref. https://groups.yahoo.com/neo/groups/adifdev/conversations/messages/6857

Item 65: Add a list of US Counties

Status: Work in progress

Update 2024-07-16: No consensus was reached on this proposal for several reasons (although arguably the first item below is the main obstacle):

- At the time the proposal was raised, the Counties Award sponsor did not provide an electronic list
 of counties (and an attempt to obtain a paper one by making a payment was declined due to longterm unavailability).
- The publicly-available FIPS 6-4 document ceased to be provided in 2002.
- When this topic was last looked at, the replacement for FIPS 6-4 was an ANSI document that had to be paid for, making it an undesirable resource for amateur radio.
- There is a Wikipedia list but Wikipedia is usually not considered as an authoritative reference for ADIF: https://en.wikipedia.org/wiki/List of United States counties and county equivalents
- Adding a list to ADIF would result in problems mapping whatever county names are currently in use in ADIF into the proposed ADIF list.

t.b.s.

Ref.

Item 62.2: Update Primary Administrative Subdivision for Country Code 224 (Finland)

□Status: Ready for inclusion

Update the table for Enumeration for Country Code 224 (Finland) adding a new column *Deleted* and the data provided in:

https://groups.io/g/adifdev/files/Enumeration for country code 224 %28Finland%29 2017-03-16.csv https://groups.io/g/adifdev/files/Enumeration for country code 5 %28Aland Is.%29 2017-03-16.csv https://groups.yahoo.com/neo/groups/adifdev/files/Enumeration for country code 224 (Finland) 2017-03-16.csv

Ref. https://groups.io/g/adifdev/message/6764

https://www.sral.fi/sv/hobbyn/infobanken/kommunforteckning/

https://groups.yahoo.com/neo/groups/adifdev/conversations/messages/6793

https://groups.yahoo.com/neo/groups/adifdev/conversations/messages/6791

Item 58: Remove FIPS 6-4 US County Link

Status: Work in progress

In "III.B.12 Secondary Administrative Subdivision Enumeration", the "FIPS 6-4" link is broken because FIPS 6-4 has been replaced by INCITS 38-2009[R2014] which has to be purchased from ANSI for \$38: https://standards.incits.org/apps/group_public/project/details.php?project_id=206.

I propose that the link is removed altogether and footnotes be added underneath the table:

"Alternative lists of US Counties:

[1] "2010 FIPS Codes for Counties and County Equivalent Entities"

https://www.census.gov/geo/reference/codes/cou.html provides lists of Counties by

State. Subsequent changes are documented in "Substantial Changes to Counties and County

Equivalent Entities: 1970-Present" https://www.census.gov/geo/reference/county-changes.html

[2] "INCITS 31-2009[R2014]: Information technology - Codes for the Identification of Counties and Equivalent Areas of the United States, Puerto Rico, and the Insular Areas"

https://standards.incits.org/apps/group_public/project/details.php?project_id=204 is available for purchase from ANSI https://webstore.ansi.org "

Sponsors: G3ZOD, AA6YQ

Ref. https://groups.yahoo.com/neo/groups/adifdev/conversations/messages/6727

Item 47: Add JARL awards to Credit enumeration

Status: Work in progress

Update 2024-07-16: There was a failure to agree that the following was a workable implementation. As the topic has not been raised for a long time, this item will be removed in the next version of this document.

Originally JARL awards were going to be included as follows. However, doubt has been raised and clarification is needed. Until such time as that occurs, this item will be dormant.

Credit For	Sponsor	Award	Facet
JARL_MIXED	JARL	All	Mixed
JARL_BAND	JARL	All	Band
JARL_MODE	JARL	All	Mode
JARL_SATELLITE	JARL	All	Satellite
JARL_QRP	JARL	All	QRP

Item 11: Add REP DMP Award

Status: Awaiting sponsors

Update 2024-07-16: No sponsors have come forward so this will be removed at the next version of this document.

There are four categories: HF Fixed, HF Mobile/Portable, VHF Fixed, VHF Mobile/Portable. However, since a single QSO cannot receive credit for both HF and VHF variations, it's not necessary to have additional HF/VHF item(s) in the Credit enumeration.

[11.1] Credit enumeration, add:

Credit For Sponsor Award Facet

DMP-FIXED REP Diploma of Portuguese Municipalities Fixed

(DMP)

DMP-MOBILEPORTABLE REP Diploma of Portuguese Municipalities Mobile / Portable

(DMP)

[11.2] Sponsored Award enumeration, add:

SPONSOR_: REP_

Sponsoring Organization: Rede dos Emissores Portugueses

[11.3] Secondary Administrative Subdivision Enumeration, add:

Secondary Subdivision: Portuguese Municipalities

Country Code: 149 **DXCC Entity: Azores**

Number of secondary subdivisions: 19

Award: DMP http://ct1end.netpower.pt/diplomas/dmp 2000.pdf

Subdivision List: DMP List http://ct1end.netpower.pt/diplomas/dmp 2000.pdf

Country Code: 256 DXCC Entity: Madeira Is

Number of secondary subdivisions: 11

Award: DMP http://ct1end.netpower.pt/diplomas/dmp_2000.pdf

Subdivision List: DMP List http://ct1end.netpower.pt/diplomas/dmp 2000.pdf

Country Code: 272 **DXCC Entity: Portugal**

Number of secondary subdivisions: 278

Award: DMP http://ct1end.netpower.pt/diplomas/dmp 2000.pdf

Subdivision List: DMP List http://ct1end.netpower.pt/diplomas/dmp 2000.pdf

Award Sponsor: REP

Sponsor Defined Code Format: <Four-digit municipality code>

Examples: 0113 -->Oliveira de Azemeis Municipality

Ref. message:

http://groups.yahoo.com/group/adifdev/message/5598