



Joint Council for
Qualifications^{CIC}

FORMATS FOR THE EXCHANGE OF EXAMINATION RELATED DATA

VERSION 14

REVISED December 2023

effective from
1 September 2011

Produced on behalf of:



Revision History

This table records the status and revision history of this document.

Revision Date	Status	Revision History
March 2011	Final	<p>Inclusion of Partial Absence indicators to Results file for all Results Types.</p> <p>Removal of Exam Type: Qualification and Level lists from format booklet.</p> <p>Removal of Gradesets list from format booklet.</p>
May 2016	Final	Page 16, note 2 updated for value E.
December 2023	Final	<p>The format itself is unchanged.</p> <p>However the notes have been extensively revised to reflect actual current usage.</p> <p>Spec for xml results has been included.</p> <p>References to converted product catalogues and reference data xml have been added.</p> <ul style="list-style-type: none"> • Cert/Unit Link file moved from Part V to Part IV • Results have been moved from Part III to a new Part IV, and Parts IV and V renumbered as V and VI. <p>Substantive changes in usage are:</p> <ul style="list-style-type: none"> • Max Mark is valid for Result Type 1 if marks are returned in xml results. • The language character is now used as a region (B for Wales, underscore elsewhere) • The Documentation Group in the Entries file is no longer used

Contents

Part I — Introduction	1
AO Usage	3
A2C Transport.....	4
Awarding Organisation (AO) Identifiers.....	5
Centre Numbers	6
Part II — Files.....	7
File Types	7
File Names.....	7
Field Types	11
General layout of common format files	12
File Header Record	13
Centre Header Record	13
Detail Record	13
Centre Trailer Record.....	14
File Trailer Record	14
Notes	15
Example Headers and Footers	19
Part III — Centre to AO Files	23
Entries and Amendments File Formats	23
Forecast Grades File Format.....	28
Coursework Marks File Format	29
Part IV — AO to Centre Results.....	31
EDI R File Format.....	31
A2C XML Results	34
Part V — Qualification Data.....	45
Syllabus Definition File.....	47
Option Definition File	48
Component Definition File	52
Option/Component Link File	54
Disallowed Combinations Definition File	55
Certification/Unit Link File	57
Part VI — Reference Data.....	58
Sources	58
Gradesets File	59

Part I — Introduction

This specification has been prepared by the staff of the awarding organisations and approved by the Joint Council for Qualifications ^{CIC} (JCQ) to enable data to be transferred between awarding organisations and centres. During the course of its preparation, consultations have taken place with suppliers of software and communication systems on the file structures to be used. This booklet is effective for all electronic data transfers from 1 September 2011.

The qualification data which is described in Part IV can be accessed by downloading basedata files from each awarding organisation's website or product catalogue data from the A2C website.

The files listed in Part III and IV can be transferred from centres to awarding organisations and vice versa by EDI (Electronic Data Interchange) using either the A2C Transport Application or an MIS integrated A2C transport.

This specification provides all the necessary detail for software to be written which will enable the data to be extracted from the centre's database or data files and presented in an acceptable common format for more than one awarding organisation. It should obviate, or at least reduce, the need to key information separately for each awarding organisation for which a centre has candidates. It facilitates the production of commercial software by giving a unique format of output file, whatever the awarding organisation involved.

Although all awarding organisations have agreed in principle to the acceptance of data using the common formats described in this booklet, it should be noted that the individual awarding organisations retain the right to specify the form in which they are prepared to receive data for the examinations of any particular year. Before a centre embarks on any course of action leading to the presentation of data which does not comply with one of the recognised methods, it should contact the awarding organisation for whose examinations candidates are being prepared, to ensure that the arrangements which are being made are satisfactory. It is particularly important to check well in advance of the final dates for the receipt of various types of data so that, if approval cannot be given, there is sufficient time to make alternative arrangements. The awarding organisations will not accept data which do not conform to the common file structure and for which prior approval has not been given.

For general queries on this specification please email edi@jcq.org.uk. For any questions specific to individual awarding organisations, please contact the awarding organisation directly:

AQA: aqa.org.uk

Cambridge Assessment International Education: cambridgeinternational.org

CCEA: ccea.org.uk

OCR: ocr.org.uk

Pearson: qualifications.pearson.com

WJEC: wjec.co.uk

The JCQ website publishes the latest gradesets and updates: jcq.org.uk

Further documentation relating to the EDI formats is available from the JCQ EDI SharePoint site: <https://jointcouncilqualifications.sharepoint.com/sites/EDI2> JCQ maintains an email distribution list for suppliers wanting to receive updates relating to the EDI formats.

Contact edi@jcq.org.uk to be granted access to the SharePoint site or be added to the distribution list.

AO Usage

Cambridge International

Cambridge International is not a member of JCQ but has chosen to adopt the JCQ formats for use by centres in the UK.

C&G

C&G can supply customised basedata on request. C&G uses AO ID 73.

There are some slight differences in C&G basedata. For example, they use extended ASCII characters such as dashes (ASCII character 150), which can throw out the fixed widths.

C&G does not use any of the file types in Part III or IV.

Pearson Customised Basedata

Pearson can supply customised basedata for BTECs on request. This uses AO ID 13. Customised basedata is specific for a centre and is made available to authorised users via Edexcel Online.

Other customised basedata

Use of Forecast Grades

CCEA and Cambridge International support Forecast grade file submissions. AQA, OCR, Pearson and WJEC do not support these files and will not process them if submitted.

Use of Coursework Marks

AQA, OCR, Pearson, WJEC and Cambridge International do support Coursework Marks files. CCEA does not accept Coursework Marks files. Coursework marks for CCEA must be entered on CCEA's extranet.

Coursework marks are also used by some AOs (WJEC, AQA) for carry-forwards. OCR and Pearson, Cambridge International do not accept carry forwards.

Use of XML Results

XML results are produced by AQA, OCR, Pearson and WJEC. CCEA does not have the issues with component results or endorsements in Northern Ireland. Cambridge International does not return xml results but component results are available on their extranet. The AO Preference 'EDI results available as A2C XML' defines which AOs support xml results.

AO Preferences

The A2C reference data xml contains AO preferences which indicate which AOs support which elements of the specification. In particular:

EDI files
EDI results available as A2C XML
EDI Acknowledgement (X) file

See the A2C Specification Appendix 2 for details.

A2C Transport

The files listed in Part III and IV can be transferred from centres to awarding organisations and vice versa by EDI (Electronic Data Interchange) using either the A2C Transport Application or an MIS integrated A2C transport.

For details of the A2C Transport Application see <https://a2c.avcosystems.com/>.

To find out if your MIS has an integrated A2C transport please contact your MIS supplier.

The screenshot displays the A2C Transport Application window. The title bar reads "A2C Transport Application". The interface includes a sidebar with navigation links: Home, Status, Inbox, Pending, Outbox, Logs, Help, and Settings. The main content area is titled "Configured awarding organisations" and contains a list of organisations with their logos, names, and connection status. The status for AQA, CCEA, Pearson, SQA, and WJEC is "Ready" with a green dot. For Cambridge International, City & Guilds, NCFE, and OCR, the status is not explicitly shown, but they have "Acquire Access Key" buttons. A footer message states "You have the latest version installed" and the version number "1.3.3.cd3f2f3b" is displayed in the bottom right corner.

Organisation Logo	Organisation Name	Status	Action
AQA	AQA	Ready	Check Connection
CCEA	CCEA	Ready	Check Connection
Pearson	Pearson	Ready	Check Connection
SQA	SQA	Ready	Check Connection
WJEC	WJEC	Ready	Check Connection
Cambridge International	Cambridge International		Acquire Access Key
City & Guilds	City & Guilds		Acquire Access Key
NCFE	NCFE		Acquire Access Key
OCR	OCR		Acquire Access Key

Awarding Organisation (AO) Identifiers

Awarding Organisation	Identifier	Additional detail
AQA	70	
CCEA	61	
Cambridge Assessment International Education	02	
OCR	01	ELC, GCE, GCSE and Cambridge Nationals
	72	Functional Skills and Cambridge Technicals
Pearson	10	ELC (Academic), GCSE and International GCSE, BTEC Tech Awards
	11	GCE and AEA
	13	Registrations including BTEC
	14	IAL, Projects and BTEC Technical Awards
	15	BTEC and Essential Skills (Wales) Assessments
WJEC	40	GCSE, Entry Level, Entry Pathways and Functional Skills
	41	GCE (Advanced, AS), Principal Learning and Project, WBQ and Essential Skills (Wales)

Notes

1. AO IDs 01 and 02 must have the leading zero.
2. Other IDs are used for A2C. See A2C Specification Appendix 2 for details.
3. 90 and 92 are reserved for data transfer between AOs and institutions such as UCAS and ICHEM. See '[Institutions Formats for the transfer of Data](#)' for details.

Centre Numbers

Centre numbers must be either an National Centre Numbers (NCN) or an AO assigned centre number. NCNs, which are allocated by JCQ and approved on the NCN register, are always 5 digit numeric and the same number can be used with all JCQ awarding organisations using the JCQ formats. AO assigned centre numbers must conform to the 5 character field length (these may be alpha-numeric dependent on the AO).

Part II — Files

File Types

The following data types are defined in this document.

A	Amendments	M	Coursework Marks
C	Components file	O	Options file
D	Disallowed combinations file	R	Results
E	Entries	S	Syllabus file
F	Forecast Grades	U	Certification/Unit Link file
L	Link file	X	General communication
		Z	Zipped basedata file

File Names

Filenames are *not* case sensitive.

Centre to AO files

The file name should take the form:

dcbb.Xnn

d	=	data type
dcbb	=	centre number in the case of files being sent by a centre
bb	=	AO identifier
X	=	literal 'X' identifies file as a common format file from an awarding organisation
nn	=	last two digits of the sequence number (see Sequencing below)

The file name is designed so that it contains the information needed at both ends of its journey from centre to awarding organisation or vice-versa. EDI suppliers should not rename files in transit.

Applicable file types (see examples below):

E – Entries

A – Amendments

F – Forecast Grades

M – Coursework Marks

AO to Centre files

The file name should take the form:

ccccccbb.Xnn

d	=	data type
cccc	=	centre number in the case of files being sent to a centre or an indication of the series and year in the case of broadcast or multiple files being sent by an awarding organisation
bb	=	AO identifier
X	=	literal 'X' identifies file as a common format file from an awarding organisation
nn	=	last two digits of the sequence number (see Sequencing below)

The file name is designed so that it contains the information needed at both ends of its journey from centre to awarding organisation or vice-versa. EDI suppliers should not rename files in transit, except where an awarding organisation supplies a single file containing data for a number of centres which an EDI supplier has previously agreed to split and to send the relevant parts to individual centres.

Applicable file types (see examples below):

R – Results

X – General Communication

Basedata (file types C, D, L, O, S, U and Z) is published on Awarding Organisation public or secure websites.

Sequencing

The sequence number specifies the order in which files have been produced so that awarding organisations receiving a number of files will know the order in which to process them. The last two digits of this number are included in the file name to enable multiple versions of a particular file type to be stored in one directory area. For example, a centre may produce more than one amendment file for a particular awarding organisation.

The sequence number should be reset to 1 at the beginning of each academic year. It is recommended that separate sequences are maintained for each AO ID, but the sequence number is incremented for a particular AO regardless of the series code (which is not included in the filename for centre to AO files) or data type. This means that it is clear that an amendment file with sequence 23 should be processed after an entry file with sequence 22.

The sequence number within the centre header is 3N so allows for 999 files to be sent to a single AO within an academic year. If this is exceeded, reset to 1 and inform the AO you have wrapped around.

Note that the filename contains only the last two digits of the sequence number, so it is likely that once the sequence number reaches 100 the filenames could clash; for example 001 and 101 will both have an extension X01. It is recommended files 1–99 are archived to a separate folder to avoid overwriting files. The AO will expect X01 after X99.

Sequence numbers do not need to be contiguous. For example, if an AO has processed X05 and then receives X07, it will not wait for X06. Centres and MIS suppliers should note that if X06 comes after X07 there will be potential data and fee implications.

Where a centre needs to download files from their MIS to send to an Awarding Organisation, care should be taken to ensure all files are accessed, downloaded and sent.

Example Filenames

E1000170.X01 would be entries file 01 from centre 10001 for AO 70 (AQA)

A1000101.X05 would be amendments file 05 from centre 10001 for AO 01 (OCR)

Basedata files

Basedata files will follow a similar naming convention, but instead of a centre number in bytes 2–6 of the file name they will contain the examination series code in bytes 2–3, followed by the year of the examination to which they refer in bytes 4–5 and a character indicating the region the qualifications are valid for in byte 6. The region character is 'B' for Wales and an underscore elsewhere.

A set of basedata files (Syllabus, Option, Component and Link files together with a disallowed combinations file) may be zipped as an executable file. Such files will be named according to the convention Zssyyrbb.ZIP, where Z indicates a zipped set of files, ss is the examination series, yy is the year, r is the region (B or underscore) and bb is the AO identifier.

It is also permissible for an additional text file to be included within a set of basedata. This file may be used to include any additional information. There are no naming requirements, but filenames should contain the AOID, year, month and series identifiers so they don't overwrite each other when they're unzipped. Text files will contain unformatted text and must be given a .TXT suffix.

Examples

S6A12_11.X01	would be a syllabus file from Pearson, AO Identifier 11 for series 6 (June GCE) in year 2012.
OBG11_61.X02	would be an options file from CCEA, AO Identifier 61 for series B (November) in year 2011. X02 indicates that this is the second release of this basedata file. (See note on the re-release of basedata below).
C6G12B40.X01	would be a component file for Wales from WJEC, AO Identifier 40 for series 6 (June GCSE) in year 2012.
Z3A12_70.zip	would be a set of zipped basedata files from AQA, AO Identifier 70 for series 3 (March) in year 2012.
1A22OCRHelp.TXT	A help file from OCR for their A series in Jan 2022. This could contain any additional information as required.

Re-release of Basedata

If it is necessary to release another version of the basedata files, the suffix of all files (excluding the .txt files) within a zipped file is changed to indicate the release number (for example from .X01 to .X02 if the files are released for a second time and from .X02 to .X03 if another release is necessary).

General Communication File (Type X)

Some awarding organisations, having received a centre's entries by EDI, send a confirmation of how many entries the centre has made for each subject. The file name would be

Xccccbb.Xnn

The data inside the file should be free-format text, intelligible to the recipients when read, not intended to be loaded into a computer.

The type X file is for awarding organisation to centre communications only; it is not intended for use by a centre to send an unstructured message to an awarding organisation.

The AO Preference 'EDI Acknowledgement (X) file' defines which AOs send acknowledgements.

Field Types

Field types are either numeric (N) or alphanumeric (A).

ASCII characters 13 (Carriage Return) and 10 (Line Feed) are reserved as end of line markers.

Each line must not be trimmed to remove spaces to the right of the last populated field.

File and centre headers and trailers should be padded to the same length as the detail record.

Alphanumeric fields

Alphanumeric fields:

- Must be left-justified (no leading spaces)
- Are right-padded with spaces to their full length
- can contain ASCII values 32 (space) to 126 (~)
- may contain extended ASCII values 161–255 using the ISO-8859-1 (Latin1/Western European) character encoding. However, some AOs may have further restrictions on some fields. For example, some characters are not valid for learner names, see individual fields for known constraints.
- Formatting codes are not allowed
- Pipes (ASCII code 124) are allowed but should be avoided as they can cause problems with PSV files.

Numeric fields

Numeric fields

- Must be right-justified
- Are left-padded with either spaces or zeros. Zero is a value.
- The only valid characters are 0–9 and space
- Zero should be explicit
- Examples for a 3N field are:
 - 123
 - 012
 - 000
 - □□0
 - □00
 - □□□
- The following examples are not valid and should be treated as errors:
 - ABC
 - 1□2
 - 12□
 - 0□□

Date fields

- Dates are defined as 6N. For dates the following additional constraints apply:
 - The format is ddmmyy
 - The only valid characters are 0 to 9. Spaces are not allowed.
 - dd must be a valid day number for the month and year.
 - Days 1–9 should have a leading zero
 - mm must be a valid month number (01–12)
 - Months 1–9 should have a leading zero
 - yy is last two digits of the year
 - Valid examples are:
 - 310122
 - The following examples are not valid:
 - 300222 (February does not have 30 days)
 - 301322 (There is no month 13)
 - 1 122 (spaces instead of leading zeros)
 - 013122 (date is in mmddyy format)

General layout of common format files

Each file consists of the following record types.

Record Type	Record Description
1	File Header
3	Centre Header
5	Detail
7	Centre Trailer
9	File Trailer

} Sequence repeats
for each centre in
the file

Files sent from a centre must contain records for only one centre number. For Centre to AO files there will therefore always be a file header record followed by a centre header record, a number of detail records, a centre trailer record and then a file trailer record.

Files received by a centre will only ever contain records for a single centre number, so will only ever contain a single centre header and a single centre trailer.

The situation in which there can be more than one centre header and trailer per file is where an awarding organisation produces a composite file containing data for a number of centres, which is then split by a third party and the relevant data forwarded to each centre. If more than one centre is included in the file, the centre header record, detail records and centre trailer record would be repeated the requisite number of times. In all cases the first record will be the file header and the last record will be the file trailer. The filename for composite data will contain the AO identifier, series, year and region codes.

File Header Record

Position	Description	Size	Comments
1	Data Type	1A	Same as first letter of file name
2	Record Type	1N	'1' for file header
3–7	Centre Number / Series	5A	See Note 1
8–9	AO	2N	AO identifier
10–11	Examination Series	2A	See Note 2
12–13	Year	2N	'00, '01' etc.
14	Distribution Type	1A	'S', 'B', or 'M' See Note 3
15–21	Software Package	7A	See Note 4
22–24	Software Package Version	3A	See Note 4
25–26	Formats Version	2N	See Note 5
27–	Pad with spaces		Record length will depend on data type
–end	End of Line Marker	2A	ASCII 13 (CR) + ASCII 10 (LF) See Note 6

Centre Header Record

Position	Description	Size	Comments
1	Data Type	1A	Same as first letter of file name
2	Record Type	1N	'3' for centre header
3–7	Centre Number / Series	5A	See Note 1
8–9	AO	2N	AO identifier
10–11	Examination Series	2A	See Note 2
12–13	Year	2N	'09, '10' etc.
14–16	Sequence Number	3N	Right justified with leading zeros See Note 7
17–24	Centre Postcode	8A	Left justified
25–	Pad with spaces		Record length will depend on data type
–end	End of Line Marker	2A	ASCII 13 (CR) + ASCII 10 (LF) See Note 6

Detail Record

Position	Description	Size	Comments
1	Data Type	1A	Same as first letter of file name
2	Record Type	1N	'5' for detail record
3–	Record details		Record length will depend on data type
–end	End of Line Marker	2A	ASCII 13 (CR) + ASCII 10 (LF) See Note 6

Centre Trailer Record

Position	Description	Size	Comments
1	Data Type	1A	Same as first letter of file name
2	Record Type	1N	'7' for centre trailer
3–7	Centre Number / Series	5A	See Note 1
8–14	Number of Records	7N	Right justified with leading zeros See Note 8
15–20	Date file produced	6N	In form ddmmyy
21–	Pad with spaces		Record length will depend on data type
–end	End of Line Marker	2A	ASCII 13 (CR) + ASCII 10 (LF) See Note 6

File Trailer Record

Position	Description	Size	Comments
1	Data Type	1A	Same as first letter of file name
2	Record Type	1N	'9' for file trailer
3–7	Centre Number / Series	5A	See Note 1
8–14	Number of Records	7N	Right justified with leading zeros See Note 8
15–21	Number of Centres	7N	Right justified with leading zeros See Note 9
22–	Pad with spaces		Record length will depend on data type
–end	End of Line Marker	2A	ASCII 13 (CR) + ASCII 10 (LF) See Note 6

Notes

1. Centre Number / Series

Bytes 3–7 of file header, centre header, centre trailer and file trailer records.

This field should contain either:

- the national centre number of the centre involved in the data transfer when the file contains data to or from a centre. In this case the Distribution Type will be 'S' — see Note 3.

or

- the examination series code and year (in the form YY) followed by the region (B or underscore) when the file contains non-centre specific examination data, for example basedata. In this case the Distribution Type will be 'B' or 'M' — see Note 3.

2. Examination Series

Bytes 10–11 of file and centre header records.

A two character examination series is to be used.

First Character

'1' to 'C' will refer to the main month in which the examination is taken.

1	January	7	July
2	February	8	August
3	March	9	September
4	April	A	October
5	May	B	November
6	June	C	December

Second Character

The second character is a letter (A–Z), defined to represent a set of qualifications to be processed together for the examination series. The second character is decided by the awarding organisation concerned without reference to the values used by other awarding organisations.

Any subjects which awarding organisations include in a particular set of basedata files are intended to be collected in a single entry file. For example, when combined with the year, 1A02 would simply indicate a set of basedata related to examinations scheduled to be taken in January 2002. It would have no necessary correlation with the same awarding organisation's 1A01 or 1A03, nor with another awarding organisation's 1A02.

3. Distribution Type

Byte 14 of file header record.

May contain one of three values.

'S' indicates that the file contains data to or from a centre.

In 'S' type files there should be one file header, one centre header, one centre trailer and one file trailer each of which should contain the same national centre number in bytes 3–7. All files from centres should be of type 'S'.

'B' indicates that the file contains data from one awarding organisation, all of which are to be broadcast to the centres.

In 'B' type files there should be one file header, one centre header, one centre trailer and one file trailer each of which should contain the examination series code in bytes 3–4, the year (in the form YY) in bytes 5–6, and 'B' or underscore to indicate the region in byte 7.

'M' indicates EDI carriers/file splitters

In cases where an awarding organisation issues one file containing data for a number of centres and the file needs to be split by the EDI carrier so that each part is sent to the relevant centre, byte 14 will contain the value 'M'.

In 'M' type files the file header and trailer records should contain the examination series code in bytes 3–4, the year (in the form YY) in bytes 5–6, and 'B' or underscore to indicate the region in byte 7. The body of the file will then contain a repeating sequence of centre header, detail records and centre trailer. Each centre header/trailer pair should contain the national centre number of the centre concerned in bytes 3–7.

The resultant file that the carrier/splitter outputs to each of the constituent centres will be of type 'S' (as described above).

4. Software Package Name and Version Number

Bytes 15–21 and 22–24 of file header.

These fields should contain the name and version number of the software package being used to produce the file. It is up to the software suppliers to invent suitable labels for their products. It is suggested that a centre using software that has been prepared in-house indicates this fact by placing its national centre number in bytes 15–19.

For basedata the software packages and versions are:

Awarding Organisation	Awarding Organisation ID	Software Package	Software Package Version
AQA	70	AQA	001
Cambridge Assessment International Education	02	DIRECT1	001
CCEA	61	CCEA16	002
OCR	01	UCLES01	EPS
OCR	72	OCRCAMS	001
OCR	72	OCRCAMT	001
OCR	72	OCRCAMX	001
OCR	72	OCRFSKL	001
Pearson	10	EDEXCEL	NULL
Pearson	11	EDEXCEL	NULL
Pearson	13	EDEXCEL	NULL
Pearson	14	EDEXCEL	NULL
Pearson	15	EDEXCEL	NULL
WJEC	40	WJEC	NULL
WJEC	41	WJEC	NULL

5. Formats Version

Bytes 25–26 of File Header Record

Used to indicate the version of the Formats booklet used in the file. For example, '14' would indicate that the 14th version of the Formats booklet was being followed.

6. End of Line Marker

The records take the form of fixed length lines of text, the exact length of which will depend on the data type in question. The end of line marker in all record types is ASCII code 13 (Carriage Return) followed by ASCII code 10 (Line Feed).

7. Sequence Number

Bytes 14–16 of centre header.

Right justified with leading zeros.

The Sequencing section above describes how sequence numbers should be set for centre to AO files.

For basedata the sequence number is the version number.

For AO to centre files, the initial results file for a series will have sequence 001. If there are any updates the sequence number will be incremented for each update.

8. Number of Records

Bytes 8–14 of centre trailer and file trailer.

Right justified with leading zeros.

The number of records in the centre trailer record should be a count of all the records including the centre header, centre trailer and all the detail records between the two. The number of records in the file trailer should be a count of all the records in the file including the file header and trailer records.

For example, an entries file containing the entries for one centre will contain one file header, one centre header, a number of detail records, one centre trailer and one file trailer. The record total in the centre trailer in this case should be the number of detail records plus two. The record total in the file trailer should be the number of detail records plus four.

9. Number of Centres

Bytes 15–21 of the file trailer.

For Distribution Type 'S' the number of centres is always 1, so will be '0000001'

For basedata, which has Distribution Type 'B' the number of centres is not relevant so may be set either to 0 or 1, so will be '0000000' or '0000001'.

Example Headers and Footers

In these examples the pipe symbol separates the defined fields. The grey rows show the column numbers.

Basedata Files

The following records are an example of the file and centre headers and trailers used in basedata files. This example is for a Syllabus file for AQA (AO 70) for the 2022 'A' series (6A22_), version 1 produced on 1st Jan 2021 with 70 records. The filename would be S6A22_70.X01. Syllabus files have a record length of 45 characters (excluding the □□ end of line marker).

File Header

```
|0|0|00000|00|11|11|1|1111122|222|22|2223333333333333444444|
|1|2|34567|89|01|23|4|5678901|234|56|7890123456789012345|
|S|1|6A22_|70|6A|22|B|AQA|001|14|
```

Centre Header

```
|0|0|00000|00|11|11|111|11122222|222223333333333333444444|
|1|2|34567|89|01|23|456|78901234|567890123456789012345|
|S|3|6A22_|70|6A|22|001|
```

Centre Trailer

```
|0|0|00000|0011111|1111122|2222222223333333333333444444|
|1|2|34567|8901234|567890|1234567890123456789012345|
|S|7|6A22_|0000072|011221|
```

File Trailer

```
|0|0|00000|0011111|1111122|2222222223333333333333444444|
|1|2|34567|8901234|5678901|234567890123456789012345|
|S|9|6A22_|0000074|0000000|
```

Results Files

The following records are an example of the file and centre headers and trailers used in a results file. This example is for centre 10015 from AQA (AO 70) for the 2019 'A' series (6A19), produced on 16th November 2020 with 117 records. This is the 75th file for this centre, so the sequence number is 075 and the filename would be R1001570.X75. Results files have a record length of 62 characters (excluding the □□ end of line marker). CU1 6MN is a fictitious postcode.

File Header

```
|0|0|00000|00|11|11|1|1111122|222|22|222333333333333344444444445555555555666|
|1|2|34567|89|01|23|4|5678901|234|56|789012345678901234567890123456789012|
|R|1|10015|70|6A|19|S|AQA|14|
```

Centre Header

```
|0|0|00000|00|11|11|111|11122222|22222333333333333344444444445555555555666|
|1|2|34567|89|01|23|456|78901234|56789012345678901234567890123456789012|
```

1

Centre Trailer

File Trailer

—

Entry Files

The following records are an example of the file and centre headers and trailers used in an entry file. This example is for centre 10015 sent to AQA (AO 70) for the 2021 'A' series (6A21), produced on 12th February 2021 with 30 records. This is the 26th file created by this centre for AQA in this academic year, so the sequence number is 026 and the filename would be E1001570.X26. Entry files have a record length of 192 characters (excluding the `□□` end of line marker), although the padding is not shown in the examples below. This centre is using SIMS 7 to generate their entry files. CU1 6MN is a fictitious postcode.

File Header

Centre Header

Centre Trailer

—

File Trailer

Forecast Grade Files

The following records are an example of the file and centre headers and trailers used in a Forecast Grade file. This example is for centre 71307 sent to CCEA (AO 61) for the 2019 'A' series (6A19), produced on 14th May 2019 with 4,433 detail records. This is the 368th file created by this centre for CCEA, so the sequence number is 368 and the filename would be F7130761.X68. Forecast grade files have a record length of 26 characters (excluding the □□ end of line marker). This centre is using SIMS 728 to generate their forecast grade files. BT90 1AJ is a fictitious postcode.

File Header

```
|0|0|00000|00|11|11|1|1111122|222|22|  
|1|2|34567|89|01|23|4|5678901|234|56|  
|F|1|71307|61|6A|19|S|SIMS    |728|14|
```

Centre Header

```
|0|0|00000|00|11|11|111|11122222|22|  
|1|2|34567|89|01|23|456|78901234|56|  
|F|3|71307|61|6A|19|368|BT90 1AJ|  |
```

Centre Trailer

```
|0|0|00000|0011111|111112|222222|  
|1|2|34567|8901234|567890|123456|  
|F|7|71307|0004435|140519|  |
```

File Trailer

```
|0|0|00000|0011111|1111122|22222|  
|1|2|34567|8901234|5678901|23456|  
|F|9|71307|0004437|0000001|  |
```

Coursework Mark Files

The following records are an example of the file and centre headers and trailers used in a coursework file. This example is for centre 10015 sent to Pearson (AO 10) for the 2021 'G' series (6G21), produced on 31st March 2021 with 48 records. This is the 16th file created by this centre for Pearson in this academic year, so the sequence number is 016 and the filename would be M1001510.X16. Coursework mark files have a record length of 42 characters (excluding the □□ end of line marker). This centre is using SIMS 7 to generate their coursework mark files. CU1 6MN is a fictitious postcode.

File Header

```
|0|0|00000|00|11|11|1|1111122|222|22|2223333333333444|  
|1|2|34567|89|01|23|4|5678901|234|56|7890123456789012|  
|M|1|10015|10|6G|21|S|SIMS    |7  |14|
```

Centre Header

```
|0|0|00000|00|11|11|111|11122222|222223333333333444|
```


|1|2|34567|89|01|23|456|78901234|567890123456789012|
|M|3|10015|10|6G|21|016|CU1 6MN |

Centre Trailer

0	0	00000	0011111	111112	222222223333333333444
1	2	34567	8901234	567890	1234567890123456789012
M	7	10015	0000050	310321	

File Trailer

0	0	00000	0011111	1111122	222222223333333333444
1	2	34567	8901234	5678901	234567890123456789012
M	9	10015	0000052	0000001	

Part III — Centre to AO Files

Entries and Amendments File Formats

The file should be created according to the rules for common format data files outlined earlier, using the data type 'E' for entries or 'A' for amendments as the first character of the file name and of all the data records. The record length is 194 bytes including the end of line marker.

Entries and Amendments Detail Record

Position	Description	Size	Comments
1	Data Type	1A	'E' for Entries 'A' for Amendments
2	Record Type	1N	'5' for Details record
3	Candidate Status	1A	'C' or 'P' See Note 1
4–8	Centre Number	5A	
9–12	Candidate Number	4N	See Note 2
13–52	Candidate Name	40A	See Note 3
53	Sex	1A	See Note 4
54–59	Date of Birth	6N	In format DDMMYY (‘000000’ if not known)
60–72	Candidate Identifier	13A	Unique Candidate Identifier (UCI) See Note 5
73–85	Pupil Number	13A	Unique Pupil Number (UPN) See Note 6
86–95	Unique Learner Number	10N	Unique Learner Number (ULN) See Note 7
96	Qualifier Flag	1A	'G', 'P', or '□' See Note 8
97–101	Optional Centre Number	5N	See Note 8
102–105	Optional Candidate Number	4N	See Note 8
106–108	Documentation Group	3A	Not used.

109–114 & 115 116–121 & 122 123–128 & 129 130–135 & 136 137–142 & 143 144–149 & 150 151–156 & 157 158–163 & 164 165–170 & 171 172–177 & 178 179–184 & 185 186–191 & 192	1st Option Entry Code and Flag ... 12th Option Entry Code and Flag	6A 1A by 12	See Note 9
193–194	End of Line Marker	2A	ASCII 13 (CR) + ASCII 10 (LF)

Notes

1. Candidate Status (Byte 3)

May take the value 'C' for a centre candidate (normal internal candidate) or 'P' for a private candidate. Some awarding organisations will not accept private candidates as part of a centre's entry file and will treat all candidates received in this way as centre candidates, irrespective of the value contained here.

This is a mandatory field. AOs may reject entries if this field is blank or contains any value other than 'C' or 'P'.

2. Candidate Number (Bytes 9–12)

Candidate Number must be a 4 digit number, right justified and padded with leading zeros within the range 0001-9999, for example 1234, 0123, 0012, 0001. Candidate numbers must be unique to an exam series.

3. Candidate Name (Bytes 13–52)

Must be in the format SURNAME:FORENAMES. For example

Jones:Frederick William T

The surname must be first.

A colon separates the surname and forenames.

- If no colon is present the candidate has no forenames and all the names will be assumed to be part of the surname.
- There must be only one colon. If there are multiple colons, the split is on the first colon and any subsequent colons would be included in the forenames.
- The last character should not be a colon, even if there are no forenames. If present it will be stripped.
- There should not be a space before or after the colon. Any white space before or after the colon should be trimmed.

Acceptable characters are:

- A–Z, a–z, hyphen, apostrophe, space, round brackets (open and close) and full stop.
- Some AOs accept accented ASCII characters in the range 192 to 255.

Mixed case is preferred, although awarding organisations may convert names to upper case when they transfer on to their own computer systems. They may also remove or replace any characters which are not acceptable.

4. Sex

Current valid fields are:

F – Female

M – Male

The JCQ are reviewing additional values to support gender.

5. Candidate Identifier (Bytes 60–72)

The Candidate Identifier is mandatory.

The Candidate Identifier is the 13 character Unique Candidate Identifier (UCI).

The specification for UCIs is available from

<https://www.jcq.org.uk/exams-office/entries/unique-candidate-identifiers-uci/>

or from the 'Unique Candidate Identifiers' folder on

<https://jointcouncilqualifications.sharepoint.com/sites/EDI2>

Note that UCIs contain a check digit and these should be validated.

UCIs are based on a centre's NCN and therefore the first 5 characters will be numeric and the 6th character will always be zero.

If a learner already has a UCI, it must continue to be used, even if it was generated for a different centre, candidate number, or year. Therefore characters 1–5 do not need to match the current centre number, characters 7–8 do not need to match the current year and characters 9–12 do not need to match the current candidate number.

Where a centre has an AO assigned centre number the 6th character will also vary. These UCIs may also be known as AO Specific Learner Identifiers – details are available here:

<https://www.jcq.org.uk/exams-office/entries/unique-candidate-identifiers-uci/>

6. Pupil Number (Bytes 73–85)

This is the 13 character Unique Pupil Number (UPN) used by DfE. The UPN is mandatory for all learners at state-funded schools or colleges in England, Wales and Northern Ireland.

7. Unique Learner Number (ULN) (Bytes 86–95)

This is the 10 digit number allocated by the Learning Records Service (LRS) and is used to access a learner's Personal Learning Record (PLR).

The ULN is mandatory for all entries of learners at state-funded schools or colleges in England, Wales and Northern Ireland. They are optional for independently-funded schools and for private candidates, but should be provided if available.

8. Qualifier Flag, Optional Centre and Candidate Numbers (Bytes 96, 97–101 and 102–105)

If the qualifier flag contains 'G' then the candidate is a guest from another centre. The optional centre and candidate number fields specify the centre which holds the main entry and the number of the candidate at that centre. This is currently not supported by any AO.

If the qualifier flag contains 'P' then the candidate's previous centre and candidate number are supplied for the purpose of carrying forward marks. The fields for optional centre and candidate numbers should not be left blank if the qualifier flag contains 'P'.

If the qualifier flag is a space then the optional centre and candidate numbers must also be blank.

Any other value in the qualifier flag byte is invalid.

Some awarding organisations do not require this information and it will not be used if provided.

9. Option Entry Codes

The maximum number of entry codes which can be accommodated in one record is 12. If a candidate is entering for more than 12 subjects, the additional information should be provided in a second record which should follow immediately, the first 108 bytes of which should be identical to the first record.

For an Entry file there must be at least one entry (bytes 109-114). The option entry codes may be blank for an amendment file — this would mean that the candidate has been withdrawn from all previous entries.

The byte after each option entry code is a spare flag, any use of which will be indicated by an individual awarding organisation. It should be blank if not required.

Use of Entries and Amendments Files

A centre should submit only one entries file for a given examination series to each awarding organisation for which it has entries, and this file should contain the majority if not all of the centre's entries. Subjects which are to be collected in any single file are defined by their presence in the corresponding basedata files for that awarding organisation, year and series.

Any change to the entries or additional entries are amendments and should be submitted in an amendments file.

An amendments file should include complete replacement records for all candidates whose entries and/or personal details have changed since the entries file or last amendments file was submitted. The awarding organisation will determine the differences between the amended record submitted by the centre and the data held on the awarding organisation's database.

Amendment files do not need to include candidates for which there are no changes.

A candidate record with no subject entries will be interpreted as an instruction to withdraw the candidate from all subjects. Individual awarding organisations, however, may follow their own procedures on candidate withdrawal.

Centres should ensure any changes to candidate entries processed by Awarding Organisations via non-EDI submission, for example AO extranet amendments, are also maintained within the MIS to ensure entries are not withdrawn and late fees incurred in error.

Example Entry File

In the example below an internal candidate at centre 10015 called 'Marcus Smith', who is male, with date of birth 1st August 2004 and has a candidate number 0123, a UCI 123456789012D, a ULN 5304602721 and a UPN T001800021001 is being entered for Philosophy (7172), Politics (7152) and Economics (7136) A levels.

0	0	0	00000	0111	11111112222222223333333333444444444555	5	555555
1	2	3	45678	9012	3456789012345678901234567890123456789012	3	456789
E	5	C	10015	0123	Smith:Marcus	M	010804

6666666666777	7777777788888	88889999999	9
0123456789012	3456789012345	6789012345	6
123456789012D	T001800021001	5304602721	

00011	1111	111	111111	11111111	1	111111	1	111111	1	111111	1	111111	1
99900	0000	000	000111	11111112	2	222222	2	333333	3	333444	4	444444	5
78901	2345	678	901234	5 678901	2	345678	9	012345	6	789012	3	456789	0
			7172	7152		7136							

111111	1	111111	1	111111	1	111111	1	111111	1	111111	1	111111	1	111111	1
555555	5	556666	6	666667	7	777777	7	788888	8	888899	9				
123456	7	890123	4	567890	1	234567	8	901234	5	678901	2				

Forecast Grades File Format

A forecast grade would be required for entries which have a gradeset defined in the Options file in bytes 85–88 or 89–92.

The file should be created according to the rules for common format data outlined earlier, using the data type 'F' as the first character of the file name. The record length is 28 bytes including the end of line marker.

Forecast Grades Detail Record

Position	Description	Size	Comments
1	Data Type	1A	'F' for Forecast Grades
2	Record Type	1N	'5' for Details record
3–7	Centre Number	5A	
8–11	Candidate Number	4N	Right justified with leading zeros
12–17	Entry Code	6A	Code for which entry was made
18–19	First Grade	2A	See Notes 1 and 2
20–21	Second Grade	2A	See Notes 1 and 2
22–26	Pad with spaces	5A	
27–28	End of Line Marker	2A	ASCII 13 (CR) + ASCII 10 (LF)

Notes

First and Second Grades (Bytes 18–21)

1. These fields are two bytes in length to allow for the inclusion of A* grades. In the absence of a second character the forecast grade should be left aligned with a space to fill the second byte. Split grades to indicate borderlines are not permitted.
2. Where an awarding organisation requires a code to indicate that no forecast grade will be supplied for the entry code concerned, for example Z, O, this should be in byte 18. In the interests of harmonisation, all awarding organisations will accept 'Z' in EDI files.

Example Forecast Grade File

In the example below an internal candidate at centre 71307 with candidate number 4089 and entry code G9824 has been given a forecast gradeset short code of B1. From the basedata option definition file option entry code G9824 has first forecast grade gradeset 62. Gradeset short code B1 in gradeset 62 equates to the grade full title of BC*.

```
|0|0|00000|0011|111111|11|22|22222|
|1|2|34567|8901|234567|89|01|23456|
|F|5|71307|4089|G9824|B1| | |
```

Coursework Marks File Format

The file should be created according to the rules for common format data outlined previously, using the data type 'M' as the first character of the file name. The record length is 44 bytes including the end of line marker.

Coursework Mark Detail Record

Position	Description	Size	Comments
1	Data Type	1A	'M' for Marks
2	Record Type	1N	'5' for Details record
3–7	Centre Number	5A	
8–11	Candidate Number	4N	Right justified with leading zeros
12–23	Component Code	12A	Key to Component file See Note 1 below
24–27		4A	Undefined
28	Mark/Grade Status	1A	See Note 2 below
29–31	Mark/Grade	3A	Right justified with leading zeros if mark. Left justified if grade See Note 2 below
32–36	Previous Centre Number	5N	See Note 3 below
37–40	Previous Candidate Number	4N	See Note 3 below
41–42	Previous Series	2A	See Note 3 below
43–44	End of Line Marker	2A	ASCII 13 (CR) + ASCII 10 (LF)

Notes

1. Component Code (Bytes 12–23)

This field will determine to which component the mark or grade belongs.

2. Mark/Grade Status (Byte 28)

Allowed values are:

- 'V' Valid mark recorded
- 'Z' Zero mark recorded
- 'G' Grade recorded
- 'A' Absent for this component
- 'M' Missing mark or grade
- 'F' Mark or grade is being carried forward
- 'N' No work available at present
- 'E' Educated Elsewhere or Parent Assessed

The mark field (bytes 29–31) will only contain a numerical mark greater than 0 if the mark status is 'V' or 'E'. If the mark is zero then the mark status must be 'Z'. It is not acceptable to have status 'V' or 'E' with the mark '000'.

If the mark status is 'G' then bytes 29–31 should contain a grade. If the grade consists of a single character then this should be in position 29 followed by 2 spaces.

If the mark status is 'F' this indicates that a mark or grade has been carried forward, and so no mark follows.

If the mark status is 'E' then bytes 29–31 should contain a mark or grade if 'Parent Assessed', otherwise leave blank for 'Educated Elsewhere'.

3. Previous Centre Number, Candidate Number and Series (Bytes 32–36, 37–40 and 41–42)

These fields are to be completed when a candidate is carrying forward marks to show the centre and candidate number under which they were originally sent and to indicate the series from which they are to be carried forward. Unless being used it should be populated with spaces.

Use of Coursework Marks Files

Awarding Organisations

CCEA does not use coursework marks files.

Carry Forwards

Where a coursework mark file is being used to notify an AO of a carry forward:

- The Mark/Grade Status must be set to 'F'
- The Previous Centre Number may be set even if it is the same as the current centre number
- The Previous Candidate Number and Previous Series code may be set

Example Coursework Marks file

```
|0|0|00000|0011|111111112222|2222|2|233|33333|3334|44|
|1|2|34567|8901|234567890123|4567|8|901|23456|7890|12|
|M|5|10015|4377|1PE0 03| | |V|089| | |
|M|5|10015|4377|1PE0 04| | |V|016| | |
```

Endorsement grade

```
|0|0|00000|0011|111111112222|2222|2|233|33333|3334|44|
|1|2|34567|8901|234567890123|4567|8|901|23456|7890|12|
|M|5|10015|1234|1EN0 E| | |G|D| | |
```

Carry Forwards

```
|0|0|00000|0011|111111112222|2222|2|233|33333|3334|44|
|1|2|34567|8901|234567890123|4567|8|901|23456|7890|12|
|M|5|10015|1234|1EN0 E| | |F| | | |
```

Part IV — AO to Centre Results

Results are available in two formats:

1. EDI R files
2. A2C xml files

In addition to the results provided in EDI results files, xml result files include component level marks.

EDI R File Format

The file should be created according to the rules for common format data outlined earlier, using the data type 'R' as the first character of the file name. The record length is 64 bytes including the end of line marker.

Results Detail Record

Position	Description	Size	Comments
1	Data Type	1A	'R' for Results
2	Record Type	1N	'5' for Details record
3–7	Centre Number	5A	
8–11	Candidate Number	4N	Right justified with leading zeros
12–24	Unique Candidate Identifier	13A	UCI
25–34	Unique Learner Number	10N	ULN
35–40	Entry Code	6A	Code for which entry was made or blank See Note 1
41–46	Results Code	6A	Code for which result is being awarded See Note 1
47	Result Type	1A	See Note 2
48–62	Outcome Values	15A	See Note 2
63–64	End of Line Marker	2A	ASCII 13 (CR) + ASCII 10 (LF)

Notes

1. Subject Entry Code and Subject Results Code (Bytes 35–40 and 41–46)

The subject entry code is the code for which the candidate is entered on an awarding organisation's database on the day that results are published, and will only be included, at the discretion of the awarding organisation supplying the data, if the candidate is being awarded a grade in a subject area that differs from that of the recorded entry. In most cases this field will contain spaces. The subject results code is the code for which the grade is being awarded. It should be 4, 5 or 6 characters in length, left justified with trailing spaces if necessary.

2. Result type and Outcome Values (Bytes 47, 48–62)

Byte 47 contains a flag which is used to interpret the outcomes contained in bytes 48 to 62.

The Result Types are defined in the Options file in Note 9.

There are 3 formats for results, depending on the Result Type:

1. Numeric values (Grades, Levels, Points)
2. UMS (U) or Marks (M)
3. Grades and Marks (B or C)

Numeric Results Type

Three numeric values have been defined for byte 47:

- 1 Grades left justified to allow A*
- 2 Levels (numeric) right justified
- 3 Points score (numeric) right justified with leading zero

If byte 47 contains one of these numeric values, then the grade or result field will contain space for four grades or results, each of which may be 1 or 2 characters in length as shown below, and the corresponding partial absence symbol for each (#) if appropriate.

48–49	First Grade or Result
50–51	Second Grade or Result
52–53	Endorsement to first grade or result
54–55	Endorsement to second grade or result
56–57	Undefined
58	First grade partial absence
59	Second grade partial absence
60	Endorsement to first grade partial absence
61	Endorsement to second grade partial absence
62	Undefined

In many cases some or most of these fields will be blank. For example, dependent on the gradeset a subject with a single, double, or triple grade may use the first field only.

The partial absence symbol (#) will appear only if a candidate has been absent for one or more components of the examination and has been awarded a grade.

Results Type U or M

If byte 47 contains 'U' (Uniform Mark Scale) or 'M' (Mark) then bytes 48–50 will contain a numeric score, bytes 51–52 may contain a grade and bytes 53–62 will be blank, as shown below.

48–50	Numeric score
51–52	Grade (Optional)
53–62	Pad with spaces

Results Type B or C

If byte 47 contains 'B' or 'C' then bytes 48–51 will contain a numeric score, bytes 52–53 contain one grade as defined by the gradeset, bytes 54–57 will be blank, byte 58 will contain the partial absence symbol and bytes 59–62 will be blank as shown below. The partial absence symbol will appear only if a candidate has been absent for one or more units of the qualification and has been awarded a grade.

48–51	Numeric score
52–53	Grade
54–57	Undefined
58	First grade partial absence
59–62	Undefined

Grades

Grades are 2 character codes which should not be exposed to users, but must always be displayed as grade names. For many grades the grade name is the same as the code (for example A and A*), but many are different. This is particularly important for double numeric grades (for example the grade 9-9 has a code 99 and it is a regulatory requirement to display the hyphen to distinguish it from a mark), for esoteric grade codes (for example M3 is a code for 'Merit Pass Pass'), or where the same code is used for different grades in different gradesets (for example D is a Distinction in some gradesets but a grade D in others).

3. No Result and Pending Results

Where a grade/result or notional grade/result is issued, an 'X' or 'x' indicates no result and a 'Q' or 'q' indicates a pending result.

Example Results File

In the example below candidate number 0123 with a UCI 123456789012D and ULN 5304602721 has a result for their Biology GCE (entry code 7402), which uses Result Type 1. The result is a grade D with a Pass in the practical.

```
|0|0|00000|0011|1111111122222|2222233333|333334|444444|4|44|55|55|55|55|5|5|6|6|6|
|1|2|34567|8901|2345678901234|5678901234|567890|123456|7|89|01|23|45|67|8|9|0|1|2|
|R|5|10015|0123|123456789012D|5304602721|       |7402|1|D| |P| | | | | | |
```

A2C XML Results

Scope

Results xml files use the A2C XML schema. They contain all the information that's in the EDI R file. AOs will continue to produce the EDI R files and there are currently no plans to deprecate the EDI R files. MIS can choose whether to continue processing the EDI file for the main results and use the XML just for the additional results, or whether to use solely the XML for all results. MIS should process component and endorsement results where they are provided by AOs.

A sample XML file with accompanying notes is available to illustrate this specification and to aid design work. In addition, each AO has produced test files for testing, each with notes. The files are available from

<https://jointcouncilqualifications.sharepoint.com/sites/EDI2>

Exclusions

Some vocational qualifications where all the required information is already in the R file will not be included in the xml files. AOs have provided details of which qualifications this applies to in the notes accompanying their test data.

Some functionality specified for A2C results is out of scope for EDI results:

- Contributing units to awards
- Raw marks
- Notional grades for components

General

The following abbreviations are used in this section:

- QE is a Qualification Element — for EDI results this could be an award, learning unit or assessable.
- QEA is a QE Availability — effectively equivalent to a series in EDI
- CAO is Centre Assessed Outcome — equivalent to Coursework in EDI
- PRR is Party Relationship Role, which define learner and organisation identifiers

Files

- XML files will be named a2c.CCCCC.AB.EDIResults.GUID.xml where CCCCC is a 5 digit alpha-numeric centre number (for EDI results always a numeric NCN) and AB is the 2 digit AO identifier (same as the EDI AB identifier) and GUID is the same GUID used in the Message ID
A GUID is formatted [0-9a-fA-F]{8}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{12}
The year and series are *not* included in the filename.
For example, a results file for centre 12345 from AO 41 with a MessageID of 35b85693-cb69-4d2b-9fc4-aa2e9e9acd5c would have a filename
a2c.12345.41.EDIResults.35b85693-cb69-4d2b-9fc4-aa2e9e9acd5c.xml

The same GUID should be used as the MessageID in the MsgHeader. If MIS want to track imports we recommend using the MessageID element in the xml rather than manipulating the filename string to extract the GUID.

Note that GUIDs are not case-sensitive: they are 128-bit integers expressed as hexadecimal strings and hex allows a–f or A–F. So 8a16e427-97e6-e811-a980-00224800510b and 8A16E427-97E6-E811-A980-00224800510B are equal because they represent the same hexadecimal value.

- Customers with multiple centre numbers will have a separate results file for each NCN.
- AOs with multiple AO IDs must not combine different AO IDs in a single file. The schema supports only one AO ID per file. The filename for an R file and for xml results both contain the AB identifier so by definition can contain results for only one board.
- If there are results for multiple series for the same AO ID on the same day they will be in separate files. The GUID ensures the filenames are unique.
- The service code for the AS4 transport is the same as other JCQ EDI messages, as specified in the A2C Transport Specification: "uri:jcq.org.uk/formats/edi/13". The action code for Component Results XML is 'G'.

Schema

- For the parts of the schema used by XML results for EDI entries any of the following A2C schemas are valid: 10.7, 10.8, 10.9, 10.10. These are functionally equivalent and MIS should accept any version. All four versions are available in the [Schema](#) folder on Sharepoint.
- The A2C schema contains some mandatory elements that are not relevant for EDI. For example, the sequence number will not be used but must be set; for EDI results it will always be zero. There are also some mandatory dates that may not be available from EDI systems — see Dates below.
- The TransactionName element must be ProcessResults. This is the same TransactionName used in A2C, as once the xml is unpacked and passed validation/sequence checking, it can be handled the same way whether it arrived as an A2C transaction or EDI file.
- The MessageID in the MsgHeader should use the same GUID as the filename.
- All strings must be trimmed (no leading or trailing spaces)
- Numbers should not be padded with zeros, for example a UMS value of 78 may have been presented in EDI R files as 78 or 0078, but in xml will always be 78.
- Test files may include a schema location, for example

```
xsi:schemaLocation="http://jqc.org.uk/a2c
file:///N:/JCQ/A2C%20Specification/Schema/Version%2010.8/A2CEntityBlocksSc
hema_Ver_10-8-1.xsd">
```

- For production files the A2CMessage should not include a schema location and will always be

```
<A2CMessage xmlns="http://jqc.org.uk/a2c"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
```

Party Identifiers

Individuals (learners) and organisations are parties and are identified using Party IDs.

The AO identifier will be the same as that used for the EDI entry and EDI results file.

The Initiator_Party_Id will always be the AO ID of the AO sending the results.

For EDI results, the Party_Id_Originator and the Awarding_Organisation_Party_Id (both under QEOutcome) will always be the same as the Initiator_Party_Id. They can be different for A2C, but not for EDI.

Dates and Times

The timestamp in the header is the datetime that the file was created. For EDI results this should be set to one second past midnight on the Wednesday. For 2020 GCSE, restricted results were issued on Wednesday 19/8/20. Datetimes are in UTC and we're on BST in August so the timestamp would be '2020-08-19T00:00:01+01:00'

Some AOs use GMT for all datetimes, some use a 1 hour offset during BST; both approaches are valid. 1 second past midnight on 1st June 2019 can be expressed as 2019-06-01T00:00:01+01:00 or 2019-05-31T23:00:01Z, which are semantically equivalent. MIS are advised to use a standard library (such as joda-time or nodatetime) to convert datetimes to the format you want to store them in.

The A2C data model makes extensive use of effective dates. Effective from dates are always mandatory.

- The party name effective date would ideally be set to the date the learner registered with the AO, but for EDI results it is acceptable to use the date component of the timestamp in the header.
- For party relationship effective dates, it is acceptable (for EDI results) to use the date component of the timestamp in the header.
- QEA Effective Start Date Times use a nominal start date for a series with an offset in seconds relating to the series code. For the June 2020 series, the date is 1/6/2020; for the November 2020 series, the date would be 1/11/2020; for January 2021 it would be 1/1/2021. For the A series the offset is one second past midnight, 2 seconds for B, etc. So, for the 206G series, the QEA_Effective_Start_Date would be '2020-06-01T00:00:07+01:00'.

The QE_Outcome_Date_Time is one second past midnight on the restricted results publication date. For 2020 GCSE the restricted results release date is Wednesday 19/8/20, so the timestamp is '2020-08-19T00:00:01+01:00'. If a result is subsequently updated this is set to the datetime the result was amended.

The QE_Outcome_Date is the results publication date, so for GCSE results in 2020 is '2020-08-20'. If a result is updated this date does not change (whereas the QE_Outcome_Date_Time would).

The QE_Outcome_Date is defined as a date but the TimeStamp and QE_Outcome_Date_Time are datetime types in the schema. The logical data model further defines QE_Outcome_Date_Time as 'DATETIME DAY TO SECOND'. This allows a result to be updated more than once in a day — which we know occasionally happens. In an A2C transaction the TimeStamp would have a resolution of milliseconds, but for EDI results the

original results would be set to one second past midnight BST on the Wednesday and any updates could be rounded to the nearest second.

The QE_Outcome_Date can be used by MIS to enforce the embargo on results publication. Note that the embargo applies to component results as much as the overall results. See the JCQ General Regulations section 5.12 for details on what can be done before and after embargo. In A2C the QE_Outcome_Date includes the exact time that the embargo is lifted (currently 8am for JCQ results) which allows MIS to strictly enforce the embargo. For EDI results this is currently just the date component, but may include the time in a future version.

Learners

Learner Identifiers

- The party ID for learners will normally be their UCI — the UCI is required for all EDI entries and is known to be reliably unique for qualifications using EDI; this convention has been adopted in the example xml. However, if a UCI is not available an AO may use an arbitrary unique identifier such as a GUID. In A2C the learner party ID would be an MIS assigned learner identifier. For both reasons, MIS should not assume that the learner party ID is a UCI but instead obtain the learner's UCI from the UCI PRR for the learner.
- In the same way that PRR records for MIS Assigned Learner Identifiers are not required for A2C centre to AO transactions, technically the PRRs for 'AO Assigned Learner Identifier' in results transactions are technically redundant information (as the Relationship_Reference is always the same as Party_Id_2nd). However, it is acceptable to include them.
- AOs will not be able to return MIS Assigned Learner Identifiers as these are not submitted in EDI entry files.
- Other learner identifiers (ULN, UPN, candidate number) and details (name, DOB and legal sex) are included to help MIS/centres correctly match results to entries, even if the entries have not been entered in the MIS.
Name, DOB and legal sex are required fields for EDI entries so MIS can assume they will always be populated for EDI results.
Remember that the 'sex' field in the entry file must be the learner's legal sex (Male/Female), not their declared gender (Man/Woman). Gender will not be returned in results.
- In A2C results transactions the candidate number is not returned with results as it is for EDI (the outcome record contains the key values for the QE learner booking record). For EDI results the candidate number is included as a PRR. It is assumed that centres adhere to the rule that a learner at a single centre uses the same candidate number for the entire season. However, even if they have used different candidate numbers for different series within the same season, they will be in different files as AOs will produce separate results files for each series even if they are issued on the same day. Similarly, if a learner is taking GCE and GCSE in the same year and have used different candidate numbers, results are issued on different days so will be in separate files. They can have different candidate numbers at different centres, because results are split by centre.

- Candidate Number must be a 4 digit number padded with leading zeros, for example 1234, 0123, 0012, 0001 as in the specification for entry files.
- ULN (and other learner details) are not mandatory; they will be included where possible but there may be instances where the data are not available or applicable.

Learner Names

Returning learner names with results is not mandatory, but AOs are encouraged to do so as this could help centres match results where the MIS is unable to match results to entries, and therefore reduce queries on results days. Learner names are mandatory for EDI entries, so should always be available for EDI results.

AOs should use the best name they have for a learner wherever possible. For example, where a learner has requested a particular name on their certificate, or the entry has been linked to a learner record (for example through ULN matching), the names are likely to be better than a name provided in the EDI entry file. However, for many EDI results, the only name available will be the one that was supplied with the EDI entry.

The Surname is mapped to the Family name and Forenames to Given names.

In the example quoted for the entry file, 'Jones:Frederick William T' will become:

```
<PartyName_CN>
  <PartyName_ID>
  <Party_Name_Type>Full</Party_Name_Type>
  <Party_Name_Effective_Date>2020-08-19</Party_Name_Effective_Date>
  </PartyName_ID>
  <PartyNameComponent>
    <PartyNameComponent_ID>
    <Party_Name_Component_Order>1</Party_Name_Component_Order>
    </PartyNameComponent_ID>
    <Party_Name_Component_Type>Given</Party_Name_Component_Type>
    <Party_Name_Component>Frederick William T</Party_Name_Component>
  </PartyNameComponent>
  <PartyNameComponent>
    <PartyNameComponent_ID>
    <Party_Name_Component_Order>2</Party_Name_Component_Order>
    </PartyNameComponent_ID>
    <Party_Name_Component_Type>Family</Party_Name_Component_Type>
    <Party_Name_Component>Jones</Party_Name_Component>
  </PartyNameComponent>
</PartyName_CN>
```

- If there is no colon, there will be only one Party_Name_Component, which will be Party_Name_Component_Type=Family with Party_Name_Component_Order=1
- If there is a single colon but it is the last character then there will be only one Party_Name_Component, which will be Party_Name_Component_Type=Family with Party_Name_Component=1, with the colon stripped.
- If there are multiple colons, the split is on the first colon and any subsequent colons would be included in the Given name
- Names should be trimmed to remove any white space before or after the colon
- If the AO has converted the name to upper case, or removed/replaced any unacceptable characters, when they create the entry on their own computer systems, the name returned in results may not be exactly the same name that was provided on the entry.

- Party_Name_Component_Order is mandatory in the schema. Where there is a single colon, the Given name(s) will have Party_Name_Component_Order=1 and the Surname will have Party_Name_Component_Order=2.
- It has been observed that some names appear to be entered as FORENAMES:SURNAME, in which case the names will also be in the wrong order in the xml. This is not a new problem and wouldn't have any impact as the names are used only where results can't be matched automatically in the MIS to existing entries.

Qualifications

The QE_Types and QE_IDs map to basedata as follows:

Award	Certification in Options file Exam Type Item (byte 22) = 'C'	Option Entry Code (bytes 3–8)
Learning Unit	Unit in Options file Exam Type Item (byte 22) = 'U'	Option Entry Code (bytes 3–8)
Assessable	Component in Components file	Component Code (bytes 3–14)

Qualification Identifiers

- Assessables correspond to Components in EDI, and for Exam Type Item in the Options file: U corresponds to a Learning Unit and C to an Award.
- The AO_Qualification_Element_ID (QE_ID) refers to the option entry code or component code, which can be matched to the data in the options and components basedata. Where converted product catalogues are being used, the QE_ID is usually the option entry code / component code, but where these are not unique the QE_ID is set to a unique value and the code is stored in the QE_Admin_Code.
- Component results identify the candidate and the component. MIS will need to use their entry data and/or basedata or product catalogue if they want to link components to options. Note that some components are available under multiple options, but an individual learner would never be allowed to use the same component for different awards in the same series.
- The example uses AO ID 10 (Pearson), but the examples are representative of qualifications from all AOs. Where Pearson does not have qualifications that illustrate the particular scenario we have used WJEC qualifications but included them in the same file under AO ID 10.

Results

Component/Unit/Award results

If there is a component result, there will always be a result at the unit level. However, as in the R file there may be unit results without a result at award level.

The ResultType specified in basedata applies to the EDI Results 'R' file, not xml results. For example, ResultType U means a single numeric value would be returned in the EDI R file, but this does not preclude AOs returning more information in xml than they are able to in EDI.

Grades

AOs will provide a Gradeset in the EDI_Options file for any award or learning unit for which a grade will be issued or in the EDI_Components file for any assessable for which a grade will be issued.

Gradesets are set in basedata for all components where the Teacher Marks is G. The gradeset used for coursework submission contains the same grades that the AO issues.

Where coursework marks/grades have been submitted (for example by using the Coursework M file) and the coursework component is part of the final entry, a result will always be returned, which could be a Scaled/Weighted Mark or a Grade Code or a 'No Result'.

The QE_Outcome_Value may be either an EDI grade code or a Grade_Key. If it's a Grade_Key the QE_Outcome_Value_Type will be 'Grade' whereas if it's an EDI grade code the QE_Outcome_Value_Type will be 'Grade Code'.

In either case the QE_Outcome_Value in the results must reference a grade within the Gradeset defined in the basedata. If QE_Outcome_Value_Type is 'Grade Code' the QE_Outcome_Value will be a Grade_Code from the gradeset, if it's Grade it will be a Grade_Key for the gradeset.

Neither the Grade_Code nor Grade_Key are designed for use by users, and on most screens and reports MIS should use either the Grade_Name (which correspond to the Ofqual/DfE grades), or the Grade_Short_Name (which is the full name in the EDI gradeset listing), or the Grade_Long_Name (which is the unabbreviated grade name)

The problem we've had with EDI grade codes in the past is that the same code can be used to refer to different grades depending on the gradeset, for example D is a Distinction in gradeset 66 (and others), an L2 Distinction in gradeset 68, and a grade D in lots of others. A Grade_Key of 'Grade D' will always be a Grade D with an EDI code of D. Grade_Keys 'Distinction' and 'Level 2 Distinction' also have an EDI_Code of D, but they have appropriate Grade_Names. Conversely where the EDI codes are different for similar grades we have different keys, for example 'Level 2 Merit' has code M and 'Merit Level 2' has code M2.

Grade_Key is consistent across all grade sets. If QE_Outcome_Value_Type is Grade, the grade names can be looked up without determining the gradeset from the basedata.

If QE_Outcome_Value_Type is 'Grade Code', the gradeset must first be determined from the basedata:

- For a learning unit or award (U or C in basedata), the AO_QE_ID will be the Option_Entry_Code in the Options file. The gradeset for the Option is bytes 94–97.
- For an assessable (EDI Component), the AO_QE_ID will be the Component Code in the Components file. The gradeset for the Component is bytes 55–58.

The correct grade names can then be determined using the GradeSet from the basedata and the QE_Outcome_Value from the results xml.

This also addresses the issue about people confusing double grades with marks (for example 99), which is why Ofqual wants them presented as 9-9 or Grade 9-9 rather than 99.

Some example grades to illustrate this are:

```

Grade_Key="Distinction Level 2" Grade_Name="D2" Grade_Short_Name="Distinction L2"
Grade_Long_Name="Distinction Level 2" Grade_Code="D2"

Grade_Key="Grade A*A*" Grade_Name="A*A*" Grade_Short_Name="Grade A*A*"
Grade_Long_Name="Grade A*A*" Grade_Code="**"

Grade_Key="Grade 9-9" Grade_Name="9-9" Grade_Short_Name="Grade 9-9"
Grade_Long_Name="Grade 9-9" Grade_Code="99"

```

The example xml uses Grade, but all the AOs will actually exclusively use Grade Code for EDI results and so the AO test files use Grade Code rather than Grade. A2C results will use Grade rather than Grade Code, so we recommend MIS implement support for both.

The gradeset data is contained in A2CRefData.xml and MIS are recommended to use this rather than the gradeset spreadsheet. Both are available from the [Exam Codes and Reference Data](#) folder on sharepoint.

Endorsements

An endorsement will always have an associated award result.

Endorsement results are identified as Endorsement results at Award level but as normal results at Assessable level.

Adjusted Results

Adjusted Results (also known as assessed grades/marks or aegrotat awards), where special considerations have been applied, may be identified with a QE_Outcome_Qualifier_Type of 'Adjusted Results'. This is optional and some AOs will not identify them as such and just issue grades/marks as normal. In neither case would pre-adjusted results be returned.

Carry Forwards

Carry Forwards are returned as normal results. Some endorsements can also be carried forward, from the same AO or another AO. OCR and Pearson (and incidentally CAIE) have different entry codes for carry forwards, and results will be returned against those entry codes. AQA and WJEC do not have separate entry codes for carry forwards, so results are returned against the normal entry code and are not identified as carry forwards.

Moderated Marks

AOs are not required to return details of how centre assessed outcomes have been moderated and scaled. However, this can be accommodated if they wish to do so. For example, a coursework/NEA component is marked out of 80 but for its correct weighting in the award is scaled to a mark out of 100. A centre awards a candidate a mark of 30/80, but after the AO's moderation process the adjusted mark is 27/80, which in turn scales to 54/100. The AO would always return the Scaled/Weighted Mark, but may also choose to return the Moderated Centre Mark. AOs have decided not to return the centre mark, but if they wanted to in future it would be returned as a Raw Mark.

- Raw Mark = 30
- Moderated Centre Mark = 27
- Scaled/Weighted Mark = 54

The example xml shows the Moderated Centre Mark but not the Raw Mark.

Unit Awards

OCR has a concept of “unit awards”. Candidates enter the Award and the Learning Units separately. Assessable outcomes are reported under each Learning Unit. Then the Learning Units aggregate into the overall Award. An example is:

```
Award-J817
  • Learning Unit-R081
  • Learning Unit-R082B
  • Learning Unit-R084B
  • Learning Unit-R085B
Learning Unit-R081
  • Assessable-R081/01
Learning Unit-R082B
  • Assessable-R082/02
Learning Unit-R084B
  • Assessable-R084/02
Learning Unit-R085B
  • Assessable-R085/02
```

Absences

If a learner is absent from *a//* assessables the outcome at Award level is ‘No Result’.

Linear GQ with unitised structure

Some linear qualifications have so many options that creating an entry code for each would require hundreds of codes. For example, OCR History A level has 13 options in group 1, 24 in group 2, 21 in group 3, so would need 6552 entry codes. OCR Further Maths is another example. Instead EOs make unit entries for each unit, as well as an overall entry for the award. They do not use UMS.

Over Entries

Some learners enter for more assessables than they need, for example OCR Further Maths has 4 optional papers and students must take at least 2 but can take 3 or 4. The overall result includes the best 2 results. AOs return results for the assessables that have been included in the overall result. Including the additional assessables and identifying which have been used and which ignored will be considered as a potential enhancement.

Results where there is no booking in the MIS

If a booking has been made on an AO extranet and not entered in the MIS, the MIS will not have an entry to match the result to. The result should contain sufficient information for the MIS to create an entry, so our recommendation is that (with user confirmation and appropriate logging/auditing) the MIS automatically creates the entry and then records the result as if the entry was already present, without any further user intervention.

Results where there is no direct link to a booking

Consider the situation where an entry is made for a qualification with three mandatory exams marked by the AO. Results are issued for the award and a mark is returned for each of the three assessables taken. In the MIS there will be an entry for the award.

The QE outcome refers to a QEA and a relationship between the issuer (which for AO assessed components will be the AO) and learner. Where the mark is for a component

which is not directly orderable we expect the MIS to navigate the QE relationships. Assessables may be under multiple awards, but it is extremely unlikely that the same learner will have multiple current and valid entries for different qualifications using the same assessable, so in the vast majority of cases the MIS will be able to determine which entry the result definitely belongs to.

For CAOs where AOs return a moderated mark the QE outcome will refer to the QEA for the CAO. If the CAO was sent from the MIS, the link between the CAO and the registration/entry will already be present, but if not the MIS has the information to automatically create a CAO (with user confirmation and appropriate logging/auditing) for the moderated mark to be stored against. It is extremely unlikely that the same learner will have multiple current and valid entries relevant to the particular CAO, so in the vast majority of cases the MIS will be able to determine which booking the result belongs to.

Null results

QE_Outcome_Value is nullable, but in practice null is used only for pending, no results and absences.

Result Updates

The XML for an update to a previously published result is the same as in the examples, except that the QE_Outcome_Date_Time is the datetime of the update (see Dates above).

The following example considers results issued on 19/8/20 and updated on 23/8/20 at 14:15:30

Attribute	1st time results file	Updated results file
MsgHeader TimeStamp	Restricted Results DateTime 2020-08-19T00:00:01+01:00	Update DateTime 2020-08-23T14:15:30+01:00
QE Outcome Date	Result Release Date 2020-08-20	Result Release Date 2020-08-20
QE Outcome Date Time	Restricted Results DateTime 2020-08-19T00:00:01+01:00	Update DateTime 2020-08-23T14:15:30+01:00

Result updates can be sent via the A2C Transport App and/or uploaded to AO extranets for manual download.

Results can be updated to No result in the following cases:

- malpractice discovered after result has been issued
- result was issued against the wrong learner
- if a grade boundary is changed affected results would be set to No Result before being set to the new grade — this is extremely rare

Pending is used where there is an ongoing malpractice investigation when results are issued. These will be updated either with a result or a No result, depending on the outcome of the investigation.

Pending is also used where there are two sets of results on different dates for the same series: the first set of results will contain pending outcomes for the results that will be issued in the second set.

Part V — Qualification Data

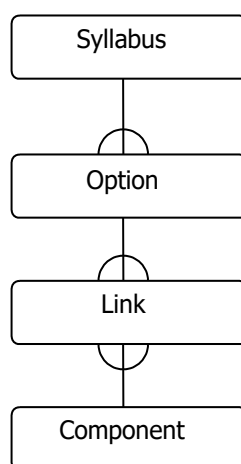
Basedata File Types

Basedata refer to information required by centres and others to enable them to be made aware of the various syllabuses, options and components that an awarding organisation offers. It includes information such as syllabus and option definitions, entry codes, the dates and times of examination papers and details of the internally assessed components for which centres need to supply marks.

Four basedata file types are defined in Part V of this document. A fifth file may be included containing details of disallowed combinations of subjects.

- S Syllabus Definitions**
- O Option Definitions**
- C Component Definitions**
- L Option/Component Link File**

The relationship between these files is shown in the diagram below.



A syllabus may have any number of options but each option is an option for one syllabus. Each option may include a number of components and each component may be used by a number of syllabuses; the link file is used to specify the components which need to be included for each option.

A further basedata file, Disallowed Combinations Definition, provides information about which syllabuses or options are forbidden with other syllabuses or options. It should be noted that only forbidden or prohibited combinations are shown; in some instances it may be possible for candidates to offer certain combinations although it may not be in their best interests to do so if a higher education course is their ultimate goal.

Each series is published as a single ZIP file. All the files in a ZIP file must have the same version number.

- ULINKS should be in a separate file as there can only be one ULINKS file per AO ID per academic year

- Readme text files can be included but their filenames should contain the AOID, year, month and series identifiers For examples see the current published basedata files.

Syllabus Definition File

The file should be created according to the rules for common format data outlined previously, using the data type 'S' as the first byte of the file name. The record length is 47 bytes including the end of line marker.

Syllabus Definition Detail Record

Position	Description	Size	Comments
1	Data Type	1A	'S' for Syllabus
2	Record Type	1N	'5' for Details record
3–8	Syllabus Code	6A	
9		1A	Undefined
10–45	Syllabus Title	36A	
46–47	End of Line Marker	2A	ASCII 13 (CR) + ASCII 10 (LF)

Option Definition File

The file should be created according to the rules for common format data outlined previously, using the data type 'O' as the first byte of the file name. The record length is 117 bytes including the end of line marker.

Option Definition Detail Record

Position	Description	Size	Comments
1	Data Type	1A	'O' for Option
2	Record Type	1N	'5' for Details record
3–8	Option Entry Code	6A	
9–14	Syllabus Code	6A	
15–18	Exam Type: Qualification (certification)	4A	See Note 1
19–21	Exam Type: Level (certification)	3A	See Note 2
22	Exam Type Item	1A	See Note 3
23–26	Exam Type: Qualification (unit)	4A	See Note 1
27–29	Exam Type: Level (unit)	3A	See Note 2
30	Exam Type: Process	1A	See Note 4
31–34	Classification Code	4A	See Note 5
35–42	Qualification Number	8A	See Note 6
43–78	Option Title	36A	See Note 7
79	Fee Defined	1A	'Y' or 'N' (if 'N' then next field is not defined)
80–84	Examination Fee	5N	In pence right justified with leading zeros
85–88	First Forecast Grade Gradeset	4A	Left justified with trailing spaces. See Note 8
89–92	Second Forecast Grade Gradeset	4A	Left justified with trailing spaces. See Note 8
93	Result Type	1A	See Note 9
94–97	First Grade or Result Gradeset	4A	Left justified with trailing spaces. See Note 10
98–101	Second Grade or Result Gradeset	4A	Left justified with trailing spaces. See Note 10
102–105	Endorsement to first Grade or Result Gradeset	4A	See Note 10
106–109	Endorsement to second Grade or Result Gradeset	4A	See Note 10
110–113	Maximum Mark or UMS	4N	See Note 11

114–115	Number of Components	2N	The number of components associated with this option via the link file (a safeguard)
116–117	End of Line Marker	2A	ASCII 13 (CR) + ASCII 10 (LF)

Notes

1. Exam Type: Qualification

Exam Type: Qualification (certification) (Bytes 15–18) will be populated where the option entry code (bytes 3–8) is certification.

Exam Type: Qualification (unit) (Bytes 23–26) will be populated where the option entry code (bytes 3–8) is a unit or module.

Exam Type: Qualification (certification) (Bytes 15–18) and Exam Type: Qualification (unit) (Bytes 23–26) will be populated where the option entry code (bytes 3–8) is both certification and a unit or module.

2. Exam Type: Level

Exam Type: Level (certification) (Bytes 19–21) will be populated where the option entry code (bytes 3–8) is certification.

Exam Type: Level (unit) (Bytes 27–29) will be populated where the option entry code (bytes 3–8) is a unit or module.

Exam Type: Level (certification) (Bytes 19–21) and Exam Type: Level (unit) (Bytes 27–29) will be populated where the option entry code (bytes 3–8) is both certification and a unit or module.

Lists of all Exam Type: Qualification and Level codes are available on the JCQ website, www.jcq.org.uk, and awarding organisation websites.

3. Exam Type Item (Byte 22)

- 'U' Unit or module
- 'C' Certification
- 'B' Certification and unit or module

4. Exam Type Process (Byte 30)

- 'E' Entry
- 'R' Registration

5. Classification Code

DfE publishes different codes for Key Stage 4 (KS4) and Post 16 discounting purposes. Some awards (for example most AS qualifications) therefore have two different discount codes. As the basedata format only includes provision for a single discount code per award, the classification code use in the options file is:

- the KS4 code for all Level 1, 2 and 1/2 qualifications (which includes GCSEs)
- the Post 16 code for all Level 3 qualifications (which includes AS and A-levels)

New discount codes in Wales are 7 characters so cannot be included in the options file.

For Northern Ireland, suppliers should overwrite the English classification codes with those defined in the NIEFQAN file published by DE.

6. Qualification Number

This can be either

- An Ofqual/CCEA Qualification Number in the format NNN/NNNN/E (where N is numeric and E is a number or 'X'). Note slashes (/) are excluded in the basedata file.

or

- A Qualification Wales Approval/Designation Number in the format CNN/NNNN/N (where C is the literal C and N is numeric). Note slashes (/) are excluded in the basedata file.

-

If this number is blank the qualification is self-regulated.

Note that converted product catalogues contain all relevant qualification reference numbers and identify which they are.

7. Option Title (Bytes 43–78)

The option title should completely identify the option without needing to refer to the linked syllabus record to complete the title. For example, if there was a syllabus called French which had options A, B and C, the option title should be 'French Option A' rather than just 'Option A'.

8. Forecast Grade (Bytes 85–88 and 89–92)

If a forecast grade is required for the Option entry code, these fields reference the valid set of grades available for submission. If these are set a Forecast Grades file should be sent. See Forecast Grades in section III.

Where the Forecast Grades field is blank, no forecast grades should be sent.

9. Result Type (Byte 93)

The Result Type determines what outcomes are returned in the EDI Results file. Where results are issued against the entered option, the ResultType in the EDI Results file will be the same as the ResultType for the OptionEntryCode defined in the Options file. The notes under the Results File section explain how the Outcome Values are formatted.

Additional outcomes may be returned in the xml results. For example, for a Result Type of 1 the EDI file will contain only grades but the xml file may contain marks as well as the grades.

May take the following values

1	Grade(s)	A Gradeset must be defined for each grade to be returned (1 st , 2 nd , 1 st Endorsement, 2 nd Endorsement). The EDI R file will contain only grades — see Note 2 under Results.
---	----------	---

		The xml file may contain marks as well as the grades. A 'Maximum Mark' is required if marks are returned in xml files.
2	Level(s)	
3	Points	
B	A grade and Numeric value, normally Uniform Mark or points	'Results Gradeset' valid and 'Maximum Mark' valid
C	Combination: a grade and Numeric value, normally Uniform Mark or points	'Results Gradeset' valid to certificate and 'Maximum Mark' valid to unit
M	Mark	'Results Gradeset' invalid and 'Maximum Mark' valid
U	Numeric value, normally Uniform Mark or points	'Results Gradeset' valid (if provided) and 'Maximum Mark' valid
space	Blank	No result will be issued

10. Result Gradesets (Bytes 94–97, 98–101, 102–105 and 106–109)

If the Result Type in byte 93 is 1, 2 or 3 then these four fields reference the valid set of grades which may be presented in the corresponding fields of the Results file (bytes 48–55).

11. Maximum Mark or UMS (Bytes 110–113)

If the Result Type in byte 93 is 'B', 'C', 'M' or 'U' then 110–113 will contain a numeric score.

Component Definition File

The file should be created according to the rules for common format data files outlined previously, using the data type 'C' as the first byte of the file name. The record length is 77 bytes including the end of line marker.

Component Definition Detail Record

Position	Description	Size	Comments
1	Data Type	1A	'C' for Component
2	Record Type	1N	'5' for Details record
3–14	Component Code	12A	
15–50	Component Title	36A	See Note 1
51	Teacher Marks	1A	'Y', 'N', 'G' or 'E' (See Note 2)
52–54	Maximum Mark	3N	
55–58	Component Gradeset	4A	Left justified with trailing spaces. See Note 3.
59–64	Due Date	6N	DDMMYY
65	Timetabled	1A	'T', 'C' or 'N' (See Note 4)
66–71	Timetable Date	6N	DDMMYY
72	Timetable Session	1A	'A', 'P', 'E', 'D' or 'X' (See Note 5)
73–75	Time Allowed (minutes)	3N	See Note 6
76–77	End of Line Marker	2A	ASCII 13 (CR) + ASCII 10 (LF)

Notes

1. Component Title (Bytes 15–50)

It would be desirable for the component titles to match those published elsewhere, for example on the printed timetables, wherever possible..

2. Teacher Marks (Byte 51)

May take the following values

Y	Teacher marks are required.	'Maximum Mark' and 'Due Date' both valid.
N	Teacher marks not required.	'Maximum Mark' and 'Due Date' inapplicable.
G	Teacher submits grade.	'Maximum Mark' is inapplicable. 'Due Date' is valid. Component Gradeset must be set.
E	Teacher submits coursework	'Maximum Mark' is inapplicable. 'Due Date' is valid.

Maximum Marks should be zero if Teacher Marks is not 'Y'.

3. Component Gradeset (Bytes 55–58)

If Teacher Marks (byte 51) has the value 'G', this field references the valid set of grades available for submission, held within the Gradesets File.

4. Timetabled (Byte 65)

May take the following values

T	Timetabled component. Awarding organisation supplies timetable information in the 'Timetable Date', 'Timetable Session' and 'Time Allowed' fields.
C	Centre-specified timetable. It is not possible for the awarding organisation to specify a particular date and time applicable to all centres. The 'Timetable Date' and 'Timetable Session' fields contain no information but can be edited by centres if required. 'Time Allowed' may be defined, for example for speaking tests.
N	Not timetabled. It is not meaningful to specify a date and time for this component. The 'Timetable Date', 'Timetable Session' and 'Time Allowed' fields contain no information and should be ignored.

Allowed combinations of Timetabled, Timetable Session and Time Allowed are:

Timetabled	Timetable Session	Time Allowed
T	A, P, E, D	Must be set
C	X	May be set
N	X or blank	000 or 999

5. Timetable Session (Byte 72)

Allowed values are

A	morning
P	afternoon
E	evening
D	all day
X	not defined

See 'Starting times for examinations' in the current JCQ 'Instructions for Conducting Examinations' (ICE) document, available from

<https://www.jcq.org.uk/exams-office/ice---instructions-for-conducting-examinations/>

6. Time Allowed (Bytes 73–75)

This field may contain

'000' The information is not available

'999' There is no time limit

Otherwise it contains the time allowed in minutes.

Some exam papers have been split into multiple components (for example, sections A and B are defined as separate components but are taken as one exam in a single exam slot. In this case Time Allowed on each component is set to 000.

Option/Component Link File

The file should be created according to the rules for common format data files outlined previously, using the data type 'L' as the first byte of the file name. The record length is 28 bytes including the end of line marker.

Option/Component Link Detail Record

Position	Description	Size	Comments
1	Data Type	1A	'L' for Link
2	Record Type	1N	'5' for Details record
3–8	Option Entry Code	6A	Key to Option File (See Note below)
9–20	Component Code	12A	Key to Component File (See Note below)
21–26	Pad with spaces	6A	
27–28	End of Line Marker	2A	ASCII 13 (CR) + ASCII 10 (LF)

Notes

1. The option/component link records provide the means by which the components used by each option can be recorded. The field 'Option Entry Code' (bytes 3–8) provides a link to the detail record within the option file with the same value in the field 'Option Entry Code'. Similarly, the field 'Component Code' provides a link to the component file.

Disallowed Combinations Definition File

The file should be created according to the rules for common format data outlined previously, using the data type 'D' as the first byte of the file name. The record length is 28 bytes including the end of line marker.

The Disallowed Combinations Definition file may be included with a set of basedata files to which it will relate.

MIS should ensure that entry and amendment files do not contain disallowed combinations as these may impact processing and late fees may be incurred.

Disallowed Combinations Definition Detail Record

Position	Description	Size	Comments
1	Data Type	1A	'D' for Disallowed combination
2	Record Type	1N	'5' for Details record
3–8	First Option Code	6A	Key to Option file. May include wildcards (see Note 1)
9–14	Second Option Code	6A	Key to Option file. See Note 2 May include wildcards (see Note 1)
15–20	Exception Option Code	6A	See Note 3 May include wildcards (see Note 1)
21–26	Pad with spaces	6A	
27–28	End of Line Marker	2A	ASCII 13 (CR) + ASCII 10 (LF)

Notes

1. Wildcards

Options identified in the fields 'First Option Code', 'Second Option Code' and 'Exception Option Code' may include DOS style wildcards '*' and '?'. For example, 1234* will include all option codes which begin 1234, 1234?0 will include all option codes which begin 1234 and have 0 in the sixth position, and 1* will include all option codes beginning with a 1.

2. Second Option Code (Bytes 9–14)

Combinations of codes identified by the First and Second Option Code fields are disallowed (but see Note 3 below). Codes may be identified in either order; the absence of a code from the First Option Code field does not necessarily mean that there are no disallowed combinations which include this code.

3. Exception Option Code (Bytes 15–20)

If an option is identified in the Exception Option Code field, then that option may be entered with any option identified in the First Option Code field. For example, if the First and Second Option Code fields contain 1234* and the exception Option Code field contains 1234ZZ, then all combinations of options beginning 1234 are disallowed unless one of the options entered is 1234ZZ. If the First Option Code field contains 1234*, the Second Option Code field contains 9999* and the Exception Option Code field contains 9999A then the interpretation is that a candidate may not be entered for any option beginning 1234 with any option beginning 9999 unless that option is 9999A.

Certification/Unit Link File

The Link File provides details of which Units may be used towards an overall certification award. The file does not give sufficient information to calculate the exact units required since the rules of dependency and combination governing the relationship between the number of units required and when they are sat are varied and complex.

The Link File is published at the same time as the basedata to which it applies.

The Link File does not follow the standard file naming convention but takes the form:

ULINKSbb.Xyy

bb = AO code

X = Literal 'X' identifies file as a common format file from an awarding organisation

yy = Last two digits of the start of the academic year to which the file relates, for example 09 for academic year 2009–2010.

The same link file can therefore be used for multiple series within an academic year, whether they are within the same month or different. Where a link file is used by multiple series within the same month, AOs should publish a single version, or if they are included within separate ZIP files AOs must ensure they are identical (so may contain links for qualifications that are not within the basedata files in that ZIP file). For example, if links are defined for 9A and 9B the links file will contain both. Where a link file is updated for a subsequent series in later months, the links for the previous months must be retained.

Position	Description	Size	Comments
1–6	Parent Option Entry Code	6A	See Note 1
7–12	Child Option Entry Code	6A	See Note 1
13–14	End of Line Marker	2A	ASCII 13 (CR) + ASCII 10 (LF)

Notes

1. Parent Option Entry Code (Bytes 1–6) and Child Option Entry Code (Bytes 7–12)

In general, Parent Option Entry Codes will be certification codes with the corresponding Child Option Entry Codes being Unit codes. However, there will be instances where some units contribute to other units and in these cases both the Parent and Child Entry Option Codes will relate to units.

Part VI — Reference Data

Updates relating to examination qualifications, levels, types or gradesets will not be identified in the format booklet. MIS providers who have signed up to the distribution list will be advised when the JCQ exam qualification codes or gradesets are updated.

Sources

The reference data is available in two formats:

- Excel Spreadsheet
- XML

Excel Spreadsheet

The spreadsheet is available on the JCQ website www.jcq.org.uk/exams-office/entries.

The spreadsheet format is recommended for systems where the data are updated manually or for general reference.

XML

A2CRefData.xml is available from the 'Exam Codes & Reference Data' folder on <https://jointcouncilqualifications.sharepoint.com/sites/EDI2>

The XML format is recommended for systems able to import data electronically

The file contains all the reference data defined in Appendix 2 of the A2C specification. The sections that are relevant for EDI are:

- Controlled_Lists\Exam_Qualification_Type
- Grades*

If converted product catalogues are being used with EDI, this file contains all the reference data used by A2C product catalogues.

The XML file can be polled to determine if updates are available and changes can be imported automatically.

Gradesets File

The Option Definition File and Component Definition File contain fields to hold Gradeset codes. For each of these codes, the Gradesets File contains details of the valid grades available for each qualification. The valid gradesets include 'U' (unclassified) but do not include status codes, i.e. the Gradesets do not include 'X' or 'x' (no result), 'Q' or 'q' (pending) or 'Z', 'O' or 'X' (no Forecast grade will be supplied). 'X' or 'x' and 'Q' or 'q' are valid within results files. The file is ordered by qualification Gradeset Type Code, by Grade Short Code and corresponding Grade Full Title.

The Gradesets File will be posted, as a spreadsheet, on the Joint Council for Qualifications' website (www.jcq.org.uk) with each of the awarding organisations' websites having a link to it. It will not be included in basedata or sent to centres. The Gradesets File will not follow the standard file naming convention but will take the form

Awarding Bodies Gradesets YYYY/YY – update #X

where YYYY/YY is the academic year, for example 2021/22

The Gradesets sheet column A from rows 4 down is in the format:

Position	Description	Size	Comments
1–4	Gradeset Code	4A	Left justified with trailing spaces. See Note 1
5–6	Grade Short Code	2A	See Note 2
7–21	Grade Full Title	15A	See Note 3
22–23	Sequence number	2N	See Note 4
24–25	End of Line Marker	2A	ASCII 13 ASCII 10

If necessary, centres may request via the JCQ the Gradeset File in this file format:

GRADESET.Xnn

X = literal 'X' identifies file as a common format file from an awarding body

nn = last two digits of the sequence number indicating the order in which the file was produced.

The content format is the same as the spreadsheet.

Notes

1. Gradeset code (Bytes 1–4)

A list of all gradesets is on the 'Gradeset Listing' sheet.

2. Grade Short Code (Bytes 5–6)

The Grade Short Code is the short form of the grade as used in EDI files.

3. Grade Full Title (Bytes 7–21)

The Grade Full Title is the comprehensive title of the Grade Short Code, for example Grade Full Title 'Pass' for Grade Short Code 'P'.

4. Sequence number (Bytes 22–23)

The Sequence Number gives the grades in descending order of merit, within each gradeset.