

## 146 CODED DATA FIELD: MEDIUM OF PERFORMANCE

### Field Definition and Scope

Details of the instruments and/or voices, devices, and other performers which make up a representative expression of a musical work or an expression of a musical work.

According to IFLA-LRM, the medium of performance of an expression can be considered a representative expression attribute. Therefore, it can be used at the work level, even though the medium of performance is usually described at the expression level.

### Subfields & Occurrence

Field/Subfield	Field/Subfield Name	Repeatability	Occurrence
146	CODED DATA FIELD: MEDIUM OF PERFORMANCE	R	O
a	Type of Performance Medium	NR	O
b	Instrument or Voice Soloist	R	O
c	Instrument or Voice Non-soloist, Conductor, Other Performer or Device, not Included in an Ensemble Recorded in Subfield \$d	R	MA
d	Vocal or Instrumental Ensemble	R	MA
e	Instrument or Voice Non-soloist, Conductor, Other Performer or Device, Included in an Ensemble Recorded in Preceding Subfield \$d	R	O
f	Specific Instrument Related to the Generic one Recorded in Preceding Subfield \$c or \$e	R	O
h	Number of Parts	R	O
i	Number of Players	R	O

### Indicators

Indicator	Value	Description
1		Representative Expression Indicator
	#	Not specified
	0	Representative expression of work
	1	Derived expression
2	#	blank (not defined)

### Indicators Description

#### Indicator 1: Representative Expression Indicator

This indicator shows whether the field describes the original (i.e. representative expression) or an arranged medium of performance.

#### Value 0: Representative expression of work

Use for the data recording at the work level.

#### Value 1: Derived expression

Use for the data recording at the expression level when the described expression is an arrangement of another expression.

## Subfields Description

### \$a Type of Performance Medium

A one-character code defines the genre of the work based on the type of performance medium. Not repeatable.

a	vocal a cappella music	
b	instrumental music	EX 1-4, 6-8
c	vocal and instrumental music	EX 5
d	electroacoustic music	
e	mixed media music (electroacoustic and other media)	
u	undefined, variable	E.g. Renaissance vocal or instrumental music
z	other	E.g. ordinary objects or natural sounds

### \$b Instrument or Voice Soloist

A nine-character code indicating a voice or instrument category, the number of voices or instruments for that category, and other details (EX 2, 3, 5). Repeatable.

The number of soloists in a voice or instrument category is recorded with a two-digit code (character positions 0-1), with leading 0 if necessary. If this number is not determined, use “uu”.

For the voice or instrument category (character positions 2-4), use the codes listed in Code list A/1-9, A/13.

For other details (character positions 5-8), use the codes listed in Code list B-C.

Table of Subfield \$b Fixed-length Data Elements:

Name of Data Element	Number of Characters	Character Positions
Number of Instruments or Voices	2 (with leading 0)	0-1
Category of Instrument or Voice	3 (see Code list A)	2-4
Other details	4 (see Code list B-C)	5-8

### \$c Instrument or Voice Non-soloist, Conductor, Other Performer or Device, not Included in an Ensemble Recorded in Subfield \$d

A nine-character code indicating an instrument or voice, etc. category, the total number of instruments or voices, etc. for that category and other details. Mandatory if no subfield \$d is entered. Repeatable. (EX 1, 3, 4, 6-8)

The number of parts in a category is recorded with a two-digit code (character positions 0-1), with leading 0 if necessary. If this number is not determined, use “uu”.

For the voice or instrument, etc. category (character positions 2-4), use the codes listed in Code list A/1-9, A/12-13.

For other details (character positions 5-8), use the codes listed in Code list B-C.

Instruments (e.g. continuo) or families of instruments (e.g. percussions) generically recorded in an occurrence of subfield \$c may be further specified in one or more immediately following occurrences of subfield \$f.

Table of Subfield \$c Fixed-length Data Elements:

Name of Data Element	Number of Characters	Character Positions
Number of Instruments or Voices, etc.	2 (with leading 0)	0-1
Category of Instrument or Voice, etc.	3 (see Code list A)	2-4
Other Details	4 (see Code list B-C)	5-8

**\$d Vocal or Instrumental Ensemble**

A nine-character code indicating one category of vocal or instrumental ensemble, the total number of ensembles for that category, the number of real parts of that ensemble and other details (EX 2, 5). Mandatory if no subfield \$c is entered. Repeatable.

The number of ensembles is recorded with a two-digit code (character positions 0-1), with leading 0 if necessary. If this number is not determined, use “uu”.

For the category of ensemble (character positions 2-4), use the codes listed in Code list A/10-11.

The number of real parts (e.g. the number of voices for a choir) is recorded with a two-character code (character positions 5-6), with leading 0 if necessary. If the number is not determined, use “##”.

For other details (character positions 7-8), use the codes listed in Code list B-C.

Instruments or voices, etc. included in ensembles recorded in subfield \$d may be specified in one or more immediately following occurrences of subfield \$e.

Table of Subfield \$d Fixed-Length Data Elements:

Name of Data Element	Number of Characters	Character Positions
Number of Ensembles	2 (with leading 0)	0-1
Category of Ensemble	3 (see Code list A)	2-4
Number of Real Parts	2 (with leading 0)	5-6
Other Details	2 (see Code list B-C)	7-8

**\$e Instrument or Voice Non-soloist, Conductor, Other Performer or Device, Included in an Ensemble Recorded in Preceding Subfield \$d**

A nine-character code indicating a voice or instrument, etc. category included in an ensemble recorded in an immediately preceding occurrence of subfield \$d, the total number of instruments or voices, etc. for that category and other details. Repeatable. (EX 2, 5)

The number of parts in a category is recorded with a two-digit code (character positions 0-1), with leading 0 if necessary. If this number is not determined, use “uu”.

For the voice or instrument, etc. category (character positions 2-4), use the codes listed in Code list A/1-9, A/12-13.

For other details (character positions 5-8), use the codes listed in Code list B-C.

Instruments (e.g. continuo) or families of instruments (e.g. percussions) generically recorded in an occurrence of subfield \$e may be further specified in one or more immediately following occurrences of subfield \$f.

Table of Subfield \$e Fixed-length Data Elements:

Name of Data Element	Number of Characters	Character Positions
Number of Instruments or Voices	2 (with leading 0)	0-1
Category of Instrument or Voice	3 (see Code list A)	2-4
Other Details	4 (see Code list B-C)	5-8

**\$f Specific Instrument Related to the Generic one Recorded in Preceding Subfield \$c or \$e**

A nine-character code indicating a specific instrument recorded generically (e.g. electronic keyboards) or collectively as a family (e.g. percussions) in an immediately preceding occurrence of subfield \$c or \$e, the total number of instruments for that category and other details (EX 6). Repeatable.

The number of parts in an instrument category is recorded with a two-digit code (character positions 0-1), with leading 0 if necessary. If this number is not determined, use “uu”.

For the instrument category (character positions 2-4), use the codes listed in Code list A/2-9.

For other details (character positions 5-8), use the codes listed in Code list B-C.

Table of Subfield \$f Fixed-length Data Elements:

Name of Data Element	Number of Characters	Character Positions
Number of Instruments	2 (with leading 0)	0-1
Category of Instrument	3 (see Code list A)	2-4
Other Details	4 (see Code list B-C)	5-8

### \$h Number of Parts

A four-character code indicating the total number of real parts related to the category entered in position 3 (EX 2). Repeatable.

The number of parts is recorded with a three-digit code (character positions 0-2), with leading 0 if necessary. Use \$h only if this number is determined.

For categories (character position 3), use the codes listed in Code list D.

Table of Subfield \$h Fixed-length Data Elements:

Name of Data Element	Number of Characters	Character Positions
Number of Parts	3 (with leading 0)	0-2
Category	1 (see Code list D)	3

### \$i Number of Players

A four-character code indicating the total number of players related to the category entered in position 3 (EX 1, 3-5, 8). Repeatable.

The number of players is recorded with a three-digit code (character positions 0-2), with leading 0 if necessary. Use \$i only if this number is determined.

For categories (character position 3), use the codes listed in Code list D.

Table of Subfield \$i Fixed-length Data Elements:

Name of Data Element	Number of Characters	Character Positions
Number of Players	3 (with leading 0)	0-2
Category	1 (see Code list D)	3

## Notes on Field Contents

### Field Repeatability

Repeatable in the case of alternate media of performance. In this case, position 8 of subfields \$b to \$f should be used to indicate which instruments or voices are alternates.

### Subfield Contents

The order and occurrence of subfields is to some extent mandatory:

- at least one subfield \$c or \$d is mandatory if field is present;
- a subfield \$b may occur only if at least one subfield \$c or \$d is entered;
- a subfield \$e may occur only if at least one subfield \$d is entered;
- a subfield \$e may immediately follow only a subfield \$d, \$e or \$f;
- a subfield \$f may occur only if at least one subfield \$c or \$e is entered;
- a subfield \$f may immediately follow only a subfield \$c, \$e or \$f.

The degree of detail of the field may vary according to the local practice, e.g. all instruments employed in an orchestra may or may not be specified (EX 1-3, 5, 6). The most common example of non-detailed indication are percussion instruments in ensemble: sometimes only a close analysis of the score makes it

possible to specify all instruments; in such cases the indication will more likely be limited to the number of percussion players.

Subfield \$b should be used in place of subfield \$c to differentiate soloist(s) in opposition with accompanying voice(s)/instrument(s), etc. (entered in \$c) or ensemble(s) (entered in \$d) or their arranged version (EX 2, 3, 5).

If there is no distinction, enter all in \$c.

If detailed, instruments/voices, etc. being part of ensembles entered in \$d are always coded in \$e (EX 2, 5).

In subfield \$d, character positions 5-6 may be used to indicate the number of real parts of the ensemble (EX 5). If used to code more than one ensemble, positions 5-6 may be used only if all the ensembles have the same parts (e.g. for two choirs for four mixed voices code 02cmi04##); if parts vary, code ## (EX 2).

As an alternative, field \$d may be repeated for each ensemble.

In case of repeated subfield \$d, subfields \$e must be entered after each related subfield \$d (EX 5).

Subfield \$f may be used to specify individual instruments from a generic code used in \$c or \$e, e.g. the specific instruments coded as percussion in \$c (EX 6). Each series of \$f must immediately follow the related subfield \$c or \$e..

It is recommended to use subfield \$h to specify the number of real parts only when it differs from that of players entered in \$i, or when the number of players cannot be determined (EX 2).

In subfields \$h and \$i, the code "a" in position 3 must be used by default to indicate the total number of parts and players when the musical work is vocal a cappella music or when it is instrumental music (EX 1, 3, 4, 8).

## Related Fields

UNIMARC/Authorities format	
371 NOTE ON EXPRESSION	This note may contain details in subfield \$f, such as the use of different instruments by one performer or pertinence of single instruments to different groups within larger ensembles, etc.
UNIMARC/Bibliographic format	
146 CODED DATA FIELD: MEDIUM OF PERFORMANCE	This field gives details of the instruments and/or voices, devices and other performers which make up a musical work. In LRM cataloguing, this data is applicable at the manifestation level only.

## Examples

EX 1A
146 0#\$ab\$c01svl#####\$c01svc#####\$c01kpf#####\$i003a
241 #1\$3FRBNF165917898\$aStrauss, Richard (1864-1949)\$4230\$tTrios\$rViolon, violoncelle, piano\$sNo 2\$sTrV 71\$uRé majeur
This musical work is an instrumental trio with no soloist.
EX 1B
146 0#\$ab\$c01svl#####\$c01svc#####\$c01kpf#####\$i002s\$i001k\$i003a
241 #1\$3FRBNF165917898\$aStrauss, Richard (1864-1949)\$4230\$tTrios\$rViolon, violoncelle, piano\$sNo 2\$sTrV 71\$uRé majeur
This musical work is an instrumental trio with no soloist. The field 146 has more detailed data structure.
EX 2A

146 0# \$ab\$b01kpf#####d01ofu#####e01qco#####h001j\$h001o\$h001q
241 #1\$3FRBNF139150022\$aMozart, Wolfgang Amadeus (1756-1791)\$4230\$tConcertos\$rPiano, orchestre\$sKV 238\$uSi bémol majeur
Mozart's concerto for piano KV 238 is an instrumental work for soloist and orchestra (with a conductor).
EX 2B
146 0# \$b01kpf#####d01ofu#####
241 #1\$3FRBNF139150022\$aMozart, Wolfgang Amadeus (1756-1791)\$4230\$tConcertos\$rPiano, orchestre\$sKV 238\$uSi bémol majeur
Mozart's concerto for piano KV 238 is an instrumental work for soloist and orchestra (with a conductor). The field 146 has less detailed data structure.
EX 3A
146 1# \$ab\$b01kpf#####c02svl#####c01sva#####c01svc#####i001j\$i004s\$i005a
242 #1\$3<AR_ID for the work>\$aMozart, Wolfgang Amadeus (1756-1791)\$tConcertos\$rPiano, orchestre\$sKV 238\$uSi bémol majeur\$lArrangement\$vPiano, violons (2), alto, violoncelle
Mozart's concerto for piano KV 238, arranged for piano and string quartet.
EX 3B
146 1# \$b01kpf#####c02svl#####c01sva#####c01svc#####i005a
242 #1\$3<AR_ID for the work>\$aMozart, Wolfgang Amadeus (1756-1791)\$tConcertos\$rPiano, orchestre\$sKV 238\$uSi bémol majeur\$lArrangement\$vPiano, violons (2), alto, violoncelle
Mozart's concerto for piano KV 238, arranged for piano and string quartet. The field 146 has less detailed data structure.
EX 4
146 0# \$ab\$c01wfl#####c01wob###c\$c01svl###c\$c01mco#####i002a
241 #1\$3FRBNF14805457\$aPhilidor, Pierre Danican (1681-1731)\$4230\$tSuites\$rFlûte ou hautbois ou violon, basse continue\$sOp. 1, no 6
This is a piece for flute or oboe or violin and continuo. Code 'c' in position 8 indicates the optional use of oboe or violin as alternative instruments.
EX 5A
146 0# \$ac\$b01vms#####b01vbs#####d01cmi04##\$e01vso#####e01val#####e01vte#####e01vbs#####d01ofu#####e01qco#####i002I\$i001c\$i001o\$i001q
241 #1\$3FRBNF13911794\$aDurufilé, Maurice (1902-1986)\$4230\$tRequiem\$sOp. 9
Maurice Durufilé's Requiem op. 9 is a vocal and instrumental work for mezzo-soprano, bass, 4-voice choir (soprano, alto, tenor, bass) and orchestra (with conductor).
EX 5B
146 0# \$ac\$b01vms#####b01vbs#####d01cmi04##\$d01ofu#####e01qco#####
241 #1\$3FRBNF13911794\$aDurufilé, Maurice (1902-1986)\$4230\$tRequiem\$sOp. 9
Maurice Durufilé's Requiem op. 9 is a vocal and instrumental work for mezzo-soprano, bass, 4-voice choir (soprano, alto, tenor, bass) and orchestra (with conductor). The field 146 has less detailed data structure.
EX 6
146 0# \$ab\$c01pun#####f01pti#####f01kgf#####f01pvi#####f01pds#####
241 #1\$3FRBNF14788420\$aTelman, André (1967-....)\$4230\$tVoyage sans retour

This instrumental musical work is a piece for a percussion quartet. The cataloguer has detailed the instruments.
EX 7
146 0# \$ab\$ c01kpf#4###
241 #1\$3FRBNF17783838\$aHahn, Reynaldo (1874-1947)\$4230\$tVariations sur un thème de Charles Levadé
A piece for piano, four hands.
EX 8
146 0# \$ab\$ c01wcl#a##\$ c01wcl#b##\$i002a
241 #1\$3FRBNF13956989\$aPoulenc, Francis (1899-1963)\$4230\$tSonates\$rClarinettes (2)\$sFP 7
A piece for two clarinets (one in A, the other in B flat).

## CODE LISTS

Code lists are maintained and updated by IAML (International Association of Music Libraries, Archives and Music Documentation Centres).

The lists show a definition term and several other terms using the same code, without distinction between:

- similar instruments, voices or devices having the same code;
- definition in other language(s);
- orthographic variants.

Chronological, organological or language specifications are added in brackets if strictly necessary. The pitch of the instruments is specified when necessary (e.g.: A, Bb, F).

### A: codes for subfields \$b-\$f, positions 2-4

Pertinence of instruments to “families” in code lists is specified by the first character of the three-letter code.

Instruments needing a code in pos. 5-8 are shown only when they have a specific name in any language.

1. Voices
2. Woodwinds
3. Brass instruments
4. Strings, bowed
5. Strings, plucked
6. Keyboard
7. Percussion
8. Electric / electronic instruments and devices
9. Miscellaneous, other, unspecified instruments
10. Choruses
11. Orchestras, ensembles
12. Conductors
13. Other performers

(Code lists updated by IAML are available on IAML website [<http://www.iaml.info/> (2009-11-10)])

**B: codes for subfields \$b to \$f, positions 5-7**

Note: positions 5-6 for \$d indicate number of parts in ensemble, with leading zero (## if not spec.).

1- Codes for position 5: tessitura, prepared (not applied to subfield \$d)

Code	Definition	Notes Other definitions, language terms, variants
#	not specified - position not required	
a	sopranino	
b	soprano	dessus pardessus sopran treble
c	alto	alt contralto haute-contre quinte
d	tenor	taille ténor tenore
e	baritone	baritone baryton
f	bass	bajo bas basse basso
g	contrabass	contrebasse contrabbasso contrabass
h	sub-contrabass	basse grave basso grave octobasse sub-contrabbasso
i	sopracute	garklein sopracuto suraigu
j	high	acuto aigu hoch klein petit piccolo small
k	medium	medio mittel moyen
l	low	big grand grande grave gross large

## 146 CODED DATA FIELD: MEDIUM OF PERFORMANCE

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m	prepared	prepare preparato

2- Codes for position 6: number of hands/players; keys of pitched instruments (not applied to subfield \$d)

Code	Definition	Notes Other definitions, language terms, variants
#	not specified - position not required	
1	one hand	eine Hand une main una mano
2	two players on one instrument	deux exécutants sur un instrument due esecutori su uno strumento
3	three hands	drei Hände trois mains tre mani
4	four hands	vier Hände quatre mains quattro mani
6	six hands	sechs Hände six mains sei mani
8	eight hands	acht Hände huit mains otto mani
a	A	la
b	B flat	B si bémol si bemolle
c	C	ut do
d	D	ré
e	E	mi
f	F	fa
g	G	sol
h	B	H si
i	E flat	Es mi bémol mi bemolle
j	A flat	As la bémol la bemolle
k	D flat	Des ré bémol re bemolle
l	F sharp	Fis fa diesis fa dièse

n	Instrument played in non standard way	instrument joué de manière non standard strumenti suonati in modo non standard
s	non standard string number	nombre de cordes non standard numero di corde non standard

## 3- Codes for position 7: other

Code	Definition	Notes Other definitions, language terms, variants
#	not specified - position not required	
r	electric	électrique elettrico
s	electronic	électronique elettronico
t	midi	
v	amplified	amplifié amplificato
w	recorded	enregistré registrato
q	antiquity	antiquité antichità
y	ethnic, traditional	ethnique, traditionnel etnico, tradizionale

**C: codes for subfields \$b to \$f, position 8**

Code	Definition
#	not specified – position not required
b	ad libitum
c	may take place of the preceding code / alternative
d	used by the same player as the preceding code

**D: codes for subfields \$h-\$i, position 3**

Code	Definition
a	performers total
b	brass instruments
c	choirs
d	wind instruments
e	electro-acoustic instruments
i	instruments total
j	solo instruments
k	keyboard instruments
l	solo voices
m	miscellaneous, other instruments
o	orchestras
p	percussion instruments
q	conductors
s	bowed string instruments
t	plucked string instruments
v	voices total
w	woodwind instruments
x	choral voices

y	ensemble instruments
z	devices, other performers

**History**

2020	New field
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