

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.

Use also in expression records when the information given corresponds to the representative expression.

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

1-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

9-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.

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

9-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.

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

9-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 “uu”.

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.

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

9-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.

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

9-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.

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

4-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.

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

4-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.

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 IFLA 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\$aDurufié, Maurice (1902-1986)\$4230\$tRequiem\$sOp. 9
Maurice Durufié'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\$aDurufié, Maurice (1902-1986)\$4230\$tRequiem\$sOp. 9
Maurice Durufié'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 3-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 tief
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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146 CODED DATA FIELD: MEDIUM OF PERFORMANCE

2022	Text errata.
2024	Text edit.