

IPTC Photo Metadata Working Group office@iptc.org
Version 2019.1 Revision 1a, 2019-12-16

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# About the Standard

#### IPTC Photo Metadadata Standard 2019.1, including

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- IPTC Extension Metadata Schema 1.5

# § Copyright

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# Acknowledgments

This document is the result of a team effort by members of the International Press Telecommunications Council since 2004 with input and assistance from other contributors.

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# Standard History

The IPTC Photo Metadata Standard includes two metadata schemas. Each schema has its specific version, the version of the full standard reflects the date of release. Both is indicated below.

# IPTC Core Schema Specification History

Version	Approval Date	Approved by	In Standard Version
1.0	2004-10-08	Standards Committee	2004
1.1	2008-07-02	Standards Committee	2008
1.2	2014-06-18	Standards Committee	July 2014

# IPTC Extension Schema Specification History

Version	Approval Date	Approved by	In Standard Version
1.0	2008-07-02	Standards Committee	2008
1.1	2009-06-17	Standards Committee	July 2009
1.2	2014-06-18	Standards Committee	July 2014
1.3	2016-10-26	Standards Committee	October 2016
1.4	2017-05-17	Standards Committee	2017.1
1.5	2019-10-16	Standards Committee	2019.1

# **About This Document**

This document specifies metadata properties with a focus on usage with photos, some of these properties are also specified by the IPTC Video Metadata Hub.

This document is a specification that may be revised to fix errata. Any changes will be indicated by a new document revision number. Any changes to the specification will be reflected by a change of the version of the standard.

This specification document will be supplemented by guidelines for end users and implementers.

### Status of this Document

This document is under the governance of the IPTC Photo Metadata Working Group of the IPTC Standards Committee.

This is a specification document endorsed by IPTC members and may be updated, replaced or made obsolete by other documents at any time.

A public version of this specification document is available at https://www.iptc.org/std/photometadata/specification/IPTC-PhotoMetadata

Previous versions of this specification document can be accessed in the web folder https://www.iptc.org/std/photometadata/specification

All related IPTC documentation like user guidelines is available at http://www.iptc.org/std/photometadata/documentation

Public comments should be sent to this forum and mailing list at: https://groups.io/g/iptc-photometadata

# Specification Document Revision History

Revision	Issue Date	Author/revised by	Remarks
2019.1 Revision 1a	2019-12-16	Photo Metadata WG/M Steidl	

# IPTC Photo Metadata

# 1. Overview

IPTC Photo Metadata provides data about photographs and the values can be processed by software. Each individual metadata entity is called a property and they are grouped into Administrative, Descriptive and Rights-related properties.

IPTC Photo Metadata properties have photo specific definitions that are widely supported by imaging software.

IPTC Photo Metadata aligns with other IPTC metadata standards made for media items of any media-type. Thus they integrate with media-type agnostic digital asset management systems.

#### The IPTC Photo Metadata specification is split into two different schemas:

- The IPTC Core schema which is built from properties of the IPTC "Information Interchange Model" (IIM) standard [IPTC IIM].
- The IPTC Extension schema extends and complements the IPTC Core schema by an additional set of more
  granular properties and further specialised rights-related properties from the PLUS metadata schema [PLUS].

This allows users to decide whether ...

- ... to use only the IPTC Core schema that has a higher backward compatibility, but less refined metadata
- ... or to use the IPTC Core and the IPTC Extension schemas with refined and specialised metadata, but restricted backward compatibility.

This document provides the latest specifications for both schemas.

### 2. Technical Metadata

Digital cameras capture metadata at the time the image is taken reflecting technical characteristics. Such metadata may include, but is not limited to, generic camera metadata, camera manufacturer-specific metadata, ICC profiles and positioning data. Standards for these metadata are not subject to IPTC Standards, but are under the control of the camera manufacturers, their associations (such as CIPA) and others. Because the IPTC acknowledges these technical metadata standards of other bodies and does not wish to duplicate existing metadata properties, the IPTC Photo Metadata specification does not include any technical metadata.

# 3. History

In 1990, the IPTC developed its "Information Interchange Model" (IIM) metadata property standard for exchanging news that was, by design, media-type agnostic and thus encouraged users to apply it to photos. A few years later, the software company Adobe Systems, Inc., adopted a subset of IIM properties for its imaging software Photoshop and developed a metadata storage technology named "Image Resource Block" to embed the metadata properties in a header section of the image files. From that moment on, millions of photographs were annotated using IIM metadata.

In September 2001, Adobe introduced its new technical metadata framework "Extensible Metadata Platform (XMP)" [Adobe-XMP] that may make the "Image Resource Blocks" sooner or later obsolete. The XML-based XMP technology is much more flexible and can deal better with globalisation requirements. In 2012 the core definition of the data model and the XML syntax were defined by ISO as standard 16684-1 [ISO-XMP].

In 2004, IPTC and Adobe jointly developed the "IPTC Core Schema for XMP" which is actually a redefinition of the IIM properties in the new XMP environment; only a few properties were added.

In 2007, the IPTC collected requirements from different sectors of the professional photography business – with a focus on news photography and stock photography – and published these requirements in its Photo Metadata White Paper 2007 [PhMdWP2007]. After receiving wide assent to this paper, the IPTC developed specifications for the "IPTC Extension Schema" and slightly revised the IPTC Core specifications. Both specifications were released in a single document named "IPTC Photo Metadata Standard" in 2008 and have been updated or extended in 2009, 2014 and 2016, 2017 and 2019.

# 4. Photo Metadata specification notation

### 4.1. The specification template

This specification document provides for each photo metadata property a full specification including:

- A specification of its name, semantics, requirements and text to be used with the user interface of a software implementing this property.
- A specific technical implementation using Adobe's XMP technology [Adobe-XMP], [ISO-XMP]
- A specific technical implementation using IPTC's IIM standard. [IPTC-IIM]
- A JSON Schema for a specific serialization in JSON: https://www.iptc.org/std/photometadata/specification/iptc-pmd-schema\_2017.1.json

The specification of a Photo Metadata property is shown in a generic table form using the following template. Some rows may be missing if there is no use for this specification, e.g. structures have no help text or label as they are applied to a property with help text and label.

### Specification Table Template

Row header	What is specified by this row
Name	The reference name of the property used by this specification. This name shall never be translated.
Definition	A photo-specific definition of the semantics of this property, may be translated for localization purposes.
Help Text	A help text for this property which may be displayed by a generic help system of the user interface, and should be translated for localization purposes.
User Note(s)	Any notes that apply to the end user of this property, should be translated for localization purposes.
Implementation Note(s)	Notes targeting parties implementing this property by any specified technology.
Label	Text appearing next to the entry field in the user interface, that should be translated for localization purposes. (As structures are used by fields with labels no label is defined for a structure.)
Basic Specs	A recommended basic data type. Used values: Text, Number, Structure.  Cardinality: how often this property may appear in a set of Photo Metadata about an image.  1 = is mandatory, 01 = one occurrence is optional, 1unbounded = one occurrence is mandatory, multiple occurrences are optional
CV Note(s)	A note on the use of Controlled Vocabularies with this property. The term "Required" specifies the use of a specific CV as mandatory.
History Note(s)	A note in which version of the specification or, if there was an error in the specification document, in which revision of this specification document a property was changed and how.

Row header	What is specified by this row
XMP Specs	The specification of the property for XMP: The namespace alias and the property identifyer separated by a colon, see section "XMP Namespaces and Identifiers" of IPTC Core and IPTC Extension.  Further the value type as as defined by the XMP specification's XMP Category and how the value of the property is generated - External, Internal - as defined by XMP, both in []-brackets.
XMP Implementation Note(s)	Any note regarding the XMP-specific implementation.
IIM Specs	The specification of the property by IIM: The numeric values of the IIM Dataset property identifier, separated by a colon, plus the IIM name of the datataset.
JSON Specs	The specification of the property for JSON: The name of the JSON property plus the data type in []-brackets.

### 4.2. Generic Specification Notes

### 4.2.1. The terms Metadata Property and Metadata Structure

The term Metadata Property is used for data about the image content. A metadata property can be made to hold only a single kind of value, or a structure of different values, for which the term Metadata Structure is used.

#### Examples:

- The metadata property Description is made for only one kind of value, a text string, but may provide this value in different languages. It is important to understand that language translations are NOT a metadata structure.
- The property Artwork or Object in the Image provides a structure of many sub-fields, and is not designed for only a single value.
  - For a property using a structure, the string "structure" is used in the "Basic data type" cell of its specification table. In this case, check the XMP Value Type cell of the table and refer to the corresponding structure identified in it. For all structures specified by the IPTC this document includes the specification tables for all members of a structure. For all structures specified by another standardisation body, in particular by PLUS, the specifications of the structure can only be found in the specification documents (website, PDF document ...) of this body.

### 4.2.2. (legacy) appended to a property name

This suffix is used if the IPTC Extension provides a better solution to annotate the information about an image than the IPTC Core does. In this case, the IPTC recommends to phase out the use of the (legacy)-marked property and to move towards using the IPTC Extension. See the notes on this matter in the particular specification table.

### 4.2.3. (DEPRECATED) appended to a property name

This suffix is used for properties which should not be used any longer. A reason for this is given in the spec table of the property and may include a recommendation to use a different property.

#### 4.2.4. Saving metadata values to files

The values of properties may be saved by using both the IIM format and the XMP format in a single image file. (A guideline on how to synchronise values existing in parallel was available from the Metadata Working Group [MetadataWG] until October 2018 and was widely used.)

# IPTC Core schema 1.2 specifications

The IPTC Core schema defines the semantics of a set of metadata properties and their technical expressions by the IIM and the XMP format.

# 5. XMP Namespaces and Identifiers

The technical XMP format of IPTC Core schema uses different namespaces for different properties.

The namespace URI for some IPTC Core schema properties is: http://iptc.org/std/Iptc4xmpCore/1.0/xmlns/
The preferred namespace-prefix of this IPTC Core namespace is: Iptc4xmpCore
The use of this namespace-prefix is not mandatory, but highly recommended for interoperability support.

Other namespaces used for IPTC Core schema properties are:

Name	URI	Recommended/used Prefix
Dublin Core	http://purl.org/dc/elements/1.1/	dc
Photoshop	http://ns.adobe.com/photoshop/1.0/	photoshop
XMP Rights	http://ns.adobe.com/xap/1.0/rights/	xmpRights

User interfaces (like the custom panels in Adobe CS products) showing "IPTC Core" properties should refer to this schema as an "IPTC Core" or "IPTC" panel.

## 6. Metadata Properties

## 6.1. City (legacy)

Row header	Specification
Name	City (legacy)
Definition	Name of the city of the location shown in the image. This element is at the third level of a top-down geographical hierarchy.
Help Text	Enter the name of the city pictured in this image

Row header	Specification
User Note(s)	This is a detail of a location with blurred semantics as it does not clearly indicate whether it is the location in the image or the location the photo was taken - which can be different. Two more concise properties are available in IPTC Extension with Location Created and Location Shown in the Image.
Label	City
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Modified by version 1.1 (2008)
XMP Specs	photoshop:City [Text <external>]</external>
IIM Specs	2:90 City
JSON Specs	cityName [string//]

# 6.2. Copyright Notice

Row header	Specification
Name	Copyright Notice
Definition	Contains any necessary copyright notice for claiming the intellectual property for this photograph and should identify the current owner of the copyright for the photograph. Other entities like the creator of the photograph may be added in the corresponding field. Notes on usage rights should be provided in "Rights usage terms".
Help Text	Enter a Notice on the current owner of the Copyright for this image, such as ©2008 Jane Doe
User Note(s)	Copyright ownership can be expressed in a more controlled way using the PLUS fields "Copyright Owner", "Copyright Owner ID", "Copyright Owner Name" of the IPTC Extension. It is the user's responsibility to keep the values of the four fields in sync.

Row header	Specification
Label	Copyright Notice
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.0 (2004)
XMP Specs	dc:rights [Lang Alt <external>]</external>
XMP Implementation Note	Note: the XMP property (dc:rights) which stores the value of this IPTC Core property is of type Lang Alt. Hence any software agent dealing with this property must abide to the processing rules for Lang Alt value type as specified by the XMP specifications.
IIM Specs	2:116 Copyright Notice
JSON Specs	copyrightNotice [AltLang]

# 6.3. Country (legacy)

try (legacy) name of the country of the location shown in the image. This element is at
name of the country of the location shown in the image. This element is at
op/first level of a top-down geographical hierarchy. The full name should pressed as a verbal name and not as a code, a code should go to the ent "CountryCode"
the name of the country pictured in this image
is a detail of a location with blurred semantics as it does not clearly ate whether it is the location in the image or the location the photo was a which can be different. Two more concise properties are available in Extension with Location Created and Location Shown in the Image.
ıtry

Row header	Specification
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Modified by version 1.1 (2008)
XMP Specs	photoshop:Country [Text <external>]</external>
IIM Specs	2:101 Country/Primary Location Name
JSON Specs	countryName [string//]

# 6.4. Country Code (legacy)

Row header	Specification
Name	Country Code (legacy)
Definition	Code of the country of the location shown in the image. This element is at the top/first level of a top-down geographical hierarchy. The code should be taken from ISO 3166 two or three letter code. The full name of a country should go to the "Country" element.
Help Text	Enter the 2 or 3 letter ISO 3166 Country Code of the Country pictured in this image
User Note(s)	This is a detail of a location with blurred semantics as it does not clearly indicate whether it is the location in the image or the location the photo was taken - which can be different. Two more concise properties are available in IPTC Extension with Location Created and Location Shown in the Image.
Label	ISO Country Code
Basic Specs	Data type: CV-code / Cardinality: 01
CV Note(s)	Required: ISO 3166-1 - 2 or 3 characters (see Definition)
History Note(s)	Modified by version 1.1 (2008)

Row header	Specification
XMP Specs	Iptc4xmpCore:CountryCode [closed choice Text <external>]</external>
XMP Implementation Note	Note 1: an implementer would have to derive from the length of the value string whether this is the country code from the two or three letter scheme as no explicit indication can be provided.
IIM Specs	2:100 Country/Primary Location Code
JSON Specs	countryCode [string//]

## 6.5. Creator

Row header	Specification
Name	Creator
Definition	Contains the name of the photographer, but in cases where the photographer should not be identified the name of a company or organisation may be appropriate.
Help Text	Enter the name of the person that created this image
User Note(s)	The creator can be expressed in a more controlled way using the "Image Creator" of PLUS in the IPTC Extension additionally. It is the user's responsibility to keep the values of the IPTC Core and the PLUS fields in sync.
Implementation Note(s)	Synchronising this Creator property with PLUS' Image Creator Name should be supported by software.
Label	Creator
Basic Specs	Data type: Text / Cardinality: 0unbounded
History Note(s)	Added by version 1.0 (2004)
XMP Specs	dc:creator [Seq ProperName <external>]</external>

Row header	Specification
IIM Specs	2:80 By-line
JSON Specs	creatorNames [string//array]

# 6.6. Creator's Contact Info

Row header	Specification
Name	Creator's Contact Info
Definition	The creator's contact information provides all necessary information to get in contact with the creator of this image and comprises a set of sub-properties for proper addressing.
User Note(s)	The IPTC Extension Licensor fields should be used instead of these Creator's Contact Info fields if you are using IPTC Extension fields. If the creator is also the licensor his or her contact information should be provided in the Licensor fields.
Implementation Note(s)	The structure of Creator's Contact Info should not be visible to the user.
Label	Creator's Contact info
Basic Specs	Data type: Creators Contact Info structure / Cardinality: 01
History Note(s)	Added by version 1.0 (2004)
XMP Specs	Iptc4xmpCore:CreatorContactInfo [struct ContactInfo <external>]</external>
XMP Implementation Note	Note 1 to user interface implementers: All sub-properties of "Creator's contact information" should be shown as group on the form.  Note 2: the CreatorContactInfo sub-properties' naming aligns with the vCard
JSON Specs	specification RFC 2426.  creatorContactInfo [CreatorContactInfo]

# 6.7. Creator's jobtitle

Row header	Specification
Name	Creator's jobtitle
Definition	Contains the job title of the photographer. As this is sort of a qualifier the Creator element has to be filled in as mandatory prerequisite for using Creator's Jobtitle.
Help Text	Enter the Job Title of the person listed in the Creator field
Label	Creator's Jobtitle
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.0 (2004)
XMP Specs	photoshop:AuthorsPosition [Text <external>]</external>
XMP Implementation Note	Note 1 {added in (July 2010)}: corresponds to the first entry in a sequence of creators
IIM Specs	2:85 By-line Title
JSON Specs	jobtitle [string//]

## 6.8. Credit Line

Row header	Specification
Name	Credit Line
Definition	The credit to person(s) and/or organisation(s) required by the supplier of the image to be used when published. This is a free-text field.
Help Text	Enter who should be credited when this image is published

Row header	Specification
User Note(s)	Note 1: For more formal identifications of the creator or the owner of the copyrights of this image other rights properties may be used. Note 2: This property was named "Credit" by the IIM metadata, then it was renamed to "Provider" in IPTC Core 1.0. In IPTC Core 1.1. it has been renamed to "Credit Line" as the field is used for this purpose by many users.
Label	Credit Line
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Renamed by version 1.1 (2008)
XMP Specs	photoshop:Credit [Text <external>]</external>
IIM Specs	2:110 Credit
JSON Specs	creditLine [string//]

# 6.9. Date Created

Row header	Specification
Name	Date Created
Definition	Designates the date and optionally the time the content of the image was created rather than the date of the creation of the digital representation.
Help Text	Enter the Date the image was taken
Implementation Note(s)	If a software system requires explicit time values and no time is given by the Date Created property the software system should default the time to 00:00:00. If the software system does not require an explicit time value the time part should be left empty as it is.
Label	Date Created
Basic Specs	Data type: DateTime (preferred: truncated DateTime) / Cardinality: 01

Row header	Specification
History Note(s)	Added by version 1.0 (2004)
XMP Specs	photoshop:DateCreated [Date <external>]</external>
XMP Implementation Note	Note 1: Any content of the IIM dataset 2:60, Time Created, should be merged to this element.  Note 2: Implementers are encouraged to provide the creation date and time from the EXIF data of a digital camera to the user for entering this date for the first time.
IIM Specs	2:55 Date Created
JSON Specs	dateCreated [string/date-time/]

# 6.10. Description

Row header	Specification
Name	Description
Definition	A textual description, including captions, of the image.
Help Text	Enter a "caption" describing the who, what, and why of what is happening in this image, this might include names of people, and/or their role in the action that is taking place within the image.
Label	Caption/Description
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.0 (2004)
XMP Specs	dc:description [Lang Alt <external>]</external>

Row header	Specification
XMP Implementation Note	Note: the XMP property (dc:description) which stores the value of this IPTC Core property is of type Lang Alt. Hence any software agent dealing with this property must abide to the processing rules for Lang Alt value type as specified by the XMP specifications.
IIM Specs	2:120 Caption/Abstract
JSON Specs	description [AltLang]

# 6.11. Description Writer

Row header	Specification
Name	Description Writer
Definition	Identifier or the name of the person involved in writing, editing or correcting the description of the image.
Help Text	Enter the name of the person involved in writing, editing or correcting the description of the image
Label	Caption/Description writer
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.0 (2004)
XMP Specs	photoshop:CaptionWriter [Text <external>]</external>
IIM Specs	2:122 Writer/Editor
JSON Specs	captionWriter [string//]

# 6.12. Headline

Row header	Specification

Row header	Specification
Name	Headline
Definition	A brief synopsis of the caption. Headline is not the same as Title.
Help Text	Enter a brief publishable synopsis or summary of the contents of the image
Label	Headline
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.0 (2004)
XMP Specs	photoshop:Headline [Text <external>]</external>
IIM Specs	2:105 Headline
JSON Specs	headline [AltLang]

## 6.13. Instructions

Row header	Specification
Name	Instructions
Definition	Any of a number of instructions from the provider or creator to the receiver of the image which might include any of the following: embargoes (NewsMagazines OUT) and other restrictions not covered by the "Rights Usage Terms" field; information regarding the original means of capture (scanning notes, colourspace info) or other specific text information that the user may need for accurate reproduction; additional permissions required when publishing; credits for publishing if they exceed the IIM length of the credit field
Help Text	Enter information about embargoes, or other restrictions not covered by the Rights Usage field
Label	Instructions

Row header	Specification
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.0 (2004)
XMP Specs	photoshop:Instructions [Text <external>]</external>
IIM Specs	2:40 Special Instruction
JSON Specs	instructions [string//]

## 6.14. Intellectual Genre

Row header	Specification
Name	Intellectual Genre
Definition	Describes the nature, intellectual, artistic or journalistic characteristic of an image.
Help Text	Enter a term to describe the nature of the image in terms of its intellectual or journalistic characteristics, such as daybook, or feature (see http://cv.iptc.org/newscodes/genre)
User Note(s)	The IPTC recognizes that the corresponding IPTC Genre NewsCodes needs photo specific extension to be better usable with this field (as of the release of this standard in the year 2008).
Label	Intellectual genre
Basic Specs	Data type: Text / Cardinality: 01
CV Note(s)	Optional IPTC CV: <u>IPTC Genre NewsCodes</u> (http://cv.iptc.org/newscodes/genre/)
History Note(s)	Added by version 1.0 (2004)
XMP Specs	Iptc4xmpCore:IntellectualGenre [Text <external>]</external>

Row header	Specification
XMP Implementation Note	Note / Examples:
	Journalistic genres: actuality, interview, background, feature, summary, wrapup
	News category related genres: daybook, obituary, press release, transcript  It is advised to use terms from a controlled vocabulary.
IIM Specs	2:04 Object Attribute Reference
JSON Specs	intellectualGenre [string//]

# 6.15. Job Id

Row header	Specification
Name	Job Id
Definition	Number or identifier for the purpose of improved workflow handling. This is a user created identifier related to the job for which the image is supplied.
Help Text	Enter a number or identifier needed for workflow control or tracking
Label	Job Identifier
Basic Specs	Data type: String / Cardinality: 01
History Note(s)	Added by version 1.0 (2004)
XMP Specs	photoshop:TransmissionReference [Text <external>]</external>
XMP Implementation Note	Note: As this identifier references a job of the receiver's workflow it must first be issued by the receiver, then transmitted to the creator or provider of the news object and finally added by the creator to this field.
IIM Specs	2:103 Original Transmission Reference

Row header	Specification
JSON Specs	jobid [string//]

# 6.16. Keywords

Row header	Specification
Name	Keywords
Definition	Keywords to express the subject of the image. Keywords may be free text and don't have to be taken from a controlled vocabulary. Codes from the controlled vocabulary IPTC Subject NewsCodes must go to the "Subject Code" field.
Help Text	Enter any number of keywords, terms or phrases used to express the subject matter in the image.
Implementation Note(s)	Single values of this field should not be restricted to single words but must allow for phrases as well.
Label	Keywords
Basic Specs	Data type: Text / Cardinality: 0unbounded
History Note(s)	Added by version 1.0 (2004)
XMP Specs	dc:subject [Bag Text <external>]</external>
IIM Specs	2:25 Keywords
JSON Specs	keywords [string//array]

# 6.17. Province or State (legacy)

Row header	Specification
Name	Province or State (legacy)

Row header	Specification
Definition	Name of the subregion of a country of the location shown in the image. This element is at the second level of a top-down geographical hierarchy.
Help Text	Enter the name of the province or state pictured in this image
User Note(s)	This is a detail of a location with blurred semantics as it does not clearly indicate whether it is the location in the image or the location the photo was taken - which can be different. Two more concise properties are available in IPTC Extension with Location Created and Location Shown in the Image.
Label	Province/State
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Modified by version 1.1 (2008)
XMP Specs	photoshop:State [Text <external>]</external>
IIM Specs	2:95 Province/State
JSON Specs	provinceState [string//]

# 6.18. Rights Usage Terms

Row header	Specification
Name	Rights Usage Terms
Definition	The licensing parameters of the image expressed in free-text.
Help Text	Enter instructions on how this image can legally be used
User Note(s)	The PLUS fields of the IPTC Extension can be used in parallel to express the licensed usage in more controlled terms.
Label	Rights Usage Terms

Row header	Specification
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.0 (2004)
XMP Specs	xmpRights:UsageTerms [Lang Alt <external>]</external>
JSON Specs	usageTerms [AltLang]

## 6.19. Scene Code

Row header	Specification
Name	Scene Code
Definition	Describes the scene of a photo content. Specifies one ore more terms from the IPTC "Scene-NewsCodes". Each Scene is represented as a string of 6 digits in an unordered list.
Help Text	Enter only the 6-digit codes from the IPTC Scene NewsCodes Controlled Vocabulary (see: http://cv.iptc.org/newscodes/scene)
Label	IPTC Scene Code
Basic Specs	Data type: CV-code / Cardinality: 0unbounded
CV Note(s)	Required: <u>IPTC Scene NewsCodes</u> (http://cv.iptc.org/newscodes/scene/). Use only the 6-digit code.
History Note(s)	Added by version 1.0 (2004)
XMP Specs	Iptc4xmpCore:Scene [Bag closed choice Text <external>]</external>
JSON Specs	sceneCodes [string//array]

### 6.20. Source

Row header	Specification

Row header	Specification
Name	Source
Definition	The name of a person or party who has a role in the content supply chain. This could be an agency, a member of an agency, an individual or a combination. Source could be different from Creator and from the entities in the Copyright Notice.
User Note(s)	Enter or edit the name of a person or party who has a role in the content supply chain, such as a person or entity from whom you received this image from.
Label	Source
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Definition changed by version 1.2 (2014)
XMP Specs	photoshop:Source [Text <external>]</external>
IIM Specs	2:115 Source
JSON Specs	source [string//]

# 6.21. Subject Code

Row header	Specification
Name	Subject Code
Definition	Specifies one or more Subjects from the IPTC Subject-NewsCodes taxonomy to categorise the image. Each Subject is represented as a string of 8 digits in an unordered list.
Help Text	Enter only the 8-digit codes from the IPTC Subject NewsCode Controlled Vocabulary (see: http://cv.iptc.org/newscodes/subjectcode)
Label	IPTC Subject Code
Basic Specs	Data type: CV-code / Cardinality: 0unbounded

Row header	Specification
CV Note(s)	Required: <u>IPTC Subject NewsCodes</u> (http://cv.iptc.org/newscodes/subjectcode/). Use only the 8-digit code.
History Note(s)	Added by version 1.0 (2004)
XMP Specs	Iptc4xmpCore:SubjectCode [Bag closed choice Text <external>]</external>
IIM Specs	2:12 Subject Reference
JSON Specs	subjectCodes [string//array]

# 6.22. Sublocation (legacy)

Row header	Specification
Name	Sublocation (legacy)
Definition	Exact name of the sublocation shown in the image. This sublocation name could either be the name of a sublocation to a city or the name of a well known location or (natural) monument outside a city. In the sense of a sublocation to a city this element is at the fourth level of a top-down geographical hierarchy.
Help Text	Enter the name of the Sublocation pictured in this image
User Note(s)	This is a detail of a location with blurred semantics as it does not clearly indicate whether it is the location in the image or the location the photo was taken - which can be different. Two more concise properties are available in IPTC Extension with Location Created and Location Shown in the Image.
Label	Sublocation
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Modified by version 1.1 (2008)
XMP Specs	Iptc4xmpCore:Location [Text <external>]</external>

Row header	Specification
IIM Specs	2:92 Sublocation
JSON Specs	sublocationName [string//]

# 6.23. Title

Row header	Specification
Name	Title
Definition	A shorthand reference for the digital image. Title provides a short human readable name which can be a text and/or numeric reference. It is not the same as Headline.
Help Text	Enter a short verbal and human readable name for the image, this may be the file name
User Note(s)	Many use the Title field to store the filename of the image, though the field may be used in many ways. Formal identifiers are provided by the Digital Image Id, or the Registry Entry property of the IPTC Extension.
Label	Title
Basic Specs	Data type: String / Cardinality: 01
History Note(s)	Added by version 1.0 (2004)
XMP Specs	dc:title [Lang Alt <external>]</external>
XMP Implementation Note	Note 1: This element aligns with the use of Dublin Core's "Title" element.  Note 2: the XMP property (dc:title) which stores the value of this IPTC Core property is of type Lang Alt. Hence any software agent dealing with this property must abide to the processing rules for Lang Alt value type as specified by the XMP specifications.
IIM Specs	2:05 Object Name

Row header	Specification
JSON Specs	title [AltLang]

# 7. Metadata Structures

## 7.1. Contact Information structure

Row header	Specification
Name	Contact Information structure
Definition	A generic structure providing a basic set of information to get in contact with a person or organisation. It includes an Address, a City, a Country, Email address, Phone number, a Postal Code, a State or Province and Web URL.
Basic Specs	Data type: Structure / Cardinality: N/A
History Note(s)	Added by version 1.0 (2004)
XMP Implementation Note	Adoption of an appropriate person information scheme discussed - decision on 9 September.
IIM Specs	2:118 Contact
JSON Specs	CreatorContactInfo [object]

### 7.1.1. Address

Row header	Specification
Name	Address
Definition	The contact information address part. Comprises an optional company name and all required information to locate the building or postbox to which mail should be sent. To that end, the address is a multiline field.
Help Text	Enter Address for the person that created this image

Row header	Specification
Label	(Contact Info detail:) Address
Basic Specs	Data type: String / Cardinality: 0unbounded
History Note(s)	Added by version 1.0 (2004)
XMP Specs	Iptc4xmpCore:CiAdrExtadr [Text <external>]</external>
XMP Implementation Note	Note 1: to user interface implementers: This field should be part of a "Contact information" group on the form.  Note 2: the ContactInfo naming aligns with the vCard specification RFC 2426.
JSON Specs	address [string//]

# 7.1.2. City

Row header	Specification
Name	City
Definition	The contact information city part.
Help Text	Enter the City for the address of the person that created this image
Label	(Contact Info detail:) City
Basic Specs	Data type: String / Cardinality: 01
History Note(s)	Added by version 1.0 (2004)
XMP Specs	Iptc4xmpCore:CiAdrCity [Text <external>]</external>
XMP Implementation Note	Note 1: to user interface implementers: This field should be part of a "Contact information" group on the form.
	Note 2: the ContactInfo naming aligns with the vCard specification RFC 2426.

Row header	Specification
JSON Specs	city [string//]

## 7.1.3. Country

Row header	Specification
Name	Country
Definition	The contact information country part.
Help Text	Enter the Country name for the address of the person that created this image
Label	(Contact Info detail:) Country
Basic Specs	Data type: String / Cardinality: 01
History Note(s)	Added by version 1.0 (2004)
XMP Specs	Iptc4xmpCore:CiAdrCtry [Text <external>]</external>
XMP Implementation Note	Note 1: to user interface implementers: This field should be part of a "Contact information" group on the form.
	Note 2: the ContactInfo naming aligns with the vCard specification RFC 2426.
JSON Specs	country [string//]

# 7.1.4. Email address(es)

Name	Email address(es)
Definition	The contact information email address part.
-	Enter the work Email address(es) for the person that created this image, such as name@domain.com

Row header	Specification
User Note(s)	Multiple email addresses can be given. May have to be separated by a comma in the user interface.
Label	(Contact Info detail:) Email(s)
Basic Specs	Data type: String / Cardinality: 0unbounded
History Note(s)	Added by version 1.0 (2004)
XMP Specs	Iptc4xmpCore:CiEmailWork [Text <external>]</external>
XMP Implementation Note	Note 1 to user interface implementers: This field should be part of a "Contact information" group on the form. Note 2 to user interface implementers: provide sufficient space to fill in multiple e-mail addresses.  Note 3: the ContactInfo naming aligns with the vCard specification RFC 2426.
JSON Specs	emailwork [string//]

# 7.1.5. Phone number(s)

Row header	Specification
Name	Phone number(s)
Definition	The contact information phone number part.
Help Text	Enter the work Phone number(s) for the person that created this image, using the international format, such as +1 (123) 456789
User Note(s)	Multiple numbers can be given. May have to be separated by a comma in the user interface.
Label	(Contact Info detail:) Phone(s)
Basic Specs	Data type: String / Cardinality: 0unbounded

Row header	Specification
History Note(s)	Added by version 1.0 (2004)
XMP Specs	Iptc4xmpCore:CiTelWork [Text <external>]</external>
XMP Implementation Note	Note 1 to user interface implementers: This field should be part of a "Contact information" group on the form. Note 2 to user interface implementers: provide sufficient space to fill in multiple international numbers.  Note 3: the ContactInfo naming aligns with the vCard specification RFC 2426.
JSON Specs	phonework [string//]

### 7.1.6. Postal Code

Row header	Specification
Name	Postal Code
Definition	The contact information part denoting the local postal code.
Help Text	Enter the Postal Code for the address of the person that created this image
Label	(Contact Info detail:) Postal Code
Basic Specs	Data type: String / Cardinality: 01
History Note(s)	Added by version 1.0 (2004)
XMP Specs	Iptc4xmpCore:CiAdrPcode [Text <external>]</external>
XMP Implementation Note	Note 1: to user interface implementers: This field should be part of a "Contact information" group on the form.  Note 2: the ContactInfo naming aligns with the vCard specification RFC 2426.
JSON Specs	postalCode [string//]

### 7.1.7. State/Province

Row header	Specification
Name	State/Province
Definition	The contact information part denoting regional information such as state or province.
Help Text	Enter the State for the address of the person that created this image
Label	(Contact Info detail:) State/Province
Basic Specs	Data type: String / Cardinality: 01
History Note(s)	Added by version 1.0 (2004)
XMP Specs	Iptc4xmpCore:CiAdrRegion [Text <external>]</external>
XMP Implementation Note	Note 1: to user interface implementers: This field should be part of a "Contact information" group on the form.
	Note 2: the ContactInfo naming aligns with the vCard specification RFC 2426.
JSON Specs	region [string//]

## 7.1.8. Web URL(s)

Row header	Specification
Name	Web URL(s)
Definition	The contact information web address part. Multiple addresses can be given.
Help Text	Enter the work Web URL(s) for the person that created this image, such as http://www.domain.com/
User Note(s)	Multiple URL can be given. May have to be separated by a comma in the user interface.
Label	(Contact Info detail:) Web URL(s)

Row header	Specification
Basic Specs	Data type: URL / Cardinality: 0unbounded
History Note(s)	Added by version 1.0 (2004)
XMP Specs	Iptc4xmpCore:CiUrlWork [Text <external>]</external>
XMP Implementation Note	Note 1 to user interface implementers: This field should be part of a "Contact information" group on the form. Note 2 to user interface implementers: provide sufficient space to fill in multiple URLs.  Note 3: the ContactInfo naming aligns with the vCard specification RFC 2426.
JSON Specs	weburlwork [string//]

#### 8. Non-normative Information

#### 8.1. "Deprecated" IIM metadata elements

Not all of the IIM datasets adopted by Adobe to be used for the Photoshop File Info have been adopted for the IPTC Core schema. In terms of mapping and transferring metadata from the legacy IIM-based headers, these datasets must to be considered as deprecated:

- Urgency: As this metadata element pertains to distribution management, it was not adopted. However, this data
  is still synchronised with the XMP property "photoshop:Urgency", and hence, available for future use, but
  outside the IPTC Core.
- Category: As this metadata element was earmarked as deprecated already for IIM 4.1, it was not adopted.
   However, this data is still synchronised with the XMP property "photoshop:Category", and hence available for future use but outside the IPTC Core. For migrating from Category codes to Subject Codes please read the Guideline for mapping Category Codes to Subject NewsCodes section below.
- Supplemental Categories: As this metadata element was earmarked as deprecated already for IIM 4.1, it was not adopted. However, this data is still synchronised with the XMP property "photoshop:SupplementalCategories", and hence available for future use but outside the IPTC Core.

#### 8.2. Synchronising IIM elements with existing XMP properties

This table shows how legacy metadata elements from the "IPTC header" – which were taken from the IPTC Information Interchange Model IIM are synchronised by Adobe Photoshop CS with XMP properties.

<b>Photoshop Name</b>	IIM Spec	XMP Spec
Title	2:05 Object Name	dc:title/*[@xml:lang='x-default']
Urgency *)	2:10 Urgency	photoshop:Urgency
Category *)	2:15 Category	photoshop:Category
Supplemental Categories *)	2:20 Supplemental Category	photoshop:SupplementalCategories
Keywords	2:25 Keywords	dc:subject
Instructions	2:40 Special Instruction	photoshop:Instructions
Date Created	2:55 Date Created	photoshop:DateCreated
Author	2:80 By-line	dc:creator
AuthorsPosition	2:85 By-line Title	photoshop:AuthorsPosition
City	2:90 City	photoshop:City
State/Province	2:95 Province/State	photoshop:State
Country	2:101 Country/Primary Location Name	photoshop:Country
Transmission Reference	2:103 Original Transmission Reference	photoshop:TransmissionReference
Headline	2:105 Headline	photoshop:Headline
Credit	2:110 Credit	photoshop:Credit
Source	2:115 Source	photoshop:Source
Copyright Notice	2:116 Copyright Notice	dc:rights/*[@xml:lang='x-default']

Photoshop Name	IIM Spec	XMP Spec
Description	2:120 Caption/Abstract	dc:description/*[@xml:lang='x-default']
Description Writer	2:122 Writer/Editor	photoshop:CaptionWriter
		*) This property is deprecated, see the previous section.

For the exact processing while synchronising metadata values reading the Guidelines for Handling Image Metadata from the Metadata Working Group helps. This document was available at this URL until October 2018: http://www.metadataworkinggroup.com/specs/

#### 8.3. Guideline for mapping Category Codes to Subject NewsCodes

Early versions of IIM included the Datasets 2:15 "Category" and 2:20 "Supplemental Category". But these two fields were replaced in IIM version 4 (released in 1999) by the Dataset 2:12 "Subject Reference" which must be populated by values from the Subject NewsCodes controlled vocabulary. In version 4 of the IIM specification document the Datasets Category and Supplemental Category were indicated as "deprecated" which meant that after the time of this release these two Datasets should not be populated with values any longer. To support the move from the three letter codes used with the Category Dataset to the Subject NewsCodes this table provides a reference for mapping.

Category	Code Subject NewsCode	Name and definition of the code
ACE	01000000	arts, culture and entertainment Matters pertaining to the advancement and refinement of the human mind, of interests, skills, tastes and emotions
CLJ	02000000	crime, law and justice Establishment and/or statement of the rules of behaviour in society, the enforcement of these rules, breaches of the rules and the punishment of offenders. Organizations and bodies involved in these activities.

DIS	03000000	disaster and accident Man-made and natural events resulting in loss of life or injury to living creatures and/or damage to inanimate objects or property.
FIN	04000000	economy, business and finance All matters concerning the planning, production and exchange of wealth.
EDU	05000000	education All aspects of furthering knowledge of human individuals from birth to death.
EVN	06000000	environmental issue All aspects of protection, damage, and condition of the ecosystem of the planet earth and its surroundings.
НТН	07000000	health All aspects pertaining to the physical and mental welfare of human beings.
HUM	08000000	human interest Lighter items about individuals, groups, animals or objects.
LAB	0900000	labour Social aspects, organizations, rules and conditions affecting the employment of human effort for the generation of wealth or provision of services and the economic support of the unemployed.

LIF	10000000	lifestyle and leisure Activities undertaken for pleasure, relaxation or recreation outside paid employment, including eating and travel.
POL	11000000	politics Local, regional, national and international exercise of power, or struggle for power, and the relationships between governing bodies and states.
REL	12000000	religion and belief All aspects of human existence involving theology, philosophy, ethics and spirituality.
SCI	13000000	science and technology All aspects pertaining to human understanding of nature and the physical world and the development and application of this knowledge.
SOI	14000000	social issue Aspects of the behaviour of humans affecting the quality of life.
SPO	15000000	sport Competitive exercise involving physical effort. Organizations and bodies involved in these activities.

# IPTC Extension schema 1.5 specifications

The IPTC Extension schema defines the semantics of a set of metadata properties and their technical expressions by the XMP format.

### 9. XMP Namespaces and Identifiers

The technical XMP format of the IPTC Extension schema uses different namespaces for different properties.

The namespace URI for some IPTC Extension schema properties is: http://iptc.org/std/Iptc4xmpExt/2008-02-29/
The preferred namespace-prefix of this IPTC Extension namespace is: Iptc4xmpExt

The use of this namespace-prefix is not mandatory but highly recommended for interoperability support.

Other namespaces used for IPTC Extension schema properties are:

Name	URI	Recommended Prefix
PLUS	http://ns.useplus.org/ldf/xmp/1.0/	plus
XMP	http://ns.adobe.com/xap/1.0/rights/	xmp

#### 9.1. User Interface Note

User interfaces (like the custom panels in Adobe CS products) showing "IPTC Extension" properties should refer to it as an "IPTC Extension" or "IPTC ..." panel.

#### 10. Metadata Properties

#### 10.1. Additional Model Information

Row header	Specification
Name	Additional Model Information
Definition	Information about the ethnicity and other facets of the model(s) in a model-released image.

Row header	Specification
Help Text	Enter information like ethnicity or other details about the model(s) in this image
User Note(s)	Use the Model Age field for the age of model(s).
Label	Additional model info
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:AddlModelInfo [Text <external>]</external>
JSON Specs	additionalModelInfo [string//]

### 10.2. Artwork or Object in the Image

Row header	Specification
Name	Artwork or Object in the Image
Definition	A set of metadata about artwork or an object in the image
Help Text	Enter details about artwork or objects shown in this image
Label	Artwork or object in the image
Basic Specs	Data type: Artwork or Object in the Image structure / Cardinality: 0unbounded
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:ArtworkOrObject [Bag ArtworkOrObjectDetails <external>]</external>
JSON Specs	artworkOrObjects [ArtworkOrObject//array]

# 10.3. Code of Organisation Featured in the Image

Row header	Specification
Name	Code of Organisation Featured in the Image
Definition	Code from a controlled vocabulary for identifying the organisation or company which is featured in the image.
Help Text	Enter an identifier for the controlled vocabulary, then a colon, and finally the code from the vocabulary assigned to the organisation shown in this image (e.g. nasdaq:companyA)
User Note(s)	For example a stock ticker symbol may be used.
Label	Code of featured Organisation
Basic Specs	Data type: CV-code / Cardinality: 0unbounded
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:OrganisationInImageCode [Bag Text <external>]</external>
JSON Specs	organisationInImageCodes [string//array]

# 10.4. Copyright Owner

Row header	Specification
Name	Copyright Owner
Definition	Owner or owners of the copyright in the licensed image.
Help Text	Enter the owner or owners of the copyright in the licensed image
User Note(s)	Serves to identify the rights holder/s for the image. The Copyright Owner, Image Creator and Licensor may be the same or different entities.

Row header	Specification
Implementation Note(s)	This is a <u>structured PLUS version 1.2 property</u> (http://ns.useplus.org/LDF/ldf-XMPSpecification#CopyrightOwner) included in the IPTC Extension schema.
Label	Copyright owner
Basic Specs	Data type: plus-CopyrightOwner / Cardinality: 03
History Note(s)	Added by version 1.0 (2008)
XMP Specs	plus:CopyrightOwner [Seq CopyrightOwnerDetail <external>]</external>
JSON Specs	copyrightOwners [Entity//array]

# 10.5. CV-Term About Image

Row header	Specification
Name	CV-Term About Image
Definition	One or more topics, themes or entities the content is about, each one expressed by a term from a Controlled Vocabulary.
Help Text	Enter one or more topics, themes or entities the image is about, each one expressed by a term from a Controlled Vocabulary
Label	CV-Term About Image
Basic Specs	Data type: CV-Term structure / Cardinality: 0unbounded
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:AboutCvTerm [Bag CV-Term Details structure <external>]</external>
JSON Specs	aboutCvTerms [CvTerm//array]

# 10.6. Digital Image GUID

Row header	Specification
Name	Digital Image GUID
Definition	Globally unique identifier for this digital image. It is created and applied by the creator of the digital image at the time of its creation. This value shall not be changed after that time.
Help Text	If an ID already exists, don't change - otherwise enter a globally unique identifier for this digital image
User Note(s)	The identifier will probably be generated by the technical means of an imaging device or software and should be applied to the digital image file as early as possible in its life cycle. This identifier does not identify any pictured content, particularly in case of a scan of non-digital images, only this digital representation.
Implementation Note(s)	Any algorithm to create this identifier has to comply with the technical requirements to create a globally unique id. Any device creating digital images - e.g. still image cameras, video cameras, scanners - should create such an identifer right at the time of the creation of the digital data and add the id to the set of metadata without compromising performance. It is recommended that this image identifier allows identifying the device by which the image data and the GUID were created.  IPTC's basic requirements for unique ids are:  * It must be globally unique. Algorithms for this purpose exist.  * It should identify the camera body.  * It should identify each individual photo from this camera body.  * It should identify the date and time of the creation of the picture.  * It should be secured against tampering.  This field should be implemented in a way to prove it has not been changed since its value has been applied.  If the identifier has been created by the imaging device its type and brand can be found in the Exif/technical metadata.
Label	Digital Image Identifier

Row header	Specification
Basic Specs	Data type: String / Cardinality: 01
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:DigImageGUID [Text <internal>]</internal>
JSON Specs	digitalImageGuid [string//]

## 10.7. Digital Source Type

Row header	Specification
Name	Digital Source Type
Definition	The type of the source of this digital image
Help Text	Select one of the values for identifying the type of the source of the digital image from the controlled vocabulary
Label	Type of source for this photo
Basic Specs	Data type: CV-code / Cardinality: 01
CV Note(s)	Required: <u>Digital Source Type NewsCodes</u> (http://cv.iptc.org/newscodes/digitalsourcetype/)
History Note(s)	Added by version 1.1 (2009)
XMP Specs	Iptc4xmpExt:DigitalSourceType [URI <external>]</external>
JSON Specs	digitalSourceType [string/uri/]

## 10.8. Embedded Encoded Rights Expression

Row header	Specification
Name	Embedded Encoded Rights Expression

Row header	Specification
Definition	An embedded rights expression using any rights expression language
Help Text	Shows an encoded rights expression. These values cannot be changed by metadata panels.
Label	Embedded Encoded Rights Expression
Basic Specs	Data type: Embedded Encoded Rights Expression (EERE) structure / Cardinality: 0unbounded
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:EmbdEncRightsExpr [Bag EERE Details structure <internal>]</internal>
JSON Specs	embdEncRightsExprs [EmbdEncRightsExpr//array]

#### 10.9. Event

Row header	Specification
Name	Event
Definition	Names or describes the specific event at which the photo was taken.
Help Text	Enter the name or description of the event where this image was taken
User Note(s)	Examples are: a press conference, dedication ceremony, etc. If this is a sub- event of a larger event both can be provided by the field: e.g. XXXIX Olympic Summer Games (Beijing): opening ceremony. Unplanned events could be named by this property too.
Label	Event
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:Event [Lang Alt <external>]</external>

Row header	Specification
JSON Specs	eventName [AltLang]

#### 10.10. Genre

Row header	Specification
Name	Genre
Definition	Artistic, style, journalistic, product or other genre(s) of the image (expressed by a term from any Controlled Vocabulary)
Label	Genre
Basic Specs	Data type: CV-Term structure / Cardinality: 0unbounded
History Note(s)	Added by version 1.3 (2016)
XMP Specs	Iptc4xmpExt:Genre [Bag CV-Term Details structure <external>]</external>
JSON Specs	genres [CvTerm//array]

# 10.11. Image Creator

Row header	Specification
Name	Image Creator
Definition	Creator or creators of the image
Help Text	Enter details about the creator or creators of this image
User Note(s)	The creator can be additionally expressed in free-text using the IPTC Core Creator field. In many countries, the Image Creator must be attributed in association with any use of the image. The Image Creator, Copyright Owner, Image Supplier and Licensor may be the same or different entities.

Row header	Specification
Implementation Note(s)	This is a <u>structured PLUS version 1.2 property</u> (http://ns.useplus.org/LDF/ldf-XMPSpecification#ImageCreator) included in the IPTC Extension schema.
Label	Image Creator
Basic Specs	Data type: plus-ImageCreator / Cardinality: 03
History Note(s)	Added by version 1.0 (2008)
XMP Specs	plus:ImageCreator [Seq ImageCreatorDetail <external>]</external>
JSON Specs	imageCreators [Entity//array]

## 10.12. Image Rating

Row header	Specification
Name	Image Rating
Definition	Rating of the image by its user or supplier
Implementation Note(s)	The value shall be -1 or in the range 051 indicates "rejected" and 0 "unrated". If an explicit value is missing the implicit default value is 0 should be assumed.
Label	Rating
Basic Specs	Data type: Decimal / Cardinality: 01
History Note(s)	Added by version 1.4 (2017.1)
XMP Specs	xmp:Rating [Closed Choice Real <external>]</external>
JSON Specs	imageRating [number//]

## 10.13. Image Region

Row header	Specification
Name	Image Region
Definition	Sets a region inside an image by defining its boundaries. All pixels of the boundary are also part of the region. It may include metadata related to this region.
Label	Image Region(s)
Basic Specs	Data type: Image Region structure / Cardinality: 0unbounded
History Note(s)	Added by version 1.5 (2019.1)
XMP Specs	Iptc4xmpExt:ImageRegion [Bag Image Region Details structure <external>]</external>
JSON Specs	imageRegion [ImageRegion//array]

# 10.14. Image Registry Entry

Row header	Specification
Name	Image Registry Entry
Definition	Both a Registry Item Id and a Registry Organisation Id to record any registration of this digital image with a registry.
Help Text	Enter IDs for this image and the registry issuing the image ID
User Note(s)	Typically an id from a registry is negotiated and applied after the creation of the digital image.
Implementation Note(s)	Any user interface implementation must show both sub-properties - Item Id and Organisation Id - as corresponding values. Further an input to both fields should be made mandatory.
Label	Registry Entry
Basic Specs	Data type: Registry Entry structure / Cardinality: 0unbounded

Row header	Specification
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:RegistryId [Bag RegistryEntryDetails <external>]</external>
JSON Specs	registryEntries [RegistryEntry//array]

# 10.15. Image Supplier

Row header	Specification
Name	Image Supplier
Definition	Identifies the most recent supplier of the image, who is not necessarily its owner or creator.
Help Text	Enter the identifier for the most recent supplier of this image - note that this might not be the creator or owner of the image
User Note(s)	For identifying the supplier either a well known and/or registered company name or a URL of the company's web site may be used. This property succeeds the Provider property of IPTC Core 1.0 by its semantics as that Provider was renamed to Credit Line.
Implementation Note(s)	This is a <u>structured PLUS version 1.2 property</u> (http://ns.useplus.org/LDF/ldf-XMPSpecification#ImageSupplier) included in the IPTC Extension schema.
Label	Image Supplier
Basic Specs	Data type: plus-ImageSupplier / Cardinality: 01
History Note(s)	Added by version 1.0 (2008)
XMP Specs	plus:ImageSupplier [Seq ImageSupplierDetail <external>]</external>
JSON Specs	suppliers [Entity//array]

# 10.16. Image Supplier Image ID

Row header	Specification
Name	Image Supplier Image ID
Definition	Optional identifier assigned by the Image Supplier to the image.
Help Text	Enter the unique identifier created by the image supplier.
Implementation Note(s)	This is a <u>structured PLUS version 1.2</u> (http://ns.useplus.org/LDF/ldf-XMPSpecification#ImageSupplierImageID) property included in the IPTC Extension schema.
Label	Image Supplier Image Id
Basic Specs	Data type: string / Cardinality: 01
History Note(s)	Added by version 1.0 (2008)
XMP Specs	plus:ImageSupplierImageID [Text <external>]</external>
JSON Specs	imageSupplierImageId [string//]

#### 10.17. Licensor

Row header	Specification
Name	Licensor
Definition	A person or company that should be contacted to obtain a licence for using the item or who has licensed the item.
Help Text	Enter the person or company that should be contacted for obtaining a license for this image
Implementation Note(s)	This is a <u>structured PLUS version 1.2 property</u> (http://ns.useplus.org/LDF/ldf-XMPSpecification#Licensor) included in the IPTC Extension schema.

Row header	Specification
Label	Licensor
Basic Specs	Data type: plus-Licensor / Cardinality: 03
History Note(s)	Added by version 1.0 (2008)
XMP Specs	plus:Licensor [Bag LicensorDetail <external>]</external>
JSON Specs	licensors [Entity//array]

# 10.18. Linked Encoded Rights Expression

Row header	Specification
Name	Linked Encoded Rights Expression
Definition	A linked rights expression using any rights expression language.
Help Text	Enter the details of a linked rights expression.
Label	Linked Encoded Rights Expression
Basic Specs	Data type: Linked Encoded Rights Expression (LERE) structure / Cardinality: 0unbounded
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:LinkedEncRightsExpr [Bag LERE Details structure <external>]</external>
JSON Specs	linkedEncRightsExprs [LinkedEncRightsExpr//array]

#### 10.19. Location created

Row header	Specification
Name	Location created
Definition	The location the photo was taken.
Definition	The location the photo was taken.

Row header	Specification
Help Text	Enter the details about a location where this image was created
User Note(s)	If the location in the image is different from the location the photo was taken the IPTC Extension property Location Shown in the Image should be used.
Label	Location Created
Basic Specs	Data type: Location structure / Cardinality: 01
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:LocationCreated [Bag LocationDetails <external>]</external>
JSON Specs	locationCreated [Location]

# 10.20. Location Shown in the Image

Row header	Specification
Name	Location Shown in the Image
Definition	A location shown in the image.
Help Text	Enter the details about a location which is shown in this image
User Note(s)	If the location the image was taken in is different from this location the property Location Created should be used too.
Label	Location shown
Basic Specs	Data type: Location structure / Cardinality: 0unbounded
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:LocationShown [Bag Location Details structure <external>]</external>
JSON Specs	locationsShown [Location//array]

# 10.21. Max Avail Height

Row header	Specification
Name	Max Avail Height
Definition	The maximum available height in pixels of the original photo from which this photo has been derived by downsizing.
Help Text	Enter the maximum available height in pixels of the original photo from which this photo has been derived by downsizing
Label	Maximum available height
Basic Specs	Data type: Integer / Cardinality: 01
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:MaxAvailHeight [Integer <external>]</external>
JSON Specs	maxAvailHeight [number/integer/]

#### 10.22. Max Avail Width

Row header	Specification
Name	Max Avail Width
Definition	The maximum available width in pixels of the original photo from which this photo has been derived by downsizing.
Help Text	Enter the maximum available width in pixels of the original photo from which this photo has been derived by downsizing
Label	Maximum available width
Basic Specs	Data type: Integer / Cardinality: 01
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:MaxAvailWidth [Integer <external>]</external>

Row header	Specification
JSON Specs	maxAvailWidth [number/integer/]

# 10.23. Minor Model Age Disclosure

Row header	Specification
Name	Minor Model Age Disclosure
Definition	Age of the youngest model pictured in the image, at the time that the image was made.
Help Text	Enter the age of the youngest model pictured in this image, at the time that this image was made.
User Note(s)	This age should not be displayed to the public on open web portals and the like.  But it may be used by image repositories in a B2B environment.
Implementation Note(s)	This is a <u>PLUS version 1.2 property</u> (http://ns.useplus.org/LDF/ldf-XMPSpecification#MinorModelAgeDisclosure) included in the IPTC Extension schema.
Label	Minor Model Age Disclosure
Basic Specs	Data type: CV-code / Cardinality: 01
CV Note(s)	See the PLUS specification of this property
History Note(s)	Added by version 1.0 (2008)
XMP Specs	plus:MinorModelAgeDisclosure [URL <external>]</external>
JSON Specs	minorModelAgeDisclosure [string/uri/]

### 10.24. Model Age

Row header	Specification
Name	Model Age
Definition	Age of the human model(s) at the time this image was taken in a model released image.
Help Text	Enter the age of the human model(s) at the time this image was made
User Note(s)	The user should be aware of any legal implications of providing ages for young models. Ages below 18 years should not be included.
Label	Model age
Basic Specs	Data type: Integer / Cardinality: 0unbounded
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:ModelAge [Bag Integer <external>]</external>
JSON Specs	modelAges [number/integer/array]

#### 10.25. Model Release Id

Row header	Specification
Name	Model Release Id
Definition	Optional identifier associated with each Model Release.
Help Text	Enter an identifier for each Model Release
Implementation Note(s)	This is a <u>PLUS version 1.2 property</u> (http://ns.useplus.org/LDF/ldf-XMPSpecification#ModelReleaseID) included in the IPTC Extension schema.
Label	Model Release Id
Basic Specs	Data type: String / Cardinality: 0unbounded

Row header	Specification
History Note(s)	Added by version 1.0 (2008)
XMP Specs	plus:ModelReleaseID [Bag Text <external>]</external>
JSON Specs	modelReleaseDocuments [string//array]

#### 10.26. Model Release Status

Row header	Specification
Name	Model Release Status
Definition	Summarises the availability and scope of model releases authorising usage of the likenesses of persons appearing in the photograph.
Help Text	Select one of the values for summarising the availability and scope of model releases authorising usage of the likenesses of persons appearing in the photograph
User Note(s)	It is recommended to apply the PLUS controlled value Unlimited Model Releases (MR-UMR) very carefully and to check the wording of the model release thoroughly before applying it.
Implementation Note(s)	This is a <u>PLUS version 1.2 property</u> (http://ns.useplus.org/LDF/ldf-XMPSpecification#ModelReleaseStatus) included in the IPTC Extension schema.
Label	Model Release Status
Basic Specs	Data type: CV-code / Cardinality: 01
CV Note(s)	See the PLUS specification of this property
History Note(s)	Added by version 1.0 (2008)
XMP Specs	plus:ModelReleaseStatus [URL <external>]</external>

Row header	Specification
JSON Specs	modelReleaseStatus [string/uri/]

# 10.27. Name of Organisation Featured in the Image

Row header	Specification
Name	Name of Organisation Featured in the Image
Definition	Name of the organisation or company which is featured in the image.
Help Text	Enter the name of the organisation which is featured by this image
User Note(s)	May be supplemented by values from a controlled vocabulary in the Organisation Code field.
Label	Name of featured Organisation
Basic Specs	Data type: Text / Cardinality: 0unbounded
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:OrganisationInImageName [Bag Text <external>]</external>
JSON Specs	organisationInImageNames [string//array]

#### 10.28. Person Shown in the Image

Row header	Specification
Name	Person Shown in the Image
Definition	Name of a person shown in the image.
Help Text	Enter the name of the person shown in this image
Label	Person shown
Basic Specs	Data type: Text / Cardinality: 0unbounded

Row header	Specification
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:PersonInImage [Bag Text <external>]</external>
JSON Specs	personInImageNames [string//array]

## 10.29. Person Shown in the Image with Details

Row header	Specification
Name	Person Shown in the Image with Details
Definition	Details about a person the content is about.
Help Text	Enter details about person(s) shown in the image. It is not required to list all, just those details which can be recognized.
Label	Person Shown (Details)
Basic Specs	Data type: Person structure / Cardinality: 0unbounded
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:PersonInImageWDetails [Bag Person Details structure <external>]</external>
JSON Specs	personsShown [PersonWDetails//array]

#### 10.30. PLUS Version

Row header	Specification
Name	PLUS Version
Definition	The version number of the PLUS standards in place at the time of the transaction.

Row header	Specification
User Note(s)	In the event of a misunderstanding between the parties, PLUS Version provides a reference to the version of the PLUS standards that was in place at the time of the transaction. PLUS standards are updated periodically.
Implementation Note(s)	This property was included into the IPTC Extension schema from PLUS version 1.2 as all other PLUS properties. To reflect this the value of "PLUS Version" should be set to the string "1.2.0"
Label	PLUS Version
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.0 (2008)
XMP Specs	plus:Version [Text <internal>]</internal>

# 10.31. Product Shown in the Image

Row header	Specification
Name	Product Shown in the Image
Definition	A product the content is about.
Help Text	Enter details about a product shown in the image
Label	Product Shown
Basic Specs	Data type: Product structure / Cardinality: 0unbounded
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:ProductInImage [Bag Product Details structure <external>]</external>
JSON Specs	productsShown [ProductWGtin//array]

### 10.32. Property Release Id

Row header	Specification
Name	Property Release Id
Definition	Optional identifier associated with each Property Release.
Help Text	Enter an identifier for each Property Release
Implementation Note(s)	This is a <u>PLUS version 1.2 property</u> (http://ns.useplus.org/LDF/ldf-XMPSpecification#PropertyReleaseID) included in the IPTC Extension schema.
Label	Property Release Id
Basic Specs	Data type: String / Cardinality: 0unbounded
History Note(s)	Added by version 1.0 (2008)
XMP Specs	plus:PropertyReleaseID [Bag Text <external>]</external>
JSON Specs	propertyReleaseDocuments [string//array]

# 10.33. Property Release Status

Row header	Specification
Name	Property Release Status
Definition	Summarises the availability and scope of property releases authorising usage of the properties appearing in the photograph.
Help Text	Select one of the values for summarising the availability and scope of property releases authorising usage of the properties appearing in the photograph
User Note(s)	It is recommended to apply the value PR-UPR very carefully and to check the wording of the property release thoroughly before applying it.

Row header	Specification
Implementation Note(s)	This is a <u>PLUS version 1.2 property</u> (http://ns.useplus.org/LDF/ldf-XMPSpecification#PropertyReleaseStatus) included in the IPTC Extension schema.
Label	Property Release Status
Basic Specs	Data type: CV-code / Cardinality: 01
CV Note(s)	See the PLUS specification of this property
History Note(s)	Added by version 1.0 (2008)
XMP Specs	plus:PropertyReleaseStatus [URL <external>]</external>
JSON Specs	propertyReleaseStatus [string/uri/]

## 10.34. Web Statement of Rights

Row header	Specification
Name	Web Statement of Rights
Definition	URL referencing a web resouce providing a statement of the copyright ownership and usage rights of the image.
Label	Copyright Info URL
Basic Specs	Data type: String / Cardinality: 01
History Note(s)	Added by version 1.4 (2017.1)
XMP Specs	xmpRights:WebStatement [Text <external>]</external>
JSON Specs	webstatementRights [string/uri/]

## 11. Metadata Structures

## 11.1. Artwork or Object in the Image structure

Row header	Specification
Name	Artwork or Object in the Image structure
Definition	A structured datatype for details about artwork or an object in an image.  Includes a Copyright Notice, a Creator, a Date Created, a Source, a Source Inventory Number and a Title.
Basic Specs	Data type: Structure / Cardinality: N/A
History Note(s)	Added by version 1.0 (2008)
JSON Specs	ArtworkOrObject [object]

#### 11.1.1. Circa Date Created

Row header	Specification
Name	Circa Date Created
Definition	Approximate date or range of dates associated with the creation and production of an artwork or object or its components.
Help Text	Enter the approximate date or range of dates associated with the creation and production of an artwork or object or its components.
Label	Circa Date Created
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:AOCircaDateCreated [Text <external>]</external>
JSON Specs	circaDateCreated [string//]

#### 11.1.2. Content Description

Row header	Specification

Row header	Specification
Name	Content Description
Definition	A textual description of the content depicted in the artwork or object.
Help Text	Describe the content depicted in the artwork or object in free-text.
Label	Content Description
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:AOContentDescription [LangAlt <external>]</external>
JSON Specs	contentDescription [AltLang]

#### 11.1.3. Contribution Description

Row header	Specification
Name	Contribution Description
Definition	A textual description about a contribution made to an artwork or an object.
Help Text	Describe any contributions made to the artwork or object as free-text. Include the type, date and location of contribution, and details about the contributor.
User Note(s)	Should include the type, date and location of contribution, and details about the contributor.
Label	Contribution Description
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:AOContributionDescription [LangAlt <external>]</external>
JSON Specs	contributionDescription [AltLang]

#### 11.1.4. Copyright Notice

Row header	Specification
Name	Copyright Notice
Definition	Contains any necessary copyright notice for claiming the intellectual property for artwork or an object in the image and should identify the current owner of the copyright of this work with associated intellectual property rights.
Help Text	Enter any necessary copyright notice for claiming the intellectual property for artwork or an object in this image
Label	(Artwork or Object detail:) Copyright notice
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:AOCopyrightNotice [Text <external>]</external>
JSON Specs	copyrightNotice [AltLang]

#### 11.1.5. Creator

Row header	Specification
Name	Creator
Definition	Contains the name of the artist who has created artwork or an object in the image. In cases where the artist could or should not be identified the name of a company or organisation may be appropriate.
Help Text	Enter the name of the artist who has created artwork or an object in this image
Label	(Artwork or Object detail:) Creator
Basic Specs	Data type: Text / Cardinality: 0unbounded
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:AOCreator [Seq ProperName <external>]</external>

Row header	Specification
JSON Specs	creatorNames [string//array]

#### 11.1.6. Creator ID

Row header	Specification
Name	Creator ID
Definition	Globally unique identifier for the creator of artwork or object.
Help Text	Enter globally unique identifier(s) for the artist who has created artwork or an object e.g. issued by an online registry of persons or companies. Enter in the same sequence as the creator names.
User Note(s)	Add the IDs in the same sequence as the Creator names
Label	Creator ID
Basic Specs	Data type: URL / Cardinality: 0unbounded
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:AOCreatorId [Seq URL <external>]</external>
JSON Specs	creatorIdentifiers [string/uri/array]

#### 11.1.7. Current Copyright Owner ID

Row header	Specification
Name	Current Copyright Owner ID
Definition	Globally unique identifier for the current owner of the copyright of the artwork or object.
Help Text	Enter a globally unique identifier for the current copyright owner e.g. issued by an online registry of persons or companies.

Row header	Specification
Label	Current Copyright Owner ID
Basic Specs	Data type: URI / Cardinality: 01
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:AOCurrentCopyrightOwnerId [URI <external>]</external>
JSON Specs	currentCopyrightOwnerIdentifier [string/uri/]

#### 11.1.8. Current Copyright Owner Name

Row header	Specification
Name	Current Copyright Owner Name
Definition	Name of the current owner of the copyright of the artwork or object.
Help Text	Enter the name of the current owner of the copyright of the artwork or object.
Label	Current Copyright Owner Name
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:AOCurrentCopyrightOwnerName [Text <external>]</external>
JSON Specs	currentCopyrightOwnerName [string//]

#### 11.1.9. Current Licensor ID

Row header	Specification
Name	Current Licensor ID
Definition	Globally unique identifier for the current licensor of the artwork or object.

Row header	Specification
Help Text	Enter a globally unique identifier for the current licensor e.g. issued by an online registry of persons or companies.
Label	Current Licensor ID
Basic Specs	Data type: URI / Cardinality: 01
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:AOCurrentLicensorId [URI <external>]</external>
JSON Specs	currentLicensorIdentifier [string/uri/]

#### 11.1.10. Current Licensor Name

Row header	Specification
Name	Current Licensor Name
Definition	Name of the current licensor of the artwork or object.
Help Text	Enter the name of the current licensor of the artwork or object.
Label	Current Licensor Name
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:AOCurrentLicensorName [Text <external>]</external>
JSON Specs	currentLicensorName [string//]

#### 11.1.11. Date Created

Row header	Specification
Name	Date Created

Row header	Specification
Definition	Designates the date and optionally the time the artwork or object in the image was created. This relates to artwork or objects with associated intellectual property rights.
Help Text	Enter the date and optionally the time when the artwork or object in this image was created
Label	(Artwork or Object detail:) Date created
Basic Specs	Data type: DateTime (preferred: truncated DateTime) / Cardinality: 01
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:AODateCreated [Date <external>]</external>
JSON Specs	dateCreated [string/date-time/]

#### 11.1.12. Physical Description

Row header	Specification
Name	Physical Description
Definition	A textual description of the physical characteristics of the artwork or object, without reference to the content depicted.
Help Text	Describe the physical characteristics of the artwork or object as free-text, without referring to the subject depicted. Object type, materials-techniques and measurements may be described.
User Note(s)	Object type, materials-techniques and measurements may be described.
Label	Physical Description
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.2 (2014)

Row header	Specification
XMP Specs	Iptc4xmpExt:AOPhysicalDescription [LangAlt <external>]</external>
JSON Specs	physicalDescription [AltLang]

### 11.1.13. Source

Row header	Specification
Name	Source
Definition	The organisation or body holding and registering the artwork or object in the image for inventory purposes.
Help Text	Enter the name of the organisation or body holding and registering the artwork or object in this image for inventory purposes
Label	(Artwork or Object detail:) Source
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:AOSource [Text <external>]</external>
JSON Specs	source [string//]

## 11.1.14. Source Inventory Number

Row header	Specification
Name	Source Inventory Number
Definition	The inventory number issued by the organisation or body holding and registering the artwork or object in the image.
Help Text	Enter the inventory number issued by the organisation or body holding and registering the artwork or object in this image
Label	(Artwork or Object detail:) Source inventory number

Row header	Specification
Basic Specs	Data type: String / Cardinality: 01
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:AOSourceInvNo [Text <external>]</external>
JSON Specs	sourceInventoryNr [string//]

## 11.1.15. Source Inventory URL

Row header	Specification
Name	Source Inventory URL
Definition	URL reference to the metadata record of the inventory maintained by the Source.
Help Text	Enter a reference URL for the metadata record of the inventory maintained by the Source.
Label	Source Inventory URL
Basic Specs	Data type: URL / Cardinality: 01
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:AOSourceInvURL [URL <external>]</external>
JSON Specs	sourceInventoryUrl [string/uri/]

## 11.1.16. Style Period

Specification
Style Period
The style, historical or artistic period, movement, group, or school whose characteristics are represented in the artwork or object.

Row header	Specification
Help Text	Enter the style, historical or artistic period, movement, group, or school whose characteristics are represented in the artwork or object.
User Note(s)	It is advised to take the terms from a Controlled Vocabulary.
Label	Style Period
Basic Specs	Data type: Text / Cardinality: 0unbounded
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:AOStylePeriod [Bag Text <external>]</external>
JSON Specs	stylePeriod [string//array]

### 11.1.17. Title

Row header	Specification
Name	Title
Definition	A reference for the artwork or object in the image.
Help Text	Enter the verbal and human readable name of the artwork or object in this image
Label	(Artwork or Object detail:) Title
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:AOTitle [Lang Alt <external>]</external>
JSON Specs	title [AltLang]

## 11.2. CV-Term structure

Row header	Specification
Name	CV-Term structure
Definition	A structure providing details of a Controlled Vocabulary term the image is about
Basic Specs	Data type: Structure / Cardinality: N/A
History Note(s)	Added by version 1.2 (2014)
JSON Specs	CvTerm [object]

### 11.2.1. CV-Term CV ID

Row header	Specification
Name	CV-Term CV ID
Definition	The globally unique identifier of the Controlled Vocabulary the term is from.
Help Text	Enter the globally unique identifier of the Controlled Vocabulary which the term is from.
Label	CV ID
Basic Specs	Data type: URI / Cardinality: 01
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:CvId [URI <external>]</external>
JSON Specs	cvId [string/uri/]

### 11.2.2. CV-Term ID

Row header	Specification
Name	CV-Term ID
Definition	The globally unique identifier of the term from a Controlled Vocabulary.

Row header	Specification
Help Text	Enter the globally unique identifier of the term from a Controlled Vocabulary
Label	Term ID
Basic Specs	Data type: URI / Cardinality: 1
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:CvTermId [URI <external>]</external>
JSON Specs	cvTermId [string/uri/]

### 11.2.3. CV-Term name

Row header	Specification
Name	CV-Term name
Definition	The natural language name of the term from a Controlled Vocabulary.
Help Text	Enter the name of the term from a Controlled Vocabulary as free-text
Label	Name
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:CvTermName [LangAlt <external>]</external>
JSON Specs	cvTermName [AltLang]

## 11.2.4. Refined 'about' Relationship of the CV-Term

Row header	Specification
Name	Refined 'about' Relationship of the CV-Term
Definition	The refined 'about' relationship of the term with the content.

Row header	Specification
Help Text	Optionally enter a refinement of the 'about' relationship of the term with the content of the image. This must be a globally unique identifier from a Controlled Vocabulary.
User Note(s)	May be used to refine the generic about relationship.
Label	Refined Aboutness
Basic Specs	Data type: URI / Cardinality: 01
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:CvTermRefinedAbout [URI <external>]</external>
JSON Specs	cvTermRefinedAbout [string/uri/]

## 11.3. Embedded Encoded Rights Expression (EERE) structure

Row header	Specification
Name	Embedded Encoded Rights Expression (EERE) structure
Definition	A structure providing details of an embedded encoded rights expression
Basic Specs	Data type: Structure / Cardinality: N/A
History Note(s)	Added by version 1.2 (2014)
JSON Specs	EmbdEncRightsExpr [object]

### 11.3.1. Encoded Rights Expression

Row header	Specification
Name	Encoded Rights Expression
Definition	An embedded rights expression using a rights expression language which is encoded as a string.

Row header	Specification
Help Text	Shows an embedded rights expression using a rights expression language which is encoded as a string.
Label	Rights expression
Basic Specs	Data type: Text / Cardinality: 1
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:EncRightsExpr [Text <internal>]</internal>
JSON Specs	rightsExprLangId [string/uri/-MANDATORY]

## 11.3.2. Encoding type

Row header	Specification
Name	Encoding type
Definition	The encoding type of the rights expression, identified by an IANA Media Type.
Help Text	Shows the encoding type of the rights expression by an IANA Media Type.
Label	Encoding type
Basic Specs	Data type: Text / Cardinality: 01
CV Note(s)	IANA Media Type (https://www.iana.org/assignments/media-types/media-types.xhtml) may be applied, if used
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:RightsExprEncType [MIMEtype <internal>]</internal>
JSON Specs	rightsExprEncType [string//-MANDATORY]

## 11.3.3. Rights Expression Language ID

Row header	Specification
Name	Rights Expression Language ID
Definition	An identifier of the rights expression language used by the rights expression.
Help Text	Shows the identifier of the used Rights Expression Language.
Label	Rights expression language ID
Basic Specs	Data type: URI / Cardinality: 01
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:RightsExprLangId [URI <internal>]</internal>
JSON Specs	encRightsExpr [string//-MANDATORY]

## 11.4. Entity or Concept structure

Row header	Specification
Name	Entity or Concept structure
Definition	A structured datatype for a named entity or concept.
Basic Specs	Data type: Structure / Cardinality: N/A
History Note(s)	Added by version 1.3 (2016)
JSON Specs	Entity [object]

### 11.4.1. Identifier

Row header	Specification
Name	Identifier
Definition	Globally unique identifier of the entity/concept
Label	Identifier

Row header	Specification
Basic Specs	Data type: URI / Cardinality: 1unbounded
History Note(s)	Added by version 1.3 (2016)
XMP Specs	xmp:Identifier [Bag Text <external>]</external>
JSON Specs	identifiers [string/uri/array]

### 11.4.2. Name

Row header	Specification
Name	Name
Definition	Full name of the entity/concept
Label	Name
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.3 (2016)
XMP Specs	Iptc4xmpExt:Name [Lang Alt <external>]</external>
JSON Specs	name [AltLang]

# 11.5. Image Region structure

Row header	Specification
Name	Image Region structure
Definition	A structured data type for defining the boundaries of an image region, some characteristics of the image region and holding metadata properties related to the region.
User Note(s)	Metadata properties related to the region are typically ones used also for an image as a whole.

Row header	Specification
Basic Specs	Data type: Structure / Cardinality: N/A
History Note(s)	Added by version 1.5 (2019.1)
JSON Specs	ImageRegion [object]

## 11.5.1. Region Boundary

Row header	Specification
Name	Region Boundary
Definition	Sets the boundaries of a region inside an image.
User Note(s)	As option only a single point may be defined to express special characteristics of this point, or a line may be defined to express a divide inside the image.
Label	Region Boundary
Basic Specs	Data type: Region Boundary structure / Cardinality: 1
History Note(s)	Added by version 1.5 (2019.1)
XMP Specs	Iptc4xmpExt:RegionBoundary [Image Region Boundary Structure <external>]</external>
JSON Specs	regionBoundary [RegionBoundary//]

## 11.5.2. Region Identifier

tifiers of an image.

Row header	Specification
Basic Specs	Data type: String / Cardinality: 01
History Note(s)	Added by version 1.5 (2019.1)
XMP Specs	Iptc4xmpExt:rId [Text <external>]</external>
JSON Specs	rId [string//]

## 11.5.3. Region Name

Row header	Specification
Name	Region Name
Definition	Free-text name of the region. Should be unique among all Region Names of an image.
Label	Name
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.5 (2019.1)
XMP Specs	Iptc4xmpExt:Name [Lang Alt <external>]</external>
JSON Specs	name [AltLang]

## 11.5.4. Region Content Type

Row header	Specification
Name	Region Content Type
Definition	The semantic type of what is shown inside the region. The value SHOULD be taken from a Controlled Vocabulary.
Label	Content Type
Basic Specs	Data type: Entity or Concept structure / Cardinality: 0unbounded

Row header	Specification
CV Note(s)	Recommended: <u>IPTC Region Content Type NewsCodes</u> (http://cv.iptc.org/newscodes/imageregiontype/)
History Note(s)	Added by version 1.5 (2019.1)
XMP Specs	Iptc4xmpExt:rCtype [Bag Entity Or Concept structure <external>]</external>
JSON Specs	rCtype [Entity//array]

## 11.5.5. Region Role

Row header	Specification
Name	Region Role
Definition	Role of this region among all regions of this image or of other images. The value SHOULD be taken from a Controlled Vocabulary.
Label	Role
Basic Specs	Data type: Entity or Concept structure / Cardinality: 0unbounded
CV Note(s)	Recommended: <u>IPTC Image Region Role NewsCodes</u> (http://cv.iptc.org/newscodes/imageregionrole/)
History Note(s)	Added by version 1.5 (2019.1)
XMP Specs	Iptc4xmpExt:rRole [Bag Entity Or Concept structure <external>]</external>
JSON Specs	rRole [Entity//array]

#### 11.5.6. Other Metadata

Row header	Specification
Name	Other Metadata

Row header	Specification
Definition	The Image Region Structure includes optionally any metadata property which is related to the region.
User Note(s)	Metadata properties related to the region are typically ones used also for an image as a whole.
Label	{as defined for the used metadata property}
Basic Specs	Data type: not defined / Cardinality: 0unbounded
History Note(s)	Added by version 1.5 (2019.1)
XMP Specs	any:any [ <>]
JSON Specs	any [any//]

# 11.6. Region Boundary structure

Row header	Specification
Name	Region Boundary structure
Definition	The properties of the Image Region Boundary structure set the boundary of a region inside an image. As option only a single point may be defined to express special characteristics of this point, or a line may be defined to express a divide inside the image.
User Note(s)	<ul> <li>Three options for the shape of the boundary are available: the boundary is a rectangle or a circle or a polygon. For each shape a set of properties is required, properties not listed in this set must not be used.</li> <li>Rectangle: the x- and y-axis coordinates of the upper left corner of the rectangle and the width and height of the rectangle relative to this upper left corner.</li> <li>Circle: the x- and y-axis coordinates of the centre of the circle and its radius measured along the x-axis.</li> </ul>

#### Row header

#### **Specification**

 Polygon: the x- and y-axis coordinates of the vertex/the vertices of the polygon.

The Shape property defines which of the three shapes is defined and an the Measuring Unit property defines the units used for measuring all distances.

The **coordinates of points** used as reference of a shape of the region boundary and values defining the size of the shape are expressed by scalar values along the x-axis or the y-axis of a rectangular coordinates system. The rules for this system are:

- Point Zero of the coordinates follows the Image Data Arrangement of the pixels of a digital image as defined by Exif (CIPA DC-008-2019):
  - The top row of the pixels is the first row, the leftmost pixel of a row is the first pixel.
  - The counting of "top row" and "leftmost" applies to pixel data as set when the pixels were (re-)organized by the camera or by software. The orientation (rotation, flipping) of the image defined by a metadata value MUST NOT be applied.
  - Point Zero of the coordinates is the first, leftmost pixel in the top row.
  - The x-axis is from Point Zero along the top row of the image. The range of coordinate values is from 0 to any positive value not exceeding the size of the image.
  - The y-axis is from Point Zero along the first pixels of the rows in the image. The range of coordinate values is from 0 to any positive value not exceeding the size of the image.
- Coordinates of a point in the image MUST have an x-axis and a y-axis value.
- Values defining the size of the shape are measured along the x-axis and the y-axis.
- The unit of a value is defined by the Region Boundary Measuring Unit property, its value MUST be from the enumeration defined for the Boundary Measuring Unit property.

Row header	Specification
Basic Specs	Data type: Structure / Cardinality: N/A
History Note(s)	Added by version 1.5 (2019.1)
JSON Specs	RegionBoundary [object]

## 11.6.1. Boundary Shape

Row header	Specification
Name	Boundary Shape
Definition	The shape of the boundary of a region inside an image. The value MUST be taken from the enumeration <i>rectangle</i> , <i>circle</i> , <i>polygon</i> .
User Note(s)	<ul> <li>rectangle = a rectangle as shape of the boundary, the shape of a square is included</li> <li>circle = a circle as the shape of the boundary</li> <li>polygon = any shape with edges, except a rectangle, including a single point (using 1 vertex) and a line (using 2 vertices). The edges between a vertex and the next one in the sequence set the shape, the last edge is the one from the last vertex in the sequence to the first vertex in the sequence.</li> </ul>
Label	Shape
Basic Specs	Data type: String / Cardinality: 1
History Note(s)	Added by version 1.5 (2019.1)
XMP Specs	Iptc4xmpExt:rbShape [Closed Choice Text <>]
JSON Specs	rbShape [string//-MANDATORY]

## 11.6.2. Boundary Measuring Unit

Row header	Specification
Name	Boundary Measuring Unit
Definition	Unit used for measuring dimensions of the boundary of a region. The value MUST be taken from the enumeration <i>pixel</i> , <i>relative</i>
User Note(s)	<ul> <li>The applicable units are:</li> <li>pixel = A pixel of a digital image setting an absolute value</li> <li>relative = Relative part of the size of an image along the x- or the y-axis.</li> <li>The range of the value is from 0 to 1 representing the proportion of the full size of an image along the x-axis or the y-axis.</li> </ul>
Implementation Note(s)	If the unit "pixel" is used: in case of rescaling the image the coordinate values and the radius of a circle must be rescaled too.
Label	Measuring Unit
Basic Specs	Data type: String / Cardinality: 1
History Note(s)	Added by version 1.5 (2019.1)
XMP Specs	Iptc4xmpExt:rbUnit [Closed Choice Text <>]
JSON Specs	rbUnit [string//-MANDATORY]

### 11.6.3. X-Axis Coordinate

Row header	Specification
Name	X-Axis Coordinate
Definition	Distance along the x-axis of the coordinate system related to its Point Zero
User Note(s)	Used only by the shapes <i>rectangle</i> and <i>circle</i> . See also the User Notes of the Region Boundary structure

Row header	Specification
Label	X-Axis Coordinate
Basic Specs	Data type: Decimal / Cardinality: 01
History Note(s)	Added by version 1.5 (2019.1)
XMP Specs	Iptc4xmpExt:rbX [Real <>]
JSON Specs	rbX [number//]

### 11.6.4. Y-Axis Coordinate

Row header	Specification
Name	Y-Axis Coordinate
Definition	Distance along the y-axis of the coordinate system related to its Point Zero
User Note(s)	Used only by the shapes <i>rectangle</i> and <i>circle</i> . See also the User Notes of the Region Boundary structure
Label	Y-Axis Coordinate
Basic Specs	Data type: Decimal / Cardinality: 01
History Note(s)	Added by version 1.5 (2019.1)
XMP Specs	Iptc4xmpExt:rbY [Real <>]
JSON Specs	rbY [number//]

## 11.6.5. Rectangle Width

Row header	Specification
Name	Rectangle Width

Row header	Specification
Definition	The size of a rectangular region boundary along the x-axis, its width. The range of a width value is any positive value not exceeding the size of the image along its x-axis.
User Note(s)	Used only by the shape <i>rectangle</i> . See also the User Notes of the Region Boundary structure
Label	Rectangle Width
Basic Specs	Data type: Decimal / Cardinality: 01
History Note(s)	Added by version 1.5 (2019.1)
XMP Specs	Iptc4xmpExt:rbW [Real <>]
JSON Specs	rbW [number//]

## 11.6.6. Rectangle Height

Row header	Specification
Name	Rectangle Height
Definition	The size of a rectangular region boundary along the y-axis, its height. The range of a height value is any positive value not exceeding the size of the image along its y-axis.
User Note(s)	Used only by the shape <i>rectangle</i> . See also the User Notes of the Region Boundary structure
Label	Rectangle Height
Basic Specs	Data type: Decimal / Cardinality: 01
History Note(s)	Added by version 1.5 (2019.1)
XMP Specs	Iptc4xmpExt:rbH [Real <>]

Row header	Specification
JSON Specs	rbH [number//]

### 11.6.7. Circle Radius

Row header	Specification
Name	Circle Radius
Definition	The radius of a circular region boundary from the centre of the circle measured along the x-axis. The range of a radius value is any positive value not exceeding the size of the image.
User Note(s)	Used only by the shape <i>circle</i> . See also the User Notes of the Region Boundary structure
Label	Circle Radius
Basic Specs	Data type: Decimal / Cardinality: 01
History Note(s)	Added by version 1.5 (2019.1)
XMP Specs	Iptc4xmpExt:rbRx [Real ⟨>]
JSON Specs	rbRx [number//]

## 11.6.8. Polygon Vertices

Row header	Specification
Name	Polygon Vertices
Definition	Sequence of vertices of the polygon
User Note(s)	Used only by the shape <i>polygon</i> . See also the User Notes of the Region Boundary structure
Label	Polygon Vertices

Row header	Specification
Basic Specs	Data type: Region Boundary Point structure / Cardinality: 0unbounded
History Note(s)	Added by version 1.5 (2019.1)
XMP Specs	Iptc4xmpExt:rbVertices [Seq Region Boundary Point structure <>]
JSON Specs	rbVertices [RegionBoundaryPoint//array]

# 11.7. Region Boundary Point structure

Row header	Specification
Name	Region Boundary Point structure
Definition	Sets a point in an image by its coordinates.
User Note(s)	This structure must be used in a context defining the measuring unit of dimensions along the x- and y-axes.
Basic Specs	Data type: Structure / Cardinality: N/A
History Note(s)	Added by version 1.5 (2019.1)
JSON Specs	RegionBoundaryPoint [object]

### 11.7.1. X-Axis Coordinate

Row header	Specification
Name	X-Axis Coordinate
Definition	Distance along the x-axis of the coordinate system related to its Point Zero
Label	X-Axis Coordinate
Basic Specs	Data type: Decimal / Cardinality: 1
History Note(s)	Added by version 1.5 (2019.1)

Row header	Specification
XMP Specs	Iptc4xmpExt:rbX [Real <>]
JSON Specs	rbX [number//-MANDATORY]

#### 11.7.2. Y-Axis Coordinate

Row header	Specification
Name	Y-Axis Coordinate
Definition	Distance along the y-axis of the coordinate system related to its Point Zero
Label	Y-Axis Coordinate
Basic Specs	Data type: Decimal / Cardinality: 1
History Note(s)	Added by version 1.5 (2019.1)
XMP Specs	Iptc4xmpExt:rbY [Real <>]
JSON Specs	rbY [number//-MANDATORY]

## 11.8. Linked Encoded Rights Expression (LERE) structure

Row header	Specification
Name	Linked Encoded Rights Expression (LERE) structure
Definition	A structure providing details of a linked encoded rights expression
Basic Specs	Data type: Structure / Cardinality: N/A
History Note(s)	Added by version 1.2 (2014)
JSON Specs	LinkedEncRightsExpr [object]

### 11.8.1. Encoding type

Row header	Specification	
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Row header	Specification
Name	Encoding type
Definition	The encoding type of the rights expression, identified by an IANA Media Type.
Help Text	Enter the encoding type of the rights expression by using an IANA Media Type.
Label	Encoding type
Basic Specs	Data type: Text / Cardinality: 01
CV Note(s)	IANA Media Type (https://www.iana.org/assignments/media-types/media-types.xhtml) may be applied, if used
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:RightsExprEncType [MIMEtype <external>]</external>
JSON Specs	rightsExprLangId [string/uri/-MANDATORY]

## 11.8.2. Link to Encoded Rights Expression

Row header	Specification
Name	Link to Encoded Rights Expression
Definition	The link to a rights expression using a rights expression language.
Help Text	Enter the link to a web resource representing an encoded rights expression.
Label	Link to Rights Expression
Basic Specs	Data type: URL / Cardinality: 1
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:LinkedRightsExpr [URL <external>]</external>
JSON Specs	rightsExprEncType [string//-MANDATORY]

## 11.8.3. Rights Expression Language ID

Row header	Specification
Name	Rights Expression Language ID
Definition	The identifer of the rights expression language used by the rights expression.
Help Text	Enter the identifier of the used Rights Expression Language.
Label	Rights Expression Language ID
Basic Specs	Data type: URI / Cardinality: 01
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:RightsExprLangId [URI <external>]</external>
JSON Specs	linkedRightsExpr [string/uri/-MANDATORY]

## 11.9. Location structure

Row header	Specification
Name	Location structure
Definition	A structured datatype for details of a location. It includes a Sublocation, a City, a Province or State, a Country (Name and ISO-Code) and a World Region.
Basic Specs	Data type: Structure / Cardinality: N/A
History Note(s)	Added by version 1.0 (2008)
JSON Specs	Location [object]

### 11.9.1. City

Row header	Specification
Name	City

Row header	Specification
Definition	Name of the city of a location. This element is at the fourth level of a top-down geographical hierarchy.
Help Text	Enter the name of the City
Label	(Location detail:) City
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:City [Text <external>]</external>
JSON Specs	city [AltLang]

## 11.9.2. Country ISO-Code

Row header	Specification
Name	Country ISO-Code
Definition	The ISO code of a country of a location. This element is at the second level of a top-down geographical hierarchy.
Help Text	Enter the 2 or 3 letter ISO 3166 Country Code of the Country
Label	(Location detail:) Country ISO-Code
Basic Specs	Data type: CV-code / Cardinality: 01
CV Note(s)	ISO 3166-1 - 2 or 3 characters (see Definition)
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:CountryCode [closed choice Text <external>]</external>

Row header	Specification
XMP Implementation Note	Note 1: an implementer would have to derive from the length of the value string whether this is the country code from the two or three letter scheme as no explicit indication can be provided.
JSON Specs	countryCode [string//]

## 11.9.3. Country Name

Row header	Specification
Name	Country Name
Definition	The name of a country of a location. This element is at the second level of a top-down geographical hierarchy.
Help Text	Enter the name of the Country
Label	(Location detail:) Country Name
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:CountryName [Text <external>]</external>
JSON Specs	countryName [AltLang]

### 11.9.4. GPS-Altitude

Row header	Specification
Name	GPS-Altitude
Definition	Altitude in meters of a WGS84 based position of this Location
Label	(Location detail:) GPS-Altitude
Basic Specs	Data type: Decimal / Cardinality: 01

Row header	Specification
History Note(s)	Added by version 1.3 (2016)
XMP Specs	exif:GPSAltitude [Exif Rational <external>]</external>
JSON Specs	gpsAltitude [number//]

### 11.9.5. GPS-Lattitude

Row header	Specification
Name	GPS-Lattitude
Definition	Lattitude of a WGS84 based position of this Location
Label	(Location detail:) GPS-Lattitude
Basic Specs	Data type: Decimal / Cardinality: 01
History Note(s)	Added by version 1.3 (2016)
XMP Specs	exif:GPSLatitude [Exif GPSCoordinate <external>]</external>
JSON Specs	gpsLatitude [number//]

## 11.9.6. GPS-Longitude

Row header	Specification
Name	GPS-Longitude
Definition	Longitude of a WGS84 based position of this Location
Label	(Location detail:) GPS-Longitude
Basic Specs	Data type: Decimal / Cardinality: 01
History Note(s)	Added by version 1.3 (2016)
XMP Specs	exif:GPSLongitude [Exif GPSCoordinate <external>]</external>

Row header	Specification
JSON Specs	gpsLongitude [number//]

### 11.9.7. Location Identifier

Row header	Specification
Name	Location Identifier
Definition	Globally unique identifier of the location
Help Text	Enter a globally unique identifier of the location shown.
Label	Location ID
Basic Specs	Data type: URI / Cardinality: 0unbounded
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:LocationId [URI <external>]</external>
JSON Specs	identifiers [string/uri/array]

### 11.9.8. Location Name

Row header	Specification
Name	Location Name
Definition	Full name of the location
Label	(Location detail:) Location Name
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.3 (2016)
XMP Specs	Iptc4xmpExt:LocationName [LangAlt <external>]</external>
JSON Specs	name [AltLang]

### 11.9.9. Province or State

Row header	Specification
Name	Province or State
Definition	The name of a subregion of a country - a province or state - of a location. This element is at the third level of a top-down geographical hierarchy.
Help Text	Enter the name of the Province or State
Label	(Location detail:) Province/State
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:ProvinceState [Text <external>]</external>
JSON Specs	provinceState [AltLang]

### 11.9.10. Sublocation

Row header	Specification
Name	Sublocation
Definition	Name of a sublocation. This sublocation name could either be the name of a sublocation to a city or the name of a well known location or (natural) monument outside a city. In the sense of a sublocation to a city this element is at the fifth level of a top-down geographical hierarchy.
Help Text	Enter the name of the Sublocation
Label	(Location detail:) Sublocation
<b>Basic Specs</b>	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:Sublocation [Text <external>]</external>

Row header	Specification
JSON Specs	sublocation [AltLang]

### 11.9.11. World Region

Row header	Specification
Name	World Region
Definition	The name of a world region of a location. This element is at the first (topI) level of a top-down geographical hierarchy.
Help Text	Enter the name of the World Region
Label	(Location detail:) World Region
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:WorldRegion [Text <external>]</external>
JSON Specs	worldRegion [AltLang]

## 11.10. Person structure

Row header	Specification
Name	Person structure
Definition	A structure of details of a single person in the image.
Basic Specs	Data type: Structure / Cardinality: N/A
History Note(s)	Added by version 1.2 (2014)
JSON Specs	PersonWDetails [object]

#### 11.10.1. Characteristics

Row header	Specification
Name	Characteristics
Definition	A property or trait of the person
Help Text	Enter a property or trait of the person by selecting a term from a Controlled Vocabulary.
Label	Characteristics
Basic Specs	Data type: CV-Term structure / Cardinality: 0unbounded
CV Note(s)	YES
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:PersonCharacteristic [Bag CV-Term structure <external>]</external>
JSON Specs	characteristics [CvTerm//array]

## 11.10.2. Description

Row header	Specification
Name	Description
Definition	A textual description of the person
Help Text	Describes the person, any actions taken, emotional expressions shown, etc. as free-text.
User Note(s)	For example, you may include actions taken, emotional expressions shown and more.
Label	Description
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.2 (2014)

Row header	Specification
XMP Specs	Iptc4xmpExt:PersonDescription [LangAlt <external>]</external>
JSON Specs	description [AltLang]

### 11.10.3. Identifier

Row header	Specification
Name	Identifier
Definition	Globally Unique Identifier of the person
Help Text	Enter Globally Unique Identifier(s) for the person, such as those from WikiData or Freebase.
User Note(s)	This should be an identifier as it is used with semantic web technology.
Label	Identifier
Basic Specs	Data type: URI / Cardinality: 0unbounded
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:PersonId [Bag URI <external>]</external>
JSON Specs	identifiers [string/uri/array]

### 11.10.4. Name

Row header	Specification
Name	Name
Definition	Name of the person
Help Text	Enter the name of the person.
Label	Name
	'

Row header	Specification
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:PersonName [LangAlt <external>]</external>
JSON Specs	name [AltLang]

## 11.11. Product structure

Row header	Specification
Name	Product structure
Definition	A structure providing details about a product
Basic Specs	Data type: Structure / Cardinality: N/A
History Note(s)	Added by version 1.2 (2014)
JSON Specs	ProductWGtin [object]

## 11.11.1. Description

Row header	Specification
Name	Description
Definition	A textual description of the product.
Help Text	Enter a description of the product as free-text.
Label	Description
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:ProductDescription [LangAlt <external>]</external>

Row header	Specification
JSON Specs	description [AltLang]

### 11.11.2. GTIN

Row header	Specification
Name	GTIN
Definition	A 14 digit GTIN (Global Trade Item Number) of the product (GTIN-8 to GTIN-14 codes are used).
Help Text	Enter the 14 digit Global Trade Item Number (GTIN) of the product as defined by GS1
Label	GTIN
Basic Specs	Data type: Text / Cardinality: 01
History Note(s)	Added by version 1.2 (2014)
XMP Specs	Iptc4xmpExt:ProductGTIN [Text <external>]</external>
JSON Specs	gtin [string//-MANDATORY]

### 11.11.3. Name

Specification
Name
Name of the product.
Enter the name of the product.
Name
Data type: Text / Cardinality: 01
Added by version 1.2 (2014)

Row header	Specification
XMP Specs	Iptc4xmpExt:ProductName [LangAlt <external>]</external>
JSON Specs	name [AltLang]

# 11.12. Registry Entry structure

Row header	Specification
Name	Registry Entry structure
Definition	A structured datatype for an entry in a registry, includes the id for the image issued by the registry and the registry's id.
Basic Specs	Data type: Structure / Cardinality: N/A
History Note(s)	Added by version 1.0 (2008)
JSON Specs	RegistryEntry [object]

### 11.12.1. Item Id

Row header	Specification
Name	Item Id
Definition	A unique identifier created by a registry and applied by the creator of the digital image. This value shall not be changed after being applied. This identifier is linked to a corresponding Registry Organisation Identifier.
Help Text	Enter the unique identifier created by a registry and applied by the creator of the digital image. This value shall not be changed after being applied.
User Note(s)	This identifier may be globally unique by itself, but it must be unique for the issuing registry.
Label	(Registry Entry detail:) Item Identifier
Basic Specs	Data type: Text / Cardinality: 1

Row header	Specification
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:RegItemId [Text <external>]</external>
JSON Specs	assetIdentifier [string/uri/-MANDATORY]

## 11.12.2. Organisation Id

Row header	Specification
Name	Organisation Id
Definition	An identifier for the registry which issued the corresponding Registry Image Id.
Help Text	Enter the identifier for the registry which issued the corresponding Registry Image ID
Label	(Registry Entry detail:) Organisation Identifier
Basic Specs	Data type: Text / Cardinality: 1
History Note(s)	Added by version 1.0 (2008)
XMP Specs	Iptc4xmpExt:RegOrgId [Text <external>]</external>
JSON Specs	registryIdentifier [string/uri/-MANDATORY]

#### 11.12.3. Role

Row header	Specification
Name	Role
Definition	An identifier of the reason and/or purpose for this Registry Entry.
Label	(Registry Entry detail:) Role
Basic Specs	Data type: URI / Cardinality: 01

Row header	Specification
History Note(s)	Added by version 1.3 (2016)
XMP Specs	Iptc4xmpExt:RegEntryRole [Text <external>]</external>
JSON Specs	role [string/uri/]

## 11.13. AltLang structure

Row header	Specification
Name	AltLang structure
Definition	
Label	Structure
Basic Specs	Data type: Structure / Cardinality: N/A
JSON Specs	AltLang object [object]

### 11.13.1. AltLang property

Row header	Specification
Name	AltLang property
Definition	
Basic Specs	Data type: / Cardinality:
XMP Specs	:[ <>]
JSON Specs	pattern property: "^(([A-Za-z]{2,3}(-([A-Za-z]{3})(-[A-Za-z]{3})){0,2}?)
[A-Za-z]{4}	[A-Za-z]{5,8})(-([A-Za-z]{4}))?(-([A-Za-z]{2}
[0-9]{3}))?(-([A-Za-z0- 9]{5,8}	[0-9][A-Za-z0-9]{3}))*(-([0-9A-WY-Za-wy-z](-[A-Za-z0-9]{2,8})))*(-(x(-[A-Za-z0-9]{1,8})))?)

# 12. Non-normative Information

None

# References

# 13. Other standards

Name	Source		
Adobe XMP	Adobe Extensible Metadata Platform (XMP), see http://www.adobe.com/products/xmp/ Latest specification as of August 2016 These documents include the specification of the metadata schemas Dublin Core, XMP Rights management and Photoshop which are referenced in this specification.		
DC	Dublin Core metadata schema: http://www.dublincore.org/		
IPTC IIM	IPTC Information Interchange Model: http://www.iptc.org/IIM/ and http://www.iptc.org/std/IIM/4.2/specification/IIMV4.2.pdf		
IPTC NewsML-G2	IPTC NewsML-G2 standard, an XML-based news exchange format: http://www.newsml-g2.org		
ISO XMP	XMP Part 1 as ISO standard 16684-1. Latest version: Second Edition of 2019-04		
JSON	The JavaScript Object Notation (JSON) Data Interchange Format, RFC 7159: https://tools.ietf.org/html/rfc7159		
PhMdWP2007	IPTC Photo Metadata White Paper 2007: http://www.iptc.org/goto?phmdwp2007		
PLUS	Picture Licensing Universal System – PLUS: http://www.useplus.org PLUS specifications: http://www.useplus.com/useplus/standards.asp		
MetadataWG	Guidelines for Handling Image Metadata v 2.0. This document was available at this URL until October 2018: http://www.metadataworkinggroup.com/specs/		
W3C-SKOS	SKOS Simple Knowledge Organization System  Overview: http://www.w3.org/2004/02/skos/  Reference: http://www.w3.org/TR/skos-reference/		

# Fixed Errata

List of errata in the specification which were fixed after the initial release of version 2019.1.

## 14. List of fixed errata

Date	What showed an error	Error	How the error was
			fixed