



**IPTC Standard**

**Photo Metadata**  
**(October 2014)**

**IPTC Core**  
**Specification Version 1.2**

**IPTC Extension**  
**Specification Version 1.2**

Document Revision 3



## Copyrights

Copyright © 2014 by IPTC, the International Press Telecommunications Council. All Rights Reserved.

The IPTC Photo Metadata Standard document is published under the Creative Commons Attribution 4.0 license - see the full license agreement at <http://creativecommons.org/licenses/by/4.0/>.

By obtaining, using and/or copying this document, you (the licensee) agree that you have read, understood, and will comply with the terms and conditions of the license.

This project intends to use materials that are either in the public domain or are available by the permission for their respective copyright holders. Permissions of copyright holder will be obtained prior to use of protected material. All materials of this IPTC standard covered by copyright shall be licensable at no charge.

## Acknowledgments

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

The effort to develop and maintain the IPTC Photo Metadata schemas was lead by Michael Steidl (IPTC) and these persons contributed (ordered by surname):

Thierry Berger (WAN-Ifra), Dave Compton (Thomson Reuters), Karl Csoknyay (Keystone Switzerland), Annette Feldman (AP), Jan Leidicke (BVPA), Harald Löffler<sup>\*)</sup> (Ifra), Cindy Lewis (PLUS), Andrea de Polo<sup>\*)</sup> (CEPIC/Alinari), David Riecks (PLUS), Sarah Saunders (BAPLA/CEPIC), Jeff Sedlik (PLUS), Klaus Sprick (IPTC), Staffan Teste (CEPIC), Andy Williams<sup>\*)</sup> (Ifra), Guowei Wu (Xinhua)

<sup>\*)</sup> Delegate is no longer with the member company in 2014.

and these invited experts:

Chi Zhang, Pengzhou Zhang and Min Wang (invited by Xinhua), Greg Reser (VRA)



## About the Standard

### IPTC Core Specification Version History

| Version | Issue Date | Approved by              | Remarks |
|---------|------------|--------------------------|---------|
| 1.0     | 2004-10-08 | IPTC Standards Committee |         |
| 1.1     | 2008-07-02 | IPTC Standards Committee |         |
| 1.2     | 2014-06-18 | IPTC Standards Committee |         |

### IPTC Extension Specification Version History

| Version | Issue Date | Approved by              | Remarks |
|---------|------------|--------------------------|---------|
| 1.0     | 2008-07-02 | IPTC Standards Committee |         |
| 1.1     | 2009-06-17 | IPTC Standards Committee |         |
| 1.2     | 2014-10-22 | IPTC Standards Committee |         |

### Document Revision History

| Revision | Issue Date | Author/revised by              | Remarks   |
|----------|------------|--------------------------------|---|
| 2        | 2014-11-28 | Photo Metadata WG/<br>M Steidl | <u>GTIN {Product detail}</u> : definition updated   |
| 3        | 2015-01-23 | Photo Metadata WG/<br>M Steidl | Fixed errata:<br><u>CV-Term About Image</u> : XMP Property Id aboutCVterm → AboutCvTerm<br><u>Encoding type {LERE details}</u> : basic data type URI → Text<br><u>Linked Encoded Rights Expression</u> : missing cardinality added<br><u>Location Identifier {Location details}</u> : XMP Value Type URI → <u>Bag</u> URI<br><u>Identifier {Person details}</u> : XMP Value Type URI → <u>Bag</u> URI |

## About this Document

- This document specifies metadata properties intended to be used primarily, but not exclusively with photos.
- 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 IPTC-PhotoMetadata-201410 is available at

<http://www.iptc.org/std/photometadata/specification>

All related IPTC documentation like user guidelines will be available at

<http://www.iptc.org/std/photometadata/documentation>

Public comments should be sent to this forum and mailing list at:

<https://groups.yahoo.com/neo/groups/iptc-photometadata/info>

A page with all errata not covered by the latest version of the Photo Metadata specifications (October 2014, document revision 1) is available at:

<http://www.iptc.org/std/photometadata/specification/PhotoMetadataErrata.html>



## Table of Contents

|  |    |
|--|----|
| Introduction to IPTC Photo Metadata .....                | 9  |
| Overview .....   | 9  |
| Technical Metadata .....                                 | 9  |
| History.....   | 9  |
| Photo Metadata specification notation .....              | 11 |
| The specification template .....                         | 11 |
| Generic Specification Notes.....                         | 12 |
| The terms Metadata Property and Metadata Structure ..... | 12 |
| (legacy) appended to a property name .....               | 12 |
| (DEPRECATED) appended to a property name .....           | 12 |
| Saving metadata values to files .....                    | 12 |
| IPTC Core schema 1.2 specifications .....                | 13 |
| Names and Identifiers.....                               | 13 |
| Metadata Properties.....                                 | 13 |
| City (legacy).....                                       | 13 |
| Country (legacy) .....                                   | 13 |
| Country Code (legacy).....                               | 14 |
| Description .....  | 15 |
| Headline .....   | 15 |
| Intellectual Genre .....                                 | 15 |
| Keywords.....  | 16 |
| Province or State (legacy) .....                         | 16 |
| Scene Code.....  | 17 |
| Subject Code .....                                       | 17 |
| Sublocation (legacy).....                                | 18 |
| Date Created .....                                       | 18 |
| Description Writer .....                                 | 19 |
| Instructions .....                                       | 19 |
| Job Id .....   | 20 |
| Title .....  | 20 |
| Copyright Notice .....                                   | 21 |
| Creator .....  | 21 |
| Creator's Contact Info .....                             | 22 |
| Creator's jobtitle .....                                 | 22 |
| Credit Line .....  | 23 |

|   |    |
|---|----|
| Rights Usage Terms.....   | 23 |
| Source .....  | 24 |
| Metadata Structure: Contact Information Details.....                    | 24 |
| Contact Information Details structure {data type}.....                  | 24 |
| Address {contact info detail}.....                                      | 25 |
| City {contact info detail} .....  | 25 |
| Country {contact info detail}.....                                      | 26 |
| Email address(es) {contact info detail} .....                           | 26 |
| Phone number(s) {contact info detail}.....                              | 27 |
| Postal Code {contact info detail}.....                                  | 27 |
| State/Province {contact info detail}.....                               | 28 |
| Web URL(s) {contact info detail}.....                                   | 28 |
| “Deprecated” IIM metadata elements .....                                | 29 |
| Synchronising IIM elements with existing XMP properties .....           | 30 |
| Guideline for mapping Category Codes to Subject NewsCodes .....         | 31 |
| IPTC Extension schema 1.2 specifications .....                          | 33 |
| Names and Identifiers.....  | 33 |
| Metadata Properties.....  | 33 |
| Additional Model Information .....                                      | 33 |
| Artwork or Object in the Image .....                                    | 33 |
| Code of Organisation Featured in the Image.....                         | 34 |
| CV-Term About Image.....  | 34 |
| Controlled Vocabulary Term (DEPRECATED – use CV-Term About Image) ..... | 35 |
| Location Shown in the Image.....  | 35 |
| Model Age.....  | 35 |
| Name of Organisation Featured in the Image .....                        | 36 |
| Person Shown in the Image .....   | 36 |
| Person Shown in the Image with Details .....                            | 37 |
| Product Shown in the image.....   | 37 |
| Digital Image GUID.....   | 37 |
| Digital Source File Type (DEPRECATED – use Digital Source Type).....    | 38 |
| Digital Source Type .....   | 38 |
| Event .....   | 39 |
| Image Registry Entry .....  | 39 |
| Image Supplier .....  | 40 |
| Image Supplier Image ID .....   | 40 |
| IPTC Metadata Last Edited (Legacy).....                                 | 41 |
| Location Created .....  | 41 |
| Max Avail Height .....  | 41 |

|  |    |
|--|----|
| Max Avail Width.....   | 42 |
| PLUS Version .....   | 42 |
| Copyright Owner.....   | 43 |
| Embedded Encoded Rights Expression .....                                     | 43 |
| Linked Encoded Rights Expression .....                                       | 44 |
| Image Creator .....  | 44 |
| Licensor .....   | 44 |
| Minor Model Age Disclosure.....  | 45 |
| Model Release ID .....   | 45 |
| Model Release Status.....  | 46 |
| Property Release ID.....   | 46 |
| Property Release Status .....  | 46 |
| Metadata Structure: Artwork or Object in the Image Details .....             | 47 |
| Artwork or Object in the Image Details structure {data type}.....            | 47 |
| Copyright Notice {Artwork or Object detail}.....                             | 47 |
| Current Copyright Owner Name {Artwork or Object detail} .....                | 48 |
| Current Copyright Owner ID {Artwork or Object detail}.....                   | 48 |
| Current Licensor Name {Artwork or Object detail}.....                        | 48 |
| Current Licensor ID {Artwork or Object detail}.....                          | 49 |
| Creator {Artwork or Object detail}.....                                      | 49 |
| Creator ID {Artwork or Object detail} .....                                  | 49 |
| Date Created {Artwork or Object detail} .....                                | 50 |
| Circa Date Created {Artwork or Object detail}.....                           | 50 |
| Style Period {Artwork or Object detail}.....                                 | 50 |
| Source {Artwork or Object detail}.....                                       | 51 |
| Source Inventory Number {Artwork or Object detail}.....                      | 51 |
| Source Inventory URL {Artwork or Object detail}.....                         | 52 |
| Content Description {Artwork or Object detail} .....                         | 52 |
| Contribution Description {Artwork or Object detail}.....                     | 52 |
| Physical Description {Artwork or Object detail} .....                        | 53 |
| Title {Artwork or Object detail}.....  | 53 |
| Metadata Structure: CV-Term Details .....                                    | 53 |
| CV-Term details structure {data type} .....                                  | 53 |
| CV-Term ID {CV-Term detail} .....  | 54 |
| CV-Term name {CV-Term detail}.....   | 54 |
| CV-Term CV ID {CV-Term detail} .....   | 54 |
| Refined 'about' relationship of the CV-Term {CV-Term detail}.....            | 54 |
| Metadata Structure: Encoded Rights Expression Details .....                  | 55 |
| Embedded Encoded Rights Expression (EERE) details structure {data type}..... | 55 |

|  |    |
|--|----|
| Encoded Rights Expression {EERE detail}.....                               | 55 |
| Encoding type {EERE detail}.....   | 55 |
| Rights Expression Language ID {EERE detail}.....                           | 56 |
| Metadata Structure: Linked Rights Expression Details.....                  | 56 |
| Linked Encoded Rights Expression (LERE) details structure {data type}..... | 56 |
| Link to Encoded Rights Expression {LERE detail} .....                      | 56 |
| Encoding type {LERE detail} .....  | 57 |
| Rights Expression Language ID {LERE detail} .....                          | 57 |
| Metadata Structure: Location Details.....                                  | 58 |
| Location Details structure {data type}.....                                | 58 |
| City {location detail}.....  | 58 |
| Country ISO-Code {location detail}.....                                    | 58 |
| Country Name {location detail} .....                                       | 59 |
| Location Identifier {location detail}.....                                 | 59 |
| Province or State {location detail}.....                                   | 59 |
| Sublocation {location detail}.....   | 60 |
| World Region {location detail}.....  | 60 |
| Metadata Structure: Person Details .....                                   | 61 |
| Person details structure {data type}.....                                  | 61 |
| Identifier {Person detail}.....  | 61 |
| Name {Person detail}.....  | 61 |
| Characteristics {Person detail}.....                                       | 62 |
| Description {Person detail}.....   | 62 |
| Metadata Structure: Product Details.....                                   | 62 |
| Product details structure {data type}.....                                 | 62 |
| Name {Product detail}.....   | 63 |
| GTIN {Product detail}.....   | 63 |
| Description {Product detail}.....  | 63 |
| Metadata Structure: Registry Entry Details.....                            | 64 |
| Registry Entry Details structure {data type} .....                         | 64 |
| Item Id {registry entry detail}.....                                       | 64 |
| Organisation Id {registry entry detail}.....                               | 64 |
| References.....  | 66 |
| Appendix 1: Metadata Property Structure Helper .....                       | 67 |
| Appendix 2: Persistent Technical Photo Metadata – a recommendation.....    | 70 |
| Objectives for Technical Photo Metadata .....                              | 70 |
| Photo Workflows .....  | 70 |
| Recommendations.....   | 73 |



Page left blank intentionally





# Introduction to IPTC Photo Metadata

## 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 that are made for media items of any media-type. Thus they integrate with media-type agnostic digital asset management systems.

The **IPTC Photo Metadata (October 2014)** specification is split into two different schemas:

- The **IPTC Core 1.2** schema which is built on properties from the IPTC “Information Interchange Model” (IIM) standard [IPTC IIM].
- The **IPTC Extension 1.2** schema extends and complements the IPTC Core schema by a 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 schema with refined and specialised metadata, but restricted backward compatibility.

This document provides the latest specifications for both schemas.

## 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.

Beyond that the IPTC Photo Metadata Working Group has studied several photo business processes in the industry and discussed the requirements for the type of technical metadata and their handling in photo workflows. As a result, recommendations for persistent Technical Photo Metadata were formulated and are appended to this document as Addendum 1, but are not part of this standard. The recommendations are about the handling of metadata when photos are stored and processed and may provide useful guidelines for the design of a workflow.

## 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 name “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” and have been slightly updated in 2009 and early 2014.

The IPTC Extension Schema was extended in October 2014 to provide additional granular metadata and to improve the support of the semantic technology by globally unique identifiers for entities and a property for terms or concepts from a Controlled Vocabulary which may follow the rules of the W3C SKOS [W3-SKOS] standard.



# Photo Metadata specification notation

## The specification template

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

- A generic specification of its name, semantics, requirements and text to be used with the user interface of a software implementing this property
- A technical implementation specific for Adobe's XMP technology [Adobe XMP], [ISO XMP]
- A technical implementation specific to IPTC's NewsML-G2-Standard. [IPTC NewsML-G2]

The specifications of a Photo Metadata property are notated by a generic table. Please find below the template table with explanations for each row in the right column:

|                              |  |                     |                   |
|------------------------------|--|---------------------|-------------------|
| <b>Generic Specification</b> | <b>A generic specification of the property which is agnostic to any implementation technology.</b><br>Property Group (in blue): <b>descriptive / administrative / rights related / a data type definition</b><br>This property grouping is not normative, only an indicator of general semantics |                     |                   |
| <b>Name</b>                  | The reference name of the property used by this specification<br>This name shall never be translated   |                     |                   |
| Definition                   | A media-type agnostic definition of the semantics of this property that may be translated for localization.  |                     |                   |
| Photo Definition             | A photo-specific definition of the semantics of this property that may be translated for localization.   |                     |                   |
| Photo 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.  |                     |                   |
| User Note(s)                 | Any notes that apply to the end user of this property, should be translated for localization.  |                     |                   |
| Implementation Note(s)       | Any notes that apply to parties implementing this property using any technology.   |                     |                   |
| Field label/title            | Text appearing next to the entry field in the user interface, that should be translated for localization.  |                     |                   |
| Cardinality                  | How often this property may appear in a set of Photo Metadata for an image.<br>1 = is mandatory, 0..1 = one occurrence is optional, 1..unbounded = one occurrence is mandatory, multiple occurrences are optional  |                     |                   |
| Basic data type              | A recommended basic data type  |                     |                   |
| Required CV                  | The identifier for a controlled vocabulary that must be used with this property.   |                     |                   |
| Spec change history          | 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.   |                     |                   |
| <b>XMP implementation</b>    | <b>The implementation specification in the context of the Adobe XMP technology</b>   |                     |                   |
| <b>XMP namespace</b>         | The XMP namespace alias, see section "Names and Identifiers" of IPTC Core and IPTC Extension.  |                     |                   |
| <b>XMP property id</b>       | The identifying name of the property   |                     |                   |
| <b>XMP Value Type</b>        | The value type as per XMP specifications   | <b>XMP Category</b> | External/Internal |
| Implementation note(s)       | Any note regarding the XMP-specific implementation   |                     |                   |
| Maps to this IIM property    | If this XMP property is mapped to an IIM property its IIM Data Set id and name appears in this row.  |                     |                   |
| XMP/IIM mapping note(s)      | Any note on how to access an XMP property for mapping it to the corresponding IIM property.  |                     |                   |
| <b>G2 implementation</b>     | <b>The technical implementation specification for IPTC G2-Standards</b><br>If this section is left empty no straightforward mapping is possible or recommended, because of either blurred semantics of a photo property or not having an equivalent G2-property.                                 |                     |                   |
| <b>Property name (XPath)</b> | The property in G2-Standards which corresponds to this Photo Metadata property, expressed by an XPath for a G2 item.   |                     |                   |
| Property-attribute(s)        | Attributes of G2 properties as they should be used.  |                     |                   |
| QCode scheme                 | The scheme-URI of a required controlled vocabulary.  |                     |                   |
| Implementation note(s)       | Any note regarding the G2-specific implementation.   |                     |                   |



## Generic Specification Notes

### 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 is providing a structure of 6 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.

### (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.

### (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 specification table of the property and may include a recommendation to use a different property.

### Saving metadata values to files

The values of properties may be saved by both the IIM format and the XMP format in a single image file. A guideline on how to synchronise values existing in parallel is available from the Metadata Working Group [MetadataWG]



# IPTC Core schema 1.2 specifications

## Names and Identifiers

The **XML namespace URI** for all versions of “IPTC Core” is:

<http://iptc.org/std/Iptc4xmpCore/1.0/xmlns/>

The **preferred XML namespace-prefix** for “IPTC Core” related XMP properties is: **Iptc4xmpCore**

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

These **other namespaces** are used in the scope of IPTC Core:

| Name        | URI   | Recommended/used Prefix |
|-------------|---|-------------------------|
| Dublin Core | <a href="http://purl.org/dc/elements/1.1/">http://purl.org/dc/elements/1.1/</a>     | dc                      |
| Photoshop   | <a href="http://ns.adobe.com/photoshop/1.0/">http://ns.adobe.com/photoshop/1.0/</a> | photoshop               |

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

## Metadata Properties

| Generic Specification         |  |                        |           | <a href="#">2descr</a> |
|-------------------------------|--|------------------------|-----------|------------------------|
| <b>Name</b>                   | <b>City (legacy)</b>   |                        |           |                        |
| Definition                    | Name of the city the content is focussing on -- either the place shown in visual media or referenced by text or audio media. This element is at the third level of a top-down geographical hierarchy.  |                        |           |                        |
| Photo 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.  |                        |           |                        |
| Photo Help Text               | Enter the name of the city 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. |                        |           |                        |
| Implementation Note(s)        |  |                        |           |                        |
| Field label/title             | City   |                        |           |                        |
| Cardinality                   | 0..1   | Basic data type        | free-text |                        |
| Required CV                   |  |                        |           |                        |
| Spec change history           | Legacy status assigned in v 1.1  |                        |           |                        |
| <b>XMP implementation</b>     |  |                        |           |                        |
| <b>XMP namespace</b>          | photoshop  | <b>XMP property id</b> | City      |                        |
| <b>XMP Value Type</b>         | Text   | <b>XMP Category</b>    | External  |                        |
| Implementation note(s)        |  |                        |           |                        |
| Maps to this IIM property     | 2:90 City  |                        |           |                        |
| XMP/IIM mapping note(s)       |  |                        |           |                        |
| <b>G2 implementation</b>      |  |                        |           |                        |
| <b>Property name (XPath)</b>  |  |                        |           |                        |
| <b>Property-attribute(s)</b>  |  |                        |           |                        |
| <b>QCode scheme</b>           |  |                        |           |                        |
| <b>Implementation note(s)</b> | Do not map this property. Use either Location Created or Location Shown in the Image of the IPTC Extension schema if available.  |                        |           |                        |

| Generic Specification |   |  |  | <a href="#">2descr</a> |
|-----------------------|---|--|--|------------------------|
| <b>Name</b>           | <b>Country (legacy)</b>   |  |  |                        |
| Definition            | Full name of the country the content is focussing on -- either the country shown in visual media or referenced in text or audio media. This element is at the top/first level of a top-down |  |  |                        |

|                              |  |                 |             |
|------------------------------|--|-----------------|-------------|
|                              | geographical hierarchy. The full name should be expressed as a verbal name and not as a code, a code should go to the element "CountryCode"  |                 |             |
| Photo Definition             | Full name 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 full name should be expressed as a verbal name and not as a code, a code should go to the element "CountryCode"  |                 |             |
| Photo Help Text              | Enter the name 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.                                 |                 |             |
| Implementation Note(s)       |  |                 |             |
| Field label/title            | Country  |                 |             |
| Cardinality                  | 0..1   | Basic data type | free-text   |
| Required CV                  |  |                 |             |
| Spec change history          | Legacy status assigned in v 1.1  |                 |             |
| <b>XMP implementation</b>    |  |                 |             |
| XMP namespace                | photoshop  | XMP property id | Country     |
| XMP Value Type               | Text   | XMP Category    | External    |
| Implementation note(s)       |  |                 |             |
| Maps to this IIM property    | 2:101 Country/Primary Location Name  |                 |             |
| XMP/IIM mapping note(s)      |  |                 |             |
| <b>G2 implementation</b>     |  |                 |             |
| Property name (XPath)        |  |                 |             |
| Property-attribute(s)        |  |                 |             |
| QCode scheme                 |  |                 |             |
| Implementation note(s)       | Do not map this property. Use either Location Created or Location Shown in the Image of the IPTC Extension schema if available.  |                 |             |
| <b>Generic Specification</b> |  |                 |             |
|                              | <a href="#">2descr</a>   |                 |             |
| <b>Name</b>                  | <b>Country Code (legacy)</b>   |                 |             |
| Definition                   | Code of the country the content is focussing on -- either the country shown in visual media or referenced in text or audio media. 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. |                 |             |
| Photo 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.   |                 |             |
| Photo 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.                                 |                 |             |
| Implementation Note(s)       |  |                 |             |
| Field label/title            | ISO Country Code   |                 |             |
| Cardinality                  | 0..1   | Basic data type | CV-code     |
| Required CV                  | ISO 3166-1 - 2 or 3 characters (see Definition)  |                 |             |
| Spec change history          | Legacy status assigned in v 1.1  |                 |             |
| <b>XMP implementation</b>    |  |                 |             |
| XMP namespace                | iptc4xmpCore   | XMP property id | CountryCode |
| XMP Value Type               | closed choice Text   | XMP Category    | External    |
| Implementation note(s)       | 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.  |                 |             |
| Maps to this IIM property    | 2:100 Country/Primary Location Code  |                 |             |
| XMP/IIM mapping note(s)      |  |                 |             |
| <b>G2 implementation</b>     |  |                 |             |
| Property name (XPath)        |  |                 |             |
| Property-attribute(s)        |  |                 |             |
| QCode scheme                 |  |                 |             |
| Implementation note(s)       | Do not map this property. Use either Location Created or Location Shown in the Image of the IPTC Extension schema if available.  |                 |             |



| Generic Specification     |   | 2descr          |             |
|---------------------------|---|-----------------|-------------|
| Name                      | Description   |                 |             |
| Definition                | A textual description, including captions, of the item's content, particularly used where the object is not text.   |                 |             |
| Photo Definition          | A textual description, including captions, of the image.  |                 |             |
| Photo 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.  |                 |             |
| User Note(s)              |   |                 |             |
| Implementation Note(s)    |   |                 |             |
| Field label/title         | Caption/Description   |                 |             |
| Cardinality               | 0..1  | Basic data type | free-text   |
| Required CV               |   |                 |             |
| Spec change history       |   |                 |             |
| XMP implementation        |   |                 |             |
| XMP namespace             | dc  | XMP property id | description |
| XMP Value Type            | Lang Alt  | XMP Category    | External    |
| Implementation note(s)    | 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. |                 |             |
| Maps to this IIM property | 2:120 Caption/Abstract  |                 |             |
| XMP/IIM mapping note(s)   | Use this XPath: dc:description/*[@xml:lang='x-default']   |                 |             |
| G2 implementation         |   |                 |             |
| Property name (XPath)     | /newsItem/contentMeta/description   |                 |             |
| Property-attribute(s)     | @role="drol:caption"  |                 |             |
| QCode scheme              |   |                 |             |
| Implementation note(s)    |   |                 |             |
| Generic Specification     |   | 2descr          |             |
| Name                      | Headline  |                 |             |
| Definition                | A brief synopsis of the caption. Headline is not the same as Title.   |                 |             |
| Photo Definition          | A brief synopsis of the caption. Headline is not the same as Title.   |                 |             |
| Photo Help Text           | Enter a brief publishable synopsis or summary of the contents of the image  |                 |             |
| User Note(s)              |   |                 |             |
| Implementation Note(s)    |   |                 |             |
| Field label/title         | Headline  |                 |             |
| Cardinality               | 0..1  | Basic data type | free-text   |
| Required CV               |   |                 |             |
| Spec change history       |   |                 |             |
| XMP implementation        |   |                 |             |
| XMP namespace             | photoshop   | XMP property id | Headline    |
| XMP Value Type            | Text  | XMP Category    | External    |
| Implementation note(s)    |   |                 |             |
| Maps to this IIM property | 2:105 Headline  |                 |             |
| XMP/IIM mapping note(s)   |   |                 |             |
| G2 implementation         |   |                 |             |
| Property name (XPath)     | /newsItem/contentMeta/headline  |                 |             |
| Property-attribute(s)     |   |                 |             |
| QCode scheme              |   |                 |             |
| Implementation note(s)    |   |                 |             |
| Generic Specification     |   | 2descr          |             |
| Name                      | Intellectual Genre  |                 |             |
| Definition                | Describes the nature, intellectual, artistic or journalistic characteristic of a item, not specifically its content.  |                 |             |
| Photo Definition          | Describes the nature, intellectual, artistic or journalistic characteristic of an image.  |                 |             |
| Photo 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 (examples at: <a href="http://www.newscodes.org/">http://www.newscodes.org/</a> )  |                 |             |



|                              |   |                 |                        |
|------------------------------|---|-----------------|------------------------|
| 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).   |                 |                        |
| Implementation Note(s)       |   |                 |                        |
| Field label/title            | Intellectual genre  |                 |                        |
| Cardinality                  | 0..1  | Basic data type | free-text              |
| Required CV                  | Optional: IPTC Genre NewsCodes  |                 |                        |
| Spec change history          |   |                 |                        |
| <b>XMP implementation</b>    |   |                 |                        |
| XMP namespace                | iptc4xmpCore  | XMP property id | IntellectualGenre      |
| XMP Value Type               | Text  | XMP Category    | External               |
| Implementation note(s)       | Note / Examples:<br>Journalistic genres: actuality, interview, background, feature, summary, wrapup<br>News category related genres: daybook, obituary, press release, transcript<br>It is advised to use terms from a controlled vocabulary.                                       |                 |                        |
| Maps to this IIM property    | 2:04 Object Attribute Reference   |                 |                        |
| XMP/IIM mapping note(s)      |   |                 |                        |
| <b>G2 implementation</b>     |   |                 |                        |
| Property name (XPath)        | /newsItem/contentMeta/genre/@literal  |                 |                        |
| Property-attribute(s)        |   |                 |                        |
| QCode scheme                 |   |                 |                        |
| Implementation note(s)       |   |                 |                        |
| <b>Generic Specification</b> |   |                 |                        |
|                              |   |                 | <a href="#">2descr</a> |
| <b>Name</b>                  | <b>Keywords</b>   |                 |                        |
| Definition                   | Keywords to express the subject of the content. 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.   |                 |                        |
| Photo 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.   |                 |                        |
| Photo Help Text              | Enter any number of keywords, terms or phrases used to express the subject matter in the image.   |                 |                        |
| User Note(s)                 |   |                 |                        |
| Implementation Note(s)       | Single values of this field should not be restricted to single words but must allow for phrases as well.  |                 |                        |
| Field label/title            | Keywords  |                 |                        |
| Cardinality                  | 0..unbounded  | Basic data type | free-text              |
| Required CV                  |   |                 |                        |
| Spec change history          |   |                 |                        |
| <b>XMP implementation</b>    |   |                 |                        |
| XMP namespace                | dc  | XMP property id | subject                |
| XMP Value Type               | bag Text  | XMP Category    | External               |
| Implementation note(s)       |   |                 |                        |
| Maps to this IIM property    | 2:25 Keywords   |                 |                        |
| XMP/IIM mapping note(s)      |   |                 |                        |
| <b>G2 implementation</b>     |   |                 |                        |
| Property name (XPath)        | /newsItem/contentMeta/subject/@literal  |                 |                        |
| Property-attribute(s)        |   |                 |                        |
| QCode scheme                 |   |                 |                        |
| Implementation note(s)       |   |                 |                        |
| <b>Generic Specification</b> |   |                 |                        |
|                              |   |                 | <a href="#">2descr</a> |
| <b>Name</b>                  | <b>Province or State (legacy)</b>   |                 |                        |
| Definition                   | Name of the subregion of a country -- either called province or state or anything else -- the content is focussing on -- either the subregion shown in visual media or referenced by text or audio media. This element is at the second level of a top-down geographical hierarchy. |                 |                        |
| Photo 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.  |                 |                        |
| Photo 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.  |                 |          |
| Implementation Note(s)       |  |                 |          |
| Field label/title            | Province/State   |                 |          |
| Cardinality                  | 0..1   | Basic data type | string   |
| Required CV                  |  |                 |          |
| Spec change history          | Legacy status assigned in v 1.1  |                 |          |
| <b>XMP implementation</b>    |  |                 |          |
| XMP namespace                | photoshop  | XMP property id | State    |
| XMP Value Type               | Text   | XMP Category    | External |
| Implementation note(s)       |  |                 |          |
| Maps to this IIM property    | 2:95 Province/State  |                 |          |
| XMP/IIM mapping note(s)      |  |                 |          |
| <b>G2 implementation</b>     |  |                 |          |
| Property name (XPath)        |  |                 |          |
| Property-attribute(s)        |  |                 |          |
| QCode scheme                 |  |                 |          |
| Implementation note(s)       | Do not map this property. Use either Location Created or Location Shown in the Image of the IPTC Extension schema if available.  |                 |          |
| <b>Generic Specification</b> |  |                 |          |
|                              | <a href="#">2descr</a>   |                 |          |
| <b>Name</b>                  | <b>Scene Code</b>  |                 |          |
| Definition                   | Describes the scene of a news content. Specifies one or more terms from the IPTC "Scene-NewsCodes". Each Scene is represented as a string of 6 digits in an unordered list.  |                 |          |
| Photo Definition             | Describes the scene of a photo content. Specifies one or more terms from the IPTC "Scene-NewsCodes". Each Scene is represented as a string of 6 digits in an unordered list. |                 |          |
| Photo Help Text              | Enter only values from the IPTC Scene NewsCodes Controlled Vocabulary (see: <a href="http://www.newscodes.org/">http://www.newscodes.org/</a> )                              |                 |          |
| User Note(s)                 |  |                 |          |
| Implementation Note(s)       |  |                 |          |
| Field label/title            | IPTC Scene Code  |                 |          |
| Cardinality                  | 0..unbounded   | Basic data type | CV-code  |
| Required CV                  | IPTC Scene NewsCodes   |                 |          |
| Spec change history          |  |                 |          |
| <b>XMP implementation</b>    |  |                 |          |
| XMP namespace                | iptc4xmpCore   | XMP property id | Scene    |
| XMP Value Type               | bag closed choice Text   | XMP Category    | External |
| Implementation note(s)       | Note: Only Scene values from this IPTC taxonomy should be used here. More about the IPTC Scene-NewsCodes at <a href="http://www.newscodes.org">www.newscodes.org</a> .       |                 |          |
| Maps to this IIM property    |  |                 |          |
| XMP/IIM mapping note(s)      |  |                 |          |
| <b>G2 implementation</b>     |  |                 |          |
| Property name (XPath)        | /newsItem/contentMeta/genre/@qcode   |                 |          |
| Property-attribute(s)        |  |                 |          |
| QCode scheme                 | IPTC Scene NewsCodes   |                 |          |
| Implementation note(s)       |  |                 |          |
| <b>Generic Specification</b> |  |                 |          |
|                              | <a href="#">2descr</a>   |                 |          |
| <b>Name</b>                  | <b>Subject Code</b>  |                 |          |
| Definition                   | Specifies one or more Subjects from the IPTC Subject-NewsCodes taxonomy to categorise the content. Each Subject is represented as a string of 8 digits in an unordered list. |                 |          |
| Photo 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.   |                 |          |
| Photo Help Text              | Enter only values from the IPTC Subject NewsCode Controlled Vocabulary (see: <a href="http://www.newscodes.org/">http://www.newscodes.org/</a> )                             |                 |          |
| User Note(s)                 |  |                 |          |
| Implementation Note(s)       |  |                 |          |
| Field label/title            | IPTC Subject Code  |                 |          |
| Cardinality                  | 0..unbounded   | Basic data type | CV-code  |



|                              |   |                        |             |
|------------------------------|---|------------------------|-------------|
| Required CV                  | IPTC Subject NewsCodes  |                        |             |
| Spec change history          |   |                        |             |
| <b>XMP implementation</b>    |   |                        |             |
| <b>XMP namespace</b>         | iptc4xmpCore  | <b>XMP property id</b> | SubjectCode |
| <b>XMP Value Type</b>        | bag closed choice Text  | <b>XMP Category</b>    | External    |
| Implementation note(s)       | Note: Only Subjects from a controlled vocabulary should be used here, free text has to be put into the Keyword element. More about IPTC Subject-NewsCodes at <a href="http://www.newsCodes.org">www.newsCodes.org</a> . |                        |             |
| Maps to this IIM property    | 2:12 Subject Reference  |                        |             |
| XMP/IIM mapping note(s)      |   |                        |             |
| <b>G2 implementation</b>     |   |                        |             |
| <b>Property name (XPath)</b> | /newsItem/contentMeta/subject/@qcode  |                        |             |
| Property-attribute(s)        |   |                        |             |
| QCode scheme                 | IPTC Subject NewsCodes  |                        |             |
| Implementation note(s)       |   |                        |             |

|                              |  |                        |           |                        |
|------------------------------|--|------------------------|-----------|------------------------|
| <b>Generic Specification</b> |  |                        |           | <a href="#">2descr</a> |
| <b>Name</b>                  | <b>Sublocation (legacy)</b>  |                        |           |                        |
| Definition                   | Name of a sublocation the content is focussing on -- either the location shown in visual media or referenced by text or audio media. This location 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. |                        |           |                        |
| Photo 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.   |                        |           |                        |
| Photo 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.   |                        |           |                        |
| Implementation Note(s)       |  |                        |           |                        |
| Field label/title            | Sublocation  |                        |           |                        |
| Cardinality                  | 0..1   | Basic data type        | free-text |                        |
| Required CV                  |  |                        |           |                        |
| Spec change history          | Legacy status assigned in v 1.1  |                        |           |                        |
| <b>XMP implementation</b>    |  |                        |           |                        |
| <b>XMP namespace</b>         | iptc4xmpCore   | <b>XMP property id</b> | Location  |                        |
| <b>XMP Value Type</b>        | Text   | <b>XMP Category</b>    | External  |                        |
| Implementation note(s)       |  |                        |           |                        |
| Maps to this IIM property    | 2:92 Sublocation   |                        |           |                        |
| XMP/IIM mapping note(s)      |  |                        |           |                        |
| <b>G2 implementation</b>     |  |                        |           |                        |
| <b>Property name (XPath)</b> |  |                        |           |                        |
| Property-attribute(s)        |  |                        |           |                        |
| QCode scheme                 |  |                        |           |                        |
| Implementation note(s)       | Do not map this property. Use either Location Created or Location Shown in the Image of the IPTC Extension schema if available.  |                        |           |                        |

|                              |   |  |  |                        |
|------------------------------|---|--|--|------------------------|
| <b>Generic Specification</b> |   |  |  | <a href="#">3admin</a> |
| <b>Name</b>                  | <b>Date Created</b>   |  |  |                        |
| Definition                   | Designates the date and optionally the time the intellectual content was created rather than the date of the creation of the physical representation.   |  |  |                        |
| Photo 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.  |  |  |                        |
| Photo Help Text              | Enter the Date the image was taken  |  |  |                        |
| User Note(s)                 |   |  |  |                        |
| 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. |  |  |                        |



|                              |   |                 |  |
|------------------------------|---|-----------------|--|
| Field label/title            | Date Created  |                 |  |
| Cardinality                  | 0..1  | Basic data type | DateTime (preferred: truncated DateTime) |
| Required CV                  |   |                 |  |
| Spec change history          |   |                 |  |
| <b>XMP implementation</b>    |   |                 |  |
| XMP namespace                | photoshop   | XMP property id | DateCreated                              |
| XMP Value Type               | Date  | XMP Category    | External                                 |
| Implementation note(s)       | <p>Note 1: Any content of the IIM dataset 2:60, Time Created, should be merged to this element.</p> <p>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.</p>  |                 |  |
| Maps to this IIM property    | 2:55 Date Created   |                 |  |
| XMP/IIM mapping note(s)      |   |                 |  |
| <b>G2 implementation</b>     |   |                 |  |
| Property name (XPath)        | /newsItem/contentMeta/contentCreated  |                 |  |
| Property-attribute(s)        |   |                 |  |
| QCode scheme                 |   |                 |  |
| Implementation note(s)       |   |                 |  |
| <b>Generic Specification</b> |   |                 |  |
|                              |   |                 | <a href="#">3admin</a>                   |
| <b>Name</b>                  | <b>Description Writer</b>   |                 |  |
| Definition                   | Identifier or the name of the person involved in writing, editing or correcting the description of the content.   |                 |  |
| Photo Definition             | Identifier or the name of the person involved in writing, editing or correcting the description of the image.   |                 |  |
| Photo Help Text              | Enter the name of the person involved in writing, editing or correcting the description of the image  |                 |  |
| User Note(s)                 |   |                 |  |
| Implementation Note(s)       |   |                 |  |
| Field label/title            | Caption/Description writer  |                 |  |
| Cardinality                  | 0..1  | Basic data type | free-text                                |
| Required CV                  |   |                 |  |
| Spec change history          |   |                 |  |
| <b>XMP implementation</b>    |   |                 |  |
| XMP namespace                | photoshop   | XMP property id | CaptionWriter                            |
| XMP Value Type               | Text  | XMP Category    | External                                 |
| Implementation note(s)       |   |                 |  |
| Maps to this IIM property    | 2:122 Writer/Editor   |                 |  |
| XMP/IIM mapping note(s)      |   |                 |  |
| <b>G2 implementation</b>     |   |                 |  |
| Property name (XPath)        | /newsitem/contentMeta/contributor   |                 |  |
| Property-attribute(s)        | @role="ctrl:descrWriter"  |                 |  |
| QCode scheme                 |   |                 |  |
| Implementation note(s)       |   |                 |  |
| <b>Generic Specification</b> |   |                 |  |
|                              |   |                 | <a href="#">3admin</a>                   |
| <b>Name</b>                  | <b>Instructions</b>   |                 |  |
| Definition                   | Any of a number of instructions from the provider or creator to the receiver of the item.   |                 |  |
| Photo 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 |                 |  |
| Photo Help Text              | Enter information about embargoes, or other restrictions not covered by the Rights Usage field  |                 |  |
| User Note(s)                 |   |                 |  |
| Implementation Note(s)       |   |                 |  |
| Field label/title            | Instructions  |                 |  |
| Cardinality                  | 0..1  | Basic data type | free-text                                |

|                              |                           |
|------------------------------|---------------------------|
| Required CV                  |                           |
| Spec change history          |                           |
| <b>XMP implementation</b>    |                           |
| <b>XMP namespace</b>         | photoshop                 |
| <b>XMP Value Type</b>        | Text                      |
| <b>XMP property id</b>       | Instructions              |
| <b>XMP Category</b>          | External                  |
| Implementation note(s)       |                           |
| Maps to this IIM property    | 2:40 Special Instruction  |
| XMP/IIM mapping note(s)      |                           |
| <b>G2 implementation</b>     |                           |
| <b>Property name (XPath)</b> | /newsItem/itemMeta/edNote |
| Property-attribute(s)        |                           |
| QCode scheme                 |                           |
| Implementation note(s)       |                           |

|                              |   |                 |           |
|------------------------------|---|-----------------|-----------|
| <b>Generic Specification</b> | <a href="#">3admin</a>  |                 |           |
| <b>Name</b>                  | <b>Job Id</b>   |                 |           |
| Definition                   | Number or identifier for the purpose of improved workflow handling. This is a user created identifier related to the job for which the item is supplied.  |                 |           |
| Photo 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. |                 |           |
| Photo Help Text              | Enter a number or identifier needed for workflow control or tracking  |                 |           |
| User Note(s)                 |   |                 |           |
| Implementation Note(s)       |   |                 |           |
| Field label/title            | Job Identifier  |                 |           |
| Cardinality                  | 0..1  | Basic data type | free-text |
| Required CV                  |   |                 |           |
| Spec change history          |   |                 |           |

|                              |  |
|------------------------------|--|
| <b>XMP implementation</b>    |  |
| <b>XMP namespace</b>         | photoshop  |
| <b>XMP Value Type</b>        | Text   |
| <b>XMP property id</b>       | TransmissionReference  |
| <b>XMP Category</b>          | External   |
| Implementation note(s)       | 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. |
| Maps to this IIM property    | 2:103 Original Transmission Reference  |
| XMP/IIM mapping note(s)      |  |
| <b>G2 implementation</b>     |  |
| <b>Property name (XPath)</b> | /newsItem/itemMeta/memberOf/@literal   |
| Property-attribute(s)        |  |
| QCode scheme                 |  |
| Implementation note(s)       |  |

|                              |  |                        |           |
|------------------------------|--|------------------------|-----------|
| <b>Generic Specification</b> | <a href="#">3admin</a>   |                        |           |
| <b>Name</b>                  | <b>Title</b>   |                        |           |
| Definition                   | A shorthand reference for the item. Title provides a short human readable name which can be a text and/or numeric reference. It is not the same as Headline.   |                        |           |
| Photo 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.  |                        |           |
| Photo 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. |                        |           |
| Implementation Note(s)       |  |                        |           |
| Field label/title            | Title  |                        |           |
| Cardinality                  | 0..1   | Basic data type        | free-text |
| Required CV                  |  |                        |           |
| Spec change history          |  |                        |           |
| <b>XMP implementation</b>    |  |                        |           |
| <b>XMP namespace</b>         | dc   | <b>XMP property id</b> | title     |
| <b>XMP Value Type</b>        | Lang Alt   | <b>XMP Category</b>    | External  |

|                              |  |
|------------------------------|--|
| Implementation note(s)       | <p>Note 1: This element aligns with the use of Dublin Core's "Title" element.</p> <p>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.</p> |
| Maps to this IIM property    | 2:05 Object Name   |
| XMP/IIM mapping note(s)      | Use this XPath: dc:title/*[@xml:lang='x-default']  |
| <b>G2 implementation</b>     |  |
| <b>Property name (XPath)</b> | /newsItem/itemMeta/title   |
| Property-attribute(s)        |  |
| QCode scheme                 |  |
| Implementation note(s)       |  |

|                              |  |                 |           |
|------------------------------|--|-----------------|-----------|
| <b>Generic Specification</b> | <a href="#">4rightrel</a>  |                 |           |
| <b>Name</b>                  | <b>Copyright Notice</b>  |                 |           |
| Definition                   | Contains any necessary copyright notice for claiming the intellectual property for this item and should identify the current owner of the copyright for the item. Other entities like the creator of the item may be added in the corresponding field. Notes on usage rights should be provided in "Rights usage terms".                   |                 |           |
| Photo 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". |                 |           |
| Photo 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.  |                 |           |
| Implementation Note(s)       |  |                 |           |
| Field label/title            | Copyright Notice   |                 |           |
| Cardinality                  | 0..1   | Basic data type | free-text |
| Required CV                  |  |                 |           |
| Spec change history          |  |                 |           |

|                           |  |                        |          |
|---------------------------|--|------------------------|----------|
| <b>XMP implementation</b> |  |                        |          |
| <b>XMP namespace</b>      | dc   | <b>XMP property id</b> | rights   |
| XMP Value Type            | Lang Alt   | XMP Category           | External |
| Implementation note(s)    | 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. |                        |          |
| Maps to this IIM property | 2:116 Copyright Notice   |                        |          |
| XMP/IIM mapping note(s)   | Use this XPath: dc:rights/*[@xml:lang='x-default']   |                        |          |

|                              |                                      |
|------------------------------|--------------------------------------|
| <b>G2 implementation</b>     |                                      |
| <b>Property name (XPath)</b> | /newsItem/rightsInfo/copyrightNotice |
| Property-attribute(s)        |                                      |
| QCode scheme                 |                                      |
| Implementation note(s)       |                                      |

|                              |  |  |  |
|------------------------------|--|--|--|
| <b>Generic Specification</b> | <a href="#">4rightrel</a>  |  |  |
| <b>Name</b>                  | <b>Creator</b>   |  |  |
| Definition                   | Contains the name of the person who created the content of this item, a photographer for photos, a graphic artist for graphics, or a writer for textual news, but in cases where the photographer should not be identified the name of a company or organisation may be appropriate. |  |  |
| Photo 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.  |  |  |
| Photo 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.   |  |  |

|                     |  |                 |        |
|---------------------|--|-----------------|--------|
| Field label/title   | Creator  |                 |        |
| Cardinality         | 0..unbounded   | Basic data type | string |
| Required CV         |  |                 |        |
| Spec change history | Specs (July 2010): mapping IIM <-> XMP aligned to the unbounded cardinality of both the IIM and the XMP property |                 |        |

|                           |                |                        |          |
|---------------------------|----------------|------------------------|----------|
| <b>XMP implementation</b> |                |                        |          |
| <b>XMP namespace</b>      | dc             | <b>XMP property id</b> | creator  |
| XMP Value Type            | Seq ProperName | XMP Category           | External |
| Implementation note(s)    |                |                        |          |
| Maps to this IIM property | 2:80 By-line   |                        |          |
| XMP/IIM mapping note(s)   |                |                        |          |

|                              |                                    |  |  |
|------------------------------|------------------------------------|--|--|
| <b>G2 implementation</b>     |                                    |  |  |
| <b>Property name (XPath)</b> | /newsItem/contentMeta/creator/name |  |  |
| Property-attribute(s)        |                                    |  |  |
| QCode scheme                 |                                    |  |  |
| Implementation note(s)       |                                    |  |  |

|                              |  |                 |   |
|------------------------------|--|-----------------|---|
| <b>Generic Specification</b> | <a href="#">4rightrel</a>  |                 |   |
| <b>Name</b>                  | <b>Creator's Contact Info</b>  |                 |   |
| Definition                   | The creator's contact information provides all necessary information to get in contact with the creator of this item and comprises a set of sub-properties for proper addressing.  |                 |   |
| Photo 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.   |                 |   |
| Photo Help Text              |  |                 |   |
| 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.   |                 |   |
| Field label/title            | Creator's Contact info   |                 |   |
| Cardinality                  | 0..1   | Basic data type | <a href="#">Metadata Structure: Contact Information Details</a> |
| Required CV                  |  |                 |   |
| Spec change history          |  |                 |   |

|                           |  |                        |                    |
|---------------------------|--|------------------------|--------------------|
| <b>XMP implementation</b> |  |                        |                    |
| <b>XMP namespace</b>      | iptc4xmpCore   | <b>XMP property id</b> | CreatorContactInfo |
| XMP Value Type            | struct ContactInfo   | XMP Category           | External           |
| Implementation note(s)    | <p>Note 1 to user interface implementers: All sub-properties of "Creator's contact information" should be shown as group on the form.</p> <p>Note 2: the CreatorContactInfo sub-properties' naming aligns with the vCard specification RFC 2426.</p> |                        |                    |
| Maps to this IIM property |  |                        |                    |
| XMP/IIM mapping note(s)   |  |                        |                    |

|                              |  |  |  |
|------------------------------|--|--|--|
| <b>G2 implementation</b>     |  |  |  |
| <b>Property name (XPath)</b> | /newsItem/contentMeta/creator/personDetails .... |  |  |
| Property-attribute(s)        |  |  |  |
| QCode scheme                 |  |  |  |
| Implementation note(s)       |  |  |  |

|                              |   |  |  |
|------------------------------|---|--|--|
| <b>Generic Specification</b> | <a href="#">4rightrel</a>   |  |  |
| <b>Name</b>                  | <b>Creator's jobtitle</b>   |  |  |
| Definition                   | Contains the job title of the person who created the content of this item. As this is sort of a qualifier the Creator element has to be filled in as mandatory prerequisite for using Creator's Jobtitle. |  |  |
| Photo 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.                                |  |  |
| Photo Help Text              | Enter the Job Title of the person listed in the Creator field   |  |  |
| User Note(s)                 |   |  |  |
| Implementation Note(s)       |   |  |  |
| Field label/title            | Creator's Jobtitle  |  |  |

|                              |   |                        |                 |
|------------------------------|---|------------------------|-----------------|
| Cardinality                  | 0..1  | Basic data type        | string          |
| Required CV                  |   |                        |                 |
| Spec change history          |   |                        |                 |
| <b>XMP implementation</b>    |   |                        |                 |
| <b>XMP namespace</b>         | photoshop   | <b>XMP property id</b> | AuthorsPosition |
| XMP Value Type               | Text  | XMP Category           | External        |
| Implementation note(s)       | Note 1 {added in (July 2010)}: corresponds to the first entry in a sequence of creators |                        |                 |
| Maps to this IIM property    | 2:85 By-line Title  |                        |                 |
| XMP/IIM mapping note(s)      |   |                        |                 |
| <b>G2 implementation</b>     |   |                        |                 |
| <b>Property name (XPath)</b> | /newsItem/contentMeta/creator/facet   |                        |                 |
| Property-attribute(s)        |   |                        |                 |
| QCode scheme                 |   |                        |                 |
| Implementation note(s)       |   |                        |                 |

|                              |  |                 |           |
|------------------------------|--|-----------------|-----------|
| <b>Generic Specification</b> | <a href="#">4rightrel</a>  |                 |           |
| <b>Name</b>                  | <b>Credit Line</b>   |                 |           |
| Definition                   | The credit to person(s) and/or organisation(s) required by the supplier of the item to be used when published. This is a free-text field.  |                 |           |
| Photo 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.   |                 |           |
| Photo Help Text              | Enter who should be credited when this image is published  |                 |           |
| User Note(s)                 | <p>Note 1: For more formal identifications of the creator or the owner of the copyrights of this image other rights properties may be used.</p> <p>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.</p> |                 |           |
| Implementation Note(s)       |  |                 |           |
| Field label/title            | Credit Line  |                 |           |
| Cardinality                  | 0..1   | Basic data type | free-text |
| Required CV                  |  |                 |           |
| Spec change history          | Renamed from Provider to Credit Line in v 1.1  |                 |           |

|                              |                                  |                        |          |
|------------------------------|----------------------------------|------------------------|----------|
| <b>XMP implementation</b>    |                                  |                        |          |
| <b>XMP namespace</b>         | photoshop                        | <b>XMP property id</b> | Credit   |
| XMP Value Type               | Text                             | XMP Category           | External |
| Implementation note(s)       |                                  |                        |          |
| Maps to this IIM property    | 2:110 Credit                     |                        |          |
| XMP/IIM mapping note(s)      |                                  |                        |          |
| <b>G2 implementation</b>     |                                  |                        |          |
| <b>Property name (XPath)</b> | /newsItem/contentMeta/creditline |                        |          |
| Property-attribute(s)        |                                  |                        |          |
| QCode scheme                 |                                  |                        |          |
| Implementation note(s)       |                                  |                        |          |

|                              |   |                        |            |
|------------------------------|---|------------------------|------------|
| <b>Generic Specification</b> | <a href="#">4rightrel</a>   |                        |            |
| <b>Name</b>                  | <b>Rights Usage Terms</b>   |                        |            |
| Definition                   | The licensing parameters of the item expressed in free-text.  |                        |            |
| Photo Definition             | The licensing parameters of the image expressed in free-text.   |                        |            |
| Photo 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. |                        |            |
| Implementation Note(s)       |   |                        |            |
| Field label/title            | Rights Usage Terms  |                        |            |
| Cardinality                  | 0..1  | Basic data type        | free-text  |
| Required CV                  |   |                        |            |
| Spec change history          |   |                        |            |
| <b>XMP implementation</b>    |   |                        |            |
| <b>XMP namespace</b>         | xmpRights   | <b>XMP property id</b> | UsageTerms |
| XMP Value Type               | Lang Alt  | XMP Category           | External   |





|                              |   |                        |           |
|------------------------------|---|------------------------|-----------|
| Implementation note(s)       |   |                        |           |
| Maps to this IIM property    |   |                        |           |
| XMP/IIM mapping note(s)      |   |                        |           |
| <b>G2 implementation</b>     |   |                        |           |
| <b>Property name (XPath)</b> | /newsItem/rightsInfo/usageTerms   |                        |           |
| Property-attribute(s)        |   |                        |           |
| QCode scheme                 |   |                        |           |
| Implementation note(s)       |   |                        |           |
| <b>Generic Specification</b> | <a href="#">4rightrel</a>   |                        |           |
| <b>Name</b>                  | <b>Source</b>   |                        |           |
| 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. |                        |           |
| Photo 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. |                        |           |
| Photo Help Text              | 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.  |                        |           |
| User Note(s)                 | This field may be used primarily in syndication workflows.  |                        |           |
| Implementation Note(s)       |   |                        |           |
| Field label/title            | Source  |                        |           |
| Cardinality                  | 0..1  | Basic data type        | free-text |
| Required CV                  |   |                        |           |
| Spec change history          | Changed by IPTC Core 1.2, 2014-06   |                        |           |
| <b>XMP implementation</b>    |   |                        |           |
| <b>XMP namespace</b>         | photoshop   | <b>XMP property id</b> | Source    |
| XMP Value Type               | Text  | XMP Category           | External  |
| Implementation note(s)       |   |                        |           |
| Maps to this IIM property    | 2:115 Source  |                        |           |
| XMP/IIM mapping note(s)      |   |                        |           |
| <b>G2 implementation</b>     |   |                        |           |
| <b>Property name (XPath)</b> | /newsItem/rightsInfo/copyrightHolder  |                        |           |
| Property-attribute(s)        |   |                        |           |
| QCode scheme                 |   |                        |           |
| Implementation note(s)       |   |                        |           |

## Metadata Structure: Contact Information Details

|                              |   |                        |                    |
|------------------------------|---|------------------------|--------------------|
| <b>Generic Specification</b> | <a href="#">9type-ContInfo</a>  |                        |                    |
| <b>Name</b>                  | <b>Contact Information Details structure {data type}</b>  |                        |                    |
| 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. |                        |                    |
| Photo 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. |                        |                    |
| Photo Help Text              |   |                        |                    |
| User Note(s)                 |   |                        |                    |
| Implementation Note(s)       |   |                        |                    |
| Field label/title            | Contact Information   |                        |                    |
| Cardinality                  |   | Basic data type        | structure          |
| Required CV                  |   |                        |                    |
| Spec change history          |   |                        |                    |
| <b>XMP implementation</b>    |   |                        |                    |
| <b>XMP namespace</b>         | Iptc4xmpCore  | <b>XMP property id</b> | ContactInfoDetails |
| XMP Value Type               | structure   | XMP Category           |                    |
| Implementation note(s)       | Adoption of an appropriate person information scheme discussed - decision on 9 September.   |                        |                    |



|                           |  |
|---------------------------|--|
| Maps to this IIM property | 2:118 Contact                              |
| XMP/IIM mapping note(s)   | NONE                                       |
| <b>G2 implementation</b>  |  |
| Property name (XPath)     |  |
| Property-attribute(s)     |  |
| QCode scheme              |  |
| Implementation note(s)    | Maps to the "contactInfo" common component |

|                              |  |                                |        |
|------------------------------|--|--------------------------------|--------|
| <b>Generic Specification</b> |  | <a href="#">9type-ContInfo</a> |        |
| <b>Name</b>                  | <b>Address {contact info detail}</b>   |                                |        |
| 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. |                                |        |
| Photo 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. |                                |        |
| Photo Help Text              | Enter Address for the person that created this image   |                                |        |
| User Note(s)                 |  |                                |        |
| Implementation Note(s)       |  |                                |        |
| Field label/title            | (Contact Info detail:) Address   |                                |        |
| Cardinality                  | 0..unbounded   | Basic data type                | string |
| Required CV                  |  |                                |        |
| Spec change history          |  |                                |        |

|                           |   |                 |             |
|---------------------------|---|-----------------|-------------|
| <b>XMP implementation</b> |   |                 |             |
| XMP namespace             | Iptc4xmpCore  | XMP property id | CiAdrExtadr |
| XMP Value Type            | Text  | XMP Category    | External    |
| Implementation note(s)    | Note 1: to user interface implementers: This field should be part of a "Contact information" group on the form.<br><br>Note 2: the ContactInfo naming aligns with the vCard specification RFC 2426. |                 |             |
| Maps to this IIM property |   |                 |             |
| XMP/IIM mapping note(s)   |   |                 |             |

|                          |                              |
|--------------------------|------------------------------|
| <b>G2 implementation</b> |                              |
| Property name (XPath)    | .../contactInfo/address/line |
| Property-attribute(s)    |                              |
| QCode scheme             |                              |
| Implementation note(s)   |                              |

|                              |  |                                |        |
|------------------------------|--|--------------------------------|--------|
| <b>Generic Specification</b> |  | <a href="#">9type-ContInfo</a> |        |
| <b>Name</b>                  | <b>City {contact info detail}</b>                                    |                                |        |
| Definition                   | The contact information city part.                                   |                                |        |
| Photo Definition             | The contact information city part.                                   |                                |        |
| Photo Help Text              | Enter the City for the address of the person that created this image |                                |        |
| User Note(s)                 |  |                                |        |
| Implementation Note(s)       |  |                                |        |
| Field label/title            | (Contact Info detail:) City  |                                |        |
| Cardinality                  | 0..1   | Basic data type                | string |
| Required CV                  |  |                                |        |
| Spec change history          |  |                                |        |

|                           |   |                 |           |
|---------------------------|---|-----------------|-----------|
| <b>XMP implementation</b> |   |                 |           |
| XMP namespace             | Iptc4xmpCore  | XMP property id | CiAdrCity |
| XMP Value Type            | Text  | XMP Category    | External  |
| Implementation note(s)    | Note 1: to user interface implementers: This field should be part of a "Contact information" group on the form.<br><br>Note 2: the ContactInfo naming aligns with the vCard specification RFC 2426. |                 |           |
| Maps to this IIM property |   |                 |           |
| XMP/IIM mapping note(s)   |   |                 |           |

|                          |  |
|--------------------------|--|
| <b>G2 implementation</b> |  |
|--------------------------|--|



|                              |                                       |
|------------------------------|---------------------------------------|
| <b>Property name (XPath)</b> | .../contactInfo/address/locality/name |
| Property-attribute(s)        |                                       |
| QCode scheme                 |                                       |
| Implementation note(s)       |                                       |

|                              |  |                 |        |
|------------------------------|--|-----------------|--------|
| <b>Generic Specification</b> | <a href="#">9type-ContInfo</a>   |                 |        |
| <b>Name</b>                  | <b>Country {contact info detail}</b>   |                 |        |
| Definition                   | The contact information country part.  |                 |        |
| Photo Definition             | The contact information country part.  |                 |        |
| Photo Help Text              | Enter the Country name for the address of the person that created this image |                 |        |
| User Note(s)                 |  |                 |        |
| Implementation Note(s)       |  |                 |        |
| Field label/title            | (Contact Info detail:) Country   |                 |        |
| Cardinality                  | 0..1   | Basic data type | string |
| Required CV                  |  |                 |        |
| Spec change history          |  |                 |        |

|                           |  |                        |           |
|---------------------------|--|------------------------|-----------|
| <b>XMP implementation</b> |  |                        |           |
| <b>XMP namespace</b>      | Iptc4xmpCore   | <b>XMP property id</b> | CiAdrCtry |
| XMP Value Type            | Text   | XMP Category           | External  |
| Implementation note(s)    | <p>Note 1: to user interface implementers: This field should be part of a "Contact information" group on the form.</p> <p>Note 2: the ContactInfo naming aligns with the vCard specification RFC 2426.</p> |                        |           |
| Maps to this IIM property |  |                        |           |
| XMP/IIM mapping note(s)   |  |                        |           |

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>G2 implementation</b>     |                                      |  |  |
| <b>Property name (XPath)</b> | .../contactInfo/address/country/name |  |  |
| Property-attribute(s)        |                                      |  |  |
| QCode scheme                 |                                      |  |  |
| Implementation note(s)       |                                      |  |  |

|                              |   |                 |        |
|------------------------------|---|-----------------|--------|
| <b>Generic Specification</b> | <a href="#">9type-ContInfo</a>  |                 |        |
| <b>Name</b>                  | <b>Email address(es) {contact info detail}</b>  |                 |        |
| Definition                   | The contact information email address part.   |                 |        |
| Photo Definition             | The contact information email address part.   |                 |        |
| Photo Help Text              | Enter the work Email address(es) for the person that created this image, such as name@domain.com  |                 |        |
| User Note(s)                 | Multiple email addresses can be given. May have to be separated by a comma in the user interface. |                 |        |
| Implementation Note(s)       |   |                 |        |
| Field label/title            | (Contact Info detail:) Email(s)   |                 |        |
| Cardinality                  | 0..unbounded  | Basic data type | string |
| Required CV                  |   |                 |        |
| Spec change history          |   |                 |        |

|                           |  |                        |             |
|---------------------------|--|------------------------|-------------|
| <b>XMP implementation</b> |  |                        |             |
| <b>XMP namespace</b>      | Iptc4xmpCore   | <b>XMP property id</b> | CiEmailWork |
| XMP Value Type            | Text   | XMP Category           | External    |
| Implementation note(s)    | <p>Note 1 to user interface implementers: This field should be part of a "Contact information" group on the form.</p> <p>Note 2 to user interface implementers: provide sufficient space to fill in multiple e-mail addresses.</p> <p>Note 3: the ContactInfo naming aligns with the vCard specification RFC 2426.</p> |                        |             |
| Maps to this IIM property |  |                        |             |
| XMP/IIM mapping note(s)   |  |                        |             |

|                              |                       |  |  |
|------------------------------|-----------------------|--|--|
| <b>G2 implementation</b>     |                       |  |  |
| <b>Property name (XPath)</b> | .../contactInfo/email |  |  |
| Property-attribute(s)        |                       |  |  |
| QCode scheme                 |                       |  |  |

|                              |   |                        |            |
|------------------------------|---|------------------------|------------|
| Implementation note(s)       |   |                        |            |
| <b>Generic Specification</b> | <a href="#">9type-ContInfo</a>  |                        |            |
| <b>Name</b>                  | <b>Phone number(s) {contact info detail}</b>  |                        |            |
| Definition                   | The contact information phone number part.  |                        |            |
| Photo Definition             | The contact information phone number part.  |                        |            |
| Photo 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.   |                        |            |
| Implementation Note(s)       |   |                        |            |
| Field label/title            | (Contact Info detail:) Phone(s)   |                        |            |
| Cardinality                  | 0..unbounded  | Basic data type        | string     |
| Required CV                  |   |                        |            |
| Spec change history          |   |                        |            |
| <b>XMP implementation</b>    |   |                        |            |
| <b>XMP namespace</b>         | Iptc4xmpCore  | <b>XMP property id</b> | CiTelWork  |
| <b>XMP Value Type</b>        | Text  | <b>XMP Category</b>    | External   |
| Implementation note(s)       | <p>Note 1 to user interface implementers: This field should be part of a "Contact information" group on the form.</p> <p>Note 2 to user interface implementers: provide sufficient space to fill in multiple international numbers.</p> <p>Note 3: the ContactInfo naming aligns with the vCard specification RFC 2426.</p> |                        |            |
| Maps to this IIM property    |   |                        |            |
| XMP/IIM mapping note(s)      |   |                        |            |
| <b>G2 implementation</b>     |   |                        |            |
| <b>Property name (XPath)</b> | .../contactInfo/phone   |                        |            |
| Property-attribute(s)        |   |                        |            |
| QCode scheme                 |   |                        |            |
| Implementation note(s)       |   |                        |            |
| <b>Generic Specification</b> | <a href="#">9type-ContInfo</a>  |                        |            |
| <b>Name</b>                  | <b>Postal Code {contact info detail}</b>  |                        |            |
| Definition                   | The contact information part denoting the local postal code.  |                        |            |
| Photo Definition             | The contact information part denoting the local postal code.  |                        |            |
| Photo Help Text              | Enter the Postal Code for the address of the person that created this image   |                        |            |
| User Note(s)                 |   |                        |            |
| Implementation Note(s)       |   |                        |            |
| Field label/title            | (Contact Info detail:) Postal Code  |                        |            |
| Cardinality                  | 0..1  | Basic data type        | string     |
| Required CV                  |   |                        |            |
| Spec change history          |   |                        |            |
| <b>XMP implementation</b>    |   |                        |            |
| <b>XMP namespace</b>         | Iptc4xmpCore  | <b>XMP property id</b> | CiAdrPcode |
| <b>XMP Value Type</b>        | Text  | <b>XMP Category</b>    | External   |
| Implementation note(s)       | <p>Note 1: to user interface implementers: This field should be part of a "Contact information" group on the form.</p> <p>Note 2: the ContactInfo naming aligns with the vCard specification RFC 2426.</p>  |                        |            |
| Maps to this IIM property    |   |                        |            |
| XMP/IIM mapping note(s)      |   |                        |            |
| <b>G2 implementation</b>     |   |                        |            |
| <b>Property name (XPath)</b> | .../contactInfo/address/postalCode  |                        |            |
| Property-attribute(s)        |   |                        |            |
| QCode scheme                 |   |                        |            |
| Implementation note(s)       |   |                        |            |



| Generic Specification     |  | 9type-ContInfo  |             |
|---------------------------|--|-----------------|-------------|
| Name                      | State/Province {contact info detail}   |                 |             |
| Definition                | The contact information part denoting regional information such as state or province.  |                 |             |
| Photo Definition          | The contact information part denoting regional information such as state or province.  |                 |             |
| Photo Help Text           | Enter the State for the address of the person that created this image  |                 |             |
| User Note(s)              |  |                 |             |
| Implementation Note(s)    |  |                 |             |
| Field label/title         | (Contact Info detail:) State/Province  |                 |             |
| Cardinality               | 0..1   | Basic data type | string      |
| Required CV               |  |                 |             |
| Spec change history       |  |                 |             |
| XMP implementation        |  |                 |             |
| XMP namespace             | Iptc4xmpCore   | XMP property id | CiAdrRegion |
| XMP Value Type            | Text   | XMP Category    | External    |
| Implementation note(s)    | <p>Note 1: to user interface implementers: This field should be part of a "Contact information" group on the form.</p> <p>Note 2: the ContactInfo naming aligns with the vCard specification RFC 2426.</p>   |                 |             |
| Maps to this IIM property |  |                 |             |
| XMP/IIM mapping note(s)   |  |                 |             |
| G2 implementation         |  |                 |             |
| Property name (XPath)     | .../contactInfo/address/area   |                 |             |
| Property-attribute(s)     |  |                 |             |
| QCode scheme              |  |                 |             |
| Implementation note(s)    |  |                 |             |
| Generic Specification     |  | 9type-ContInfo  |             |
| Name                      | Web URL(s) {contact info detail}   |                 |             |
| Definition                | The contact information web address part. Multiple addresses can be given, separated by a comma.   |                 |             |
| Photo Definition          | The contact information web address part. Multiple addresses can be given. May have to be separated by a comma in the user interface.  |                 |             |
| Photo Help Text           | Enter the work Web URL(s) for the person that created this image, such as <a href="http://www.domain.com/">http://www.domain.com/</a>  |                 |             |
| User Note(s)              |  |                 |             |
| Implementation Note(s)    |  |                 |             |
| Field label/title         | (Contact Info detail:) Web URL(s)  |                 |             |
| Cardinality               | 0..unbounded   | Basic data type | URL         |
| Required CV               |  |                 |             |
| Spec change history       |  |                 |             |
| XMP implementation        |  |                 |             |
| XMP namespace             | Iptc4xmpCore   | XMP property id | CiUrlWork   |
| XMP Value Type            | Text   | XMP Category    | External    |
| Implementation note(s)    | <p>Note 1 to user interface implementers: This field should be part of a "Contact information" group on the form.</p> <p>Note 2 to user interface implementers: provide sufficient space to fill in multiple URLs.</p> <p>Note 3: the ContactInfo naming aligns with the vCard specification RFC 2426.</p> |                 |             |
| Maps to this IIM property |  |                 |             |
| XMP/IIM mapping note(s)   |  |                 |             |
| G2 implementation         |  |                 |             |
| Property name (XPath)     | .../contactInfo/web  |                 |             |
| Property-attribute(s)     |  |                 |             |
| QCode scheme              |  |                 |             |
| Implementation note(s)    |  |                 |             |



## “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.



## 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.

| <--- legacy IPTC headers ---> |                                       | XMP                                     |
|-------------------------------|---------------------------------------|---|
| Photoshop name                | IIM name                              | Mapping (XPath expression)              |
| 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']      |
| Description                   | 2:120 Caption/Abstract                | dc:description/*[@xml:lang='x-default'] |
| Description Writer            | 2:122 Writer/Editor                   | photoshop:CaptionWriter                 |

As of July 2010.

For the exact processing while synchronising metadata values please read the Guidelines for Handling Image Metadata from the Metadata Working Group. The document can be obtained from <http://www.metadataworkinggroup.org/specs/>



## 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         | <b>arts, culture and entertainment</b><br>Matters pertaining to the advancement and refinement of the human mind, of interests, skills, tastes and emotions   |
| CLJ           | 02000000         | <b>crime, law and justice</b><br>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         | <b>disaster and accident</b><br>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         | <b>economy, business and finance</b><br>All matters concerning the planning, production and exchange of wealth.   |
| EDU           | 05000000         | <b>education</b><br>All aspects of furthering knowledge of human individuals from birth to death.   |
| EVN           | 06000000         | <b>environmental issue</b><br>All aspects of protection, damage, and condition of the ecosystem of the planet earth and its surroundings.   |
| HTH           | 07000000         | <b>health</b><br>All aspects pertaining to the physical and mental welfare of human beings.   |
| HUM           | 08000000         | <b>human interest</b><br>Lighter items about individuals, groups, animals or objects.   |
| LAB           | 09000000         | <b>labour</b><br>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         | <b>lifestyle and leisure</b><br>Activities undertaken for pleasure, relaxation or recreation outside paid employment, including eating and travel.  |
| POL           | 11000000         | <b>politics</b><br>Local, regional, national and international exercise of power, or struggle for power, and the relationships between governing bodies and states.   |
| REL           | 12000000         | <b>religion and belief</b><br>All aspects of human existence involving theology, philosophy, ethics and spirituality.   |
| SCI           | 13000000         | <b>science and technology</b><br>All aspects pertaining to human understanding of nature and the physical world and the development and application of this knowledge.  |
| SOI           | 14000000         | <b>social issue</b><br>Aspects of the behaviour of humans affecting the quality of life.  |
| SPO           | 15000000         | <b>sport</b><br>Competitive exercise involving physical effort. Organizations and bodies involved in these activities.  |



|     |          |  |
|-----|----------|--|
| WAR | 16000000 | <b>unrest, conflicts and war</b><br>Acts of socially or politically motivated protest and/or violence. |
| WEA | 17000000 | <b>weather</b><br>The study, reporting and prediction of meteorological phenomena.                     |





# IPTC Extension schema 1.2 specifications

## Names and Identifiers

The **XML namespace URI** for the “IPTC Extension” versions 1.0, 1.1 and 1.2 is:

<http://iptc.org/std/Iptc4xmpExt/2008-02-29/>

The **preferred XML namespace-prefix** for “IPTC Extension”-related XMP properties is: **Iptc4xmpExt**

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

**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.

This **other namespace** is used in the scope of IPTC Extension:

| Name | URI   | Recommended Prefix |
|------|---|--------------------|
| PLUS | <a href="http://ns.useplus.org/ldf/xmp/1.0/">http://ns.useplus.org/ldf/xmp/1.0/</a> | plus               |

## Metadata Properties

| Generic Specification        |   |                        |              | 2descr |
|------------------------------|---|------------------------|--------------|--------|
| <b>Name</b>                  | <b>Additional Model Information</b>   |                        |              |        |
| Definition                   | Information about the ethnicity and other facets of the model(s) in a model-released image. |                        |              |        |
| Photo Definition             | Information about the ethnicity and other facets of the model(s) in a model-released image. |                        |              |        |
| Photo 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).  |                        |              |        |
| Implementation Note(s)       |   |                        |              |        |
| Field label/title            | Additional model info   |                        |              |        |
| Cardinality                  | 0..1  | Basic data type        | free-text    |        |
| Required CV                  |   |                        |              |        |
| Spec change history          |   |                        |              |        |
| <b>XMP implementation</b>    |   |                        |              |        |
| <b>XMP namespace</b>         | Iptc4xmpExt   | <b>XMP property id</b> | AddModelInfo |        |
| XMP Value Type               | Text  | XMP Category           | External     |        |
| Implementation note(s)       |   |                        |              |        |
| Maps to this IIM property    |   |                        |              |        |
| XMP/IIM mapping note(s)      |   |                        |              |        |
| <b>G2 implementation</b>     |   |                        |              |        |
| <b>Property name</b> (XPath) | /newsItem/contentMeta/description   |                        |              |        |
| Property-attribute(s)        | @role="drol:modelInfo"  |                        |              |        |
| QCode scheme                 |   |                        |              |        |
| Implementation note(s)       |   |                        |              |        |

| Generic Specification     |   |                 |  | 2descr |
|---------------------------|---|-----------------|--|--------|
| <b>Name</b>               | <b>Artwork or Object in the Image</b>                       |                 |  |        |
| Definition                | A set of metadata about artwork or an object in the item.   |                 |  |        |
| Photo Definition          | A set of metadata about artwork or an object in the image.  |                 |  |        |
| Photo Help Text           | Enter details about artwork or objects shown in this image. |                 |  |        |
| User Note(s)              |   |                 |  |        |
| Implementation Note(s)    |   |                 |  |        |
| Field label/title         | Artwork or object in the image                              |                 |  |        |
| Cardinality               | 0..unbounded  | Basic data type | <a href="#">Metadata Structure: Artwork or Object in the Image Details</a> |        |
| Required CV               |   |                 |  |        |
| Spec change history       |   |                 |  |        |
| <b>XMP implementation</b> |   |                 |  |        |

|                              |                            |                        |                 |
|------------------------------|----------------------------|------------------------|-----------------|
| <b>XMP namespace</b>         | iptc4xmpExt                | <b>XMP property id</b> | ArtworkOrObject |
| XMP Value Type               | bag ArtworkOrObjectDetails | XMP Category           | External        |
| Implementation note(s)       |                            |                        |                 |
| Maps to this IIM property    |                            |                        |                 |
| XMP/IIM mapping note(s)      |                            |                        |                 |
| <b>G2 implementation</b>     |                            |                        |                 |
| <b>Property name</b> (XPath) |                            |                        |                 |
| Property-attribute(s)        |                            |                        |                 |
| QCode scheme                 |                            |                        |                 |
| Implementation note(s)       | Mapping rules are pending. |                        |                 |

|                              |   |                 |         |                        |
|------------------------------|---|-----------------|---------|------------------------|
| <b>Generic Specification</b> |   |                 |         | <a href="#">2descr</a> |
| <b>Name</b>                  | <b>Code of Organisation Featured in the Image</b>   |                 |         |                        |
| Definition                   | Code from a controlled vocabulary for identifying the organisation or company which is featured in the content.   |                 |         |                        |
| Photo Definition             | Code from a controlled vocabulary for identifying the organisation or company which is featured in the image.   |                 |         |                        |
| Photo 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.  |                 |         |                        |
| Implementation Note(s)       |   |                 |         |                        |
| Field label/title            | Code of featured Organisation   |                 |         |                        |
| Cardinality                  | 0..unbounded  | Basic data type | CV-code |                        |
| Required CV                  | Open to any CV  |                 |         |                        |
| Spec change history          |   |                 |         |                        |

|                              |                                      |                        |                         |
|------------------------------|--------------------------------------|------------------------|-------------------------|
| <b>XMP implementation</b>    |                                      |                        |                         |
| <b>XMP namespace</b>         | iptc4xmpExt                          | <b>XMP property id</b> | OrganisationInImageCode |
| XMP Value Type               | bag Text                             | XMP Category           | External                |
| Implementation note(s)       |                                      |                        |                         |
| Maps to this IIM property    |                                      |                        |                         |
| XMP/IIM mapping note(s)      |                                      |                        |                         |
| <b>G2 implementation</b>     |                                      |                        |                         |
| <b>Property name</b> (XPath) | /newsItem/contentMeta/subject/@qcode |                        |                         |
| Property-attribute(s)        | @type="cpnat:organisation"           |                        |                         |
| QCode scheme                 |                                      |                        |                         |
| Implementation note(s)       |                                      |                        |                         |

|                              |   |                 |   |                        |
|------------------------------|---|-----------------|---|------------------------|
| <b>Generic Specification</b> |   |                 |   | <a href="#">2descr</a> |
| <b>Name</b>                  | <b>CV-Term About Image</b>  |                 |   |                        |
| Definition                   | One or more topics, themes or entities the content is about, each one expressed by a term from a Controlled Vocabulary.     |                 |   |                        |
| Photo Definition             | One or more topics, themes or entities the image is about, each one expressed by a term from a Controlled Vocabulary.       |                 |   |                        |
| Photo Help Text              | Enter one or more topics, themes or entities the image is about, each one expressed by a term from a Controlled Vocabulary. |                 |   |                        |
| User Note(s)                 |   |                 |   |                        |
| Implementation Note(s)       |   |                 |   |                        |
| Field label/title            | CV-Term about image   |                 |   |                        |
| Cardinality                  | 0..unbounded  | Basic data type | <a href="#">Metadata Structure: CV-Term Details</a> |                        |
| Required CV                  |   |                 |   |                        |
| Spec change history          | Added by version 1.2  |                 |   |                        |

|                           |                               |                        |             |
|---------------------------|-------------------------------|------------------------|-------------|
| <b>XMP implementation</b> |                               |                        |             |
| <b>XMP namespace</b>      | iptc4xmpExt                   | <b>XMP property id</b> | AboutCvTerm |
| XMP Value Type            | Bag CV-Term Details structure | XMP Category           | External    |
| Implementation note(s)    |                               |                        |             |
| Maps to this IIM property | none                          |                        |             |
| XMP/IIM mapping note(s)   |                               |                        |             |



| Generic Specification        |   | 2descr                 |  |
|------------------------------|---|------------------------|--|
| <b>Name</b>                  | <b>Controlled Vocabulary Term (DEPRECATED – use CV-Term About Image)</b>  |                        |  |
| Definition                   | A term to describe the content of the image by a value from a Controlled Vocabulary.  |                        |  |
| Photo Definition             | A term to describe the content of the image by a value from a Controlled Vocabulary.  |                        |  |
| Photo Help Text              | Enter an identifier for the controlled vocabulary, then a colon, and finally the code from the vocabulary assigned to the term  |                        |  |
| User Note(s)                 |   |                        |  |
| Implementation Note(s)       | This property is part of the Photo Metadata 2008 specifications, but should not be released to the public on the standard Adobe Custom Panels for IPTC metadata or other user interfaces unless agreed by the IPTC. |                        |  |
| Field label/title            | Controlled Vocabulary Term  |                        |  |
| Cardinality                  | 0..unbounded  | Basic data type        | CV-code  |
| Required CV                  | Any Controlled Vocabulary registered with the IPTC for this field.  |                        |  |
| Spec change history          | Deprecated by version 1.2   |                        |  |
| <b>XMP implementation</b>    |   |                        |  |
| <b>XMP namespace</b>         | iptc4xmpExt   | <b>XMP property id</b> | CVterm   |
| XMP Value Type               | bag URI   | XMP Category           | External   |
| Implementation note(s)       |   |                        |  |
| Maps to this IIM property    |   |                        |  |
| XMP/IIM mapping note(s)      |   |                        |  |
| <b>G2 implementation</b>     |   |                        |  |
| <b>Property name (XPath)</b> | /newsItem/contentMeta/subject/@qcode  |                        |  |
| Property-attribute(s)        |   |                        |  |
| QCode scheme                 |   |                        |  |
| Implementation note(s)       |   |                        |  |
| <b>Generic Specification</b> |   |                        |  |
|                              |   | 2descr                 |  |
| <b>Name</b>                  | <b>Location Shown in the Image</b>  |                        |  |
| Definition                   | A location the content of the item is about. For photos that is a location shown in the image.  |                        |  |
| Photo Definition             | A location shown in the image.  |                        |  |
| Photo 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.  |                        |  |
| Implementation Note(s)       |   |                        |  |
| Field label/title            | Location shown  |                        |  |
| Cardinality                  | 0..unbounded  | Basic data type        | <a href="#">Metadata Structure: Location Details</a> |
| Required CV                  |   |                        |  |
| Spec change history          |   |                        |  |
| <b>XMP implementation</b>    |   |                        |  |
| <b>XMP namespace</b>         | iptc4xmpExt   | <b>XMP property id</b> | LocationShown  |
| XMP Value Type               | bag LocationDetails   | XMP Category           | External   |
| Implementation note(s)       |   |                        |  |
| Maps to this IIM property    |   |                        |  |
| XMP/IIM mapping note(s)      |   |                        |  |
| <b>G2 implementation</b>     |   |                        |  |
| <b>Property name (XPath)</b> | /newsItem/contentMeta/subject/....  |                        |  |
| Property-attribute(s)        | @type="cpnat:geoArea"   |                        |  |
| QCode scheme                 |   |                        |  |
| Implementation note(s)       |   |                        |  |
| <b>Generic Specification</b> |   |                        |  |
|                              |   | 2descr                 |  |
| <b>Name</b>                  | <b>Model Age</b>  |                        |  |
| Definition                   | Age of the human model(s) at the time this image was taken in a model released image.   |                        |  |
| Photo Definition             | Age of the human model(s) at the time this image was taken in a model released image.   |                        |  |
| Photo 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.  |                        |  |
| Implementation Note(s)       |   |                        |  |

|                           |                                   |                 |          |
|---------------------------|-----------------------------------|-----------------|----------|
| Field label/title         | Model age                         |                 |          |
| Cardinality               | 0..unbounded                      | Basic data type | numeric  |
| Required CV               |                                   |                 |          |
| Spec change history       |                                   |                 |          |
| <b>XMP implementation</b> |                                   |                 |          |
| XMP namespace             | iptc4xmpExt                       | XMP property id | ModelAge |
| XMP Value Type            | bag Integer                       | XMP Category    | External |
| Implementation note(s)    |                                   |                 |          |
| Maps to this IIM property |                                   |                 |          |
| XMP/IIM mapping note(s)   |                                   |                 |          |
| <b>G2 implementation</b>  |                                   |                 |          |
| Property name (XPath)     | /newsItem/contentMeta/description |                 |          |
| Property-attribute(s)     | @role="drol:modelAge"             |                 |          |
| QCode scheme              |                                   |                 |          |
| Implementation note(s)    |                                   |                 |          |

|                              |  |                 |                         |                        |
|------------------------------|--|-----------------|-------------------------|------------------------|
| <b>Generic Specification</b> |  |                 |                         | <a href="#">2descr</a> |
| <b>Name</b>                  | <b>Name of Organisation Featured in the Image</b>  |                 |                         |                        |
| Definition                   | Name of the organisation or company which is featured in the content.                      |                 |                         |                        |
| Photo Definition             | Name of the organisation or company which is featured in the image.                        |                 |                         |                        |
| Photo 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. |                 |                         |                        |
| Implementation Note(s)       |  |                 |                         |                        |
| Field label/title            | Name of featured Organisation  |                 |                         |                        |
| Cardinality                  | 0..unbounded   | Basic data type | free-text               |                        |
| Required CV                  |  |                 |                         |                        |
| Spec change history          |  |                 |                         |                        |
| <b>XMP implementation</b>    |  |                 |                         |                        |
| XMP namespace                | iptc4xmpExt  | XMP property id | OrganisationInImageName |                        |
| XMP Value Type               | bag Text   | XMP Category    | External                |                        |
| Implementation note(s)       |  |                 |                         |                        |
| Maps to this IIM property    |  |                 |                         |                        |
| XMP/IIM mapping note(s)      |  |                 |                         |                        |
| <b>G2 implementation</b>     |  |                 |                         |                        |
| Property name (XPath)        | /newsItem/contentMeta/subject/name   |                 |                         |                        |
| Property-attribute(s)        | @type="cpnat:organisation"   |                 |                         |                        |
| QCode scheme                 |  |                 |                         |                        |
| Implementation note(s)       |  |                 |                         |                        |

|                              |  |                 |               |                        |
|------------------------------|--|-----------------|---------------|------------------------|
| <b>Generic Specification</b> |  |                 |               | <a href="#">2descr</a> |
| <b>Name</b>                  | <b>Person Shown in the Image</b>   |                 |               |                        |
| Definition                   | Name of a person the content of the item is about. For photos that is a person shown in the image. |                 |               |                        |
| Photo Definition             | Name of a person shown in the image.   |                 |               |                        |
| Photo Help Text              | Enter the name of the person shown in this image.  |                 |               |                        |
| User Note(s)                 |  |                 |               |                        |
| Implementation Note(s)       |  |                 |               |                        |
| Field label/title            | Person shown   |                 |               |                        |
| Cardinality                  | 0..unbounded   | Basic data type | free-text     |                        |
| Required CV                  |  |                 |               |                        |
| Spec change history          |  |                 |               |                        |
| <b>XMP implementation</b>    |  |                 |               |                        |
| XMP namespace                | iptc4xmpExt  | XMP property id | PersonInImage |                        |
| XMP Value Type               | bag Text   | XMP Category    | External      |                        |
| Implementation note(s)       |  |                 |               |                        |
| Maps to this IIM property    |  |                 |               |                        |
| XMP/IIM mapping note(s)      |  |                 |               |                        |
| <b>G2 implementation</b>     |  |                 |               |                        |

|                              |                                    |
|------------------------------|------------------------------------|
| <b>Property name</b> (XPath) | /newsItem/contentMeta/subject/name |
| Property-attribute(s)        | @type="cpnat:person"               |
| QCode scheme                 |                                    |
| Implementation note(s)       |                                    |

|                              |   |                 |  |                        |
|------------------------------|---|-----------------|--|------------------------|
| <b>Generic Specification</b> |   |                 |  | <a href="#">2descr</a> |
| <b>Name</b>                  | <b>Person Shown in the Image with Details</b>   |                 |  |                        |
| Definition                   | Details about a person the content is about.  |                 |  |                        |
| Photo Definition             | Details about a person shown in the image.  |                 |  |                        |
| Photo Help Text              | Enter details about person(s) shown in the image. It is not required to list all, just those which can be recognized. |                 |  |                        |
| User Note(s)                 |   |                 |  |                        |
| Implementation Note(s)       |   |                 |  |                        |
| Field label/title            | Person shown (Details)  |                 |  |                        |
| Cardinality                  | 0..unbounded  | Basic data type | <a href="#">Metadata Structure: Person Details</a> |                        |
| Required CV                  | NO  |                 |  |                        |
| Spec change history          | Added by version 1.2  |                 |  |                        |

|                           |                              |                        |                       |
|---------------------------|------------------------------|------------------------|-----------------------|
| <b>XMP implementation</b> |                              |                        |                       |
| <b>XMP namespace</b>      | iptc4xmpExt                  | <b>XMP property id</b> | PersonInImageWDetails |
| XMP Value Type            | Bag Person Details structure | XMP Category           | External              |
| Implementation note(s)    |                              |                        |                       |
| Maps to this IIM property | none                         |                        |                       |
| XMP/IIM mapping note(s)   |                              |                        |                       |

|                              |   |                 |   |                        |
|------------------------------|---|-----------------|---|------------------------|
| <b>Generic Specification</b> |   |                 |   | <a href="#">2descr</a> |
| <b>Name</b>                  | <b>Product Shown in the image</b>                 |                 |   |                        |
| Definition                   | A product the content is about.                   |                 |   |                        |
| Photo Definition             | A product shown in the image.                     |                 |   |                        |
| Photo Help Text              | Enter details about a product shown in the image. |                 |   |                        |
| User Note(s)                 |   |                 |   |                        |
| Implementation Note(s)       |   |                 |   |                        |
| Field label/title            | Product shown                                     |                 |   |                        |
| Cardinality                  | 0..unbounded                                      | Basic data type | <a href="#">Metadata Structure: Product Details</a> |                        |
| Required CV                  |   |                 |   |                        |
| Spec change history          | Added by version 1.2                              |                 |   |                        |

|                           |                               |                        |                |
|---------------------------|-------------------------------|------------------------|----------------|
| <b>XMP implementation</b> |                               |                        |                |
| <b>XMP namespace</b>      | iptc4xmpExt                   | <b>XMP property id</b> | ProductInImage |
| XMP Value Type            | Bag Product Details structure | XMP Category           | External       |
| Implementation note(s)    |                               |                        |                |
| Maps to this IIM property | none                          |                        |                |
| XMP/IIM mapping note(s)   |                               |                        |                |

|                              |   |  |  |                        |
|------------------------------|---|--|--|------------------------|
| <b>Generic Specification</b> |   |  |  | <a href="#">3admin</a> |
| <b>Name</b>                  | <b>Digital Image GUID</b>   |  |  |                        |
| Definition                   | Globally unique identifier for the item. It is created and applied by the creator of the item at the time of its creation . This value shall not be changed after that time.  |  |  |                        |
| Photo 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.   |  |  |                        |
| Photo 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 identifier 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:<br>* It must be globally unique. Algorithms for this purpose exist.<br>* It should identify the camera body.<br>* It should identify each individual photo from this camera body.<br>* It should identify the date and time of the creation of the picture.<br>* It should be secured against tampering.<br>This field should be implemented in a way to prove it has not been changed since its value has been applied.<br>If the identifier has been created by the imaging device its type and brand can be found in the Exif/technical metadata. |                 |        |
| Field label/title   | Digital Image Identifier   |                 |        |
| Cardinality         | 0..1   | Basic data type | string |
| Required CV         |  |                 |        |
| Spec change history | Specs (July 2010): XMP Category changed to Internal  |                 |        |

|                              |                             |                        |              |
|------------------------------|-----------------------------|------------------------|--------------|
| <b>XMP implementation</b>    |                             |                        |              |
| <b>XMP namespace</b>         | iptc4xmpExt                 | <b>XMP property id</b> | DigImageGUID |
| XMP Value Type               | text                        | XMP Category           | Internal     |
| Implementation note(s)       |                             |                        |              |
| Maps to this IIM property    |                             |                        |              |
| XMP/IIM mapping note(s)      |                             |                        |              |
| <b>G2 implementation</b>     |                             |                        |              |
| <b>Property name (XPath)</b> | /newsItem/contentMeta/altId |                        |              |
| Property-attribute(s)        | @type="altidtype:imageGUID" |                        |              |
| QCode scheme                 |                             |                        |              |
| Implementation note(s)       |                             |                        |              |

|                              |   |                 |         |
|------------------------------|---|-----------------|---------|
| <b>Generic Specification</b> | <a href="#">3admin</a>  |                 |         |
| <b>Name</b>                  | <b>Digital Source File Type (DEPRECATED – use Digital Source Type)</b>  |                 |         |
| Definition                   | The type of the source digital file.  |                 |         |
| Photo Definition             | The type of the source digital file.  |                 |         |
| Photo Help Text              | -   |                 |         |
| User Note(s)                 |   |                 |         |
| Implementation Note(s)       | The IPTC recommends not to implement this property any longer.  |                 |         |
| Field label/title            | Physical type of original photo   |                 |         |
| Cardinality                  | 0..1  | Basic data type | CV-code |
| Required CV                  | Values are: Scan from film {scanfilm}, scan from transparency (including slide) {scantransparency}, scan from print {scanprint}, camera raw {cameraraw}, camera tiff {cameratiff}, camera jpeg {camerajpeg} |                 |         |
| Spec change history          | Deprecated by version 1.1   |                 |         |

|                              |   |                        |                       |
|------------------------------|---|------------------------|-----------------------|
| <b>XMP implementation</b>    |   |                        |                       |
| <b>XMP namespace</b>         | iptc4xmpExt   | <b>XMP property id</b> | DigitalSourcefileType |
| XMP Value Type               | URI   | XMP Category           | External              |
| Implementation note(s)       |   |                        |                       |
| Maps to this IIM property    |   |                        |                       |
| XMP/IIM mapping note(s)      |   |                        |                       |
| <b>G2 implementation</b>     |   |                        |                       |
| <b>Property name (XPath)</b> | /newsItem/contentMeta/iptc4xmpExt:digSourceFileTyp/@qcode |                        |                       |
| Property-attribute(s)        |   |                        |                       |
| QCode scheme                 |   |                        |                       |
| Implementation note(s)       |   |                        |                       |

|                              |  |  |  |
|------------------------------|--|--|--|
| <b>Generic Specification</b> | <a href="#">3admin</a>   |  |  |
| <b>Name</b>                  | <b>Digital Source Type</b>   |  |  |
| Definition                   | The type of the source of this digital image.  |  |  |
| Photo Definition             | The type of the source of this digital image.  |  |  |
| Photo Help Text              | Select one of the values for identifying the type of the source of the digital image from the controlled vocabulary. |  |  |
| User Note(s)                 |  |  |  |
| Implementation Note(s)       |  |  |  |
| Field label/title            | Type of source for this photo  |  |  |

|                              |   |                        |                   |
|------------------------------|---|------------------------|-------------------|
| Cardinality                  | 0..1  | Basic data type        | CV-code           |
| Required CV                  | Digital Source Type NewsCodes - <a href="http://cv.iptc.org/newscodes/digitalsourcetype/">http://cv.iptc.org/newscodes/digitalsourcetype/</a> |                        |                   |
| Spec change history          | Added in v 1.1  |                        |                   |
| <b>XMP implementation</b>    |   |                        |                   |
| <b>XMP namespace</b>         | iptc4xmpExt   | <b>XMP property id</b> | DigitalSourceType |
| XMP Value Type               | URI   | XMP Category           | External          |
| Implementation note(s)       |   |                        |                   |
| Maps to this IIM property    |   |                        |                   |
| XMP/IIM mapping note(s)      |   |                        |                   |
| <b>G2 implementation</b>     |   |                        |                   |
| <b>Property name (XPath)</b> | /newsItem/contentMeta/iptc4xmpExt:digSourceType/@qcode  |                        |                   |
| Property-attribute(s)        |   |                        |                   |
| QCode scheme                 |   |                        |                   |
| Implementation note(s)       |   |                        |                   |

|                              |  |                        |           |                        |
|------------------------------|--|------------------------|-----------|------------------------|
| <b>Generic Specification</b> |  |                        |           | <a href="#">3admin</a> |
| <b>Name</b>                  | <b>Event</b>   |                        |           |                        |
| Definition                   | Names or describes the specific event the content relates to.  |                        |           |                        |
| Photo Definition             | Names or describes the specific event at which the photo was taken.  |                        |           |                        |
| Photo 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. |                        |           |                        |
| Implementation Note(s)       |  |                        |           |                        |
| Field label/title            | Event  |                        |           |                        |
| Cardinality                  | 0..1   | Basic data type        | free-text |                        |
| Required CV                  |  |                        |           |                        |
| Spec change history          |  |                        |           |                        |
| <b>XMP implementation</b>    |  |                        |           |                        |
| <b>XMP namespace</b>         | iptc4xmpExt  | <b>XMP property id</b> | Event     |                        |
| XMP Value Type               | Lang Alt   | XMP Category           | External  |                        |
| Implementation note(s)       |  |                        |           |                        |
| Maps to this IIM property    |  |                        |           |                        |
| XMP/IIM mapping note(s)      |  |                        |           |                        |
| <b>G2 implementation</b>     |  |                        |           |                        |
| <b>Property name (XPath)</b> | /newsItem/contentMeta/subject/   |                        |           |                        |
| Property-attribute(s)        | @type="cpnat:event"  |                        |           |                        |
| QCode scheme                 |  |                        |           |                        |
| Implementation note(s)       |  |                        |           |                        |

|                              |  |                        |  |                        |
|------------------------------|--|------------------------|--|------------------------|
| <b>Generic Specification</b> |  |                        |  | <a href="#">3admin</a> |
| <b>Name</b>                  | <b>Image Registry Entry</b>  |                        |  |                        |
| Definition                   | Both a Registry Item Id and a Registry Organisation Id to record any registration of this item with a registry.  |                        |  |                        |
| Photo Definition             | Both a Registry Item Id and a Registry Organisation Id to record any registration of this digital image with a registry.   |                        |  |                        |
| Photo 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. |                        |  |                        |
| Field label/title            | Registry Entry   |                        |  |                        |
| Cardinality                  | 0..unbounded   | Basic data type        | <a href="#">Metadata Structure: Registry Entry Details</a> |                        |
| Required CV                  |  |                        |  |                        |
| Spec change history          |  |                        |  |                        |
| <b>XMP implementation</b>    |  |                        |  |                        |
| <b>XMP namespace</b>         | iptc4xmpExt  | <b>XMP property id</b> | RegistryId   |                        |
| XMP Value Type               | bag RegistryEntryDetails   | XMP Category           | External   |                        |
| Implementation note(s)       |  |                        |  |                        |

|                              |                             |
|------------------------------|-----------------------------|
| Maps to this IIM property    |                             |
| XMP/IIM mapping note(s)      |                             |
| <b>G2 implementation</b>     |                             |
| <b>Property name</b> (XPath) | /newsItem/contentMeta/altId |
| Property-attribute(s)        |                             |
| QCode scheme                 |                             |
| Implementation note(s)       |                             |

|                              |  |                 |           |
|------------------------------|--|-----------------|-----------|
| <b>Generic Specification</b> | <a href="#">3admin</a>   |                 |           |
| <b>Name</b>                  | <b>Image Supplier</b>  |                 |           |
| Definition                   | Identifies the most recent supplier of the item, who is not necessarily its owner or creator.  |                 |           |
| Photo Definition             | Identifies the most recent supplier of the image, who is not necessarily its owner or creator.   |                 |           |
| Photo 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.<br>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 PLUS version 1.2 property included in the IPTC Extension schema.   |                 |           |
| Field label/title            | Image Supplier   |                 |           |
| Cardinality                  | 0..1   | Basic data type | structure |
| Required CV                  |  |                 |           |
| Spec change history          |  |                 |           |

|                           |                         |                        |                               |
|---------------------------|-------------------------|------------------------|-------------------------------|
| <b>XMP implementation</b> |                         |                        |                               |
| <b>XMP namespace</b>      | plus                    | <b>XMP property id</b> | <a href="#">ImageSupplier</a> |
| XMP Value Type            | Seq ImageSupplierDetail | XMP Category           | External                      |
| Implementation note(s)    |                         |                        |                               |
| Maps to this IIM property |                         |                        |                               |
| XMP/IIM mapping note(s)   |                         |                        |                               |

|                              |                               |
|------------------------------|-------------------------------|
| <b>G2 implementation</b>     |                               |
| <b>Property name</b> (XPath) | /newsItem/rightsInfo/ExtPoint |
| Property-attribute(s)        |                               |
| QCode scheme                 |                               |
| Implementation note(s)       |                               |

|                              |  |                 |        |
|------------------------------|--|-----------------|--------|
| <b>Generic Specification</b> | <a href="#">3admin</a>   |                 |        |
| <b>Name</b>                  | <b>Image Supplier Image ID</b>   |                 |        |
| Definition                   | Optional identifier assigned by the Image Supplier to the image.           |                 |        |
| Photo Definition             | Optional identifier assigned by the Image Supplier to the image.           |                 |        |
| Photo Help Text              | Enter the unique identifier created by the image supplier.                 |                 |        |
| User Note(s)                 |  |                 |        |
| Implementation Note(s)       | This is a PLUS version 1.2 property included in the IPTC Extension schema. |                 |        |
| Field label/title            | Image Supplier Image Id  |                 |        |
| Cardinality                  | 0..1   | Basic data type | string |
| Required CV                  |  |                 |        |
| Spec change history          | Specs (July 2010): property added  |                 |        |

|                           |      |                        |                                      |
|---------------------------|------|------------------------|--------------------------------------|
| <b>XMP implementation</b> |      |                        |                                      |
| <b>XMP namespace</b>      | plus | <b>XMP property id</b> | <a href="#">ImageSupplierImageID</a> |
| XMP Value Type            | Text | XMP Category           | External                             |
| Implementation note(s)    |      |                        |                                      |
| Maps to this IIM property |      |                        |                                      |
| XMP/IIM mapping note(s)   |      |                        |                                      |

|                              |  |
|------------------------------|--|
| <b>G2 implementation</b>     |  |
| <b>Property name</b> (XPath) |  |
| Property-attribute(s)        |  |
| QCode scheme                 |  |
| Implementation note(s)       |  |





| Generic Specification        |  | 3admin                 |  |
|------------------------------|--|------------------------|--|
| <b>Name</b>                  | <b>IPTC Metadata Last Edited (Legacy)</b>  |                        |  |
| Definition                   | The date and optionally time when any of the IPTC photo metadata fields has been last edited   |                        |  |
| Photo Definition             | The date and optionally time when any of the IPTC photo metadata fields has been last edited.  |                        |  |
| Photo Help Text              | -  |                        |  |
| User Note(s)                 | The public use of this property is deprecated by IPTC Extension version 1.1. It may only still be used by a private user interface for a use scoped to a company.<br>If used this field should be a timestamp of the latest change applied to any of the fields. One may infer no metadata value has been applied after this date. |                        |  |
| Implementation Note(s)       | The value of this property should never be set by software. XMP-aware software should reflect any changes to metadata by the xmp:MetadataDate property of the XMP Basic scheme.  |                        |  |
| Field label/title            | IPTC Fields Last Edited  |                        |  |
| Cardinality                  | 0..1   | Basic data type        | DateTime   |
| Required CV                  |  |                        |  |
| Spec change history          | Legacy status assigned in version 1.1  |                        |  |
| XMP implementation           |  |                        |  |
| <b>XMP namespace</b>         | iptc4xmpExt  | <b>XMP property id</b> | iptcLastEdited                                       |
| XMP Value Type               | Date   | XMP Category           | External/Internal                                    |
| Implementation note(s)       | The value of this property can either be entered by the user or be set by a metadata editing software  |                        |  |
| Maps to this IIM property    |  |                        |  |
| XMP/IIM mapping note(s)      |  |                        |  |
| G2 implementation            |  |                        |  |
| <b>Property name (XPath)</b> |  |                        |  |
| Property-attribute(s)        |  |                        |  |
| QCode scheme                 |  |                        |  |
| Implementation note(s)       |  |                        |  |
| Generic Specification        |  | 3admin                 |  |
| <b>Name</b>                  | <b>Location Created</b>  |                        |  |
| Definition                   | The location the content of the item was created.  |                        |  |
| Photo Definition             | The location the photo was taken.  |                        |  |
| Photo 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.  |                        |  |
| Implementation Note(s)       |  |                        |  |
| Field label/title            | Location Created   |                        |  |
| Cardinality                  | 0..1   | Basic data type        | <a href="#">Metadata Structure: Location Details</a> |
| Required CV                  |  |                        |  |
| Spec change history          |  |                        |  |
| XMP implementation           |  |                        |  |
| <b>XMP namespace</b>         | iptc4xmpExt  | <b>XMP property id</b> | LocationCreated                                      |
| XMP Value Type               | Bag LocationDetails  | XMP Category           | External   |
| Implementation note(s)       |  |                        |  |
| Maps to this IIM property    |  |                        |  |
| XMP/IIM mapping note(s)      |  |                        |  |
| G2 implementation            |  |                        |  |
| <b>Property name (XPath)</b> | /newsItem/contentMeta/located/POIdetails/contactInfo/address/...(locality,area,country)  |                        |  |
| Property-attribute(s)        |  |                        |  |
| QCode scheme                 |  |                        |  |
| Implementation note(s)       |  |                        |  |
| Generic Specification        |  | 3admin                 |  |
| <b>Name</b>                  | <b>Max Avail Height</b>  |                        |  |
| Definition                   | The maximum available height in pixels of the original photo from which this photo has been derived by downsizing.   |                        |  |
| Photo Definition             | The maximum available height in pixels of the original photo from which this photo has been derived by downsizing.   |                        |  |

|                              |   |                        |                |
|------------------------------|---|------------------------|----------------|
| Photo Help Text              | Enter the maximum available height in pixels of the original photo from which this photo has been derived by downsizing.  |                        |                |
| User Note(s)                 |   |                        |                |
| Implementation Note(s)       |   |                        |                |
| Field label/title            | Maximum available height  |                        |                |
| Cardinality                  | 0..1  | Basic data type        | integer        |
| Required CV                  |   |                        |                |
| Spec change history          |   |                        |                |
| <b>XMP implementation</b>    |   |                        |                |
| <b>XMP namespace</b>         | Iptc4xmpExt   | <b>XMP property id</b> | MaxAvailHeight |
| XMP Value Type               | Integer   | XMP Category           | External       |
| Implementation note(s)       |   |                        |                |
| Maps to this IIM property    |   |                        |                |
| XMP/IIM mapping note(s)      |   |                        |                |
| <b>G2 implementation</b>     |   |                        |                |
| <b>Property name (XPath)</b> | /newsItem/contentSet[rendition='rnd:highRes']/height  |                        |                |
| Property-attribute(s)        |   |                        |                |
| QCode scheme                 |   |                        |                |
| Implementation note(s)       | Only mapping out of G2!   |                        |                |
| <b>Generic Specification</b> | <a href="#">3admin</a>  |                        |                |
| <b>Name</b>                  | <b>Max Avail Width</b>  |                        |                |
| Definition                   | The maximum available width in pixels of the original photo from which this photo has been derived by downsizing.   |                        |                |
| Photo Definition             | The maximum available width in pixels of the original photo from which this photo has been derived by downsizing.   |                        |                |
| Photo Help Text              | Enter the maximum available width in pixels of the original photo from which this photo has been derived by downsizing.   |                        |                |
| User Note(s)                 |   |                        |                |
| Implementation Note(s)       |   |                        |                |
| Field label/title            | Maximum available width   |                        |                |
| Cardinality                  | 0..1  | Basic data type        | integer        |
| Required CV                  |   |                        |                |
| Spec change history          |   |                        |                |
| <b>XMP implementation</b>    |   |                        |                |
| <b>XMP namespace</b>         | Iptc4xmpExt   | <b>XMP property id</b> | MaxAvailWidth  |
| XMP Value Type               | Integer   | XMP Category           | External       |
| Implementation note(s)       |   |                        |                |
| Maps to this IIM property    |   |                        |                |
| XMP/IIM mapping note(s)      |   |                        |                |
| <b>G2 implementation</b>     |   |                        |                |
| <b>Property name (XPath)</b> | /newsItem/contentSet[rendition='rnd:highRes']/width   |                        |                |
| Property-attribute(s)        |   |                        |                |
| QCode scheme                 |   |                        |                |
| Implementation note(s)       | Only mapping out of G2!   |                        |                |
| <b>Generic Specification</b> | <a href="#">3admin</a>  |                        |                |
| <b>Name</b>                  | <b>PLUS Version</b>   |                        |                |
| Definition                   | The version number of the PLUS standards in place at the time of the transaction.   |                        |                |
| Photo Definition             | The version number of the PLUS standards in place at the time of the transaction.   |                        |                |
| Photo Help Text              | -   |                        |                |
| 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"                             |                        |                |
| Field label/title            | PLUS Version  |                        |                |
| Cardinality                  | 0..1  | Basic data type        |                |
| Required CV                  |   |                        |                |

| Spec change history          |  |                        |   |
|------------------------------|--|------------------------|---|
| <b>XMP implementation</b>    |  |                        |   |
| <b>XMP namespace</b>         | plus   | <b>XMP property id</b> | <a href="#">Version</a>   |
| XMP Value Type               | Text   | XMP Category           | Internal  |
| Implementation note(s)       |  |                        |   |
| Maps to this IIM property    |  |                        |   |
| XMP/IIM mapping note(s)      |  |                        |   |
| <b>G2 implementation</b>     |  |                        |   |
| <b>Property name</b> (XPath) |  |                        |   |
| Property-attribute(s)        |  |                        |   |
| QCode scheme                 |  |                        |   |
| Implementation note(s)       |  |                        |   |
| <b>Generic Specification</b> |  |                        |   |
|                              |  |                        | 4rightrel   |
| <b>Name</b>                  | <b>Copyright Owner</b>   |                        |   |
| Definition                   | Owner or owners of the copyright in the licensed image.  |                        |   |
| Photo Definition             | Owner or owners of the copyright in the licensed image.  |                        |   |
| Photo 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. |                        |   |
| Implementation Note(s)       | This is a PLUS version 1.2 property included in the IPTC Extension schema.   |                        |   |
| Field label/title            | Copyright owner  |                        |   |
| Cardinality                  | 0..3   | Basic data type        | structure   |
| Required CV                  |  |                        |   |
| Spec change history          |  |                        |   |
| <b>XMP implementation</b>    |  |                        |   |
| <b>XMP namespace</b>         | plus   | <b>XMP property id</b> | <a href="#">CopyrightOwner</a>  |
| XMP Value Type               | Seq CopyrightOwnerDetail   | XMP Category           | External  |
| Implementation note(s)       |  |                        |   |
| Maps to this IIM property    |  |                        |   |
| XMP/IIM mapping note(s)      |  |                        |   |
| <b>G2 implementation</b>     |  |                        |   |
| <b>Property name</b> (XPath) | /newsItem/rightsInfo/CopyrightHolder/@qcode + /name  |                        |   |
| Property-attribute(s)        |  |                        |   |
| QCode scheme                 |  |                        |   |
| Implementation note(s)       |  |                        |   |
| <b>Generic Specification</b> |  |                        |   |
|                              |  |                        | 4rightrel   |
| <b>Name</b>                  | <b>Embedded Encoded Rights Expression</b>  |                        |   |
| Definition                   | An embedded rights expression using any rights expression language.  |                        |   |
| Photo Definition             | An embedded rights expression using any rights expression language.  |                        |   |
| Photo Help Text              | Shows an encoded rights expression. These values cannot be changed by metadata panels.   |                        |   |
| User Note(s)                 |  |                        |   |
| Implementation Note(s)       |  |                        |   |
| Field label/title            | Embedded encoded rights expression   |                        |   |
| Cardinality                  | 0..unbounded   | Basic data type        | <a href="#">Metadata Structure: Encoded Rights Expression Details</a> |
| Required CV                  | NO   |                        |   |
| Spec change history          | Added by version 1.2   |                        |   |
| <b>XMP implementation</b>    |  |                        |   |
| <b>XMP namespace</b>         | iptc4xmpExt  | <b>XMP property id</b> | EmbdEncRightsExpr   |
| XMP Value Type               | Bag EERE Details structure   | XMP Category           | Internal  |
| Implementation note(s)       |  |                        |   |
| Maps to this IIM property    | none   |                        |   |
| XMP/IIM mapping note(s)      |  |                        |   |



| Generic Specification        |  | 4rightrel              |  |
|------------------------------|--|------------------------|--|
| <b>Name</b>                  | <b>Linked Encoded Rights Expression</b>  |                        |  |
| Definition                   | A linked rights expression using any rights expression language.   |                        |  |
| Photo Definition             | A linked rights expression using any rights expression language.   |                        |  |
| Photo Help Text              | Enter the details of a linked rights expression.   |                        |  |
| User Note(s)                 |  |                        |  |
| Implementation Note(s)       |  |                        |  |
| Field label/title            | Linked encoded rights expression   |                        |  |
| Cardinality                  | 0..unbounded   | Basic data type        | <a href="#">Metadata Structure: Linked Rights Expression Details</a> |
| Required CV                  |  |                        |  |
| Spec change history          | Added by version 1.2   |                        |  |
| <b>XMP implementation</b>    |  |                        |  |
| <b>XMP namespace</b>         | iptc4xmpExt  | <b>XMP property id</b> | LinkedEncRightsExpr  |
| XMP Value Type               | Bag LERE Details structure   | XMP Category           | External   |
| Implementation note(s)       |  |                        |  |
| Maps to this IIM property    | none   |                        |  |
| XMP/IIM mapping note(s)      |  |                        |  |
| <b>Generic Specification</b> |  |                        |  |
|                              |  | 4rightrel              |  |
| <b>Name</b>                  | <b>Image Creator</b>   |                        |  |
| Definition                   | Creator or creators of the image.  |                        |  |
| Photo Definition             | Creator or creators of the image.  |                        |  |
| Photo 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. |                        |  |
| Implementation Note(s)       | This is a PLUS version 1.2 property included in the IPTC Extension schema.   |                        |  |
| Field label/title            | Image Creator  |                        |  |
| Cardinality                  | 0..3   | Basic data type        | structure  |
| Required CV                  |  |                        |  |
| Spec change history          |  |                        |  |
| <b>XMP implementation</b>    |  |                        |  |
| <b>XMP namespace</b>         | plus   | <b>XMP property id</b> | <a href="#">ImageCreator</a>   |
| XMP Value Type               | Seq ImageCreatorDetail   | XMP Category           | External   |
| Implementation note(s)       |  |                        |  |
| Maps to this IIM property    |  |                        |  |
| XMP/IIM mapping note(s)      |  |                        |  |
| <b>G2 implementation</b>     |  |                        |  |
| <b>Property name (XPath)</b> | /newsItem/contentMeta/creator/@qcode + /name   |                        |  |
| Property-attribute(s)        |  |                        |  |
| QCode scheme                 |  |                        |  |
| Implementation note(s)       |  |                        |  |
| <b>Generic Specification</b> |  |                        |  |
|                              |  | 4rightrel              |  |
| <b>Name</b>                  | <b>Licensor</b>  |                        |  |
| Definition                   | A person or company that should be contacted to obtain a licence for using the item or who has licensed the item.  |                        |  |
| Photo Definition             | A person or company that should be contacted to obtain a licence for using the item or who has licensed the item.  |                        |  |
| Photo Help Text              | Enter the person or company that should be contacted for obtaining a license for this image.   |                        |  |
| User Note(s)                 |  |                        |  |
| Implementation Note(s)       | This is a PLUS version 1.2 property included in the IPTC Extension schema.   |                        |  |
| Field label/title            | Licensor   |                        |  |
| Cardinality                  | 0..3   | Basic data type        | struct   |
| Required CV                  |  |                        |  |
| Spec change history          |  |                        |  |

| XMP implementation           |   |                        |   |
|------------------------------|---|------------------------|---|
| <b>XMP namespace</b>         | plus  | <b>XMP property id</b> | <a href="#">Licensor</a>                |
| XMP Value Type               | bag LicensorDetail  | XMP Category           | External                                |
| Implementation note(s)       |   |                        |   |
| Maps to this IIM property    |   |                        |   |
| XMP/IIM mapping note(s)      |   |                        |   |
| G2 implementation            |   |                        |   |
| <b>Property name (XPath)</b> | /newsItem/rightsInfo/ExtPoint   |                        |   |
| Property-attribute(s)        |   |                        |   |
| QCode scheme                 |   |                        |   |
| Implementation note(s)       |   |                        |   |
| Generic Specification        |   |                        | 4rightrel                               |
| <b>Name</b>                  | <b>Minor Model Age Disclosure</b>   |                        |   |
| Definition                   | Age of the youngest model pictured in the image, at the time that the image was made.   |                        |   |
| Photo Definition             | Age of the youngest model pictured in the image, at the time that the image was made.   |                        |   |
| Photo 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 PLUS version 1.2 property included in the IPTC Extension schema.  |                        |   |
| Field label/title            | Minor Model Age Disclosure  |                        |   |
| Cardinality                  | 0..1  | Basic data type        | CV-code                                 |
| Required CV                  | CV defined by PLUS  |                        |   |
| Spec change history          | Specs (July 2010): XMP Value type corrected   |                        |   |
| XMP implementation           |   |                        |   |
| <b>XMP namespace</b>         | plus  | <b>XMP property id</b> | <a href="#">MinorModelAgeDisclosure</a> |
| XMP Value Type               | URL   | XMP Category           | External                                |
| Implementation note(s)       |   |                        |   |
| Maps to this IIM property    |   |                        |   |
| XMP/IIM mapping note(s)      |   |                        |   |
| G2 implementation            |   |                        |   |
| <b>Property name (XPath)</b> | /newsItem/rightsInfo/ExtPoint   |                        |   |
| Property-attribute(s)        |   |                        |   |
| QCode scheme                 |   |                        |   |
| Implementation note(s)       |   |                        |   |
| Generic Specification        |   |                        | 4rightrel                               |
| <b>Name</b>                  | <b>Model Release ID</b>   |                        |   |
| Definition                   | Optional identifier associated with each Model Release.   |                        |   |
| Photo Definition             | Optional identifier associated with each Model Release.   |                        |   |
| Photo Help Text              | Enter an identifier for each Model Release.   |                        |   |
| User Note(s)                 |   |                        |   |
| Implementation Note(s)       | This is a PLUS version 1.2 property included in the IPTC Extension schema.  |                        |   |
| Field label/title            | Model Release Id  |                        |   |
| Cardinality                  | 0..unbounded  | Basic data type        | Identifier                              |
| Required CV                  |   |                        |   |
| Spec change history          | Specs (July 2010): definition aligned with PLUS specs   |                        |   |
| XMP implementation           |   |                        |   |
| <b>XMP namespace</b>         | plus  | <b>XMP property id</b> | <a href="#">ModelReleaseID</a>          |
| XMP Value Type               | Bag Text  | XMP Category           | External                                |
| Implementation note(s)       |   |                        |   |
| Maps to this IIM property    |   |                        |   |
| XMP/IIM mapping note(s)      |   |                        |   |
| G2 implementation            |   |                        |   |
| <b>Property name (XPath)</b> | /newsItem/rightsInfo/ExtPoint   |                        |   |
| Property-attribute(s)        |   |                        |   |
| QCode scheme                 |   |                        |   |
| Implementation note(s)       |   |                        |   |



| Generic Specification     |  | 4rightrel       |                                    |
|---------------------------|--|-----------------|------------------------------------|
| Name                      | Model Release Status   |                 |                                    |
| Definition                | Summarizes the availability and scope of model releases authorizing usage of the likenesses of persons appearing in the photograph.  |                 |                                    |
| Photo Definition          | Summarises the availability and scope of model releases authorising usage of the likenesses of persons appearing in the photograph.  |                 |                                    |
| Photo 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 PLUS version 1.2 property included in the IPTC Extension schema.   |                 |                                    |
| Field label/title         | Model Release Status   |                 |                                    |
| Cardinality               | 0..1   | Basic data type | CV-code                            |
| Required CV               | CV defined by PLUS   |                 |                                    |
| Spec change history       | Specs (July 2010): XMP Value type corrected  |                 |                                    |
| XMP implementation        |  |                 |                                    |
| XMP namespace             | plus   | XMP property id | <a href="#">ModelReleaseStatus</a> |
| XMP Value Type            | URL  | XMP Category    | External                           |
| Implementation note(s)    |  |                 |                                    |
| Maps to this IIM property |  |                 |                                    |
| XMP/IIM mapping note(s)   |  |                 |                                    |
| G2 implementation         |  |                 |                                    |
| Property name (XPath)     | /newsItem/rightsInfo/ExtPoint  |                 |                                    |
| Property-attribute(s)     |  |                 |                                    |
| QCode scheme              |  |                 |                                    |
| Implementation note(s)    |  |                 |                                    |
| Generic Specification     |  | 4rightrel       |                                    |
| Name                      | Property Release ID  |                 |                                    |
| Definition                | Optional identifier associated with each Property Release.   |                 |                                    |
| Photo Definition          | Optional identifier associated with each Property Release.   |                 |                                    |
| Photo Help Text           | Enter an identifier for each Property Release  |                 |                                    |
| User Note(s)              |  |                 |                                    |
| Implementation Note(s)    | This is a PLUS version 1.2 property included in the IPTC Extension schema.   |                 |                                    |
| Field label/title         | Property Release Id  |                 |                                    |
| Cardinality               | 0..unbounded   | Basic data type | Identifier                         |
| Required CV               |  |                 |                                    |
| Spec change history       | Specs (July 2010): definition aligned with PLUS specs  |                 |                                    |
| XMP implementation        |  |                 |                                    |
| XMP namespace             | plus   | XMP property id | <a href="#">PropertyReleaseID</a>  |
| XMP Value Type            | Bag Text   | XMP Category    | External                           |
| Implementation note(s)    |  |                 |                                    |
| Maps to this IIM property |  |                 |                                    |
| XMP/IIM mapping note(s)   |  |                 |                                    |
| G2 implementation         |  |                 |                                    |
| Property name (XPath)     | /newsItem/rightsInfo/ExtPoint  |                 |                                    |
| Property-attribute(s)     |  |                 |                                    |
| QCode scheme              |  |                 |                                    |
| Implementation note(s)    |  |                 |                                    |
| Generic Specification     |  | 4rightrel       |                                    |
| Name                      | Property Release Status  |                 |                                    |
| Definition                | Summarises the availability and scope of property releases authorizing usage of the properties appearing in the photograph.  |                 |                                    |
| Photo Definition          | Summarises the availability and scope of property releases authorising usage of the properties appearing in the photograph.  |                 |                                    |
| Photo 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. |                 |                                       |
| Implementation Note(s)    | This is a PLUS version 1.2 property included in the IPTC Extension schema.   |                 |                                       |
| Field label/title         | Property Release Status  |                 |                                       |
| Cardinality               | 0..1   | Basic data type | CV-code                               |
| Required CV               | CV defined by PLUS   |                 |                                       |
| Spec change history       | Specs (July 2010): XMP Value type corrected  |                 |                                       |
| <b>XMP implementation</b> |  |                 |                                       |
| XMP namespace             | plus   | XMP property id | <a href="#">PropertyReleaseStatus</a> |
| XMP Value Type            | URL  | XMP Category    | External                              |
| Implementation note(s)    |  |                 |                                       |
| Maps to this IIM property |  |                 |                                       |
| XMP/IIM mapping note(s)   |  |                 |                                       |
| <b>G2 implementation</b>  |  |                 |                                       |
| Property name (XPath)     | /newsItem/rightsInfo/ExtPoint  |                 |                                       |
| Property-attribute(s)     |  |                 |                                       |
| QCode scheme              |  |                 |                                       |
| Implementation note(s)    |  |                 |                                       |

## Metadata Structure: Artwork or Object in the Image Details

|                        |  |                 |           |
|------------------------|--|-----------------|-----------|
| Generic Specification  | <a href="#">9type-artobj</a>   |                 |           |
| <b>Name</b>            | <b>Artwork or Object in the Image Details structure {data type}</b>  |                 |           |
| 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. |                 |           |
| Photo 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. |                 |           |
| Photo Help Text        | -  |                 |           |
| User Note(s)           |  |                 |           |
| Implementation Note(s) |  |                 |           |
| Field label/title      | N/A  |                 |           |
| Cardinality            |  | Basic data type | structure |
| Required CV            |  |                 |           |
| Spec change history    |  |                 |           |

|                           |  |                 |                   |
|---------------------------|--|-----------------|-------------------|
| Generic Specification     | <a href="#">9type-artobj</a>   |                 |                   |
| <b>Name</b>               | <b>Copyright Notice {Artwork or Object detail}</b>   |                 |                   |
| 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. |                 |                   |
| Photo 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. |                 |                   |
| Photo Help Text           | Enter any necessary copyright notice for claiming the intellectual property for artwork or an object in this image.  |                 |                   |
| User Note(s)              |  |                 |                   |
| Implementation Note(s)    |  |                 |                   |
| Field label/title         | Copyright Notice   |                 |                   |
| Cardinality               | 0..1   | Basic data type | free-text         |
| Required CV               |  |                 |                   |
| Spec change history       |  |                 |                   |
| <b>XMP implementation</b> |  |                 |                   |
| XMP namespace             | iptc4xmpExt  | XMP property id | AOCopyrightNotice |
| XMP Value Type            | Text   | XMP Category    | External          |
| Implementation note(s)    |  |                 |                   |
| Maps to this IIM property |  |                 |                   |
| XMP/IIM mapping note(s)   |  |                 |                   |
| <b>G2 implementation</b>  |  |                 |                   |



|                              |                            |
|------------------------------|----------------------------|
| <b>Property name</b> (XPath) |                            |
| Property-attribute(s)        |                            |
| QCode scheme                 |                            |
| Implementation note(s)       | Mapping rules are pending. |

|                              |  |                        |                             |
|------------------------------|--|------------------------|-----------------------------|
| <b>Generic Specification</b> | <a href="#">9type-artobj</a>   |                        |                             |
| <b>Name</b>                  | <b>Current Copyright Owner Name {Artwork or Object detail}</b>                 |                        |                             |
| Definition                   | Name of the current owner of the copyright of the artwork or object.           |                        |                             |
| Photo Definition             | Name of the current owner of the copyright of the artwork or object.           |                        |                             |
| Photo Help Text              | Enter the name of the current owner of the copyright of the artwork or object. |                        |                             |
| User Note(s)                 |  |                        |                             |
| Implementation Note(s)       |  |                        |                             |
| Field label/title            | Current Copyright Owner Name   |                        |                             |
| Cardinality                  | 0..1   | Basic data type        | Text                        |
| Required CV                  |  |                        |                             |
| Spec change history          | Added by version 1.2   |                        |                             |
| <b>XMP implementation</b>    |  |                        |                             |
| <b>XMP namespace</b>         | Iptc4xmpExt  | <b>XMP property id</b> | AOCurrentCopyrightOwnerName |
| XMP Value Type               | Text   | XMP Category           | External                    |
| Implementation note(s)       |  |                        |                             |
| Maps to this IIM property    | none   |                        |                             |
| XMP/IIM mapping note(s)      |  |                        |                             |

|                              |   |                        |                           |
|------------------------------|---|------------------------|---------------------------|
| <b>Generic Specification</b> | <a href="#">9type-artobj</a>  |                        |                           |
| <b>Name</b>                  | <b>Current Copyright Owner ID {Artwork or Object detail}</b>  |                        |                           |
| Definition                   | Globally unique identifier for the current owner of the copyright of the artwork or object.                                   |                        |                           |
| Photo Definition             | Globally unique identifier for the current owner of the copyright of the artwork or object.                                   |                        |                           |
| Photo Help Text              | Enter a globally unique identifier for the current copyright owner e.g. issued by an online registry of persons or companies. |                        |                           |
| User Note(s)                 |   |                        |                           |
| Implementation Note(s)       |   |                        |                           |
| Field label/title            | Current Copyright Owner ID  |                        |                           |
| Cardinality                  | 0..1  | Basic data type        | URI                       |
| Required CV                  |   |                        |                           |
| Spec change history          | Added by version 1.2  |                        |                           |
| <b>XMP implementation</b>    |   |                        |                           |
| <b>XMP namespace</b>         | Iptc4xmpExt   | <b>XMP property id</b> | AOCurrentCopyrightOwnerId |
| XMP Value Type               | URI   | XMP Category           | External                  |
| Implementation note(s)       |   |                        |                           |
| Maps to this IIM property    | none  |                        |                           |
| XMP/IIM mapping note(s)      |   |                        |                           |

|                              |   |                        |                       |
|------------------------------|---|------------------------|-----------------------|
| <b>Generic Specification</b> | <a href="#">9type-artobj</a>  |                        |                       |
| <b>Name</b>                  | <b>Current Licensor Name {Artwork or Object detail}</b>   |                        |                       |
| Definition                   | Name of the current licensor of the artwork or object.  |                        |                       |
| Photo Definition             | Name of the current licensor of the artwork or object.  |                        |                       |
| Photo Help Text              | Enter the name of the current licensor of the artwork or object. This could be a person, an estate, a company, or an artists rights organisation. |                        |                       |
| User Note(s)                 |   |                        |                       |
| Implementation Note(s)       |   |                        |                       |
| Field label/title            | Current Licensor Name   |                        |                       |
| Cardinality                  | 0..1  | Basic data type        | Text                  |
| Required CV                  |   |                        |                       |
| Spec change history          | Added by version 1.2  |                        |                       |
| <b>XMP implementation</b>    |   |                        |                       |
| <b>XMP namespace</b>         | Iptc4xmpExt   | <b>XMP property id</b> | AOCurrentLicensorName |
| XMP Value Type               | Text  | XMP Category           | External              |
| Implementation note(s)       |   |                        |                       |
| Maps to this IIM property    | none  |                        |                       |





|                              |  |                        |                              |
|------------------------------|--|------------------------|------------------------------|
| XMP/IIM mapping note(s)      |  |                        |                              |
| <b>Generic Specification</b> |  |                        |                              |
|                              |  |                        | <a href="#">9type-artobj</a> |
| <b>Name</b>                  | <b>Current Licensor ID {Artwork or Object detail}</b>  |                        |                              |
| Definition                   | Globally unique identifier for the current licensor of the artwork or object.  |                        |                              |
| Photo Definition             | Globally unique identifier for the current licensor of the artwork or object.  |                        |                              |
| Photo Help Text              | Enter a globally unique identifier for the current licensor e.g. issued by an online registry of persons or companies. |                        |                              |
| User Note(s)                 |  |                        |                              |
| Implementation Note(s)       |  |                        |                              |
| Field label/title            | Current Licensor ID  |                        |                              |
| Cardinality                  | 0..1   | Basic data type        | URI                          |
| Required CV                  |  |                        |                              |
| Spec change history          | Added by version 1.2   |                        |                              |
| <b>XMP implementation</b>    |  |                        |                              |
| <b>XMP namespace</b>         | Iptc4xmpExt  | <b>XMP property id</b> | AOCurrentLicensorId          |
| XMP Value Type               | URI  | XMP Category           | External                     |
| Implementation note(s)       |  |                        |                              |
| Maps to this IIM property    | none   |                        |                              |
| XMP/IIM mapping note(s)      |  |                        |                              |

|                              |  |                        |                              |
|------------------------------|--|------------------------|------------------------------|
| <b>Generic Specification</b> |  |                        |                              |
|                              |  |                        | <a href="#">9type-artobj</a> |
| <b>Name</b>                  | <b>Creator {Artwork or Object detail}</b>  |                        |                              |
| Definition                   | Contains the name of the artist who has created artwork or an object in the image.   |                        |                              |
| Photo 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. |                        |                              |
| Photo Help Text              | Enter the name of the artist who has created artwork or an object in this image.   |                        |                              |
| User Note(s)                 |  |                        |                              |
| Implementation Note(s)       |  |                        |                              |
| Field label/title            | Creator  |                        |                              |
| Cardinality                  | 0..unbounded   | Basic data type        | string                       |
| Required CV                  |  |                        |                              |
| Spec change history          |  |                        |                              |
| <b>XMP implementation</b>    |  |                        |                              |
| <b>XMP namespace</b>         | Iptc4xmpExt  | <b>XMP property id</b> | AOCreator                    |
| XMP Value Type               | Seq ProperName   | XMP Category           | External                     |
| Implementation note(s)       |  |                        |                              |
| Maps to this IIM property    |  |                        |                              |
| XMP/IIM mapping note(s)      |  |                        |                              |
| <b>G2 implementation</b>     |  |                        |                              |
| <b>Property name (XPath)</b> |  |                        |                              |
| Property-attribute(s)        |  |                        |                              |
| QCode scheme                 |  |                        |                              |
| Implementation note(s)       | Mapping rules are pending.   |                        |                              |

|                              |  |                 |                              |
|------------------------------|--|-----------------|------------------------------|
| <b>Generic Specification</b> |  |                 |                              |
|                              |  |                 | <a href="#">9type-artobj</a> |
| <b>Name</b>                  | <b>Creator ID {Artwork or Object detail}</b>   |                 |                              |
| Definition                   | Globally unique identifier for the creator of artwork or object.   |                 |                              |
| Photo Definition             | Globally unique identifier for the creator of artwork or object.   |                 |                              |
| Photo Help Text              | Enter globally unique identifier(s) for the artist who has created artwork or 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.   |                 |                              |
| Implementation Note(s)       |  |                 |                              |
| Field label/title            | Creator ID   |                 |                              |
| Cardinality                  | 0..unbounded   | Basic data type | URL                          |
| Required CV                  |  |                 |                              |
| Spec change history          | Added by version 1.2   |                 |                              |
| <b>XMP implementation</b>    |  |                 |                              |



|                           |             |                        |             |
|---------------------------|-------------|------------------------|-------------|
| <b>XMP namespace</b>      | iptc4xmpExt | <b>XMP property id</b> | AOCreatorId |
| XMP Value Type            | Seq URL     | XMP Category           | External    |
| Implementation note(s)    |             |                        |             |
| Maps to this IIM property | none        |                        |             |
| XMP/IIM mapping note(s)   |             |                        |             |

|                              |  |                 |  |
|------------------------------|--|-----------------|--|
| <b>Generic Specification</b> | <a href="#">9type-artobj</a>   |                 |  |
| <b>Name</b>                  | <b>Date Created {Artwork or Object detail}</b>   |                 |  |
| 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. |                 |  |
| Photo 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. |                 |  |
| Photo Help Text              | Enter the date and optionally the time when the artwork or object in this image was created  |                 |  |
| User Note(s)                 |  |                 |  |
| Implementation Note(s)       |  |                 |  |
| Field label/title            | Date Created   |                 |  |
| Cardinality                  | 0..1   | Basic data type | DateTime (preferred: truncated DateTime) |
| Required CV                  |  |                 |  |
| Spec change history          |  |                 |  |

|                           |             |                        |               |
|---------------------------|-------------|------------------------|---------------|
| <b>XMP implementation</b> |             |                        |               |
| <b>XMP namespace</b>      | iptc4xmpExt | <b>XMP property id</b> | AODateCreated |
| XMP Value Type            | Date        | XMP Category           | External      |
| Implementation note(s)    |             |                        |               |
| Maps to this IIM property |             |                        |               |
| XMP/IIM mapping note(s)   |             |                        |               |

|                              |   |                 |      |
|------------------------------|---|-----------------|------|
| <b>Generic Specification</b> |   |                 |      |
| <b>Name</b>                  | <b>Circa Date Created {Artwork or Object detail}</b>  |                 |      |
| Definition                   | Approximate date or range of dates associated with the creation and production of an artwork or object or its components. |                 |      |
| Photo Definition             | Approximate date or range of dates associated with the creation and production of an artwork or object or its components. |                 |      |
| Photo Help Text              | Enter approximate dates in text format for creation of the artwork or object e.g. circa dates or date ranges.             |                 |      |
| User Note(s)                 |   |                 |      |
| Implementation Note(s)       |   |                 |      |
| Field label/title            | Circa Date Created  |                 |      |
| Cardinality                  | 0..1  | Basic data type | Text |
| Required CV                  |   |                 |      |
| Spec change history          | Added by version 1.2  |                 |      |

|                           |             |                        |                    |
|---------------------------|-------------|------------------------|--------------------|
| <b>XMP implementation</b> |             |                        |                    |
| <b>XMP namespace</b>      | iptc4xmpExt | <b>XMP property id</b> | AOCircaDateCreated |
| XMP Value Type            | Text        | XMP Category           | External           |
| Implementation note(s)    |             |                        |                    |
| Maps to this IIM property | none        |                        |                    |
| XMP/IIM mapping note(s)   |             |                        |                    |

|                              |  |                 |      |
|------------------------------|--|-----------------|------|
| <b>Generic Specification</b> | <a href="#">9type-artobj</a>   |                 |      |
| <b>Name</b>                  | <b>Style Period {Artwork or Object detail}</b>   |                 |      |
| Definition                   | The style, historical or artistic period, movement, group, or school whose characteristics are represented in the artwork or object. |                 |      |
| Photo Definition             | The style, historical or artistic period, movement, group, or school whose characteristics are represented in the artwork or object. |                 |      |
| Photo Help Text              | Enter style or historical period associated with the artwork or object e.g. art historical movement, group or school.                |                 |      |
| User Note(s)                 | It is recommended that natural language terms from a controlled vocabulary are used.   |                 |      |
| Implementation Note(s)       |  |                 |      |
| Field label/title            | Style Period   |                 |      |
| Cardinality                  | 0..unbounded   | Basic data type | Text |



|                           |                      |
|---------------------------|----------------------|
| Required CV               |                      |
| Spec change history       | Added by version 1.2 |
| <b>XMP implementation</b> |                      |
| <b>XMP namespace</b>      | Iptc4xmpExt          |
| <b>XMP Value Type</b>     | Bag Text             |
| <b>XMP property id</b>    | AOStylePeriod        |
| <b>XMP Category</b>       | External             |
| Implementation note(s)    |                      |
| Maps to this IIM property | none                 |
| XMP/IIM mapping note(s)   |                      |

|                              |  |                 |           |
|------------------------------|--|-----------------|-----------|
| <b>Generic Specification</b> | <a href="#">9type-artobj</a>   |                 |           |
| <b>Name</b>                  | <b>Source {Artwork or Object detail}</b>   |                 |           |
| Definition                   | The organisation or body holding and registering the artwork or object in the image for inventory purposes.                    |                 |           |
| Photo Definition             | The organisation or body holding and registering the artwork or object in the image for inventory purposes.                    |                 |           |
| Photo Help Text              | Enter the name of the organisation or body holding and registering the artwork or object in this image for inventory purposes. |                 |           |
| User Note(s)                 |  |                 |           |
| Implementation Note(s)       |  |                 |           |
| Field label/title            | Source   |                 |           |
| Cardinality                  | 0..1   | Basic data type | free-text |
| Required CV                  |  |                 |           |
| Spec change history          |  |                 |           |

|                           |             |                        |          |
|---------------------------|-------------|------------------------|----------|
| <b>XMP implementation</b> |             |                        |          |
| <b>XMP namespace</b>      | Iptc4xmpExt | <b>XMP property id</b> | AOSource |
| <b>XMP Value Type</b>     | Text        | <b>XMP Category</b>    | External |
| Implementation note(s)    |             |                        |          |
| Maps to this IIM property |             |                        |          |
| XMP/IIM mapping note(s)   |             |                        |          |

|                              |                            |  |  |
|------------------------------|----------------------------|--|--|
| <b>G2 implementation</b>     |                            |  |  |
| <b>Property name (XPath)</b> |                            |  |  |
| Property-attribute(s)        |                            |  |  |
| QCode scheme                 |                            |  |  |
| Implementation note(s)       | Mapping rules are pending. |  |  |

|                              |  |                 |        |
|------------------------------|--|-----------------|--------|
| <b>Generic Specification</b> | <a href="#">9type-artobj</a>   |                 |        |
| <b>Name</b>                  | <b>Source Inventory Number {Artwork or Object detail}</b>  |                 |        |
| Definition                   | The inventory number issued by the organisation or body holding and registering the artwork or object in the image.        |                 |        |
| Photo Definition             | The inventory number issued by the organisation or body holding and registering the artwork or object in the image.        |                 |        |
| Photo Help Text              | Enter the inventory number issued by the organisation or body holding and registering the artwork or object in this image. |                 |        |
| User Note(s)                 |  |                 |        |
| Implementation Note(s)       |  |                 |        |
| Field label/title            | Source Inventory Number  |                 |        |
| Cardinality                  | 0..1   | Basic data type | string |
| Required CV                  |  |                 |        |
| Spec change history          |  |                 |        |

|                           |             |                        |               |
|---------------------------|-------------|------------------------|---------------|
| <b>XMP implementation</b> |             |                        |               |
| <b>XMP namespace</b>      | Iptc4xmpExt | <b>XMP property id</b> | AOSourceInvNo |
| <b>XMP Value Type</b>     | Text        | <b>XMP Category</b>    | External      |
| Implementation note(s)    |             |                        |               |
| Maps to this IIM property |             |                        |               |
| XMP/IIM mapping note(s)   |             |                        |               |

|                              |  |  |  |
|------------------------------|--|--|--|
| <b>G2 implementation</b>     |  |  |  |
| <b>Property name (XPath)</b> |  |  |  |
| Property-attribute(s)        |  |  |  |
| QCode scheme                 |  |  |  |



|                              |  |                        |                           |
|------------------------------|--|------------------------|---------------------------|
| Implementation note(s)       | Mapping rules are pending.   |                        |                           |
| <b>Generic Specification</b> | 9type-artobj   |                        |                           |
| <b>Name</b>                  | <b>Source Inventory URL {Artwork or Object detail}</b>   |                        |                           |
| Definition                   | URL reference to the metadata record of the inventory maintained by the Source.  |                        |                           |
| Photo Definition             | URL reference to the metadata record of the inventory maintained by the Source.  |                        |                           |
| Photo Help Text              | Enter a reference URL for the metadata record of the inventory maintained by the Source.   |                        |                           |
| User Note(s)                 |  |                        |                           |
| Implementation Note(s)       |  |                        |                           |
| Field label/title            | Source Inventory URL   |                        |                           |
| Cardinality                  | 0..1   | Basic data type        | URL                       |
| Required CV                  |  |                        |                           |
| Spec change history          | Added by version 1.2   |                        |                           |
| <b>XMP implementation</b>    |  |                        |                           |
| <b>XMP namespace</b>         | iptc4xmpExt  | <b>XMP property id</b> | AOSourceInvURL            |
| XMP Value Type               | URL  | XMP Category           | External                  |
| Implementation note(s)       |  |                        |                           |
| Maps to this IIM property    | none   |                        |                           |
| XMP/IIM mapping note(s)      |  |                        |                           |
| <b>Generic Specification</b> | 9type-artobj   |                        |                           |
| <b>Name</b>                  | <b>Content Description {Artwork or Object detail}</b>  |                        |                           |
| Definition                   | A textual description of the content depicted in the artwork or object.  |                        |                           |
| Photo Definition             | A textual description of the content depicted in the artwork or object.  |                        |                           |
| Photo Help Text              | Describe the content depicted in the artwork or object in free-text.   |                        |                           |
| User Note(s)                 |  |                        |                           |
| Implementation Note(s)       |  |                        |                           |
| Field label/title            | Content Description  |                        |                           |
| Cardinality                  | 0..1   | Basic data type        | Text                      |
| Required CV                  |  |                        |                           |
| Spec change history          | Added by version 1.2   |                        |                           |
| <b>XMP implementation</b>    |  |                        |                           |
| <b>XMP namespace</b>         | iptc4xmpExt  | <b>XMP property id</b> | AOContentDescription      |
| XMP Value Type               | LangAlt  | XMP Category           | External                  |
| Implementation note(s)       |  |                        |                           |
| Maps to this IIM property    | none   |                        |                           |
| XMP/IIM mapping note(s)      |  |                        |                           |
| <b>Generic Specification</b> | 9type-artobj   |                        |                           |
| <b>Name</b>                  | <b>Contribution Description {Artwork or Object detail}</b>   |                        |                           |
| Definition                   | A textual description about a contribution made to an artwork or an object.  |                        |                           |
| Photo Definition             | A textual description about a contribution made to an artwork or an object.  |                        |                           |
| Photo Help Text              | Describe contributions to the artwork or object such as restoration, find, excavation etc. Include type, date and location of contribution, and contributor details. |                        |                           |
| User Note(s)                 | Should include the type, date and location of contribution, and details about the contributor.   |                        |                           |
| Implementation Note(s)       |  |                        |                           |
| Field label/title            | Contribution Description   |                        |                           |
| Cardinality                  | 0..1   | Basic data type        | Text                      |
| Required CV                  |  |                        |                           |
| Spec change history          | Added by version 1.2   |                        |                           |
| <b>XMP implementation</b>    |  |                        |                           |
| <b>XMP namespace</b>         | iptc4xmpExt  | <b>XMP property id</b> | AOContributionDescription |
| XMP Value Type               | LangAlt  | XMP Category           | External                  |
| Implementation note(s)       |  |                        |                           |
| Maps to this IIM property    | none   |                        |                           |
| XMP/IIM mapping note(s)      |  |                        |                           |



| Generic Specification     |  | 9type-artobj    |                       |
|---------------------------|--|-----------------|-----------------------|
| Name                      | Physical Description {Artwork or Object detail}  |                 |                       |
| Definition                | A textual description of the physical characteristics of the artwork or object, without reference to the content depicted. |                 |                       |
| Photo Definition          | A textual description of the physical characteristics of the artwork or object, without reference to the content depicted. |                 |                       |
| Photo Help Text           | Describe the physical characteristics of the artwork or object e.g. object type, materials, techniques and dimensions.     |                 |                       |
| User Note(s)              | Object type, materials-techniques and measurements may be described.   |                 |                       |
| Implementation Note(s)    |  |                 |                       |
| Field label/title         | Physical Description   |                 |                       |
| Cardinality               | 0..1   | Basic data type | Text                  |
| Required CV               |  |                 |                       |
| Spec change history       | Added by version 1.2   |                 |                       |
| XMP implementation        |  |                 |                       |
| XMP namespace             | iptc4xmpExt  | XMP property id | AOPhysicalDescription |
| XMP Value Type            | LangAlt  | XMP Category    | External              |
| Implementation note(s)    |  |                 |                       |
| Maps to this IIM property | none   |                 |                       |
| XMP/IIM mapping note(s)   |  |                 |                       |

| Generic Specification     |  | 9type-artobj    |           |
|---------------------------|--|-----------------|-----------|
| Name                      | Title {Artwork or Object detail}   |                 |           |
| Definition                | A reference for the artwork or object in the image.                              |                 |           |
| Photo Definition          | A reference for the artwork or object in the image.                              |                 |           |
| Photo Help Text           | Enter the verbal and human readable name of the artwork or object in this image. |                 |           |
| User Note(s)              |  |                 |           |
| Implementation Note(s)    |  |                 |           |
| Field label/title         | Title  |                 |           |
| Cardinality               | 0..1   | Basic data type | free-text |
| Required CV               |  |                 |           |
| Spec change history       |  |                 |           |
| XMP implementation        |  |                 |           |
| XMP namespace             | iptc4xmpExt  | XMP property id | AOTitle   |
| XMP Value Type            | Lang Alt   | XMP Category    | External  |
| Implementation note(s)    |  |                 |           |
| Maps to this IIM property |  |                 |           |
| XMP/IIM mapping note(s)   |  |                 |           |
| G2 implementation         |  |                 |           |
| Property name (XPath)     |  |                 |           |
| Property-attribute(s)     |  |                 |           |
| QCode scheme              |  |                 |           |
| Implementation note(s)    | Mapping rules are pending.   |                 |           |

## Metadata Structure: CV-Term Details

| Generic Specification  |   | 9type-cvterm    |           |
|------------------------|---|-----------------|-----------|
| Name                   | CV-Term details structure {data type}   |                 |           |
| Definition             | A structure providing details of a Controlled Vocabulary term the content is about. |                 |           |
| Photo Definition       | A structure providing details of a Controlled Vocabulary term the image is about.   |                 |           |
| Photo Help Text        |   |                 |           |
| User Note(s)           |   |                 |           |
| Implementation Note(s) |   |                 |           |
| Field label/title      | N/A   |                 |           |
| Cardinality            |   | Basic data type | structure |
| Required CV            |   |                 |           |
| Spec change history    | Added by version 1.2  |                 |           |

| Generic Specification     |  | <a href="#">9type-cvterm</a> |          |
|---------------------------|--|------------------------------|----------|
| <b>Name</b>               | <b>CV-Term ID {CV-Term detail}</b>   |                              |          |
| Definition                | The globally unique identifier of the term from a Controlled Vocabulary.       |                              |          |
| Photo Definition          | The globally unique identifier of the term from a Controlled Vocabulary.       |                              |          |
| Photo Help Text           | Enter the globally unique identifier of the term from a Controlled Vocabulary. |                              |          |
| User Note(s)              |  |                              |          |
| Implementation Note(s)    |  |                              |          |
| Field label/title         | Term ID  |                              |          |
| Cardinality               | 1  | Basic data type              | URI      |
| Required CV               | YES  |                              |          |
| Spec change history       | Added by version 1.2   |                              |          |
| <b>XMP implementation</b> |  |                              |          |
| <b>XMP namespace</b>      | Iptc4xmpExt  | <b>XMP property id</b>       | CvTermId |
| XMP Value Type            | URI  | XMP Category                 | External |
| Implementation note(s)    |  |                              |          |
| Maps to this IIM property | none   |                              |          |
| XMP/IIM mapping note(s)   |  |                              |          |

| Generic Specification     |   | <a href="#">9type-cvterm</a> |            |
|---------------------------|---|------------------------------|------------|
| <b>Name</b>               | <b>CV-Term name {CV-Term detail}</b>                                  |                              |            |
| Definition                | The natural language name of the term from a Controlled Vocabulary.   |                              |            |
| Photo Definition          | The natural language name of the term from a Controlled Vocabulary.   |                              |            |
| Photo Help Text           | Enter the name of the term from a Controlled Vocabulary as free-text. |                              |            |
| User Note(s)              |   |                              |            |
| Implementation Note(s)    |   |                              |            |
| Field label/title         | Name  |                              |            |
| Cardinality               | 0..1  | Basic data type              | Text       |
| Required CV               | No  |                              |            |
| Spec change history       | Added by version 1.2  |                              |            |
| <b>XMP implementation</b> |   |                              |            |
| <b>XMP namespace</b>      | Iptc4xmpExt   | <b>XMP property id</b>       | CvTermName |
| XMP Value Type            | LangAlt   | XMP Category                 | External   |
| Implementation note(s)    |   |                              |            |
| Maps to this IIM property | none  |                              |            |
| XMP/IIM mapping note(s)   |   |                              |            |

| Generic Specification     |   | <a href="#">9type-cvterm</a> |          |
|---------------------------|---|------------------------------|----------|
| <b>Name</b>               | <b>CV-Term CV ID {CV-Term detail}</b>   |                              |          |
| Definition                | The globally unique identifier of the Controlled Vocabulary the term is from.             |                              |          |
| Photo Definition          | The globally unique identifier of the Controlled Vocabulary the term is from.             |                              |          |
| Photo Help Text           | Enter the globally unique identifier of the Controlled Vocabulary which the term is from. |                              |          |
| User Note(s)              |   |                              |          |
| Implementation Note(s)    |   |                              |          |
| Field label/title         | CV ID   |                              |          |
| Cardinality               | 0..1  | Basic data type              | URI      |
| Required CV               | no  |                              |          |
| Spec change history       | Added by version 1.2  |                              |          |
| <b>XMP implementation</b> |   |                              |          |
| <b>XMP namespace</b>      | Iptc4xmpExt   | <b>XMP property id</b>       | CvId     |
| XMP Value Type            | URI   | XMP Category                 | External |
| Implementation note(s)    |   |                              |          |
| Maps to this IIM property | none  |                              |          |
| XMP/IIM mapping note(s)   |   |                              |          |

| Generic Specification |   | <a href="#">9type-cvterm</a> |  |
|-----------------------|---|------------------------------|--|
| <b>Name</b>           | <b>Refined 'about' relationship of the CV-Term {CV-Term detail}</b>         |                              |  |
| Definition            | The refined 'about' relationship of the term with the content.              |                              |  |
| Photo Definition      | The refined 'about' relationship of the term with the content of the image. |                              |  |



|                           |  |                 |                    |
|---------------------------|--|-----------------|--------------------|
| Photo 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.  |                 |                    |
| Implementation Note(s)    |  |                 |                    |
| Field label/title         | Refined Aboutness  |                 |                    |
| Cardinality               | 0..1   | Basic data type | URI                |
| Required CV               | YES  |                 |                    |
| Spec change history       | Added by version 1.2   |                 |                    |
| <b>XMP implementation</b> |  |                 |                    |
| XMP namespace             | Iptc4xmpExt  | XMP property id | CvTermRefinedAbout |
| XMP Value Type            | URI  | XMP Category    | External           |
| Implementation note(s)    |  |                 |                    |
| Maps to this IIM property | none   |                 |                    |
| XMP/IIM mapping note(s)   |  |                 |                    |

## Metadata Structure: Encoded Rights Expression Details

|                        |  |                 |           |
|------------------------|--|-----------------|-----------|
| Generic Specification  | <a href="#">9type-eere</a>   |                 |           |
| <b>Name</b>            | <b>Embedded Encoded Rights Expression (EERE) details structure {data type}</b> |                 |           |
| Definition             | A structure providing details of an embedded encoded rights expression.        |                 |           |
| Photo Definition       | A structure providing details of an embedded encoded rights expression.        |                 |           |
| Photo Help Text        |  |                 |           |
| User Note(s)           |  |                 |           |
| Implementation Note(s) |  |                 |           |
| Field label/title      | N/A  |                 |           |
| Cardinality            |  | Basic data type | structure |
| Required CV            |  |                 |           |
| Spec change history    | Added by version 1.2   |                 |           |

|                        |  |                 |      |
|------------------------|--|-----------------|------|
| Generic Specification  | <a href="#">9type-eere</a>   |                 |      |
| <b>Name</b>            | <b>Encoded Rights Expression {EERE detail}</b>   |                 |      |
| Definition             | An embedded rights expression using a rights expression language which is encoded as a string.       |                 |      |
| Photo Definition       | An embedded rights expression using a rights expression language which is encoded as a string.       |                 |      |
| Photo Help Text        | Shows an embedded rights expression using a rights expression language which is encoded as a string. |                 |      |
| User Note(s)           |  |                 |      |
| Implementation Note(s) |  |                 |      |
| Field label/title      | Rights Expression  |                 |      |
| Cardinality            | 1  | Basic data type | Text |
| Required CV            | NO   |                 |      |
| Spec change history    | Added by version 1.2   |                 |      |

|                           |             |                 |               |
|---------------------------|-------------|-----------------|---------------|
| <b>XMP implementation</b> |             |                 |               |
| XMP namespace             | Iptc4xmpExt | XMP property id | EncRightsExpr |
| XMP Value Type            | Text        | XMP Category    | Internal      |
| Implementation note(s)    |             |                 |               |
| Maps to this IIM property | none        |                 |               |
| XMP/IIM mapping note(s)   |             |                 |               |

|                        |   |                 |      |
|------------------------|---|-----------------|------|
| Generic Specification  | <a href="#">9type-eere</a>  |                 |      |
| <b>Name</b>            | <b>Encoding type {EERE detail}</b>  |                 |      |
| Definition             | The encoding type of the rights expression, identified by an IANA Media Type. |                 |      |
| Photo Definition       | The encoding type of the rights expression, identified by an IANA Media Type. |                 |      |
| Photo Help Text        | Shows the encoding type of the rights expression by an IANA Media Type.       |                 |      |
| User Note(s)           |   |                 |      |
| Implementation Note(s) |   |                 |      |
| Field label/title      | Encoding Type   |                 |      |
| Cardinality            | 0..1  | Basic data type | Text |
| Required CV            | NO  |                 |      |

|                           |                      |                        |                   |
|---------------------------|----------------------|------------------------|-------------------|
| Spec change history       | Added by version 1.2 |                        |                   |
| <b>XMP implementation</b> |                      |                        |                   |
| <b>XMP namespace</b>      | iptc4xmpExt          | <b>XMP property id</b> | RightsExprEncType |
| XMP Value Type            | MIMEtype             | XMP Category           | Internal          |
| Implementation note(s)    |                      |                        |                   |
| Maps to this IIM property | none                 |                        |                   |
| XMP/IIM mapping note(s)   |                      |                        |                   |

|                              |  |                 |     |                            |
|------------------------------|--|-----------------|-----|----------------------------|
| <b>Generic Specification</b> |  |                 |     | <a href="#">9type-eere</a> |
| <b>Name</b>                  | <b>Rights Expression Language ID {EERE detail}</b>                             |                 |     |                            |
| Definition                   | An identifier of the rights expression language used by the rights expression. |                 |     |                            |
| Photo Definition             | An identifier of the rights expression language used by the rights expression. |                 |     |                            |
| Photo Help Text              | Shows the identifier of the used Rights Expression Language.                   |                 |     |                            |
| User Note(s)                 |  |                 |     |                            |
| Implementation Note(s)       |  |                 |     |                            |
| Field label/title            | Rights Expression Language ID  |                 |     |                            |
| Cardinality                  | 0..1   | Basic data type | URI |                            |
| Required CV                  | NO   |                 |     |                            |
| Spec change history          | Added by version 1.2   |                 |     |                            |

|                           |             |                        |                  |
|---------------------------|-------------|------------------------|------------------|
| <b>XMP implementation</b> |             |                        |                  |
| <b>XMP namespace</b>      | iptc4xmpExt | <b>XMP property id</b> | RightsExprLangId |
| XMP Value Type            | URI         | XMP Category           | Internal         |
| Implementation note(s)    |             |                        |                  |
| Maps to this IIM property | none        |                        |                  |
| XMP/IIM mapping note(s)   |             |                        |                  |

## Metadata Structure: Linked Rights Expression Details

|                              |  |                 |           |                            |
|------------------------------|--|-----------------|-----------|----------------------------|
| <b>Generic Specification</b> |  |                 |           | <a href="#">9type-lere</a> |
| <b>Name</b>                  | <b>Linked Encoded Rights Expression (LERE) details structure {data type}</b> |                 |           |                            |
| Definition                   | A structure providing details of a linked encoded rights expression.         |                 |           |                            |
| Photo Definition             | A structure providing details of a linked encoded rights expression.         |                 |           |                            |
| Photo Help Text              |  |                 |           |                            |
| User Note(s)                 |  |                 |           |                            |
| Implementation Note(s)       |  |                 |           |                            |
| Field label/title            | N/A  |                 |           |                            |
| Cardinality                  |  | Basic data type | structure |                            |
| Required CV                  |  |                 |           |                            |
| Spec change history          | Added by version 1.2   |                 |           |                            |

|                              |   |                 |     |                            |
|------------------------------|---|-----------------|-----|----------------------------|
| <b>Generic Specification</b> |   |                 |     | <a href="#">9type-lere</a> |
| <b>Name</b>                  | <b>Link to Encoded Rights Expression {LERE detail}</b>                      |                 |     |                            |
| Definition                   | The link to a rights expression using a rights expression language.         |                 |     |                            |
| Photo Definition             | The link to a rights expression using a rights expression language.         |                 |     |                            |
| Photo Help Text              | Enter the link to a web resource representing an encoded rights expression. |                 |     |                            |
| User Note(s)                 |   |                 |     |                            |
| Implementation Note(s)       |   |                 |     |                            |
| Field label/title            | Link to Rights Expression   |                 |     |                            |
| Cardinality                  | 1   | Basic data type | URL |                            |
| Required CV                  |   |                 |     |                            |
| Spec change history          | Added by version 1.2  |                 |     |                            |

|                           |             |                        |                  |
|---------------------------|-------------|------------------------|------------------|
| <b>XMP implementation</b> |             |                        |                  |
| <b>XMP namespace</b>      | iptc4xmpExt | <b>XMP property id</b> | LinkedRightsExpr |
| XMP Value Type            | URL         | XMP Category           | External         |
| Implementation note(s)    |             |                        |                  |
| Maps to this IIM property | none        |                        |                  |
| XMP/IIM mapping note(s)   |             |                        |                  |





| Generic Specification     |   | 9type-lere      |                   |
|---------------------------|---|-----------------|-------------------|
| Name                      | Encoding type {LERE detail}   |                 |                   |
| Definition                | The encoding type of the rights expression, identified by an IANA Media Type. |                 |                   |
| Photo Definition          | The encoding type of the rights expression, identified by an IANA Media Type. |                 |                   |
| Photo Help Text           | Enter the encoding type of the rights expression by using an IANA Media Type. |                 |                   |
| User Note(s)              |   |                 |                   |
| Implementation Note(s)    |   |                 |                   |
| Field label/title         | Encoding Type   |                 |                   |
| Cardinality               | 0..1  | Basic data type | Text              |
| Required CV               | NO  |                 |                   |
| Spec change history       | Added by version 1.2  |                 |                   |
| XMP implementation        |   |                 |                   |
| XMP namespace             | Iptc4xmpExt   | XMP property id | RightsExprEncType |
| XMP Value Type            | MIMEtype  | XMP Category    | External          |
| Implementation note(s)    |   |                 |                   |
| Maps to this IIM property | none  |                 |                   |
| XMP/IIM mapping note(s)   |   |                 |                   |

| Generic Specification     |   | 9type-lere      |                  |
|---------------------------|---|-----------------|------------------|
| Name                      | Rights Expression Language ID {LERE detail}                                     |                 |                  |
| Definition                | The identifier of the rights expression language used by the rights expression. |                 |                  |
| Photo Definition          | The identifier of the rights expression language used by the rights expression. |                 |                  |
| Photo Help Text           | Enter the identifier of the used Rights Expression Language.                    |                 |                  |
| User Note(s)              |   |                 |                  |
| Implementation Note(s)    |   |                 |                  |
| Field label/title         | Rights Expression Language ID   |                 |                  |
| Cardinality               | 0..1  | Basic data type | URI              |
| Required CV               | NO  |                 |                  |
| Spec change history       | Added by version 1.2  |                 |                  |
| XMP implementation        |   |                 |                  |
| XMP namespace             | Iptc4xmpExt   | XMP property id | RightsExprLangId |
| XMP Value Type            | URI   | XMP Category    | External         |
| Implementation note(s)    |   |                 |                  |
| Maps to this IIM property | none  |                 |                  |
| XMP/IIM mapping note(s)   |   |                 |                  |



## Metadata Structure: Location Details

| Generic Specification  | 9type-location   |                 |           |
|------------------------|--|-----------------|-----------|
| <b>Name</b>            | <b>Location Details structure {data type}</b>  |                 |           |
| 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. |                 |           |
| Photo 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. |                 |           |
| Photo Help Text        | -  |                 |           |
| User Note(s)           |  |                 |           |
| Implementation Note(s) |  |                 |           |
| Field label/title      | N/A  |                 |           |
| Cardinality            |  | Basic data type | structure |
| Required CV            |  |                 |           |
| Spec change history    |  |                 |           |

| Generic Specification  | 9type-location  |                 |        |
|------------------------|---|-----------------|--------|
| <b>Name</b>            | <b>City {location detail}</b>   |                 |        |
| Definition             | Name of the city of a location. This element is at the fourth level of a top-down geographical hierarchy. |                 |        |
| Photo Definition       | Name of the city of a location. This element is at the fourth level of a top-down geographical hierarchy. |                 |        |
| Photo Help Text        | Enter the name of the City  |                 |        |
| User Note(s)           |   |                 |        |
| Implementation Note(s) |   |                 |        |
| Field label/title      | City  |                 |        |
| Cardinality            | 0..1  | Basic data type | string |
| Required CV            |   |                 |        |
| Spec change history    |   |                 |        |

| XMP implementation        |             |                        |          |
|---------------------------|-------------|------------------------|----------|
| <b>XMP namespace</b>      | Iptc4xmpExt | <b>XMP property id</b> | City     |
| XMP Value Type            | Text        | XMP Category           | External |
| Implementation note(s)    |             |                        |          |
| Maps to this IIM property |             |                        |          |
| XMP/IIM mapping note(s)   |             |                        |          |

| G2 implementation            |  |
|------------------------------|--|
| <b>Property name</b> (XPath) | /newsItem/contentMeta/subject/               |
| Property-attribute(s)        | @type="cpnat:geoArea"+@facet="fct:city"      |
| QCode scheme                 |  |
| Implementation note(s)       | Mapping for Location Shown in the Image only |

| Generic Specification  | 9type-location  |                        |             |
|------------------------|---|------------------------|-------------|
| <b>Name</b>            | <b>Country ISO-Code {location detail}</b>   |                        |             |
| Definition             | The ISO code of a country of a location. This element is at the second level of a top-down geographical hierarchy.  |                        |             |
| Photo Definition       | The ISO code of a country of a location. This element is at the second level of a top-down geographical hierarchy.  |                        |             |
| Photo Help Text        | Enter the 2 or 3 letter ISO 3166 Country Code of the Country.   |                        |             |
| User Note(s)           |   |                        |             |
| Implementation Note(s) |   |                        |             |
| Field label/title      | Country ISO-Code  |                        |             |
| Cardinality            | 0..1  | Basic data type        | CV-code     |
| Required CV            | ISO 3166-1 - 2 or 3 characters (see Definition)   |                        |             |
| Spec change history    | Specs (201007): XMP ValueType corrected   |                        |             |
| XMP implementation     |   |                        |             |
| <b>XMP namespace</b>   | Iptc4xmpExt   | <b>XMP property id</b> | CountryCode |
| XMP Value Type         | closed choice   | XMP Category           | External    |
| Implementation note(s) | 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. |                        |             |

|                              |  |
|------------------------------|--|
| Maps to this IIM property    |  |
| XMP/IIM mapping note(s)      |  |
| <b>G2 implementation</b>     |  |
| <b>Property name</b> (XPath) | /newsItem/contentMeta/subject/@qcode         |
| Property-attribute(s)        | @type="cpnat:geoArea"+@facet="fct:country"   |
| QCode scheme                 |  |
| Implementation note(s)       | Mapping for Location Shown in the Image only |

|                              |  |                 |        |
|------------------------------|--|-----------------|--------|
| <b>Generic Specification</b> | <a href="#">9type-location</a>   |                 |        |
| <b>Name</b>                  | <b>Country Name {location detail}</b>  |                 |        |
| Definition                   | The name of a country of a location. This element is at the second level of a top-down geographical hierarchy. |                 |        |
| Photo Definition             | The name of a country of a location. This element is at the second level of a top-down geographical hierarchy. |                 |        |
| Photo Help Text              | Enter the name of the Country.   |                 |        |
| User Note(s)                 |  |                 |        |
| Implementation Note(s)       |  |                 |        |
| Field label/title            | Country Name   |                 |        |
| Cardinality                  | 0..1   | Basic data type | string |
| Required CV                  |  |                 |        |
| Spec change history          |  |                 |        |

|                           |             |                        |             |
|---------------------------|-------------|------------------------|-------------|
| <b>XMP implementation</b> |             |                        |             |
| <b>XMP namespace</b>      | Iptc4xmpExt | <b>XMP property id</b> | CountryName |
| XMP Value Type            | Text        | XMP Category           | External    |
| Implementation note(s)    |             |                        |             |
| Maps to this IIM property |             |                        |             |
| XMP/IIM mapping note(s)   |             |                        |             |

|                              |  |
|------------------------------|--|
| <b>G2 implementation</b>     |  |
| <b>Property name</b> (XPath) | /newsItem/contentMeta/subject/name           |
| Property-attribute(s)        | @type="cpnat:geoArea"+@facet="fct:country"   |
| QCode scheme                 |  |
| Implementation note(s)       | Mapping for Location Shown in the Image only |

|                              |   |                 |     |
|------------------------------|---|-----------------|-----|
| <b>Generic Specification</b> | <a href="#">9type-location</a>                            |                 |     |
| <b>Name</b>                  | <b>Location Identifier {location detail}</b>              |                 |     |
| Definition                   | Globally unique identifier of the location.               |                 |     |
| Photo Definition             | Globally unique identifier of the location.               |                 |     |
| Photo Help Text              | Enter a globally unique identifier of the location shown. |                 |     |
| User Note(s)                 |   |                 |     |
| Implementation Note(s)       |   |                 |     |
| Field label/title            | Location ID   |                 |     |
| Cardinality                  | 0..unbounded  | Basic data type | URI |
| Required CV                  | NO  |                 |     |
| Spec change history          | Added by version 1.2                                      |                 |     |

|                           |             |                        |            |
|---------------------------|-------------|------------------------|------------|
| <b>XMP implementation</b> |             |                        |            |
| <b>XMP namespace</b>      | Iptc4xmpExt | <b>XMP property id</b> | LocationId |
| XMP Value Type            | Bag URI     | XMP Category           | External   |
| Implementation note(s)    |             |                        |            |
| Maps to this IIM property | none        |                        |            |
| XMP/IIM mapping note(s)   |             |                        |            |

|                              |  |  |  |
|------------------------------|--|--|--|
| <b>Generic Specification</b> | <a href="#">9type-location</a>   |  |  |
| <b>Name</b>                  | <b>Province or State {location detail}</b>   |  |  |
| 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. |  |  |
| Photo 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. |  |  |
| Photo Help Text              | Enter the name of the Province or State.   |  |  |
| User Note(s)                 |  |  |  |

|                        |                |                 |        |
|------------------------|----------------|-----------------|--------|
| Implementation Note(s) |                |                 |        |
| Field label/title      | Province/State |                 |        |
| Cardinality            | 0..1           | Basic data type | string |
| Required CV            |                |                 |        |
| Spec change history    |                |                 |        |

|                           |             |                        |               |
|---------------------------|-------------|------------------------|---------------|
| <b>XMP implementation</b> |             |                        |               |
| <b>XMP namespace</b>      | Iptc4xmpExt | <b>XMP property id</b> | ProvinceState |
| <b>XMP Value Type</b>     | Text        | <b>XMP Category</b>    | External      |
| Implementation note(s)    |             |                        |               |
| Maps to this IIM property |             |                        |               |
| XMP/IIM mapping note(s)   |             |                        |               |

|                               |  |  |  |
|-------------------------------|--|--|--|
| <b>G2 implementation</b>      |  |  |  |
| <b>Property name (XPath)</b>  | /newsItem/contentMeta/subject/               |  |  |
| <b>Property-attribute(s)</b>  | @type="cpnat:geoArea"+@facet="fct:provState" |  |  |
| <b>QCode scheme</b>           |  |  |  |
| <b>Implementation note(s)</b> | Mapping for Location Shown in the Image only |  |  |

|                              |                                |
|------------------------------|--------------------------------|
| <b>Generic Specification</b> | <a href="#">9type-location</a> |
|------------------------------|--------------------------------|

|                        |  |                 |        |
|------------------------|--|-----------------|--------|
| <b>Name</b>            | <b>Sublocation {location detail}</b>   |                 |        |
| 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. |                 |        |
| Photo 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. |                 |        |
| Photo Help Text        | Enter the name of the Sublocation.   |                 |        |
| User Note(s)           |  |                 |        |
| Implementation Note(s) |  |                 |        |
| Field label/title      | Sublocation  |                 |        |
| Cardinality            | 0..1   | Basic data type | string |
| Required CV            |  |                 |        |
| Spec change history    |  |                 |        |

|                           |             |                        |             |
|---------------------------|-------------|------------------------|-------------|
| <b>XMP implementation</b> |             |                        |             |
| <b>XMP namespace</b>      | Iptc4xmpExt | <b>XMP property id</b> | Sublocation |
| <b>XMP Value Type</b>     | Text        | <b>XMP Category</b>    | External    |
| Implementation note(s)    |             |                        |             |
| Maps to this IIM property |             |                        |             |
| XMP/IIM mapping note(s)   |             |                        |             |

|                               |  |  |  |
|-------------------------------|--|--|--|
| <b>G2 implementation</b>      |  |  |  |
| <b>Property name (XPath)</b>  | /newsItem/contentMeta/subject/               |  |  |
| <b>Property-attribute(s)</b>  | @type="cpnat:geoArea"+@facet="fct:subLoc"    |  |  |
| <b>QCode scheme</b>           |  |  |  |
| <b>Implementation note(s)</b> | Mapping for Location Shown in the Image only |  |  |

|                              |                                |
|------------------------------|--------------------------------|
| <b>Generic Specification</b> | <a href="#">9type-location</a> |
|------------------------------|--------------------------------|

|                        |  |                 |        |
|------------------------|--|-----------------|--------|
| <b>Name</b>            | <b>World Region {location detail}</b>  |                 |        |
| Definition             | The name of a world region of a location. This element is at the first (top) level of a top-down geographical hierarchy. |                 |        |
| Photo Definition       | The name of a world region of a location. This element is at the first (top) level of a top-down geographical hierarchy. |                 |        |
| Photo Help Text        | Enter the name of the World Region   |                 |        |
| User Note(s)           |  |                 |        |
| Implementation Note(s) |  |                 |        |
| Field label/title      | World Region   |                 |        |
| Cardinality            | 0..1   | Basic data type | string |
| Required CV            |  |                 |        |
| Spec change history    |  |                 |        |

|                           |             |                        |             |
|---------------------------|-------------|------------------------|-------------|
| <b>XMP implementation</b> |             |                        |             |
| <b>XMP namespace</b>      | Iptc4xmpExt | <b>XMP property id</b> | WorldRegion |

|                           |   |              |          |
|---------------------------|---|--------------|----------|
| XMP Value Type            | Text  | XMP Category | External |
| Implementation note(s)    |   |              |          |
| Maps to this IIM property |   |              |          |
| XMP/IIM mapping note(s)   |   |              |          |
| <b>G2 implementation</b>  |   |              |          |
| Property name (XPath)     | /newsItem/contentMeta/subject/              |              |          |
| Property-attribute(s)     | @type="cpnat:geoArea"+@facet="fct:worldReg" |              |          |
| QCode scheme              |   |              |          |
| Implementation note(s)    |   |              |          |

## Metadata Structure: Person Details

|                              |   |                 |           |
|------------------------------|---|-----------------|-----------|
| <b>Generic Specification</b> | <a href="#">9type-person</a>                            |                 |           |
| <b>Name</b>                  | <b>Person details structure {data type}</b>             |                 |           |
| Definition                   | A structure of details of a single person in the image. |                 |           |
| Photo Definition             | A structure of details of a single person in the image. |                 |           |
| Photo Help Text              |   |                 |           |
| User Note(s)                 |   |                 |           |
| Implementation Note(s)       |   |                 |           |
| Field label/title            | N/A   |                 |           |
| Cardinality                  |   | Basic data type | structure |
| Required CV                  |   |                 |           |
| Spec change history          | Added by version 1.2                                    |                 |           |

|                              |  |                 |     |
|------------------------------|--|-----------------|-----|
| <b>Generic Specification</b> | <a href="#">9type-person</a>   |                 |     |
| <b>Name</b>                  | <b>Identifier {Person detail}</b>  |                 |     |
| Definition                   | Globally Unique Identifier of the person   |                 |     |
| Photo Definition             | Globally Unique Identifier of the person   |                 |     |
| Photo Help Text              | Enter Globally Unique Identifier(s) for the person, such as those from WikiData or Freebase. |                 |     |
| User Note(s)                 |  |                 |     |
| Implementation Note(s)       |  |                 |     |
| Field label/title            | Identifier   |                 |     |
| Cardinality                  | 0..unbounded   | Basic data type | URI |
| Required CV                  | NO   |                 |     |
| Spec change history          | Added by version 1.2   |                 |     |

|                           |             |                 |          |
|---------------------------|-------------|-----------------|----------|
| <b>XMP implementation</b> |             |                 |          |
| XMP namespace             | Iptc4xmpExt | XMP property id | PersonId |
| XMP Value Type            | Bag URI     | XMP Category    | External |
| Implementation note(s)    |             |                 |          |
| Maps to this IIM property | none        |                 |          |
| XMP/IIM mapping note(s)   |             |                 |          |

|                              |  |                 |      |
|------------------------------|--|-----------------|------|
| <b>Generic Specification</b> | <a href="#">9type-person</a>   |                 |      |
| <b>Name</b>                  | <b>Name {Person detail}</b>  |                 |      |
| Definition                   | Name of the person   |                 |      |
| Photo Definition             | Name of the person   |                 |      |
| Photo Help Text              | Enter the name of the person   |                 |      |
| User Note(s)                 |  |                 |      |
| Implementation Note(s)       | This property could be synchronized with one of the entries of Person Shown in Image |                 |      |
| Field label/title            | Name   |                 |      |
| Cardinality                  | 0..1   | Basic data type | Text |
| Required CV                  | NO   |                 |      |
| Spec change history          | Added by version 1.2   |                 |      |

|                           |             |                 |            |
|---------------------------|-------------|-----------------|------------|
| <b>XMP implementation</b> |             |                 |            |
| XMP namespace             | Iptc4xmpExt | XMP property id | PersonName |
| XMP Value Type            | LangAlt     | XMP Category    | External   |
| Implementation note(s)    |             |                 |            |
| Maps to this IIM property | none        |                 |            |



|  |   |                 |                                     |
|--|---|-----------------|-------------------------------------|
| XMP/IIM mapping note(s)  |   |                 |                                     |
| <b>Generic Specification</b> <span style="float: right;">9type-person</span> |   |                 |                                     |
| <b>Name</b>  | <b>Characteristics {Person detail}</b>  |                 |                                     |
| Definition   | A property or trait of the person   |                 |                                     |
| Photo Definition   | A property or trait of the person   |                 |                                     |
| Photo Help Text  | Enter a property or trait of the person by selecting a term from a Controlled Vocabulary. |                 |                                     |
| User Note(s)   |   |                 |                                     |
| Implementation Note(s)   |   |                 |                                     |
| Field label/title  | Characteristics   |                 |                                     |
| Cardinality  | 0..unbounded  | Basic data type | Metadata Structure: CV-Term Details |
| Required CV  | YES   |                 |                                     |
| Spec change history  | Added by version 1.2  |                 |                                     |
| <b>XMP implementation</b>  |   |                 |                                     |
| XMP namespace  | iptc4xmpExt   | XMP property id | PersonCharacteristic                |
| XMP Value Type   | Bag CV-Term structure   | XMP Category    | External                            |
| Implementation note(s)   |   |                 |                                     |
| Maps to this IIM property  | none  |                 |                                     |
| XMP/IIM mapping note(s)  |   |                 |                                     |

|  |   |                 |                   |
|--|---|-----------------|-------------------|
| <b>Generic Specification</b> <span style="float: right;">9type-person</span> |   |                 |                   |
| <b>Name</b>  | <b>Description {Person detail}</b>  |                 |                   |
| Definition   | A textual description of the person   |                 |                   |
| Photo Definition   | A textual description of the person   |                 |                   |
| Photo Help Text  | Describe the person, any actions taken, emotional expressions shown, etc. as free-text. |                 |                   |
| User Note(s)   | It may include actions taken, emotional expressions shown and more.                     |                 |                   |
| Implementation Note(s)   |   |                 |                   |
| Field label/title  | Description   |                 |                   |
| Cardinality  | 0..1  | Basic data type | Text              |
| Required CV  | No  |                 |                   |
| Spec change history  | Added by version 1.2  |                 |                   |
| <b>XMP implementation</b>  |   |                 |                   |
| XMP namespace  | iptc4xmpExt   | XMP property id | PersonDescription |
| XMP Value Type   | LangAlt   | XMP Category    | External          |
| Implementation note(s)   |   |                 |                   |
| Maps to this IIM property  | none  |                 |                   |
| XMP/IIM mapping note(s)  |   |                 |                   |

## Metadata Structure: Product Details

|   |  |                 |  |
|---|--|-----------------|--|
| <b>Generic Specification</b> <span style="float: right;">9type-product</span> |  |                 |  |
| <b>Name</b>   | <b>Product details structure {data type}</b>   |                 |  |
| Definition  | A structure providing details about a product. |                 |  |
| Photo Definition  | A structure providing details about a product. |                 |  |
| Photo Help Text   |  |                 |  |
| User Note(s)  |  |                 |  |
| Implementation Note(s)  |  |                 |  |
| Field label/title   |  |                 |  |
| Cardinality   |  | Basic data type |  |
| Required CV   |  |                 |  |
| Spec change history   | Added by version 1.2                           |                 |  |
| <b>XMP implementation</b>   |  |                 |  |
| XMP namespace   |  | XMP property id |  |
| XMP Value Type  |  | XMP Category    |  |
| Implementation note(s)  |  |                 |  |
| Maps to this IIM property   | none   |                 |  |
| XMP/IIM mapping note(s)   |  |                 |  |



| Generic Specification     |                                | 9type-product   |             |
|---------------------------|--------------------------------|-----------------|-------------|
| Name                      | Name {Product detail}          |                 |             |
| Definition                | Name of the product.           |                 |             |
| Photo Definition          | Name of the product.           |                 |             |
| Photo Help Text           | Enter the name of the product. |                 |             |
| User Note(s)              |                                |                 |             |
| Implementation Note(s)    |                                |                 |             |
| Field label/title         | Name                           |                 |             |
| Cardinality               | 0..1                           | Basic data type | Text        |
| Required CV               |                                |                 |             |
| Spec change history       | Added by version 1.2           |                 |             |
| XMP implementation        |                                |                 |             |
| XMP namespace             | Iptc4xmpExt                    | XMP property id | ProductName |
| XMP Value Type            | LangAlt                        | XMP Category    | External    |
| Implementation note(s)    |                                |                 |             |
| Maps to this IIM property | none                           |                 |             |
| XMP/IIM mapping note(s)   |                                |                 |             |

| Generic Specification     |  | 9type-product   |             |
|---------------------------|--|-----------------|-------------|
| Name                      | GTIN {Product detail}  |                 |             |
| Definition                | A 14 digit GTIN (Global Trade Item Number) of the product (GTIN-8 to GTIN-14 codes are used).  |                 |             |
| Photo Definition          | A 14 digit GTIN (Global Trade Item Number) of the product (GTIN-8 to GTIN-14 codes are used).  |                 |             |
| Photo Help Text           | Enter the 14 digit Global Trade Item Number (GTIN) of the product as defined by GS1.   |                 |             |
| User Note(s)              |  |                 |             |
| Implementation Note(s)    | More information about GTIN at <a href="http://www.gs1.org/barcodes/technical/idkeys/gtin">http://www.gs1.org/barcodes/technical/idkeys/gtin</a> |                 |             |
| Field label/title         | GTIN   |                 |             |
| Cardinality               | 0..1   | Basic data type | Text        |
| Required CV               |  |                 |             |
| Spec change history       | Added by version 1.2   |                 |             |
| XMP implementation        |  |                 |             |
| XMP namespace             | Iptc4xmpExt  | XMP property id | ProductGTIN |
| XMP Value Type            | Text   | XMP Category    | External    |
| Implementation note(s)    |  |                 |             |
| Maps to this IIM property | none   |                 |             |
| XMP/IIM mapping note(s)   |  |                 |             |

| Generic Specification     |  | 9type-product   |                    |
|---------------------------|--|-----------------|--------------------|
| Name                      | Description {Product detail}               |                 |                    |
| Definition                | A textual description of the product.      |                 |                    |
| Photo Definition          | A textual description of the product.      |                 |                    |
| Photo Help Text           | Enter a textual description of the product |                 |                    |
| User Note(s)              |  |                 |                    |
| Implementation Note(s)    |  |                 |                    |
| Field label/title         | Description                                |                 |                    |
| Cardinality               | 0..1                                       | Basic data type | Text               |
| Required CV               |  |                 |                    |
| Spec change history       | Added by version 1.2                       |                 |                    |
| XMP implementation        |  |                 |                    |
| XMP namespace             | Iptc4xmpExt                                | XMP property id | ProductDescription |
| XMP Value Type            | LangAlt                                    | XMP Category    | External           |
| Implementation note(s)    |  |                 |                    |
| Maps to this IIM property | none                                       |                 |                    |
| XMP/IIM mapping note(s)   |  |                 |                    |



## Metadata Structure: Registry Entry Details

|                              |   |                 |           |
|------------------------------|---|-----------------|-----------|
| <b>Generic Specification</b> | <a href="#">9type-registryid</a>  |                 |           |
| <b>Name</b>                  | <b>Registry Entry Details structure {data type}</b>   |                 |           |
| Definition                   | A structured datatype for an entry in a registry, includes the id issued by the registry and the registry's id.               |                 |           |
| Photo 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. |                 |           |
| Photo Help Text              | -   |                 |           |
| User Note(s)                 |   |                 |           |
| Implementation Note(s)       |   |                 |           |
| Field label/title            | N/A   |                 |           |
| Cardinality                  |   | Basic data type | structure |
| Required CV                  |   |                 |           |
| Spec change history          |   |                 |           |

|                              |  |                 |        |
|------------------------------|--|-----------------|--------|
| <b>Generic Specification</b> | <a href="#">9type-registryid</a>   |                 |        |
| <b>Name</b>                  | <b>Item Id {registry entry detail}</b>   |                 |        |
| Definition                   | A unique identifier created by a registry and applied by the creator of the item. This value shall not be changed after being applied. This identifier is linked to a corresponding Registry Organisation Identifier.          |                 |        |
| Photo 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. |                 |        |
| Photo 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.  |                 |        |
| Implementation Note(s)       |  |                 |        |
| Field label/title            | Item Identifier  |                 |        |
| Cardinality                  | 1  | Basic data type | string |
| Required CV                  |  |                 |        |
| Spec change history          |  |                 |        |

|                              |                             |                        |           |
|------------------------------|-----------------------------|------------------------|-----------|
| <b>XMP implementation</b>    |                             |                        |           |
| <b>XMP namespace</b>         | iptc4xmpExt                 | <b>XMP property id</b> | RegItemId |
| XMP Value Type               | Text                        | XMP Category           | External  |
| Implementation note(s)       |                             |                        |           |
| Maps to this IIM property    |                             |                        |           |
| XMP/IIM mapping note(s)      |                             |                        |           |
| <b>G2 implementation</b>     |                             |                        |           |
| <b>Property name (XPath)</b> | /newsItem/contentMeta/altId |                        |           |
| Property-attribute(s)        |                             |                        |           |
| QCode scheme                 |                             |                        |           |
| Implementation note(s)       |                             |                        |           |

|                              |  |                        |          |
|------------------------------|--|------------------------|----------|
| <b>Generic Specification</b> | <a href="#">9type-registryid</a>   |                        |          |
| <b>Name</b>                  | <b>Organisation Id {registry entry detail}</b>   |                        |          |
| Definition                   | An identifier for the registry which issued the corresponding Registry Image Id.       |                        |          |
| Photo Definition             | An identifier for the registry which issued the corresponding Registry Image Id.       |                        |          |
| Photo Help Text              | Enter the identifier for the registry which issued the corresponding Registry Image ID |                        |          |
| User Note(s)                 |  |                        |          |
| Implementation Note(s)       |  |                        |          |
| Field label/title            | Organisation Identifier  |                        |          |
| Cardinality                  | 1  | Basic data type        | string   |
| Required CV                  |  |                        |          |
| Spec change history          |  |                        |          |
| <b>XMP implementation</b>    |  |                        |          |
| <b>XMP namespace</b>         | iptc4xmpExt  | <b>XMP property id</b> | RegOrgId |
| XMP Value Type               | Text   | XMP Category           | External |
| Implementation note(s)       |  |                        |          |



|                              |  |
|------------------------------|--|
| Maps to this IIM property    |  |
| XMP/IIM mapping note(s)      |  |
| <b>G2 implementation</b>     |  |
| <b>Property name</b> (XPath) | /newsItem/contentMeta/altId/@type="RegOrgId" |
| Property-attribute(s)        |  |
| QCode scheme                 |  |
| Implementation note(s)       |  |



## References

| Name           | Source  |
|----------------|---|
| Adobe XMP      | Adobe Extensible Metadata Platform (XMP)<br><a href="http://www.adobe.com/products/xmp/">http://www.adobe.com/products/xmp/</a><br>Latest specification as of April 2012 and April 2013<br>These documents include the specification of the metadata schemas Dublin Core, XMP Rights management and Photoshop which are referenced in this specification. |
| ISO XMP        | XMP Part 1 as <a href="#">ISO standard 16684-1</a>  |
| DC             | Dublin Core metadata schema:<br><a href="http://www.dublincore.org/">http://www.dublincore.org/</a>   |
| IPTC NewsML-G2 | IPTC NewsML-G2 standard, an XML-based news exchange format:<br><a href="http://www.newsml-g2.org">http://www.newsml-g2.org</a>  |
| IPTC IIM       | IPTC Information Interchange Model: <a href="http://www.iptc.org/IIM/">http://www.iptc.org/IIM/</a> and<br><a href="http://www.iptc.org/std/IIM/4.2/specification/IIMV4.2.pdf">http://www.iptc.org/std/IIM/4.2/specification/IIMV4.2.pdf</a>  |
| PhMdWP2007     | IPTC Photo Metadata White Paper 2007<br><a href="http://www.iptc.org/goto?phmdwp2007">http://www.iptc.org/goto?phmdwp2007</a>   |
| PLUS           | Picture Licensing Universal System – PLUS: <a href="http://www.useplus.org">http://www.useplus.org</a><br>PLUS specifications: <a href="http://www.useplus.com/useplus/standards.asp">http://www.useplus.com/useplus/standards.asp</a>  |
| MetadataWG     | Guidelines for Handling Image Metadata v 2.0<br><a href="http://www.metadataworkinggroup.com/specs/">http://www.metadataworkinggroup.com/specs/</a>   |
| W3C-SKOS       | SKOS Simple Knowledge Organization System<br>Overview: <a href="http://www.w3.org/2004/02/skos/">http://www.w3.org/2004/02/skos/</a><br>Reference: <a href="http://www.w3.org/TR/skos-reference/">http://www.w3.org/TR/skos-reference/</a>  |



# Appendix 1: Metadata Property Structure Helper

These structures below reflect the hierarchy of properties defined by this standard:

## IPTC Core structure

- City
- Copyright Notice
- Country
- Country Code
- Creator
- Creator's Contact Info
  - Address
  - City
  - Country
  - Email address
  - Phone number
  - Postal Codes
  - State/Province
  - Web URL
- Creator's Jobtitle
- Credit Line
- Date Created
- Description
- Description Write
- Headline
- Instructions
- Intellectual Genre
- Job Id
- Keywords
- Province/State
- Rights Usage Terms
- Scene Code
- Source
- Subject Code
- Sublocation
- Title

## IPTC Extension structure

- Additional Model Information
- Artwork or Object in the Image
  - Copyright Notice
  - Current Copyright Owner Name
  - Current Copyright Owner ID
  - Current Licensor Name
  - Current Licensor ID
  - Creator
  - Creator ID
  - Date Created
  - Circa Date Created
  - Style Period
  - Source
  - Source Inventory Number
  - Source Inventory URL

- Content Description
- Physical Description
- Contribution Description
- Title
- Code of Organisation Featured in the Image
- Copyright Owner
- CV-Term About Image
  - CV-Term ID
  - CV-Term Name
  - CV-Term CV ID
- Digital Image GUID
- Digital Source Type
- Embedded Encoded Rights Expression
  - Encoded Rights Expression
  - Encoding Type
  - Rights Expression Language ID
- Event
- Image Creator
- Image Registry Entry
  - Item ID
  - Organisation ID
- Image Supplier
- Image Supplier Image ID
- Licensor
- Linked Encoded Rights Expression
  - Link to Encoded Rights Expression
  - Encoding Type
  - Rights Expression Language ID
- Location Created
  - City
  - Country ISO-Code
  - Country Name
  - Location Identifier
  - Province or State
  - Sublocation
  - World Region
- Location Shown in the Image
  - City
  - Country ISO-Code
  - Country Name
  - Location Identifier
  - Province or State
  - Sublocation
  - World Region
- Max Avail Height
- Max Avail Width
- Minor Model Age Disclosure
- Model Age
- Model Release ID
- Model Release Status
- Name of Organisation Featured in the Image
- Person Shown in the Image



- Person Shown in the Image with Details
  - Identifier
  - Name
  - Characteristics
    - CV-Term ID
    - CV-Term Name
    - CV-Term CV ID
  - Description
- PLUS Version
- Product Shown in the Image
- Property Release ID
- Property Release Status



## Appendix 2: Persistent Technical Photo Metadata – a recommendation

### Objectives for Technical Photo Metadata

Technical photo metadata within the scope of this paper are:

- Digital camera manufacturers' metadata, including all Exif and MakerNote metadata that record the camera settings and image capture conditions
- ICC metadata in the form of ICC profiles, if embedded, that define the colours of the image in a standard way
- Other third-party application metadata, for example, Photoshop and Fotoware metadata, and face detection metadata
- File format metadata like that in Exif DCF2, camera RAW, JPEG 2000 or JPEG XR.

All these forms of technical metadata should be persistent, along with metadata contained in the IPTC Core, IPTC Extension or IIM metadata.

#### Why do we need persistent technical metadata?

Technical metadata must be viewed as being just as important as descriptive (content oriented) metadata standards defined by the IPTC. Both types of metadata are essential to the business of picture agencies, news reporting, and cultural heritage works.

The prime reason to preserve and maintain technical metadata is to take advantage of technical developments in digital photography. Workflows need to be faster and more efficient, saving time and money whenever and wherever possible, image quality needs to be higher, and search and retrieval for images needs to be more discerning and more fruitful.

The digital present and the digital future require a general all-round improvement in the use of resources and digital assets.

A more complete discussion regarding the benefits of keeping technical metadata is given in an extended version of "Persisting Technical Photo Metadata" available [on the Ifra web site](#)<sup>i</sup>. After reading this document, it should become clear that there is much to be gained by keeping all metadata and the highest advantages can be obtained at low cost through automatic software procedures.

### Photo Workflows

Whenever photos are captured by digital cameras, metadata is written into the image file. Subsequently, additional metadata is written by the photographer, picture desk editor, picture librarians and also automatically by application and system software.

Software applications need to be aware of metadata that has been added to the image by, firstly, the digital camera and, secondly, by other people or another application, so that a complete record of metadata is preserved and persisted with each image as it passes through every stage of the workflow.

#### How to persist metadata in different workflows

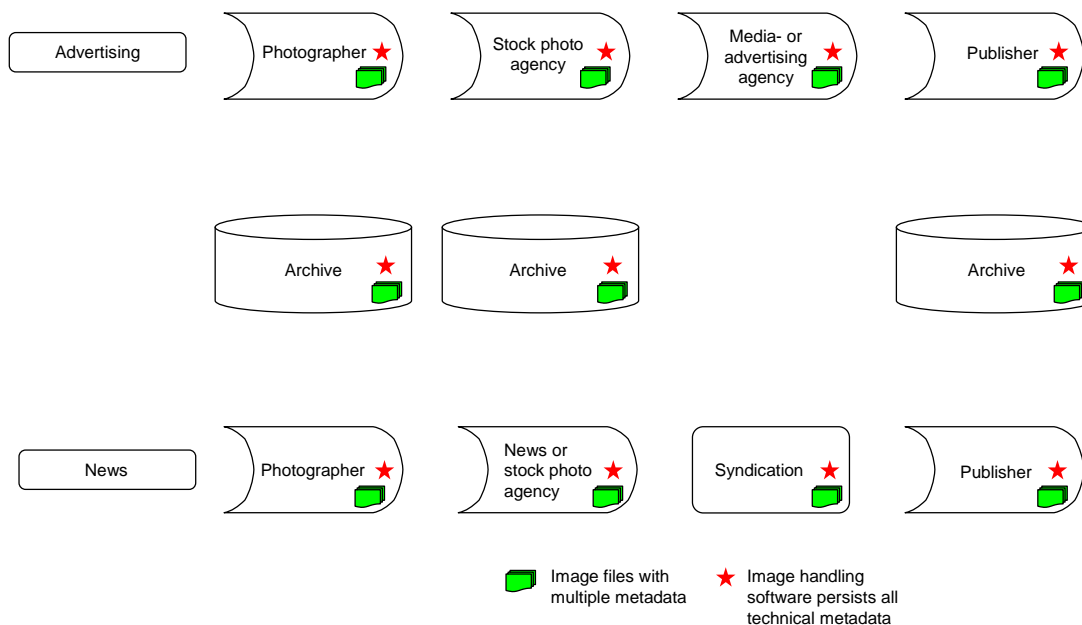
Workflow diagrams are shown here for the persistence of technical metadata for:

- a) the general case
- b) a news picture agency
- c) a newspaper

The workflow diagrams have red asterisks to show where metadata can be invalidated or lost, if the software application does not fully support technical metadata by updating certain fields after processing and correctly writing the metadata into the image file on saving.



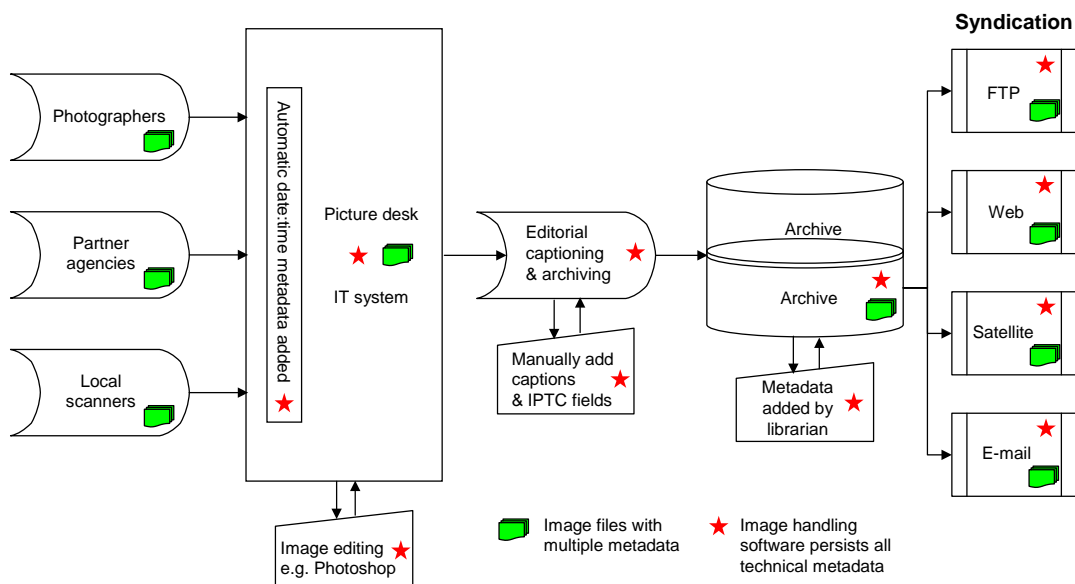
### Generalised Photo Value Chain



At every stage in the value chain, starting with downloading images from the camera to a storage device, and at every further stage of picture annotation and editing, only software that persists and maintains all photo metadata should be used.

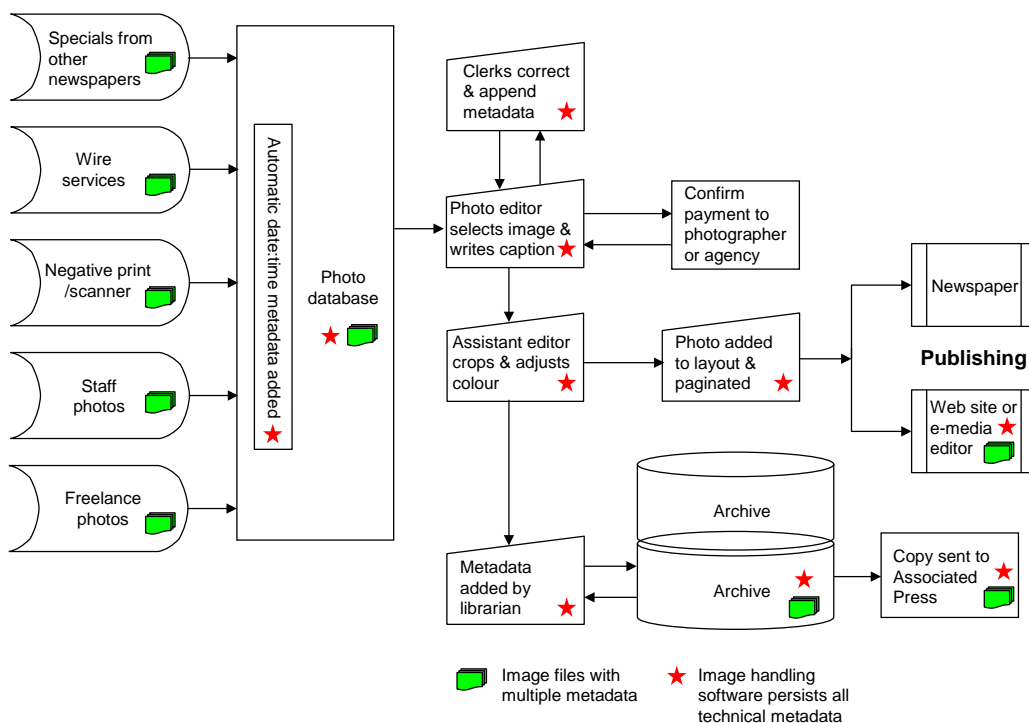
### News Agency Workflow

(example from dpa, Deutsche Presse-Agentur)



### U.S. Newspaper's Workflow

( a typical example )







## Recommendations

1. “Persisting technical metadata” means that all metadata properties and their values relating to:
  - Basic file management (e.g. file type, image dimensions in pixels, orientation, image data compression parameters) MUST BE PERSISTED AND MAINTAINED to record the current state of the image
  - Administration (e.g. date and time of capture, creator, copyright holder, GPS, unique image ID) MUST BE PERSISTED AND MAINTAINED
  - Camera settings (e.g. auto- or manual exposure, auto- or manual focus, colour space and colour profile, ISO setting, scene type, camera ID, lens ID) MUST BE PERSISTED AND NOT CHANGED
  - Image capture conditions (e.g. exposure time, lens aperture, distance to subject) MUST BE PERSISTED AND NOT CHANGED, and
  - Descriptions (e.g. comments, title) are to be added and ARE OPTIONALLY PERSISTED AND EDITED.
2. All metadata (descriptive and technical), should be persisted in accordance with the first recommendation, above, as long as each image file remains digitally accessible. All JPEG-based Exif, TIFF/EP and camera RAW files contain technical camera metadata. PDF files also contain technical metadata, as do the new generation of file formats, JPEG 2000 and JPEG XR.
3. All technical metadata should be persisted, even if they are not required for use by the current application in a workflow step. Any application should not be limited by inadequate metadata processing of software in a previous workflow step. It should not remove any property.
4. Versioning metadata, to historically record all modifications to the image, is optional. Similarly, an application must be able to update standard metadata, where appropriate.
5. If the picture data is edited, for example through orientation, colour characterisation, sizing or cropping, then the pertinent metadata (e.g. pixel height and width) and the thumbnail image need to be updated in the file to be commensurate with the main picture data.
6. Image suppliers should persist all of the technical metadata, both standard and proprietary, in its existing and standardised form within the respective image files (Exif, TIFF, JPEG 2000, RAW, PDF, DNG etc.). Not just one schema for metadata has to be supported today, but several - IPTC IIM and IPTC Core, IPTC Extension, TIFF, Dublin Core, Exif, ICC and others.
7. In order for the technical metadata to be usable by the widest range of existing applications, technical metadata is required in its original schema. The Exif format, for example, is by far the most common digital camera format and schema for digital pictures. All automatic image processing applications cater first and foremost to this format and schema, while extending their capabilities to other less common formats as well. Technical metadata originating from the camera-, ICC profiles-, GPS information- and face detection metadata, should remain in the schema in which it was originally created by the camera or application. This would ensure maximum compatibility with clients' and customers' systems and workflows today. If technical metadata is repeated in another schema within the same file, the metadata should still be persisted to its fullest extent in its original schema. Additionally, any updating of a metadata property that becomes necessary in one schema, for example because of, image processing or administration, should be automatically replicated by the software in each of the other metadata schemas where the same property appears in that file. Without this assistance, photo sources have problems in keeping multiple sets of the same metadata current and synchronised within the file.
8. in the future, the use of a single schema for all metadata should be recommended, but not until such a schema is approved by all bodies that issue imaging file standards (e.g. ISO, IEC, ITU, JEITA, JPEG, ICC).
9. Archived images should be a copy of the original picture data and full metadata so that, as technical metadata develops, it shall become possible to take advantage of new algorithms to further improve image quality, the use of image resources, and the implementation of asset management.



10. Technical metadata and the associated image pixel data should always be kept together or be linked together in an unambiguous manner.
11. While the persistence of all metadata is the prime goal, metadata that contravenes personal information data protection, or personal-, state- or national security may be removed because of legal requirements. Software that captures all metadata must contain functions that allow the deletion of sensitive metadata, if it contravenes just one of these principles. For example, under some circumstances, a personal ID and GPS information could both be considered safety hazards to a photojournalist in the field and must be removed before distribution.
12. When organisations create or support formats for photos or picture standards, they should ensure that the respective schema or format can be read or be written by freely available software, preferably under an Open Source Licence.  
This would enable the reading and writing of image data and metadata so that the above recommendations are met, while obtaining such software should not then become expensive<sup>ii</sup>. Only when such software is freely available and easily integrated into picture-handling programs, can the agencies and organisations which are currently unable to take advantage of the technical developments in digital photography expect to participate effectively in an international trading of pictures.

---

<sup>i</sup> [http://www.ifra.com/Persisting\\_Technical\\_Photo\\_Metadata.pdf](http://www.ifra.com/Persisting_Technical_Photo_Metadata.pdf)

<sup>ii</sup> An example of such software is Phil Harvey's ExifTool to be found at:  
<http://www.sno.phy.queensu.ca/~phil/exiftool/>