

A Guide to a RSS pivot format, including ClaimReview and MediaReview

for Fact Checks Feed Providers

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Introduction

This document, produced as part of the European [DE FACTO](#) project, is a guide to set up a RSS pivot format including the ClaimReview and MediaReview specifications defined by the Schema.org consortium, for fact-checking articles.

This guide is intended to provide a common pivot format for the fact-checking supplier's partners of the DeFacto project. All items listed are important for distributing fact-checking articles with a maximum of metadata.

However, it remains a state of the art of good practices, a recommendation, to set up the richest possible RSS feed for the purposes of automating as much as possible content ingestion within the EDMO regional and national hubs, as well as improving indexing, referencing, and data reuse e.g. to build disinformation databases.

It is therefore more of an objective to be achieved within the framework of the project than a strict requirement.

RSS elements

The description of the recommended RSS pivot format reuses the standards defined by the RSS 2.0 format as well as the existing extensions.

The full RSS format specification can be accessed at <https://www.rssboard.org/rss-2-0-1>.

RSS feeds

Elements	
channel	Definition of the fact-checking operator

channel

Elements	
title	Title of the RSS feed
link	Link of the RSS feed or homepage of the site
language	Language of the RSS feed
item	An item for each publication of a verification article (fact-check). https://www.rssboard.org/rss-profile#element-channel-item

Item

In addition to the existing RSS elements, the pivot format defines additional elements allowing the additional support of useful data.

<https://www.rssboard.org/rss-specification#extendingRss>

These elements use the following namespaces:

Prefix	Namespace	support
schema	https://schema.org	Schema.org community-defined elements for the support of ClaimReview and MediaReview https://schema.org
media	http://search.yahoo.com/mrss/	RSS module used as a complement to to the <enclosure> element defining the media used by the article. https://www.rssboard.org/media-rss
content	http://purl.org/rss/1.0/modules/content/	RSS 1.0 module for supporting website content in any format. https://web.resource.org/rss/1.0/modules/content/
atom	http://www.w3.org/2005/Atom	Atom community-defined elements

Elements	
title	Article title https://www.rssboard.org/rss-profile#element-channel-textinput-title
guid	Unique identifier of the article. Attribute: <ul style="list-style-type: none"> • isPermaLink => <ul style="list-style-type: none"> ○ <i>true</i> (default): in that case, the guid must be a permanent URL of the article ○ <i>false</i> : in that case, the guid must respect the format defined by Tag URI scheme. https://www.rssboard.org/rss-profile#element-channel-item-guid
link	URL of the fact check article on your site https://www.rssboard.org/rss-profile#element-channel-item-link
pubDate	Publication date of the article in dateTime format. The recommended DE FACTO date time format is ISO 8601 with the time zone indicated as an offset from UTC, for instance: 2022-04-29T11:36:31+01:00. https://www.rssboard.org/rss-profile#element-channel-item-pubdate

atom:updateDate	Last article update date in dateTime format
schema:review	<p>An element containing ClaimReview and/or MediaReview to describe the statement or media that was checked. The content is in json-ld format escaped into a CDATA section.</p> <p>Attribute:</p> <ul style="list-style-type: none"> • encodingFormat (mandatory) => defines the mime type of the content. For ClaimReview and MediaReview elements, the type is always application/ld-json
content:encoded	<p>Full content or the first paragraphs of the article in HTML format escaped into a CDATA section. This content is meant to be automatically ingested by Content Management Systems or other automatic processes. DE FACTO is expected to get the full content to feed its CMS.</p> <p>https://www.rssboard.org/rss-profile#namespace-elements-content-encoded https://web.resource.org/rss/1.0/modules/content/</p>
description	<p>Short summary or first paragraph of the article in text. Essential element for RSS readers.</p> <p>https://www.rssboard.org/rss-profile#element-channel-item-description</p>
enclosure	<p>Illustrative image of the article. For compatibility with RSS aggregators, there should be no more than one enclosure.</p> <p>Required attributes:</p> <ul style="list-style-type: none"> • url => media link • type => media mime type • length => media size <p>https://www.rssboard.org/rss-profile#element-channel-item-enclosure</p>
media:content media:group	<p>An element which supplements the enclosure element for additional description of any type of media. If there are several contents, the element is repeated. If the same content in different formats, media:group is used.</p> <p>https://www.rssboard.org/media-rss#primary-elements</p>
author	<p>Name of the author of the article. The element is repeated when there are several authors.</p> <p>https://www.rssboard.org/rss-profile#element-channel-item-author</p>
category	<p>Definition of a category linked to the article. This can be done with free text or by using a taxonomy defined by the domain in the case of a controlled vocabulary.</p> <p>The element is repeated when there are several categories.</p> <p>https://www.rssboard.org/rss-profile#element-channel-item-category</p>

Support for IPTC codes in the category element

In order to standardize the content of **categories**, it is possible to use the codes defined by the IPTC or other standardized domains.

The definition of the domain to which the codes belong is specified by the use of the **domain**.

Examples

The use of IPTC codes in category elements is done via the **domain**.

IPTC Category:

```
<category domain="https://cv.iptc.org/newscodes/subjectcode">04008033</category>
```

Media Topic:

```
<category domain="https://iptc.org/standards/media-topics">2000337</category>
```

Example with categories defined by an AFP factcheck:

Media topic in text

```
<category>Media topic/Conflicts, wars and peace< /category>  
<category>Media topic/Science and technology</category>  
<category>Media topic/Politics</category>  
<category>Media topic/Politics/Elections</category>  
<category>Media topic/Politics/Elections/campaign Election</category>  
<category>Media topic/Society</category>  
<category>Media topic/Science and technology/Social sciences</category>  
<category>Media topic/Science and technology/Social sciences/History</category >  
<category>Media topic/Conflicts, wars and peace/Massacre</category>  
<category>Media topic/Religion and belief</category>  
<category>Media topic/Society/Discrimination</category>  
<category>Media topic/ Society/Discrimination/Racism</category>
```

Media topic with IPTC defined codes

```
<category domain="https://iptc.org/standards/m edia-topics">16000000</category>  
<category domain="https://iptc.org/standards/media-topics">13000000</category>  
<category domain="https://iptc.org/standards/ media-topics">11000000</category>  
<category domain="https://iptc.org/standards/media-topics">20000574</category>  
<category domain="https://iptc.org/standards/ media-topics">20000580</category>  
<category domain="https://iptc.org/standards/media-topics">14000000</category>  
<category domain="https://iptc.org/standards/ media-topics">20000742</category>  
<category domain="https://iptc.org/standards/media-topics">20000747</category>  
<category domain="https://iptc.org/standards/ media-topics">20000071</category>  
<category domain="https://iptc.org/standards/media-topics">12000000</category>  
<category domain="https://iptc.org/standards/ media-topics">20000775</category>  
<category domain="https://iptc.org/standards/media-topics">20000777</category>
```

ISO 316 Country Code 6

The country codes defined by the ISO 3166 standard can be used by specifying one of the following values for the **domain** :

- <https://www.iso.org/iso-3166-2> => 2-letter country code
- <https://www.iso.org/iso-3166-3> => 3-letter country

code Example Country Code

```
<category>Location/France</category>
```

```
<category domain="https://www.iso.org/iso-3166-2">EN</category
```

```
<category domain="https://www.iso.org/iso-3166-3">ENG</category
```

Country code with Geonames

```
<category domain="https://www.geonames.org">2988507</category
```

Media RSS - media:content

Media RSS elements are defined here: <https://www.rssboard.org/media-rss>.namespace **http://search.yahoo.com/mrss/** prefixed with **media**.

For example:

```
<rss version="2.0" xmlns:media="http://search.yahoo.com/mrss/">
```

The use of elements defined by the media-rss extension allows adding metadata on media contained in the article.

Attributes and child elements of **media:content**

Attributes https://www.rssboard.org/media-rss#media-content	
url	Link to media content.
fileSize	Size in bytes of media content.
height	Height display size of the content.
width	Width display size of the content.
type	Media mime type.
Elements	
media:credit	Media credit

	<p>Optional attributes:</p> <ul style="list-style-type: none"> • scheme => possible values are urn:ebu (default) or urn:yvs.attribute <i>role</i> • role => value defined by domain <i>scheme</i>. By default, urn:ebu are defined by the European Broadcasting Union Role Codes. <p>https://www.rssboard.org/media-rss#media-credit</p>
media:copyright	<p>Media copyright information</p> <p>Optional attribute:</p> <ul style="list-style-type: none"> • url => link to terms of use or copyright information. <p>https://www.rssboard.org/media-rss#media-copyright</p>
media:description	<p>Short description of the media.</p> <p>Optional attribute:</p> <ul style="list-style-type: none"> • type => type of description text. Two possible values: plain (default), html. <p>https://www.rssboard.org/media-rss#media-description</p>
media:player	<p>Allows to embed a remote player to play a media (audio or video) via an iframe. This element is required only if a direct media url attribute is not specified in the media:content element. It has the following attributes:</p> <ul style="list-style-type: none"> • url: URL of the player that plays the media (required attribute) • height: height of the player (optional) • width: width of player (optional) <p>https://www.rssboard.org/media-rss#media-player</p>
media:embed	<p>Sometimes player-specific embed code is needed for a player to play any video or audio. The media:embed element allows inclusion of such information in the form of key-value pairs with the media:param subelement.</p> <p>https://www.rssboard.org/media-rss#media-embed</p>
media:thumbnail	<p>Allows particular images to be used as representative images for the media object. This element can be used typically in combination with the media:embed element, to provide a representative image of a video.</p> <p>Attributes:</p> <ul style="list-style-type: none"> • url: URL of the representative image • width: image width • height: image height <p>https://www.rssboard.org/media-rss#media-thumbnails</p>

media:group

The media:group element can be used to group multiple media:content elements that have the same content in different forms, for example, different resolutions.

Example: content distributed with different resolutions.

```
<media:group>
  <media:content fileSize="4696063" height="3333" type="image/jpeg"
url="https://hosting.afp.com/factcheck-rss/FR/medias/dea3220d9b4815e97477c8fa42e
a0f9af93196ea-highRes.jpg" width="5000">
  <media:credit>AFP</media:credit>
</media:content>
  <media:content fileSize="234803" height="166" type="image/jpeg"
url="https://hosting.afp.com/factcheck-rss/FR/medias/dea3220d9b4815e97477c8fa42e
a0f9af93196ea-lowRes.jpg" width="250">
  <media:credit>AFP</media:credit>
</media:content>
</media:group>
```

Example: multimedia object embed

```
<media:content>
  <media:player
url="https://peertube.fr/videos/embed/7bc5577c-b711-4a2e-9d58-1af327416688"
/>
  <media:embed>
    <media:param name="width">850</media:param>
    <media:param name="height">480</media:param>
    <media:param name="title">JDLL</media:param>
    <media:param name="allowFullScreen">>true</media:param>
    <media:param name="frameborder">0</media:param>
    <media:param name="allow">encrypted-media;
picture-in-picture</media:param>
  </media:embed>
  <media:thumbnail
url="https://peertube.fr/lazy-static/previews/2bd21b07-80a1-4dbe-8694-93f8c
d805fd1.jpg" height="480" width="850"/>
</media:content>
```

RSS Feed

Example Simple Example

```
<rss version="2.0" xml:base="https://factual.afp.com/"
xmlns:schema="https://schema.org" xmlns:media="http://search.yahoo.com/mrss/"
xmlns:content="http://purl.org/rss/1.0/modules/content/">
  <channel>
    <title>AFP Factual</title>
    <link>https://factual.afp.com</link>
    <language>en</language>
    <item>
      <guid>http://d.afp.com/doc-9zb9xd-5</guid>
      <title>French Jews 'protected' by Pétain? Eric Zemmour's thesis
challenged by historians</title>
```



```

<link>https://factual.afp.com/doc.afp.com.9ZB9XD</link>
<schema:review encodingFormat="application/ld+json"><![CDATA[
{"@context": "https://schema.org",
"@type": "ClaimReview",
"datePublished": "2022-02-11 11:40",
"url": "",
"claimReviewed": "Pétain protected French Jews",
"itemReviewed": {
  "author": {
    "name": "Eric Zemmour",
    "url": null,
    "sameAs": null,
    "logo": null,
    "@type": "Person"
  },
  "datePublished": "2022-02-07",
  "appearance":
  "https://twitter.com/franceinter/status/1490594446114709514",
  "@type": "Claim"
},
"author": {
  "name": "AFP",
  "url": "https://factcheck.afp.com/",
  "sameAs": "https://twitter.com/AFPFactCheck",
  "logo": {
    "url": "https://www.afp.com/sites/all/themes/custom/afpcom/logo.png",
    "@type": "ImageObject"
  },
  "@type": "Organization"
},
"reviewRating": {
  "ratingValue": "1",
  "bestRating": "5",
  "worstRating": "1",
  "alternateName": "False",
  "@type": "Rating"
}
} ]]>

```

```

</schema:review>
<content:encoded><![CDATA[<h2><span data-contrast="none"
xml:lang="FR-FR"><span data-ccp-parastyle="heading 2">Eric Zemmour claimed that
</span><span data-ccp-parastyle="heading 2">Pétain</span><span
data-ccp-parastyle="heading 2">had</span><span data-ccp-parastyle="heading
2">"protected</span><span data-ccp-parastyle="heading 2">the Jews</span><span
data-ccp-parastyle="heading 2">french</span><span data-ccp-parastyle="heading
2">s</span><span data-ccp-parastyle="heading 2">during the Occupation,
proceeding to</span><span data-ccp-parastyle="heading 2">a "barter</span><span
data-ccp-parastyle="heading 2">sin</span><span data-ccp-parastyle="heading
2">i</span><span .. ..<span class="e-afp-update-note"><time
datetime="2022-02-11T12:38:00+0100">February 11, 2022</time>here comes again

```

```
with correct spelling from Raul Hillberg, adds details on the number of Jews
deported from France</span>]]>
  </content:encoded>
  <enclosure length="3513775" type="image/jpeg"
url="https://hosting.afp.com/factcheck-rss/FR/medias/0bb409e64dd535010b71bc704dd
08b93ccb129c3-highRes.jpg"/>
  <media:content fileSize="3513775" height="3327" type="image/jpeg"
url="https://hosting.afp.com/factcheck-rss/FR/medias/0bb409e64dd535010b71bc704dd
08b93ccb129c3-highRes.jpg" width= "4500">
  <media:description>Marshal Pétain and German Chancellor Adolf Hitler,
November 24, 1940 in Montoire-sur-le-Loir.</media:description>
  <media:credit>AFP</media:credit>
</media:content>
<author>Julien NGUYEN DANG</author>
<author>Jeremy TORDJMAN</author>
<author>AFP France</author>
<category>Location/France</category>
<category>Media topic/Conflicts, wars and peace</category>
<category>Media topic/Science and technology</category>
<category>Media topic/Policy</category>
<category>Media topic/Politics/Elections</category>
<category>Media topic/Politics/Elections/Election campaign </category>
<category>Media topic/Company</category>
<category>Media topic/Science and technology/Social sciences</category>
<category>Media topic/Science and technology/Social
sciences/History</category>
<category>Media topic/Conflicts, wars and peace/Massacre</category>
<category>Media topic/Religion and belief</category>
<category>Media topic/Society/Discrimination</category>
<category>Media topic/Society/Discrimination/Racism</category>
<category>Tags/Elections 2022</category>
<pubDate>Fri, 11 Feb 2022 11:40:39 +0100</pubDate>
</item>
</channel>
</rss>
```

Schema:review

The element **schema:review** is an enrichment of the RSS format which contains the expression of **ClaimReview** and **MediaReview** defined by the Schema.org community. The content is expressed in a **CDATA** to escape XML validation and is in JSON-LD format <https://www.w3.org/TR/json-ld/>.

The ClaimReview and MediaReview are subtypes of the same Review type defining the following common structure:

Review Properties		
url	URL	Link to the page hosting the article.
datePublished	DateTime Date	Date of publication of the fact-checking article.
author	Organization Person	Author of the fact-checking or fact-checking article. It can be a person or an organization.
itemReviewed	Claim or MediaReviewItem	Definition of the claim verified by the fact-checker, or MediaReviewItem Full definitions at https://schema.org/Claim and https://schema.org/MediaReviewItem
reviewRating	Rating	Rating of the statement or media item

ReviewRating

The full definition of the **reviewRating** is defined at <https://schema.org/Rating>
Numerical rating values are defined by fact-checking systems.

Values are set from worst to best.

Example scoring:

- 1 = "False"
- 2 = "Mostly false"
- 3 = "Half true"
- 4 = "Mostly true"
- 5 = "True"

Properties		
@type	Fixed Value	Rating
alternateName	Text	Assessing the truthfulness of the statement by a word or short text. There is no controlled vocabulary for this value.

bestRating	Number	Best numerical rating according to the scale defined for the fact-checking system.
worstRating	Number	Worst possible value according to the scale defined for the fact-checking system. The value must be less than bestRating .
ratingValue	Number	Rating assigned to the declaration between the bestRating and worstRating if these are provided.
additionalType	URL	Enumeration of controlled values related to the alternateName property.

Example Rating

```
{
  "reviewRating":
  {
    "ratingValue": "1",
    "bestRating": "5",
    "worstRating": "1",
    "alternateName": "False",
    "@type": "Rating"
  }
}
```

Example values for the **alternateName** (indexed by [Google FactCheck Explorer](#))

False	https://toolbox.google.com/factcheck/explorer/search/false:hl=en
Misleading	https://toolbox.google.com/factcheck/explorer/search/misleading:hl=en
Unsupported	https://toolbox.google.com/factcheck/explorer/search/unsupported:hl=en
Missing context	https://toolbox.google.com/factcheck/explorer/search/missing%20context:hl=en
Partly false	https://toolbox.google.com/factcheck/explorer/search/partly%20false:hl=en

ClaimReview

The expression of a ClaimReview defines additional properties compared to the Review type.

The full definition is available at <https://schema.org/ClaimReview>

Properties ClaimReview		
@context	Fixed Value	https://schema.org
@type	Fixed Value	ClaimReview
claimReviewed	Text	Short summary of the claim to be verified.
associatedMediaReview	MediaReview	MediaReview associated with the ClaimReview. This property will list media related to the statement that have been verified. (cf MediaReview)

ClaimReview structure example

```
{
  "@context": "https://schema.org",
  "@type": "ClaimReview",
  "claimReviewed": "Claim description",
  "datePublished": "2022-02-11 11:40",
  "url": "http://article_link",
  "itemReviewed":
  {
    "@type": "Claim"
    // Claim to check
  },
  "author":
  {
    "name": "name of the organization that authored the fact check",
    "@type": "Organization"
  },
  "reviewRating":
  {
    "ratingValue": "1",
    "bestRating": "5",
    "worstRating": "1",
    "alternateName": "False",
    "@type": "Rating"
  }
}
```

ItemReviewed for ClaimReview

This property contains the description of the claim that is checked by the fact-checker in ClaimReview.

The full definition of the itemReviewed property is defined at <https://schema.org/Claim>.

Properties		
@type	Fixed value	Type of the item reviewed. The type is always <i>Claim</i>
author	Organization Person	Author of the claim being checked. It can be a person or an organization.
url	URL	Link in support of the verified declaration.
datePublished	DateTime Date	Date of the statement
firstAppearance	URL CreativeWork	Link or description in which the statement first appears.
appearance	URL CreativeWork Array [URL CreativeWork]	Links or descriptions of objects in which the statement appears. If there are several, the content is in the form of an array of CreativeWork links or descriptions.

Appearance with links

The property **appearance**, defined on <https://schema.org/appearance>, indicates the occurrences where the declaration being checked is found.

The simplest representation is an [URL](#) accessible on the internet to the resource where the declaration is located (website, social network, etc.).

The most complex representation can be a description of material content (book, film, podcast, photography, etc.) of the [CreativeWork](#) type.

If the declaration appears in more than one place, the value of the **appearance** is an array.

The **appearance** is found exclusively in an **itemReview** of type **Claim**.

Example with a single referenced URL

```
{
  "appearance":
  "https://www.facebook.com/100063486369524/videos/2008381422654312"
}
```

Example with several URLs

```
{
  "appearance":
  [
    "https://www.facebook.com/100063486369524/videos/2008381422654312",
    "https://twitter.com/baa3465dd891455/status/1486057108307066880"
  ]
}
```

Note: In the case of several links, the author defined in the itemReview is not necessarily the author of all the referenced links. To associate an author or a creator to each link, you must use the CreativeWork type for each **appearance**.

Appearance CreativeWork

In order to give a finer description than a declaration, the property **appearance** can contain the occurrences of several media described by the type [CreativeWork](#).

Using the CreativeWork type is sufficient to define all types. The list of properties below covers the requirements for embedding media (text, photo, video and audio).

Warning: the CreativeWork type is a generic type. It is advisable to use [subtypes](#) like MediaObject, Article, Blog, WebPage, etc.

Properties		
@type	CreativeWork	Sets the creativeWork type of the itemReview. The general value is CreativeWork which is suitable for all content. It is advisable to specialize the contents by using the subtypes of CreativeWork and to use the properties specific to the subtype used. https://schema.org/CreativeWork#subtypes
url	URL	Link to the content of the claim, usually the web page where the claim is contained.
archivedAt	URL	Link to an archive provider where the link defined in <i>url</i> is archived.
creator	Organization Person	Creator of the content of this CreativeWork. Not to be confused with the author of the statement.
name	Text	Name of the object.
abstract	Text	Description of the object.

If the URL of the claim refers to a media (photo, video or audio), the type used should be MediaObject. In addition to the above properties, MediaObject properties can be added as a complement.

MediaObject Properties		
@type	MediaObject	CreativeWork subtype for media assets. The subtype should be specified for more granularity. <ul style="list-style-type: none"> • AudioObject • VideoObject • ImageObject
contentUrl	URL	Link to the original media content (audio, image or video file).
contentSize	Text	Media file size.
duration	Duration	Duration of the media (audio or video).
startTime	DateTime or Time	Starting timecode for an audio or video extract.
endTime	DateTime or Time	End timecode for an audio or video clip.
height	Distance or QuantitativeValue	Height display size of the media.
width	Distance or	Width display size of the media.

	QuantitativeValue	
encodingFormat	Text	Mime type of the media.
uploadedDate	Date	Date the media was uploaded.

CreativeWork

AudioObject - Extract to audio track.

```
{
  "appearance":
  {
    "@type": "AudioObject",
    "url":
    "https://www.franceinter.fr/emissions/le-7-9/le-7-9-du-lundi-07-fevrier-2022",
    "contentUrl":
    "https://media.radiofrance-podcast.net/podcast09/10241-07.02.2022-ITEMA_22925015-2022F1076150038-22.mp3",
    "description": "Pétain and the Jews of France",
    "name": "The 7/9",
    "duration": "9188",
    "encodingFormat": "mp3",
    "startTime": "01:46:52",
    "endTime": "01:48:42",
    "designer":
    {
      "@type": "Organization",
      "name": "France Inter"
    }
  }
}
```

VideoObject - Multiple videos of the same content on different links.

```
{
  "appearance":
  [
    {
      "@type": "VideoObject",
      "url":
      "https://www.facebook.com/100063486369524/videos/2008381422654312",
      "archivedAt": "https://archive.is/EXAMPLE",
    }
  ]
}
```

```

    "designer":
    {
        "@type": "Person",
        "name": "Lokal West Indian"
    }
},
{
    "@type": "VideoObject",
    "url": "https://twitter.com/i/status/1507346802802053123",
    "archivedAt": "https://archive.is/EXAMPLE1",
    "designer":
    {
        "@type": "Person",
        "name": "Beautiful Milk",
        "url": "https://twitter.com/baa3465dd891455"
    }
},
{
    "@type": "VideoObject",
    "url": "https://www.facebook.com/watch/?v=985014695406486",
    "archivedAt": "https://archive.is/EXAMPLE2",
    "designer":
    {
        "@type": "Person",
        "name": "Mali. 24 TV"
    }
}
]
}

```

ImageObject - Same image shared on different links.

```

{
    "appearance":
    [
        {
            "@type": "ImageObject",
            "url":
            "https://twitter.com/LoupnoirAlpha/status/1493483404276420612/photo/1",
            "archivedAt": "https://archive.is/pZn8v",
            "creator": {
                "@type": "Person",
                "name": "BlackwolfAlpha"
            }
        },
    ],
}

```

```
    {
      "@type": "ImageObject",
      "url":
"https://www.facebook.com/151335048220780/posts/2139858189368446/",
      "archivedAt": "https://archive.is/anga1",
      "creator": {
        "@type": "Person",
        "name": "MediaLiars"
      }
    }
  ]
}
```

MediaReview

The MediaReview is an alternative to ClaimReview and specializes in online media content. As defined by schema.org, best practices for linking ClaimReview and MediaReview are not fully finalized. However, it is possible to link the 2 concepts with the **associatedClaimReview** for a ClaimReview. The reciprocity to link a MediaReview to a ClaimReview is done with the **associatedMediaReview** (cf [ClaimReview](#)).

MediaReview are expressed in JSON-LD. See: <https://www.w3.org/TR/json-ld/>
The full definition is available at <https://schema.org/MediaReview>.

Properties		
@type	Value Fixed	MediaReview
mediaAuthenticityCategory	MediaManipulationRatingEnumeration	enumeration. Possible values are: <ul style="list-style-type: none">• DecontextualizedContent• EditedOrCroppedContent• OriginalMediaContent• SatireOrParodyContent• StagedContent• TransformedContent
originalMediaContextDescription	Text	Text describing the original media
originalMediaLink	URL	Link to the original media that has been modified
associatedClaimReview	ClaimReview	ClaimReview in which the processed media appears.
itemReviewed	MediaReviewItem	Definition of verified media occurrences.

MediaReview structure example

```
{
  "@context": "https://schema.org",
  "@type": "MediaReview",
  "datePublished": "2022-02-24",
  "url": "Link URL of the article",
  "author":
  {
    "@type": "Organization",
    "name": "AFP"
  },
  "mediaAuthenticityCategory": "Media authenticity value",
```

```

    "originalMediaContextDescription": "Original Media Source
Description",
    "originalMediaLink": "Original Media URL",
    "associatedClaimReview":
    {
    "@type": "ClaimReview",
    "claimReviewed": "description of the associated claim"
    },
    "itemReviewed":
    {
    "@type": "MediaReviewItem",
    // Definition of reviewed media
    ) },
    "reviewRating":
    {
    "ratingValue": "1",
    "bestRating": "5",
    "worstRating": "1",
    "alternateName": "False",
    "@type": "Rating"
    }
}

```

ItemReviewed for MediaReview

This property contains the description of media occurrences checked by the fact-checker in MediaReview.

The full definition of the itemReviewed property is defined at <https://schema.org/MediaReviewItem>.

Properties		
@type	Value Fixed	MediaReviewItem
mediaItemAppearance	MediaObject	CreativeWork subtype for media content. The subtype should be specified for more granularity. <ul style="list-style-type: none"> • AudioObject • VideoObject • ImageObject

Example with several videos of the same content whose content has been modified

```
{
  "@context": "https://schema.org",
  "@type": "MediaReview",
  "datePublished": "2021-09- 02",
  "url": "https://factual.afp.com/doc.afp.com.9YM7U4",
  "author":
  {
    "@type": "Organization",
    "name": "AFP",
    "url": "https://factcheck.afp.com/",
    "sameAs": "https://twitter.com/AFPFactCheck"
  },
  "mediaAuthenticityCategory": "EditedOrCroppedContent",
  "originalMediaContextDescription": "1918 Armistice Centenary: Arrival of
Vladimir Putin at the Arc de Triomphe",
  "originalMediaLink": "https://youtu.be/HPZoY7u20BY",
  "associatedClaimReview":
  {
    "@type": "ClaimReview",
    "claimReviewed": "Vladimir Putin ignored Emmanuel Macron's handshake"
  },
  "itemReviewed":
  {
    "@type": "MediaReviewItem",
    "mediaItemAppearance":
    [
      {
        "@type": "VideoObject",
        "url":
"https://www.facebook.com/100063486369524/videos/2008381422654312",
        "archivedAt": "https://archive.is/EXAMPLE",
        "designer":
        {
          "@type": "Person",
          "name": "Lokal West Indian"
        }
      },
      {
        "@type": "VideoObject",
        "url":
"https://twitter.com/baa3465dd891455/status/1486057108307066880",
        "archivedAt": "https://archive.is/EXAMPLE1",
        "designer":
        {
```

```
        "@type": "Person",
        "name": "Beautiful Milk",
        "url": "https://twitter.com/baa3465dd891455"
    },
    {
        "@type": "VideoObject",
        "url": "https://www.facebook.com/watch/?v=985014695406486",
        "archivedAt": "https://archive.is/EXAMPLE2",
        "designer":
        {
            "@type": "Person",
            "name": "Mali. 24 TV"
        }
    }
]
},
"reviewRating":
{
    "ratingValue": "1",
    "bestRating": "5",
    "worstRating": "1",
    "alternateName": "False",
    "@type": "Rating"
}
}
```

Use cases

The use of ClaimReview and MediaReview applies to the following use cases:

1. A declaration published on a single link.
2. A statement published in several places.
3. Several statements.
4. A statement with a media review.

All examples are accessible on the GitHub project:

<https://github.com/AFP-Medialab/defacto-rss/tree/main/example>

Case 1: A single statement published on a single link

ClaimReview	appearance
Pétain protected French Jews	https://twitter.com/franceinter/status/1490594446114709514

Example 1 - ClaimReview from a URL

Source: <https://factual.afp.com/doc.afp.com.9ZB9XD>

```
{
  "@context": "https://schema.org",
  "@type": "ClaimReview",
  "claimReviewed": "Pétain Protected French Jews",
  "url": "https://factual.afp.com/doc.afp.com.9ZB9XD",
  "datePublished": "2022-02-11 11:40",
  "itemReviewed": {
    "author": {
      "name": "Eric Zemmour",
      "@type": "Person"
    },
    "datePublished": "2022-02-07",
    "appearance": "https://twitter.com/franceinter/status/1490594446114709514",
    "@type": "Claim"
  },
  "author": {
    "name": "AFP",
    "url": "https://factcheck.afp.com/",
    "sameAs": "https://twitter.com/AFPFactCheck",
```



```

    "@type": "Organization"
  },
  "reviewRating":
  {
    "ratingValue": "1",
    "bestRating": "5",
    "worstRating": "1",
    "alternateName": "False",
    "@type": "Rating"
  }
}

```

Example 2 - ClaimReview from a VideoObject

```

{
  "@context": "https://schema.org",
  "@type": "ClaimReview",
  "claimReviewed": "Pétain Protected French Jews",
  "url": "https://factual.afp.com/doc.afp.com.9ZB9XD",
  "datePublished": "2022-02-11 11:40",
  "itemReviewed":
  {
    "@type": "Claim",
    "author":
    {
      "name": "Eric Zemmour",
      "@type": "Person"
    },
    "datePublished": "2022-02-07",
    "appearance":
    {
      "@type": "VideoObject",
      "contentUrl":
      "https://twitter.com/franceinter/status/1490594446114709514",
      "designer":
      {
        "@type": "Organization",
        "name": "France Inter"
      }
    }
  },
  "author":
  {
    "name": "AFP",

```

```

    "url": "https://factcheck.afp.com/",
    "sameAs": "https://twitter.com/AFPFactCheck",
    "@type": "Organization"
  },
  "reviewRating":
  {
    "ratingValue": "1",
    "bestRating": "5",
    "worstRating": "1",
    "alternateName": "False",
    "@type": "Rating"
  }
}

```

Case 2: Fact-check on a declaration published in several places

Several links to documents for the same claim: the same declaration was taken up in several places.

ClaimReview	appearance
EU riot police on the Champs-Élysées	https://twitter.com/LoupnoirAlpha/status/1493483404276420612/photo/1
	https://www.facebook.com/151335048220780/posts/2139858189368446/

Example 1 - Claim Review simple multi appearances

```

{
  "@context": "https://schema.org",
  "@type": "ClaimReview",
  "datePublished": "2022-02-17 01:47",
  "url": "https://factuel.afp.com/doc.afp.com.322R23R",
  "claimReviewed": "EU riot police on the Champs-Élysées",
  "author":
  {
    "name": "AFP",
    "url": "https://factcheck.afp.com/",
    "sameAs": "https://twitter.com/AFPFactCheck",
  }
}

```

```

    "@type": "Organization"
  },
  "itemReviewed":
  {
    "@type": "Claim",
    "author":
    {
      "name": "LoupnoirAlpha",
      "@type": "Person"
    },
    "datePublished": "2022-02-15",
    "appearance":
    [
      "https://twitter.com/LoupnoirAlpha/status/1493483404276420612/photo/1",
      "https://www.facebook.com/151335048220780/posts/2139858189368446/"
    ]
  },
  "reviewRating":
  {
    "ratingValue": "1",
    "bestRating": "5",
    "worstRating": "1",
    "alternateName": "Misleading",
    "@type": "Rating"
  }
}

```

Example 2 - ClaimReview with CreativeWork multi appearance

Same example as the previous one with links to archived pages in the itemReview.

```

{
  "@context": "https://schema.org",
  "@type": "ClaimReview",
  "datePublished": "2022-02-17 01:47",
  "url": "https://factuel.afp.com/doc.afp.com.322R23R",
  "claimReviewed": "EU riot police on the Champs-Élysées",
  "author":
  {
    "name": "AFP",
    "url": "https://factcheck.afp.com/",
  }
}

```

```
    "sameAs": "https://twitter.com/AFPFactCheck",
    "@type": "Organization"
  },
  "itemReviewed":
  {
    "@type": "Claim",
    "author":
    {
      "name": "LoupnoirAlpha",
      "@type": "Person"
    },
    },
  "datePublished": "2022-02-15",
  "appearance":
  [
    {
      "@type" : "ImageObject",
      "contentUrl" :
"https://twitter.com/LoupnoirAlpha/status/1493483404276420612/photo/1",
      "archivedAt": "https://archive.is/pZn8v",
      "creator" : {
        "@type" : "Person",
        "name" : "LoupnoirAlpha"
      }
    },
    {
      "@type" : "ImageObject",
      "contentUrl" :
"https://www.facebook.com/151335048220780/posts/2139858189368446/",
      "archivedAt": "https://archive.is/anga1",
      "creator" : {
        "@type" : "Person",
        "name" : "MediaMenteurs"
      }
    }
  ]
},
"reviewRating":
{
  "ratingValue": "1",
  "bestRating": "5",
  "worstRating": "1",
  "alternateName": "Misleading",
  "@type": "Rating"
}
}
```

Case 3: Multiple claim reviews for one thematic Fact-Checking wrap-up.

A thematic wrap-up may include multiple claims.

Multiple claimReviews for a same thematic FactCheck wrap-up article are possible but be aware that the whole article will not be eligible for the single fact check rich result on Google search. Nevertheless, it may be useful to keep those multiple ClaimReviews into your CMS and to build databases.

Theme	Source
Manipulated videos, recycled photos: renewed disinformation about the Russian-Ukrainian conflict	https://factuel.afp.com/doc.afp.com.323Q7N9

ClaimReview	appearance
a girl on a bus in Ukraine (...) waiting for Russian soldiers	https://twitter.com/terror_alarm/status/1492596807544750082/photo/1
Ukrainian troops preparing for potential combat	https://weibo.com/1650926392/LbMiODUqI?refer_flag=1001030103
BBC warning of imminent nuclear war in Eastern Europe	https://www.facebook.com/104681915311714/videos/686860666025235/?_rdc=1&_rdr
	https://www.facebook.com/toscoentertainment/videos/1307046023053075/?_rdc=1&_rdr

```
{
  "@context": "https://schema.org",
  "@graph":
  [
    {
      "@type": "ClaimReview",
      "datePublished": "2022-02-23 16:15",
      "url": "https://factuel.afp.com/doc.afp.com.323Q7N9",
      "name": "Manipulated videos, recycled photos: renewed
disinformation about the Russian-Ukrainian conflict",
      "@context": "https://schema.org",
      "claimReviewed": "a girl on a bus in Ukraine (...) waiting for
Russian soldiers",
      "itemReviewed":
      {
        "@type": "Claim",
```

```

        "author":
        {
            "name": "Terror Alarm",
            "@type": "Person"
        },
        "datePublished": "2022-02-12",
        "appearance":
        "https://twitter.com/terror_alarm/status/1492596807544750082/photo/1"
    },
    "author":
    {
        "name": "AFP",
        "url": "https://factcheck.afp.com/",
        "sameAs": "https://twitter.com/AFPFactCheck",
        "logo":
        {
            "url":
            "https://www.afp.com/sites/all/themes/custom/afpcom/logo.png",
            "@type": "ImageObject"
        },
        "@type": "Organization"
    },
    "reviewRating":
    {
        "ratingValue": "1",
        "bestRating": "5",
        "worstRating": "1",
        "alternateName": "False",
        "@type": "Rating"
    }
},
{
    "datePublished": "2022-02-23 16:15",
    "@type": "ClaimReview",
    "url": "https://factual.afp.com/doc.afp.com.323Q7N9",
    "name": "Manipulated videos, recycled photos: renewed
disinformation about the Russian-Ukrainian conflict",
    "@context": "https://schema.org",
    "claimReviewed": "Ukrainian troops preparing for potential combat",
    "itemReviewed":
    {
        "@type": "Claim",
        "author":
        {
            "name": "Unknown",
            "@type": "Person"
        },
        "datePublished": "2022-01-21",
        "appearance":
        "https://weibo.com/1650926392/LbMiODUqI?refer_flag=1001030103_"
    }
}

```

```

    },
    "author":
    {
        "name": "AFP",
        "url": "https://factcheck.afp.com/",
        "sameAs": "https://twitter.com/AFPFactCheck",
        "logo":
        {
            "url":
"https://www.afp.com/sites/all/themes/custom/afpcom/logo.png",
            "@type": "ImageObject"
        },
        "@type": "Organization"
    },
    "reviewRating":
    {
        "ratingValue": "1",
        "bestRating": "5",
        "worstRating": "1",
        "alternateName": "False",
        "@type": "Rating"
    }
},
{
    "@type": "ClaimReview",
    "datePublished": "2022-02-23 16:15",
    "url": "https://factual.afp.com/doc.afp.com.323Q7N9",
    "name": "Manipulated videos, recycled photos: renewed
disinformation about the Russian-Ukrainian conflict",
    "@context": "https://schema.org",
    "claimReviewed": "BBC warning of imminent nuclear war in Eastern
Europe",
    "itemReviewed":
    {
        "@type": "Claim",
        "author":
        {
            "name": "Unknown",
            "@type": "Person"
        },
        "datePublished": "2022-01-20",
        "appearance":
\["https://www.facebook.com/104681915311714/videos/686860666025235/?\_rdc=1&\_rdr",
"https://www.facebook.com/toscoentertainment/videos/1307046023053075/?\_rdc=1&\_rd
r"\]
    },
    "author":
    {
        "name": "AFP",
        "url": "https://factcheck.afp.com/",

```

```

        "sameAs": "https://twitter.com/AFPFactCheck",
        "logo":
        {
            "url":
"https://www.afp.com/sites/all/themes/custom/afpcom/logo.png",
            "@type": "ImageObject"
        },
        "@type": "Organization"
    },
    "reviewRating":
    {
        "ratingValue": "1",
        "bestRating": "5",
        "worstRating": "1",
        "alternateName": "False",
        "@type": "Rating"
    }
}
]
}

```

Case 4: A ClaimReview with media review

The example below shows the use of a MediaReview item in a ClaimReview. The **associatedMediaReview** property replaces the **itemReview** property in the ClaimReview.

Source: <https://factuel.afp.com/doc.afp.com.9YM7U4>

ClaimReview	MediaReview: <i>EditedOrCroppedContent</i>
Vladimir Putin ignored Emmanuel Macron's handshake.	https://www.facebook.com/100063486369524/videos/2008381422654312
	https://twitter.com/baa3465dd891455/status/1486057108307066880
	https://www.facebook.com/watch/?v=985014695406486

```

{
  "@context": "https://schema.org",
  "@type": "ClaimReview",
  "name": "No, Vladimir Putin did not ignore Emmanuel Macron's handshake.",
  "datePublished": "2022-02-08 12:59",

```



```

"url": "https://factuel.afp.com/doc.afp.com.9YM7U4",
"claimReviewed": "Vladimir Putin ignored Emmanuel Macron's handshake.",
"associatedMediaReview":
{
  "@type": "MediaReview",
  "datePublished": "2021-09-02",
  "url": "https://factuel.afp.com/doc.afp.com.9YM7U4",
  "author":
  {
    "@type": "Organization",
    "name": "AFP",
    "url": "https://factcheck.afp.com/",
    "sameAs": "https://twitter.com/AFPFactCheck"
  },
  "mediaAuthenticityCategory": "EditedOrCroppedContent",
  "originalMediaContextDescription": "Centenary of the 1918 Armistice:
Vladimir Putin arrives at the Arc de Triomphe",
  "originalMediaLink": "https://youtu.be/HPZoY7u20BY",
  "itemReviewed":
  {
    "@type": "MediaReviewItem",
    "mediaItemAppearance":
    [
      {
        "@type": "VideoObject",
        "url":
"https://www.facebook.com/100063486369524/videos/2008381422654312",
        "archivedAt": "https://perma.cc/B4TG-EFFE",
        "creator":
        {
          "@type": "Person",
          "name": "Lokal Antillais"
        }
      },
      {
        "@type": "VideoObject",
        "url":
"https://twitter.com/baa3465dd891455/status/1486057108307066880",
        "archivedAt": "https://perma.cc/NR8G-FHXU",
        "creator":
        {
          "@type": "Person",
          "name": "Lait bel",
          "url": "https://twitter.com/baa3465dd891455"
        }
      },
      {
        "@type": "VideoObject",
        "url": "https://www.facebook.com/watch/?v=985014695406486",
        "creator":

```

```

        {
            "@type": "Person",
            "name": " Mali. 24 TV"
        }
    ]
}
},
"author":
{
    "@type": "Organization",
    "@id": "https://factcheck.afp.com/",
    "name": "AFP",
    "url": "https://factcheck.afp.com/",
    "sameAs": "https://twitter.com/AFPFactCheck",
    "logo":
    {
        "@type": "ImageObject",
        "url":
"https://factuel.afp.com/sites/all/themes/custom/afpblog/v2/assets/img/Logo_AFP.
svg"
    }
},
"reviewRating":
{
    "@type": "Rating",
    "ratingValue": "1",
    "bestRating": "5",
    "worstRating": "1",
    "alternateName": "Truncated and misleading video"
}
}
}

```

Conclusion

This document provides an on-going state-of-the art and recommendation to use ClaimReview and MediaReview within Fact-checking RSS feeds in order to facilitate automation of content ingestion within the De Facto project, that can be useful also for EDMO regional and national hubs platforms.

Richer in metadata the content will be, easier it will be to build disinformation databases for Social Sciences afterwards. The enrichment in metadata can also take place on each disinformation observatory platform. In this respect, we welcome feedback on this document to continue the discussion on this topic and to improve this document. Feel free to connect with medialab@afp.com for this purpose.

References

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<https://developers.facebook.com/docs/instant-articles/publishing/setup-rss-feed/>
- Technical feed requirements:
<https://support.google.com/news/publisher-center/answer/9545420?hl=en>
- Google Fact-checking definition:
<https://developers.google.com/search/docs/advanced/structured-data/factcheck?hl=en>
- New Source of ClaimReview Markup for Data Commons Feed :
<https://www.datacommons.org/factcheck/>
- Enriching ClaimReview for fact checkers :
<http://blog.schema.org/2021/12/enriching-claim-reviews-sharing.html>
- Claim Review validator: <https://search.google.com/test/rich-results>
- Media Topic AFP : <https://www.afp.com/fr/documentation-sur-les-thematiques>
- RSS best practices : <https://www.rssboard.org/rss-profile>
- Categorized visual misinformation :
<https://www.niemanlab.org/2020/01/is-this-video-missing-context-transformed-or-edited-this-effort-wants-to-standardize-how-we-categorize-visual-misinformation/>
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<https://docs.google.com/document/d/1jRbX2lesVQrWvKpehb8ntSMKe0D88bZp3nK8ZAjq6E4/edit>
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