

## Categories of content and contribution actions, methods and tools

### Seven main categories of contents

6 main categories of content will be considered for the platform:

1. Documents/content from WHO and WMO sites
2. Documents/content from external web sites (selected by WHO/WMO, or approved by WHO/WMO)
3. Data & data sets (External or WHO and WMO)
4. Content for explanatory web pages by WHO/WMO
5. Awareness documents/contents by WHO/WMO
6. Connect content

### Actions made by the contributor of content

The contributor of content can perform different actions depending on how the content is captured

Methods of content capture	Actions for content entries (in sequence)
<b>[MR] Manual research and entry</b> Performed by the contributor on-line and off-line	<ol style="list-style-type: none"> <li>1. Selection of content</li> <li>2. Curation of metadata</li> <li>3. Manual entry of metadata &amp; file</li> </ol>
<b>[AR] Automatic research and semi-automatic entry</b> Performed by web spiders programmed to parse pre-defined content sources	<ol style="list-style-type: none"> <li>1. Semi-automatic entry of metadata &amp; file</li> <li>2. Selection of content</li> <li>3. Curation of metadata</li> </ol>
<b>[AI] Automatic import</b> Performed by means of an API connecting the DataBase of the source with that of the HC site	<ol style="list-style-type: none"> <li>1. Automatic entry of metadata &amp; file</li> <li>2. Selection of content (if necessary)</li> <li>3. Curation of metadata (if necessary)</li> </ol>

### Summary of actions depending on categories of contents

Methods of content capture	Categories of contents
<b>[MR] Manual research and entry</b> Performed by the contributor, on-line and off-line	<ol style="list-style-type: none"> <li>1. Documents/contents from external web sites</li> <li>2. Documents/contents from WHO and WMO sites</li> <li>3. Data &amp; data sets (External or WHO and WMO)</li> <li>4. Content for explanatory web pages by the WHO/WMO</li> <li>5. Awareness documents/contents by the WHO/WMO</li> <li>6. Contact contents</li> </ol>
<b>[AR] Automatic research and semi-automatic entry</b> Performed by a web spiders programmed to parse pre-defined content sources	<ol style="list-style-type: none"> <li>1. Documents from external web sites</li> <li>2. Documents from WHO and WMO sites</li> </ol>
<b>[AI] Automatic import</b> Performed by means of an API connecting the DB of the source with that of the HC site	<ol style="list-style-type: none"> <li>1. Documents from WHO and WMO sites</li> </ol>

### Summary of methods and tools to entry content into the Data Base (back-office)

Methods of content capture	Actions for Content entry (in sequence)	Methods and tools
<b>[MR] Manual research and entry</b> Performed by the contributor on-line and off-line	<ol style="list-style-type: none"> <li>1. Selection of content</li> <li>2. Curation of metadata</li> <li>3. Manual entry of metadata &amp; file</li> </ol>	Selection off-line and on-line (on web sites)  Different possibilities a) On paper b) On excel files (or similar) used to <b>batch load</b> <sup>1</sup> more entries at the same time c) Directly in the entry mask  Entry mask used for a) entry one content at the time b) batch load more entries at the same time
<b>[AR] Automatic research and semi-automatic entry</b> Performed by web spiders programmed to parse pre-defined content sources	<ol style="list-style-type: none"> <li>1. Semi-automatic entry of metadata &amp; file</li> <li>2. Selection of content</li> <li>3. Curation of metadata</li> </ol>	Ready-made list available on the back-office prepared by the spider  Selection on the ready-made list of one or more entries  One entry at the time directly on the entry mask
<b>[AI] Automatic import</b> Performed by means of an API connecting the DataBase of the source with that of the HC site	<ol style="list-style-type: none"> <li>1. Automatic entry of metadata &amp; file</li> <li>2. Selection of content (if necessary)</li> <li>3. Curation of metadata (if necessary)</li> </ol>	Two possibilities a) Ready-made list available on the back-office prepared by the API for checking b) Automatic publishing on the HC web site  Selection on the ready-made list of one or more entries  One entry at the time directly on the entry mask

<sup>1</sup> A **batch load tool** can be done using excel files, in this way the contributor can speed up the content editing (selection and curation) and the entry in the Data Base behind the web site (it is enough to upload the excel file to have inserted in the Data Base all the contents). **This type of contribution is very effective to populate the site at the beginning, because it allows the content editing before the back-office is implemented. Then the entry mask are used to add content one by one when necessary during the web site updating.**

## Categories types and related contribution actions, methods and tools

### 1. Documents/content from WHO and WMO sites

Content type	Metadata	Methods of content capture	Insertion of Metadata & file	Entry methods/tools
1. Training Events 2. Training materials 3. Guidance 4. Case studies 5. Research & scientific publications 6. Products & Services 7. Programmes, Projects, Initiatives	<b>Descriptive metadata</b>	[MR] Manual research	Manual entry	Entry mask
	<ul style="list-style-type: none"> <li>Title</li> <li>Sub-title</li> <li>Author(s)</li> <li>Issue date</li> <li>Editor</li> <li>ISBN</li> <li>URL</li> <li>File (PDF)</li> <li>Brief description</li> <li>.....</li> </ul>	[AR] Automatic research [AI] Automatic import	1. Semi-automatic & automatic entry 2. Selection of content 3. Curation of metadata (if necessary)	Ready-made list for selection Entry mask for curation
	<b>Classification metadata</b>	[MR] Manual research	Manual entry	Entry mask
	<ul style="list-style-type: none"> <li>Hazards &amp; Health Risks</li> <li>Countries &amp; Regions</li> <li>Themes</li> <li>Landscapes</li> <li>Spatial scale</li> <li>Peer reviewed: yes, no</li> <li>Action Steps</li> <li>Type of Product &amp; Service</li> <li>Year</li> <li>Language</li> </ul>	[AR] Automatic research [AI] Automatic import	1. Semi-automatic & automatic entry 2. Manual entry	Entry mask for curation

### 2. Documents/content from external web sites

Content type	Metadata	Methods of content capture	Insertion of Metadata & file	Entry methods/tools
1. Training Events 2. Training materials 3. Guidance 4. Case studies 5. Research & scientific publications 6. Products & Services 7. Programmes, Projects, Initiatives	<b>Descriptive metadata</b>	[MR] Manual research	Manual entry	Entry mask
	<ul style="list-style-type: none"> <li>Title</li> <li>Sub-title</li> <li>Author(s)</li> <li>Issue date</li> <li>Editor</li> <li>ISBN</li> <li>URL</li> <li>File (PDF)</li> <li>Brief description</li> <li>.....</li> </ul>	[AR] Automatic research	1. Semi-automatic entry 2. Selection of content 3. Curation of metadata	Ready-made list for selection Entry mask for curation
	<b>Classification metadata</b>	[MR] Manual research	Manual entry	Entry mask
	<ul style="list-style-type: none"> <li>Hazards &amp; Health Risks</li> <li>Countries &amp; Regions</li> <li>Themes</li> <li>Landscapes</li> <li>Spatial scale</li> <li>Peer reviewed: yes, no</li> <li>Action Steps</li> <li>Type of Product &amp; Service</li> <li>Year</li> <li>Language</li> </ul>	[AR] Automatic research	1. Semi-automatic entry 2. Manual entry	Entry mask for curation

### 3. Data & data sets (external or WHO and WMO)

Data type	Metadata	Methods of content capture	Insertion of Metadata	Entry methods/tools
1. Health Impact 2. Socio-economic data 3. Historic record of observation: climate, water, pollen etc. 4. Monitoring and nowcasting products: weather, hydrology 5. Forecasts extended 6. Sub seasonal climate forecasts 7. Seasonal climate forecasts 8. Inter-annual climate forecasts 9. Decadal climate forecasts 10. Decade to century climate information	<b>Descriptive metadata</b> <sup>1</sup>	[MR] Manual research	Manual entry	Entry mask for curation
	<ul style="list-style-type: none"> <li>Title</li> <li>Sub-title</li> <li>Brief description</li> <li>Instructions on how to use data</li> <li>Issue date</li> <li>Owner</li> <li>URL of the page</li> <li>.....</li> </ul>			
	<b>Classification metadata</b>	[MR] Manual research	Manual entry	Entry mask for curation
	<ul style="list-style-type: none"> <li>Hazards &amp; Health Risks</li> <li>Countries &amp; Regions</li> <li>Themes</li> <li>Landscapes</li> <li>Spatial scale</li> <li>Temporal scale</li> <li>Action Steps</li> <li>Type of Data &amp; Data sets</li> </ul>			

<sup>1</sup> Requirement: it is expected that the contributor selects pages within the web site and not only the data set home page

#### 4. Content for explanatory web pages by WHO/WMO

Content type	Metadata	Methods of content capture	Insertion of Metadata	Entry methods/tools
Web pages with text and images	<b>Descriptive metadata</b> <ul style="list-style-type: none"> <li>• Title</li> <li>• Owner</li> <li>• Issue date</li> <li>• ....</li> </ul>	NA	Automatic during the web page layout/editing	Layout area on the web page <sup>1</sup>
	<b>Classification metadata</b>	NA	NA	NA

<sup>1</sup> **Requirement:** It is necessary to have a software module enabling to edit and layout content directly on the web page: a CMS using WYSIWIG features including the possibility of adding web page in a hierarchical mode and the capacity to add manually links to contents already inserted into the system (and its database)

#### 5. Awareness documents/content by WHO/WMO

Content type	Metadata	Methods of content capture	Insertion of Metadata & file	Entry methods/tools
<ol style="list-style-type: none"> <li>1. Brochures</li> <li>2. Flyers</li> <li>3. Infographs &amp; other visualizations</li> <li>4. Factsheets</li> <li>5. Powerpoint presentations</li> <li>6. Videos</li> <li>7. Terminology</li> <li>8. News &amp; Announcements</li> </ol>	<b>Descriptive metadata</b> <ul style="list-style-type: none"> <li>• Title</li> <li>• Sub-title</li> <li>• Author(s)</li> <li>• Issue date</li> <li>• Editor</li> <li>• ISBN</li> <li>• URL</li> <li>• File (PDF)</li> <li>• Brief description</li> <li>• .....</li> </ul>	[MR] Manual research	Manual entry	Entry mask
	<b>Classification metadata</b> <ul style="list-style-type: none"> <li>• Hazards &amp; Health Risks</li> <li>• Countries &amp; Regions</li> <li>• Themes</li> <li>• Landscapes</li> <li>• Spatial scale</li> <li>• Action Steps</li> <li>• Year</li> <li>• Language</li> </ul>	[MR] Manual research	Manual entry	Entry mask

#### 6. Connect content

Content type	Metadata	Methods of content capture	Insertion of Metadata & file	Entry methods/tools
<ol style="list-style-type: none"> <li>1. Conference &amp; meetings</li> <li>2. Communities of practice</li> <li>3. Expert teams</li> <li>4. Organizations <ul style="list-style-type: none"> <li>○ Academic &amp; scientific institutions</li> <li>○ WMO Regional Centers</li> <li>○ National Met Services</li> <li>○ Data &amp; Service providers</li> </ul> </li> </ol>	<b>Descriptive metadata</b> <ul style="list-style-type: none"> <li>• Name</li> <li>• Address</li> <li>• Brief description</li> <li>• Contact person (s)</li> <li>• URL</li> <li>• .....</li> </ul>	[MR] Manual research	Manual entry	Entry mask
	<b>Classification metadata</b> <ul style="list-style-type: none"> <li>• Hazards &amp; Health Risks</li> <li>• Countries &amp; Regions</li> <li>• Themes</li> <li>• Landscapes</li> <li>• Spatial scale</li> <li>• Action Steps</li> <li>• Type of Organization</li> </ul>	[MR] Manual research	Manual entry	Entry mask

## Summary of content type and related capture systems

[MR] Manual research and entry

[AR] Automatic research and semi-automatic entry

[AI] Automatic import

Category of content	Content/document type	Entry methods/tools	Implement Priority	Contributor
<b>Documents/content from external web sites</b>	Training events	[MR]	2	
	Training materials	[MR]	2	
	Guidance	[MR]	2	
	Case studies	[MR] [AR]	2	
	Research & scientific publications	[MR] [AR] [AI]	2	
	Products & Services	[MR] [AR]	1	
	Programmes, Projects, Initiatives	[MR]	1	
<b>Documents/content from WHO and WMO sites</b>	Training events	[MR]	2	
	Training materials	[MR] [AR]	1	
	Guidance	[MR] [AR] [AI]	1	
	Case studies	[MR] [AR] [AI]	1	
	Research & scientific publications	[MR] [AR] [AI]	1	
	Products & Services	[MR] [AR] [AI]	1	
	Programmes, Projects, Initiatives	[MR]	1	
<b>Data &amp; data sets (External or WHO and WMO)</b>	Health Impact	[MR]	1	
	Socio-economic data	[MR]	1	
	Historic record of observation: climate, water, pollen etc.	[MR]	1	
	Monitoring and nowcasting products: weather, hydrology	[MR]	1	
	Forecasts extended	[MR]	1	
	Sub seasonal climate forecasts	[MR]	1	
	Seasonal climate forecasts	[MR]	1	
	Inter-annual climate forecasts	[MR]	1	
	Decadal climate forecasts	[MR]	1	
	Decade to century climate information	[MR]	1	
<b>Content for explanatory web pages by WHO/WMO<sup>1</sup></b>	Web pages with text and images	[MR]	1+	
<b>Awareness documents/content by WHO/WMO</b>	Brochures	[MR]	2	
	Flyers	[MR]	2	
	Infographs & other visualizations	[MR]	1+	
	Factsheets	[MR]	1+	
	Powerpoints presentations	[MR]	2	
	Videos	[MR]	1	
	Terminology	[MR]	1	
	News & Announcements	[MR]	1+	
<b>Connect content</b>	Conference & Meetings	[MR]	2	
	Communities of practice	[MR]	1	
	Expert teams	[MR]	1	
	Organizations <ul style="list-style-type: none"> <li>• Academic &amp; scientific institutions</li> <li>• WMO Regional Centers</li> <li>• National Met Services</li> </ul>	[MR]	1	
	Service & data providers	[MR]	1	

<sup>1</sup> Note this method is used to implement the sections: “Country & Regions”, and the explanatory pages for “Action steps (Develop Products & Services)”

## Classification metadata used for faceted navigation

### Hazards & Health risks

- Air Pollution
- Air Allergens
- Diseases - *Communicable, Non-communicable*
- Cyclone - *Hurricane, Tropical Cyclone, Typhoon*
- Cold Wave - *Extreme Cold*
- Drought - *pronounced absence of rainfall*
- Heat Wave - *Extreme Heat*
- Flooding - *Inundation, Flash Floods*
- Foodborne Outbreaks
- Lightening
- NBC - *Nuclear, Biological, Chemical*
- Sand and Dust
- Solar Radiation
- Storm - *Thunderstorm, Wind Storm, Winter Storm*
- Water Quality
- Wild Fire

### Steps to develop Products & Services

- Enabling environment
- Develop Capacity
- Research
- Develop Products & Services
  - Assess
  - Monitor Risk
  - Anticipate
- Plan & apply
- Evaluation

### Type of Products & Services (*outputs of Product & service development*)

- Assess
  - Vulnerability, risk & adaptation assessments
- Monitor Risk
  - Risk monitoring and integrated surveillance systems
  - Core analytics : indicators, thresholds, models, maps
- Anticipate
  - Risk forecasting tools
  - Early Warning Systems
  - Projections & scenarios
- Plan & apply
  - Risk management / communication tools
  - Adaptation plans
  - Action plans
  - Mitigation plans
  - Emergency response planning
  - Decision support

## Type of climate data & data sets

- Assess
  - Health Impact
  - Socio-economic data
  - Historic record of observation: climate, water, pollen etc.
- Monitor
  - Monitoring and nowcasting products: weather, hydrology
  - Forecasts extended
- Anticipate
  - Sub seasonal climate forecasts
  - Seasonal climate forecasts
  - Inter-annual climate forecasts
- Prepare
  - Decadal climate forecasts
  - Decade to century climate information

## Landscape

- Coastal
- Desert & Arid
- Forest
- Island / SIDS
- Mountain & Polar
- Rural
- Urban

## Spatial scale

- Global
- Regional
- Sub-regional
- National
- Sub-national
- Local/City

## Time scale

- Daily
- Weekly
- Monthly
- Seasonal
- Annual
- Decadal