|  |  |  |
| --- | --- | --- |
| WORLD METEOROLOGICAL ORGANIZATION  COMMISSION FOR BASIC SYSTEMS  -----------------------------  FIRST MEETING OF  INTER-PROGRAMME EXPERT TEAM ON CODES MAINTENANCE  GENEVA, SWITZERLAND, 24 - 28 JULY 2017 |  | IPET-CM-I / Doc. 2.6 (7)  (11. 7. 2017)  -------------------------  ITEM 2.6  ENGLISH ONLY |

GRIB edition 3

**Overlay Template URL**

*Submitted by Enrico Fucile (ECMWF)*

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Summary and Purpose of Document**

Template and template component to define an external overlay GRIB message to be retrieved with a URL is proposed.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**ACTION PROPOSED**

The Team is asked to review the proposal and accept it for validation.

**DISCUSSIONS**

In GRIB 3 the concept of overlay was introduced to be able to extend the bitmap used in GRIB 2 to provide information that a value is missing in the field. The aim was to be able to superimpose a field as a land/sea mask, a vegetation or type of soil map. These are all overlays that can be applied to many fields and encoding them with all the relevant GRIB messages is very inefficient from the volume point of view. We propose a way to uniquely locate the overlay GRIB with a URL.

**PROPOSAL**

***Overlay Template Component 9.1 – URL***

|  |  |
| --- | --- |
| Byte No. | Contents |
| 1-2 | scheme (code table 9.0) |
| 3 | Nhost - number of bytes used by host |
| 4 - 4+Nhost | host |
| 5+Nhost - 6+Nhost | port (unsigned integer) |
| 7+Nhost - 9+Nhost | Npath -number of bytes used by path |
| 10+Nhost - 10+Nhost+Npath | path |
| 11+Nhost+Npath - 13+Nhost+Npath | Nquery -number of bytes used by query |
| 14+Nhost+Npath - 15+Nhost+Npath+Nquery | query |

**Notes:**

(1) A URL is a Uniform Resource Locator that is identifying a web resource and is used in this context to locate and retrieve a GRIB message providing the overlay field.

The syntax of the URL is:

**scheme://host**[**:port**]**/path**[?**query**]

where port and query are optional and can be missing.

**Code table 9.0** – *URL scheme*

Code figure Meaning

0 http

1 https

2 ftp

3 file

65535 Missing

***Overlay Template 9.1 – URL***

|  |  |
| --- | --- |
| Component Code | Component Name |
| 9.1 | URL |