# Application form to become an RSMC for Numerical Ocean Wave Prediction

Members wishing to apply as an Regional Specialized Meteorological Center (RSMC) for Numerical Ocean Wave Prediction should complete all four parts of this application form.

Members should submit the application form, endorsed by the PR, to the WMO Marine Meteorology and Ocean Affairs Division by email, mmo@wmo.int.

The application will be assessed by the JCOMM Expert Team on Disaster Risk Reduction, and will be endorsed and recommended by the JCOMM Co-Presidents, CBS President and relevant Regional Association President, for decision by the Executive Council.

## Part 1 – Details about Centre

|  |  |
| --- | --- |
| Name of Centre |  |
| Address of Centre |  |
| Name, position, phone and email details of Focal Point for this RSMC |  |
| Date of application |  |

## Part 2 – Mandatory activities

*This section relates to the list of mandatory activities referenced at 2.2.1.6.*

|  |  |
| --- | --- |
| **Mandatory activities of an RSMC for ocean wave prediction** | **Assessment of capability** |
| Do you currently prepare global analyses of ocean wave parameters? |  |
| Do you currently prepare global forecast fields of basic and derived ocean wave parameters; |  |
| Are you able to make available on the WIS, the list of mandatory products? *(as given in Appendix 2.2.11)* |  |
| Do you currently provide your forecasts and any wave buoy observations to the Lead Centre(s) for Wave Forecast Verification? |  |
| Are you able to make available on a website up-to-date information on the characteristics of your global numerical ocean wave prediction system? *(the minimum information to be provided is given in Appendix 2.2.12)* |  |
| Do you archive your model outputs? (Specify the date that the archive begins?) *Ref: 2.1.3.1* |  |

## Part 3 – Mandatory products and recommended products

*This section relates to the list of mandatory and recommended products referenced at 2.2.11.*

3.1, Please provide an assessment on your ability to provide the Mandatory products and make them available on WIS?

|  |  |
| --- | --- |
| **Mandatory products** | **Assessment of capability (Yes, No, comment)** |
| Refer to table below. |  |



*Table of Mandatory Products, 2.2.11.*

3.2, Please provide an assessment on your ability to provide the list of additional recommended products?

|  |  |
| --- | --- |
| **Additional recommended products** | **Assessment of capability (Yes, No, comment)** |
| – u and v component of 10-metre wind |  |
| – Full 2-D wave spectra at subset of grid points |  |
| – Wind sea and swell split at all grid points |  |
| – Derived parameters including wave steepness, directional spreading and rogue wave potential |  |

## Part 4 – Characteristics of System

*This section relates to the list of system characteristics referenced at 2.2.12.*

4.1, Please provide a URL containing the system characteristics as described below, and as specified in 2.2.1.6.

or,

Please complete the required metadata characteristics associated with your ocean wave prediction system? (please complete the table below*)*

| **Characteristic** | **Description of characteristic** |
| --- | --- |
| **1. System** |  |
| System name (version) |  |
| Date of implementation |  |
| **2. Configuration**  |  |
| Horizontal resolution of the model, with indication of grid spacing in km |  |
| Number of model frequency bands |  |
| Number of model directional bands |  |
| Forecast length and forecast step interval |  |
| Runs per day (times in UTC) |  |
| Is model coupled to ocean, atmosphere, sea-ice models? Specify which models |  |
| Integration time step |  |
| Additional comments (if any) |  |
| **3. Initial conditions** |  |
| Data assimilation method for control analysis |  |
| Additional comments (if any) |  |
| **4. Surface boundary conditions** |  |
| Surface forcing, briefly describe method(s) |  |
| Lateral boundary conditions (for example, sea-ice cover)? If yes, briefly describe method(s) |  |
| Additional comments (if any) |  |
| **5. Other details of model** |  |
| What kind, if any, of sea-swell splitting scheme is in use? |  |
| Are wave observations, or spectra, assimilated? If so, describe method briefly. |  |
| Does the model contain shallow water physics? What bathymetry database is used for shallow water areas? |  |
| Verification approach? |  |
| Other relevant details? |  |
| **6. Further information** |  |
| Operational contact point |  |
| URLs for system documentation |  |
| URL for list of products |  |