# 2018 Plan for Improvement of Maritime Safety Information

June 2018 Forecast Department, Japan Meteorological Agency

## Improvement of maritime safety information

### Major changes (scheduled implementation: 19 June 2018)

### 1. Forecast and current wind information will both be available (except for tropical depressions (typhoons))

(a) Storm/gale warnings associated with low-pressure areas

#### Information in current warnings:

- 1. Current wind speed or maximum wind speed expected within the next 24 hours<sup>\*1</sup>
- Maximum radius of ≥30-kt winds ("30-kt wind radius") expected within the next 24 hours<sup>\*2</sup>

#### Information in new warnings:

- 1. Current wind speed
- 2. Current 30-kt wind radius
- 3. Maximum wind speed expected within the next 24 hours
- 4. Maximum 30-kt wind radius expected within the next 24 hours
- $\Rightarrow$  Detailed information to be provided

(b) Storm/gale warnings for ocean areas denoted with latitudes and longitudes or geographical names such as "the Sea of Japan" (30-kt wind radius not included in current or new warnings)

#### Information in current warnings:

1. Current wind speed or maximum wind speed expected within the next 24 hours<sup>\*1</sup>

#### Information in new warnings:

- 1. Current wind speed
- 2. Maximum wind speed expected within the next 24 hours.
- ⇒ Detailed information to be provided
- \*1: Information on current wind speed is provided when: 1. the current value is 34 kt or more and the expected maximum is less than 48 kt; 2. the current value is 48 kt or more and the expected maximum is less than 64 kt; and 3. the current value is 64 kt or more. Otherwise, information on the maximum wind speed expected within the next 24 hours is provided.
- \*2: The 30-kt wind radius is that of the area affected by winds with speeds of 30 kt or more around a low-pressure area.

2. Information on the expected formation of low-pressure areas will be provided (except for tropical depressions (typhoons)). (In cases when a storm/gale warning is necessary for an expected low-pressure area (i.e., where the maximum wind speed is expected to exceed 34 kt within the next 24 hours))

### Information in current warnings:

 Wind speed/direction over ocean areas denoted with latitudes and longitudes or geographical names such as "the Sea of Japan"

#### Information in new warnings:

 Warnings on expected winds caused by new low-pressure areas with information on position and movement
⇒This improvement will support decisions on routing and contribute to maritime safety

## Samples of current and new bulletins

| Current bulletin   | cf. p. 21 (a)   | New bulletin  |  |  |
|--|---|---|--|--|
| WARNING AND SUMMARY 090600.<br>WARNING VALID 100600.<br>WARNING IS UPDATED EVERY 6 HOURS.<br>GALE WARNING.<br>DEVELOPING LOW 1006 HPA                      | Storm/gale warnings associated with a<br>low-pressure are provided in these two<br>sections.<br>1. Current wind speed or maximum<br>wind speed expected within the next 24<br>hours (this sample: current wind speed);<br>2. maximum 30-kt wind radius expected<br>within the next 24 hours | WARNING AND SUMMARY 090600.<br>WARNING VALID 100600.<br>WARNING IS UPDATED EVERY 6 HOUR<br>GALE WARNING.<br>DEVELOPING LOW 1006 HPA | Information on the current wind<br>speed and the maximum wind speed<br>expected within the next 24 hours<br>(underlined) is provided.<br>Information on the current 30-kt wind<br>radius and the maximum 30-kt wind<br>radius expected within the next 24<br>hours (underlined) is provided. |  |
| 🕇 AT 34N 123E YELLOW SEA MOVING EAST 15 KNOTS.   |   | 🔨 🛦 🗍 AT 34N 123E YELLOW SEA MOVING E   | AT 34N 123E YELLOW SEA MOVING EAST 15 KNOTS.   |  |
| WINDS 30 TO 35 KNOTS WITHIN 600 MILES OF LOW.  |   | WINDS 30 TO 35 KNOTS WITHIN 300   | WINDS 30 TO 35 KNOTS WITHIN 300 MILES OF LOW.  |  |
|  |   | EXPECTED WINDS 30 TO 45 KNOTS W   | EXPECTED WINDS 30 TO 45 KNOTS WITHIN 600 MILES OF LOW WITHIN NEXT 24   |  |
| cf. p. 2 1 (b)<br>Storm/gale warnings on ocean areas provide information on either the<br>current wind speed or the maximum wind speed expected within the |   | e maxir   | nation on the current wind speed and the<br>num wind speed expected within the next<br>urs (underlined) is provided.   |  |
| next 24 hours (this samp   | le: current wind speed for the Sea of Japan)  |   |  |  |
| GALE WARNING.  |   |   | WESTERLY TO NORTHWESTERLY WINDS 30 TO 35 KNOTS<br>EXPECTED WINDS 30 TO 45 KNOTS WITHIN NEXT 24 HOURS   |  |
| WESTERLY TO NORTHWESTERLY WINDS 30 TO 35 KNOTS PREVAILING OVER SEA OF  |   |   | PREVAILING OVER SEA OF JAPAN.  |  |
| JAPAN.   | TO 33 KNOTS TREVATEING OVER SEA OF  | CTREVATEING OVER SEA OF GALAN.  | 2  |  |
|  | )   | GALE WARNING.   | ٦  |  |
| GALE WARNING.  |   | NEW LOW   | •  |  |
| EXPECTED WESTERLY TO SOUTHWESTERLY WINDS 30 TO 45 KNOTS PREVAILING   |   | FORECAST POSITION FOR 100600UTC   | FORECAST POSITION FOR 100600UTC AT 32N 136E WITH UNCERTAINTY OF 85   |  |
| OVER WATERS BOUNDED BY 32N 130E 35N 140E 33N 146E 27N 141E 26N 130E  |   | MILES RADIUS MOVING ENE 25 KNOT   | MILES RADIUS MOVING ENE 25 KNOTS.  |  |
| 32N 130E FOR NEXT 24 HOURS.  |   | ITHIN 500 MILES OF LOW WITHIN NEXT 24   |  |  |
| WARNING.<br>DENSE FOG OBSERVED LOCALLY OVER SEA  | Information on wind variables such<br>as direction and speed is provided<br>in warnings of storms/gales caused<br>by low-pressure areas expected to   | WARNING. pressure wind spe  | tion on the position and movement of the low-<br>area expected to form and the maximum<br>eed/maximum 30-kt wind radius expected<br>he next 24 hours (underlined) is provided.   |  |
| SUMMARY.   | new low is indicated (this sample:  | SUMMARY.  |  |  |
| HIGH 1020 HPA AT 36N 156E EAST 10 KT. ocean area by latitude and longitude; includes information on  |   |   | HIGH 1020 HPA AT 36N 156E EAST 10 KT.  |  |
| STATIONARY FRONT FROM 23N 111E TO 2<br>29N 138E.   | the expected maximum wind speed<br>within the next 24 hours)  | STATIONARY FRONT FROM 23N 111E<br>29N 138E.   | TO 25N 120E 30N 129E 31N 130E 30N 134E   |  |
| JAPAN METEOROLOGICAL AGENCY. =   |   | JAPAN METEOROLOGICAL AGENCY. =  |  |  |

\* Blank lines are added to the sample bulletins to compare them easily.