

## Examination Standards, Standard Processing Periods, Disposition Standards, and Standards for Publication of Name for Forecasting Service Licensing

### 1. Examination Standards

- (1) The license for forecasting services for meteorological phenomena and terrestrial phenomena (excluding earthquake ground motions, volcanic phenomena, and landslides), as well as approval for changes to the purpose and scope of such forecasting services (hereinafter collectively referred to as “Forecasting Service Licensing”), must be governed by Appendix 1.
- (2) Forecasting service licensing for earthquake ground motions must be governed by Appendix 2.
- (3) Forecasting service licensing for volcanic phenomena must be as follows:
  - A. With regard to the dispersion of volcanic ash, ash fall, and the fall of small volcanic rocks (excluding those caused by overseas volcanoes), Appendix 3 must apply.
  - B. For volcanic phenomena other than those specified in A, and for volcanic phenomena caused by overseas volcanoes, no examination standards must be established for the time being, as the content of examination varies significantly depending on each target volcano and phenomenon.
- (4) Forecasting service licensing for landslides must be governed by Appendix 4.
- (5) Forecasting service licensing for tsunamis must be governed by Appendix 5.
- (6) Forecasting service licensing for storm surges must be governed by Appendix 6.
- (7) Forecasting service licensing for high waves must be governed by Appendix 7.
- (8) Forecasting service licensing for floods must be governed by Appendix 8.

### 2. Standard Processing Periods

- (1) Forecasting service licensing for meteorological phenomena and terrestrial phenomena (excluding earthquake ground motions, volcanic phenomena, and landslides): 15 days
- (2) Forecasting service licensing for earthquake ground motions:
  - A. Earthquake ground motions (seismic intensity derived from hypocenter parameters): 1 month
  - B. Earthquake ground motions (non-attenuated intensity based on wavefront propagation), where only forecasting data provided by the Japan Meteorological Agency are collected: 1 month
  - C. Earthquake ground motions (non-attenuated intensity based on wavefront propagation), where forecasting data other than those provided by the Japan Meteorological Agency are also collected: 3 months
  - D. Earthquake ground motions (long-period ground motion classes, etc.): 1 month
- (3) Forecasting service licensing for volcanic phenomena:
  - A. Dispersion of volcanic ash, ash fall, ashfall amounts, and the fall of small volcanic rocks (excluding those caused by overseas volcanoes): 6 months
  - B. Volcanic phenomena other than those specified in A, and volcanic phenomena caused by overseas volcanoes: No standard processing period must be established for the time being, as the

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content of examination varies significantly depending on each target volcano and phenomenon.

- (4) Forecasting service licensing for landslides: 4 months
- (5) Forecasting service licensing for tsunamis: 6 months
- (6) Forecasting service licensing for storm surges: 4 months
- (7) Forecasting service licensing for high waves: 3 months
- (8) Forecasting service licensing for floods: 4 months

3. Standards for Adverse Dispositions

As provided in Appendix 9.

4. Standards for Publication of Names, etc.

As provided in Appendix 10.

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## Appendix 1

### Examination Standards Concerning Forecasting Service Licensing for Meteorological Phenomena and Terrestrial Phenomena (excluding Earthquake Ground Motions, Volcanic Phenomena, and Landslides)

#### 1. Purpose of Forecasting Services

The recipients of forecasting services indicated as the purpose of forecasting services must be individuals based on contracts, corporations based on contracts, and an unspecified large number of people.

#### 2. Scope of Forecasting Services

##### 1. Type of Forecasting

###### (1) Phenomena Intended for Forecasting

Meteorological phenomena and terrestrial phenomena (excluding earthquake ground motions, volcanic phenomena, and landslides).

###### (2) Items Intended for Forecasting

Meteorological phenomena must be classified as follows. Terrestrial phenomena (excluding earthquake ground motions, volcanic phenomena, and landslides) must be road surface conditions, etc. (which means road surface conditions, ground temperature, etc.).

###### A. Typhoons

This means the center position, the maximum suspended wind speed, and other elements related to typhoons (Includes low pressure systems recognized by the Japan Meteorological Agency as being expected to develop into typhoons.).

###### B. Phenomena in the atmosphere other than typhoons

This means temperature, precipitation, wind direction, wind speed, weather, and other phenomena in the atmosphere (excluding those included in A.).

###### (3) Forecasting Period

Refers to the period during which forecasting can be performed based on the data collected.

#### 2. Areas Intended for Coverage

These areas must be individual points or areas that can be clearly demarcated. In the case of administrative districts, etc., or areas demarcated by roads, railways, rivers, etc., the indication of such areas must be based on their names. In other cases, the indication must be based on latitude/longitude, address, or indication on a map.

#### 3. Facilities and Staff Members for the Collection of Observation and Other Forecasting Data

##### 1. Collection of Observation and Other Forecasting Data

(1) Observations and other forecasting data that properly correspond to the type of forecasting, the area intended for coverage, and the method of predicting phenomena must be collected.

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- (2) On-site observation data must be properly collected as necessary.

## 2 Observation Facilities

- (1) With regard to the observation facilities used for collecting on-site observation values, the location of installation and type of observation equipment must be indicated.
- (2) When using meteorological instruments subject to the verification test prescribed in Article 9, paragraph (1) of the Meteorological Service Act, such instruments must pass the verification test, and the valid period of the verification test must have not yet expired.
- (3) When using meteorological instruments not subject to the verification test prescribed in Article 9, paragraph (1) of the Meteorological Service Act, the performance of such instruments must be verified.
- (4) Among the primary observations prescribed in Article 9, paragraph (2) of the Meteorological Service Act, meteorological instruments used for observations other than those conducted by the Japan Meteorological Agency must be the meteorological instruments prescribed in (2).
- (5) Meteorological instruments used for supplementary observations prescribed in Article 9, paragraph (2) of the Meteorological Service Act must follow the separately stipulated "Examination Standards Regarding Verification for Using Supplementary Observations in Forecasting Services."
- (6) On-site observation may be carried out by a person other than the person who intends to obtain a license, etc. (hereinafter referred to as "business operator"). In such cases, the person must possess sufficient rights and authority necessary for obtaining the relevant observation values.

## 3 Collection Facilities

- (1) These facilities must be computers and other facilities capable of accurately collecting and processing forecasting data necessary for the intended forecast.
- (2) Facilities may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

## 4 Collection Staff Members

Staff members for collecting forecasting data necessary for the proper performance of forecasting services must be deployed.

## 4. Facilities and Staff Members for the Analysis of Forecasting Data

### 1 Analysis Facilities

- (1) Facilities must consist of electronic computers or other equipment capable of accurately processing the analytical methods employed.
- (2) Facilities may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

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2 Analysis Staff Members

Staff members for analyzing forecasting data necessary for the proper performance of forecasting services must be deployed.

5. Facilities and Staff Members Capable of Receiving Warning Matters Promptly

1 Facilities for Prompt Receipt

- (1) These facilities must be communication equipment and other facilities that can receive warning matters related to forecasting services quickly and reliably.
- (2) Facilities may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

2 Staff Members for Prompt Receipt

Staff members receiving warning matters related to forecasting services quickly and reliably must be deployed.

6. Method of Predicting Phenomena

1 Method of Predicting Phenomena

Predicting phenomena must be performed by a certified weather forecaster in accordance with the items intended for forecasting, the forecasting period, and the coverage area as well as with scientific methods that properly correspond with the observations and other forecasting data obtained.

2 Assigning Certified Weather Forecasters

The standards for the assigning certified weather forecasters must be in accordance with the provisions of Article 11-3, paragraph (1) of the Regulation for Enforcement of the Meteorological Service Act. However, cases pursuant to the provisions of the proviso of the same paragraph must be as individually specified in the right column of the following table according to the categories listed in the left column of the same table.

| Category  | Number of staff members   |
|---|---|
| When one or more dedicated certified weather forecasters are able to engage in the prediction of phenomena at the relevant business office while such prediction is being conducted in consideration of the number of days for predicting phenomena per week and other circumstances                    | At least one less than the number of persons listed in the right column of the table in Article 11-3, paragraph (1) of the Regulation for Enforcement of the Meteorological Service Act |
| When certified weather forecasters assigned to the relevant business office confirm forecasts calculated using scientific methods confirmed in advance by such certified weather forecasters in forecasting services for meteorological phenomena, road surface conditions, etc., and the assignment of | One person or more  |

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|   |                    |
|---|--------------------|
| staff members and the communication system necessary to appropriately perform the forecasting services are secured  |                    |
| When predictions of phenomenon conducted for research are presented for demonstration, trial, etc., the method and results of calculation of such forecast are confirmed by a certified weather forecaster assigned to the business office, and measures are taken to ensure the safety of users of such forecast | One person or more |

### Supplementary Provisions

For persons who obtained a forecasting services license for meteorological phenomena prior to November 30, 2023, the following must apply:

- 1 With regard to the purpose of forecasting services, such persons must be deemed to have been licensed for “individuals under contract, corporations under contract, and an unspecified number of persons.”
- 2 The items to be forecast must be deemed to be licensed as “phenomena in the atmosphere other than typhoons.”
- 3 With regard to the phenomena and the items to be forecast, where road surface conditions, etc. are specified in their forecasting services plan as of November 30, 2023, such persons must be deemed to have been licensed for “terrestrial phenomena (excluding earthquake ground motions, volcanic phenomena, and landslides)” and “road surface conditions, etc.”, respectively.
- 4 With regard to the forecast period, such persons must be deemed to have been licensed for the revised forecast periods listed in the right-hand column of the table below, corresponding to the pre-revision forecast periods listed in the left-hand column. However, where the pre-revision forecast period includes provisions that limit the period by a proviso, such provisions must continue to apply as before.

| Pre-Revision Forecast Period          | Post-Revision Forecast Period                     |
|---------------------------------------|---|
| Very short-term forecast              | Up to 3 hours ahead                               |
| Short-term forecast                   | More than 3 hours ahead and up to 2 days ahead    |
| Medium-term forecast                  | More than 2 days ahead and up to 7 days ahead     |
| Long-term forecast (1-month forecast) | More than 7 days ahead and up to 1 month ahead    |
| Long-term forecast (3-month forecast) | More than 1 month ahead and up to 3 months ahead  |
| Long-term forecast (6-month forecast) | More than 3 months ahead and up to 6 months ahead |

Examination Standards Concerning Forecasting Service Licensing for Earthquake Ground Motions

1. Purpose of Forecasting Services

The recipients of forecasting services indicated as the purpose of forecasting services must be individuals based on contracts, corporations based on contracts, and an unspecified large number of people.

2. Scope of Forecasting Services

1 Type of Forecasting

(1) Phenomena Intended for Forecasting

must be classified as follows.

A. Earthquake Ground Motions (Seismic Intensity Derived from Hypocenter Parameters)

Forecasts in which earthquake ground motions are predicted in terms of seismic intensity, based on the time of earthquake occurrence, the location of the hypocenter, and the magnitude of the earthquake, while considering attenuation with distance from the hypocenter.

B. Earthquake Ground Motions (Non-Attenuated Intensity Based on Wavefront Propagation)

Forecasts in which earthquake ground motions are predicted in terms of seismic intensity, based on the time of earthquake occurrence, the location of the hypocenter, the magnitude of the earthquake, and other forecasting data, without considering attenuation with distance under certain conditions during wavefront propagation.

C. Earthquake Ground Motions (Long-Period Ground Motion Classes, etc.)

Forecasts in which earthquake ground motions are predicted based on the time of earthquake occurrence, the location of the hypocenter, and the magnitude of the earthquake, while taking into account attenuation with distance from the hypocenter, using values of the absolute velocity response spectrum for arbitrary periods, the maximum values of the absolute velocity response spectrum for arbitrary period bands, long-period ground motion classes, and period-specific classes of long-period ground motion (hereinafter collectively referred to as “long-period ground motion classes, etc.”).

(2) Items Intended for Forecasting

The items must be as follows for each classification in (1):

A. Seismic intensity; arrival time of earthquake ground motions

B. Seismic intensity

C. Long-period ground motion classes, etc.; arrival time of earthquake ground motions

2 Areas Intended for Coverage

(1) In principle, forecasts must be made for individual points and must be as follows depending on the phenomena to be forecast. The area must be indicated using the latitude and longitude or address of the forecast target point.

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A. Earthquake Ground Motions (Seismic Intensity Derived from Hypocenter Parameters)

Limited to areas within the applicable range of the ground amplification digital database used (for ground amplification factors calculated by the method specified in paragraph (1), Item 1 (c) (2) of the “Notification Prescribing Calculation Methods under Article 10-2, Item 1 (b) of the Regulations for Enforcement of the Meteorological Service Act” (Japan Meteorological Agency Notification No. 11 of 2007; hereinafter referred to as the “Notification Prescribing Calculation Methods”), within the applicable range of that method).

B. Earthquake Ground Motions (Non-Attenuated Intensity Based on Wavefront Propagation)

Limited to areas within the applicable range of the ground amplification digital database used (for ground amplification factors calculated by the method specified in paragraph (1), Item 1 (c) (2) of the “Notification Prescribing Calculation Methods,” within the applicable range of that method). However, this must be limited to within the radius specified in paragraph (1), Item 2 (a) (1) of the “Notification Prescribing Calculation Methods.”

C. Earthquake Ground Motions (Long-Period Ground Motion Classes, etc.)

Limited to areas within the applicable range of correction factors calculated by each of the methods specified in paragraph (2), Item 1 (d) (1) through (4) of the “Notification Prescribing Calculation Methods.”

(2) Where the target area is defined as a collection of forecast target points under (1), it must be an area that can be clearly delineated. Areas divided by administrative boundaries or by roads, railways, rivers, etc., must be identified by their names; in other cases, they must be indicated by latitude and longitude, address, or representation on a map.

3. Facilities and Staff Members for the Collection of Observation and Other Forecasting Data

1 Collection of Observation and Other Forecasting Data

The following must apply depending on the phenomena to be forecast:

A. Earthquake Ground Motions (Seismic Intensity Derived from Hypocenter Parameters)

Data on the time of earthquake occurrence, the location of the hypocenter, and the magnitude of the earthquake, as announced by the Japan Meteorological Agency in Earthquake Early Warnings (forecast), must be collected.

B. Earthquake Ground Motions (Non-Attenuated Intensity Based on Wavefront Propagation)

Data on the time of earthquake occurrence, the location of the hypocenter, and the magnitude of the earthquake, as announced by the Japan Meteorological Agency in Earthquake Early Warnings (forecast), as well as data on the results of analyses of observed earthquake ground motions, as announced by the Japan Meteorological Agency in real-time seismic intensity telegrams, must be collected. Where forecasting data other than those provided by the Japan Meteorological Agency are collected, such data must be limited to those that satisfy the conditions specified in paragraph (1), Item 1 (e) of the “Notification Prescribing Calculation Methods.”

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C. Earthquake Ground Motions (Long-Period Ground Motion Classes, etc.)

Data on the time of earthquake occurrence, the location of the hypocenter, and the magnitude of the earthquake, as announced by the Japan Meteorological Agency in Earthquake Early Warnings (forecast), must be collected.

2 Observation Facilities

- (1) For observation facilities used as forecasting data that satisfy the conditions specified in paragraph (1), Item 1 (e) of the “Notification Prescribing Calculation Methods,” the installation locations and the types of observation equipment must be specified.
- (2) Where the facilities in (1) are owned by the entity seeking a license, etc., (hereinafter referred to as the “business operator”), measures taken at such facilities to appropriately maintain observation functions must be specified.
- (3) Observations may be conducted by parties other than the business operator; in such cases, the operator must possess sufficient rights and authority necessary to obtain the relevant observation data.

3 Collection Facilities

- (1) Whether in cases where forecasting data are collected and analyzed using servers or other equipment owned by the business operator and then forecasts are provided to users (hereinafter referred to as “centralized distribution-type forecasting”), or in cases where forecasting data are collected and analyzed using terminals, software, etc., provided by the business operator to users and then forecasts are provided (hereinafter referred to as “individual terminal-type forecasting”), the facilities must consist of electronic computers or other equipment capable of accurately collecting and processing the forecasting data necessary for the intended forecasts.
- (2) Facilities for centralized distribution-type forecasting may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

4 Collection Staff Members

Staff members for collecting forecasting data necessary for the proper performance of forecasting services must be deployed.

4. Facilities and Staff Members for the Analysis of Forecasting Data

1 Analysis Facilities

- (1) For both centralized distribution-type forecasting and individual terminal-type forecasting, the facilities must consist of electronic computers or other equipment capable of accurately processing the analytical methods employed.
- (2) Facilities for centralized distribution-type forecasting may be owned by a person other than a

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business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

## 2 Analysis Staff Members

Staff members for analyzing forecasting data necessary for the proper performance of forecasting services must be deployed.

## 5. Facilities and Staff Members Capable of Receiving Warning Matters Promptly

### 1 Facilities for Prompt Receipt

(1) These facilities must be communication equipment and other facilities that can receive warning matters related to forecasting services quickly and reliably.

(2) Facilities may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

## 2 Staff Members for Prompt Receipt

Staff members receiving warning matters related to forecasting services quickly and reliably must be deployed.

## 6. Method of Predicting Phenomena

### 1 Method of Predicting Phenomena

(1) The methods must satisfy the requirements specified in the “Notification Prescribing Calculation Methods.”

(2) Methods must be established to verify the validity of input values used for predicting phenomena, output values calculated, and other aspects of the prediction methods, and the accuracy of predictions and other matters to be noted in the use of forecasts must be confirmed in advance.

## 2 Maintenance and Management of Methods for Predicting Phenomena

Methods must be established to verify the validity of prediction results after forecasts are made, and the methods for predicting phenomena must be appropriately maintained and managed based on the results of such verification.

## Supplementary Provisions

For persons who obtained a forecasting services license for earthquake ground motions prior to July 1, 2018, the phenomena to be forecast must be deemed to be licensed as “Earthquake Ground Motions (Seismic Intensity Derived from Hypocenter Parameters).”

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#### Supplementary Provisions

For persons who obtained a forecasting services license for earthquake ground motions prior to November 30, 2023, the following must apply:

- 1 With regard to the purpose of forecasting services, such persons must be deemed to have been licensed for “individuals under contract, corporations under contract, and an unspecified number of persons.”
- 2 With regard to the items to be forecast, such persons must be deemed to have been licensed for the items specified in their forecasting services plan as of November 30, 2023, for each phenomenon to be forecast.
- 3 With regard to Section 6, paragraph (2) of these examination standards, confirmation through on-site inspections conducted by officials of the Japan Meteorological Agency that the methods for predicting phenomena are being properly maintained and managed must be deemed to satisfy this requirement.

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## Appendix 3

Examination Standards Concerning Forecasting Service Licensing for Volcanic Phenomena (Ash Fall, etc.)

### 1. Purpose of Forecasting Services

The recipients of forecasting services indicated as the purpose of forecasting services must be individuals based on contracts, corporations based on contracts, and an unspecified large number of people.

### 2. Scope of Forecasting Services

#### 1 Type of Forecasting

##### (1) Phenomena Intended for Forecasting

must be classified as follows.

- A. Dispersion of volcanic ash.
- B. Ash fall.
- C. Fall of small volcanic rocks.

##### (2) Items Intended for Forecasting

For A: the affected area; for B: the affected area or amount; and for C: the affected area.

#### 2 Areas Intended for Coverage

These areas must be individual points or areas that can be clearly demarcated. In the case of administrative districts, etc., or areas demarcated by roads, railways, rivers, etc., the indication of such areas must be based on their names. In other cases, the indication must be based on latitude/longitude, address, or indication on a map.

#### 3 Volcanoes Intended for Coverage

The target volcanoes must be those located within Japan. For overseas volcanoes, individual examinations must be conducted depending on the forecasting data to be collected and the target area, etc.

### 3. Facilities and Staff Members for the Collection of Observation and Other Forecasting Data

#### 1 Collection of Observation and Other Forecasting Data

(1) Observations and other forecasting data that properly correspond to the type of forecasting, the area intended for coverage, and the method of predicting phenomena must be collected. In particular, the following A or B must apply:

##### A. Where forecasts are made assuming a volcanic eruption

Data necessary to assume the scale of volcanic eruption of the target volcano must be collected, and values for indicators representing the scale of eruption (such as plume height, eruption rate, and erupted volume) must be appropriately set.

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B. Where forecasts are made after a volcanic eruption by identifying or estimating the condition of the volcanic plume

Data necessary to identify the condition of the volcanic plume (such as plume location, plume height, and plume volume) or to estimate such conditions based on observed facts must be collected, and values for indicators representing the scale of volcanic eruption must be appropriately set.

(2) On-site observation data must be collected where deemed necessary in accordance with the method for predicting phenomena.

## 2 Observation Facilities

(1) Where on-site observation data are collected, the observation facilities used must be installed at locations appropriate for obtaining observation data that enable proper understanding of the conditions of the phenomena to be forecast within the target area. The types of observation equipment must also be specified.

(2) Where the facilities in (1) are owned by the entity seeking a license, etc., (hereinafter referred to as the “business operator”), measures taken at such facilities to appropriately maintain observation functions must be specified.

(3) On-site observations may be conducted by parties other than the business operator; in such cases, the operator must possess sufficient rights and authority necessary to obtain the relevant observation data.

## 3 Collection Facilities

(1) Whether in cases where forecasting data are collected and analyzed using servers or other equipment owned by the business operator and then forecasts are provided to users (hereinafter referred to as “centralized distribution-type forecasting”), or in cases where forecasting data are collected and analyzed using terminals, software, etc., provided by the business operator to users and then forecasts are provided (hereinafter referred to as “individual terminal-type forecasting”), the facilities must consist of electronic computers or other equipment capable of accurately collecting and processing the forecasting data necessary for the intended forecasts.

(2) Facilities for centralized distribution-type forecasting may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

## 4 Collection Staff Members

Staff members for collecting forecasting data necessary for the proper performance of forecasting services must be deployed.

## 4. Facilities and Staff Members for the Analysis of Forecasting Data

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## 1 Analysis Facilities

- (1) For both centralized distribution-type forecasting and individual terminal-type forecasting, the facilities must consist of electronic computers or other equipment capable of accurately processing the analytical methods employed.
- (2) Facilities for centralized distribution-type forecasting may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

## 2 Analysis Staff Members

Staff members for analyzing forecasting data necessary for the proper performance of forecasting services must be deployed.

## 5. Facilities and Staff Members Capable of Receiving Warning Matters Promptly

### 1 Facilities for Prompt Receipt

- (1) These facilities must be communication equipment and other facilities that can receive warning matters related to forecasting services quickly and reliably.
- (2) Facilities may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

### 2 Staff Members for Prompt Receipt

Staff members receiving warning matters related to forecasting services quickly and reliably must be deployed.

## 6. Method of Predicting Phenomena

### 1 Method of Predicting Phenomena

- (1) Methods must be physical, chemical, or other scientific methods appropriate to the phenomena to be forecast, the target area, the volcano concerned, and the forecasting data, such as making predictions by performing calculations that take into account effects such as advection, diffusion, and gravitational fall, based on meteorological conditions around the target volcano and data such as indicators representing the observed or estimated scale of the volcanic eruption.
- (2) Methods must be established to verify the validity of input values used for predicting phenomena, output values calculated, and other aspects of the prediction methods, and the accuracy of predictions and other matters to be noted in the use of forecasts must be confirmed in advance.

### 2 Maintenance and Management of Methods for Predicting Phenomena

(This document is a provisional English translation. In the event of any inconsistency between the Japanese and English versions, the Japanese version must prevail.)

Methods must be established to verify the validity of prediction results after forecasts are made, and the methods for predicting phenomena must be appropriately maintained and managed based on the results of such verification.

#### Supplementary Provisions

For persons who obtained a forecasting services license for volcanic phenomena (ash fall, etc.) prior to November 30, 2023, the following must apply:

- 1 With regard to the purpose of forecasting services, such persons must be deemed to have been licensed for “individuals under contract, corporations under contract, and an unspecified number of persons.”
- 2 With regard to the items to be forecast, such persons must be deemed to have been licensed for the items specified in their forecasting services plan as of November 30, 2023, for each phenomenon to be forecast.
- 3 With regard to Section 6, paragraph (2) of these examination standards, confirmation through on-site inspections conducted by officials of the Japan Meteorological Agency that the methods for predicting phenomena are being properly maintained and managed must be deemed to satisfy this requirement.

## Examination Standards Concerning Forecasting Service Licensing for Landslides

### 1. Purpose of Forecasting Services

The recipients of forecasting services indicated as the purpose of forecasting services must be limited to those who have received explanations pursuant to Article 19-3 of the Meteorological Service Act.

### 2. Scope of Forecasting Services

#### 1. Type of Forecasting

##### (1) Phenomena Intended for Forecasting

Landslides (slope failures, debris flows, and landslides). Limited, however, to those closely related to meteorological phenomena.

##### (2) Items Intended for Forecasting

The occurrence of the phenomena described in (1) and their impact areas; however, forecasts that address only impact areas are excluded.

##### (3) Forecasting Period

Refers to the period during which forecasting can be performed based on the data collected.

### 2. Areas Intended for Coverage

These areas must be individual points or areas that can be clearly demarcated. In the case of administrative districts, etc., or areas demarcated by roads, railways, rivers, etc., the indication of such areas must be based on their names. In other cases, the indication must be based on latitude/longitude, address, or indication on a map.

### 3. Facilities and Staff Members for the Collection of Observation and Other Forecasting Data

#### 1. Collection of Observation and Other Forecasting Data

(1) Observations and other forecasting data that properly correspond to the type of forecasting, the area intended for coverage, and the method of predicting phenomena must be collected.

(2) Meteorological forecasts used as input must be handled as follows:

##### A. Where the operator performs the forecasts internally

A certified weather forecaster must be appointed in accordance with Article 11-3, paragraph (1) of the Regulations for Enforcement of the Meteorological Service Act, and such forecasters must perform the meteorological forecasts.

##### B. Where the operator does not perform the forecasts internally

Meteorological forecasts provided by the Japan Meteorological Agency or by a person licensed for meteorological forecasting services must be collected.

(3) On-site observation data must be collected where deemed necessary in accordance with the

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method for predicting phenomena.

## 2 Observation Facilities

- (1) With regard to the observation facilities used for collecting on-site observation values, the location of installation and type of observation equipment must be indicated.
- (2) When using meteorological instruments subject to the verification test prescribed in Article 9, paragraph (1) of the Meteorological Service Act, such instruments must pass the verification test, and the valid period of the verification test must have not yet expired.
- (3) When using meteorological instruments not subject to the verification test prescribed in Article 9, paragraph (1) of the Meteorological Service Act, the performance of such instruments must be verified.
- (4) Among the primary observations prescribed in Article 9, paragraph (2) of the Meteorological Service Act, meteorological instruments used for observations other than those conducted by the Japan Meteorological Agency must be the meteorological instruments prescribed in (2).
- (5) Meteorological instruments used for supplementary observations prescribed in Article 9, paragraph (2) of the Meteorological Service Act must follow the separately stipulated "Examination Standards Regarding Verification for Using Supplementary Observations in Forecasting Services."
- (6) On-site observation may be carried out by a person other than the person who intends to obtain a license, etc. (hereinafter referred to as "business operator"). In such cases, the person must possess sufficient rights and authority necessary for obtaining the relevant observation values.

## 3 Collection Facilities

- (1) Whether in cases where forecasting data are collected and analyzed using servers or other equipment owned by the business operator and then forecasts are provided to users (hereinafter referred to as "centralized distribution-type forecasting"), or in cases where forecasting data are collected and analyzed using terminals, software, etc., provided by the business operator to users and then forecasts are provided (hereinafter referred to as "individual terminal-type forecasting"), the facilities must consist of electronic computers or other equipment capable of accurately collecting and processing the forecasting data necessary for the intended forecasts.
- (2) Facilities for centralized distribution-type forecasting may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

## 4 Collection Staff Members

Staff members for collecting forecasting data necessary for the proper performance of forecasting services must be deployed.

## 4. Facilities and Staff Members for the Analysis of Forecasting Data

(This document is a provisional English translation. In the event of any inconsistency between the Japanese and English versions, the Japanese version must prevail.)

1 Analysis Facilities

- (1) For both centralized distribution-type forecasting and individual terminal-type forecasting, the facilities must consist of electronic computers or other equipment capable of accurately processing the analytical methods employed.
- (2) Facilities for centralized distribution-type forecasting may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

2 Analysis Staff Members

Staff members for analyzing forecasting data necessary for the proper performance of forecasting services must be deployed.

5. Facilities and Staff Members Capable of Receiving Warning Matters Promptly

1 Facilities for Prompt Receipt

- (1) These facilities must be communication equipment and other facilities that can receive warning matters related to forecasting services quickly and reliably.
- (2) Facilities may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

2 Staff Members for Prompt Receipt

Staff members receiving warning matters related to forecasting services quickly and reliably must be deployed.

6. Facilities and Staff Members for Providing Explanations Regarding Specified Forecasting Services

1 Facilities for Providing Explanations

- (1) The facilities must consist of communication equipment and other facilities capable of appropriately providing the explanations prescribed in Section 8.
- (2) Facilities may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

2 Staff Members for Providing Explanations

Staff members necessary for appropriately providing the explanations prescribed in Section 8 must be assigned.

7. Method of Predicting Phenomena

1 Method of Predicting Phenomena

(This document is a provisional English translation. In the event of any inconsistency between the Japanese and English versions, the Japanese version must prevail.)

- (1) Methods must be physical or statistical methods based on generally accepted scientific and technical knowledge, appropriate to the type of forecast, the target area, and the forecasting data to be collected, such as estimating the causes of landslides from the spatiotemporal distribution of precipitation based on meteorological forecast data or observations and other forecast data related to landslides, such as soil moisture content, and making predictions taking into account infiltration into the ground.
- (2) With respect to (1), where meteorological phenomena used as input are predicted by the operator, a certified weather forecaster must be appointed in accordance with Article 11-3, paragraph (1) of the Regulation for Enforcement of the Meteorological Service Act, and such forecasters must perform the meteorological forecasts.
- (3) With respect to (1), the validity of the predictions must be verified in advance and matters to be noted in the use of the forecasts must be established.

## 2 Maintenance and Management of Methods for Predicting Phenomena

Methods must be established to verify the validity of prediction results after forecasts are made, as well as policies for response based on the results of such verification, and the methods for predicting phenomena must be appropriately maintained and managed.

## 8. Prevention of Transmission of Forecast Information to Persons Other Than Those Who Have Received Explanations Regarding Specified Forecasting Services

### 1 Measures to Prevent Transmission of Forecast Information to Persons Other Than Those Who Have Received Explanations

Measures must be taken to prevent users of the specified forecasting services from transmitting forecast information to persons who have not received the required explanations.

### 2 Explanations to Persons Intending to Use the Specified Forecasting Services

Before commencing the provision of the specified forecasting services, explanations must be provided to persons intending to use such services regarding matters to be noted in their use. Where such explanations are outsourced, measures must be taken to ensure that the person providing explanations on behalf of the operator reliably delivers the explanations to persons intending to use the specified forecasting services. The methods of explanation pursuant to Article 11-4 of the Regulations for Enforcement of the Meteorological Service Act, as well as the content of explanations under items (1) and (9) of the same Article, must be as follows:

#### (1) Method of Explanation

Explanations must be provided face-to-face (including methods that enable mutual recognition of each other's condition through the transmission and reception of audio and video) using documents (including electromagnetic records).

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(2) Content of Explanation

A. Purpose of Article 19-3 of the Meteorological Service Act

Landslide forecasts have significant social impact, as they are directly linked to disaster response. If such forecasts provided by persons licensed for forecasting services are received by individuals who do not sufficiently understand their characteristics, it may hinder evacuation behavior or disaster response and lead to confusion in disaster prevention. To prevent such confusion, it must be explained that persons intending to use the specified forecasting services must fully understand, in advance, the precautions related to the use of such forecasts.

B. Measures to Prevent Transmission of Forecast Information to Persons Other Than Those Intending to Use the Specified Forecasting Services

Considering the purpose described in A, specific measures to prevent users from transmitting forecast information to persons who have not received the explanation must be explained.

## Examination Standards Concerning Forecasting Service Licensing for Tsunamis

### 1. Purpose of Forecasting Services

The recipients of forecasting services indicated as the purpose of forecasting services must be limited to those who have received explanations pursuant to Article 19-3 of the Meteorological Service Act.

### 2. Scope of Forecasting Services

#### 1 Type of Forecasting

##### (1) Phenomena Intended for Forecasting

Tsunamis. Limited to, however, tsunamis generated by earthquakes or volcanic phenomena.

##### (2) Items Intended for Forecasting

The predicted arrival time of the first wave, height, and other related characteristics of the phenomena described in (1).

### 2 Areas Intended for Coverage

These areas must be individual points or areas that can be clearly demarcated. In the case of administrative districts, etc., or areas demarcated by roads, railways, rivers, etc., the indication of such areas must be based on their names. In other cases, the indication must be based on latitude/longitude, address, or indication on a map.

### 3. Facilities and Staff Members for the Collection of Observation and Other Forecasting Data

#### 1 Collection of Observation and Other Forecasting Data

(1) Observations and other forecasting data that properly correspond to the type of forecasting, the area intended for coverage, and the method of predicting phenomena must be collected.

(2) On-site observation data must be collected where deemed necessary in accordance with the method for predicting phenomena.

#### 2 Observation Facilities

(1) Where on-site observation data are collected, the observation facilities used must be installed at locations appropriate for obtaining observation data that enable proper understanding of tsunami conditions within the target area. The types of observation equipment must also be specified.

(2) Where the facilities in (1) are owned by the entity seeking a license, etc., (hereinafter referred to as the “business operator”), measures taken at such facilities to appropriately maintain observation functions must be specified.

(3) On-site observations may be conducted by parties other than the business operator; in such cases, the operator must possess sufficient rights and authority necessary to obtain the relevant observation

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data.

### 3 Collection Facilities

- (1) Whether in cases where forecasting data are collected and analyzed using servers or other equipment owned by the business operator and then forecasts are provided to users (hereinafter referred to as “centralized distribution-type forecasting”), or in cases where forecasting data are collected and analyzed using terminals, software, etc., provided by the business operator to users and then forecasts are provided (hereinafter referred to as “individual terminal-type forecasting”), the facilities must consist of electronic computers or other equipment capable of accurately collecting and processing the forecasting data necessary for the intended forecasts.
- (2) Facilities for centralized distribution-type forecasting may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

### 4 Collection Staff Members

Staff members for collecting forecasting data necessary for the proper performance of forecasting services must be deployed.

## 4. Facilities and Staff Members for the Analysis of Forecasting Data

### 1. Analysis Facilities

- (1) For both centralized distribution-type forecasting and individual terminal-type forecasting, the facilities must consist of electronic computers or other equipment capable of accurately processing the analytical methods employed.
- (2) Facilities for centralized distribution-type forecasting may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

### 2 Analysis Staff Members

Staff members for analyzing forecasting data necessary for the proper performance of forecasting services must be deployed.

## 5. Facilities and Staff Members Capable of Receiving Warning Matters Promptly

### 1 Facilities for Prompt Receipt

- (1) These facilities must be communication equipment and other facilities that can receive warning matters related to forecasting services quickly and reliably.
- (2) Facilities may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

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## 2 Staff Members for Prompt Receipt

Staff members receiving warning matters related to forecasting services quickly and reliably must be deployed.

## 6. Facilities and Staff Members for Providing Explanations Regarding Specified Forecasting Services

### 1 Facilities for Providing Explanations

(1) The facilities must consist of communication equipment and other facilities capable of appropriately providing the explanations prescribed in Section 8.

(2) Facilities may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

### 2 Staff Members for Providing Explanations

Staff members necessary for appropriately providing the explanations prescribed in Section 8 must be assigned.

## 7. Method of Predicting Phenomena

### 1 Method of Predicting Phenomena

(1) Methods must be physical methods based on generally accepted scientific and technical knowledge, appropriate to the type of forecast, the target area, and the forecasting data to be collected, such as estimating tsunami sources from the time of earthquake occurrence, the location of the hypocenter, and the magnitude of the earthquake, and making predictions taking into account tsunami propagation, or making predictions based on offshore tsunami observations while taking tsunami propagation into account.

(2) Methods must be established to verify the validity of input values used for predicting phenomena, output values calculated, and other aspects of the prediction methods, and the accuracy of predictions and other matters to be noted in the use of forecasts must be confirmed in advance.

### 2 Maintenance and Management of Methods for Predicting Phenomena

After forecasts are made, the validity of prediction results must be verified using on-site observation data and other data that enable appropriate understanding of tsunami conditions in the target area, and the methods for predicting phenomena must be properly maintained and managed based on the results of such verification.

## 8. Prevention of Transmission of Forecast Information to Persons Other Than Those Who Have Received Explanations Regarding Specified Forecasting Services

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## 1 Measures to Prevent Transmission of Forecast Information to Persons Other Than Those Who Have Received Explanations

Measures must be taken to prevent users of the specified forecasting services from transmitting forecast information to persons who have not received the required explanations.

## 2 Explanations to Persons Intending to Use the Specified Forecasting Services

Before commencing the provision of the specified forecasting services, explanations must be provided to persons intending to use such services regarding matters to be noted in their use. Where such explanations are outsourced, measures must be taken to ensure that the person providing explanations on behalf of the operator reliably delivers the explanations to persons intending to use the specified forecasting services. The methods of explanation pursuant to Article 11-4 of the Regulations for Enforcement of the Meteorological Service Act, as well as the content of explanations under items (1) and (9) of the same Article, must be as follows:

### (1) Method of Explanation

Explanations must be provided face-to-face (including methods that enable mutual recognition of each other's condition through the transmission and reception of audio and video) using documents (including electromagnetic records).

### (2) Content of Explanation

#### A. Purpose of Article 19-3 of the Meteorological Service Act

Tsunami forecasts have a significant social impact, as they are directly linked to disaster response. If such forecasts provided by persons licensed for forecasting services are received by individuals who do not sufficiently understand their characteristics, it may hinder evacuation behavior or disaster response and lead to confusion in disaster prevention. To prevent such confusion, it must be explained that persons intending to use the specified forecasting services must fully understand, in advance, the precautions related to the use of such forecasts.

#### B. Measures to Prevent Transmission of Forecast Information to Persons Other Than Those Intending to Use the Specified Forecasting Services

Considering the purpose described in A, specific measures to prevent users from transmitting forecast information to persons who have not received the explanation must be explained.

## Supplementary Provisions

For persons who obtained a forecasting services license for tsunamis prior to November 30, 2023, the phenomena to be forecast must be deemed to be licensed as "Tsunamis (limited to those caused by earthquakes)."

Examination Standards Concerning Forecasting Service Licensing for Storm Surges

1. Purpose of Forecasting Services

The recipients of forecasting services indicated as the purpose of forecasting services must be limited to those who have received explanations pursuant to Article 19-3 of the Meteorological Service Act.

2. Scope of Forecasting Services

1 Type of Forecasting

(1) Phenomena Intended for Forecasting

Storm surges.

(2) Items Intended for Forecasting

Tide levels, water levels, overtopping discharge, and other conditions related to storm surges.

(3) Forecasting Period

Refers to the period during which forecasting can be performed based on the data collected.

2 Areas Intended for Coverage

These areas must be individual points or areas that can be clearly demarcated. In the case of administrative districts, etc., or areas demarcated by roads, railways, rivers, etc., the indication of such areas must be based on their names. In other cases, the indication must be based on latitude/longitude, address, or indication on a map.

3. Facilities and Staff Members for the Collection of Observation and Other Forecasting Data

1 Collection of Observation and Other Forecasting Data

(1) Observations and other forecasting data that properly correspond to the type of forecasting, the area intended for coverage, and the method of predicting phenomena must be collected.

(2) Meteorological forecasts used as input must be handled as follows:

A. Where the operator performs the forecasts internally

A certified weather forecaster must be appointed in accordance with Article 11-3, paragraph (1) of the Regulations for Enforcement of the Meteorological Service Act, and such forecasters must perform the meteorological forecasts.

B. Where the operator does not perform the forecasts internally

Meteorological forecasts provided by the Japan Meteorological Agency or by a person licensed for meteorological forecasting services must be collected.

(3) On-site observation data must be collected where deemed necessary in accordance with the method for predicting phenomena.

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## 2 Observation Facilities

- (1) With regard to the observation facilities used for collecting on-site observation values, the location of installation and type of observation equipment must be indicated.
- (2) When using meteorological instruments subject to the verification test prescribed in Article 9, paragraph (1) of the Meteorological Service Act, such instruments must pass the verification test, and the valid period of the verification test must have not yet expired.
- (3) When using meteorological instruments not subject to the verification test prescribed in Article 9, paragraph (1) of the Meteorological Service Act, the performance of such instruments must be verified.
- (4) Among the primary observations prescribed in Article 9, paragraph (2) of the Meteorological Service Act, meteorological instruments used for observations other than those conducted by the Japan Meteorological Agency must be the meteorological instruments prescribed in (2).
- (5) Meteorological instruments used for supplementary observations prescribed in Article 9, paragraph (2) of the Meteorological Service Act must follow the separately stipulated "Examination Standards Regarding Verification for Using Supplementary Observations in Forecasting Services."
- (6) On-site observation may be carried out by a person other than the person who intends to obtain a license, etc. (hereinafter referred to as "business operator"). In such cases, the person must possess sufficient rights and authority necessary for obtaining the relevant observation values.

## 3 Collection Facilities

- (1) Whether in cases where forecasting data are collected and analyzed using servers or other equipment owned by the business operator and then forecasts are provided to users (hereinafter referred to as "centralized distribution-type forecasting"), or in cases where forecasting data are collected and analyzed using terminals, software, etc., provided by the business operator to users and then forecasts are provided (hereinafter referred to as "individual terminal-type forecasting"), the facilities must consist of electronic computers or other equipment capable of accurately collecting and processing the forecasting data necessary for the intended forecasts.
- (2) Facilities for centralized distribution-type forecasting may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

## 4 Collection Staff Members

Staff members for collecting forecasting data necessary for the proper performance of forecasting services must be deployed.

## 4. Facilities and Staff Members for the Analysis of Forecasting Data

### 1 Analysis Facilities

- (1) For both centralized distribution-type forecasting and individual terminal-type forecasting, the

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facilities must consist of electronic computers or other equipment capable of accurately processing the analytical methods employed.

- (2) Facilities for centralized distribution-type forecasting may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

## 2 Analysis Staff Members

Staff members for analyzing forecasting data necessary for the proper performance of forecasting services must be deployed.

## 5. Facilities and Staff Members Capable of Receiving Warning Matters Promptly

### 1 Facilities for Prompt Receipt

- (1) These facilities must be communication equipment and other facilities that can receive warning matters related to forecasting services quickly and reliably.
- (2) Facilities may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

### 2 Staff Members for Prompt Receipt

Staff members receiving warning matters related to forecasting services quickly and reliably must be deployed.

## 6. Facilities and Staff Members for Providing Explanations Regarding Specified Forecasting Services

### 1 Facilities for Providing Explanations

- (1) The facilities must consist of communication equipment and other facilities capable of appropriately providing the explanations prescribed in Section 8.
- (2) Facilities may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

### 2 Staff Members for Providing Explanations

Staff members necessary for appropriately providing the explanations prescribed in Section 8 must be assigned.

## 7. Method of Predicting Phenomena

### 1 Method of Predicting Phenomena

- (1) Based on meteorological forecasting data or observations and other forecasting data related to tide levels, methods must be used that estimate the causes of storm surges from the spatiotemporal

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distribution of offshore winds and sea-level pressure and predict tide levels and other conditions related to storm surges taking into account sea-level rise, or that predict water levels, wave overtopping discharge, and other conditions related to storm surges by incorporating the estimated causes of storm surges together with sea-level rise that reflects coastal seabed topography and the shape of coastal structures such as seawalls. Such methods must be physical or statistical methods grounded in generally accepted scientific and technical knowledge, appropriate to the type of forecast, the target area, and the forecasting data to be collected.

(2) With respect to (1), where meteorological phenomena used as input are predicted by the operator, a certified weather forecaster must be appointed in accordance with Article 11-3, paragraph (1) of the Regulations for Enforcement of the Meteorological Service Act, and such forecasters must perform the meteorological forecasts.

(3) With respect to (1), the validity of the predictions must be verified in advance and matters to be noted in the use of the forecasts must be established.

## 2 Maintenance and Management of Methods for Predicting Phenomena

Methods must be established to verify the validity of prediction results after forecasts are made, as well as policies for response based on the results of such verification, and the methods for predicting phenomena must be appropriately maintained and managed.

## 8. Prevention of Transmission of Forecast Information to Persons Other Than Those Who Have Received Explanations Regarding Specified Forecasting Services

### 1 Measures to Prevent Transmission of Forecast Information to Persons Other Than Those Who Have Received Explanations

Measures must be taken to prevent users of the specified forecasting services from transmitting forecast information to persons who have not received the required explanations.

### 2 Explanations to Persons Intending to Use the Specified Forecasting Services

Before commencing the provision of the specified forecasting services, explanations must be provided to persons intending to use such services regarding matters to be noted in their use. Where such explanations are outsourced, measures must be taken to ensure that the person providing explanations on behalf of the operator reliably delivers the explanations to persons intending to use the specified forecasting services. The methods of explanation pursuant to Article 11-4 of the Regulations for Enforcement of the Meteorological Service Act, as well as the content of explanations under items (1) and (9) of the same Article, must be as follows:

#### (1) Method of Explanation

Explanations must be provided face-to-face (including methods that enable mutual recognition of each other's condition through the transmission and reception of audio and video) using documents

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(including electromagnetic records).

(2) Content of Explanation

A. Purpose of Article 19-3 of the Meteorological Service Act

Storm surge forecasts have significant social impact, as they are directly linked to disaster response. If such forecasts provided by persons licensed for forecasting services are received by individuals who do not sufficiently understand their characteristics, it may hinder evacuation behavior or disaster response and lead to confusion in disaster prevention. To prevent such confusion, it must be explained that persons intending to use the specified forecasting services must fully understand, in advance, the precautions related to the use of such forecasts.

B. Measures to Prevent Transmission of Forecast Information to Persons Other Than Those Intending to Use the Specified Forecasting Services

Considering the purpose described in A, specific measures to prevent users from transmitting forecast information to persons who have not received the explanation must be explained.

Supplementary Provisions

For persons who obtained a forecasting services license for storm surges prior to November 30, 2023, they must obtain approval from the Director-General of the Japan Meteorological Agency for compliance with Section 7 of these examination standards by November 29, 2026. Until such approval is obtained, Sections 3, 4, and 6 of the “Examination Standards Concerning Licensing of Forecasting Services for Meteorological Phenomena and Terrestrial Phenomena (excluding earthquake ground motions, volcanic phenomena, and landslides)” must apply in place of Sections 3, 4, and 7 of these standards.

## Examination Standards Concerning Forecasting Service Licensing for High Waves

### 1. Purpose of Forecasting Services

The recipients of forecasting services indicated as the purpose of forecasting services must be individuals based on contracts, corporations based on contracts, and an unspecified large number of people.

### 2. Scope of Forecasting Services

#### 1. Type of Forecasting

##### (1) Phenomena Intended for Forecasting

High waves.

##### (2) Items Intended for Forecasting

Wave height, wave period, and wave direction.

##### (3) Forecasting Period

Refers to the period during which forecasting can be performed based on the data collected.

### 2. Areas Intended for Coverage

These areas must be individual points or areas that can be clearly demarcated. In the case of administrative districts, etc., or areas demarcated by roads, railways, rivers, etc., the indication of such areas must be based on their names. In other cases, the indication must be based on latitude/longitude, address, or indication on a map.

### 3. Facilities and Staff Members for the Collection of Observation and Other Forecasting Data

#### 1. Collection of Observation and Other Forecasting Data

(1) Observations and other forecasting data that properly correspond to the type of forecasting, the area intended for coverage, and the method of predicting phenomena must be collected.

(2) Meteorological forecasts used as input must be handled as follows:

##### A. Where the operator performs the forecasts internally

A certified weather forecaster must be appointed in accordance with Article 11-3, paragraph (1) of the Regulations for Enforcement of the Meteorological Service Act, and such forecasters must perform the meteorological forecasts.

##### B. Where the operator does not perform the forecasts internally

Meteorological forecasts provided by the Japan Meteorological Agency or by a person licensed for meteorological forecasting services must be collected.

(3) On-site observation data must be collected where deemed necessary in accordance with the method for predicting phenomena.

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## 2 Observation Facilities

- (1) With regard to the observation facilities used for collecting on-site observation values, the location of installation and type of observation equipment must be indicated.
- (2) When using meteorological instruments subject to the verification test prescribed in Article 9, paragraph (1) of the Meteorological Service Act, such instruments must pass the verification test, and the valid period of the verification test must have not yet expired.
- (3) When using meteorological instruments not subject to the verification test prescribed in Article 9, paragraph (1) of the Meteorological Service Act, the performance of such instruments must be verified.
- (4) Among the primary observations prescribed in Article 9, paragraph (2) of the Meteorological Service Act, meteorological instruments used for observations other than those conducted by the Japan Meteorological Agency must be the meteorological instruments prescribed in (2).
- (5) Meteorological instruments used for supplementary observations prescribed in Article 9, paragraph (2) of the Meteorological Service Act must follow the separately stipulated "Examination Standards Regarding Verification for Using Supplementary Observations in Forecasting Services."
- (6) On-site observation may be carried out by a person other than the person who intends to obtain a license, etc. (hereinafter referred to as "business operator"). In such cases, the person must possess sufficient rights and authority necessary for obtaining the relevant observation values.

## 3 Collection Facilities

- (1) Whether in cases where forecasting data are collected and analyzed using servers or other equipment owned by the business operator and then forecasts are provided to users (hereinafter referred to as "centralized distribution-type forecasting"), or in cases where forecasting data are collected and analyzed using terminals, software, etc., provided by the business operator to users and then forecasts are provided (hereinafter referred to as "individual terminal-type forecasting"), the facilities must consist of electronic computers or other equipment capable of accurately collecting and processing the forecasting data necessary for the intended forecasts.
- (2) Facilities for centralized distribution-type forecasting may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

## 4 Collection Staff Members

Staff members for collecting forecasting data necessary for the proper performance of forecasting services must be deployed.

## 4. Facilities and Staff Members for the Analysis of Forecasting Data

### 1 Analysis Facilities

- (1) For both centralized distribution-type forecasting and individual terminal-type forecasting, the

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facilities must consist of electronic computers or other equipment capable of accurately processing the analytical methods employed.

- (2) Facilities for centralized distribution-type forecasting may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

## 2 Analysis Staff Members

Staff members for analyzing forecasting data necessary for the proper performance of forecasting services must be deployed.

## 5. Facilities and Staff Members Capable of Receiving Warning Matters Promptly

### 1 Facilities for Prompt Receipt

- (1) These facilities must be communication equipment and other facilities that can receive warning matters related to forecasting services quickly and reliably.
- (2) Facilities may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

### 2 Staff Members for Prompt Receipt

Staff members receiving warning matters related to forecasting services quickly and reliably must be deployed.

## 6. Method of Predicting Phenomena

### 1 Method of Predicting Phenomena

- (1) Methods must be physical or statistical methods based on generally accepted scientific and technical knowledge, appropriate to the type of forecast, the target area, and the forecasting data to be collected, such as estimating the causes of high waves from the spatiotemporal distribution of offshore winds based on meteorological forecasting data or observations and other forecasting data related to high waves, and making predictions taking into account variations in the sea surface.
- (2) With respect to (1), where meteorological phenomena used as input are predicted by the operator, a certified weather forecaster must be appointed in accordance with Article 11-3, paragraph (1) of the Regulations for Enforcement of the Meteorological Service Act, and such forecasters must perform the meteorological forecasts.
- (3) With respect to (1), the validity of the predictions must be verified in advance and matters to be noted in the use of the forecasts must be established.

### 2 Maintenance and Management of Methods for Predicting Phenomena

Methods must be established to verify the validity of prediction results after forecasts are made, as well

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as policies for response based on the results of such verification, and the methods for predicting phenomena must be appropriately maintained and managed.

### Supplementary Provisions

For persons who obtained a forecasting services license for high waves prior to November 30, 2023, the following must apply:

- 1 With regard to compliance with Section 6 of these examination standards, approval from the Director-General of the Japan Meteorological Agency must be obtained by November 29, 2026. Until such approval is obtained, Sections 3, 4, and 6 of the “Examination Standards Concerning Licensing of Forecasting Services for Meteorological Phenomena and Terrestrial Phenomena (excluding earthquake ground motions, volcanic phenomena, and landslides)” must apply in place of Sections 3, 4, and 6 of these standards.
- 2 With regard to the purpose of forecasting services, such persons must be deemed to have been licensed for “individuals under contract, corporations under contract, and an unspecified number of persons.”
- 3 With regard to the forecast period, such persons must be deemed to have been licensed for the revised forecast periods listed in the right-hand column of the table below, corresponding to the pre-revision forecast periods listed in the left-hand column. However, where the pre-revision forecast period includes provisions that limit the period by a proviso, such provisions must continue to apply as before.

| Pre-Revision Forecast Period          | Post-Revision Forecast Period                     |
|---------------------------------------|---|
| Very short-term forecast              | Up to 3 hours ahead                               |
| Short-term forecast                   | More than 3 hours ahead and up to 2 days ahead    |
| Medium-term forecast                  | More than 2 days ahead and up to 7 days ahead     |
| Long-term forecast (1-month forecast) | More than 7 days ahead and up to 1 month ahead    |
| Long-term forecast (3-month forecast) | More than 1 month ahead and up to 3 months ahead  |
| Long-term forecast (6-month forecast) | More than 3 months ahead and up to 6 months ahead |

## Examination Standards Concerning Forecasting Service Licensing for Floods

### 1. Purpose of Forecasting Services

The recipients of forecasting services indicated as the purpose of forecasting services must be limited to those who have received explanations pursuant to Article 19-3 of the Meteorological Service Act.

### 2. Scope of Forecasting Services

#### 1 Type of Forecasting

##### (1) Phenomena Intended for Forecasting

Floods.

##### (2) Items Intended for Forecasting

(1) Water levels, discharge, areas inundated due to flooding or the depth of such inundation, and other conditions related to floods.

##### (3) Forecasting Period

Refers to the period during which forecasting can be performed based on the data collected.

### 2 Areas Intended for Coverage

These areas must be individual points or areas that can be clearly demarcated. In the case of administrative districts, etc., or areas demarcated by roads, railways, rivers, etc., the indication of such areas must be based on their names. In other cases, the indication must be based on latitude/longitude, address, or indication on a map.

### 3. Facilities and Staff Members for the Collection of Observation and Other Forecasting Data

#### 1 Collection of Observation and Other Forecasting Data

(1) Observations and other forecasting data that properly correspond to the type of forecasting, the area intended for coverage, and the method of predicting phenomena must be collected.

(2) Meteorological forecasts used as input must be handled as follows:

##### A. Where the operator performs the forecasts internally

A certified weather forecaster must be appointed in accordance with Article 11-3, paragraph (1) of the Regulations for Enforcement of the Meteorological Service Act, and such forecasters must perform the meteorological forecasts.

##### B. Where the operator does not perform the forecasts internally

Meteorological forecasts provided by the Japan Meteorological Agency or by a person licensed for meteorological forecasting services must be collected.

(3) On-site observation data must be collected where deemed necessary in accordance with the method for predicting phenomena.

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## 2 Observation Facilities

- (1) With regard to the observation facilities used for collecting on-site observation values, the location of installation and type of observation equipment must be indicated.
- (2) When using meteorological instruments subject to the verification test prescribed in Article 9, paragraph (1) of the Meteorological Service Act, such instruments must pass the verification test, and the valid period of the verification test must have not yet expired.
- (3) When using meteorological instruments not subject to the verification test prescribed in Article 9, paragraph (1) of the Meteorological Service Act, the performance of such instruments must be verified.
- (4) Among the primary observations prescribed in Article 9, paragraph (2) of the Meteorological Service Act, meteorological instruments used for observations other than those conducted by the Japan Meteorological Agency must be the meteorological instruments prescribed in (2).
- (5) Meteorological instruments used for supplementary observations prescribed in Article 9, paragraph (2) of the Meteorological Service Act must follow the separately stipulated "Examination Standards Regarding Verification for Using Supplementary Observations in Forecasting Services."
- (6) On-site observation may be carried out by a person other than the person who intends to obtain a license, etc. (hereinafter referred to as "business operator"). In such cases, the person must possess sufficient rights and authority necessary for obtaining the relevant observation values.

## 3 Collection Facilities

- (1) Whether in cases where forecasting data are collected and analyzed using servers or other equipment owned by the business operator and then forecasts are provided to users (hereinafter referred to as "centralized distribution-type forecasting"), or in cases where forecasting data are collected and analyzed using terminals, software, etc., provided by the business operator to users and then forecasts are provided (hereinafter referred to as "individual terminal-type forecasting"), the facilities must consist of electronic computers or other equipment capable of accurately collecting and processing the forecasting data necessary for the intended forecasts.
- (2) Facilities for centralized distribution-type forecasting may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

## 4 Collection Staff Members

Staff members for collecting forecasting data necessary for the proper performance of forecasting services must be deployed.

## 4. Facilities and Staff Members for the Analysis of Forecasting Data

### 1 Analysis Facilities

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- (1) For both centralized distribution-type forecasting and individual terminal-type forecasting, the facilities must consist of electronic computers or other equipment capable of accurately processing the analytical methods employed.
- (2) Facilities for centralized distribution-type forecasting may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

## 2 Analysis Staff Members

Staff members for analyzing forecasting data necessary for the proper performance of forecasting services must be deployed.

## 5. Facilities and Staff Members Capable of Receiving Warning Matters Promptly

### 1 Facilities for Prompt Receipt

- (1) These facilities must be communication equipment and other facilities that can receive warning matters related to forecasting services quickly and reliably.
- (2) Facilities may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

### 2 Staff Members for Prompt Receipt

Staff members receiving warning matters related to forecasting services quickly and reliably must be deployed.

## 6. Facilities and Staff Members for Providing Explanations Regarding Specified Forecasting Services

### 1 Facilities for Providing Explanations

- (1) The facilities must consist of communication equipment and other facilities capable of appropriately providing the explanations prescribed in Section 8.
- (2) Facilities may be owned by a person other than a business operator. In such cases, the person must possess sufficient rights and authority necessary for using the relevant facility.

### 2 Staff Members for Providing Explanations

Staff members necessary for appropriately providing the explanations prescribed in Section 8 must be assigned.

## 7. Method of Predicting Phenomena

### 1 Method of Predicting Phenomena

- (1) Methods must be physical or statistical methods based on generally accepted scientific and

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technical knowledge, appropriate to the type of forecast, the target area, and the forecast data to be collected, such as making predictions based on meteorological forecast data or observations and other forecasting data related to water levels, discharge, or inundation, while taking into account runoff into rivers and flow within rivers reflecting the effects of flood control facilities.

(2) With respect to (1), where meteorological phenomena used as input are predicted by the operator, a certified weather forecaster must be appointed in accordance with Article 11-3, paragraph (1) of the Regulations for Enforcement of the Meteorological Service Act, and such forecasters must perform the meteorological forecasts.

(3) With respect to (1), the validity of the predictions must be verified in advance and matters to be noted in the use of the forecasts must be established.

## 2 Maintenance and Management of Methods for Predicting Phenomena

Methods must be established to verify the validity of prediction results after forecasts are made, as well as policies for response based on the results of such verification, and the methods for predicting phenomena must be appropriately maintained and managed.

## 8. Prevention of Transmission of Forecast Information to Persons Other Than Those Who Have Received Explanations Regarding Specified Forecasting Services

### 1 Measures to Prevent Transmission of Forecast Information to Persons Other Than Those Who Have Received Explanations

Measures must be taken to prevent users of the specified forecasting services from transmitting forecast information to persons who have not received the required explanations.

### 2 Explanations to Persons Intending to Use the Specified Forecasting Services

Before commencing the provision of the specified forecasting services, explanations must be provided to persons intending to use such services regarding matters to be noted in their use. Where such explanations are outsourced, measures must be taken to ensure that the person providing explanations on behalf of the operator reliably delivers the explanations to persons intending to use the specified forecasting services. The methods of explanation pursuant to Article 11-4 of the Regulations for Enforcement of the Meteorological Service Act, as well as the content of explanations under items (1) and (9) of the same Article, must be as follows:

#### (1) Method of Explanation

Explanations must be provided face-to-face (including methods that enable mutual recognition of each other's condition through the transmission and reception of audio and video) using documents (including electromagnetic records).

#### (2) Content of Explanation

##### A. Purpose of Article 19-3 of the Meteorological Service Act

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Flood forecasts have significant social impact, as they are directly linked to disaster responses. If such forecasts provided by persons licensed for forecasting services are received by individuals who do not sufficiently understand their characteristics, it may hinder evacuation behavior or disaster response and lead to confusion in disaster prevention. To prevent such confusion, it must be explained that persons intending to use the specified forecasting services must fully understand, in advance, the precautions related to the use of such forecasts.

**B. Measures to Prevent Transmission of Forecast Information to Persons Other Than Those Intending to Use the Specified Forecasting Services**

Considering the purpose described in A, specific measures to prevent users from transmitting forecast information to persons who have not received the explanation must be explained.

Standards for Adverse Dispositions Against Persons who have Obtained a License for Forecasting Services

Section 1: Orders to Improve Services Pursuant to Article 20-2 of the Meteorological Service Act

1. Orders issued when a licensee (meaning a person who has obtained a license; referred to below as “licensee”) no longer meets any of the criteria listed in Article 18, paragraph (1) of the Meteorological Service Act (referred to below as “the Act”)

(1) Orders Concerning Collection and Analysis of Forecasting Data

If it is determined that the licensee no longer possesses the facilities or staff members necessary for the collection of observational and other forecasting data, or for the analysis of forecasting data, to perform the licensed forecasting services properly, the Director-General of the Japan Meteorological Agency (JMA) orders that the necessary facilities for the collection or analysis of forecasting data be established, or that the necessary staff members be assigned.

(2) Orders Concerning the Acquisition of Warning Matters

If it is determined that the licensee no longer possesses the facilities or staff members necessary to promptly receive warning matters from the JMA related to the purpose and scope of the licensed forecasting services, the Director-General of JMA orders that the necessary facilities be established or that the necessary staff members be assigned.

(3) Orders Concerning Specified Forecasting Services

(i) If it is determined that, despite performing specified forecasting services, the licensee no longer possesses the facilities or staff members capable of properly providing the explanation under Article 19-3 of the Act, the Director-General of JMA orders that the necessary facilities be established or that the necessary staff members be assigned.

(ii) If it is determined that, despite performing specified forecasting services, necessary measures have not been taken to prevent forecast information from being communicated to any party other than those who have received the explanation under Article 19-3 of the Act, the Director-General of JMA orders the implementation of the necessary measures.

(4) Orders Concerning the Assignment of Dedicated Certified Weather Forecasters

If it is determined that, despite performing services for forecasting meteorological phenomena or terrestrial phenomena (excluding earthquake ground motion, volcanic phenomena, and landslides; the same must apply hereinafter except in Section 1, 2 (3)), the number of dedicated certified weather forecasters staffed at a business office where predictions of such phenomena are performed fails to comply with the standards referred to in Article 11-3, paragraph (1) of the Regulations for Enforcement of the Meteorological Service Act (referred to below as the “Enforcement Regulations”) (or, where at least one dedicated certified weather forecaster is staffed at the office and such non-compliance continues for a period exceeding two weeks), the Director-General of JMA orders the assignment of the

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required number of dedicated certified weather forecasters.

(5) Orders Concerning Compliance with Technical Standards for Methods of Predicting Earthquake Ground Motion, Volcanic Phenomena, and Tsunamis

- (i) If a licensee is performing services for forecasting earthquake ground motions but the method of predicting earthquake ground motions is determined to no longer comply with the standards referred to in Article 10-2, item (i) of the Enforcement Regulations, the Director-General of JMA orders the licensee to bring the method of predicting earthquake ground motions into compliance with the standards.
- (ii) If a licensee is performing services for forecasting volcanic phenomena but the method of predicting volcanic phenomena is determined to no longer comply with the standards referred to in Article 10-2, item (ii) of the Enforcement Regulations, the Director-General of JMA orders the licensee to bring the method of predicting volcanic phenomena into compliance with the standards.
- (iii) If a licensee is performing services for forecasting tsunamis but the method of predicting tsunamis is determined to no longer comply with the standards referred to in Article 10-2, item (iii) of the Enforcement Regulations, the Director-General of JMA orders the licensee to bring the method of predicting tsunamis into compliance with the standards.

(6) Orders Concerning Compliance with Technical Standards for Methods of Predicting Phenomena for Forecasting Services Involving Phenomena Related to Meteorological Phenomena

- (a) If a licensee does not perform predictions of meteorological phenomena for forecasting services involving phenomena related to meteorological phenomena, the following must apply:
  - (i) If a licensee is performing services for forecasting landslides but the method of predicting landslides is determined to no longer comply with the standards referred to in Article 10-2, item (iv) of the Enforcement Regulations, the Director-General of JMA orders the licensee to bring the method of predicting landslides into compliance with the standards.
  - (ii) If a licensee is performing services for forecasting storm surges but the method of predicting storm surges is determined to no longer comply with the standards referred to in Article 10-2, item (v) of the Enforcement Regulations, the Director-General of JMA orders the licensee to bring the method of predicting storm surges into compliance with the standards.
  - (iii) If a licensee is performing services for forecasting high waves but the method of predicting high waves is determined to no longer comply with the standards referred to in Article 10-2, item (vi) of the Enforcement Regulations, the Director-General of JMA orders the licensee to bring the method of predicting high waves into compliance with the standards.
  - (iv) If a licensee is performing services for forecasting floods but the method of predicting floods is determined to no longer comply with the standards referred to in Article 10-2, item (vii) of the Enforcement Regulations, the Director-General of JMA orders the licensee to bring the method of predicting floods into compliance with the standards.
- (b) In addition to (a), where a licensee performs predictions of meteorological phenomena for

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forecasting services involving phenomena related to meteorological phenomena, if it is determined that the number of dedicated certified weather forecasters staffed at a business office performing predictions of meteorological phenomena for forecasting services involving phenomena related to meteorological phenomena fails to comply with the standards referred to in Article 11-3, paragraph (1) of the Enforcement Regulations (or, where at least one dedicated certified weather forecaster is staffed at the office and such non-compliance continues for a period exceeding two weeks), the Director-General of JMA orders the assignment of the required number of dedicated certified weather forecasters.

## 2. Orders Issued When Deemed Necessary to Ensure the Proper Operation of Forecasting Services by Licensees

### (1) Orders Where a Licensee falls under Grounds for Disqualification

(i) If a licensee falls under the stipulations of Article 18, paragraph (2), item (iii) of the Act, the Director-General of JMA orders the dismissal of the relevant officer.

(ii) If a licensee falls under the stipulations of Article 18, paragraph (2), item (iv) of the Act, the Director-General of JMA orders the designation of a domestic representative or domestic agent.

### (2) Orders Where a Falsified Application is Discovered

If a licensee is deemed to fall under the stipulations of Article 18, paragraph (2), item (v) of the Act, the Director-General of JMA orders the licensee to submit true and accurate documents.

### (3) Orders Where a Warning is Issued

If a licensee issues a warning regarding meteorological phenomena, terrestrial phenomena, tsunamis, storm surges, high waves, or floods in violation of Article 23 of the Act, the Director-General of JMA orders the licensee to cease such conduct.

### (4) Orders Where a Person Other than a Certified Weather Forecaster Is Caused to Perform Prediction of Meteorological Phenomena or Terrestrial Phenomena

If a licensee, in violation of the latter part of Article 19-2 of the Act, causes a person other than a certified weather forecaster to perform predictions of meteorological phenomena or terrestrial phenomena, the Director-General of JMA orders the licensee to suspend such predictions.

### (5) Orders Where no Explanations are Provided to Persons Intending to Use Specified Forecasting Services

If a licensee, despite performing specified forecasting services, fails to provide an explanation to a person intending to use such services in violation of Article 19-3 of the Act, the Director-General of JMA orders the licensee to provide such explanation.

### (6) Orders Where Conditions Attached to a License or Approval are Violated

If a licensee violates the conditions attached to a license or approval pursuant to Article 40-2, paragraph (1) of the Act, the Director-General of JMA orders compliance with such conditions.

### (7) Orders where the Purpose or Scope of Forecasting Services is Changed without Approval

If a licensee changes the purpose or scope of forecasting services without approval from the Director-

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General of JMA, in violation of Article 19, paragraph (1) of the Act, the Director-General of JMA orders the licensee to take corrective measures, such as resuming operations compliant with the purpose and scope of the forecasting services for which a license or approval has already been granted, or obtaining approval for the change. However, this must not apply if the licensee demonstrates an intention to take corrective measures promptly under its own initiative.

(8) Orders in Cases of Failure to Notify of Changes to the Content of a License Application

If a licensee, in violation of Article 19, paragraph (4) of the Act, fails to notify the Director-General of JMA of any change in the matters listed in the items of Article 17-2, paragraph (1) of the Act (excluding item (iii)), or submits a false report, the Director-General of JMA orders the licensee to submit a true and accurate report regarding such change. However, this must not apply if the licensee demonstrates an intention to promptly submit a true and accurate report under its own initiative.

(9) Orders in the Event of Failure to Report Changes in the Content of Various Submitted Documents

If a licensee fails to report to the Director-General of JMA regarding changes to the content of various submitted documents, in violation of Article 50, paragraph (2) of the Enforcement Regulations, the Director-General of JMA orders the submission of a report regarding such changes. However, this must not apply if the licensee demonstrates an intention to promptly submit a report under its own initiative.

(10) Orders in the Event of Failure to Notify the Suspension or Abolition of Forecasting Services

If a licensee suspends or abolishes all or part of its forecasting services and, in violation of Article 22 of the Act, fails to notify the Director-General of JMA of such suspension or abolition within 30 days, or makes a false notification of such, the Director-General of JMA orders the licensee to submit a true and accurate notification regarding such suspension or abolition. However, this must not apply if the licensee demonstrates an intention to promptly submit notification under its own initiative.

(11) Order to Submit Reports and Other Information.

If a licensee engages in conduct falling under the stipulations of Article 47, item (iii) of the Act, the Director-General of JMA orders the licensee to submit a true and accurate report.

(12) Orders Concerning On-Site Inspections

If a licensee engages in conduct falling under the stipulations of Article 47, item (iv) of the Act, the Director-General of JMA orders the licensee to cease such conduct.

(13) Orders Concerning Deficiencies in Meteorological Observations

If a licensee, in violation of Article 9, paragraph (1) of the Act, uses meteorological instruments that have not passed calibration for observations relating to forecasting services without obtaining the confirmation required under paragraph (2) of the same Article, the Director-General of JMA orders the licensee to suspend the use of such meteorological instruments.

(14) Orders Regarding Other Measures Necessary to Improve the Operation of the Forecasting Services

In addition to the provisions above, if it is deemed necessary to ensure the proper operation of the licensee's forecasting services, the Director-General of JMA orders the licensee to take measures necessary to improve the operation of said forecasting services.

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## Section 2: Suspension of Operations and Revocation of Licenses Pursuant to Article 21 of the Meteorological Service Act

### 1. Suspension of Services

#### (1) In Cases Where Serious Violations Are Found

Where an order needs to be issued pursuant to Section 1 and all the conditions set below are met, the Director-General of JMA orders the suspension of forecasting services for a specified period. In such cases, the licensee may also be ordered to take corrective measures. In determining the duration of the suspension, the period required to implement the relevant corrective measures must be taken into consideration.

- (i) Where systematic and malicious conduct is found.
- (ii) Where the licensee has received two or more adverse dispositions based on these standards for the same reason within the past two years.
- (iii) Where it is determined that continuing the forecasting services would hinder the sound development of meteorological services or jeopardize the public interest, including cases where there is a risk of damage occurring or spreading.

#### (2) Failure to Comply with an Order for Business Improvement, etc.

In cases where an order is issued pursuant to any of the preceding paragraphs, and the measures pertaining to the order are not implemented without justifiable cause, or in other cases of violation of the order, the Director-General of JMA orders the suspension of forecasting services for a specified period. In such cases, an order to take corrective measures may also be issued. In determining the duration of the suspension, the time required to implement the corrective measures must be taken into consideration.

### 2. Revocation of Licenses

#### (1) Where a serious violation is found

Where a licensee is subject to an order pursuant to Section 1, and all the conditions set below are met, the Director-General of JMA revokes the license for forecasting services.

- (i) Systematic and malicious conduct is found.
- (ii) The licensee has received two or more adverse dispositions based on these standards for the same reason within the past two years.
- (iii) It is determined that continuing the forecasting services would pose a risk of causing or exacerbating harm, thereby hindering the sound development of meteorological services and the safeguarding of the public interest, and the licensee is deemed to lack the will or ability to implement corrective measures.

#### (2) Failure to Comply with an Order to Suspend Services

If a licensee, despite having received an order to suspend services pursuant to paragraph (1), performs

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forecasting services during the suspension period, or fails to implement the corrective measures ordered in conjunction with the order without justifiable cause, or otherwise violates the order to suspend services, the Director-General of JMA revokes the license for forecasting services.

(3) Where the licensee falls under Grounds for Disqualification

If a licensee falls under the stipulations of Article 18, paragraph (2), item (i) or item (ii) of the Act (limited to provisions pertaining to overseas laws and enforcement regulations equivalent to those of the Act) and fails to notify the discontinuation of forecasting services, the Director-General of JMA revokes the license for forecasting services.

(4) The whereabouts of the licensee can no longer be ascertained

If the licensee falls under the stipulations of Article 21, paragraph (2) of the Act, the Director-General of JMA revokes the license for forecasting services.

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Appendix 10

Standards for Publication of Names, etc. Pursuant to Article 42-2 of the Meteorological Service Act Concerning Forecasting Services Licensing

Where any of the following items apply, names, etc., must be made public:

- (1) Where a person has performed forecasting services without obtaining a forecasting services license in violation of Article 17, paragraph (1) of the Meteorological Service Act, and correction through administrative guidance is deemed difficult.
- (2) Where a person has issued warnings for meteorological phenomena, terrestrial phenomena, tsunamis, storm surges, high waves, or floods in violation of Article 23 of the Meteorological Service Act.