**DATA BUOY COOPERATION PANEL (DBCP)**

**FORMAT FOR NATIONAL REPORTS ON CURRENT AND
PLANNED BUOY PROGRAMMES**

|  |  |
| --- | --- |
| **Country** | **REPUBLIC OF KOREA** |
| **Year** | **2021** |

**Please Identify your Programme’s Major Opportunities and Challenges/Risks during the upcoming year and how DBCP can most effectively assist your Programme.**

1. ***CURRENT PROGRAMME:***

**Please Identify your Programme’s Major Opportunities and Challenges/Risks during the upcoming year and how DBCP may assist your Programme.**

|  |  |
| --- | --- |
| **Agency or programme** | **Korea Meteorology Administration(KMA)** |
| Number and type of buoys | (a) deployed during the year |  |
| (b) operational as of 31 August | 95 moored buoys |
| (c) reporting on GTS as of 31 August | 24 |
| Purpose of programme*(check/uncheck boxes using [\_] or [x] as appropriate)* | (a) operational | [x] |
| (b) met / ocean research | [x] |
| (c) developmental | [x] |
| Main deployment areas | the Yellow Sea, the Southern Sea, the East Sea |
| Vandalism incidents |  - |

|  |  |
| --- | --- |
| **Agency or programme** | **Korea Hydrographic and Oceanographic Agency(KHOA)** |
| Number and type of buoys | (a) deployed during the year |  |
| (b) operational as of 31 August | 35 Moored Buoy |
| (c) reporting on GTS as of 31 August |  |
| Purpose of programme*(check/uncheck boxes using [\_] or [x] as appropriate)* | (a) operational | [To provide real time information and compare with model predictions] |
| (b) met / ocean research | [x] |
| (c) developmental | [x] |
| Main deployment areas | Yellow Sea(the western coast of Korea) and East Sea(the eastern and southern coast of Korea), East China Sea |
| Vandalism incidents | (a) Five times from 2020 to 2021 |

*(repeat table above as often as necessary)*

***2. PLANNED PROGRAMMES:***

|  |  |
| --- | --- |
| **Agency or programme** | **Korea Meteorology Administration(KMA)** |
| Number and type of buoys | planned for deployment in the next 12 months | 2 moored buoys |
| Purpose of programme*(check/uncheck boxes using [\_] or [x] as appropriate)* | (a) operational | [x] |
| (b) met / ocean research | [x] |
| (c) developmental | [x] |
| Main deployment areas |  |

|  |  |
| --- | --- |
| **Agency or programme** | **Korea Hydrographic and Oceanographic Agency(KHOA)** |
| Number and type of buoys | planned for deployment in the next 12 months | 3 Moored Buoy |
| Purpose of programme*(check/uncheck boxes using [\_] or [x] as appropriate)* | (a) operational | [To provide real time information and compare with model predictions] |
| (b) met / ocean research | [x] |
| (c) developmental | [x] |
| Main deployment areas |  |

*(repeat table above as often as necessary)*

***3. TECHNICAL DEVELOPMENTS:***

**KMA**

|  |  |
| --- | --- |
| (a) Buoy design | * 3m, 10m discus buoy: 17
* 6m nomad buoy: 7
* 0.7m sphere Buoy: 71
 |
| (b) Instrumentation | * 3m, 10m discus, 6m nomad buoy: Wave, Wind, Humidity, Pressure, Temp., Water Temp. Sensor
* 0.7m Sphere Buoy: Wave, Water Temp.
 |

**KHOA**

|  |  |
| --- | --- |
| (a) Buoy design | * P.E Foam Buoy(4.3m, 3.0m)
* Aids to Navigation Buoy
 |
| (b) Instrumentation | * Data logger & Control system
* Wave sensor
* Doppler current sensor
* C/T sensor
* Weather sensor
* GPS
 |

***4. PUBLICATIONS (on programme plans, technical developments, QC reports, etc.):***

|  |  |  |
| --- | --- | --- |
| ***Ref*** | ***Title*** | ***Type[[1]](#footnote-1)*** |
| 1 | **(KMA)** Monthly Report of Marine Data | (5) Data Management |
| 2 | **(KMA)** Annual Report of Marine Data | (5) Data Management |
| 3 | **(KHOA)** Monthly Report of Korea Oceanographic Observation Network | (6)Data collection |
| 4 | **(KHOA)** Annual Report of Korea Oceanographic Observation Network | (6)Data collection |

*(repeat rows in the table above as necessary)*

***5. ADDITIONAL COMMENTS:***

|  |  |
| --- | --- |
| (a) Quality of buoy data | * **(KMA)** More than 90% good data(2021.1.~8.)
* **(KHOA)** More than 80% good data
 |
| (b) Communications | * **(KMA)** Inmasat iridium satellite, LTE or CDMA
* **(KHOA)** Iridium satellite, LTE or CDMA
 |
| (c) Buoy lifetimes | * **(KMA)** About 7 years(Regular inspection every 2 years)
* **(KHOA)** About 5~10 years(exchange battery every year)
 |
| (d) Data Accessibility[[2]](#footnote-2) | * **(KMA)** http://data.kma.go.kr
* **(KHOA)** http://www.khoa.go.kr/oceangrid/
 |
| (e) New Observations[[3]](#footnote-3) |  |
| (f) GFCS and WIGOS[[4]](#footnote-4) |  |
| (g) Additional Requirements[[5]](#footnote-5) |  |
| (h) DBCP Linkages[[6]](#footnote-6) |  |
| (i) Contribution to UN Decade and UN SDGs[[7]](#footnote-7) | ● ● ●  |
| (j) Other (i.e. Impact of COVID19 on observing systems and mitigation efforts) |  |

Note: It is recommended that this form is filled in electronically and returned also electronically to the Secretariat. A template of the form can be downloaded from the following SharePoint site:

[https://wmoomm.sharepoint.com/:w:/s/wmocpdb/EQ1z8KndbxREkzE6RH4NFkkBDdvOItne74OP8f4voMMSbg?e=pgru6r](https://wmoomm.sharepoint.com/%3Aw%3A/s/wmocpdb/EQ1z8KndbxREkzE6RH4NFkkBDdvOItne74OP8f4voMMSbg?e=pgru6r)

**ANNEX - FORM FOR REPORTING INCIDENTS OF VANDALISM ON DATA BUOYS**

|  |  |
| --- | --- |
| **Country** |  **Republic of Korea** |
| **Contact person e-mail** |  |
| **Year** | **Buoy Location** | **Type of Buoy****(e.g. Tsunami / Met -Ocean Buoy/Drifter/ARGO floats/ Other)** | **Type of damage to buoy** | **Buoy id/WMO id** | **Number of days of transmission lost** | **Cost of replacement** | **Remarks****(e.g. whether photos have been taken)** |
| **Latitude** | **Longitude** |  |
|  2021 | 33.700  |  126.591 |  Oceanographic observation Buoy |  Collision of vessel  |   |   |   |   |
| 2021 | 36.274 | 126.458 | Oceanographic observation Buoy | Collision of vessel  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|   |   |   |   |   |   |   |   |   |
|   |   |   |   |   |   |   |   |   |
|   |   |   |   |   |   |   |   |   |
| **Efforts taken against vandalism** |   |
| **Awareness meeting Organised**  |  |
| **Suggestions (if any)** |  |
| **Photos on Vandalism** | (please include pictures if available; and email electronic versions to dbcp-tc@jcommops.org and dr.r.venkatesan@gmail.com) |

Note: It is recommended that this form is filled in electronically and returned electronically also to OceanOPS (dbcp-tc@jcommops.org and dr.r.venkatesan@gmail.com ). A template of the form can be downloaded from the following SharePoint site: [https://wmoomm.sharepoint.com/:w:/s/wmocpdb/EXsq1FXv0vpHmOjQA-tTobwBMrNnjXnaQok3oudPhKIb3A?e=2IR9Wh](https://wmoomm.sharepoint.com/%3Aw%3A/s/wmocpdb/EXsq1FXv0vpHmOjQA-tTobwBMrNnjXnaQok3oudPhKIb3A?e=2IR9Wh)

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1. : Types of publications: (1) Implementation, (2) Operations, (3) Instrumentation, (4) Quality Management, (5) Data Management, (6) Data collection and/or location, (7) Data use, (8) Other [↑](#footnote-ref-1)
2. How does the international community access the ocean observing data provided by your Organization [↑](#footnote-ref-2)
3. What new ocean observations does your Organization plan to make in the upcoming year (i.e. new parameters, expanding geographic scope, filling spatial or latency gaps)? [↑](#footnote-ref-3)
4. How do your Organization’s observations contribute to the WMO’s Integrated Global Observing System (WIGOS) and/or Global Framework for Climate Services (GFCS)? [↑](#footnote-ref-4)
5. What additional requirements (other than climate) does your organization have that are currently not adequately addressed by the DBCP? [↑](#footnote-ref-5)
6. How would your organization benefit from DBCP’s closer linkages to the Global Ocean Observing System(GOOS), Data Management and Modelling Communities? [↑](#footnote-ref-6)
7. How do your ocean observing networks contributing to the UN decade on Ocean Science and UN Sustainable Development Gloas . [↑](#footnote-ref-7)