**DATA BUOY COOPERATION PANEL (DBCP)**

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

|  |  |
| --- | --- |
| **Country** | United Kingdom |
| **Year** | 2022 |

**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.**

|  |  |
| --- | --- |
| **Met Office** | Marine network deep ocean moored buoys (K1, K2, K4, K5, K7, Brittany) |
| Number and type of buoys | (a) deployed during the year | 6 |
| (b) operational as of 31 August | 6 |
| (c) reporting on GTS as of 31 August | 6 |
| Purpose of programme*(check/uncheck boxes using [\_] or [x] as appropriate)* | (a) operational | [x] |
| (b) met / ocean research | [x] |
| (c) developmental |  |
| Main deployment areas | North-east Atlantic, 1 buoy in Biscay  |
| Vandalism incidents | (a) Nil |

*Successful year getting to visit all of the moored buoy sites.*

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| **Met Office** | Instrumented light vessels/buoys |
| Number and type of buoys | (a) deployed during the year | 3 visited |
| (b) operational as of 31 August | 5 |
| (c) reporting on GTS as of 31 August | 5 |
| Purpose of programme*(check/uncheck boxes using [\_] or [x] as appropriate)* | (a) operational | [x] |
| (b) met / ocean research |  |
| (c) developmental |  |
| Main deployment areas | The Channel |
| Vandalism incidents | (a) Nil |

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| **Met Office/NOCS** | Porcupine Abyssal Plain (PAP) OceanSITES mooring |
| Number and type of buoys | (a) deployed during the year | Deployed May 2022 |
| (b) operational as of 31 August | Yes |
| (c) reporting on GTS as of 31 August | Yes |
| Purpose of programme*(check/uncheck boxes using [\_] or [x] as appropriate)* | (a) operational | [x] |
| (b) met / ocean research | [x] |
| (c) developmental |  |
| Main deployment areas | Porcupine Abyssal Plain 49N 16.5W  |
| Vandalism incidents | (a) Nil |

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| **PML/Met Office** | Western Channel Observatory moored buoys (E1 and L4) |
| Number and type of buoys | (a) deployed during the year | 2 |
| (b) operational as of 31 August | 2 |
| (c) reporting on GTS as of 31 August | 2 |
| Purpose of programme*(check/uncheck boxes using [\_] or [x] as appropriate)* | (a) operational | [x] |
| (b) met / ocean research | [x] |
| (c) developmental |  |
| Main deployment areas |  |
| Vandalism incidents | (a) Nil |

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| **Cefas** | WaveNet |
| Number and type of buoys | (a) deployed during the year | 14 |
| (b) operational as of 31 August | 17 operated by Cefas (40 3rd party) |
| (c) reporting on GTS as of 31 August | None. Data available through WaveNet website |
| Purpose of programme*(check/uncheck boxes using [\_] or [x] as appropriate)* | (a) operational | [x] |
| (b) met / ocean research |  |
| (c) developmental |  |
| Main deployment areas |  |
| Vandalism incidents | (a) One confirmed collision (Dowsing site), two other broken moorings |

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| **Cefas** | SmartBuoy monitoring sites |
| Number and type of buoys | (a) deployed during the year | 9 |
| (b) operational as of 31 August | 3 |
| (c) reporting on GTS as of 31 August | 0 |
| Purpose of programme*(check/uncheck boxes using [\_] or [x] as appropriate)* | (a) operational | [x] |
| (b) met / ocean research | [x] |
| (c) developmental |  |
| Main deployment areas | English eutrophication monitoring sites |
| Vandalism incidents | (a) Nil |

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| **Met Office** | Drifters |
| Number and type of buoys | (a) deployed during the year | FY21/22 – 22 (20 DBi, 2 Pacific Gyre)FY22/23 so far – 11 (6 Scripps, 5 Pacific Gyre)2 on behalf of E-SURFMAR so far the FY |
| (b) operational as of 31 August | 61 (5 more in October) |
| (c) reporting on GTS as of 31 August | 61 (5 more in October) |
| Purpose of programme*(check/uncheck boxes using [\_] or [x] as appropriate)* | (a) operational | [x] |
| (b) met / ocean research | [x] |
| (c) developmental |  |
| Main deployment areas | 1. Met Office aim for the South Atlantic, targeting waters around the Falklands and between Cape Town – St Helena/Ascension
2. AOML\*/ESURFMAR targets the North Eastern Atlantic, off the NW coast of Africa
 |
| Vandalism incidents | (a) Nil |

***2. PLANNED PROGRAMMES:***

|  |  |
| --- | --- |
| **Agency or programme** | Cefas SmartBuoy |
| Number and type of buoys | planned for deployment in the next 12 months | 3 sites serviced every 3 months |
| 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 |  |

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| **Agency or programme** | Cefas WaveNet |
| Number and type of buoys | planned for deployment in the next 12 months | 19 sites serviced every 12 to 24 months. |
| 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 |  |

***3. TECHNICAL DEVELOPMENTS:***

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| (a) Buoy design | * PAP buoy has been upgraded to dual met systems
* All Met Office moored buoys are now Mobilis/Hyrdrosphere hull with AMO2X automatic weather stations on board (based on Campbell Scientific CR1000X
 |
| (b) Instrumentation | * Sensor packages upgraded on all Cefas SmartBuoys to use new ESMx datalogger (Cefas design), implementation of UV antifouling for CT sensors, and mechanical wipers for optical.
* Met Office moored buoys now carrying Aanderaa Motus Directional Wave sensors. Unfortunately, there have been delays in getting the data processing set up so sites have been missing wave data.
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***4. PUBLICATIONS (on programme plans, technical developments, QC reports, etc.):***

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| --- | --- | --- |
| ***Ref*** | ***Title*** | ***Type[[1]](#footnote-2)*** |
| 1 |  |  |
| 2 |  |  |
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*(repeat rows in the table above as necessary)*

***5. ADDITIONAL COMMENTS:***

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| (a) Quality of buoy data | * Overall data quality and timeliness are good.
 |
| (b) Communications | * Iridium comms
 |
| (c) Buoy lifetimes | * Met Office aim to replace moored buoy moorings every 6 years and switch out the buoy itself every 2
 |
| (d) Data Accessibility[[2]](#footnote-3) | * Cefas data available from WaveNet (<https://wavenet.cefas.co.uk/Map>)
* Met Office data shared on GTS and available from Marine Observation site (<https://www.metoffice.gov.uk/weather/specialist-forecasts/coast-and-sea/observations>)
 |
| (e) New Observations[[3]](#footnote-4) |  |
| (f) GFCS and WIGOS[[4]](#footnote-5) |  |
| (g) Additional Requirements[[5]](#footnote-6) |  |
| (h) DBCP Linkages[[6]](#footnote-7) |  |
| (i) Contribution to UN Decade and UN SDGs[[7]](#footnote-8) | ● ● ●  |
| (j) Other (i.e. Impact of COVID19 on observing systems and mitigation efforts) | * In an extraordinary effort all moored buoy sites were visited by the Met Office Marine Systems Engineering Team
* Brittany and Gascogne sites were previously operated jointly by Met Office and Meteofrance. This agreement has now come to an end with the Met Office taking responsibility for Brittany and Meteofrance taking responsibility for Gascogne
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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** |   |
| **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** |  |
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| **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 karen.grissom@noaa.gov ) |

Note: It is recommended that this form is filled in electronically and returned electronically also to OceanOPS(dbcp-tc@jcommops.org and karen.grissom@noaa.gov ). 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-2)
2. How does the international community access the ocean observing data provided by your Organization [↑](#footnote-ref-3)
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-4)
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-5)
5. What additional requirements (other than climate) does your organization have that are currently not adequately addressed by the DBCP? [↑](#footnote-ref-6)
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-7)
7. How do your ocean observing networks contributing to the UN decade on Ocean Science and UN Sustainable Development Gloas . [↑](#footnote-ref-8)