|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Country** | **Type of AWS** | **Method****of****Comms** | **Manual****Entry** **Facility** | **Number of Ships with AWS *(@ 31 December )*** |
| **2002** | **2004** | **2005** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** |
|  **Australia**  | Vaisala Milos 500 AWS  | Inmarsat C (Data Mode)  | Yes  | 9 | 11 | 10 | 8 | 9 | 9 | 8 | 8 | 8 | 6 | 6 | 5 | 3 |
| TECHSAS/ Other  | Inmarsat Fleet Broadband | No  | -  | -  | -  | -  | -  | -  | -  | 1 | 1 | 1 | 1 | 0 | 0 |
|  **Brazil** | VAISALA Maritime Observation System MAWS410 | (not known) | No  |   |   |   |   |   | -  |   | 4  | 6 |  6 |  (6) | 6 | 6 |
|  **Canada**  | AVOS – AXYS Technologies  | Inmarsat C  | Yes  | 13 | 14 | 14 | 39 | 41 | 45 | 35 | 18 | 4  | 2 | -  | -  | - |
| Iridium  | Yes  | -  | -  | -  | -  | 1 | 1 | 17 | 35 |  48 | 49\*\*\*\* | 52 |  (52) | 53 |
|  **China** | *DJQ-1* | BDS | No | -  | -  | -  | -  | -  |   | -  | 33 |  (2) | 2 |  (2) | 15 | 10 |
| *XZC2-2SA* | Inmarsat C CDMA,BDS | Yes  | -  | -  | -  | -  | -  |   | -  | 12 |  (12) | 12 |  (12) | 11 | - |
| *ZZ6-5* | GPRS | No |   |   |   |   |   |   |   |   |   |   |   | 5 | 5 |
| *XZC5-1* | (non real time) | Yes  |   |   |   |   |   |   |   |   |   |   |   | 5 | 5 |
| *ZQZ-A/ZQZ-C II-Pro* | GPRS | No |   |   |   |   |   |   |   |   |   |   |   | 44 | 44 |
| *XZC2-2SC/XZC2-2S* | Inmarsat C CDMA,BDS, BeiDou nav satellite | Yes  | -  | -  | -  | -  | -  |   | -  | -  |  (36) | 36 |  (36) | 8 | 12 |
| *XZC6-1* | Inmarsat C CDMA, BDS, BeiDou nav satellite | Yes  | -  | -  | -  | -  | -  |   | -  | 35 |  (17) | 17 |  (17) | 18 | 15 |
| *Other* | CDMA/ BeiDou nav satellite | No | - | - | - | - | - |  | - | - |  | - |  | - | 7 |
|  **Croatia** | BAROS  | Iridium SBD  | No  |   |   |   |   |   |   |   |   | 1\*\*\*\*\* | 1\*\*\*\*\* | 1\*\*\*\*\* | 1\*\*\*\*\* | (1\*\*\*\*\*) |
|  **Denmark** | BATOS  | Inmarsat C (Data Mode)  | Yes  | -  | -  | -  | 2 | \*\*\*\*\* | \*\*\*\*\* | \*\*\*\*\* | \*\*\*\*\* | \*\*\*\*\* | \*\*\*\*\* | \*\*\*\*\* |   | (1) |
| **Ecuador** | Vaisala 101C | Tarjeta | Yes  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | 1 |  |
| **EUMETNET** | BATOS  | Inmarsat C (Data Mode)  | Yes  | -  | -  | -  | -  | 5 | 5 | 6 | 8 | 10  | 10 | 11 | 11 | 11 |
| BAROS  | Iridium SBD  | No  |  - |  - | -  |  - | 0 | 4 | 9 | 13 | 15  | 16 | 17 | 17 | 18 |
| EUCAWS | Iridium SBD | Yes | - | - | - | - | - | - | - | - | - | - | - | - | 3 |
| Deck Drifters | Iridium SBD | No | - | - | - | - | - | - | - | - | - | - | - | - | 1 |
| **France**  | BATOS  | Inmarsat C (Data Mode)  | Yes  | 19 | 30 | 39 | 45 | 48 | 54 | 56 | 58 | 56 | 58 | 58 | 57 | 52 |
| Mini BATOS  | Inmarsat C (Data Mode)  | No  |   | 1 | 2 | 3 | 3 | 1 | -  | -  | -  | -  | -  | -  | 0 |
| Mercury | Iridium | Yes  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | 2 | 5 |
| MINOS  | Argos  | No  |   | 6 | 7 | 8 | 8 | 7 | 8 | 7 | 6 | 5 | 4 | 3 | 3 |
| EUCAWS | Iridium | Yes |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| BAROS  | Iridium  | No  | -  | -  | -  | -  | 1 | -  | -  | -  | -  | -  | -  | 0 | 0 |
| **Germany** | Vaisala Milos 500 AWS  | Email/Meteosat DCP | Yes  | 23 | 21 | 21 | 17 | 18 | 17 | 16 | 17 | 17 | 17 | 16 | 16 | 15 |
| AbWst Mk2 | Email | No | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | 3 | 2 | 2 |
| Ships’ own data logger  | Inmarsat/ Iridium  | Yes  | -  | -  | -  | -  | -  | 2 | 2 | 2 | 2 | 2 | -  | -  | - |
| **Hong Kong China** | *AMOS*  | Iridium | No | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | 1¥ | 1¥ | 1¥ |
| *Metocean deck drifter* | Iridium | No | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | 1 | 1 | 1 |
| **Indonesia** | TECHSENSE MET | Inmarsat/Thuraya | No  |   |   |   |   |   |   |   |  (6) | 6 |   | 12 |  (12) | 10 |
| PROJEX DX4 PRO | GPRS | No  |   |   |   |   |   |   |   |  (1) | 1 |  (1) | -  |  - | - |
| BATOS | Iridium | Yes |  |  |  |  |  |  |  |  |  |  |  |  | 8 |
| **Ireland**  | Vaisala Milos AWS  | Meteosat  | No  | 1 | 1 | 1 | 1 | 1 | 1 | -  | -  | - | - | - | - | 0 |
| BATOS  | Iridium  | No  | -  | -  | -  | -  |   |   | 1 | 2 |  - |  - | 2\*\*\*\*\* | - | 0 |
| **Italy** | BAROS ++ | Iridium | No |   |   |   |   |   |   |   |   |   | 3\*\*\*\*\* | 3\*\*\*\*\* | 3\*\*\*\*\* | (3\*\*\*\*\*) |
| BAROS | Iridium | No |   |   |   |   |   |   |   |   |   | 3\*\*\*\*\* | 6\*\*\*\*\* | 6\*\*\*\*\* | (6\*\*\*\*\*) |
| **Japan**  | Integrated System for Marine Met Observation (Koshin Denki Kogyo Co)  | Inmarsat / MTSAT/ DCP | Some  | 13 | 12 | 13 | 9 | 9 | 9 | 9 | 6 | 6 | 6 | 6 | 5 | 5 |
| Weather Observation System (Nippon)  | Inmarsat C  | Some  | -  | -  | -  | 4 | 5 | 5 | 6 | 6 | 6 | 5 | 5 | 5 | 5 |
| SOAR - Shipboard Oceanographic & Atmospheric Radiation (Brookhaven National Laboratory)  | Inmarsat C  | Yes  | -  | -  | -  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Ogasawara Keiki Seisakusho Co (Japan)  | Inmarsat  | No  | -  | -  | -  | 3 | 1 | 1 | -  | -  | -  | -  | -  | -  | - |
| JRCS MFG. Co. Ltd (Japan)  | Inmarsat F  | No  | -  | -  | -  | -  | 1 | 1 | -  | -  | -  | -  | -  | -  | - |
| **New Zealand**  | Sutron 9000RTU  | MTSAT  | Yes  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1 | 1 | 0 |
| mSTAR-SHIP  | GPRS/UPP Cellular | No  | -  | -  | -  | -  | 1 | 1 | 1 | 1 | 1 | 1  | 1 | 1 | 1 |
| **Norway**  | AWS  | VSAT  | some  | -  | -  | 17 | 17 | 18 | 16 |  (15) |  (15) |  (15) | (5)  | (5)  | (5)  | (5) |
| **Portugal** | BAROS ++ | Iridium | No | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | 1\*\*\*\*\* | 1\*\*\*\*\* | 1\*\*\*\*\* |
| **Russia**  | GM6  | Inmarsat C  | Yes  | -  | 38 |  (38) |  (38) |  (38) |  (38) | 0 | 0 | 0 | 0 | -  |  |  |
| **South Africa**  | Vaisala Milos 520  | Inmarsat C  | Yes  | -  |   | 1 | -1 | 1 | 1 | 1 | 1 | 1 | 2 |  (2) | 2 |  |
| **Spain**  | Vaisala MAWS 410  | Inmarsat C  | Yes  | 1 | 1 |  (1) | 1 | 1 | 1 | 1 | 1 | 1 | 1  |  (1) |  (1) | 1 |
| **United Kingdom** | Automet  | Inmarsat  | No  | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MINOS –GP  | Argos  | No  | -  | -  | 1 | 2 | 6 | 5 | 5 | 5 | 3 | 2 | 2 | 2 | 0 |
| MINOS-GPW  | Argos  | No  | -  | -  | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| BATOS  | Inmarsat C (Data Mode)  | Yes  | -  | -  | -  | 1 | 3 | 3 | 2 | 5\*\* | 4\*\* | 4\*\* | 1 | 1 | 1 |
| AVOS  | Inmarsat  | Yes  | -  | -  | -  | -  | 1 | 1\*\*\* | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Metpod  | Iridium  | No  | -  | -  | -  | -  | -  | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Metocean Deck Buoy  | Iridium  | No  | -  | -  | -  | -  | -  | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 |
| AMOS - Automated Marine Observing System (Met Office) | Iridium  | No  | -  | -  | -  | -  | -  | - | - | -  | 21 | 33 | 37 | 39 | 49 |
| **United States**  | SEAS-Version 8.00/6.57 AutoImet NOAA SCS (Science Computing System) Type 1  | VSAT Email  | Yes  | -  | 3 |  (3) | 0 | 3 | 16\*  | 25 | 9 | 12 | 12  | 10 | 7 | - |
| SEAS-Version >9.1  AutoImet NOAA SCS (Science Computing System) Type 2 | VSAT Email  | Yes  | -  | -  | -  | -  | -  | -  | 0 | 0 | 0 | 0 | 5 | 6 | - |
| NOAA SCS  Type 3 (developed by Alaska region) | Email | No  |   |   |   |   |   |   |   | 8 | 3 | 3 | 0 | -  | - |
| Non NOAA (developed by Alaska Region) | Email | No  | -  | -  | -  | -  | -  | -  | -  | -  | 7 | 7  | 7 | -  | - |
| Integrated - using compliant e-logbook and ships instrumentation | VSAT / ships Email | Yes |  |  |  |  |  |  |  |  |  |  |  |  | 16 |
| Integrated - using no e-logbook | Email | Yes  |   |   |   |   |   |   |   |   |   |   |   | 24 | 15 |
| Other ship owned AWS systems  | Email | Yes  | -  | -  | -  | -  | -  | - | - | 12 | 5 | 6  | 11 | - | - |
| **TOTAL AWS SYSTEMS** | **81** | **140** | **171** | **204** | **227** | **250** | **229** | **331** | **330** | **296** | **350** | **392** | **389** |

|  |  |
| --- | --- |
|  | Notes -  |
|  | Shaded cells indicate that a national SOT VOS report was not received |
|  | Numbers shown in brackets are carried forward from previous year and not confirmed  |
|  | \*2008 number corrected in 2009 - different from 2008 report |
|  | \*\* includes 3 systems installed on UK VOS on behalf of E-SURFMAR  |
|  | \*\*\* AVOS system on UK VOS Transferred to Environment Canada |
|  | \*\*\*\* includes 2 systems on training establishments |
|  | \*\*\*\*\* systems installed on behalf of E-SURFMAR (not included in total as also included Eumetnet figures) |
|  | ¥ Met Office AMOS system installed on Hong Kong VOS and managed by UK Met Office ( not included in total as also included in Met office figures) |
|  |  |