**VOS Report for 2012**                                                                                **Germany**

| a. | Programme description: | | | |
|---|---|---|---|---|
| **Category** | **No. of ships at 31 Dec 2012** | **Recruitments in 2012** | **De-recruitments In 2012** | **Comments** |
| *Selected* | 657 | 20 | 53 | |
| *Selected AWS* | 17 | | | |
| *VOSClim* | 57 | 5 | 3 | |
| *VOSClim AWS* | 2 | | | |
| *Supplementary* | | | | |
| *Supplementary AWS* | | | | |
| *Auxiliary* | 22 | 1 | 1 | |
| *Auxiliary AWS* | | | | |
| *Other* | | | | |
| **National VOS Total** | 753 | | | |

| | |
|---|---|
| **National VOS Target** | |
| **National VOSClim Target** | |

| b. | Data management: |
|---|---|
| *Total number of ship observations (BBXX) distributed on the GTS in 2012* | 273.657 |
| *Frequency of VOS data submitted to the GCC in 2012* | continuously |

| c. Shipboard Automatic Weather System | | | | |
|---|---|---|---|---|
| **Type** | **No. of ships at 31 Dec 2012** | **Manual Input Yes / No** | **Method of Comms** | **2013 Planned installations** |
| MILOS | 17 | no | DCP | |
| Ship own data logger | 2 | yes | INMARSAT/Iridium | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| d. Electronic logbooks: (TurboWin, SEAS, OBSJMA) | | |
|---|---|---|
| **Software & version** | **No. of ships at 31 Dec 2012** | **Implementation plans** |
| TurboWin xx | 695 | Continuously on Ship's PC |
| | | |
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| | | |
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| | | |

**e.    Major challenges and difficulties:**

Started in 2012 to use digital equipment, the first seven vessels use it since December 2012.

**f.    Research / development / testing:**

**g.    Other comments:**