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| **ASBU Implementation Situational Questionnaire** | **Ref.: ASBU\_ISQ-01** |
| **Name of State: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** **Name of Organization/Administration \_\_\_\_\_\_\_\_\_\_\_** **Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | **State MET Focal Point:****Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Email address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Tel: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
|  The purpose of this questionnaire is to collect baseline data on the status of the implementation of ASBU MET element by the State. |

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| **Reference & Title of the ASBU AMET element** | **AMET-B0/1 Meteorological observations products** |
| **Main purpose** | **Meteorological observations in support of flexible airspace management, improved situational awareness, collaborative decision-making and dynamically optimized flight trajectory planning** |

| **Enabler category** | **Enabler name**  | **Enabler related status question** | **Status** | **Comments** |
| --- | --- | --- | --- | --- |
|  |  |  | **Completed** | **In progress** | **Not started** | **If planned** *(provide the date of planning)* | **Not applicable** |  |
| **Regulatory provisions** | **National framework amendment for the provision of meteorological observations products** | 1. Are national regulations amended to include changes to the provision of quality-assured meteorological observation products to support the main purpose of the AMET-B0/1?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |
| **Operational procedures** | **Procedures for the provision of meteorological observations products** | 1. Are procedures for changes to the provision of quality-assured meteorological observation products, including additional meteorological parameters and higher spatial and temporal resolution observations developed and implemented?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |
| **Airborne system capability** | **Transmission of meteorological observations data from aircraft** | 1. Are onboard sensors and communication means for the measurement and transmission of meteorological data by ACAR, Mode-S, ADS-B & ADS-C provide I aircraft systems?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |  |  |  |  |  |  |
| **Ground system infrastructure** | **Automated systems and infrastructure to support the provision of meteorological observations products** | 1. Are meteorological required instrumentation, IT systems and communications infrastructure for the measurement, storage, display and transmission (including AFS) of meteorological observations products implemented?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |
| **Training** | **Training requirements for the provision of meteorological observations products** | 1. Is training need assessment conducted and identified training needs for meteorological personnel and aviation industry stakeholders on meteorological observations products implemented?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |

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| **Reference & Title of the ASBU AMET element** | **AMET-B0/2 Meteorological forecast and warning products** |
| **Main purpose** | **Meteorological forecasts, advisories and warnings in support of flexible airspace management, improved situational awareness, collaborative decision-making and dynamically optimized flight trajectory planning.** |

| **Enabler category** | **Enabler name**  | **Enabler related status question** | **Status** | **Comments** |
| --- | --- | --- | --- | --- |
|  |  |  | **Completed** | **In progress** | **Not started** | **If planned** *(provide the date of planning)* | **Not applicable** |  |
| **Regulatory provisions** | **National framework amendment for the provision of meteorological forecast products and warnings** | 1. Are national regulations amended to include changes to the provision of quality-assured meteorological forecast and warning products to support the main purpose of the AMET-B0/2?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |
| **Operational procedures** | **Procedures for the provision of Meteorological forecast products and warnings** | 1. Are procedures for changes to the provision of quality-assured meteorological forecast and warning products, including improved visualization and higher spatial and temporal resolution of gridded products developed and implemented?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |
| **Ground system infrastructure** | **Systems and infrastructure to support the provision of meteorological forecast and warning products** | 1. Are IT systems and communications infrastructure for the storage, forecasting, display, and transmission (including AFS) of meteorological forecast and warning products implemented?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |
| **Training** | **Training requirements for the provision of meteorological forecast products and warnings** | 1. Is training need assessment conducted and identified training needs for meteorological personnel and aviation industry stakeholders on meteorological forecast and warning products implemented?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |

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| **Reference & Title of the ASBU AMET element** | **AMET-B0/3 Climatological and historical meteorological products** |
| **Main purpose** | **Climatological products in support of the design and planning of infrastructure, flight routes and airspace management. Historical meteorological observations, forecasts, advisories and warnings in support of incident and accident investigations.** |

| **Enabler category** | **Enabler name**  | **Enabler related status question** | **Status** | **Comments** |
| --- | --- | --- | --- | --- |
|  |  |  | **Completed** | **In progress** | **Not started** | **If planned** *(provide the date of planning)* | **Not applicable** |  |
| **Regulatory provisions** | **National framework amendment for the provision of climatological meteorological information products** | 1. Are national regulations amended to include changes to the provision of climatological and historical meteorological products to support the main purpose of the AMET-B0/3?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |
| **Operational procedures** | **Procedures for the provision of climatological meteorological information products** | 1. Are procedures for changes to the provision of climatological and historical meteorological, including aerodrome climatological tables and summaries developed and implemented?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |
| **Ground system infrastructure** | **Systems and infrastructure to support the provision of climatological meteorological products** | 1. Are IT systems and communications infrastructure for the storage, display and transmission (including AFS) of climatological meteorological products implemented?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |
| **Training** | **Training requirements for the provision of climatological meteorological information products** | 1. Is training need assessment conducted and identified training needs for meteorological personnel and aviation industry stakeholders on climatological and historical meteorological products planned and implemented?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |

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| **Reference & Title of the ASBU AMET element** | **AMET-B0/4 Dissemination of meteorological products** |
| **Main purpose** | **Dissemination of meteorological products in support of flexible airspace management, improved situational awareness, collaborative decision-making and dynamically optimized flight trajectory planning** |

| **Enabler category** | **Enabler name**  | **Enabler related status question** | **Status** | **Comments** |
| --- | --- | --- | --- | --- |
|  |  |  | **Completed** | **In progress** | **Not started** | **If planned** *(provide the date of planning)* | **Not applicable** |  |
| **Regulatory provisions** | **National framework amendment for meteorological information exchange** | 1. Are national regulations amended to include changes to the dissemination of meteorological products in support of flexible airspace management, improved situational awareness, collaborative decision-making and dynamically optimized flight trajectory planning?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |
| **Operational procedures** | **Procedures for meteorological information exchange** | 1. Are procedures for changes to the dissemination of meteorological products, including the exchange of meteorological information using the ICAO Meteorological Information Exchange Model (IWXXM) developed and implemented?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |
| **Ground system infrastructure Information exchange** | **Communications infrastructure for meteorological information exchange** | 1. Are ground system infrastructure and dissemination systems for meteorological products, including message switching systems and the roll-out of the Aeronautical Message Handling System (AMHS) implemented to replace the Aeronautical Fixed Telecommunications Network (AFTN)?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |  |  |  |  |  |  |
| **Information exchange mode** | **ICAO Meteorological Information Exchange Model (IWXXM)** | 1. Is ICAO Meteorological Information Exchange Model (IWXXM) schema used to enable the provision meteorological information in XML/GML form?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |
| **Training** | **Training for meteorological information exchange** | 1. Is training need assessment conducted and identified training needs for meteorological and aviation IT personnel, including NOC/ROC/RODB/IROG personnel on the exchange of meteorological products. implemented?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |

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| **Reference & Title of the ASBU AMET element** | **AMET-B1/1 Meteorological observations information** |
| **Main purpose** | **Meteorological observations information in support of automated decision processes or aids and performance-based requirements, involving meteorological information, meteorological information translation, ATM impact conversion and ATM decision support.** |

| **Enabler category** | **Enabler name**  | **Enabler related status question** | **Status** | **Comments** |
| --- | --- | --- | --- | --- |
|  |  |  | **Completed** | **In progress** | **Not started** | **If planned** *(provide the date of planning)* | **Not applicable** |  |
| **Regulatory provisions** | **National framework amendment for the provision of meteorological observations information** | 1. Are national regulations amended to include the provision of quality-assured meteorological observations information in support of the main purpose of the AMET-B1/1?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |
| **Operational procedures** | **Procedures for the provision of meteorological observations information** | 1. Are procedures for changes to the provision of quality-assured meteorological observations information, including space weather developed and implemented?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |
| **Airborne system capability** | **Transmission of meteorological observations information from aircraft** | 1. Are onboard sensors and communication means for the measurement and transmission of meteorological information by ACAR, Mode-S, ADS-B & ADS-C provide I aircraft systems?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |  |  |  |  |  |  |
| **Ground system infrastructure** | **Automated systems and infrastructure to support the provision of meteorological observations information** | 1. Are meteorological instrumentation, IT systems and communications infrastructure for the measurement, storage, display and transmission (including AFS) of meteorological observations information implemented?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |
| **Training** | **Training requirements for meteorological observations information** | 1. Is training need assessment conducted and identified training needs for meteorological personnel and aviation industry stakeholders on meteorological observations information planned and implemented?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |

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| **Reference & Title of the ASBU AMET element** | **AMET-B1/2 Meteorological forecast and warning information** |
| **Main purpose** | **Meteorological forecast and warning information for automated support for decision processes or aids and performance-based requirements, involving meteorological information, meteorological information translation, ATM impact conversion and ATM decision processes.** |

| **Enabler category** | **Enabler name**  | **Enabler related status question** | **Status** | **Comments** |
| --- | --- | --- | --- | --- |
|  |  |  | **Completed** | **In progress** | **Not started** | **If planned** *(provide the date of planning)* | **Not applicable** |  |
| **Regulatory provisions** | **National framework amendment for the provision of meteorological forecast and warnings information** | 1. Are national regulations amended to include changes to the provision of meteorological forecast and warning information in support of automated decision processes or aids and performance based requirements, involving meteorological information, meteorological information translation, ATM impact conversion and ATM decision support?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |
| **Operational procedures** | **Procedures for the provision of meteorological forecast and warnings information** | 1. Are procedures for changes to the provision of quality-assured meteorological forecast and warning information, including commencement of the change from product-centric to data-centric information, space weather, enhanced hazardous weather services and the provision of probabilistic information derived from ensemble prediction systems developed and implemented?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |
| **Ground system infrastructure** | **Systems and infrastructure to support the provision of meteorological forecast and warning information** | 1. Are IT systems and communications infrastructure for the storage, forecasting, display and transmission (including AFS) of meteorological forecast and warning information implemented?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |
| **Training** | **Training requirements for Meteorological forecast and warning information** | 1. Is training need assessment conducted and identified training needs for meteorological personnel and aviation industry stakeholders on meteorological forecast and warning information implemented?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |

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| **Reference & Title of the ASBU AMET element** | **AMET-B1/3 Climatological and historical meteorological information** |
| **Main purpose** | **Climatological information in support of the design and planning of infrastructure, flight routes and airspace management. Historical meteorological observations, forecasts, advisories and warnings in support of incident and accident investigations.** |

| **Enabler category** | **Enabler name**  | **Enabler related status question** | **Status** | **Comments** |
| --- | --- | --- | --- | --- |
|  |  |  | **Completed** | **In progress** | **Not started** | **If planned** *(provide the date of planning)* | **Not applicable** |  |
| **Regulatory provisions** | **National framework amendment for the provision of climatological meteorological information** | 1. Are national regulations amended to include changes to the provision of climatological and historical meteorological information in support of the design and planning of infrastructure, flight routes and airspace management and to support incident and accident investigations?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |
| **Operational procedures** | **Procedures for the provision of climatological meteorological information** | 1. Are procedures for changes to the provision of climatological and historical meteorological information, including en-route winds and enhanced information for the terminal area developed and implemented?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |
| **Ground system infrastructure** | **Systems and infrastructure to support the provision of climatological meteorological information** | 1. Are IT systems and communications infrastructure for the storage, display and transmission (including AFS) of climatological meteorological information implemented?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |
| **Training** | **Training requirements for climatological meteorological information** | 1. Is training need assessment conducted and identified training needs for meteorological personnel and aviation industry stakeholders on climatological and historical meteorological information implemented?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |

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| **Reference & Title of the ASBU AMET element** | **AMET-B1/4 Dissemination of meteorological information**  |
| **Main purpose** | **Integrated meteorological observations in support of enhanced ATM and airport decision-making processes, particularly in the near-term**  |

| **Enabler category** | **Enabler name**  | **Enabler related status question** | **Status** | **Comments** |
| --- | --- | --- | --- | --- |
|  |  |  | **Completed** | **In progress** | **Not started** | **If planned** *(provide the date of planning)* | **Not applicable** |  |
| **Regulatory provisions** | **National framework amendment for the dissemination of meteorological information** | 1. Are national regulations amended to include changes to the dissemination of meteorological information in support of automated decision process or aids, involving meteorological information, meteorological information translation, ATM impact conversion and ATM decision support?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |
| **Operational procedures** | **Procedures for the dissemination of meteorological information** | 1. Are procedures for changes to the dissemination of meteorological information, including the exchange of meteorological information using the latest version of the ICAO Meteorological Information Exchange Model (IWXXM) developed and implemented?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |
| **Ground system infrastructure** | **Communications infrastructure for meteorological information exchange** | 1. Are the ground system infrastructure and dissemination systems for meteorological information, including the implementation of the Aeronautical Message Handling System (AMHS) implemented?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |  |  |  |  |  |  |
| **Information exchange model** | **ICAO Meteorological Information Exchange Model (IWXXM)** | 1. Is ICAO Meteorological Information Exchange Model (IWXXM) schema used to enable the provision meteorological information in XML/GML form?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |
| **Training** | **Training for the dissemination of meteorological information** | 1. Is training need assessment conducted and identified training needs for meteorological and aviation IT personnel, including NOC/ROC/RODB/IROG personnel on the exchange of meteorological information planned and implemented?
 |[ ] [ ] [ ]   |[ ]   |
|  |  | 1. Are key stakeholder(s) responsible for the completion of 1) identified?
 |[ ] [ ] [ ]   |[ ]   |

**END**