Survey on the operational implementation of WIGOS Station Identifiers

# Background

According to the [Manual on WIGOS](https://library.wmo.int/doc_num.php?explnum_id=10145), **WMO observing stations and platforms shall be uniquely identified by a WIGOS station identifier (WSI)**.

On 1st July 2016, WMO Pub. 9 Vol. A was frozen, and the Secretariat loaded its content to [OSCAR/surface](https://oscar.wmo.int/surface/#/), which is now the official repository of WIGOS stations metadata. OSCAR/surface is making available a Vol. A legacy format to support the applications that cannot use OSCAR/surface API to access the metadata. However, WMO Pub. 9 Vol. A is not updated since 1st July 2016.

WSI is the only identifier for a station in OSCAR/Surface, and a WSI was assigned to each station by the Secretariat when Vol. A was uploaded (WSI schema used by Secretariat can be found in the [Guide to WIGOS](https://library.wmo.int/doc_num.php?explnum_id=10040)).

New stations, not present in Volume A on the 1st July 2016, are assigned a WSI by the authority registering the station in OSCAR/surface. There is a large degree of freedom for the assignment of WSIs (see [Guide to WIGOS](https://library.wmo.int/doc_num.php?explnum_id=10040)) and BUFR data from these stations do not have a Traditional Station Identifier (TSI) registered in Vol. A

To provide guidance for the encoding of WSI in BUFR, the Secretariat sent a circular letter, clearly stating that

* stations having a TSI (registered in Vol. A on 1st July 2016 when it was frozen) should keep it unchanged and add the WSI sequence that can be easily skipped by the users’ operational systems and provide continuity during the transition;new stations, registered after 1st July 2016, having only WSI should set TSI BUFR descriptors to missing and add a valid WSI.

As a consequence of the above, the current situation on GTS is that there is a number of stations providing BUFR data with both WSI and TSI (WSI+TSI data) and an increasing number of new stations sending data only with the WSI (WSI-only data). While the WSI+TSI data should not be of concern for operational processing, the WSI-only data require significant changes in the software stack to be processed.

The stations [listed here](https://github.com/wmo-im/WSI/blob/master/documents/WSI%2BTSI_on_GTS.csv) provide BUFR data on GTS with both WSI and TSI (WSI+TSI data).

The stations [listed here](https://github.com/wmo-im/WSI/blob/master/documents/WSI-only_on_GTS.csv) provide BUFR data on GTS with WSI only (WSI-only data).

The following questions aim to assess your center's preparedness and plans on the processing of WSI+TSI and WSI-only data. Centers not ready to process WSI data can still make use of the TSI headers included in the WSI+TSI BUFR. This however limits them to the available data from stations as of 2016. The increasing number of available stations and new observations will only be used when WSI data can be processed.

# Questions

Please answer the following questions focusing only on the NWP applications and, in particular, your data acquisition, pre-processing, and data assimilation software.

1. Is your software stack ready to process WSI+TSI BUFR data?
2. Have you started to adapt your software stack to process WSI+TSI BUFR data?
3. When is your software stack planned to be ready to process WSI+TSI BUFR data?
4. Which components of your software stack are not able to process WSI+TSI BUFR data?
5. Is your software stack ready to process WSI-only BUFR data?
6. Have you started to adapt your software stack to process WSI-only BUFR data?
7. When is your software stack planned to be ready to process WSI-only BUFR data?
8. Which components of your software stack are not able to process WSI-only BUFR data?

Please answer the following questions focusing only on Nowcasting applications applications, including required databases.

1. Is your software stack ready to process WSI+TSI BUFR data?
2. Have you started to adapt your software stack to process WSI+TSI BUFR data?
3. When is your software stack planned to be ready to process WSI+TSI BUFR data?
4. Which components of your software stack are not able to process WSI+TSI BUFR data?
5. Is your software stack ready to process WSI-only BUFR data?
6. Have you started to adapt your software stack to process WSI-only BUFR data?
7. When is your software stack planned to be ready to process WSI-only BUFR data?
8. Which components of your software stack are not able to process WSI-only BUFR data?

Please answer the following questions focusing only on operational databases for various purposes not related to the previous questions.

1. Is your software stack ready to process WSI+TSI BUFR data?
2. Have you started to adapt your software stack to process WSI+TSI BUFR data?
3. When is your software stack planned to be ready to process WSI+TSI BUFR data?
4. Which components of your software stack are not able to process WSI+TSI BUFR data?
5. Is your software stack ready to process WSI-only BUFR data?
6. Have you started to adapt your software stack to process WSI-only BUFR data?
7. When is your software stack planned to be ready to process WSI-only BUFR data?
8. Which components of your software stack are not able to process WSI-only BUFR data?

Please answer the following questions focusing only on applications for various purposes like graphical and web applications not related to the previous questions.

1. Is your software stack ready to process WSI+TSI BUFR data?
2. Have you started to adapt your software stack to process WSI+TSI BUFR data?
3. When is your software stack planned to be ready to process WSI+TSI BUFR data?
4. Which components of your software stack are not able to process WSI+TSI BUFR data?
5. Is your software stack ready to process WSI-only BUFR data?
6. Have you started to adapt your software stack to process WSI-only BUFR data?
7. When is your software stack planned to be ready to process WSI-only BUFR data?
8. Which components of your software stack are not able to process WSI-only BUFR data?