### Solution: Centralized Registry for WMO Tables

1. Improve handling of GRIB and BUFR tables by creating a web registry of machine readable tables and by requiring the inclusion of a reference to a registered table in GRIB and BUFR records. The reference would be an unambiguous signature of the table, such as an MD5 checksum. Both WMO standard tables and local tables should be required to be registered.

2. Create reference software and/or a web-service that can be used to validate that a BUFR/GRIB message is well-formed. It should read the message metadata and apply the registered tables, and also decode the data itself, returning a representation of all the metadata and data in a well understood encoding (e.g. ASCII or XML) so that other BUFR/GRIB reading software can be validated against this “reference implementation”.

3. Establish an international GRIB and BUFR users group to share knowledge in an informal way, where users can ask questions and get advice.

4. Encourage WMO members to take part in a community effort to create a standard mapping of GRIB parameter tables to the CF (Climate and Forecast Convention) standard names.

### Summary

- We cannot reliably read GRIB/BUFR files without human supervision
- Many wasted hours trying to validate / obtain correct tables
- Only for experts – GRIB/BUFR is inaccessible to casual users
- This will become harder/impossible in the future, as original software and people retire

→ Do not use GRIB/BUFR as an archive format