Process for gathering requirements for Weather SBA

Sarah Goodchild

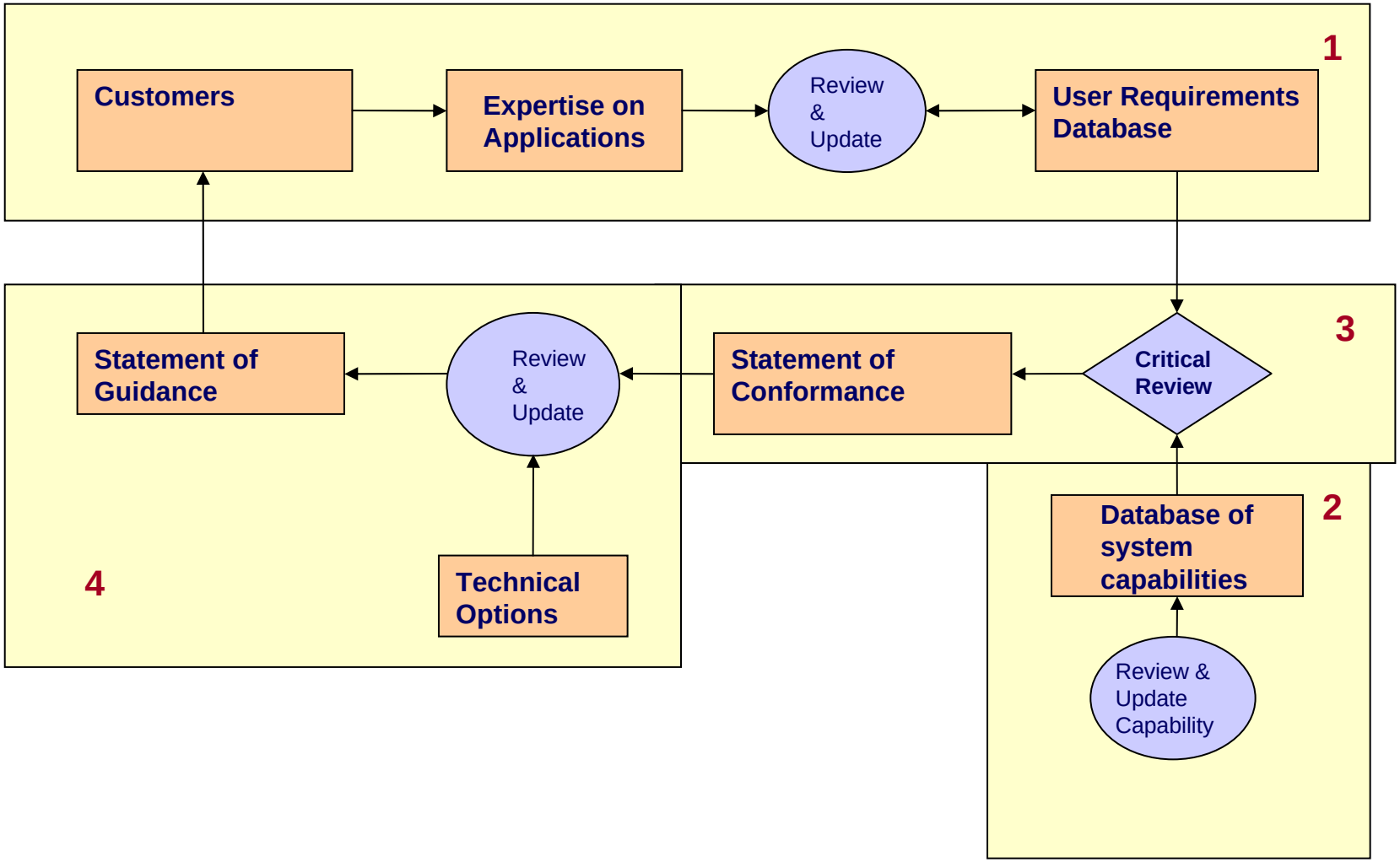
Process

- Use the Current WMO Statements of Guidance http://www.wmo.int/web/sat/sog/sog_contents.htm#3.1%20Global%20Numerical%20Weather%20Prediction which document how well satellite and *In Situ* sensor capabilities meet WMO User Requirements in 10 application areas

- Application areas are all relevant to the operational services provided by the National Hydrological and Meteorological Services which make up WMO

- Input has been sought from JCOMM, GOOS and other bodies.

Rolling Review of Requirements



10 Statements of Guidance exist

- Global Numerical Weather Prediction
- Regional Numerical Weather Prediction
- Synoptic Meteorology
- Nowcasting and Very Short Range Forecasting
- Seasonal to Inter-annual Forecasts
- Aeronautical Meteorology
- Atmospheric Chemistry
- JCOMM Ocean Applications Areas
- Agrometeorology
- Hydrology

Sample Output from Statements of Guidance

The critical atmospheric variables that are not adequately measured by current or planned systems for Global NWP are (in order of priority):

- wind profiles at all levels;
- temperature profiles of adequate vertical resolution in cloudy areas;
- precipitation;
- soil moisture;
- surface pressure;
- snow equivalent water content.

Process for gathering requirements for Climate SBA

Sarah Goodchild

Climate

- The Second Report on the Adequacy of the Global Observing Systems for Climate (April 2003) http://www.wmo.int/web/gcos/gcoshome.html identifies the requirements for observations to support the Climate SBA and the Implementation Plan for the Global Observing System for Climate in Support of the UNFCCC (Oct 2004) http://www.wmo.int/web/gcos/gcoshome.html the plan for delivering it.
- Work with GCOS to review the adequacy of the climate observing system to identify priorities noting they are due to review the adequacy of the climate observing system and the progress of the Implementation Plan, and are charged with reporting on this to the SBSTA of the UNFCCC in June.