

Step 5: Compile a menu of forecasts

In order for FbF to allocate funding when a trigger occurs, there must be a certain probability of the event. To safeguard this, it is crucial to select the best-suited forecasts. An analysis of forecast verification, type, reliability, lead times, and sources of data for forecasts should be presented as an inventory, to allow an informed decision about which one to use.

Note that this information does not need to be analysed or calculated by the national society but can be obtained by working with hydro-meteorological services, research institutions, or other experts.

Guiding questions:

- Which agency produces relevant forecasts on national, regional or global level?
- What kind(s) of forecast(s) are produced or how is the forecast produced? Tip: Choices include observed data (e.g. gauged precipitation), statistical forecasts (e.g. extrapolation of an upstream river flow to a downstream location, or an index based on El Niño sea-surface temperatures), and dynamic models (e.g. numerical weather-prediction systems and large-scale hydrological forecasting models). Check the [toolbox](#) for more information.
- What outcome is the forecast forecasting? E.g. seasonal total rainfall, flood levels, windspeeds.
- Is the forecast deterministic (showing a single outcome without conveying potential error and uncertainty) or probabilistic (showing the probabilities of one or more discrete outcomes or categories) or issued as an interval (showing an explicit upper and lower limit between which a value is expected to occur)?
- What is the spatial (e.g. what is the level of detail?) and temporal (e.g. how often is the forecast produced in a month?) resolution of the forecast?
- What is the lead time for each forecast, e.g. what is the time between forecast issuance and the shock?
- What regions are covered by the forecasts?
- What is the skill (the quality) of the forecast? How has the skill been assessed (e.g. skill at a specific location, skill at predicting extreme events)?
- Is the forecast available throughout the year? Does the accuracy/skill of the forecast change over time?

The menu of forecast required in the full EAP (section 4.2) requests to provide the following information about the available forecasts (or other

relevant early warning and/or monitoring/surveillance systems) and requests to include an explanation about which forecast will be used and why.

- Name of forecast
- Source
- Lead time
- False alarm ratio and missed events
- Number of times the forecast has been issued for this hazard in the last 10 years

You can download a template for the menu of forecast table and a more comprehensive guide on forecast verification or skill analysis in the [toolbox](#) below.



Menu of forecast and skill analysis for the simplified EAP

For the simplified EAP a less-thorough assessment can be done. The rationale is that perhaps there is less data available to assess the forecast skill which is particularly true for non-weather-related hazards. However, if data is available, information should be included as you want to avoid false alarms or missed events that will jeopardise the reputation of the National Society but also the mechanism of FbF.