

Activity 1.b - According to the proposed criteria, review the SAP and subsequently the Activity Plan. Assess the validity of the concept, objective, and the SAP; and advise on adjustments, where necessary.

Basic information

FFI SAP Scope and action domains

The FFI SAP is designed to meet following objectives "to produce more accurate, timely and reliable forecasts and warnings of weather, climate, water and related services to the public, governments and other users" (corresponds with overall FFI objective).

The FFI SAP concentrates on the first three expected results of the WMO FFI:

- improved quantitative and qualitative weather forecasting products, that are available for flood forecasting;
- medium-range weather forecasting and climate predictions applied to extend warning times;
- NMHSs have improved their capacity to cooperate to jointly deliver timely and accurate flood forecasting information.

The SAP proposed actions are grouped according to so called Action Domains (areas with proposed actions for implementing main objective of the SAP) – there are seven core and three complimentary Action Domains (*FFI SAP - WMO, 2006*).

FFI SAP Implementation

Proposed FFI SAP implementation includes the following items:

- development of a long-term programme capabilities of NMHSs (with respect to their capacities and needs);
- formulation of detailed action plans for each organization (national and regional level);
- preparation of a cooperation and technical assistance framework (through a Flood Forecasting and Warning International Support Committee - FFWISC);
- identification and sharing of relevant national and international experience;
- preparation and initiation of selected demonstration projects;
- promotion of the development of regional joint flood forecasting projects;
- mobilization of funds under the WMO framework.

Review of the Strategy and Action Plan (SAP)

The review was done according to developed Review Criteria for the FFI Strategy and Action Plan (prepared by Dr. H. Lins), which briefly states that overview should examine the SAP according to: its scope (limits of domain), validity of action proposed (doable in the following 5-10 years), technical approaches chosen, completeness and clarity.

Proposals, based on the SAP review:

1. SAP actions timeframe (in terms of forecast lead time) is unlimited - from nowcasting to climate outlooks and climate risk assessment. Such approach is effective as it motivates NMHSs to develop and implement seamless forecasting systems of flood and flood-related events. The most devastating and hazardous flood events, that carry threat for people and property of the regions, can be effectively forecasted in shorter time ranges (e.g. first days, or more – depending on QPF effectiveness, scale of the basin and etc.). Thus, it is recommended to prioritize the SAP actions, taking in mind higher priority for the short and medium range forecasting and lower priority for seasonal predictions and climate outlooks. It is advised to develop of generic and living list of requirements for the E2E flood forecasting systems, taking in consideration high priority actions and

recommendations from the SAP (recommendations on short and medium range forecasting in this case).

2. The SAP coverage is very broad and covers all possible water-related activities. There are too many SAP Action Domains and these contain too many actions, resulting in a SAP that is hardly achievable if trying to implement them at once. Numerous actions touch almost all water, weather and climate related domains (after reading the actions it looks like FFI is an umbrella over all other WMO programmes and initiatives). There are 11 action domains in the SAP (see *FFI SAP - WMO, 2006*). Each of the proposed Action Domain in the SAP contains an average of 15 actions to be taken to complete the mission of the domain. All problems of operational hydrometeorology are gathered and are to be solved in the FFI SAP. It is recommended to prioritize the proposed actions in the manner that the most important actions (high priority) are related to establishing the E2E flood forecasting system, then lower priority actions deal with other hydrological issues (e.g. data rescue, network design assessment, modeling design flows). It is advised to develop a generic and living list of requirements for the E2E flood forecasting systems, taking in consideration high priority actions and recommendations from the SAP.
3. Implementation strategy of the SAP appears to only be successfully accomplished through Demonstration Projects, such as CIFDP, and flood forecasting-related projects, such as GFFGS. However, it is not clear that such projects have explicitly considered the actions outlined in the SAP in their design and implementation. Proposed action is to ensure that all major demonstration projects and components, including but not limited to CIFDP, SWFDP, FFGS, include the requirements for effective and sustainable flood forecasting in their design and implementation.
4. The SAP approach and its documentation are too lengthy and complex, resulting in its not being transparent nor it's being broadly adopted. Given the lengthy and complex nature of the SAP documents, it is difficult to evaluate its validity and implementation status. The current structure is the following: SAP - Action Domains - Actions, SAP Activity Plan - Activities, FFI-AG Workplan - Activities. It is recommended to avoid such terminological complexity in the further FFI guidance documentation (e.g. generic list of requirements/best practices).

Review of the Activity Plan

The WMO Technical Commission for Hydrology (CHy) in 2008 decided "To supplement the Strategy and Action Plan on the Flood Forecasting Initiative with a detailed activity plan that will assist Members in establishing flood forecasting system". It contains proposed activities for every SAP action - implementation means, need for a particular action in each particular WMO region, capacity of a WMO region, and possible limitations.

Proposals, based on the Activity Plan review:

1. It is not obvious that Country Members, WMO Secretariat, FFI Demonstration Project developers use the Activity Plan in their operations. The Activity Plan makes it even more difficult to track the SAP actions implementation. There is no person (or body) who controls the Activity Plan progress.
Proposed action includes development new FFI implementation strategy based on the Demonstration projects and other FFI components implementation, guidance material development for different audiences (NMHSs, donors, NGOs etc.), development of training programs and effectively promote them so that they are available for the target audience (via IFM HelpDesk).

Agreement on the review findings

1. Prioritize the SAP actions and proposals.
2. Create generic and living list of requirements/best practices to be taken from the SAP (taking into account its top priority actions).
3. Make sure terminology and structure of the further FFI documents are simple and transparent.
4. Ensure all major FFI components (demonstration projects, flood related projects) include requirements/best practices for effective and sustainable flood forecasting in their design and implementation. This can be done by developing the generic list of such requirements and then following these requirements in each of FFI demonstration projects (via projects steering groups).
5. The Activity Plan is to be considered as ineffective document, use it in the further FFI documentation development.