The harmful consequences of recurrent floods in the River Niger valley as well as the variability of the regime of this river require a flow prediction management planning. The Niger Basin Authority (NBA) has a central role at the location of the users concerned administrative authorities as users.

Computer Prediction System (SIP) built in 1984 in the NBA aimed to predict in advance the flooding of the river (date of arrival, importance of the flood) at specific sites, based on the information provided by a network of hydro-meteorological monitoring stations.

As part of a grant from the European Union, the SIP has been updated and implemented in the NBA in 2010. The NBA has, therefore, this important tool for regular forecasting at various horizons and disseminate results.

Model groups of flood, mixed and low-flow trend are developed to achieve the forecasts for various horizons ranging from 2 to 5 days, 1 to 2 weeks, 1 to 2 months and 150 days for the trend forecasts.

The intended beneficiaries are:

- forecast Centre Interregional Observatory and the basin of the NBA,
- the National Hydrological Services
- hydraulic structures Managers (dams, irrigation ...)
- water users in the watershed

• local population