## Construction of the Kouoro Dam bridge, on the RN11 (Sikasso - Koutiala) - Mali.

Client : MINISTÈRE DE L'ÉQUIPEMENT ET DU DESENCLAVEMENT / AGEROUTE Mali

Lieu : Kouoro Région de Sikasso, Mali

**Date :** 2013-2014 (pre-project studies) and 2015 (detailled design)

The bridge to be rehabilitated or rebuilt is on the Korobani River at Kouoro Dam on National Road N°11 (Sikasso-Koutiala). It is located at the limit between the circle of Koutiala (agricultural production area par excellence) and the circle of Sikasso (capital of the Sikasso region and area for transporting products for export to consumption areas and urban centres).

The existing structure is a metal bridge that was built in colonial times with two reinforced concrete abutments on which a metal superstructure (deck and railing) rests. The existing structure is still in operation after extensive rehabilitation works to cope with the current traffic. This situation poses enormous cash flow problems on a recurring basis each year. Also, there is a need to widen the existing structure or to build another one to have a 7 m pavement. Both solutions, i.e. the construction of a new bridge or the replacement and widening of the deck of the existing structure will be considered. The aim is to bring the characteristics of the final structure to the following values :

- Bridge length : approx. 100 ml
- Rolling width : 7 m
- Sidewalk width : 2 x 1.50 m
- Transverse slope : 2.5

Variants having been the subject of the detailed preliminary design : Construction of a new structure with the 2 following variants : Bridge with prefabricated girders prestressed by post tension VIPP and Unibridge type steel-concrete composite bridge.

ECIA is in charge of the complete project management :

- ECIA in consortium with NOVEC Mali will be in charge of the detailed preliminary design studies and the preparation of the DAO in 2013-2014.
- ECIA ensured the elaboration of the detailed design file on behalf of the company in 2015.

