

## Establishment of the Eastern Nile Planning Model, Ethiopia

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<b>Assignment</b>	Consulting services in the field of knowledge management, development of a modelling system and institutional & human capacity building are provided to the Eastern Nile Technical Regional Office for the realisation of a planning model.
<b>Client</b>	Eastern Nile Technical Regional Office (ENTRO)
<b>Financing Agency</b>	World Bank
<b>Partners</b>	DHI, 1) Tropics, Ethiopia 2) MM Ltd 3) RTi 4) EGEC, Egypt
<b>Composition of Team</b>	<i>Euroconsult Mott MacDonald</i> : Environmental economist; Social scientist <i>Partner(s)</i> : Team Leader; Water system modeller; IMS/Database specialist; Software developer
<b>Period of Assignment</b>	From March 2011 to March 2013 Staff months: Euroconsult Mott MacDonald: 6; Partner(s): 19
<b>Contract value</b>	Euroconsult Mott MacDonald: € 113,000 Partner(s): € 387,000
<b>Background</b>	<p>The Nile River is the longest river in the world and together with its tributaries flows through ten countries. The river basin drains over three million square kilometres and is home to 300 million people, many of them among the world's poorest. Due to its size and variety of climates and topographies, the Nile is one of the most complex of all the major river basins in the world.</p> <p>With such a complex and large river system, it is critical that the water resources of the Main (White) Nile as well as the Eastern Nile (EN) are managed properly. The Nile Basin Initiative (NBI) is a regional partnership among the ten Nile Basin riparian countries that provides a forum for cooperative development of the river's water resources.</p> <p>A key part of the NBI's Subsidiary Action Program is the Eastern Nile Subsidiary Action Program (ENSAP) focusing activities on the Nile and its tributaries in Ethiopia, Sudan, and Egypt. The Eastern Nile Technical Regional Office (ENTRO), based in Addis Ababa, Ethiopia, is the implementing arm of ENSAP.</p> <p>All three countries in the EN region recognise that integrated water resources management is a key strategy for their overall development. To properly implement such a strategy, however, a robust planning framework is needed that will address the region's critical water resources planning needs. An important tool in a planning framework is a water resources planning model, which the region is currently lacking. This is a serious 'gap' in integrated water resources planning, and severely constrains the ability of regional officials to make informed decisions about needed investments along the Eastern Nile. The Eastern Nile Planning Model (ENPM) project is part of ENSAP and seeks to fill that</p>

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<b>Description of project</b>	<p>gap by developing and implementing a mutually acceptable water resources modelling system in the region that would be a key tool for informed investment decision making.</p> <p>The long-term development objective of ENPM is to strengthen the capacity of Egypt, Ethiopia and Sudan to identify, prepare, and implement cooperative development projects that provide mutual benefits in the Eastern Nile.</p> <p>The immediate objective of ENPM is to develop and implement an EN planning modelling system to assist in identifying, evaluating, and prioritising potential projects as part of the investment planning process for sustainable development and management of EN waters.</p> <p>Five tasks were identified for the consultant:</p> <ul style="list-style-type: none"><li>i) Assess detailed ENPM needs;</li><li>ii) Development of ENTRO knowledge management systems;</li><li>iii) Develop customised models to support ENTRO activities;</li><li>iv) Strengthen ENTRO Intranet and public web portal;</li><li>v) Stakeholder interaction and institutional capacity building.</li></ul>
<b>Services provided</b>	<p>The ENPM builds on three major components, 1) the knowledge management system, 2) the simulation modelling and 3) institutional and human capacity building.</p> <p>The knowledge management system will be built on the architecture of the decision support system (DSS) for the Nile Basin, ensuring that the ENPM will be fully compatible with the DSS technology and will provide an independent and easily accessible repository for gathering, storing and publishing relevant information from the EN region. It will have options for public access to provide specific information. One of the key results will be ‘State of the EN Report’ that will be prepared in a participatory way.</p> <p>The consultant will identify use cases (software modelling techniques to determine which features to implement) and modelling needs and assemble these in a model concept note describing the required modelling framework. This report will describe the key data needed and available (input), the required analyses (process) and the key information produced by the modelling (output).</p> <p>The ENPM will also include multi criteria analysis (MCA) tools that can be used to assess and evaluate trade-offs between scenarios.</p> <p>Institutional and human capacity building will be pursued through a partnership approach, where focus teams, concentrating on technical and managerial issues, will be established and be made responsible to realise project deliverables.</p>

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The input of EC MM is in model development where attention will be paid to the environmental aspects of the projects and to institutional capacity building.