



Terms of Reference

Preparation of e-learning materials for an environmental flows e-learning training module on the Nile Basin Initiative's eLearning Management System

1. Background

The Nile Basin Initiative (NBI) is a partnership of the 10 riparian countries of the Nile basin that seek to develop and manage the shared water resources of the Nile in a cooperative manner, catalyze economic development, share substantial socio-economic benefits, and promote regional peace, security and integration so as to fight poverty. This partnership is guided by a shared vision: *“to achieve sustainable socioeconomic development through the equitable utilization of, and benefit from, the common Nile Basin water resources”*.

The NBI has three centers: the Nile Basin Initiative Secretariat (Nile-SEC) headquartered in Entebbe, Uganda, has responsibilities for coordinated basin-wide water resources management, cooperation, planning, monitoring, and knowledge and information management. The two sub-regional Subsidiary Action Programs (SAPs), namely; the Eastern Nile Subsidiary Action Program (ENSAP) managed by the Eastern Nile Technical Regional Office (ENTRO) in Addis Ababa, Ethiopia, and the Nile Equatorial Lakes Subsidiary Action Program (NELSAP) managed by its Coordination Unit (NELSAP-CU) located in Kigali, Rwanda, facilitate member states in the upstream investment planning, mobilization of investment financing and supervision oversight on implementation of the investment projects at the sub-basin level.

Capacity development has been one of the key areas of activities of the Nile Basin Initiative. These activities range from targeted institutional support of national NBI offices, country to country experience sharing visits, and study tours, short and long training courses. Several hundred NBI stakeholders have benefitted from these capacity development events.

Most training courses were designed and delivered as instructor-led face-to-face learning sessions. However, the size of stakeholder groups that can be reached through face-to-face training courses is limited. Moreover, face-to-face training, with all their advantages, are not cost-effective. In addition, as members of NBI governance, NBI staff, national desk officers and technical experts from member countries rotate often, there is a need for having ready-made training courses to help them in getting familiar with NBI, its data and analytic services, water resources tools and key issues of Nile cooperation quickly and this is done more efficiently and cost-effectively using web-based learning modules.

In 2016, NBI launched two e-learning courses, currently available at <https://elearn.nilebasin.org/>, through OpenEdx, with over 100 participants per year:

- a) Introduction to the Nile Basin Decision Support System
- b) Induction to the Nile Basin Initiative

NBI, with support from GIZ, has four new e-learning courses in the pipeline, which are currently at different stages of preparation and will be rolled out within the next 12 months:

- c) Introduction to the NBI Environmental Flows Strategy
- d) Introduction to Hydromet
- e) Introduction to the NBI Policy Framework on Transboundary Water Management
- f) NBI Climate Proofing Guideline and Risk Assessments

NBI's blended learning is focused on the recurring induction in major NBI tools for practitioners (stakeholders) of transboundary cooperation process under NBI. It is not a basic introduction to a subject and, as such, not targeted at the general public. It may, however, be accessed by students and others interested more in-depth in the specific context and applications of principles of water management and cooperation in the Nile Basin. NBI may also consider partnering with other e-learning providers who offer basic introductions, e.g. with IHE-Delft which offers basic courses on e-flows and could be recommended as a preparation to an NBI-specific course on e-flows.

Notably, many of the e-learning courses tie in with either an existing or planned Community of Practice. For example, the Nile Basin DSS course also connects participants and users of the DSS to a DSS Helpdesk, a DSS mailing list and the DSS Online portal where experiences can be exchanged, and analyses shared. The E-Flows course is partly aimed at members of the Regional Expert Working Group, a group of experts engaged on agenda setting around E-Flows in the Nile Basin (who meet regularly in person), and gives participants access to the NBI's E-Flow studies repository. Similarly, the anticipated climate proofing course ought to be integrated with the (to be) digitalized and modular structured Climate Proofing Guideline (web-based semi-technical guideline) and (to be) established Community of Practice that shall enhance digital peer-to-peer learning, exchange and sharing best practices on specific guideline topics for which e-learning modules shall also be offered.

Nile-SEC, with GIZ support, seeks to contract an individual consultant to support NBI in refining existing e-learning modules to a high quality standard.

2. Objective and approach of the assignment

2.1 Objective of the assignment:

The objective of the assignment is to refine existing coarse eflows assessment technical materials for the NBI's e-learning course and generate introductory blended training materials on the NBI Environmental Flows Strategy'. The content (both technical and communication-wise) shall enhance the overall end-user experiences and contribute to available resources on the NBI's eLearning Management System for benefit of the broad range of interested stakeholders.

2.2. Clarification on terms used in the TORs regarding e-learning:

E-learning: following the definition given by FAO¹, for the purpose of this consultancy, eLearning is defined as the use of computer and Internet technologies to deliver a broad array of solutions to enable learning and improve performance.

E-learning course or module: this term is used in this tender as an e-learning course that will be designed according to the description.

Blended learning approaches in the context of these TORs are understood to combine e-learning courses or modules with face-to-face (F2F) learning approaches including multimedia content.

Synchronous learning in the context of these TORs refers to online or distance learning that happens in real time, whereas **asynchronous learning** occurs through online channels without real-time interaction.

2.3 Context:

2.3.1 Environmental Flows (2018)

In 2018, NBI developed the 'Coarse Environmental Flow Assessment for selected Reaches in the Nile Basin' Technical Report. The objective was to provide a first implementation step for Nile basin wide consideration of e-flows; by accommodating environmental flow requirements with the Nile Basin water resources planning with a view to contributing to the adequacy,

¹ FAO (2011), E-learning methodologies A_guide_for_designing_and_developing_e-learning_courses

reliability and credibility of the Nile water resources strategic analysis outcomes and recommended strategic measures.

As part of the assignment a repository of Nile Basin Environmental Flows was established. The repository includes all available e-flows related data and information, past and on-going studies, relevant guiding procedures and instructions, and the determined e-flows for the different Nile reaches and sub-basins.

In addition, an 'e-flows training module' was developed. The training course was not intended to be a basic introduction to environmental flows, and was not aimed to the general public. It was envisioned, however, to be accessed by students and others interested more in-depth in the specific context and applications of principles of water management and cooperation in the Nile Basin; and recommended to be taken with other e-learning resources (e.g. with IHE-Delft which offers basic courses on e-flows and could be recommended as a preparation to an NBI-specific course on e-flows).

The E-Flows course is partly aimed at members of the Regional Expert Working Group, a group of experts engaged on agenda setting around E-Flows in the Nile Basin (who meet regularly in person), and gives participants access to the NBI's E-Flow studies repository.

2.3.2 NBI E-learning (ongoing)

In 2021, NBI hired a team of consultants to support the NBI with delivering training for its national stakeholders within a blended and e-learning framework; and to deliver high quality blended learning courses based on existing face-to-face courses.

The consultants were tasked to provide advisory and backstopping support under the following tasks:

- Identify and address general challenges with the existing NBI e-learning modules
- Didactic input, quality control and final delivery on NBI e-learning platform of individual e-learning modules
- Coaching and backstopping support to NBI course manager(s) and learning technology and IT expert(s) throughout course implementation
- Compilation of an NBI Human Capacity Development Approach/Strategy Paper

The E-learning consultant experts have assessed the existing 'Environmental Flows online training course'. It has been pointed out that content-wise the training course is robust; however, from an instructional design point of view, the material should be revised and revamped under the guidance of knowledge communication specialists (i.e. the e-learning consultants.)

3. Scope of the assignment

The consultant is expected to perform the following activities:

1. to attend coaching sessions by e-learning consultants. The coaching sessions will cover:
 - a. the modularization of instructional contents suitable for e-learning

- b. the production of digital instructional media suitable for the Learning Management System provided (Open edX)
2. to conceptualize and to develop instructional material. The consultants will be supported by the e-learning coaches to build the eFlows e-learning course. The online publishing of the instructional media developed on the Open edX platform can be done by the e-learning coaches, dependent on the consultant's preference.
3. Existing digital expert content (PDFs, videos) will be used as a quarry and be recycled whenever possible.
4. The following quantity structure which must be either recycled from existing material, re-produced or newly produced:
 - a. approx. 36 x 10min video recordings (to be re-produced)
 - b. approx. 80 graphics and explanations (to be recycled)
 - c. approx. 90 quiz questions (to be produced newly)

4. Deliverables

The consultant shall deliver the following deliverables:

Training materials for the NBI Environmental Flows e-learning module as follows:

- approx.. 36 x 10min video recordings (to be re-produced)
- approx. 80 graphics and explanations (to be recycled)
- approx. 90 quiz questions (to be produced newly)
- Manuals for the eFlows course

5. Qualifications and Experience

1. University education to the minimum level of masters in a discipline relevant to environmental flows (i.e. water and ecology, wetland ecology, water resources management, environmental engineering, eco-hydrology or similar);
2. Professional experience in environmental flows assessments for more than 7 years;
3. Knowledge of the implementation of environmental flows assessments in the Nile Basin through the engagement in at least 2 professional assignments;
4. Fluency in English is a precondition for the assignment.

6. Level of effort, Schedule

The assignment shall take 15-man days from the signing of the contract with Nile-SEC but shall be implemented not exceeding 31st December 2021. A detailed schedule shall be developed at the beginning of the consultancy.

No travel for the consultant to the client's premises will be required. The assignment shall be done remotely and deliverables communicated electronically to the client.

7 Implementation arrangements

The Consultant shall sign a lumpsum contract with the Nile-Sec under the supervision of the Deputy Executive Director/Head of Basin-wide Program of the Nile-Sec. However, the consultant will work with the Regional Information Systems Specialist on a day-to-day basis.

How to apply

Interested applicants are advised to submit applications electronically. Application/cover letter indicating the title of the assignment accompanied by detailed curriculum vitae should be sent to wrmconsult@nilebasin.org **latest December 9, 2021, not later than 5:00 pm (Local time in Entebbe, Uganda)**