

Terms of Reference: Establishing an integrated data storage, analysis and sharing platform to support monitoring, evaluation, accountability and learning systems in the Greater Virunga Landscape (GVL)

Start date: As soon as possible.

Background

The Greater Virunga Landscape (GVL) is one of Africa's richest biodiverse ecosystems, containing more threatened vertebrate species than anywhere else across the continent. It encompasses an interconnected network of protected areas across the Democratic Republic of Congo (DRC), Rwanda and Uganda, and is home to globally important populations of elephants, hippos, chimpanzees and mountain gorillas. The GVL also has immense socio-economic value; a large and growing human population depends on the GVL's rich natural capital, which also contributes significantly to sustainable national and regional economic growth. Despite its significance, the GVL faces numerous threats including the pressure for additional agricultural land and freshwater resources from the growing rural population, unsustainable poaching and illegal trade in timber and wildlife products, and the pressure from extractive industries and infrastructure development.

The Greater Virunga Transboundary Collaboration (GVTC), an interstate institution for GVL, provides a mechanism for formalized transboundary collaboration among the range states within the GVL. Together with state and non-state partners, GVTC has recently developed The Greater Virunga Landscape Transboundary Strategic Plan (GVL TSP) 2024-2033 which maps out the coordinated action needed from all stakeholders to ensure that the GVL is sustainably conserved for the benefit of people and nature. The GVL TSP is underpinned by a monitoring, evaluation, accountability and learning (MEAL) plan which provides a systematic framework for data gathering to inform evidence-based decision-making, adaptive management, and impact tracking, ensuring that interventions are effective and efficient. Recent multi-stakeholder fundraising success within the GVLⁱ has further emphasised the need for an effective transboundary MEAL system.

GVTC has initiated development of a "center of excellence for information" and is leading development of a data sharing MoU, protocols and integrated data storage and information sharing platform to support realization of these aspirations. The proposed integrated platform will serve as the core technical infrastructure for this "center of excellence for information," providing the foundation that will enable the center's objectives of coordinated data sharing and evidence-based decision-making across the GVL.

Recently, GVTC commissioned a needs assessment consultancy to assess existing data collection, storage, analysis and sharing mechanisms among stakeholders within the GVL; identify barriers to effective and efficient real-time data collation and sharing mechanisms; and make recommendations of possible solutions. The outputs from that

consultancy identified that a range of tools are used variably by different stakeholders including Spatial Monitoring and Reporting Tool (SMART), EarthRanger, Social Assessments for Protected Areas (SAPA), Management Effectiveness and Tracking Tool (METT), and FAO-EMPRESS-I. Key constraints identified included the lack of an integrated system for real-time data collation, storage, analysis and sharing, and gaps in staff capacity. Additional constraints relate to concerns about data security and the need to ensure that sensitive data remains only accessible to restricted stakeholder groups.

This consultancy is intended to address these constraints through the development of an integrated transboundary data storage and sharing platform. The required platform needs to be a single, integrated online system where partner institutions across the GVL can submit and manage data, but with clearly defined levels of access-rights based on their mandates, ensuring both data security and relevance. The platform will typically feature a dedicated user interface, a robust backend for data processing, and the capacity for future integration of options for advanced analytics and machine learning capabilities. By streamlining data entry/submission and storage, this will ensure uniform data formats and consistent reporting, facilitating more comprehensive analytics and decision support. The goal is to ensure that the system is fully integrated and web-based, with the appropriate platform architecture and infrastructure setup to support efficient operation, maintenance, and long-term sustainability. The proposed system will be hosted by GVTC, and with data governance, access control, and coordination responsibilities.

Purpose

Under the leadership of the Greater Virunga Transboundary Collaboration (GVTC), the overall objective of this consultancy is to establish a fully functional integrated data storage, analysis and information sharing platform to support realization of the GVL MEAL plan.

Specific Tasks

TASK 1. DESIGN AND DEVELOP SYSTEM REQUIREMENTS

- Build stakeholder understanding and confidence by demonstrating the potential capabilities of an integrated data storage, analysis and sharing platform through use of existing/historic data from among partners in the GVL.
- Draw on a combination of (1) earlier assessments of existing data mechanisms within the GVL, (2) stakeholder engagement [primarily GVTC, Protected Area Authorities, and key NGO partners], and (3) the consultant's own knowledge / experience, to inform design of an integrated, user-friendly and web-based platform that functions across the GVL countries, including: (1) secure data

collation and consolidation, in real-time where appropriate; and (2) data access, visualisation and reporting with variable levels of access rights.

- Refine key data fields for the data sharing platform and define data sensitivity. For sensitive data (e.g. law enforcement), it is anticipated that the transboundary system will consolidate processed data (aggregated datasets, quality-checked data that has passed validation protocols, data transformed into standardized indicators, and anonymized datasets where personally identifiable information has been removed) rather than raw data. For non-sensitive data, capabilities for real-time data collation should be explored. Both will be informed by agreed GVL data sharing protocols (see next task).
- Define standardised forms, and workflows to ensure consistent data collection, secure sharing, and effective reporting.
- Design system architecture and data models (including relevant AI models); develop frontend and backend interfaces; and set up initial data schemas and spatial data visualisation.
- Ensure that the resulting platform is compliant with relevant data protection legislation.

TASK 2. TECHNICAL INPUT IN DATA SHARING PROTOCOLS

- GVTC is leading a process to determine underpinning working arrangements (data sharing protocols; roles and responsibilities) that will enable realization of the use of the integrated platform.
- The consultant(s) will not lead these processes but will be requested to provide relevant technical input into: (1) the process of developing data sharing and governance protocols; (2) the definition of roles and responsibilities across the relevant GVL stakeholders; and (3) the identification of capacity gaps and training needs.

TASK 3. TESTING AND QUALITY ASSURANCE

- In 1-2 selected sites, pilot use of the developed platform.
- Provide the necessary training (including development of training materials) to enable piloting of the platform in the selected sites.
- Gather feedback and use learning from this process to test data security, troubleshoot and optimize performance, as required.

TASK 4. FULL DEPLOYMENT AND SUSTAINABILITY

- Provide the necessary training (including development of training manuals, tailored to specific roles as required, and training of "4 super-users-one from each

(GVTC, Institut Congolais pour la Conservation de la Nature (ICCN), Rwanda Development Board (RDB), and Uganda Wildlife Authority (UWA)" to support long term sustainability) to realise rollout and effective adoption of the platform to an agreed stakeholder group (GVTC, ICCN, RDB, UWA, WWF, Wildlife Conservation Society, International Gorilla Conservation Programme, IUCN, Gorilla Doctors, TRAFFIC). Super-user responsibilities will include: (1) first-line technical support for their organization, (2) data validation and quality assurance, (3) localized training delivery to new users, (4) basic system administration tasks including user account management, and (5) feedback collection and communication with the technical support team.

- Provide additional refresher training to the agreed stakeholder group (as required).
- Establish maintenance schedules, regular audits and technical support channels to support system reliability and user responsiveness.
- During the 5-month lighter touch support period, provide ad hoc maintenance and support with the following specifications: (1) Response times: 48 hours for critical system issues, 5 business days for minor enhancements and user queries, (2) Covered support types: bug fixes, minor system enhancements, user account issues, data import/export assistance, and general user guidance, (3) Communication channels: dedicated support email and monthly check-in calls with GVTC technical lead.

Deliverables

Deliverable	Description	Due by
1. Proposed design	A report outlining the proposed design for an integrated, user-friendly, web-based platform that functions across the GVL countries (to be approved by the GVL steering committee before further implementation).	End of month 1
2. Prototype platform	A presentation / demonstration of the functionality of the prototype platform (to be endorsed by the GVL steering committee before further implementation).	Mid-month 2
3. Testing phase	A report outlining the process and outcomes of piloting (1) the platform; and (2) the process for training primary stakeholders in use of the platform. Including documentation of learning from this process and remedial actions taken (as required).	End of month 3

Deliverable	Description	Due by
4. Finalised platform	A presentation / demonstration of the functionality of the finalised platform, integrating learning from piloting (as required).	End of month 4
5. Training materials	A suite of documented training materials which enable the roll-out and effective adoption of the platform. A report documenting the training of agreed stakeholders, including the four (4) nominated "super-users".	End of month 5
6. Full deployment	A final report documenting the process of roll-out and recommendations for ongoing and long-term sustainability.	End of month 6
7. Maintenance and Support Report	A comprehensive report summarizing all maintenance activities, issues resolved, system performance metrics, user feedback addressed, and detailed recommendations for long-term sustainability beyond the consultancy period. This report will cover the 5-month lighter touch support period and include a transition plan for ongoing system management.	End of month 9

Implementation: This consultancy is expected to take 9 months, with approximately 4 months of intense engagement and a further 5 months of lighter touch troubleshooting support. The consultancy will be led by GVTC, in consultation with all relevant GVL partners, and contractually managed by WWF.

Minimum Qualification and Experience: Eligible consulting firms must demonstrate that at least 2-3 team members have the following key competencies:

- Advanced university degree (master's degree or equivalent) in a related area
- Demonstrable experience in developing complex data collection, storage, analysis and sharing mechanisms, ideally in transboundary context. Verifiable examples should be included as part of the application.
- Demonstrable experience in data acquisition and information sharing platforms which involve multi-partner coordination, collaboration and communication.
- Advanced knowledge of ICT and use of web-based portals including knowledge of biodiversity informatics including application of digital tools for data collection and information processing such SMART, ArcGIS, etc.

Modalities for Application: Interested applicants are invited to submit a short technical proposal (no more than 10 pages) demonstrating their understanding of these Terms of References, proposed approach, and qualifications and experience of the consultant / consultancy team; detailed CVs; and proposed budget.

To apply for the consultancy, please send your proposal (both technical and financial) to: procurement@wwfuganda.org with copies to es@greatervirunga.org, rkabeya@greatervirunga.org

It's the responsibility of the applicant to clearly and appropriately mark the subject line during the application.

SUBMISSION DEADLINE: 14TH/OCT/2025@5:00PM

ⁱ *Toward Zero Poaching in Greater Virunga Landscape* funded by UK Illegal Wildlife Challenge Fund, through WWF-UK, *Strengthening One Health Based PPR in the Greater Virunga Landscape* funded by the Pandemic Fund through FAO, UNICEF and WHO.