

ITERATION 7

TEAM 35



NGO PROJECT PORTFOLIO MANAGEMENT SYSTEM

This document contains the conversion plan
for the Integrated NGO Management System
developed for EPI-USE and
groupelephant.com.

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1. Document Introduction

This document presents the conversion plan for the proposed Integrated NGO Management System, which aims to transition EPI-USE and groupelephant.com from its existing Google Forms, Google Sheets and WhatsApp-based processes to a centralised and automated system. The plan provides an overview of the current system, identifies its limitations, and establishes the need for an improved solution that integrates key processes such as registration, event entry management, adjudication, and certificate generation.

The proposed conversion approach provides a structured roadmap covering pre-conversion activities, phased implementation, data migration, user onboarding, and bilingual support for EPI-USE and groupelephant.com diverse stakeholders. By following a structured conversion process, the organisation can maintain operational continuity, minimise disruption, and support the successful adoption of the new system. Ultimately, the proposed approach aims to provide EPI-USE and groupelephant.com with a scalable and efficient platform that can support its current operations and accommodate future growth.

2. Conversion Plan for the Integrated NGO Management System

2.1 Current System Background

EPI-USE Africa currently coordinates its conservation projects including Rhino protection, Elephant monitoring, K9 anti-poaching units, and Bike fundraising programmes using a combination of spreadsheets, email correspondence, and manually assembled reports. Project data, team and role assignments, inventory holdings, procurement records, and budgets are tracked in disconnected files maintained by different coordinators, with no shared source of truth.

As the number of concurrent projects has grown, this approach has revealed significant limitations. Reports including budget summaries, expenditure breakdowns and inventory valuations are compiled by hand, and there is no centralised platform for managing project teams, roles, inventory, procurement, or predictive planning. This leads to inefficiencies, including:

- ❑ **Duplicate or Inconsistent Data Entry:** Manual handling of project, team, and inventory data increases errors.
- ❑ **Difficulty Tracking Project Progress:** Coordinating deadlines, budgets, and team assignments across the Rhino, Elephant, K9, and Bike programmes is complex and error-prone without a shared system.
- ❑ **Delays in Report Production:** Manually compiling list and control-break reports (budget, expenditure, inventory valuation) hinders timely decision-making.
- ❑ **Limited Financial and Operational Visibility:** There is no unified view of committed versus settled spend, budget consumption, stock levels, or project risk across the organisation.
- ❑ **No Formal Backup or Disaster Recovery:** Spreadsheet-based records have no versioning, backup, or recovery process.

These challenges necessitate a centralised, automated system to streamline the full project lifecycle – from team and role assignment, through inventory and procurement, to budgeting, reporting, and forward planning.

2.2 Conversion Plan

To address these issues, Team 35 will collaborate with EPI-USE Africa management to finalise INPPMS for production use, focusing on infrastructure hand-over, data provisioning, and deployment readiness. Final configuration and hardening will begin in September 2026, with full implementation targeted for late November 2026 or early December 2026, aligning with EPI-USE Africa's next project reporting cycle to minimise disruption.

A Phase-In approach will be adopted to ensure a smooth transition for all users including super admins, project coordinators, team members, and report viewers, while maintaining operational continuity. Stakeholders will be engaged to validate role and permission structures, test the report builder and ML dashboard against real project data, and confirm alignment with EPI-USE Africa's project categories and reporting needs.

2.3 Pre-Conversion Tasks

The following tasks will be completed to prepare for the conversion:

- ❑ **Hosting & Infrastructure Ownership Transfer:** Ownership of the .NET API and Angular front-end hosting infrastructure will be transferred to EPI-USE Africa's control by October 2026, with permissions and resources scaled for anticipated project and reporting traffic.
- ❑ **Production Database Provisioning:** The SQL Server database (currently a local development instance) will be provisioned on EPI-USE Africa-owned infrastructure. Connection strings and the JWT signing key will be rotated to production-grade secrets, stored outside source control rather than in appsettings.json.
- ❑ **Firebase Project Hand-over:** The Firebase project used for authentication support and Firestore will be transferred to an EPI-USE Africa-owned Firebase project, with a new service-account credential (firebase-key.json) issued and securely configured.
- ❑ **Super Admin Email Domain Configuration:**
 - ❑ The automatic super-admin provisioning rule (currently scoped to the tuks.co.za student domain) will be reconfigured to EPI-USE Africa's corporate email domain before go-live, so that ownership of the super-admin role transfers cleanly to EPI-USE Africa staff.
- ❑ **ML Model Service Deployment:** The Python prediction sidecar (budget, team-size, risk, and stock-demand models) will be deployed alongside the API, bound to localhost only as designed, with the model-service base URL pointed at the production sidecar.
- ❑ **AI Report-Parsing Key Transfer:** The AI provider key used for natural-language report-filter parsing will be moved to an EPI-USE Africa-owned account and billing arrangement.
- ❑ **Backup & Recovery Verification:** The existing scheduled backup service and secure backup storage will be configured for the production environment, and a full backup-then-restore drill will be run before go-live to confirm the maintenance-mode restore path works end to end.
- ❑ **Deployment Preparation:** The system will be load-tested for anticipated peak usage (reporting deadlines and bulk report generation), with front-end and API base URLs updated to their production addresses.

2.4 Conversion Strategy

The conversion will follow a phased approach to ensure a successful rollout:

1. Data Population (Lookup Data Seeding)

The INPPMS database will be populated with essential lookup data to support system functionality:

- Project categories (Rhino, Elephant, K9, Bike)
- System roles and permissions (application-level and project-scoped)
- Groups and team roles
- Skills catalogue
- Inventory types and warehouses
- Vendors, locations, and permit types
- Backup schedule defaults

2. Admin Access Setup

Initial super-admin accounts will be provisioned to give EPI-USE Africa full access to system management features, including oversight of projects, user roles, inventory, procurement, reporting, and backups. Admin credentials will be securely shared with designated EPI-USE Africa personnel.

3. User Registration and Access

- ☐ **Account Provisioning:** Project coordinators, team members, and report viewers will be onboarded by the seeded admins and assigned application- and project-scoped roles matching their responsibilities.
- ☐ **Verification Process:** New accounts and role assignments will require admin confirmation to ensure access is granted only to legitimate EPI-USE Africa staff and volunteers.
- ☐ **Automated Notifications:** Users will receive email confirmation of their account, login details, and any project or report notifications relevant to them.

4. Gradual Data Migration (“Phase-In” Conversion)

- ☐ **New Project Onboarding:** The system will prioritise new projects, teams, and inventory for upcoming reporting cycles, ensuring a fresh, accurate start.
- ☐ **Limited Historical Data Migration:** Historical spreadsheet records (e.g., past project budgets or inventory logs) will only be migrated if requested by EPI-USE Africa, focusing effort on future operations.
- ☐ **Data Validation:** Imported data will be validated to prevent duplication or errors, with admins overseeing the process.

5. Report & ML Validation

- ☐ **Report Verification:** The seven pre-structured reports and the ad-hoc report builder will be validated against live production data before being relied on for decision-making.

- **Predictive Model Validation:** The ML dashboard's budget, team-size, risk, and stock-demand predictions will be reviewed once sufficient completed-project history exists; until then, the system transparently falls back to baseline estimates rather than unreliable model output.

2.5 Post Conversion Support

- **Monitoring and Feedback:** Post-implementation, the system will be monitored for performance, user adoption, and issues, with feedback collected from EPI-USE Africa stakeholders to refine functionality.
- **Ongoing Maintenance:** Regular updates will address bugs, enhance features, and ensure compatibility between the API, the front end, and the ML prediction service.
- **Backup and Restore Support:** EPI-USE Africa will have access to the built-in scheduled and on-demand backup system, with periodic restore drills to confirm recovery readiness.
- **Scalability Adjustments:** As the number of concurrent projects and users grows, hosting resources will be scaled to maintain performance, ensuring efficient handling of projects, inventory, and reporting workloads.

This conversion plan ensures a seamless transition to a centralised, automated system tailored to EPI-USE Africa's needs, with streamlined project, inventory, and reporting management, and secure, role-based access across the organisation.

3. Document Conclusion

This document has presented the conversion plan provides a structured transition from EPI-USE and groupelephant.com manual processes to a centralised and automated event management system. By addressing challenges such as duplicate data entry, certificate delays, and limited visibility, the system will improve the efficiency, accuracy, and transparency of registrations, event entries, and adjudication. Through phased implementation and stakeholder support, the solution will provide EPI-USE and groupelephant.with a scalable platform that supports future growth while enhancing the experience of participants, adjudicators, and coordinators.

4. Sign-off by Client

Sign-Off Confirmation:

I, the undersigned, have reviewed the contents of this document and approved it as complete and accurate. I acknowledge that the information provided meets the requirements agreed upon with team 35, Canvas.

Client Name: Dané Coetzee

Signature: *Dané Coetzee*

Date: 11/08/2026

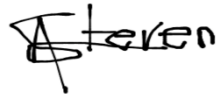
5. Sign-off by Team

Team member:

Name: Alexander Steven

Date: 16 August 2026

Signature:



Team member:

Name: Amahle Khoza

Date: 16 August 2026

Signature:



Team member:

Name: Christopher Bailey

Date: 16 August 2026

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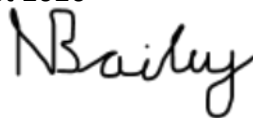


Team member:

Name: Nicholas Bailey

Date: 16 August 2026

Signature:



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