

IASO is an innovative, open-source, and multilingual (EN/FR) platform designed for data collection, planning, monitoring, and evaluation of health, environmental, and social programs. With its advanced geospatial capabilities, IASO provides a structured approach to managing geographic data, optimizing field data collection, and enhancing decision-making.

IASO's core functionalities revolve around four interconnected components, each reinforcing the capabilities of the others:

1. Geospatial Data Management (Georegistry)

- Manage multiple master lists of geographic data, including hierarchical structures (e.g., country ? region ? district ? facilities), GPS coordinates, and boundaries.
- Track changes and updates to geographic data over time.
- Integrate and visualize multiple geographic data sources.
- Allow field teams to propose changes via the IASO mobile app and review them through the web interface.

2. Geo-Structure Data Collection

- Design and upload data collection forms using the widely known XLSForm format.
- Link forms to one or multiple geographic levels (e.g., national, regional, district, health facility, etc.) to structure data collection.
- Track changes in data collection forms over time.
- Review and analyze submitted questionnaires via the web application.
- Monitor questionnaire completeness across geographic levels and identify potential data gaps.

3. Geo-Enabled Microplanning

- Manage and organize teams, including hierarchical team structures.
- Assign data collection tasks to teams and users through an interactive map interface.
- Define planning scopes, timeframes, and associated questionnaires to structure field activities.

4. Entity and Workflow Planning

IASO allows the tracking of entities, which can be individuals (e.g., health or social program beneficiaries) or physical objects (e.g., supplies, parcels, bed nets). Workflows facilitate entity tracking by linking forms dynamically based on previous responses.

- Define entity types (individuals, items, etc.).
- Configure workflows to determine which forms open based on prior responses.
- Register new entities via the mobile app, even offline.
- Synchronize data between mobile and web applications.
- Identify, compare, and merge duplicate entity records as needed.

- Store entity information on NFC cards for easy access and updates.

Access Information

SOURCE CODE

<https://github.com/BLSQ/iaso>

WEBSITE

<https://www.bluesquarehub.com/iaso/>

CONTACT

mdewulf@bluesquarehub.com

WHO System Classification

PRIMARY

D6 | D6 Health management information systems (HMIS)

ADDITIONAL

C1 | C1 Census and population information systems

D5 | D5 Geographic information system (GIS)

B2 | B2 Health finance-related information systems

C6 | C6 Identification registries and directories

C4 | C4 (Health) Facility registries

C7 | C7 Immunization information systems



Standards & Interoperability

SSL, GeoPackage, JWT, UTF-8, HTML, CSS, ECMAScript, JSON, XML, HTTPS, CSV, REST

STANDARDS

Other

OPENHIE COMPONENT

- Point of service
- Facility Registry
- Health Management Information Service
- Healthworker Registry

Maturity

Launched in 2019, IASO has reached a level of maturity that makes it a robust, ready-to-use, and highly adaptable solution for diverse use cases. Its versatility enables seamless deployment for geo-targeted data collection, georegistries, health campaign digitalization, nutritional tracking, and logistics. With a configurable architecture, IASO can be tailored to a wide range of contexts, ensuring flexibility and efficiency in addressing complex operational needs.

Maturity Matrix: 2023

Global Utility

Country Utilization	Medium
Country Strategy	Low
Digital Health Interventions	High
Source Code Accessibility	High
Funding and Revenue	High

Community Support

Developer and Implementer	Low
Community Engagement	
Community Governance	Medium
Software Roadmap	Low
User Documentation	Medium
Multi-Lingual Support	High

Software Maturity

Technical Documentation	Medium
Software Productization	Medium
Interoperability and Data Accessibility	Medium
Security	High
Scalability	Medium

Resources

- Documentation URL
<https://docs.openiaso.com/>
- Architectural Documentation URL
<https://github.com/BLSQ/iaso/wiki/>
- Issue Tracking URL
<https://github.com/BLSQ/iaso/issues>
- Troubleshooting URL
<https://docs.openiaso.com/>
- User Guide URL
<https://docs.openiaso.com/>
- Functional Spec URL
<https://github.com/BLSQ/iaso/wiki/>

Community

Since its launch in 2019, IASO has been continuously developed by a community of 30 contributors and deployed in 14 countries, supporting over 40 use cases—primarily in health and social programs across sub-Saharan Africa. Its mobile application has been downloaded by more than 100,000 users, demonstrating its growing impact and adoption.

Explore more IASO use cases on our website: openiaso.com

Sustainability

IASO's development is primarily funded by the Gates Foundation, a USAID-supported project, a UN agency specializing in nutritional assistance, and various contracts with international donors and NGOs.