

MAPME Working Group Restitution Session

A New IATI-Based Location Standard for Better Data and Impact

Maja Bott, Senior Sector Economist – Digital Transformation, KfW Development Bank

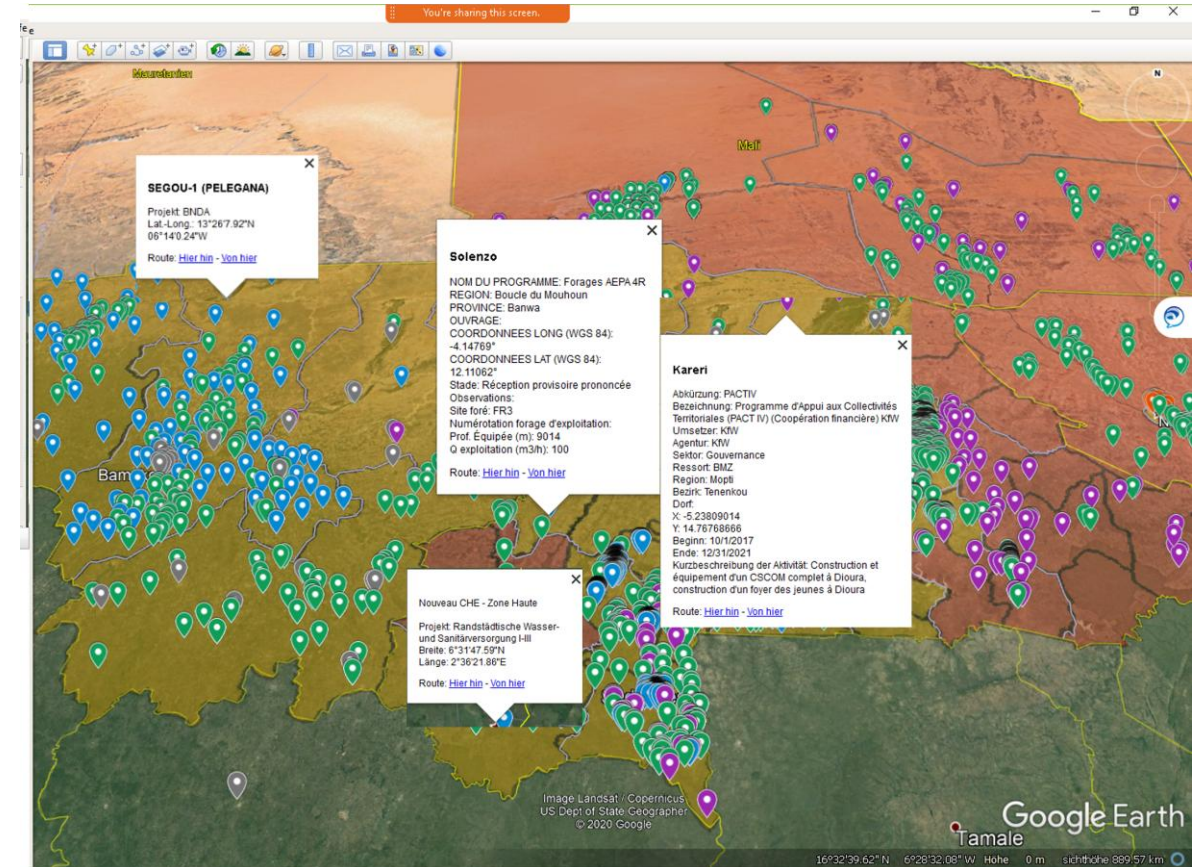
Steven Flower, IATI Specialist, Open Data Services

Why collect information on project locations?

International Aid and Development Cooperation uses project locations to report on the relevance, progress, and impacts of our project portfolios.

We create maps of the portfolios of project locations for donors as well as other internal and external stakeholders.

The data is also used to appraise potential new locations during project preparation and to assess portfolios for social, environmental or climate-related risks.



Example: project locations mapped across a country portfolio

THE CHALLENGE

Where we are now

International Aid Organizations are collecting different types of location data that cannot be properly aggregated, analysed and compared.

Why is this a problem?

1

Support gaps & targeting biases

2

Challenges to aid coordination

3

Lacking efficacy & efficiency

4

Use of funds difficult to track



The Solution

An International Location Standard

Why Standardized Location Data Matters



Population in Partner Countries

- Benefit from more targeted, coordinated and effective project interventions
- Improved service delivery
- Enhanced transparency and accountability



Partner Governments, Implementing Agencies & NGOs

- Compare locations with satellite imagery, crowdsourced and other baseline data for planning, ESG/climate risk and impact analysis
- Plan and coordinate activities, share consistent location information — also for reporting
- Manage and mitigate local risks



Donors & Financing Institutions

- Identify financing gaps and imbalances, and inform strategic decisions
- Assess impacts and ESG/climate risks — monitor safeguards
- Design and coordinate financial support more efficiently; verify use of funds at subnational level (audits & evaluations)
- Improve overall monitoring effectiveness and meet IATI transparency/reporting standards

The International Aid Transparency Initiative

A Global Standard for Aid Transparency

IATI (International Aid Transparency Initiative) is a global multi-stakeholder initiative that sets a common open data standard for publishing information on development and humanitarian resources.

Founded in 2008, IATI brings together **1,846+ signatories** — governments, multilateral institutions, NGOs and private sector organizations — committed to publishing open data on their aid activities.

The IATI Standard defines rules and guidance for publishing data freely, in a consistent machine-readable XML format — covering over **1,038,000+ activities** worldwide.



Founded 2008 — at the Accra High Level Forum



Free & Open Data — XML format, openly accessible

Georeferencing in IATI: the **<location>** Element

The IATI Standard's **<location>** element enables sub-national georeferencing of any aid activity:

- ▶ **Point coordinates:** Latitude/longitude (WGS84/EPG:4326) as **<point><pos>**
- ▶ **Administrative units:** linked via gazetteer vocabulary and code (e.g. GADM, OCHA)
- ▶ **Location reach:** activity site (1) or target area (2)
- ▶ **Exactness:** exact (1) or approximate (2) — supports security-sensitive contexts
- ▶ **Feature designation:** 600+ location type codes (e.g. UNIV, HOSP, ADMF)

```
<point srsName="EPSG:4326"><pos>31.62 65.72</pos></point>
```

→ iatistandard.org/en/iati-standard/203/activity-standard/.../location

Operationalizing IATI for Subnational Location Data

Project (= IATI Activity) data already required in the IATI Standard:

- **Project ID** = IATI activity ID using the IATI identifier rules
- **Data Publisher / Reporting Organization** using the IATI Organisation Identifier
- **Project Title** = Activity Title
- **IATI Activity Description**
- **IATI Activity Status**
- **IATI Activity (Start and / or End) Date**
- **IATI Sector Vocabulary No 1:** OECD DAC5-Subsector Code (5-digit CRS-Code) and DAC5-Subsector Name
- **Project Recipient Country / Region:** IATI code list for countries OR regions
→ update with M49 list
- **Project Donor OR Client** (upstream) = IATI Participating Organizations



Identity

Project ID, Title, Publisher



Status & Dates

Activity status, start/end dates



Sector & Geography

Sector code, country/region



Stakeholders

Donor & participating orgs

STEP ONE

Assign IATI-activity data to coordinates

01

Each IATI activity is geo-located by linking its activity-level data to one or more sets of coordinates.

The screenshot displays the World Bank Maps interface. The main map shows a topographic view of the Meru region in Kenya, with several project locations marked by colored dots. A pop-up window for the 'Kenya Watershed Services Improvement Project' is visible, showing details such as the commitment amount (\$200M), approval date (12 Jun 2025), and closing date (31 Dec 2030). The left sidebar contains a search bar and a table of projects. The bottom right corner shows a legend for IATI activities, including Agriculture, Fishing and Forestry, Education, Energy and Extractives, Financial Sector, Health, Industry, Trade and Services, Information and Communications Technologies, Public Administration, and Social Protection.

Projects	Com. Amt	Locations	Countries
43	\$ 6.88b	45	1

Projects	Com. Amt	Locations	Countries
1 BioCF Kenya Greenbelt Mov... (P099628)	N/A		N/A
2 Horn of Africa Gateway De... (P161305)	\$ 750m		
3 Food Systems Resilience P... (P177816)	\$ 603m		
4 Tanzania-Zambia Transmiss... (P163752)	\$ 465m		
5 Regional Infrastructure F... (P171967)	\$ 425m		
6 Kenya Digital Economy Acc... (P170941)	\$ 390m		
7 Horn of Africa - Groundwa... (P174867)	\$ 385m		
8 Health Emergency Prepared...	\$ 359m		

Example: project location data mapped from activity records

Additional Project / IATI Activity -Level Requirements

Additional required attributes

- **Acronym** (abbreviation of Project-/Activity Title) for map visualization
- **Type of Financing Instrument** from the IATI codelist finance type
- **Name of Project Executing / Implementing Agency(ies)** using IATI Participating Organizations rules
- **Updated Project Recipient Country / Region list:** IATI code list updated by using M49 names and codes (all IATI languages), adding region groupings and status (SIDS, etc.)

Recommended, non-mandatory attributes

- **Date of data collection or latest update**
- **Language Code**

→ UPDATED DEFINITION OF “LOCATION” IN THE IATI STANDARD

A location is a set of geographical features **and additional attributes** that are part of a financially supported activity, where it is not feasible to make any further geographical distinctions with regards to funding.

Location-Level Attributes in the Current IATI Standard

Location Activity Description	Valuable — no extra effort if added as a fixed location-type attribute
Location Description	No value added, obsolete
Geographic Exactness	Could be made more useful by differentiating between approximate categories
Geospatial Attributes: Administrative Units and Point Coordinates	No lines, no polygons, no link to polygon repositories, missing important admin unit repositories
> 600 Location Type Names (& Codes = feature designation)	Potentially very valuable, but incoherent — reduce & recategorize
Geographic Location Reach (location of activity OR target area)	Potentially very valuable as a fixed attribute of each location type
Geographic Location Class	No value added, obsolete (too similar to IATI category)
Geographical Precision	No value added, obsolete (too similar to IATI category)

Required Location Attributes in the updated IATI Standard

- **Field ID** – links all relevant attributes of the activity / subactivities at a specific location
- **IATI Location ID** – ID from the gazetteer or administrative boundary repository
- **Location Activity Description**
- **Location Name**
- **Geographic Exactness:** "exact" (Code 1) OR three "approximate" categories – code 2 exact location unknown; code 3 location is admin unit, or code 4 location is undisclosed for security reasons
- **Geospatial Attributes:** (exact) point, line, polygon coordinates OR admin unit polygon from an administrative (unit) repository OR other sector-specific polygon repository like the IUCN WDPA Protected Areas repository
- **~220 Location Types** incl. Geographic Location Reach, Geodata Type (point/line/polygon) & IATI category, without admin unit location types
- **Location (Sub-)Activity Status** for each location, using IATI-Activity Status categories

How Would This Look?

Filtering EAC project locations by IATI identifier, Location Name, Location Activity Status, Location Type Theme, Location Type, etc.

Project Locations Map - Use your mouse wheel to zoom in and out

InPro	Name	Status	Theme	Type	Cc
Geben SI	Geben SI	Geben SI	Geben SI	Geben SI	Geben SI
25887	Panyimur	Pipeline/Id	Energy	geotherm:	AI
25887	Ngozi DP	Implemen	Energy	geotherm:	AI
25887	Natron SS	Pipeline/Id	Energy	geotherm:	AI
25887	Alalobeda	Pipeline/Id	Energy	geotherm:	AI
25887	Wondo Ga	Pipeline/Id	Energy	geotherm:	AI
25887	Daguna Fe	Pipeline/Id	Energy	geotherm:	AI
25887	Ngozi DP	Implemen	Energy	geotherm:	AI
25887	Buranga S	Pipeline/Id	Energy	geotherm:	AI
25887	Arus SS	Pipeline/Id	Energy	geotherm:	AI
25887	Homa Hills	Pipeline/Id	Energy	geotherm:	AI
25887	Tulu Moye	Closed	Energy	geotherm:	AI
25887	Wondo Ga	Pipeline/Id	Energy	geotherm:	AI
25887	Boku DP	Pipeline/Id	Energy	geotherm:	AI
25887	Daguna Fe	Pipeline/Id	Energy	geotherm:	AI
25887	Korosi DP	Pipeline/Id	Energy	geotherm:	AI
25887	Ngozi DP	Implemen	Energy	geotherm:	AI
25887	Karthalha D	Pipeline/Id	Energy	geotherm:	AI

All EAC project locations

Project Locations Map - Use your mouse wheel to zoom in and out

Status	Theme	Type	Country	Team	
Geben SI	Educatio	scholars	Geben SI	LA	
o	Implemen	Education	university	KEN	LAB2
n	Implemen	Education	university	E_A_C_	LAB2
L	Implemen	Education	university	E_A_C_	LAB2
n	Implemen	Education	university	E_A_C_	LAB2
Jr	Implemen	Education	university	E_A_C_	LAB2
o	Implemen	Education	university	E_A_C_	LAB2
y	Implemen	Education	university	E_A_C_	LAB2
jc	Implemen	Education	university	E_A_C_	LAB2
t	Implemen	Education	university	E_A_C_	LAB2
U	Implemen	Education	university	E_A_C_	LAB2
y	Implemen	Education	university	E_A_C_	LAB2
u	Implemen	Education	university	E_A_C_	LAB2
o	Implemen	Education	university	KEN	LAB2
o	Implemen	Education	university	KEN	LAB2
o	Implemen	Education	university	KEN	LAB2

Filtered: location type "university", status "implementation" in EAC

A Single Location Record

PROJECT NAME / IATI ACTIVITY

EAC Scholarship Programme

DAC 5 PURPOSE CLASSIFICATION

11420

GEOGRAPHIC EXACTNESS

exact

LOCATION NAME

Dedan Kimathi University of Technology

LATITUDE

-0.397820482

IATI ACTIVITY ID

BMZ201767896

COUNTRY CODE

E_A_C_

LOCATION ACTIVITY STATUS

implementation

(IATI) LOCATION TYPE NAME (EN)

university

code

UNIV

reach

1

geodata type

point

LONGITUDE

36.96091955

Recommended, Non-Mandatory Location Attributes

- **Planned or actual start and/or end date of activity at the location**, analogous to the IATI-Activity Date. By default, the IATI activity date/s may be assigned to all respective locations.
- **Date of data collection or latest update**, if not already covered at project level.

Publishing restrictions due to security reasons

Although optional, this issue is considered very important by all participants so far. We propose to leave the publication rules up to the publishers, but to make some recommendations to raise awareness of security issues, especially in fragile contexts.

One general recommendation: each publisher decides whether to publish approximate locations only (e.g. at admin unit 2 level) as a general rule — or decides for every location/country office whether exact coordinates should be published, only the approximate admin-unit-level location, or no location at all.

Operationalizing the IATI Location Types List

Location Reach	Location Type Themes for Pre-Selection	IATI Category	Geodata Type	Location Type Code	IATI Location Type Name	IFAD	ADB	GEMS	GEF	WFP
1 location of the activity	Biodiversity Conservation	A (Admin)	Polygon	CDT	Afforestation / Reforestation Site			forestry/tree planting		
1 location of the activity	Biodiversity Conservation	V (Vegetation)	Polygon	REGEN	regeneration / restoration / rehabilitation area	Mangrove restoration				Land rehabilitation
1 location of the activity	Education	S (Spot)	Point	SCH	school (primary, secondary, college)			Elementary/Secondary Education		
1 location of the activity		V (Vegetation)	Point	REGEN	university			Building/Rehabilitation of schools		
1 location of the activity								Higher Education		
2 target area	Generic	A (Admin)	Polygon	CDT	capacity development / training			Scientific Research		
								Informal education		

Operationalizing the IATI Location Types List

Current: > 600 location types

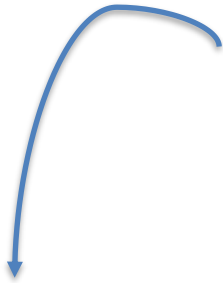
- Most of the >600 types are not useful for IATI activities — never used, too vague, overlapping, with no clear distinction by reach and category
- Most location types describe overly detailed geographical features — not useful for structured analysis
- ADMX entries should not be location types, but types of target areas in Category A
- Some location types are already used and should remain part of the new list

Proposed: ~220 location types

- **Reach (1 or 2)** added as a fixed attribute of every location type
- **Geodata Type** (point, line, polygon) added as a fixed attribute of every location type
- **Themes** for pre-selection only — non-mandatory, no fixed sectoral attribution
- **Reach 2 (target area)** → mapped to an admin unit polygon

Operationalizing the IATI Location Types List

Code	Name	Description	Category
AIRQ	abandoned airfield	abandoned airfield	S (Spot Features)
PPL	populated place	a city, town, village, or other agglomeration of buildings where people live & work	P (populated place)
RDGB	beach ridge	a ridge of sand just inland and parallel to the beach, usually in series	T (Hypso-graphic)
ADM1	first-order ad-min.division	a primary administrative division of a country, such as a state in the United States	A (Admin. Region)
RD	road	an open way with improved surface for transportation of animals, people & vehicles	R (Streets/ Highways/ Roads)



Non-mandatory, only for preselection, no fixed sectoral attribution!

Add reach as a fixed attribute of a location type

Add geodata type as a fixed attribute of a location type

Theme	Reach (1 or 2)	Code	Name	Description	Category	Geodata type
Mobility / Transport	1 (location of the activity)	RD	road	an open way with improved surface for transportation of animals, people & vehicles	R (Streets/ Highways/ Roads)	Line
_Generic / Cross_Sectoral	2 (target area)	CDT	capacity development / training	target area, usually admin unit, of interventions that are enhancing capacities, abilities, knowledge or skills for personal, professional or organizational growth	A (Administrative Region)	Polygon (from selected admin unit repository)
Energy	1 (location of the activity)	ONGRE	area covered by on-grid renewable energy	area powered by renewable energy through central electrical networks / grids from public utility infrastructure	L (Area)	Polygon

From old list

Reach 2 (target area) -> admin unit polygon

New Location Types List — Structure & Examples

Theme	Reach	Code	Name	Geodata Type	IATI Category
Mobility / Transport	1 – location	RD	road	Line	R (Streets/ Highways/Roads)
Generic / Cross-Sectoral	2 – target area	CDT	capacity development / training	Polygon (admin unit)	A (Admin. Region)
Energy	1 – location	ONGRE	area covered by on-grid renewable energy	Polygon	L (Area)
Water Management	1 – location	SAN	sanitary facility	Point	S (Spot Features)
Protected & Conserved Areas	1 – location	NATP	national park (IUCN Cat II)	Polygon (IUCN WDPA)	V (Vegetation)

Examples illustrating how Theme, Reach, Code, Geodata Type and IATI Category combine in the proposed ~220-item list

Updating Admin Unit Repositories

Name	Main Use(s) / Authoritativeness / Resp. (Dis-)Advantages	Accuracy / Documentation	Update Frequency	Admin levels	Access / Licence	Flexible boundaries repres.
National Governments	per country, authoritative, national boundaries may be disputed	Varying / Governments	Varying	Varying	Varying	NO
HDX COD AB (OCHA Global Subnational Admin Boundaries)	Most accurate & recent per country, but only 110 countries yet	High (OCHA FISS ArcGIS Server) & UN country offices	Frequent <1 year	Up to level 4	Free / <u>Varying</u>	YES
Fieldsmaps.io	Maps covering more than one country, world mapping	High / based on HDX & Geoboundaries & Governments	Frequent (but based on one person)	Up to level 4	Free / ODbL	YES
World Bank Official Boundaries	Per country, incl. Non-Determined Legal Status Areas (NDLSA), ocean mask	High / HDX, National Governments, WB GAD legacy	Twice a year	Up to level 2	Free / CC BY 4.0	NO (WB lvl 0 standards)
FAO (GAUL)	Maps covering more than one country; additional UNSalB data of 10 countries is authoritative, but not recent	High (official) / based on HDX, Geoboundaries & UNSALB	Updated 2015, 2024, update due in 2026	Up to level 2	Free / CC BY 4.0	YES
Geoboundaries	Very comprehensive, but needs processing (not edge-matched, not hierarchical)	High / Crowdsourced mix of Government, OpenStreetMap, Wikipedia data	Last updated 2023	Up to level 2	Free / CC BY 4.0	NO (USA pov)
OpenStreetMap	dataset of last resort (min. 8 admin levels), clean nesting data not always available, not authoritative, partly non-hierarchical	Varying / Crowdsourced from OSM contributors	Continuous (but user based)	8 to 11 levels	Free / ODbL 1.0	NO
GADM	Highly simplified, high level of aggregation	Medium / data sources un-documented	Every 2-3 years	Up to level 4	Free / non-commercial use	NO
Mapbox	Very accurate, covering all countries	High / private data collection, using HDX a.o.	Unknown	Up to level 4	Commercial	YES

Thank You

The MAPME Working Group on Project Location Data Standards

Link to the GitHub repo: <https://mapme-initiative.github.io/IATI-Project-Location-Standard/>

contact@mapme-initiative.org • www.mapme-initiative.org