



United Nations
Group of Experts
on Geographical Names



Update on the UNGEGN WGN Database

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Overall vision of UNGEGN World Geographic Names (WGN) Database

Why are we doing this?

- ✓ UNGEGN is mandated by the Economic and Social Council as one of its nine Subsidiary Bodies – this is implementing UNGEGN Decision 2/2019/2
- ✓ Position UNGEGN as the ‘go to’ for authoritative, comparable, and high-quality geographic names/toponyms – aligned with its Strategic Plan
- ✓ Provide a dramatically improved platform for managing toponymic data
- ✓ Enhance visibility and use of toponymic data, irrespective of language, from across the UN system and globally to support evidence-based action
- ✓ Implement Recommendation 2 of UNGEGN 2023/Third Session
- ✓ Increase visibility of UNGEGN, its intergovernmental role and its work



WGN System Components

Position the UNGEGN as a global leader in authoritative geographical names

- 1 WGN Dashboard - Publicly Accessible Dashboard
- 2 WGN API - Publicly Accessible, read-only geoJSON, API
- 3 WGN Administration System – User Interface for UNGEGN Secretariat





The Dashboard

The WGN Database platform is now being extensively tested – but not publicly advertised

<https://ungegn.un.org>

<https://ungegn-api.azurewebsites.net/swagger/index.html>



Implementing Recommendation 2 UNGEGN 2023/Third Session

The Economic and Social Council decides that the appropriate working groups of the United Nations Group of Experts on Geographical Names, namely, the Working Groups on Geographical Names Data Management, on Geographical Names as Cultural Heritage and on Romanization Systems, shall work to populate the World Geographical Names Database in order to ensure that toponyms are accurately reflected across all languages, including those with non-Roman alphabets or scripts, to strengthen relationships, links and connections in geographical names standardization, and in this regard requests:

- a) The mobilization of resources to support the integration of other toponymic datasets in the Database, including those pertaining to culture, heritage and identity;
- b) A report that explores the role of semantic web technologies in the context of the World Geographical Names Database and provides recommendations, where appropriate, to the Group of Experts at its 2025 session for consideration;
- c) The Statistics Division of the Department of Economic and Social Affairs and the Geospatial Information Section of the Office of Information and Communications Technology to work with the Group of Experts through its Bureau and working groups to review existing data within the World Geographical Names Database and work with Member States to resolve linguistic, geographical and other data quality issues.

1. The ongoing liquidity and hiring freeze presents a challenging landscape for the Secretariat. But, we are identifying how an intern(s) can help support improve our capacities

2. We are working with the UNDATA Secretariat to develop this report, with the expectation it will be provided after this 2025 Session

3. We are requesting geocoding support from OICT/GIS as part of the data integration work and to improve elements of geographic and endonymic completeness



Data Governance

- The Secretariat is working towards endonymic ‘completeness’ of this data across the six official UN languages (Arabic, Chinese, English, French, Russian, and Spanish), integrating authoritative linguistic data from the Demographic Yearbook and the UNTERM database. The positional accuracy of geographic coordinates will be assessed in cooperation with the UN Geospatial Information Section of the UN Office of Information and Communications Technology (OICT)
- Geographic names of cultural heritage, maritime areas and other ‘geographies’ could be explored.
- The Working Group on Geographical Names Data, as part of its work plan Action Item 1-i-5 – “Promote and support the establishment of an authoritative international database/gazetteer of geographical names to be disseminated to the public through UNGEGN” provides ‘day-to-day’ Member State governance for the WGN Database

GEGN.2/2025/21/CRP.21/Add.1

Towards a Governance Structure for the World Geographical Names Database

The World Geographical Names Database (WGND) is a key initiative under the United Nations Group of Experts on Geographical Names (UNGEGN), providing a publicly available platform for UNGEGN's approved names. The database is designed to provide authoritative and standardized geographical names at the global level. This document outlines the governance structure that ensures the efficient and transparent management of the WGND.

Governance Framework

The governance of the WGND is proposed to be focused within the UNGEGN Working Group on Geographical Names Data Management, overseen the UNGEGN Bureau and Secretariat, with additional and thematic input from UNGEGN Working Groups (lead by their Convenors/Coordinators) as necessary, and is supported by member state engagement.

Oversight Bodies

The UNGEGN Core Bureau¹ provides overall strategic oversight of the WGND. Its key responsibilities include:

- Approving major updates and modifications to the database.
- Ensuring compliance with UN standards and mandates.

The UNGEGN Working Group on Geographical Names Data Management would provide expert guidance, with the input of other Working Groups, as required, on:

- Review and input on geographic data (of both data from the UN system and Member States).
- Standardization methodologies.
- Setting policies and strategic direction, in conjunction with the UNGEGN Bureau.
- Conflict resolution regarding naming disputes.

The UNGEGN Secretariat, hosted within the United Nations Statistics Division (UNSD), is responsible for:

- Day-to-day management and coordination of the WGND.
- Ensuring compliance with UN data governance policies.
- Handling queries and liaising with stakeholders.
- Implementing UUIDs.

The UNGEGN Secretariat is supported with the WGND with the Geospatial Information Section of the Office of Information and Communication Technology.

¹ Composed of the Chair, Vice Chairs and Rapporteur



Recapping outcomes at 2025 Session of UNGEGN

Adoption of a Universal Unique Identifier for Cities

1. The Working Group on Geographical Names Data Management has developed and has adopted standardization/guidance for a universal unique identifier for cities to help respond to Recommendation 2 of UNGEGN's 2023 Session, and other decisions pertaining to Linked Data

Governance

1. A governance structure for the WGN Database has been suggested
2. The Secretariat is collaborating with other members of UNSD, the UN Library, SALB and other sources of geographic data where geographic names are important to integrate and refine the data within the WGN Database.

Capacity Building

1. The Secretariat is examining the possibility of a workshop on "Linking Geographic Names, the Disaggregation and Localisation of SDGs, and the Semantic Web" on 11-15 August 2025 at the United Nations Economic Commission for Latin America and the Caribbean, Santiago, Chile

Relevant **Draft** Decisions

- a) Appreciated the redevelopment of the World Geographical Names Database (WGND) as a reliable and extendable technical platform and requested the Secretariat to work with Member States and entities of the United Nations system to integrate authoritative sources of geographical and toponymic data at the country and city levels;
- b) Requested Member States to provide standardized geographical names to the Secretariat to ensure that the World Geographic Names Database is operationalized as a practical mechanism for implementing the Global Fundamental Geospatial Data Theme "Geographical Names" for Member States and the United Nations system;
- c) Urged Member States to mobilise resources to support the development of capacity across all Member States and welcomed the possibility of convening a workshop on Linking Geographic Names, the Disaggregation and Localisation of SDGs, and the Semantic Web 11-15 August 2025 at the United Nations Economic Commission for Latin America and the Caribbean Santiago, Chile;
- d) Adopted the concept for a Universal Unique Identifier for Cities as detailed in the document "The development of a globally unique identifier for Cities" ;
- e) Requested the United Nations Statistics Division to implement the concept within the WGND as a consistent and reliable unique identifier for cities;

Universal Unique Identifier “UUID”

Adopted Paper on the development of a global unique identifier for cities


This position paper provides concepts for the creation of a unique identifier for cities and identifies URIs and/or UUIDs as suitable mechanisms for their creation.

Universal and Unique Identifier management considerations

- Using Uniform Resource Identifiers “URIs” as global resource identifiers
- Using Universal Unique Identifiers “UUIDs”
- Assumptions for the globally unique identifiers (either URIs or UUIDs) of the WGN DB

Endorsed by the UN Expert Group on the Integration of Statistical and Geospatial Information at its eighth (Nairobi 2024) meeting.

Adopted by UNGEGN at this 2025 meeting.



UNEGN World Geographical Names Database

DRAFT Position Paper on the development of a global unique identifier for cities
By the UNGEGN Working Group on Geographical Names Data Management

Paper Structure

1. Introduction 2
2. The WGN DB and the Group of Expert's Mandate from the 2023 Session 2
3. Background and prerequisites of the World Geographic Names Database 3
4. Universal and unique identifier management considerations 4
5. Summary and Point of Decision 5
6. Annex 1: The (new) WGN DB model 6
- Acknowledgements 8

Timeline and Actions

#	Task/Action	Responsibility	Status
1	Discussion of ideas for a unique identifier for cities concept for the WGN DB with colleagues from DE (BKG) and NL (Dutch Kadaster)	Convenor WG GNDM	Done
2	DRAFT Position Paper on the development of a unique identifier for cities, version 0.1	Convenor WG GNDM	Done
3	Discussions about the WGN DB and the DRAFT Position Paper with UN SD / DESA and UNGEGN Bureau members, version 0.3	UN SD	Done
4	Exchange of the DRAFT Position Paper, version 0.4, with the WG GNDM	Convenor WG GNDM	Done
5	Update of the DRAFT Position Paper, version 0.5	Convenor WG GNDM	Done
6	Discussions about the WGN DB and the updated DRAFT Position Paper with UN SD / DESA and UNGEGN Expanded Bureau members, version 0.6-0.9	UN SD	Done
7	Circulate version 0.9 to <ul style="list-style-type: none">• UNGEGN WG GNDM --- for information• UNGEGN Expanded Bureau --- for information and discussion at its next meeting in February 2024• Expert Group on the Integration of Statistical and Geospatial Information (EG ISGI)	Convenor WG GNDM	January 2024 (most probably)
8	Endorsement of the Position Paper by the bodies mentioned under #7	Convenor WG GNDM	Q1/2024

Done

In progress

Delayed

The WG GNDM seeks the review and comment of relevant groups on the concepts outlined within this paper. Please contact Mr Pier-Giorgio Zaccheddu (Pier-Giorgio.Zaccheddu@bkg.bund.de) and Mr Mark Iliffe (mark.iliffe@un.org) with your comments.

Universal Unique Identifier “UUID”

Position Paper on the development of a global unique identifier for cities

Prospective Timeline and Milestones

UNGEGN

2025/Fourth Session in May 2025

- **This side event to raise awareness and promote the UUID**
- Promote the concept paper. Concept is to be **ADOPTED**

UN-GGIM

Fifteenth Session in August 2025

- Potential side event to raise awareness and promote the UUID
- As a background document to UNGEGN’s report, promote the concept paper and seek endorsement

Statistical
Commission

57th Session in February or March 2026

- Collaboration with relevant bodies, including DEGURBA, UN-Habitat and other relevant parties
- Possible: Global Consultation on Concept
- Promote the concept paper. Seek endorsement
- Request the Secretariat to maintain the “Registry/Standard etc” of City UUIDs

Secretariat

Ongoing

- Assign UUIDs to cities
- Establish collaboration agreement with UN-Habitat to enhance and synchronize cities at the global scale
- Liaison with UNTERM and Library to integrate Linked Open Data (LOD) of the WGN Database into the UN Data Ecosystem (and UNDATA)
- Liaison with the One UN Geospatial Situation Room to incorporate the API as a data stream (and fulfil the need of the Global Fundamental Geospatial Data Theme “Geographical Names” in the United Nations

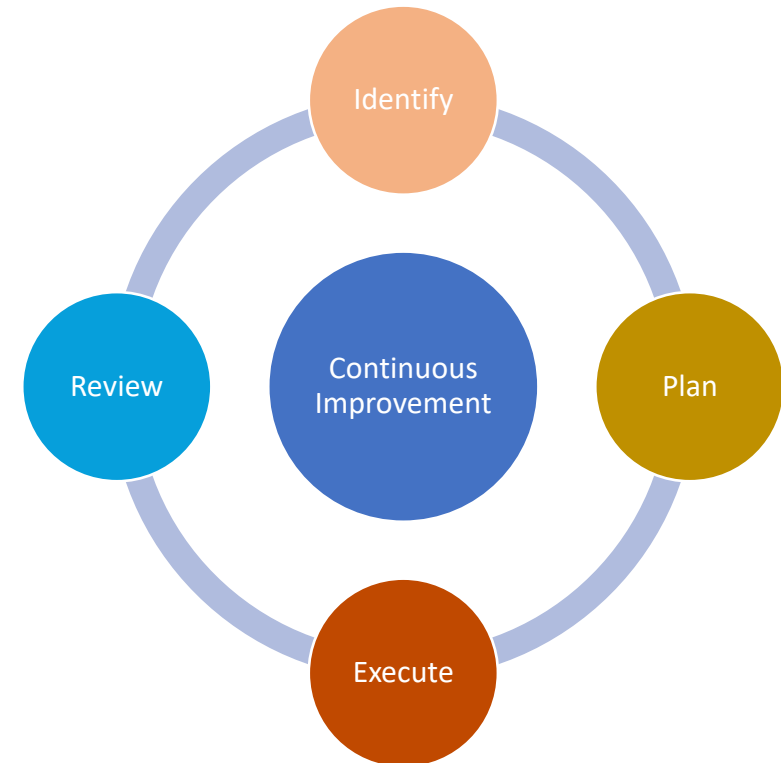
Geospatial data quality assesses how well a dataset conforms to its product specification and to data users attempting to determine whether or not specific geographic data are of sufficient quality for their particular application

WGN Data Quality

Aspiration for the WGN Database to be informed by the ISO 19157-1:2023 “Geographic information — Data quality”.

Aspects of Geospatial Data Quality:

- Logical consistency
- Positional accuracy
- Thematic accuracy
- Temporal quality
- Usage purpose and constraints
- Semantic accuracy
- Lineage/History
- Semantic accuracy
- Metadata



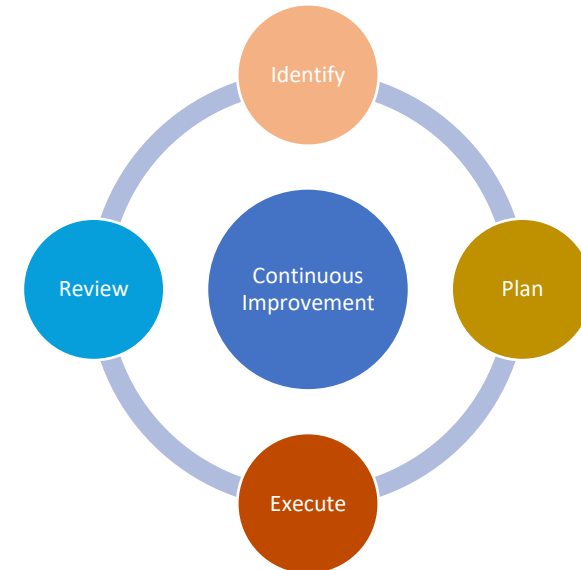
See: <https://www.iso.org/standard/78900.html>



WGN Data Quality

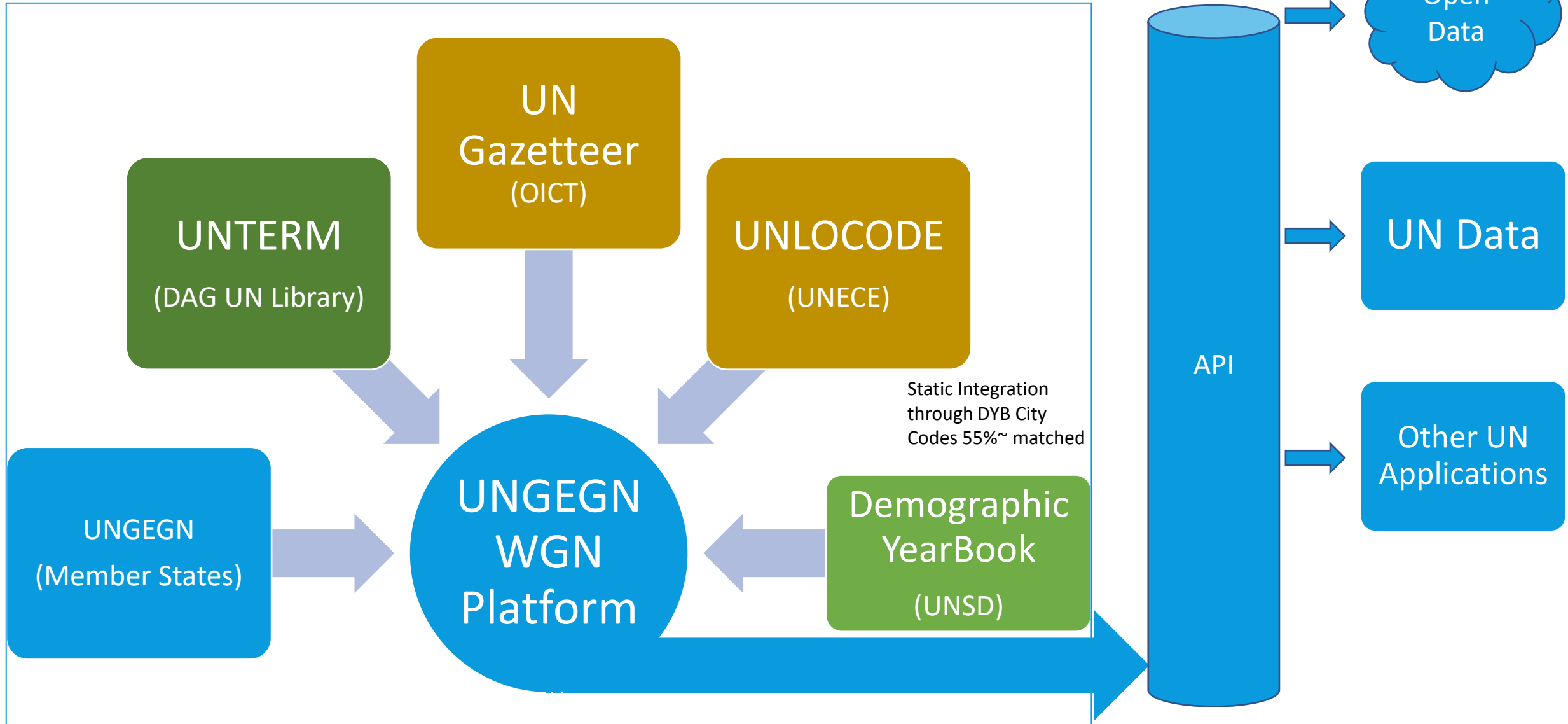
Aligned with ISO 19157-1:2023 Geographic information — Data quality

Metric	Description	Actions
Completeness	This is a measure of the lack of data; that is, an assessment of how many objects are expected to be found in the database but are missing as well as an assessment of excess data that should not be included. In other words, how comprehensive the coverage of real-world objects is	<ul style="list-style-type: none">• Review of completeness of present dataset• Integration of additional data:<ul style="list-style-type: none">• Phase 1: from the World Demographic Yearbook and the SDG Database• Phase 2: from UN Term• Phase 3: from the UN Gazetteer
Logical consistency	This is an aspect of the internal consistency of the dataset in terms of topological correctness and the relationships that are encoded in the database.	<ul style="list-style-type: none">• Internal quality controls inherent to the WGN Database (inclusive of API, Dashboard, and Administration Panel) ensure logical consistency of data and compliance with the correct coordinate reference system and other aspects
Positional accuracy	How well the coordinate value of an object in the database relates to the reality on the ground.	<ul style="list-style-type: none">• Liaison with the Geospatial Information Section
Thematic accuracy	As objects in a geographical database are represented not only by their geometrical shape but also by additional attributes	<ul style="list-style-type: none">• Liaison with Countries – potentially through Note Verbale to announce the WGN Database and request updates• Need to establish documentation and data ingestion procedures• Historical records of name changes could be explored
Temporal quality	This is a measure of the validity of changes in the database in relation to real-world changes and also the rate of updates.	
Lineage/History	This aspect of quality is about the history of the dataset how it was collected and evolved.	
Usage purpose and constraints	This is a fitness-for-purpose declaration that should help potential users in deciding how the data should be used.	<ul style="list-style-type: none">• To be discussed in forthcoming report to UNGEGN
Semantic accuracy	This aspect of quality is about the history of the dataset, how it was collected and evolved.	<ul style="list-style-type: none">• Collected as part of the data ingestion process
Semantic accuracy	This measure links the way in which the object is captured and represented in the database to its meaning and the way in which it should be interpreted	<ul style="list-style-type: none">• n/a
Metadata	Data about data	<ul style="list-style-type: none">• Continue testing WGN Suite of Applications





Intended Data Integration Flows





Intended Data Integration Flows

Milestone 1 – to 2025: Authoritative Data from the UN System

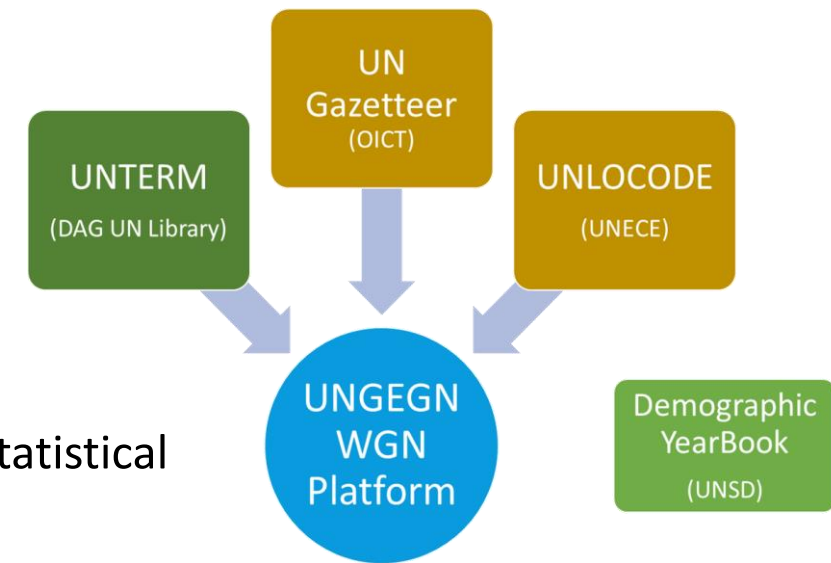
Focus: Geographic Completeness

Short Term

- i. UN Demographic Yearbook – Authoritative Member State provided statistical data
- ii. UNTERM

Long Term

- iii. UN Gazetteer
- iv. UNLOCODE



Defining engagement with Member States to collect/update geographical names

– what are the potential process(es)?

Milestone 2 – After 2025: Member States

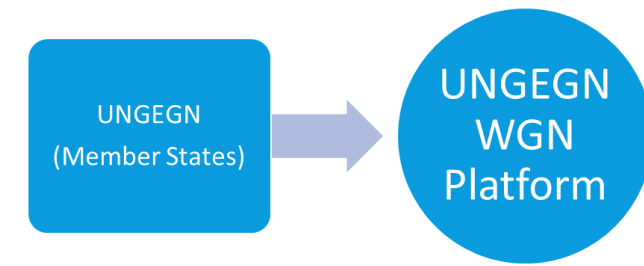
Focus: Endonymic Completeness

- i. Request review of existing geographic names held within the WGN database
- ii. Request input (in defined format) of new geographical names
- iii. Interlinkages with national geographical names authorities and identify national focal point(s)
- iv. ...?

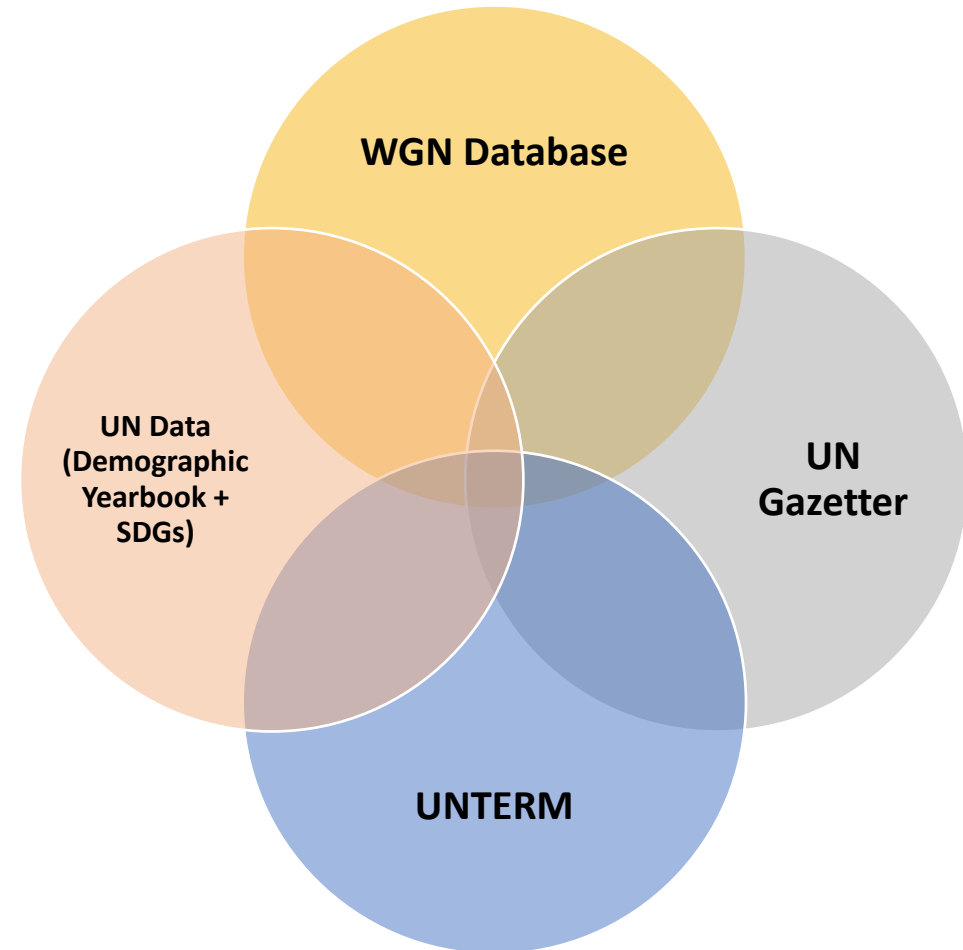


State of Data

Milestone 1: Geographic Completeness



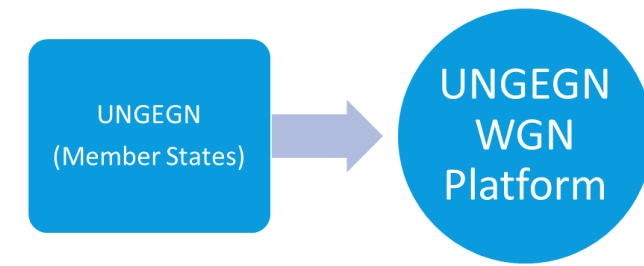
- Through work with UN Data (consuming data from UN-Habitat, country reported data from the SDGs and other authoritative sources) there exist **9,850 individual cities**.
- Through data integration, it will be possible to integrate these geographies into the WGN Database. We propose this schedule:
 - Phase 1: from the World Demographic Yearbook and the SDG Database
 - Phase 2: from UNTERM
 - Phase 3: from the UN Gazetteer
- Following the integration of these data, we propose to initiate 'data review' (following the forthcoming UNGEGN Session) with Member States to collect toponymic data.





State of Data

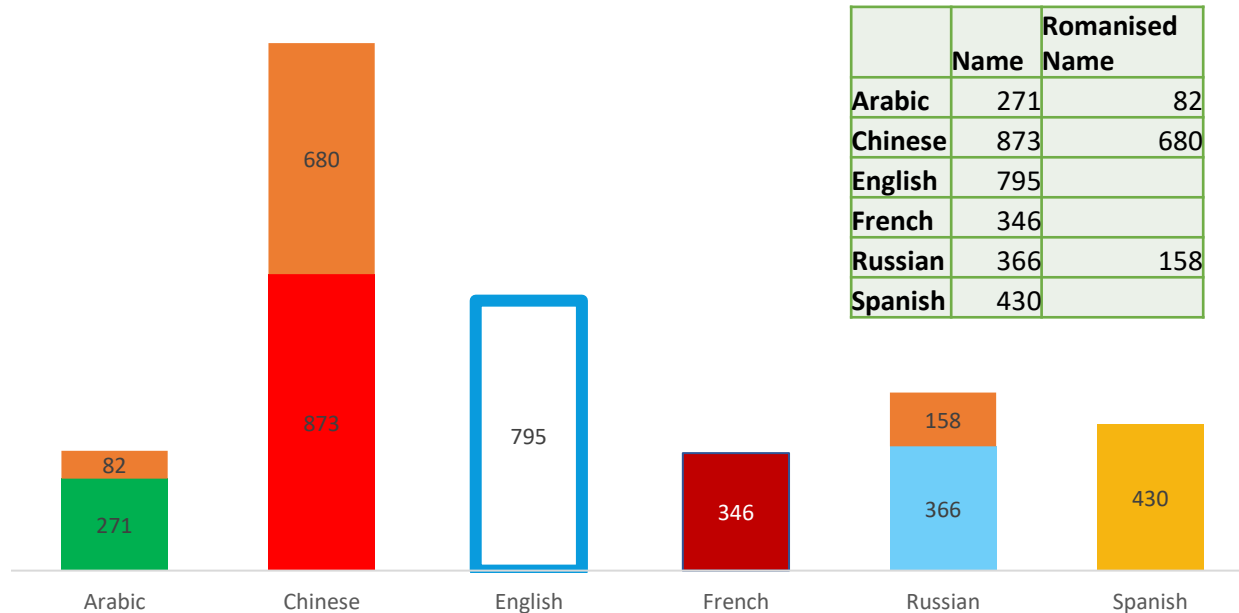
Milestone 2: Endonymic Completeness



- Presently, there are 9,850 ‘cities’ within the WGN Database.
- There are many data gaps – e.g. it should be a bare minimum that cities have a name in the six languages of the UN – whether that is the provided name or a Romanised name.
- This demonstrates the need to liaise with UNTERM and to work toward ‘toponymic completeness’.
- Potential discussions could occur to establish parameters and targets to balancing between non/Romanised names and identify what ‘complete’ looks like.
 - Opportunity to work with WGDM to establish ‘principles and aspirations’ to guide the data management within the WGN Database.

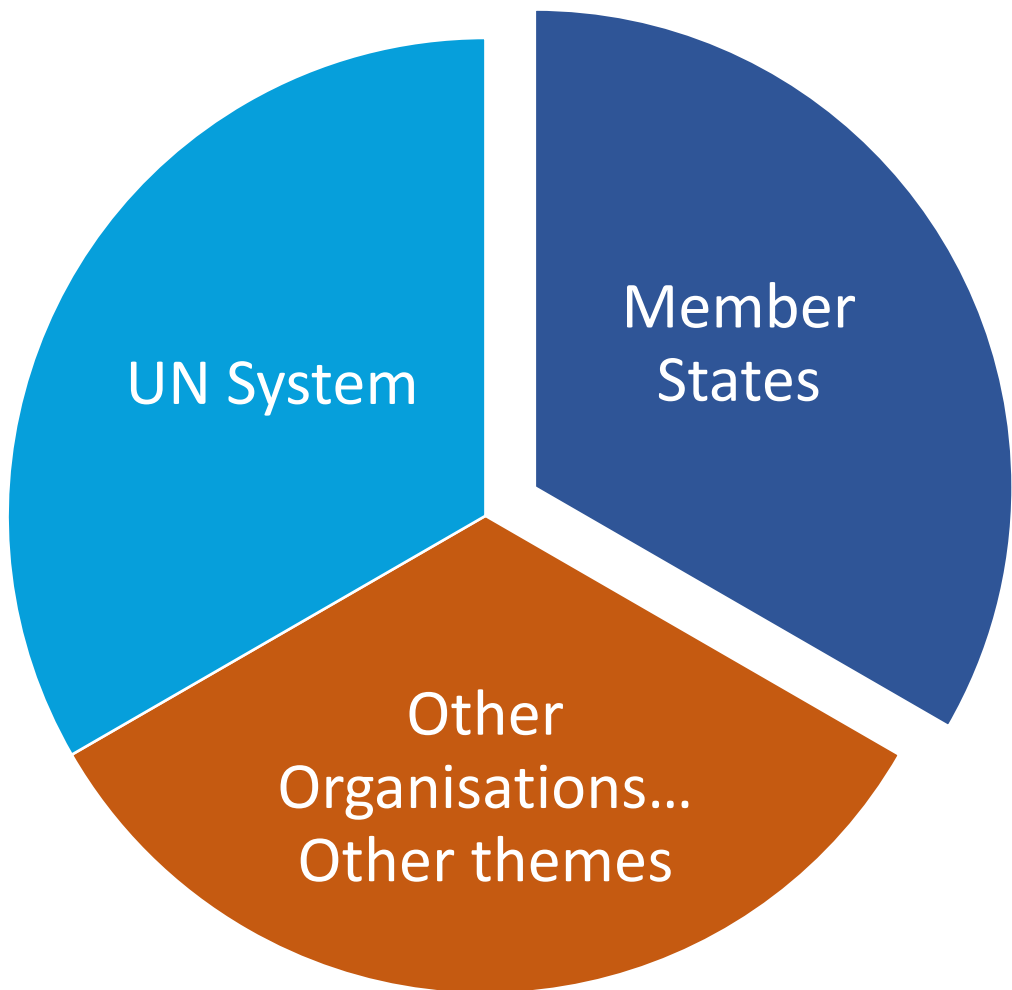
Toponym Count

■ Name ■ Romanised Name





Engagement with Member States



World Geographical Names Database - Data Collection

1. Overview

Data submissions to the World Geographical Names Database (WGND) must comply with the following structure and content requirements. This ensures consistency, quality, and interoperability across contributions from Member States.

Submissions are requested in **GeoJSON** format, where each **Feature** represents a city or populated place, including multilingual toponymic (name) information. Countries are invited to discuss with the Secretariat (mark.iliffe@un.org) options for data submission if technical realities prevent submission of data within the GeoJSON format.

2. GeoJSON Structure Requirements

The overall structure must follow the GeoJSON standard:

```
json
{
  "type": "FeatureCollection",
  "features": [Feature, Feature, ...]
}
```

Each **Feature** must contain:

- **Geometry:** Point (longitude, latitude)
- **Properties:** Toponyms (names) related to the location

3. Detailed Field Requirements

Feature Object

Field	Type Required	Notes
type	String Yes	Must be "Feature"
geometry.type	String Yes	Must be "Point"
geometry.coordinates	Array Yes	[longitude, latitude] (in decimal degrees)
properties.toponyms	Array Yes	Array of toponym objects (see below)

Toponym Object (inside `properties.toponyms`)

SUBMIT YOUR Geographical Names

