



**United Nations**



United Nations  
Global Geodetic  
Centre of Excellence

**Africa Geodesy Capacity Development Workshop  
Modernizing your Country Geospatial Reference System**

**19 to 23 May 2025  
Nairobi, Kenya**

**United Nations Global Geodetic Centre of Excellence  
Statistics Division, Department of Economic and Social Affairs**

**Detailed Agenda**

| <b>Monday, 19 May</b>  |   |
|--|---|
| <b>Location: UN Nairobi Complex, Conference Building, Rooftop, Conference Room 9</b> |   |
| 8:30 – 9:00 am   | Arrival and entry to the building   |
| 9:00 – 10:00 am  | <p><b>Welcome and overview</b></p> <ul style="list-style-type: none"> <li>Mr Nicholas Brown (Head of Office UN-GGCE)</li> </ul> <p><b>Welcome from Ambassador Peter Thomson (video)</b></p> <p><b>Workshop agenda</b></p> <ul style="list-style-type: none"> <li>Mr Nicholas Brown (Head of Office UN-GGCE)</li> </ul> <p><b>Introduction to logistics</b></p> <ul style="list-style-type: none"> <li>Ms Walaa Allahham (UN-GGCE)</li> </ul> <p><b>Group photo and ice-breaking exercise</b></p> <ul style="list-style-type: none"> <li>Mr Nicholas Brown (Head of Office UN-GGCE)</li> </ul> |
| 10:00 – 10:30 am   | Morning Break   |
| 10:30 – 11:00 am   | <p><b>1.2.1   The Importance of a Geospatial Reference System</b><br/><i>Including an introduction to “The Roadmap: Guidance on how to build a country’s Geospatial Reference System”</i></p> <ul style="list-style-type: none"> <li>Mr Nicholas Brown (Head of Office UN-GGCE)</li> </ul>  |
| 11:00 – 11:30 am   | <p><b>1.2.2   Update on actions of the UN-GGCE</b></p> <ul style="list-style-type: none"> <li>Mr Nicholas Brown (Head of Office UN-GGCE)</li> </ul>   |
| 11:30 am – 12:00 pm  | <p><b>1.2.3   Introduction to Geodetic Reference System infrastructure</b></p> <ul style="list-style-type: none"> <li>Mr Nicholas Brown (Head of Office UN-GGCE)</li> </ul>   |
| 12:00 – 2:00 pm  | Lunch   |
| 2:00– 2:30 pm  | <p><b>1.2.4   An Introduction to aligning national geodetic datums with the International Terrestrial Reference Frame</b></p> <ul style="list-style-type: none"> <li>Mr Nicholas Brown (Head of Office UN-GGCE)</li> </ul>  |
| 2:30 – 3:00 pm   | <p><b>1.3.1   Regional Geodetic Collaborations</b></p> <ul style="list-style-type: none"> <li>Mr Nicholas Brown (Head of Office UN-GGCE)</li> </ul>   |
| 3:00 – 3:30 pm   | Afternoon Break   |
| 3:30 – 4:15 pm   | <p><b>1.3.2   History of the African Reference Frame</b></p> <ul style="list-style-type: none"> <li>Mr Aslam Parker (South Africa)</li> </ul>   |
| 4:15 – 5:00 pm   | <p><b>1.4.1   Options for African countries to align their datums with ITRF (including worked example)</b></p> <ul style="list-style-type: none"> <li>Mr Nicholas Brown (Head of Office UN-GGCE)</li> </ul>   |

| <b>Tuesday, 20 May</b> |   | <b>Location: UN Nairobi Complex, Conference Building, Rooftop, Conference Room 9</b> |  |
|------------------------|---|--|--|
| 8:30 – 9:00 am         | Arrival and entry to the building   |  |  |
| 9:00 – 10:00 am        | <b>Activity: Geodesy Factbook</b> <ul style="list-style-type: none"> <li>• <i>Mr Ryan Keenan (UN-GGCE Consultant)</i></li> </ul>  |  |  |
| 10:00 – 10:30 am       | <b>Discussion on Geodesy Factbook</b> <ul style="list-style-type: none"> <li>• <i>Mr Ryan Keenan (UN-GGCE Consultant)</i></li> </ul>  |  |  |
| 10:30 – 11:00 am       | Morning Break   |  |  |
| 11:00 – 11:30 am       | <b>2.2.1   National geodetic adjustments</b> <ul style="list-style-type: none"> <li>• <i>Mr Nicholas Brown (Head of Office UN-GGCE)</i></li> </ul>  |  |  |
| 11:30 am – 12:00 pm    | <b>Discussion on national geodetic adjustments</b> <ul style="list-style-type: none"> <li>• <i>Mr Nicholas Brown (Head of Office UN-GGCE)</i></li> </ul> <p><i>At this point we will have covered the International Terrestrial Reference Frame, African Reference Frame, undertaken a review of the current status of your country's GRS, and introduced national adjustments. This discussion is to address the remaining questions participants have on any of the above topics.</i></p> |  |  |
| 12:00 – 2:00 pm        | Lunch   |  |  |
| 2:00 – 2:30 pm         | <b>2.3.1   Introduction to data standardization, tools and registers</b> <ul style="list-style-type: none"> <li>• <i>Mr Nicholas Brown (Head of Office UN-GGCE)</i></li> </ul>  |  |  |
| 2:30 – 3:00 pm         | <b>Discussion on data standards</b> <ul style="list-style-type: none"> <li>• <i>Mr Nicholas Brown (Head of Office UN-GGCE)</i></li> </ul>   |  |  |
| 3:00 – 3:30 pm         | Afternoon Break   |  |  |
| 3:30 – 5:00 pm         | <b>Discussion on data standards (continued)</b> <ul style="list-style-type: none"> <li>• <i>Mr Nicholas Brown (Head of Office UN-GGCE)</i></li> </ul>   |  |  |

| <b>Wednesday, 21 May</b> |   | <b>Location: UN Nairobi Complex, Conference Building, Rooftop, Conference Room 9</b> |  |
|--------------------------|---|--|--|
| 8:30 – 9:00 am           | Arrival and entry to the building   |  |  |
| 9:00 – 9:45 am           | <b>3.1.1   Development of transformation parameters, plate motion models and deformation models</b> <ul style="list-style-type: none"> <li>• <i>Mr Nicholas Brown (Head of Office UN-GGCE)</i></li> </ul> |  |  |
| 9:45 – 10:30 am          | <b>3.1.2   Worked example: Transformation Parameters</b> <ul style="list-style-type: none"> <li>• <i>Mr Nicholas Brown (Head of Office UN-GGCE)</i></li> </ul>  |  |  |
| 10:30 – 11:00 am         | Morning Break   |  |  |
| 11:00 – 12:00 pm         | <b>3.2.1   National geoid models and height datums</b> <ul style="list-style-type: none"> <li>• <i>Mr Nicholas Brown (Head of Office UN-GGCE)</i></li> </ul>  |  |  |
| 12:00 – 2:00 pm          | Lunch   |  |  |
| 2:00 – 2:30 pm           | <b>3.3.1   Capacity development needs</b> <ul style="list-style-type: none"> <li>• <i>Mr Ryan Keenan (UN-GGCE Consultant)</i></li> </ul>  |  |  |
| 2:30 – 3:00 pm           | <b>3.3.2   International geodesy initiatives</b> <ul style="list-style-type: none"> <li>• <i>Mr Ryan Keenan (UN-GGCE Consultant)</i></li> </ul>   |  |  |
| 3:00 – 3:30 pm           | Afternoon Break   |  |  |
| 3:30 – 4:00 pm           | <b>3.4.1   GGOS Africa and other African initiatives</b> <ul style="list-style-type: none"> <li>• <i>Ms Aletha de Witt and Mr Jack Radcliffe</i></li> </ul>   |  |  |
| 4:00 – 4:30 pm           | <b>3.4.2   Lantmäteriet's role in Africa</b> <ul style="list-style-type: none"> <li>• <i>Mr Christopher Byren</i></li> </ul>  |  |  |
| 4:30 – 5:00 pm           | <b>3.4.3   Alumni of the workshop</b> <ul style="list-style-type: none"> <li>• <i>Ms Walaa Allahham (UN-GGCE)</i></li> </ul>  |  |  |

| <b>Thursday, 22 May</b> |   | <b>Location: UN Nairobi Complex, Conference Building, Rooftop, Conference Room 9</b> |
|-------------------------|---|--|
| 8:30 – 9:00 am          | Arrival and entry to the building   |  |
| 9:00 – 10:00 am         | <b>4.1.1   Communicating geodesy</b> <ul style="list-style-type: none"> <li>Mr Nicholas Brown (Head of Office UN-GGCE)</li> </ul>   |  |
| 10:00 – 10:30 am        | <b>Group Activity: Communications</b> <ul style="list-style-type: none"> <li>Mr Nicholas Brown (Head of Office UN-GGCE)</li> </ul> <p><i>Working in pairs, prepare and record a 30 second video explaining why updates to the GRS are needed to explain to policy makers.</i></p>         |  |
| 10:30 – 11:00 am        | Morning Break   |  |
| 11:00 – 11:30 am        | <b>4.2.1   Developing Business Cases for increased investment in geodesy</b> <ul style="list-style-type: none"> <li>Mr Albert Momo (GeoDEV international)</li> </ul>  |  |
| 11:30 am – 12:00 pm     | <b>Group Activity: Drafting persuasive business cases</b> <ul style="list-style-type: none"> <li>Mr Ryan Keenan (UN-GGCE Consultant)</li> </ul>   |  |
| 12:00 – 2:00 pm         | Lunch   |  |
| 2:00 – 3:00 pm          | <b>Geodesy country reports</b> <ul style="list-style-type: none"> <li>Four participants</li> </ul> <p><i>Time for four participants to provide a 15-minute presentation their GRS, work they are doing to upgrade it, or to pose questions to the audience to request assistance.</i></p> |  |
| 3:00 – 3:30 pm          | Afternoon Break   |  |
| 3:30 – 4:30 pm          | <b>Regional partner reports</b> <ul style="list-style-type: none"> <li>Ms Rachel Gedion (RCMRD)</li> <li>Mr Lazarus Mustapha (AFRIGIST)</li> <li>Mr John Gitau</li> </ul>   |  |
| 4:30 – 5:00 pm          | <b>4.4.1   Geodesy governance</b> <ul style="list-style-type: none"> <li>Mr Nicholas Brown (Head of Office UN-GGCE)</li> </ul>  |  |

| <b>Friday, 23 May</b> |  | <b>Location: UN Nairobi Complex, Conference Building, Rooftop, Conference Room 9</b> |
|-----------------------|--|--|
| 8:30 – 9:00 am        | Arrival and entry to the building  |  |
| 9:00 – 10:30 am       | <b>Group Activity: Working on your Roadmap</b> <p><i>Participants will start working through The Roadmap.</i></p>  |  |
| 10:30 – 11:00 am      | Morning Break  |  |
| 11:00 am – 12:00 pm   | <b>Discussion</b> <ul style="list-style-type: none"> <li>Mr Nicholas Brown (Head of Office UN-GGCE)</li> </ul> <p><i>Following their work on their Roadmap, participants will discuss their plans once they return home and seek further guidance on components they need assistance with.</i></p> |  |
| 12:00 – 1:30 pm       | Lunch  |  |
| 1:30 – 2:30 pm        | <b>Closing</b> <ul style="list-style-type: none"> <li>Mr Nicholas Brown (Head of Office UN-GGCE)</li> </ul>  |  |