

ACT Government

Engineering Advisory Note

EAN 21

Transport Canberra and City Services (TCCS) adoption of the Geocentric Datum of Australia 2020 (GDA2020) and Traffic Control Device (TCD) Grid updates

Background

The ACT is adopting the new Geocentric Datum of Australia 2020 (GDA2020) for all its surveying, mapping, and spatial data. The official projection for the ACT will be the Map Grid of Australia 2020 (MGA2020). Adopting GDA2020 and the MGA2020 projection will align the ACT mapping systems and integrate the ACT spatial data with the rest of Australia, particularly NSW which has already implemented GDA2020/MGA2020. Further information regarding the adoption of GDA2020 in the ACT can be found on the Office of the Surveyor-General and Land Information [webpage](#) on GDA2020/MGA2020.

TCCS [Reference Document 08 – Requirements for Works as Executed Records](#), TCCS [Reference Document 11 – Drafting Requirements for Summary Drawings](#) and TCCS [Reference Document 11 – TAMS Drafting Standard for Traffic Control Devices](#) currently specify that all Works as Executed (WAE) and Traffic Control Device (TCD) submissions must be in the ACT Standard Grid (Stromlo) projection. This Engineering Advisory Note supersedes the above-noted requirements identified in these TCCS Reference Documents for WAE and TCD data submissions. In due course, these TCCS Reference Documents will be updated to reflect the details provided within this Engineering Advisory Note.

TCCS adoption of GDA2020/MGA2020

TCCS have been maintaining all infrastructure and landscape asset spatial data in the MGA2020 (zone 55) projection since early 2021 and have reprojected the TCD Grids to the new projection.

MGA2020 is now the identified official projection for TCCS mapping and spatial data. WAE and TCD submissions for all new projects with contracts which commenced after 1 October 2023 must be submitted in the MGA2020 zone 55 projection. **Projects for which contracts commenced before 1 October 2023 can be submitted to TCCS using the superseded AGD66 datum and ACT Standard Grid (Stromlo) projection during a 9-month transition/grace period, however the preferred projection for TCCS to receive submissions is MGA2020.** The transition/grace period expires on 30 June 2024 for projects with contracts which commenced before 1 October 2023. Any WAE or TCD submission received after 30 June 2024 in the AGD66 datum and ACT Standard Grid (Stromlo) projection that does not have an approved exemption will be rejected.

There are several large, multi-year projects that are already underway across Canberra and expected to be delivered after the transition/grace period expires. Spatial data datum and projection requirements for these projects will be assessed on a case-by-case basis to determine the most appropriate and cost-

effective solution and potentially provide an approved exemption, as mentioned above. If your project falls into this category, please email tccs.assetinformation@act.gov.au to request an exemption.

Summary of TCD Grid changes

To support the TCD Grid reprojection to MGA2020, several additional changes have been made and are summarised below.

- The Office of the Surveyor-General and Land Information cadastral data, previously available from ProjectWise as X-REF AutoCAD files, has been removed to ensure industry are accessing the latest datasets available from the data custodian. Cadastral data can be accessed directly from the ACTmapi data download [webpage](#). Cadastral data is not to be included in any TCD submissions to TCCS. However, consultants can supply X-REF AutoCAD cadastral data to provide project context if required.
- The TCD Grid file naming convention, folder structure and spatial index on ProjectWise has been updated to improve file navigation and access for data download.
- Thirteen (13) Traffic Signal hardware blocks have been updated to resolve incorrect insertion points.

The updated TCD Grids in the MGA2020 projection and new Traffic Signal Hardware blocks are available for download from the following ProjectWise and website locations:

- TCD Inventory Grid index and base (ProjectWise: [GRIDS-Inventory MGA2020](#)).
- Updated Traffic Signal hardware blocks (ProjectWise: [Traffic Signal Hardware](#)).
- Updated Traffic Signal hardware blocks (City Services webpage: [Traffic Control Devices - Traffic Light Blocks](#)).

Care has been taken to ensure the accuracy of the TCD Grids through the reprojection. However, if you identify any issues or have any concerns, please email tccs.assetinformation@act.gov.au.

Administrative Arrangement

This Engineering Advisory Note will take effect from the latest date of endorsement by the Authorised Person/s.

Prepared by:



Daniel Goodwin
Director, Asset and Data Integration,
Infrastructure Planning
Transport Canberra City Services
Date: 26/09/2023

Endorsed by:



Owen Earl-King
Senior Director,
Infrastructure Planning
Transport Canberra City Services
Date: 28/09/2023

Authorised by:



Tim Rampton
Executive Branch Manager,
Roads ACT
Transport Canberra City Services
Date: 28/09/2023