A-SPEC | Quick Start Guide for Consultants

Working with A-SPEC Councils and Authorities

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Prepared by GISSA

Introduction

This guide provides the essential steps for consultants working on projects that require A-SPEC compliant data submissions to councils and authorities (asset owner). Following these steps ensures smooth project delivery and acceptance of As Constructed Data at Practical Completion.

TYPICAL PROJECT TIMELINE
Planning Phase: Ideally at the project assessment phase or as agreed with asset owner before construction. **Steps 1-7:** Confirm requirements, register, complete checklist, arrange training
Construction Phase: Throughout construction
Step 8: Collect data progressively as assets are installed or as agreed to.
Submission Phase: At Practical Completion **Steps 9-10:** Validate and submit final package
CRITICAL: Start A-SPEC planning early. Waiting until construction ends creates delays.

Planning Phase

Complete Steps 1-7 during project planning, before construction begins

Step 1: Confirm A-SPEC Requirement

Verify with the asset owner that an A-SPEC data submission is required for your project. Confirm writing if included in your Development Conditions, your contract or engagement letter part.

Step 2: Register for A-SPEC Access

If this is your first time working with A-SPEC:

- Go to www.a-specstandards.com.au and complete the Contact form
- Sign the non-disclosure agreement (NDA) with GISSA International
- Allow 3-5 business days for access approval and credentials

If you already have A-SPEC access:

- Log in to www.a-specstandards.com.au
- Search for Members List
- Locate your asset owner on the list to identify which specifications they subscribe to

> **Note**: First-time users will need to sign a non-disclosure agreement (NDA) with GISSA International.

Step 3: Confirm Which Specifications Apply

Determine which specifications your project requires. Projects may require multiple specifications (e.g., subdivision projects typically require R-Spec, D-Spec, and O-Spec):

- B-Spec for buildings
- D-Spec for drainage
- O-Spec for open space
- R-Spec for roads
- S-Spec for wastewater
- W-Spec for water

Step 4: Confirm Data Validation System

Confirm with the asset owner which data validation system they use. This determines where you'll submit data for validation in Step 9.

- GDV Hub – SaaS – self-service kiosk online validation portal
- ACDC – As Constructed Design Certification portal
- Other - Proprietary validation system (confirm access requirements)

Step 5: Determine Coordinate System

Confirm with the asset owner:

- The required Projection as an EPSG code (e.g., 7855 for MGA 2020 Zone 55)
- The vertical datum (typically in Australia AHD - Australian Height Datum)

Note: The EPSG code defines the coordinate reference system required for spatial accuracy. Using the wrong coordinate system will cause validation failures.

Step 6: Complete Asset Deliverables Checklist

During project planning (not at submission time), complete the A-SPEC Asset Deliverables Checklist with the asset owner to agree on what asset data will be delivered at Practical Completion.

To access the checklist:

- Go to www.a-specstandards.com.au → Resources
- Download the latest Asset and Asset Data Handover Checklist
- Complete with the asset owner during project kickoff meeting

The completed checklist defines:

- Which asset types must have data submitted

Tip: Use the Pre-Handover Asset Data Confirmation Checklist tool (also in Resources page) to identify specific sections and technical requirements for each asset type. This tool helps you understand what data fields and validation rules apply to your specific assets and will assist in costing accordingly for the data capture.

Step 7: Arrange Training (if needed)

Training is recommended for first-time A-SPEC users or complex projects involving multiple asset types. Contact the asset owner or GISSA International for training on:

- A-SPEC data capture methods
- Data creation and validation
- GDV Hub or other validation portal usage

Construction Phase (During Construction)

Collect data progressively throughout construction by arrangement between the parties involved in the project as once the project is completed may not be able to verify all details. For example the contractor installing the asset will be aware of what work has been carried out so will be able to record specific details that cannot be captured post completion.

Step 8: Collect As-Constructed Data

Capture asset data according to A-SPEC requirements during construction. Record asset locations before backfill where applicable, or use agreed methodology.

Critical requirements for underground assets:

- Record asset locations BEFORE backfill (pipes, conduits, underground structures)
- Use agreed and appropriate survey methodology (e.g. GPS, total station, laser scanning)
- Document any deviations from design drawings
- Capture tolerance measurements showing variations from design (required for Tolerance Report in Step 10)

Data collection best practices:

- Assign clear responsibility for data collection to specific team members
- Integrate data capture into daily site activities and QA processes
- Verify data accuracy immediately while construction is fresh
- Store data securely with regular backups
- Review captured data in accordance with project timeline to identify gaps early

Submission Phase (At Practical Completion)

Allow sufficient time for validation iterations - validation rarely passes on first submission

Step 9: Validate Data via GDV Hub or Asset Owner's Validation Portal

Submit your data through the asset owner's validation portal confirmed in Step 4 or by other means. Validation is an iterative process - expect to make corrections and resubmit multiple times.

Accepted file formats (varies by validation system):

- Esri Shapefiles - Must include ALL 4 components: .shp (geometry), .shx (index), .dbf (attributes), .prj (projection)
- MIF/MID files - MapInfo format
- GeoPackage (.gpkg) - Check if supported by your validation system

Common validation errors:

- Missing required attributes or incomplete records
- Geometry type mismatches (e.g., point submitted for line asset)
- Coordinate system errors (wrong EPSG code or missing .prj file)
- Invalid dropdown values (values not in lookup tables)
- Topology errors (overlapping features, gaps, dangles)

If validation fails repeatedly:

- Contact the asset owner's GIS/Asset Management team for clarification on specific requirements
- Request technical support from GISSA International
- Review the relevant specification documents for the failing asset types
- Consider additional training if multiple asset types are failing

> ⚠️ **Warning**: Missing the .prj file from shapefiles is the most common validation failure. Always verify all 4 shapefile components are present before submission.

Step 10: Submit Final Package

Once data validation passes successfully, prepare and submit the complete final package to the asset owner.

Required deliverables:

- Validated data files (Esri Shapefiles/MIF-MID/Geopackage)
- Completed A-SPEC Certification Form (CSV available on the A-SPEC website)
- Tolerance Report showing variations from design (found as part of each specification)

File naming and organization:

- Follow asset owner's file naming conventions (confirmed in Step 6)
- Organize files in agreed folder structure
- Include README file listing all submitted files and versions
- Zip files if required by asset owner submission process

Pre-Construction Checklist

Use this checklist to verify all planning steps are complete before construction begins. All items should be checked before mobilizing to site.

PRE-CONSTRUCTION VERIFICATION
☐ A-SPEC requirement confirmed with asset owner in writing
☐ A-SPEC access credentials obtained (or NDA signed and pending)
☐ Applicable specifications identified and confirmed (D-Spec, R-Spec, etc.)
☐ Validation system confirmed (GDV Hub, ACDC, or other platform)
☐ Coordinate system confirmed (EPSG code and vertical datum documented)
☐ Asset Deliverables Checklist completed with asset owner
☐ Training completed (if required for team members)
☐ Data collection methodology agreed and documented (internally)
☐ Data collection responsibilities assigned to specific team members
☐ Backup and data storage procedures established
☐ Template files created for data capture (if applicable)
☐ Sample Data Template downloaded from A-SPEC website (via your login.)

Key Points to Remember

- Complete the Asset Data deliverable checklist during project planning, not at submission.
- Submit A-SPEC compliant As Constructed Data at Practical Completion.
- Data must pass A-SPEC validation before progressing to the Defects Liability Period.
- Data must accurately reflect as-built conditions.
- The asset owner may reject Data that doesn't comply with A-SPEC requirements.

For More Information

Resource	Contact
A-SPEC Website	www.a-specstandards.com.au
GISSA International Email	info@gissa.com.au
GISSA International Phone	(03) 9877 6972
Technical Support	Available through the asset owner or GISSA International