

## Open Spatial's ACDC delivers rapid data management to South Australia Water



### CUSTOMER

#### South Australia Water

South Australia Water maintains and operates 10 metropolitan reservoirs and delivers water and sewer services to a range of cities including Keith, Victor Harbor, Port Lincoln and Streaky Bay. SA Water also looks after a vast network of water and sewer pipes, plumping stations, treatment plants, reservoirs and tanks.

### CHALLENGES

- Capturing accurate digital asset data at the source rather than manually extracting data from paper plans
- Automating the submission, validation and processing of As-Constructed data
- Ensuring data quality and consistency
- Reducing the time and resources required to create asset data

### INNOVATIONS/RESULTS

- A five-fold time savings in managing water data
- ACDC portal runs on a cutting-edge platform allowing 24/7 online data validation and cloud-based convenience
- Automated checking of As-Constructed data against SA Water's organizational standards
- The ACDC portal automatically validates all As-Constructed submissions and provides instant feedback to engineers and consultants
- Only fully validated As-Constructed data is allowed to pass through the portal to the city's asset department
- Drawing tools, templates and documents are readily available from the ACDC Portal
- Asset data is automatically transformed for loading into GIS and AMS systems

### SOLUTION



South Australia Water processes information from construction documents five to ten times faster using Open Spatial's As-Constructed Design Certification (ACDC) software and online portal. ACDC delivers automated assessment of data submitted to SA Water, and streamlines an essential business function for the organization delivering water services to 1.7 million South Australians.

SA Water initiated a pilot project six years ago using ACDC to automate the capture, validation and submittal of construction data related to water and sewer infrastructure. The pilot program offered an end-to-end solution and affordable option for developers and contractors working with SA Water via ACDC's As-Constructed Portal service, which accommodates multiple users at once and is available 24/7.

Pilot results for ACDC showed a five-fold time savings in managing water data by transforming a 90-minute manual process into

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an automated assessment taking less than 19 minutes. Likewise, a 10-fold improvement in managing sewer data was noted, with a 90-minute process again taking less than 19 minutes. The pilot program also demonstrated improvement in spatial accuracy and supported ACDC's efficient validation of design information stored in As-Constructed drawings and converted to GIS and Asset Management Systems.

SA Water began using ACDC in 2016, using both the As-Constructed portal and ACDC desktop tool and instating its own organizational standard. With ACDC, data quality is checked against organizational and industry standards, such as A-SPEC.

"We are seeing the benefits of ACDC's portal and the rapid response it offers. It removes the manual checking and back and forth between developers and consultants," said Alex Militch, GIS

Specialist with SA Water. Militch added that ACDC's validation features provide incentive for consultants to submit documents with complete and accurate information.

A key innovation with ACDC is the application of tools to pre-validate construction information before submittal to SA Water, and the availability of enhanced validation techniques to include location, geometry and topology to ensure accurate information. ACDC manages submitted data and confirms its quality against a comprehensive data standard that increases focus on the information captured early in the process, during the design and drafting phase. This in turn, revolutionizes the quality and depth of data needed at the end of the process during the automated assessment phase.

For SA Water, the migration to ACDC ensures high quality data capture of water and wastewater assets including more than \$6 billion in SA Water infrastructure including pipelines, plumping stations, treatment plants, reservoirs and tanks.

## ACDC is one of the digital improvements we implemented, and five years later we have refined the process, saved time and improved data quality

As part of its overall digital transformation program, SA Water began using ACDC as an investment in its commitment to use technology to enhance services and productivity. "SA Water works to invest in capital and IT infrastructure to meet our basic regulated responsibilities and drive efficiency in the way we do things," said Andrew Murray, Senior IT Business Analyst with SA Water. "ACDC is one of the digital improvements we implemented, and five years later we have refined the process, saved time and improved data quality."

## Open Spatial Geospatial Suite

Open Spatial provides geospatial engineering solutions for managing spatial data from survey through design, construction and data management. Our technologies are based on risk averse ubiquitous platforms that bridge the gap between CAD, GIS, BIM and asset management applications. Utilizing open standards and engineering best practices, we deliver fit-for-purpose solutions with a focus on productivity improvements, definable return on investment and long-term savings.



Edit in AutoCAD Map, Civil 3D, store data in single database; Multi-users, off-the-shelf applications and data models



Web-based, geospatial portal and business intelligences integration platform



Automate the validation and loading of data from electronic submittals of as-builts directly into GIS and CMMS

## Validate and Automate Electronic Design Submittals

With ACDC you can easily validate and transform design information stored in "As-Constructed" drawings to GIS and Enterprise Asset Management information without capturing the data.

ACDC manages submitted data, validates its quality against organizational and industry standards and transforms it into geospatial and asset management information which can be automatically loaded into GIS and CMMS/AMS systems with minimum disruption to current workflows.

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