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National Asset Management Strategy Australia



Institute of
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BUSINESS CASE

Resource Pack

(September 2009)

PURPOSE OF THIS DOCUMENT

This document has been produced for Councils and other Agencies intending to become subscribers to the ADAC (Asset Design & As Constructed) program. The material provides:

- background information on the project;
- a summary of expected benefits;
- explanatory processes; and
- details on joining the program.

Councils or Authorities intending to subscribe and become an ADAC member are invited to use this material in the development of a Business Case highlighting the benefits of the investment in this project to their organisations. The ADAC Mission, Vision and Value Chain noted below provide further context to the program:

ADAC Mission

To provide a framework for the efficient, effective and standardised capture, transfer, delivery and use of Public Works Civil Engineering asset data.

ADAC Vision

To be the national standard for the delivery of Public Works Civil Engineering asset data.

ADAC Value Chain

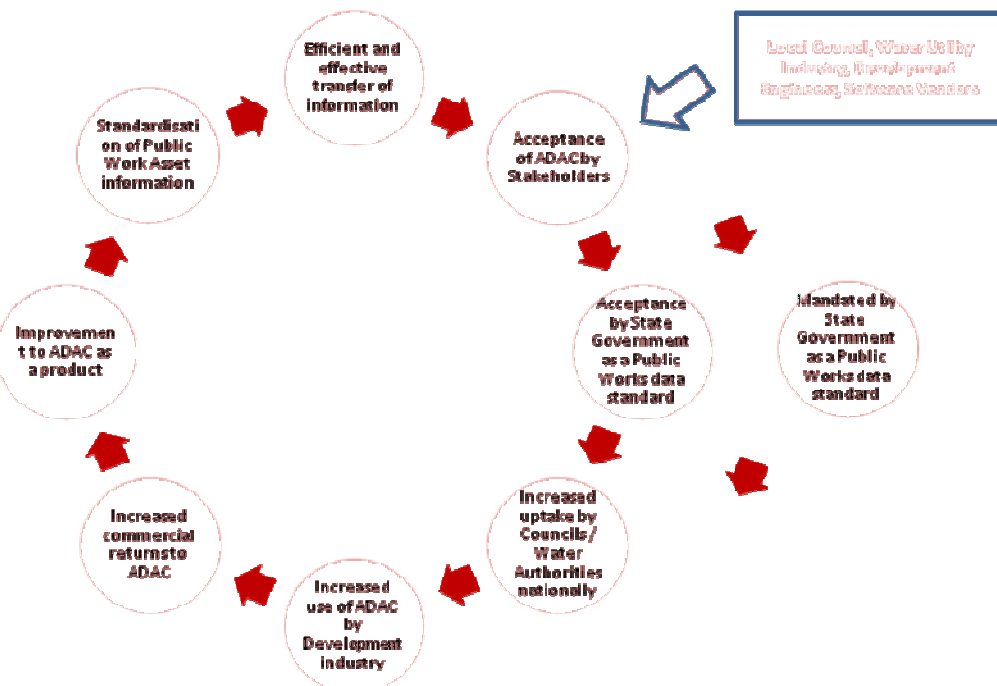


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1 OVERVIEW

The ADAC (Asset Design & As Constructed) project was initiated in 2001 and supports the efficient transfer of “As Constructed” asset information from the development industry to councils. The process is designed to capture detailed data on new civil infrastructure assets including water, sewerage, drainage, roads, open space assets and storm water quality improvement devices as well as survey-accurate cadastral information¹.

The project, originally conceived and operated by a number of member councils in South East Queensland under a regional collaboration model, has continued to grow in scale and maturity. The ADAC project is linked with the IPWEA Queensland Division and IPWEA-NAMS to facilitate further expansion of the ADAC product at a national level and is being rolled out using a subscriber-based business model.

Historically, purpose-built ADAC software, developed by the project consortium for the capture and recording of asset information, has been distributed at no charge via the ADAC website to the various customers of councils (consulting engineers and surveyors for their exclusive use). With the increasing take-up of the process, commercial providers of CAD and other software tools are now choosing to include the functionality for capturing and reporting ADAC-compliant asset data within their mainstream products for the convenience of their customers.

The ADAC process offers substantial benefits to all stakeholders involved in the “As Constructed” process chain. Land Developers’ Consultants that are responsible for preparing “As Con” plans and providing asset information on new urban developments now have a consistent approach when recording this information and supplying it to any ADAC participating councils.

Subscriber Councils will also have access to a variety of tools, knowledge and experience that can provide significant business advancements for the data capture process. Councils that receive ADAC compliant files benefit from notable improvements in the quality and structure of this critical asset data and can also gain significant resource savings associated with all interrelated business processes.

¹ Open space (Parks) assets and stormwater quality improvement devices (SQUIDS) assets are additions to the most recent version of the standard.

With the support of the IPWEAQ, the affiliated state branches and the IPWEA NAMS group, the ADAC process is to be maintained nationally via a user subscription model. This subscription model has been developed to cover the costs of ongoing maintenance of the standard and provision of ongoing support to member councils, with further investment directed towards refinements of the technical processes and related asset management initiatives. Recently, a second “associate” tier of membership has been included which allows access to tools and user fora, but without a direct role in governance or technical management. ADAC sits under Engicom – IPWEAQ’s engineering and technical hub.

“Core” subscribing councils have access to ongoing process benefits and savings along with provision of supporting services. Subscribing councils will also be able to provide input into regular updates of the ADAC asset data models, allowing continual alignment with contemporary asset management needs. This business model will underpin the provision of ADAC processes into the future on a national level, providing a level of certainty that the ongoing benefits are maintained in the interests of all stakeholders.

1.1 BUSINESS NEED

Councils are responsible for the planning and management of a broad range of public assets including roads, footpaths, stormwater systems, parks and all manner of associated furniture and improvements. In some states, councils may also be responsible for the planning and management of public water and sewerage systems.

The vast majority of these important assets are “contributed or donated” to councils via the land development process as a part of new sub-divisions. Councils, even those with low to moderate levels of growth, can potentially receive many millions of dollars of new assets annually.

As the long-term custodian on behalf of our communities, councils are required to accurately record and value the new assets, capturing and maintaining all relevant information. They are then expected to continue to manage and rehabilitate these assets in the most cost-effective way into the future.

Historically, hardcopy ‘As Constructed’ plans are submitted to local authorities at the completion of each major stage of a development. The collection of asset data on this new civil infrastructure is then actioned through scrutiny of the supplied plans. This approach is recognised as both time consuming and potentially prone to errors.

The ADAC process allows for all relevant details associated with the donated assets to be captured accurately and consistently. The capture process is undertaken according to a predefined asset data model during creation of the “As Constructed” plans. The information is provided to councils in digital form and can be used to create relevant GIS layers and support the automated population of other backend systems, including asset management databases.

The digital format enables rapid valuation of assets and computerised checking of the supplied information against any predefined rules, saving time and money. The information can then be used in the development of necessary operations, maintenance and renewal plans along with cash flows identified for budgeting forecasts. The ADAC process can also be applied to internal capital works where the scale of works or expenditure thresholds necessitates the provision of “As Constructed” information.

The ADAC process can be implemented partially or completely, depending on the needs and maturity of the organisation. There is no need to change or upgrade existing information systems and

implementation can be staged to gain specific benefits and ease any impact on existing associated processes.

It is also noted that ADAC processes and systems apply equally well to larger utility organisations, including regional or state water authorities.

1.2 TYPICAL BENEFITS

Through subscription and with the effective implementation of adopted parts of the process, ADAC can provide the following benefits to a receiving organisation such as a council or utility:

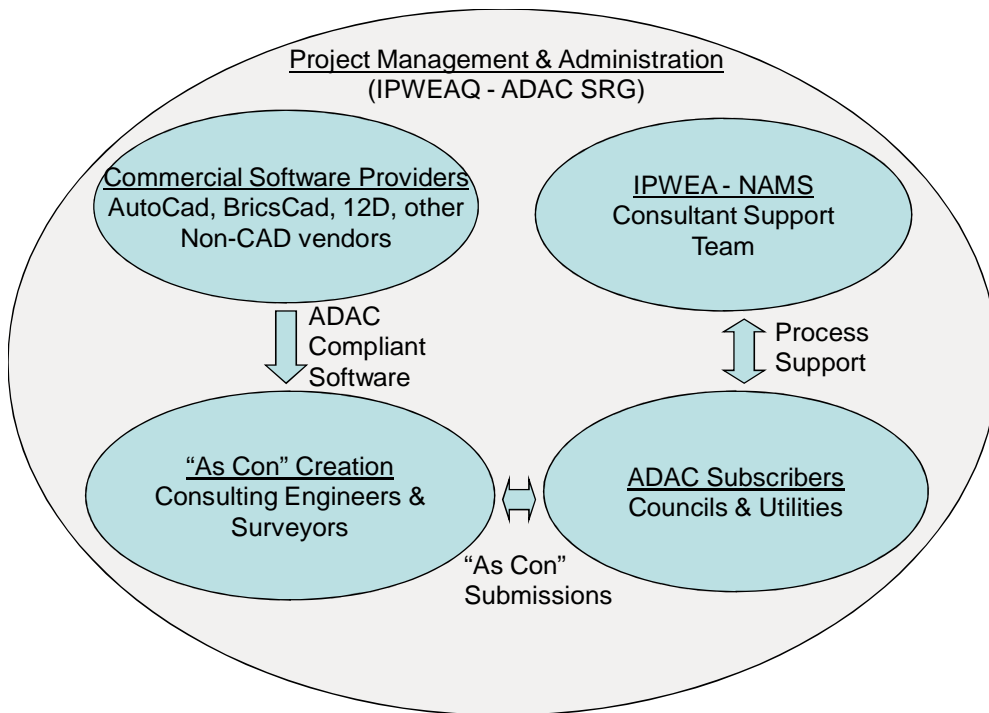
- Significant time and resource savings in the processing of “As Constructed” data;
- Improved consistency and accuracy of detailed asset data provided to council;
- Ability to perform “rule-based” quality control checks on the supplied asset data ensuring completeness and integrity;
- Capability for automated uploading of asset data to GIS, asset management databases and other tools;
- Transparency of asset registration and valuation processes, resulting in improved corporate governance;
- Capacity to reconcile individual donated trunk assets with infrastructure agreements;
- Potential to “round-trip” asset data and related information to external customers in a consistent format;
- Access to a network of other ADAC user councils and forums that can provide support in leveraging and value-adding to asset registration processes and other associated asset management activities;
- A framework allowing relevant software vendors to understand and support the immediate and practical needs of their users;

2 BUSINESS OPERATIONS MODEL

The expansion of the program has seen a revised business operations model divided into three distinct parts:

- Software Vendors – provision of commercial tools;
- IPWEAQ (IPWEA-NAMS) – general administration and project coordination (customer support);
- Member Councils – ADAC subscribers and beneficiaries.

The following graphic represents the relationships of these three parts of the business operations model and the relationship with the “As Con” suppliers.



2.1 SOFTWARE VENDORS - ACTIVITIES AND SUPPORT

Commercial Software Vendors (e.g. CAD, GIS, Survey) are participating in the ADAC process by developing and supporting integrated tools that are capable of capturing and displaying ADAC specific data and outputting ADAC compliant files.

Vendors will continue to have access to the most current ADAC data model and associated information to allow them to further develop these products. The V4 XML schema was released to vendors in late July 09, and we expect commitments to be firmed up in September. Direct communications for vendors is provided via Project Management and Administration (below) to ensure they are kept up to date with proposed changes in the standard and any other industry requirements.

2.2 PROJECT MANAGEMENT, SUPPORT & ADMINISTRATION

This role is responsible for the management of subscriptions from ADAC subscriber councils, review and updating of the ADAC data model, software vendor liaison and process support.

Governance, project management and administration of the ADAC program is coordinated by the IPWEAQ (Institute of Public Works Engineering Australia – Queensland Division) in conjunction with a Strategic Reference Group (SRG) of member council representatives. This relationship operates under a Memorandum of Understanding (MOU) covering the relevant aspects of this relationship. At a state and regional level, affiliated bodies of the IPWEA will provide contact points for their local council subscribers.

Subscriber support is provided via the IPWEA-NAMS Consulting support group. A number of this group of industry specialists has received training on the overall ADAC project and are familiar with the necessary policy, process and technical requirements to be addressed by subscriber councils. Members of this group will be attending a briefing on 11 September 09, along with interested authorities.

Where detailed technical support is required, subscribing Councils will be referred to a choice of specialist support agencies affiliated with IPWEA-NAMS that have been trained and are best positioned to address their specific needs.

2.3 MEMBER COUNCILS

Local Authorities (councils) and Utilities that join the program become acknowledged as a Core or Associate “ADAC Participating Organisation”, allowing direct access to the ADAC standard and the other support services offered, to different degrees. A once-off initial joining fee is payable in the first year for Core subscriber, followed by an annual subscription that recognises and maintains the organisation’s access to ongoing benefits and standing as an ADAC affiliated Member Council. Associate subscribers pay only an annual fee. Annual fees are pro-rata’d.

Pricing (ex GST) for the 2009/2010 financial year is as follows:

Core membership

Small council – (up to 40,000 pop) - \$3,000 joining fee, \$1,000 annual fee

Medium council – (40,001 to 100,000 pop) - \$10,000 joining fee, \$3,000 annual fee

Large council – (100,001 +) - \$15,000 joining fee, \$6,000 annual fee.

Associate membership (annual only)

Small council - \$500

Medium council - \$1,000

Large council - \$2,000

Membership for other organisations will follow a similar structure, but given the diversity of business models, firm pricing is still to be set.

3 BENEFITS

Successful implementation of the ADAC process provides benefits at multiple levels within a typical council or utility. The possible gains or savings achievable are quite broad and only limited by the subscriber organisation’s ability to leverage off the ADAC framework of systems and support. Some typical examples have been provided below.

3.1 RESOURCES AND COSTS

The regular process of interrogation and deconstruction of “as constructed” plans to capture and record asset data is extremely time consuming. Potential for significant labour savings exists with the effective introduction of the ADAC process.

The actual resources or cost savings will depend on the quantity of “as constructed” plans being routinely processed however electronic registration can potentially do away with the inputting of asset data.

- “Automatic Load” routines can transfer data from ADAC electronic file format to Spreadsheets, Databases, GIS, Asset Management and Financial Systems in a streamlined and repeatable manner saving time and FTEs depending on the amount of incoming information at a particular organisation.
- “Pass/Fail” tests can be simply run on the ADAC data allowing quick turnarounds if there is any missing or incorrect information detected.

3.2 IMPROVEMENTS IN DATA QUALITY

- Data can be tested against allowable ranges, explicit values or mandatory requirements. These domains can be built into an organisations “back-end systems” and supported by business rules unique to any particular business.
- With a structured framework provided via the ADAC data model at the capture stage, consistency and accuracy of information is markedly improved mitigating consequent risks within the receiving organisation.

3.3 FINANCIAL CONSIDERATIONS

- The asset valuation can be automated and simplified. By applying basic costing models to the ADAC data, component values and aggregated costs can be quickly calculated.

- Financial registration processes are transparent and auditable, resulting in improved corporate governance.

3.4 RECONCILIATION OF ASSETS WITH OTHER SYSTEMS

Specific assets donated as a requirement of infrastructure agreements or other arrangements can be easily identified and reconciled.

- Specified trunk infrastructure provided along with other infill assets can be marked accordingly during the creation of “As Constructed” plans using the ADAC tool. This allows easy and automated recognition of these assets with any relevant agreements.
- Processing of Bonds on specified works can be reconciled to parent assets.
- Private infrastructure can be noted accordingly reducing risks to both council and owner.

3.5 BENEFITS FOR PROVIDERS OF “AS CONSTRUCTED” DATA

The ADAC process has benefits for those supplying “As Constructed” plans to councils and utilities.

- The integration of the ADAC process with commercial industry tools allows a professional and consistent process to be developed, assisting workflows and generating efficiencies for those generating “As Constructed” plans.
- Technical support for ADAC users is available via the normal help-desk channels provided by product vendors.

3.6 OTHER RISK MANAGEMENT BENEFITS

- Auditing is both simple and transparent, providing a better understanding of the donated and capital works management process. This results in a reduction in the concerns surrounding asset registration and valuation from an audit perspective.

- Data risks are minimised, potentially avoiding costly mistakes.

4 JOINING UP TO ADAC

4.1 STEPS IN THE PROCESS

- Councils and other Agencies who decide to join the ADAC group will register as a subscribing council with the IPWEAQ. Contact info@ipweaq.asn.au for further information.
- The ADAC web site is presently undergoing a significant revision with publication expected in late 2009. IPWEAQ has also commissioned the production of several new support resources for subscribers, to be available late 2009.