

## The team behind the Avanti approach helps Thames Water Utilities Limited to verify their processes and procedures prior to project implementation



### Why Avanti?

Thames Water Utilities Limited (TWUL) run a centrally-located multi-skilled engineering team operating a £3.2 million asset management plan over a five year, OFWAT regulated, project period. The company operates with eight partners - consultants and contractors - in a flexible, project-based business model.

TWUL first became aware of the Avanti approach in November 2004. At that time the company was confronted with a number of issues in respect of the control of their design and project delivery processes, the most notably being: resource management; and control of the quality and consistency of information.

As part of an initiative to help address these issues, TWUL's information standards were being re-written to encompass all site information, and including the introduction of wider ranging CAD standards to achieve better quality and consistency of design output. In parallel, TWUL were considering the benefits of exchanging 'live' documents – in other words sharing of the information within otherwise static documents. Finally, TWUL was keen to promote best practice in information sharing and collaboration through use of an 'open' set of documents and standards.

TWUL's objectives were very much aligned with the aims of the team behind the Avanti approach. A decision was made within TWUL to implement the Avanti approach as part of their initiative, adopting a multi-stage approach.

### First stage process: Verification of Thames Water's standards.

Before embarking on full 'implementation' of the Avanti approach, it was agreed that TWUL's existing processes should be assessed for consistency with the principles of the Avanti approach.

The assessment was extremely detailed and, as a result, took place over a six month period commencing April 2005. The assessment is the subject of this case study. Two reviews were undertaken as part of the verification exercise:

- Seventeen TWUL process documents plus a further five documents describing their 'Engineering Capital Projects Delivery Process' were reviewed and assessed in relation to the Avanti 'Design Management Procedure'.
- The 114-page TWUL 'Standard Practice Document A14' was verified against Avanti 'Standard Method and Protocol' document.

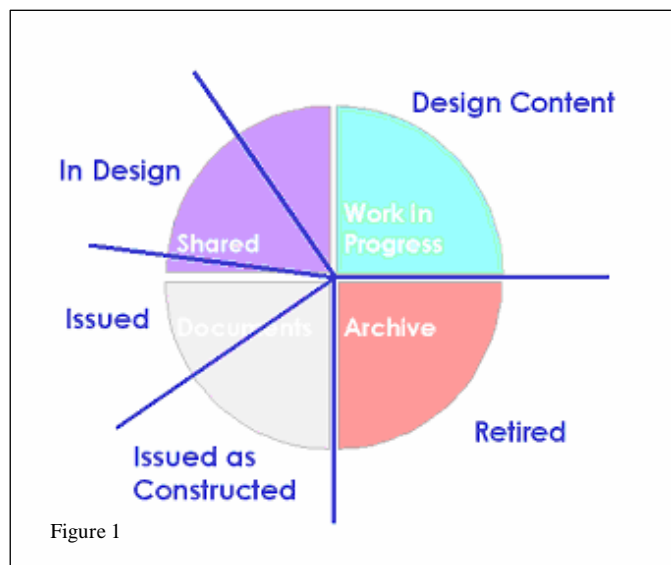
Thames Water Utilities Ltd has a number of well-defined aims:

- To create a consistent, single and quality-controlled information repository.
- To provide design teams with more confidence in the information they use.
- To gain the opportunity to contain costs and timescales within stringent constraints.

The purpose of these reviews was to verify: (a) TWUL's management processes, roles and responsibilities; and (b) the company's standards and protocols for collaborative working - both against the principles of the Avanti approach. The reviews aimed to show where there was a 'fit' with Avanti principles, or where there was 'no fit' - and whether that fit should be achieved now or at some future stage.

Overall the verification exercise assessed the current state of play as well as providing an indication of how to migrate effectively from a drawing-centric approach (as common in TWUL at that time) to a data-centric approach (as promoted within the Avanti approach).

Overall, TWUL's processes and procedures, although sometimes different in detail, showed little deviation in practice from the principles of Avanti. Figure 1 shows the stages of the TWUL information and document management process overlaid on the generic Avanti approach.



Following the review process, TWUL are faced with decisions about to what degree they adapt their existing processes and standards and to what extent they adopt the generic approaches described in the Avanti toolkit documentation. One of the features of the Avanti approach is that it is the **principles** which are more important than the specific solution: commonality of procedures and standards is essential whilst the solution can be adapted to suit the needs and capabilities of the organisations involved. This allows TWUL to undertake a combination of adaptation of existing practices and adoption of new ones. It was agreed that before final decisions are made, audits of TWUL's regional offices would be undertaken.

### What happens next?

Following the conclusion of the verification exercise, and before TWUL move into full implementation of a standard collaborative working approach, audits are being undertaken of individual TWUL sites and offices, identifying particular areas of strength and areas for improvement. This is being achieved through a programme of workshops led by the team behind the Avanti approach. Workshops are being organised around TWUL's four geographical locations, represented by offices at Esher, Hampton, Maple Lodge and Reading. TWUL's CAD Managers and Design Managers will attend the workshop, along with the framework partner equivalents. TWUL's framework partners have agreed, in principle, to adopt a collaborative working procedure based on the generic Avanti approach.

Senior Managers within TWUL want the organisation to be recognised as an informed construction client and a leader in the movement to more effective collaborative working. They are seeking out individuals within their regional offices and their project partners to act as Champions to promote collaborative working and the cross-fertilisation of best practices. This will include the sharing of practice across TWUL and with other organisations adopting the Avanti approach.

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## About Avanti

Avanti is an approach to collaborative working on projects that enables construction partners to work together effectively. The principles of collaborative working the Avanti way are early access to all project information by all partners, early involvement of the supply chain, and sharing of project information, drawings and schedules, in an agreed and consistent manner. The Avanti approach is supported by handbooks, toolkits and on-site mentoring.

Avanti focuses on people and processes, mobilising existing enabling technologies. Team working and access to a common information model are at the heart of the Avanti approach to a project's whole life cycle.

Using the Avanti approach improves business performance by increasing quality of information and predictability of outcomes and by reducing risk and waste.

The Avanti approach is led by a team of industry practitioners and managed by a construction industry consortium. It is supported by DTI, Constructing Excellence in the Built Environment, BuildingSmart and Teamwork.

## Acknowledgements

Thames Water Utilities Limited

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