

CABINET - SUBJECTS FOR CONSIDERATION, 22 SEPTEMBER 2008 11:00 AM

Not relevant




1 New Initiatives/Policy Matters

Not relevant



106 MWSCS08/084 Minister for Water Security's and the Treasurer's Item
(Karlene Maywald and Kevin Foley)
**APPROVED AS AMENDED (NEW
RECOMMENDATIONS)**

Not relevant



TO: THE PREMIER FOR CABINET

RE: ADELAIDE DESALINATION PROJECT (ADP)

APPROVAL FOR ADDITIONAL EXPENDITURE FOR PROJECT DEVELOPMENT FUNDING

1 PURPOSE

- 1.1 To seek Cabinet approval of the Accelerated Milestones for the delivery of the ADP noting that First Water Delivery milestone will be specified by SA Water to achieve a minimum of 15 Mega-litres per day (ML/d) (or 5 Gigalitres/annum capacity) of safe and treated drinking water by December 2010;
- 1.2 For Cabinet to note the initiatives to achieve accelerated delivery of the ADP as noted in sections 3.10, 3.11, 3.12, 3.13 and 3.14 of this submission;
- 1.3 To seek Cabinet approval of the final short-list of three (3) Respondents resulting from the evaluation of the Expressions of Interest for the Design, Build, Operate and Maintain (DBOM) of the Desalination Plant and Marine Works for the ADP;
- 1.4 To seek Cabinet approval for SA Water to engage the final short-list of three (3) Respondents to undertake appropriate investigations (including marine geotechnical investigations), participate in an Early Contractor Involvement (ECI), to develop management plans, designs and to prepare formal submissions through extensive bidder interaction workshops and utilising a competitive process.
- 1.5 For Cabinet to note that through the ECI process and the RFP, SA Water will seek competitive bids for the Desalination Plant to be designed and built with intake and outfall infrastructure and other civil works that will in any event accommodate a capacity of 100 GL/annum (whether on first construction or by way of future expansion) and with alternative prices for:
 - a capacity of 50 GL/annum (with First Water achieved by December 2010, 50 GL/annum production capacity established by June 2011 and Project Handover by August 2011; or
 - an initial capacity of 50 GL/annum, (with First Water achieved by December 2010 and 50 GL/annum production established by June 2011) and a capacity on completion (by June 2012) of 75 GL/annum; or

- an initial capacity of 50 GL/annum, (with First Water achieved by December 2010 and 50 GL/annum production established by June 2011) and a capacity on completion (by June 2012) of 100 GL/annum.
- 1.6 For Cabinet to note the ongoing progress to secure Construction Power and Operational Power supply through ETSA Utilities (ETSA);
- 1.7 To seek Cabinet approval for SA Water to contract with ETSA (on a sole Supplier basis) to procure Construction Power and Operational Power Infrastructure, required for the accelerated delivery of the ADP;
- 1.8 To seek Cabinet approval for SA Water to:
- Acquire the *Northern Land at Port Stanvac* and any other required land, easements and access of land; and
 - Commence the required processes to secure land, easements and access of land through Exxon-Mobil, subject to ongoing advice by the Crown Solicitor's Office.
- 1.9 To note that SA Water, with the Minister's approval, may commence compulsory acquisition of the required land and interests in the land under the *Waterworks Act and Land Acquisition Act*;
- 1.10 To seek Cabinet approval for the Parliamentary Counsel to prepare legislation for introduction during the Spring 2008 session of Parliament for the following:
- 10 Legal professional privilege
- 1.11 For Cabinet to note that SA Water will continue to engage the team of existing specialist professional service providers and advisers for the Early Contractor Involvement process;
- 1.12 To seek Cabinet approval for additional project development funding of up to **\$100.2** million (excluding GST) which comprises the following major categories:

- Expenditure of **\$50.2** million to acquire land and easements at Port Stanvac. This also includes provisional amounts to secure land, easements and access for the Transfer pipeline system, ETSA power supply and other ADP associated requirements;
 - Expenditure of **\$20** million brought forward to undertake additional investigations, prepare detailed designs, plans and secure manufacturing positions for ETSA infrastructure; and
 - Expenditure of **\$30** million for acceleration including ECI process, bidder interactions and to commit manufacturing capacity for long-lead items. Note that this category includes a payment of \$2.5 million per bidder to participate in the DBOM ECI process, prepare detailed designs and plans and submit a conforming bid.
- 1.13 To seek Cabinet approval to authorise the Board of SA Water to undertake tendering and award any contracts (including authority to execute contract documents) for the additional project development funding of up to \$100.2 million (excluding GST) without referral back to Cabinet.
- 1.14 For Cabinet to note that this submission will have no additional impact on the General Government Net Operating Result or Net Lending Position. Additionally that there will be no CSO funding implications from this proposal.
- 1.15 For Cabinet to note that further approvals will be sought from Cabinet during October 2008 to March 2009. These submissions will also require Public Works Committee consideration;
- 1.16 For Cabinet to note that this submission does not require consideration by the Public Works Committee; and
- 1.17 For Cabinet to note that the above proposals have been endorsed by the Adelaide Desalination Project Steering Committee.

2 BACKGROUND

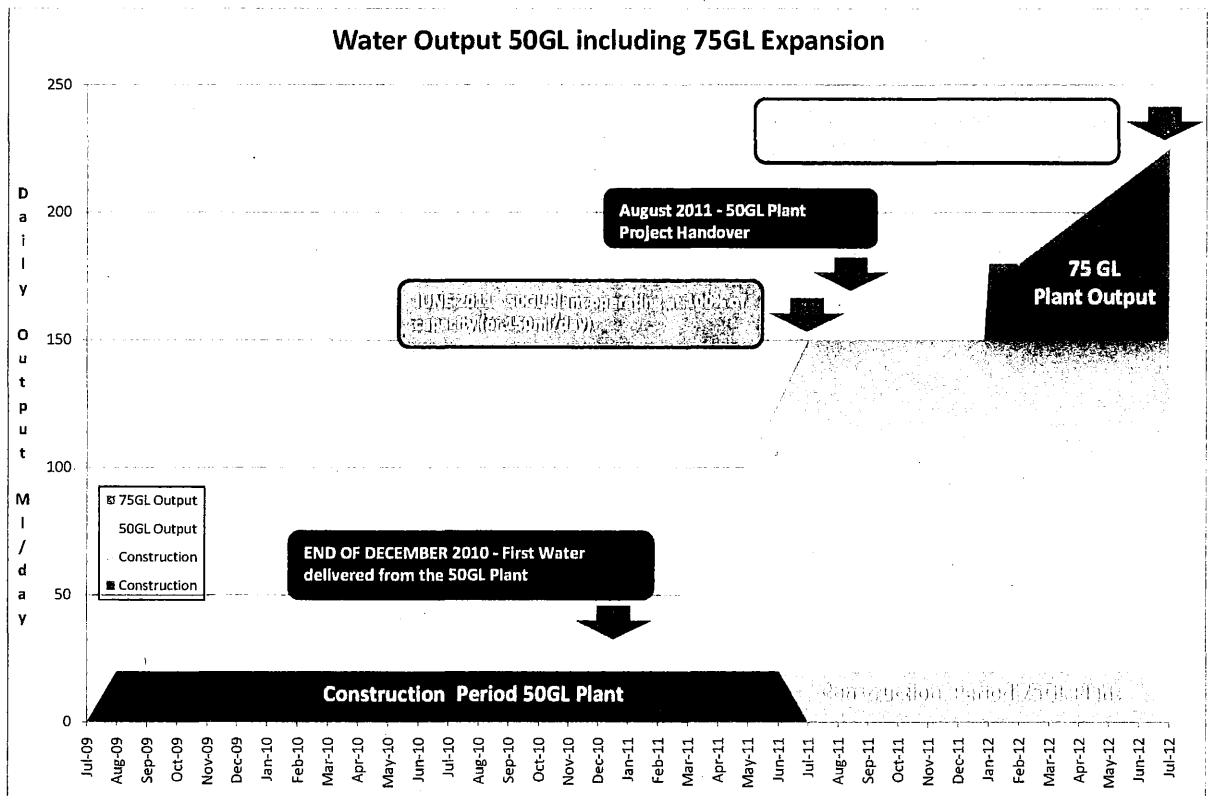
- 2.1 On 28 February 2008, Cabinet approved an expenditure of up to \$36.3 million by SA Water to undertake Preliminary Works and Activities for the ADP, and to adopt a Design, Build, Operate and Maintain (DBOM) procurement methodology for the ADP. Cabinet also authorised the Board of SA Water to call tenders and award contracts for the Preliminary Works and Activities (noted in section 3.1.2.4 of that submission).

- 2.2 In February 2008, Cabinet approved to set-up the Adelaide Desalination Project Steering Committee specifically to oversight on-time and on-budget delivery of the desalination project and to provide the Government with any related advice. The Committee is independently chaired by Mr Kevin Osborn and comprises the Under Treasurer and Chief Executives of SA Water, Department of Water, Land and Biodiversity Conservation, Department of Transport, Energy and Infrastructure and Department for Environment and Heritage.
- 2.3 On 16 June 2008, Cabinet approved for SA Water to procure the Transfer Pipeline System separately from the DBOM procurement for the Desalination Plant and marine works for the ADP. Cabinet also approved an open call Request for Proposal (RFP) process to short-list at least two (2) Contractors and use a competitive Early Contractor Involvement (ECI) process to develop detailed design and the guaranteed maximum price for the Transfer Pipeline System.
- 2.4 On 31 July 2008 Cabinet approved a number of critical water security measures and initiatives including:
- Proposals to accelerate the completion of the ADP by up to 12 months to achieve First Water Delivery by December 2010, noting that changes to project arrangements would be reviewed by the ADP Steering Committee;
 - Approved that acceleration of the ADP be achieved by accelerating the competitive DBOM process.
- The July 2008 Cabinet Submission included proposals for accelerating the competitive DBOM process by the short-listed Respondents undertaking Early Works comprising significant early design and development and securing formal commitments for critical long-lead manufactured components.
- 2.5 On 1st August 2008, the ADP Steering Committee endorsed the issue of Addendum 4 to SA Water's Request for Expressions of Interest for the DBOM. This Addendum 4 required implementation of an Early Contractor Involvement process to supplement the competitive DBOM procurement method. An extract of the relevant parts from the Addendum 4 is enclosed at **Attachment A**.
- 2.6 On 14th August 2008, SA Water received Responses from six (6) national and international consortia which included a risk based approach to early project completion subject to appropriate prerequisites or constraints.

3 DISCUSSION

Accelerated Project Milestones

- 3.1 In the original program, First Water Delivery (December 2011) milestone represented one Desalination Plant train ready and operational by December 2011 or nominally 10% plant capacity available.
- 3.2 As part of SA Water's Request for Expressions of Interest, Respondents for the Desalination Plant and Marine Works were asked identify opportunities for early project completion and any constraints or risks.
- 3.3 Based on these Responses, SA Water has assessed that First Water Delivery Milestone is that stage in the performance of the DBOM Contractor's activities when the Desalination Plant has delivered at least 15 ML/day (or 10% of the 50 GL/annum plant capacity) of Treated Water within a 24 hour period complying with Treated Water Specifications and can continue to do so, without interruption.
- 3.4 The diagram (on the next page) shows ADP First Water Delivery milestone and progressive increase to full capacity of 50 GL/annum by end June 2011. Thereafter any minor defects will be resolved, tests completed and certified by Independent Verifier to reach the Project Handover Milestone by end August 2011.
- 3.5 If the plant capacity is changed from 50 GL/annum to 75 GL/annum at the time of DBOM contract award (by March 2009), the First Water Delivery of at least 5 G/annum will be available by December 2010, in accordance with the diagram (below), however the ultimate capacity will only be available by end June 2012 and Project Handover (for the expanded capacity 75 GL/annum reached by end August 2012).



3.6 The following accelerated project completion milestones for the ADP are proposed:

Milestone	Previously approved by Cabinet in February 2008	Accelerated Milestone
Construction Contract Award (DBOM Contract)	End June 2009	End March 2009
First Water Delivery	End-December 2011	End-December 2010
Project Handover for Operations (this also includes the Practical Completion Milestone)	End-June 2012	End-August 2011

3.7 Subject to the above accelerated milestones, a 20-year Operation and Maintenance period will commence at the achievement of the Project Handover for Operations Milestone (end August 2011). This will include a 24-months Defects Liability period up to end August 2013.

3.8 If circumstances change or further information is gained as part of the next stage of the procurement process which suggests that the First Water Delivery Milestone is impractical or unnecessary Cabinet will be advised and approval for an alternative approach sought.

- 3.9 It is recommended that Cabinet approve the Accelerated Milestones for the delivery of the ADP noting that First Water Delivery milestone will be specified by SA Water to achieve a minimum of 15 ML/d (or 5 GL/annum capacity) of safe and treated drinking water.

Initiatives and requisites to achieve the Accelerated Delivery of ADP

- 3.10 To save up to 3 months in the procurement process for the ADP, the ADP Steering Committee endorsed in July 2008 a process for Early Contractor Involvement (ECI) to be supplemented to the competitive DBOM procurement method. SA Water issued, to the recipients of its Request for Expressions of Interest, an Addendum (refer extracts from Addendum 4 in **Attachment A**) notifying a change to the procurement processes. A much shorter bidding time was to be achieved with the short-listed Respondents whilst undertaking the following critical tasks:

- Design development to a high level suitable to undertake a program that will achieve early delivery upon DBOM Contract Award;
- Commercial submission with detailed pricing schedules (consistent with SA Water's requirements), and confirmation of risk allocations contained in the proposed contractual documents;
- Technical submission including information on design, effective design management, site, site access, compliance with SA Water's requirements, detailed program and assumptions used in developing the program;
- Additional information on preparation of detailed management plans, profit and overheads and details of risk management strategies and opportunities.

- 3.11 The Addendum 4 (refer **Attachment A**) also notified the Respondents that:

- SA Water would resource sufficiently to permit a high level of interaction with the Respondents;
- Each Respondent would receive a contribution to undertake design development to a nominated level and this will need to be undertaken concurrently with the development of the DBOM contract documentation by SA Water. This approach is consistent with those taken for the desalination projects in Western Australia and Sydney.

- 3.12 In the Responses received the DBOM, Respondents identified a number of critical long-lead items. These include tunnel boring machines, high pressure pumps, special materials, high voltage switchgear and transformers. In order to meet the accelerated construction and completion program, the manufacturing capacity for these long-lead items will need to be committed by the short-listed Respondents during November and December 2008. As the short-listed Respondents will be making these commitments, the unsuccessful Respondents will have to bear pre-agreed cancellation costs, although this is still to be negotiated;
- 3.13 As part of the Respondent interviews (and in response to specific queries raised by the short-listed Respondents on the quantum of contribution that SA Water was prepared to make) SA Water has indicated that, subject to Government approvals, SA Water was prepared to consider a maximum contribution (capped at \$2.5 million, per bidder) and subject to receipt of a conforming bid which will include detailed designs, management plans and appropriate cancellation costs for long-lead items (for the unsuccessful Respondents);
- 3.14 The acceleration of the ADP procurement requires the Transfer Pipeline System to be brought forward which requires certain additional tasks to be undertaken as part of the early contractor engagement process with the short-listed Proponents (for the Transfer Pipeline System). These tasks include:
- Design work to confirm the likely sizes of key components so that early market engagement for appropriate sizes of large pumps, motors, variable speed drives, transformers, electrical switchgear, pipes and pipe fittings can be undertaken and manufacturing capacity for any long-lead items committed;
 - Identification and acquisition of easements along the preferred pipeline route (which may also include easements required on land owned by Exxon-Mobil, the Glenthorn Farm which is owned by the University of Adelaide and other essential land packages).
- 3.15 **It is recommended that Cabinet note the initiatives to achieve accelerated delivery of the ADP as noted in sections 3.10, 3.11, 3.12, 3.13 and 3.14 of this submission.**

Shortlist of Respondents arising from the Evaluation of EOIs for the ADP DBOM Scope

- 3.16 The Cabinet approval of 28th February 2008 authorised SA Water to call tenders and undertake bid evaluations to short-list contractors / consortia for the main plant;

- 3.17 On 4th July 2008, SA Water issued an open call with a Request for Expressions of Interest (EOI) for the DBOM scope. The submission closing date was 14th August 2008. The EOI Evaluation was carried out using an approved Evaluation Plan;
- 3.18 Following initial evaluation of six (6) submissions, a confidential briefing was provided to the ADP Steering Committee at its meeting on the 1st September 2008 setting out a recommended short-list of two (2) Respondents but noting the gap to the third Respondent was small;
- 3.19 At that meeting the ADP Steering Committee was informed that the top two (2) Respondents (with the highest overall scores) each had a consortium member with a related parent entity (Leighton Holdings). Whilst this possibility was contemplated in SA Water's Request for EOI and there was a requirement for such a situation to be dealt-with by a Process and Probity Deed, ADP Steering Committee felt there would be an unacceptable risk of compromise to the competitive process from restricting competition to a pair of related companies. At that meeting, the ADP Steering Committee:
- Required an expansion of the shortlist to include three (3) Respondents to address concerns with related parent entities, to mitigate potential risks or perceptions of non-competitive behaviour;
 - Proposed that additional written assurances be sought from the short-list Respondents, where there is a related parent entity;
 - Endorsed the short-list of three (3) Respondents, as noted below:
 - **Addwater** (Veolia Water and John Holland)
 - **Water First** (Degremont Pty Ltd, Thiess and Thiess Services)
 - **Adelaide Aqua** (Acciona Agua, United Utilities, McConnell Dowell, Abigroup Contractors)
 - Agreed that, subject to satisfactory outcomes from the interviews all three (3) Respondents would be invited to respond to the RFP to ensure competitiveness in the prices received;
 - Noted that additional resourcing effort will be required to support bidder interaction with three (3) instead of two (2) Respondents previously envisaged.
- 3.20 Following ADP Steering Committee review, interviews were satisfactorily completed with preliminary short-list of Respondents by the Evaluation Panel on the 4th September 2008. During the interviews Respondents were notified that SA Water was considering three (3) short-listed Respondents for the ECI process. All three (3) Respondents indicated the process is acceptable to them;
- 3.21 Following the interviews, the three (3) short-listed Respondents (**Addwater, Water First and Adelaide Aqua**) were endorsed by the Evaluation Panel on the 5th September 2008;

- 3.22 In accordance with the procurement process outlined in the Request for EOI, the shortlisted Respondents will be invited to submit detailed technical and commercial proposals in response to SA Water's Request for Proposal, and to participate in ECI process with SA Water (including detailed commercial, financial and legal negotiations) as previously noted;
- 3.23 **It is recommended that Cabinet approve the final short-list of three (3) Respondents resulting from the evaluation of the Expressions of Interest for the Design, Build, Operate and Maintain (DBOM) of the Desalination Plant and Marine Works for the ADP;**
- 3.24 **It is also recommended that Cabinet approve for SA Water to engage the final short-list of three (3) Respondents to undertake appropriate investigations (including marine geotechnical investigations), participate in an Early Contractor Involvement (ECI), to develop management plans, designs and to prepare formal submissions through extensive bidder interaction workshops and utilising a competitive process.**

Plant Capacity Options

- 3.25 The Desalination Working Group's analysis of water security recommended a 50 GL/a Desalination Plant to balance average supply and demand to 2025 and to maintain the average percentage of water sourced from the River Murray for Adelaide at current levels (approximately 40%);
- 3.26 The February 2008 Cabinet approval confirmed that expansion option be built into the tender structuring arrangements which would allow future expansion of the capacity from the 50 GL/annum up to 100 GL/annum to be considered, consistent with the Government's public announcement on the subject. The final capacity of 100 GL/annum has been built into the RFP process;
- 3.27 SA Water in conjunction with the Water Security Council (with oversight from the ADP Steering Committee) is currently undertaking a review of the water security measures for Adelaide and in particular, to:
- Optimise the size of the Desalination Plant
 - Review the size and timing of the additional Mt Lofty storages
 - Take account of the possible Commonwealth grants;
 - Consider the revised arrangements for use of MDBC storages; and
 - Review any implications of increasing the capacity of the ADP on participation in the Upper Spencer Gulf desalination project.

- 3.28 The possibility of a \$100 million grant to the ADP was canvassed in the Federal election campaign and since then there has been discussion of a \$100 million contribution towards the cost of expanding the plant capacity to 75GL/annum or larger. The status of these funding proposals will need to be clarified. Any Federal funding received would reduce the burden on the State and mitigate the water price increases required to pay for the ADP.
- 3.29 If the 75 GL/annum plant is to be constructed, the First Water for the 50 GL/annum of capacity will still be targeted by December 2010, subject to a decision on the size by November 2008. The 50GL/a capacity would still be achieved by end August 2011 and Project Handover for the full 75 GL/annum capacity by end August 2012;
- 3.30 In order to maximise the opportunities to develop competitive firm bid prices and carefully assess the risks and execution plans it is important that all three options of plant capacity 50 GL/annum, 75 GL/annum and 100 GL/annum be considered as part of the DBOM Early Contractor Involvement with the three (3) short-listed Respondents;
- 3.31 **It is recommended that Cabinet note that through the ECI process and the RFP, SA Water will seek competitive bids for the Desalination Plant to be designed and built with intake and outfall infrastructure and other civil works that will in any event accommodate a capacity of 100 GL/annum (whether on first construction or by way of future expansion) and with alternative prices for:**
- a capacity of 50 GL/annum (with First Water achieved by December 2010, 50 GL/annum production capacity established by June 2011 and Project Handover by August 2011; or
 - an initial capacity of 50 GL/annum, (with First Water achieved by December 2010 and 50 GL/annum production established by June 2011) and a capacity on completion (by June 2012) of 75 GL/annum; or
 - an initial capacity of 50 GL/annum, (with First Water achieved by December 2010 and 50 GL/annum production established by June 2011) and a capacity on completion (by June 2012) of 100 GL/annum.

Power Supply Infrastructure through ETSA

- 3.32 The accelerated completion of the ADP will require infrastructure and cabling for the construction power and operational power to be brought forward significantly to have these available for use in accordance with the timetable below:
- Construction Power to be available at Port Stanvac site by or before end June 2009. Any minor construction power / electrical loads required at Port Stanvac site prior to June 2009 will be met by temporary diesel generators;

- Operational Power at the Port Stanvac site is to be available by March / April 2010 to meet the commissioning power requirements for large seawater pumps, with full capacity available by or before end August 2010.
- 3.33 The short-listed Respondents to EOI (for the DBOM) have indicated a construction power requirement of approximately 11 Megavolt-Ampere (MVA) to be available by around May / June 2009. This power load is mainly due to the large electrical power required by the tunnel boring machines. This will require temporary high voltage cables and transformers to be installed at the Port Stanvac site. Discussions have been held with ETSA to identify options, system capacity, sizing constraints, program and risks to meet the compressed delivery timeline. Discussions have also occurred to identify manufacturing capacity for any long lead items;
- 3.34 The operational power supply load of 60 MVA transformer capacity for stage 1(50 GL/annum Desalination Plant capacity) and up to 120 MVA transformer capacity for stage 2 (100 GL/annum desalination capacity) has been determined. To provide this power supply very large electrical supply infrastructure will need to be put in place, involving large transformers, cabling and high voltage switchgear. Some of this infrastructure will have delivery timelines of over 18 months;
- 3.35 ETSA Utilities has provided an offer which includes a number of options for construction and operational power supply infrastructure. The offer includes 'non-contestable' and 'contestable' work (i.e. contestable work can be offered as an open call tender process). Work has also been undertaken by ETSA to develop detailed substation layouts, cable route and cable sizing so that sufficient space and access can be provided on the ADP site layout to accommodate the new ETSA substation;
- 3.36 To meet the accelerated delivery, SA Water will need to negotiate and develop the specifications, scope, commercial and legal terms and conditions with ETSA. This will need a cost commitment by SA Water to cover the following:
- Acquisition of easements along the preferred cable route (which may include land owned by Exxon-Mobil as well as other land owners);
 - Additional design work for investigation and engineering and for sub-station design, including transformers, electrical cables, switchgear, earthing grid and site civil works;
 - Costs for site studies, investigations, approval submissions and approval permits incurred by ETSA; and,
 - Manufacturing capacity for long-lead items.
- 3.37 For the stage 1 capacity (to support 50 GL/annum Desalination Plant) ETSA has submitted an application to the Development Assessment Commission regarding upgrades required to the 66 kV transmission system, of which some components are overhead lines and some are underground lines;

- 3.38 ETSA has indicated they can accelerate the program to achieve March 2010 construction completion, which is required to meet the ADP accelerated program. This is subject to SA Water making a formal commitment with ETSA during October 2008;
- 3.39 **It is recommended that Cabinet note ongoing progress to secure Construction Power and Operational Power supply through ETSA Utilities (ETSA).**
- 3.40 The scope of the works with ETSA for stage 1 (to support 50 GL/annum Desalination Plant capacity) include:
- Establishment of a new substation at the ADP site comprising four (4) large transformers switched in pairs;
 - ETSA 66 kV system upgrades between existing Port Stanvac substation and the new ADP substation;
 - ETSA 66 kV system upgrades between the existing Morphett Vale substation and the new ADP substation;
 - Extension of ETSA's network telecommunications and control system; and
 - ETSA's engineering and project management costs.
- 3.41 ETSA has indicated that stage 2 (to meet 100 GL/annum Desalination Plant capacity) cannot be delivered until December 2011. In addition, the operation of stage 2 power supply infrastructure would be dependent on ElectraNet completing their City West project (targeted for completion by December 2011).
- 3.42 SA Water is proposing to undertake negotiations on the contractual terms with ETSA Utilities on a sole Supplier basis for the contestable and non-contestable portions of work. SA Water will develop both stage 1 and stage 2 options further in discussions with ETSA. If an open call tender process was used for the contestable portions of work, the accelerated ADP program would be compromised.
- 3.43 SA Water is undertaking a review of the ETSA options including a comprehensive cost review by ADP Cost Estimate consultants, Currie & Brown (and through them a further verification by Evans & Peck against benchmark costs). SA Water (and Crown Solicitor's Office) and its Insurers are also undertaking a review of ETSA's proposed contract terms and conditions.
- 3.44 **It is recommended that Cabinet approve that SA Water contract with ETSA (on a sole Supplier basis) to procure Construction Power and Operational Power Infrastructure, required for the accelerated delivery of the ADP.**

Port Stanvac Site Selection and Negotiations with Exxon-Mobil

- 3.45 A preliminary Site Selection Report was prepared by SA Water's Technical Specialist (Connell Wagner). This report is based on a number of investigations and analysis. A multi-criteria assessment of the Northern and Southern sites at Port Stanvac has also been undertaken. As a result of this objective assessment the Northern Site has been identified as the preferred site for the ADP. A summary of the findings from the preliminary Site Selection Report is enclosed in **Attachment C**.
- 3.46 The Site Selection Report was provided to the ADP Steering Committee. At its meeting on 1st September 2008, the ADP Steering Committee:
- Endorsed the report;
 - Noted recommendation for the Northern Site;
 - Noted requirement for a safety buffer zone at the Southern strip of the Northern site;
 - Noted that ADP would need to consider acquisition of the entire (60 Ha) Northern Site; and
 - Noted that recommendation to acquire the entire Northern Sites would be put to Cabinet along with request to seek approvals to commence compulsory acquisition of the site (if required).
- 3.47 A copy of the Report will be provided to Exxon-Mobil by 15th September 2008 in accordance with *Negotiation and Access Agreement* with Exxon-Mobil;
- 3.48 In order to acquire the Exxon-Mobil land for the ADP:
- It will be necessary to obtain further detailed valuations to provide a robust basis on which negotiation can occur.
 - Other costs e.g. Exxon-Mobil legal fees, land valuations, independent cost reviews, taxes and duties relating to land, which are identified as SA Water's responsibility in the *Negotiation and Access Agreement*, will need to be quantified and agreed;
 - Negotiations will be held with Exxon-Mobil. These negotiations may require both parties (SA Water and Exxon-Mobil) to consider further independent land valuations. In order to achieve early settlement a slightly higher price may have to be accepted by SA Water for the entire Northern Land, albeit within the overall maximum upper limit provision of \$50.2 million for land, easement and settlement cost.
- 3.49 Additional easements on land owned by Exxon-Mobil or otherwise may also be necessary for access and other infrastructure requirements, the costs of which have also been considered and incorporated into the project development funding;

3.50 For the purpose of the Request for Proposals from the short-listed Respondents SA Water will indicate to them that the Northern site will be the site of the ADP. Without this indication, it will be impossible for bidders to prepare and price their bids. In order to proceed with this, SA Water must have complete confidence that the Northern Site will be acquired whether by agreement or compulsory acquisition. A subsequent change (for example an agreement with Mobil to purchase the southern site instead) would cause significant delay and disruption to the bidding process, and would give rise to justifiable complaint (and requests for additional ECI payments) from the short-listed Respondents. All this would then impact on the schedule and budget to complete;

3.51 **It is recommended that Cabinet approve for SA Water to:**

- **Acquire the *Northern Land at Port Stanvac* and any other required land, easements and access of land; and**
- **Commence the required processes to secure land, easements and access of land through Exxon-Mobil, subject to ongoing advice by the Crown Solicitor's Office.**

3.52 Subject to Cabinet's approval of the proposal to acquire the Northern Site (and related easements), SA Water proposes to commence discussions with Exxon-Mobil immediately after it has given Exxon-Mobil the site selection report and other information, with a view to agreeing on the purchase of the Northern site

3.53 There are other incidental requirements, such as an extension of the Pilot Plant site lease and easements for power supply infrastructure, which will also be sought from Exxon-Mobil

3.54 If Exxon-Mobil will not engage in negotiations, or if negotiations do not make rapid and favourable progress, it will be necessary to commence a compulsory acquisition process in order to ensure that the program for construction of the plant can be implemented. An indication of acceptable progress would be:

15 September (on or before) 2008	Deliver site selection report and proposal to commence negotiations
22 September 2008	Commence negotiations
6 October 2008	Assess favourable progress with negotiations
20 October 2008	Concluded and executed sale and purchase agreement

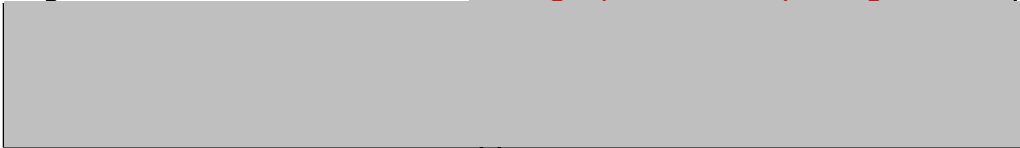
3.55 The above position will be assessed progressively and if these expectations are not met the compulsory acquisition process should be commenced. Negotiations can continue after the process has commenced, but if they are not successful, the compulsory acquisition could be finalised by January or February 2009. As the process takes a minimum of three months, reliance on negotiations up to 31 December 2008 would involve a high risk of ultimate failure and delay to the ADP:

Acquisition of Land and Easements including Special Legislation for

- **Acquisition of Land, Easements and Access**
- **Development Authorisation**

3.56 The purchase of the ADP site from Exxon-Mobil will require further progression to ensure rights of access to the site are obtained. This is essential for installation of construction power transformers and cables, and other early preparatory site works (including potential site remediation). Accordingly, selection of the site will need to be achieved as soon as possible to facilitate the commencement of these activities;

3.57 In order to ensure that the ADP is not delayed by protracted negotiations with Exxon-Mobil, **10 Legal professional privilege**



3.58 **It is recommended that Cabinet note that SA Water, with the Minister's approval, may commence compulsory acquisition of the required land and interests in the land under the *Waterworks Act and Land Acquisition Act*;**

3.59 **10 Legal professional privilege**



3.60 The ADP Environmental Management Team is already working to prepare the EIS. A detailed status and look ahead activities for the Development and Environmental Approval process is enclosed at **Attachment E** – which was endorsed by the ADP Steering Committee on the 1st September 2008;

3.61 It is recommended that Cabinet approve that Parliamentary Counsel prepare legislation for introduction during the Spring 2008 session of Parliament for the following:

- 10 Legal professional privilege
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SA Water's Project Team, Professional Service Providers and Advisers

3.62 It is intended that the tasks discussed in section 3 will be managed and coordinated by the ADP Team, which comprises SA Water staff, contractors from SA Water's approved Panel of Service Providers, personnel from SA Water's ADP Specialist Professional Service Providers and representatives from the Department of Treasury and Finance (DTF), the Department of the Premier and Cabinet (DPC) and the Crown Solicitor's Office (CSO);

3.63 The continued participation of SA Water's technical, legal, commercial and financial advisers within the ADP Team will be required to assist with and progress contractual and commercial negotiations relating to the ECI for the Transfer Pipeline System, the ETSA contracts for the establishment of construction and operational power supply, the ADP DBOM contracts, and support throughout the DBOM ECI process;

3.64 **Cabinet to note that SA Water will continue to engage the team of Specialist Professional Service Providers and Advisers for DBOM bidder interaction workshops and the Early Contractor Involvement process which is essential to meet the accelerated project delivery milestones.**

Additional Project Development Funding of up to \$100.2 million

3.65 The tables (below) provide an estimate of the Project Development expenditure required as a result of bringing forward required activities to achieve delivery of First Water Delivery by December 2010, inclusive of costs to accommodate additional involvement and commitment of ADP Team personnel:

Activity	Cost
Land and easement costs – brought forward	\$ 50,200,000
Detailed design, marine geotechnical investigations and preparation of investigations, power supply infrastructure commitment.	\$ 20,000,000
Acceleration including Early Contractor Involvement (ECI) costs with short-listed (3) Respondents for the DBOM	\$ 30,000,000
Sub Total	\$ 100,200,000

The above \$100.2 million expenditure will be over and above the \$45.8 million (comprising \$36.3 million for Preliminary Works and Activities and \$9.5 million for the temporary Pilot Plant) approved by the Cabinet in February 2008;

Further breakdown of the major categories of costs

3.66 Further breakdown of the above major categories of costs is provided in tables below:

Land and Easement Costs Brought Forward \$50.2 million

Activity	Cost
Exxon-Mobil land acquisition (excluding land remediation costs) and easements. This is based on preliminary land valuations and is subject to change.	\$ 25,000,000
Other land acquisition and easements costs for Transfer Pipeline, Power Supply Infrastructure and associated services required for the ADP.	\$ 15,000,000
Other project cost (land valuation, land negotiation, land acquisition, Exxon-Mobil legal and other costs payable by SA Water under the Negotiation Agreement, Development and Planning Fees)	\$ 4,500,000
SA Water's Project Management costs and insurance costs	\$ 1,200,000
Contingency (to cover higher land valuation if the land zoning is changed from that currently assumed i.e. light industrial zoning)	\$ 4,500,000
Sub Total (indicative upper limit settlement provision)	\$ 50,200,000

Detailed Design and Site Investigations Brought Forward \$20 million

Activity	Cost
ETSA Power Supply commitment for ongoing investigations, studies, easements. This also includes additional SA Water's dedicated team to manage, negotiate and set-up the contract arrangements with ETSA.	\$ 8,000,000
Additional marine (geotechnical) investigation using a jack-up barge (to confirm the requirements for a tunnel boring machine) and other options for marine pipework	\$ 2,000,000
Transfer Pipeline detailed site investigations, detailed designs and plan, and associated professional service providers.	\$ 3,000,000
SA Water's Professional Service Provider costs (includes Commercial, Financial, Legal, Probity, Review, Estimating and Community Engagement Services) costs to prepare additional documentation for the early procurement and additional site investigations	\$ 2,000,000
SA Water's project delivery costs, insurance costs for Transfer Pipeline, for ETSA power supply infrastructure. This also includes other project cost (technical, commercial, legal, risk, communications, stakeholder engagement, development and planning fees and charges and public consultation costs)	\$ 3,000,000
Contingency to cover potential additional ETSA costs.	\$ 2,000,000
Sub-total of the design and detailed site investigation costs.	\$ 20,000,000

Acceleration Costs including Early Contractor Involvement \$30 million

Activity	Cost
Contribution to the Early Contractor Involvement by three (3) shortlisted Respondents for the Desalination Plant and Marine works (DBOM Scope). A payment of \$2.5 million will be made to each losing Respondent. The third Respondent's price for the DBOM contract will include the \$2.5 million component and therefore it not included in this table.	\$ 5,000,000

Activity	Cost
Transfer Pipeline commitment of manufacturing positions for long-lead items by the ECI Contractors. This also includes provision for securing manufacturing positions for critical long-lead items such as high pressure pumps, pipelines, high voltage switchgear and large motors. Some of this expenditure will substitute for expenditure that would normally be undertaken by the successful bidder (post contract award) however the amount cannot be quantified at this stage.	\$ 15,000,000
Increases to SA Water's Professional Service Provider costs in order to meet its obligations associated with taking three (3) Respondents through an ECI process (includes Technical, Legal, Commercial, Financial, Probity, Technical Review, Estimating, Energy Procurement and Community Engagement Services) costs to prepare additional documentation for the ECI contracts. This also includes costs for extensive bidder interactions during ECI workshops.	\$ 7,000,000
SA Water's Project Management costs including insurance, fees, etc. for acceleration.	\$ 3,000,000
Sub-total of the additional costs to achieve accelerated project milestones.	\$ 30,000,000

3.67 In the July 2008 Water Security initiatives Cabinet Submission the following ADP acceleration costs were identified:

- Likely up-front costs of \$120 million. Not additional to the project costs, but rather an early commitment and timing issue. These costs will ultimately form part of the contributed assets for the project;
- Estimated additional cost for project acceleration of \$79 million, which would increase the overall ADP completed costs from \$1.295 billion to \$1.374 billion (including the transfer pipeline);
- An additional \$50 million may be incurred if, due to environmental requirements, the seawater intake/outfall tunnel needs to be increased in length by 500 metres.

- 3.68 This submission proposes that up to \$30 million of the \$79 million (provision for acceleration) be utilised in the ECI process, early commitment of manufacturing capacity and in compression of the procurement activities up to DBOM contract award. It is noted that some of the works that are carried out during the ECI workshops (albeit classified as acceleration costs) will also bring forward detailed design activities that would normally occur after award of contract. The quantum of such costs is difficult to identify at this stage and therefore is classified as acceleration costs;
- 3.69 The remaining \$49 million (out of the \$79 million acceleration amount) is still to cover the DBOM and Transfer Pipeline contractors' acceleration costs such as additional labour costs (increase in personnel, out of hours work/shift work, mobilisation and demobilisation, supervision, safety, programming / scheduling, lost time due to inefficiencies etc), additional plant/equipment costs (increase in numbers, mobilisation and demobilisation costs, etc), additional preliminaries (on/off- site establishment, etc) offset by cost savings due to the reduction in overall construction duration;
- 3.70 Taking account of the additional project development funding of \$100.2 million, the ADP project cost estimate (as noted by Cabinet in the July 2008 submission) remains unchanged. This is summarised in the table (and changes explained) below:

	Nominal Cost (\$ millions)
ADP costs - February 2008 Cabinet Approval.	1,295
ADP costs – July 2008 Cabinet Approval which included the following key components: <ul style="list-style-type: none"> • Acceleration cost of \$79 million • Upfront (early commitment cost) of \$120 million. 	1,374
ADP costs – September 2008: <ul style="list-style-type: none"> • Acceleration cost of \$30 million (out of the \$79 million provision). Note: the remaining acceleration costs still to be quantified (also refer paras 3.69 and 3.70 above) but are anticipated to be within the \$79 million July 2008 approval. • Upfront (early commitment cost) of \$70.2 million (out of the \$120 million indicated in July 2008). Note there will be a need to commit further costs in January / February 2009 at the completion of the ECI process but within the \$120 million July 2008 Cabinet approval limit. 	1,374

- 3.71 As indicated in the above table, the \$102.2 million project development funding (\$30 million plus \$70.2 million) is in line with the budget previously indicated to Cabinet as part of the July 2008 submission. Therefore there is no increase in the project nominal cost (cost at completion) of \$1,374 million. The expenditure approval being sought in this submission is for the portion of acceleration costs and the portion of early commitment costs that are that will be incurred during the ECI process (next 4 months);
- 3.72 **It is recommended that Cabinet approve an additional project development funding of up to \$100.2 million (excluding GST) which comprises the following major categories:**
- **Expenditure of \$50.2 million to acquire land and easements at Port Stanvac. This also includes provisional amounts to secure land, easements and access for the Transfer pipeline system, ETSA power supply and other ADP associated requirements;**
 - **Expenditure of \$20 million brought forward to undertake additional investigations, prepare detailed designs, plans and secure manufacturing positions for ETSA infrastructure; and**
 - **Expenditure of \$30 million for acceleration including ECI process, bidder interactions and to commit manufacturing capacity for long-lead items. Note that this category includes a payment of \$2.5 million per bidder to participate in the DBOM ECI process, prepare detailed designs and plans and submit a conforming bid.**
- 3.73 **It is also recommended that Cabinet authorise the Board of SA Water to undertake tendering and award any contracts (including authority to execute contract documents) for the additional project development funding of up to \$100.2 million (excluding GST) without referral back to Cabinet.**

Economic, financial and budgetary implications

- 3.74 On 31 July 2008, Cabinet approved the recommendations of the *Water Security Situation and Contingency Planning* submission for a series of contingency measures around water security, which included an accelerated desalination plant.
- 3.75 Since this time, on 18 August 2008, Cabinet approved the *Lower Lakes Potable Water Pipelines* submission, which was part of the *Water Security Situation and Contingency Planning* submission approval. The Lower Lakes submission approved capital expenditure of \$50.5 million in 2008-09 and the receipt of \$45.45 million in Federal Funding (90% of capital expenditure).

3.76 The resultant capital expenditure changes and budget impacts associated with that submission (including the acceleration of a 50GL capacity desalination plant and excluding the Lower Lakes Pipelines) are to be incorporated in both SA Water and Government forward budget estimates, as shown below;

Cabinet Submission as approved 31 July 2008	2008/09 (\$m)	2009/10 (\$m)	2010/11 (\$m)	2011/12 (\$m)	2012/13 (\$m)	Total 2008/09 to 2012/13 **
Increase (Decrease) in Revenue	-	-	-	-	-	-
Increase (Decrease) in CSO Revenue	-	-	-	-	-	-
Increase (Decrease) in Profit Before Tax	(61.969)	(47.778)	(107.462)	(116.549)	(104.296)	(438.054)
Increase (Decrease) in Capital Expenditure	252.260	317.107	(268.843)	(173.091)	-	127.432
Increase (Decrease) in Contribution to Govt	(59.800)	(46.105)	(103.702)	(112.469)	(100.646)	(422.722)
Increase (Decrease) in Borrowings	274.430	558.831	283.062	62.485	(3.850)	(3.850)

** Note - Debt is presented as at 2012/13

*** Excludes impacts associated with the Lower Lakes Pipelines which was separately approved by Cabinet in Aug 2008

3.77 The above budget impacts are largely due to timing shifts in capital expenditure as detailed in the following table. Cabinet will note that the primary driver is the accelerated ADP:

Water Security Situation and Contingency Planning Submission : Approved 31 July 2008

Revised Capital Expenditure of the Approved Recommendations

	Movements in Capital expenditure					Total 2008- 09 to 2012- 13 \$m
	Cabinet approved recommendations					
	2008- 09 \$m	2009- 10 \$m	2010- 11 \$m	2011- 12 \$m	2012- 13 \$m	
Additional capital expenditure: increase / (decrease)						
Acceleration of 50GL desalination plant	213	317	-269	-173	-	88
Acceleration of interconnector	-	-	-	-	-	-
Bores	5	-	-	-	-	5
Weir	34	-	-	-	-	34
Water licences	-	-	-	-	-	-
Lower Lakes Pipelines Removed as subsequently approved by Cabinet on 18 August 2008	-	-	-	-	-	-
Total additional expenditure	252	317	-269	-173	-	127

Figures may not add due to rounding

- 3.78 The approval of \$100.2m sought in this submission for additional ADP project development funding in 2008/09 is in addition to existing approvals of \$45.8m (comprising \$36.3 for Preliminary Works and \$9.5 m for Pilot Plant approved in January 2008) which will bring the total approval for this project to \$146.0m.
- 3.79 Cabinet should note that the capital expenditure changes and budget impact amendments resulting from the July Water Security Submission, provides an adequate level of funding to meet the requirements outlined in this submission. On this basis, there are no additional budget impacts identified or being sought.
- 3.80 Commonwealth contributions towards this project are *not* assumed in this assessment.
- 3.81 **It is recommended that Cabinet notes that this submission will have no additional impact on the General Government Net Operating Result or Net Lending Position. Additionally, there will be no CSO funding implications from this proposal.**

Required resources

- 3.82 In order to meet the accelerated First Water delivery of the ADP a compressed procurement program is required. This coupled with commitment for extensive interactions with short-listed Respondent teams during the Early Contractor Involvement process has required a review of the resources within the ADP Team. Based on that review, it is assessed that additional resources will be required;
- 3.83 It is also likely that additional resources will also be required by the key Agencies to provide dedicated and priority response to the ADPT team. SA Water's Chief Executive has written to the agency Chief Executives identifying the requirements, seeking priority support and nomination of a key single point resource to provide coordinated and priority response to the ADP;
- 3.84 Some of the additional resources have been identified from within the SA Water's approved Panel and some from the ADP Team's external Professional Service Provider teams. Given the extent of acceleration effort and need for senior coordination efforts it is anticipated that up to four (4) additional staff from within SA Water's business units will also be required and some back-filling of that staff will be required;
- 3.85 It is anticipated that the three (3) short-listed international consortia (Respondents) for the DBOM will be mobilising in Adelaide from 23rd September 2008 onwards. Many of these Respondents have indicated that they will be seeking up to 70% of their resources locally (from within Adelaide) and each Respondent will be mobilising 50 to 75 designers and estimators;

- 3.86 The above resourcing requirements have been discussed with SA Water's Panel and Professional Service Providers and it is recognised that the local Adelaide resource pool will generally be quite stretched during the period from October 2009 through to March 2009;
- 3.87 Contingency planning includes national and international recruitment (where required) to back-fill key positions. ADP Team core resources have been established and available to support the Early Works and an accelerated program, as committed by SA Water in Addendum 4 (refer **Attachment A**) of the Request for EOI;

South Australia's Strategic Plan

- 3.88 This proposal will support the achievement of the following elements of South Australia's Strategic Plan:
- Meet Government policy decision to construct a seawater Desalination Plant for Adelaide;
 - Meet Target T3.9 – South Australia's water resources are managed within sustainable limits by 2018 through continued support for the Water Proofing Adelaide strategy and the provision of a climate independent supply of 50 gegalitres per year of potable water via the proposed ADP;
 - Meet Target T1.7 – Performance in the public sector – customer and client satisfaction with government services, through improved security of water supply and reduced severity of water restrictions.

Information & Communication Technology Requirements

- 3.89 At this stage of the approval, the ADP does not have any material impact on Information and Communication Technology requirements.

Staffing Implications

- 3.90 As noted in the section on "Resources" above, there will be a need for additional staff to manage and coordinate the ECI workshops with the short-listed Respondents. Whilst some of these resources can be acquired from SA Water's existing operational business units, there may be a need to back-fill up to 4 additional FTE resources to meet the ongoing business needs.

Impact on the Community & the Environment

- 3.91 The environmental impacts associated with the ADP (noted in the February 2008 and July 2008 Cabinet submissions) have not changed.

- 3.92 In implementing an accelerated program, there will be a need to provide the community with assurance that the ADP approval process will not bypass the environmental approvals processes rather additional resources will be deployed to consolidate and provide improved turn-around time for the formal submissions. Assurance will also need to be provided that key issues identified during the statutory consultation period will be clarified or commitments made for resolution.

Risk Management Strategy

- 3.93 The ADP Team (comprising key advisers such as KPMG, Crown Solicitor's Office, Corrs Chambers Westgarth and Technical Specialists (Connell Wagner)) undertook a review of the accelerated program from a risk perspective. The ADP Team also undertook further detailed risk assessments and risk mitigations. A summary of the risks and mitigations is included in the Acceleration Paper which was endorsed by the ADP Steering Committee (copy enclosed at **Attachment B**);
- 3.94 The key risks and mitigation strategies which have been identified are as follows:
- **Delays in obtaining government approvals, particularly environmental approvals:** The confirmation of the site of the Desalination Plant as soon as possible will assist in obtaining approvals within an earlier timeframe. In relation to the major development approval process for the DBOM scope, early meetings and engagement with approval authorities (including Planning SA and the Environmental Protection Authority), have already been initiated. It is expected that through the ECI process the short-listed Respondents will have an opportunity to input and take ownership of approval submission and / or any detailed conditions. SA Water's Chief Executive has undertaken to liaise with other Agency Chief Executives to identify key persons within each of the key Agencies who can help facilitate comments and feedback for key decision areas. Ongoing reviews will also be undertaken to ensure any emerging risks are assessed and mitigation actions implemented;
 - **Delays to preparation of RFP requirements:** Detailed planning and coordination of RFP preparation has been undertaken to ensure the RFP for the DBOM scope can be issued in a manner so as to enable the timely development of proposals by the shortlisted respondents. Required resources have been identified and advised of their involvement in the drafting/review process. Co-location of additional dedicated technical, commercial and legal (Adviser) teams to fast track preparation and review of tender documents has been sought;

- **Delays in settling contract negotiations:** SA Water has, with the assistance of its legal and commercial advisers, developed comprehensive contract documentation that is consistent with market precedents. A Commercial Principles Paper was presented to the ADP Steering Committee recommending adoption of the key Commercial Principles (based on the Sydney Desalination Project). The ADP Steering Committee accepted the Commercial Principles paper subject to:
 - Operation and Maintenance portion performance bond of \$10 million;
 - Seeking an additional option price through the RFP process for a higher liability cap under the D&C Contract of 70% of the contract value plus insurance proceeds; and
 - Clarification in respect of risk quantifications.
 The Liability Cap matter will now be put forward to the Liability Review Committee for approval.

To avoid delays, SA Water will also seek to achieve a high level of interaction with the shortlisted Respondents with a view to achieving early conclusion of commercial negotiations.

- **Delays to obtaining the results of marine studies:** The SA Water ADP Team is currently closely managing the study program, and intends to incorporate the shortlisted respondents into the extent and scope of marine geotechnical investigations currently underway. SA Water will also seek to secure access to a jack-up barge to progress marine studies;
- **Delays caused by unanticipated customisation of designs or due to SA Water approval of designs:** SA Water will be required to adopt a flexible approach to specification requirements with focus on (whole of life) Durability Plan and Performance Specifications.
- **Risk of shipping or other supply disruption to long-lead time items:** The responsibilities of SA Water and the Contractor will need to be carefully defined to ensure that SA Water places the contractor in a position to place orders at contract award, whilst the contractor ensures relationships with its supply chain are managed appropriately so as to minimise the likelihood of this risk occurring.
- **Risk of adverse weather and geotechnical conditions, or environmental impacts in relation to marine construction works:** The Contractor will be responsible to conduct studies and develop a design which as far as possible minimises or eliminates such risks. Due to a compressed program the adverse weather risk is unable to be fully mitigated.

- 3.95 It is anticipated that the mitigation strategies identified above, where not already implemented, will be implemented by SA Water to support efforts to achieve First Water by end December 2010;
- 3.96 SA Water continues to work with KPMG to identify key risks for different components of the project including the Project Approvals, Land Acquisition, DBOM Contract, Transfer Pipeline System, ETSA contracts.

Consultation

3.97 Extensive consultation has taken place since January 2008, and continues to take place, with Government Agencies for the overall ADP, including:

- Department of Treasury and Finance;
- Department of the Premier and Cabinet;
- Department for Transport, Energy and Infrastructure;
- Department of Water, Land and Biodiversity Conservation;
- Department for Environment and Heritage;
- Department of Trade and Economic Development;
- Office for Water Security;
- Planning SA; and
- Environment Protection Authority.

3.98 With respect to the acceleration of the ADP, the Department of Treasury and Finance (DTF) has been consulted on the financial and budget aspects and impacts of the proposal.

3.99 10 Legal professional privilege

A large rectangular area of the document is redacted with a solid grey fill. The redaction covers the text of paragraph 3.99 and extends into the beginning of paragraph 3.100.

Communication Strategy

3.100 It is anticipated that the impact of the acceleration of the program will be managed pursuant to the existing stakeholder and community engagement and communications plan established for the ADP, and as approved by Cabinet on 28th February 2008;

3.101 A key area of significant effort by the ADP Team will be to manage the community expectations and communications emphasising that responsible and careful environmental and social planning are key considerations and integral to the detailed planning of the accelerated delivery of the ADP. Messages conveying the key water security drivers requiring acceleration of the ADP will need to continue and be reinforced;

Implementation Plan

3.102 The implementation plan relating to this proposal includes the following indicative completion target dates for the ADP key activities:

Key Activities Description	Indicative Target Date
Commence issue of RFP documents to Shortlisted Respondents for the DBOM	23 September 2008
Financial Approval for the ADP (see further details at below). To meet the accelerated program this will need to be specific approval for the Transfer Pipeline, Power Supply Infrastructure and Land Acquisition within the context of the overall ADP estimate (which will include the DBOM portion – for which firm prices would only be received from the bidders in end December 2008). There will be a need to seek further Cabinet and PWC endorsement in March 2009 when the DBOM tenders have been received and evaluated. The context for a further approval in March 2009 would be confirmation of the price (within the budget) or risk allocation or any change to commercial terms.	Mid October 2008
Public Works Report for the ADP (for the Transfer Pipeline, Power Supply Infrastructure and possibly Land Acquisition at Port Stanvac).	End-October 2008
Commence Early Procurement for the Transfer Pipeline	End-October 2008
ADP Site Access Achieved	Mid-December 2008
Receive RFP Submissions	End-December 2008
Award Transfer Pipeline Contract	End-December 2008
Issue Cabinet Pink for DBOM (advising Cabinet of selected DBOM consortium and any significant changes to allocation of risk or cost) or alternatively seek a further Cabinet and PWC approval.	Early March 2009
Public Works Report for the DBOM contract.	Mid March 2009
Obtain Major Development Approval	End-March 2009

Project Approvals Plan

3.103 It is anticipated that further Cabinet submissions and notifications relating to the ADP will be required and sought as the Project progresses. The indicative timing of these submissions and notifications are contained in the below table:

Submission Type	Indicative Timing of Cabinet Submission	Approval Sought/Notification
Cabinet Submission & PWC Submission	Mid Oct 2008	<ul style="list-style-type: none"> • Approval of the Project Feasibility Report (including the consolidated Business Case) • Financial Approval of the ADP based on Concept Design Estimate with <u>specific approval</u>: <ol style="list-style-type: none"> 1. To award contracts for the Transfer Pipeline System within an approved budget and risk profile. 2. To award contracts for construction and operational power supply infrastructure through ETSA. 3. To confirm the commercial and legal terms and conditions of the acquisition of land, easements and access at Port Stanvac site through Exxon-Mobil. 4. To confirm the major terms and conditions and risk allocation framework for the proposed DBOM contract. 5. To confirm the overall project budget including the provisions for the DBOM scope. To return back to Cabinet and PWC after DBOM prices are confirmed. 6. Renewable Energy procurement strategy for the ADP
Cabinet Pink	End Dec 2008 To End January 2009	<ul style="list-style-type: none"> • Advice to Cabinet of the selected contractor for the Transfer Pipeline System and confirmation of price and risks. • Advice to Cabinet of any changes to the risk allocation or costs associated with the DBOM contract
Cabinet Submission &	Early March 2009	<ul style="list-style-type: none"> • Approval of the preferred Contractor for the DBOM contract.

PWC Submission	<ul style="list-style-type: none"> • Approval to award the DBOM contract. • Confirmation of project approvals.
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3.104 It is recommended that Cabinet note that further approvals will be sought from Cabinet during October 2008 to March 2009. These submissions will require Public Works Committee consideration.

Project Progress Update

3.105 A summary of the progress update of the ADP is enclosed at Attachment D.

4 RECOMMENDATION

It is recommended that Cabinet:

- 4.1 Approve the Accelerated Milestones for the delivery of the ADP noting that First Water Delivery milestone will be specified to achieve a minimum of 15 ML/d (or 5 GL/annum capacity) of safe and treated drinking water by December 2010;
- 4.2 Note the initiatives to achieve accelerated delivery of the ADP as noted in sections 3.10, 3.11, 3.12, 3.13 and 3.14 of this submission;
- 4.3 Approve of the final short-list of three (3) Respondents resulting from the evaluation of the Expressions of Interest for the Design, Build, Operate and Maintain (DBOM) of the Desalination Plant and Marine Works for the ADP;
- 4.4 Approve for SA Water to engage the final short-list of three (3) Respondents to undertake appropriate investigations (including marine geotechnical investigations), participate in an Early Contractor Involvement (ECI), to develop management plans, designs and to prepare formal submissions through extensive bidder interaction workshops and utilising a competitive process;
- 4.5 Note that through the ECI process and the RFP, SA Water will seek competitive bids for the Desalination Plant to be designed and built with intake and outfall infrastructure and other civil works that will in any event accommodate a capacity of 100 GL/annum (whether on first construction or by way of future expansion) and with alternative prices for:
 - a capacity of 50 GL/annum (with First Water achieved by December 2010, 50 GL/annum production capacity established by June 2011 and Project Handover by August 2011; or

- an initial capacity of 50 GL/annum, (with First Water achieved by December 2010 and 50 GL/annum production established by June 2011) and a capacity on completion (by June 2012) of 75 GL/annum; or
- an initial capacity of 50 GL/annum, (with First Water achieved by December 2010 and 50 GL/annum production established by June 2011) and a capacity on completion (by June 2012) of 100 GL/annum.

4.6 Note the ongoing progress to secure Construction Power and Operational Power supply through ETSA Utilities (ETSA);

4.7 Approve for SA Water to contract with ETSA (on a sole Supplier basis) to procure Construction Power and Operational Power Infrastructure, required for the accelerated delivery of the ADP;

- 4.8 Approve for SA Water to:
- Acquire the *Northern Land at Port Stanvac* and any other required land, easements and access of land; and
 - Commence the required processes to secure land, easements and access of land through Exxon-Mobil, subject to ongoing advice by the Crown Solicitor's Office.

4.9 Note that SA Water, with the Minister's approval, may commence compulsory acquisition of the required land and interests in the land under the *Waterworks Act and Land Acquisition Act*;

4.10 Approve the Parliamentary Counsel to prepare legislation for introduction during the Spring 2008 session of Parliament for the following:

- 10 Legal professional privilege
-
-

4.11 Note that SA Water will continue to engage the team of existing specialist professional service providers and advisers for the Early Contractor Involvement process;

- 4.12 Approve additional project development expenditure authority of up to **\$100.2 million** (excluding GST), which comprises the following major categories:
 - Expenditure of **\$50.2 million** to acquire land and easements at Port Stanvac. This also includes provisional amounts to secure land, easements and access for the Transfer pipeline system, ETSA power supply and other ADP associated requirements;
 - Expenditure of **\$20 million** brought forward to undertake additional investigations, prepare detailed designs, detailed plans and secure manufacturing positions for ETSA infrastructure; and
 - Expenditure of **\$30 million** for acceleration including ECI process, bidder interactions and to commit manufacturing capacity for long-lead items. Note that this category includes a payment of \$2.5 million per bidder to participate in the DBOM ECY process, prepare detailed designs and plans and submit a conforming bid.

- 4.13 Note that the above \$100.2 million expenditure authority will be over and above the \$45.8 million (comprising \$36.3 million for Preliminary Works and Activities and \$9.5 million for the temporary Pilot Plant) approved by Cabinet in February 2008.

- 4.14 Authorise the Board of SA Water to undertake tendering and award any contracts (including authority to execute contract documents) for the additional project development expenditure authority of up to \$100.2 million (excluding GST), over and above the \$45.8 million approved by Cabinet in February 2008, without referral back to Cabinet;

- 4.15 Note that this submission will have no additional impact on the General Government Net Operating Result or Net Lending Position. Additionally, there will be no CSO funding implications from this proposal;

- 4.16 Note that further approvals will be sought from Cabinet during October 2008 to March 2009. These submissions will require Public Works Committee consideration;

- 4.17 Note that this submission does not require consideration by the Public Works Committee; and

- 4.18 Note that the above proposals have been endorsed by the Adelaide Desalination Project Steering Committee.

In Cabinet

22 SEP 2008

Karlene Maywald
MINISTER FOR WATER SECURITY

22/9/2008

APPROVED
PREMIER

Kevin Foley
TREASURER

22/9/2008

**ADELAIDE DESALINATION PROJECT
EXTRACTS FROM ADDENDUM 4 – TO EXPRESSION OF INTEREST
(Issued by SA Water on 4th August 2008)**

Date Issued: 4 August 2008

ADELAIDE DESALINATION PROJECT

ADDENDUM NO 4

In accordance with the Expression of Interest (EOI) for the **Design, Build, Operate and Maintain (DBOM) the proposed Adelaide Desalination Project (EOI CW2308)**, SA Water issues the following addendum:

SA Water is investigating opportunities to bring forward the DBOM Contract Award and delivery of the First Water from the Adelaide Desalination Project. This includes making the following amendments to the process for establishment of the DBOM Contract. The process to be used will be an Early Contractor Involvement ("ECI") strategy in which short-listed Respondents will receive a contribution to undertake design development to a nominated level, and this will be undertaken concurrently with the development of the DBOM contract documentation by SA Water.

As a result the following amendments are made to the EOI document:

Section 1.2 DBOM Procurement Process, Phase 1 Expressions of Interest, pg 3

Replace with:

EOI clarification session (tentative)	Cancelled
Closing date for EOI submissions	14 th August 2008
Respondent interviews (as required)	2 nd September 2008
Short-listed Respondents notified	22 nd September 2008

Section 3.2 Overall Project Timeline, pg 15

Add to end of section:

The intention is to seek Responses which include a indicative program showing the earliest achievable delivery of First Water and key milestones and risks associated with meeting the program.

The areas that SA Water may be seeking to compress works are:

1. Issue of the RFP Documentation;
2. Evaluation, clarification and negotiation of Proposals;

3. DBOM Contract Award;
4. Date of First Water Availability;
5. Date of Practical Completion; and
6. Date of Project Handover for Operations.

Section 4 Commercial Arrangements, pg 23

Add:

4.10 Early Contractor Involvement

SA Water intends to enter into a competitive Early Contractor Involvement process whereby the short-listed Respondents will receive a contribution towards the development of the following tasks:

7. Design development to a high level suitable to undertake a program that will achieve early delivery upon DBOM Contract Award;
8. Commercial submission with detailed pricing schedules (consistent with SA Water's requirements), mark-ups to risk allocations contained in the proposed contractual documents;
9. Technical submission including information on design, effective design management, site, site access, compliance with SA Water's requirements, detailed program and assumptions used in developing the program; and
10. Additional information on preparation of detailed management plans, profit and overheads and details of risk management strategies and opportunities.

SA Water will require final submissions which are complete and transparent from the two short-listed Respondents in a timely manner. In particular, SA Water will require a high level of interaction with the short-listed Respondents through the bidder workshops (technical and commercial) as identified in the Section 6.3.2. The workshops are to achieve:

11. Early identification of long lead items and appropriate strategies to minimise time implications;
12. Value for money and innovative outcomes at all stages;
13. Risk identification and development of appropriate innovative mitigation strategies during all phases of the project;
14. Demonstrated engagement in the environmental process required for the delivery of the project including capacity to comply with all environmental approvals and requirements including stakeholder and community commitments;
15. Confidence that the short-listed Respondents will enter into the proposed contractual documents well prior to bid lodgement; and
16. Detailed program of works to meet early delivery.

The short-listed Respondents will be required to provide detailed information to SA Water and potential Respondents should prepare now on that basis. SA Water proposes to resource this project to permit a high level of interaction with the short-listed Respondents.

Section 7 Evaluation Criteria for EOI, Criterion 3 - Design, construction and commissioning experience, capacity and capability, Criteria element(s), pg 45

Add:

- Respondents should demonstrate design, construction and commissioning capability and capacity to deliver the project earlier including providing an indicative project program showing the earliest achievable delivery of the First Water, key milestones and risks associated with meeting the program.

Section 7 Evaluation Criteria for EOI, Criterion 3 - Design, construction and commissioning experience, capacity and capability, Criteria element(s), pg 47

Add:

- The Respondent's proposed approach, specific capability and capacity to deliver the project earlier, including providing an indicative project program showing the earliest achievable delivery of the First Water, key milestones and risks associated with meeting the program.

Section 10 Glossary of Terms, pg 65

Replace with:

'First Water'	First water delivery date (this should be earlier than December 2011): date when safe desalinated drinking water is available in the treated water tanks at Port Stanvac which will allow the Transfer pump station (at Port Stanvac) to be operated by others to transfer water to Happy Valley System.
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Note: The number of short-listed Respondents was changed from two (2) to three (3) as explained previously in the Cabinet Submission.

**ADELAIDE DESALINATION PROJECT
EXPRESSION OF INTEREST RESPONSES IN RELATION TO
PROGRAM ACCELERATION**

KEY POINTS

This document summarises the Adelaide Desalination Project DBOM EOI Responses received under Criterion 3 which sought Respondent's approach and capability to deliver First Water earlier than December 2011. The analysis focuses exclusively on responses to item (n) within Criterion 3, which is stated as follows:

Item (n). The Respondent's proposed approach, specific capability and capacity to deliver the project earlier, including providing an indicative project program showing the earliest achievable delivery of the First Water, key milestones and risks associated with meeting the program.

STRATEGIES AND SUGGESTED SA WATER ACTIONS

The main strategies for acceleration based on the EOI Responses are summarised in the following table, together with the action required by SA Water, if applicable, to support the strategies.

Strategies	SA Water Actions
<i>Release of Request For Proposals (RFP) by October 2008</i>	Deploy additional resources and review team to achieve completion of RFP documentation for release to Respondents.
<i>High level of interaction with short-listed Respondents</i>	Deploy additional teams (technical, commercial, legal and probity) to carry-out parallel interactive process (workshops) with the short-listed consortia under the Early Contractor Involvement (ECI) process.
<i>Fast-track evaluation and negotiations (2-3mths) to contract award</i>	Deploy additional teams to fast-track the RFP evaluation, manage the timely approvals of the ADP Steering Committee and Government, and deploy additional commercial / legal teams to fast track parallel evaluation and negotiation with short-listed consortia.
<i>Early provision of marine geotechnical and other marine condition studies</i>	Review opportunities to bring forward completion of the marine studies to end October 2008 from original planned end December 2008. If that is not possible, identify risks and include for these as provisional sums.
<i>Early environmental approvals</i>	Site Selection Investigation Report is to be finalised by

Strategies	SA Water Actions
<i>based on early site selection, confirmation on the use of marine tunnel option</i>	mid September 2008 in line with commitment to Exxon-Mobil. Confirmation about the site (Northern site or Southern Site at Pt Stanvac) is also required so that Development Approval and EPBC documentation can be lodged by early October 2008. <u>EPBC approvals cannot be lodged with option for 2 sites.</u>
<i>Detailed design development during ECI phase</i>	Project Development funding to secure additional expenditure to cover up to 50 designers and planners by the 2 short-listed consortia over a 4 month period during the ECI phase. This is expected to be a significant cost to each of the short-listed consortia – some of these costs are to be reimbursed by SA Water up to a capped limit.
<i>Order long lead time items at or before contract award, especially, TBMs on critical path for marine works, high pressure pumps, membranes and some other specialised equipment on critical path for plant</i>	Supplementing the above ECI process will be a requirement for support for detailed design, early design approvals and commitment by SA Water to the consortia to secure manufacturing capacity for Tunnel Boring Machines (TBMs), High Pressure Pumps and Membranes, and high voltage switchgear.
<i>Use of proven standard designs, especially designs facilitating modularisation, off-site fabrication, contract packaging</i>	This will require Flexibility by SA Water to accept proven Contractor designs with focus on Durability Plan and whole-of-life solutions rather than detailed SA Water technical specifications. There will also be a need for concessions to SA Water technical standards.
<i>Exploit full range of management strategies to fast track construction and supply chain response</i>	Construction access, site preliminary works and earthworks may have to commence early to maximise opportunity of work during summer 2008-09 period. To be firmed-up as part of the ECI discussions.

RISKS AND SUGGESTED SA WATER MITIGATION

The main risks affecting acceleration of the program are summarised in the following table, together with suggested mitigation strategies:

Risks	Mitigation
<i>Delay to preparation of RFP requirements</i>	Detailed planning and coordination of RFP preparation and ensure adequate resourcing. Additional dedicated (legal /commercial /technical) teams co-located to fast-track preparation & review of tender documents.
<i>Delay to government approvals, especially environmental approvals</i>	Manage timing of Cabinet approval of short-listed Respondents; early site selection, early meetings and engagement with approval authorities, special legislation provisions and Respondent input / ownership of the development approval documentation / conditions.
<i>Delay to settling contract negotiations</i>	Develop full contract documents consistent with market precedents, maximise use of Sydney DBOM commercial principles, seek early approval of the ADP Steering Committee, presentation to ADP Steering Committee by Crown Solicitor's Office, additional resourcing, high level of interaction with short-listed respondents, separate teams conduct parallel negotiation streams
<i>Delay to availability of marine studies</i>	Manage study program, incorporate short-listed Respondent input into the extent and scope of marine geotechnical investigations, and secure Jack Up Barge for marine studies.
<i>Delay due to unanticipated customisation of designs or SAW approval of designs.</i>	SA Water to adopt flexible approach to specification requirements with focus on (whole of life) Durability Plan and Performance Specifications.
<i>Shipping or other supply disruption to long-lead time items</i>	Contractor responsibility to manage relationships with its supply chain; SA Water to ensure contractor is in position to place orders at contract award
<i>Marine works construction risks (adverse weather, adverse geotechnical conditions, environmental impacts, etc)</i>	Contractor responsibility to conduct studies, design out risks as far as possible. <i>Note that shipping risk is unable to be mitigated fully.</i> <i>Note that adverse weather risk is unable to be mitigated fully due to a compressed program.</i>

ACCELERATED MILESTONES

The following accelerated program dates were identified as challenging but achievable by a number of DBOM Respondents to the Request for EOI (Criterion 3):

Milestone	Date
<i>Issue full RFP</i>	Mid October 2008
<i>Receive RFP submissions</i>	End December 2008
<i>Obtain environmental approvals</i>	End March 2009
<i>Award DBOM contract</i>	End March 2009
<i>First Water (minimum 10% to 15% of plant capacity available)</i>	End December 2010
<i>Practical Completion and Handover for Operations</i>	End August 2011
<i>Completion of Defects Liability Period (24 months)</i>	End August 2013

RECOMMENDATION

1. Endorse the proposed SA Water Actions and Risk Mitigation strategies to achieve the program acceleration to achieve First Water for the ADP by 12 months to December 2010.
2. Endorse the adoption of the of the new accelerated project completion milestones for the ADP as noted below:

Milestone	Date
<i>Issue full RFP</i>	Mid October 2008
<i>Receive RFP submissions</i>	End December 2008
<i>Obtain environmental approvals</i>	End March 2009
<i>Award DBOM contract</i>	End March 2009
<i>First Water (minimum 10% to 15% of plant capacity available)</i>	End December 2010
<i>Practical Completion and Handover for Operations</i>	End August 2011
<i>Completion of Defects Liability Period</i>	End August 2013

Milestone	Date
<i>(24 months)</i>	

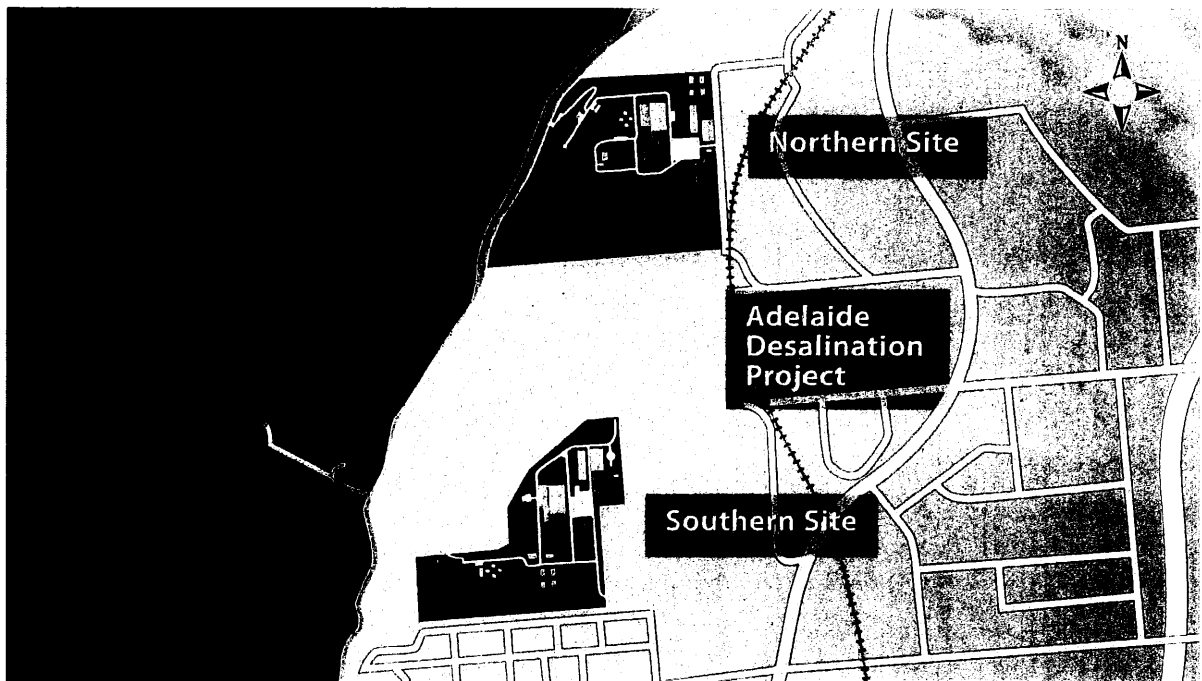
3. Note that SA Water will need to progressively issue the critical elements of the RFP to the short-listed Respondents commencing 23rd September 2008. This will be supplemented by bidder interactions with SA Water and its technical specialists and advisers during October / November / December 2008. It is important that knowledge gathered from the various studies, investigations and the concept design development process is quickly and consistently transferred to the short-listed Respondents during October / November 2008. This will also ensure that the short-listed Respondents will have an opportunity to actively input and take ownership of the commitments by SA Water in the Environmental Approval Submission(s) prior to the lodgement for public comment early November 2008.
4. Note that SA Water has confirmed the availability of its technical specialists and advisers to achieve the bidder interaction and work towards achieving program compression and Contract Award by End March 2009.
5. Note that the above acceleration milestones in recommendation 2 above are based on a 50 GL/annum plant capacity.

Milind Kumar
Project Director – Adelaide Desalination Project
25 August 2008

**ADELAIDE DESALINATION PROJECT
SUMMARY OF THE SITE SELECTION REPORT
By Connell Wagner**

1 INTRODUCTION

- 1.1 The selection of Port Stanvac as the preferred site for the Adelaide Desalination Plant followed a number of separate studies and investigations conducted by the Desalination Working Group. These studies and investigations were consolidated into a Report on site Selection (by Connell Wagner, July 2008) which presented a summary of these investigations and the decision process which resulted in selecting Port Stanvac as the preferred site. It is recognised 20-30 Ha is the ideal requirement for a 50 GL/annum Desalination Plant which has the ability to be expandable to a capacity of 100 GL/annum.
- 1.2 Two possible options for the Desalination Plant location were identified by Exxon-Mobil as part of the Negotiation Agreement:



The Site Selection Report (or a modified version thereof) will be submitted to Exxon-Mobil for their input as part of SA Water's commitment made in the Negotiation and Access Agreement between Exxon-Mobil and SA Water, which was executed on 6th June 2008. In this Agreement, SA Water is required to share all information relating to site investigations with Exxon-Mobil.

- 2.1 As part of the Preliminary Works and Activities for the Adelaide Desalination Plant, investigations have been conducted with a view to determining the preferred site for the ADP at Port Stanvac. On the basis of these investigations, a Site Selection Report has been

prepared. The Report includes the outcomes of a multi-criteria assessment undertaken in relation to the selection of the preferred site using an objective and quantifiable methodology

2.2 For both the Northern and Southern Sites, engineering evaluations have also been conducted to assess the impacts and viability of constructing and operating a Desalination Plant over a 20 year horizon. Conceptual plant layouts have been developed for each site; the layouts were developed with consideration of numerous factors including topography, operational efficiency, land features, existing vegetation, buffers from adjacent land users, visual impacts, noise, geotechnical conditions, accessibility, location and impact of the intake and outfall structures.

2.3 A number of investigation reports are being reviewed and finalised (including particularly the site contamination and geotechnical investigations), the consolidated information has been incorporated into the Site Selection Report by Connell Wagner (September 2008).

2.4 A summary of these main findings and associated issues are outlined below

- **Economic Assessment** – Based on estimated land acquisition costs, capital and operating expenditure over 20 years, the Southern site is approximately \$40 million more expensive than the Northern site.
- **Environmental Considerations** – Investigations of the Southern site have revealed groundwater contamination is evident across the site. Some groundwater contamination was encountered in sampling wells at the southern and eastern fringes of the northern site, however to considerable lower levels. Boarding the southern site is sensitive flora which will need to be carefully protected with this site option. On the basis of environmental factors, the northern site is strongly preferred
- **Social Considerations** –The Northern site is more visible by the Community and will require management of Aboriginal heritage issues, whilst the Southern site potentially has excessive construction noise and odour issues.
- **Engineering Assessment** – The risk exposure to Desalination Plant personnel and facilities arising from hazards associated with the (assumed future) operating refinery are considerably greater for the Southern site, to the extent personnel and equipment should not be located at the northern end of the Southern site. The water intake for the Northern site, compared with the Southern site, also provides greater separation from Exxon Mobil's existing offshore infrastructure should contaminants be mobilised in the marine environment. Whilst the Southern site has better access for construction, it has a smaller construction lay down area. The intake/outfall infrastructure and constructability issues also make the Southern site less favourable.

2.5 The outcome of the multi-criteria assessment supports and validates the selection of the Northern site as the preferred site. The entire

Northern site comprising six Certificates of Title (5608/586, 5752/89, 5753/580, 5752/88, 5752/84 and 5752/73) owned by Exxon-Mobil.



- 3.1 There is a physical separation of the site by a natural stormwater drain/creek which divides the Northern site into a 33 hectare northern portion and a 27 hectare southern portion.
- 3.2 There is evidence to suggest that the 'perched' groundwater on the Refinery site is contaminated and while it is generally moving westward, it may be causing contamination within the Northern site. This poses some risk to SA Water in acquiring the entire Northern site if the contaminated groundwater migrates. It should be noted that Exxon-Mobil may attempt to pass liability for this contamination to SA Water, depending on the terms of the proposed land transaction between

SA Water and Exxon-Mobil. However, the extent of remediation required may depend on the future land use of the site.

- 3.3 The natural stormwater drain/creek which divides the Northern site could prevent contaminated groundwater from migrating to the northern part of the Northern site, depending on depth and interconnection of aquifers across the site.
- 3.4 This will enable the construction of the Desalination Plant on the northern parcel of the Northern site, with the southern parcel of the Northern site being used for construction lay-down during the delivery phase of the ADP, and for subsequent use as a safety buffer zone and re-vegetation development.
- 3.5 The other key aspects are summarised below:
 - **Construction & Lay Down** – The Northern site provides an approximate land holding of 60 hectares, as compared to the Southern site which provides a nominal land holding of 35 hectares. The entire area of the Northern site will provide sufficient area for construction as well as lay-down for construction of both Stage 1 (50 GL/annum) and Stage 2 (100GL/annum) of the ADP. Greater design flexibility will accordingly be inherent with the greater land area.
 - **Safety Buffer Zone** – The acquisition of the entire Northern site will ensure that the ADP and its operations will have an appropriate buffer zone from the (future operating) Exxon-Mobil Refinery. Acquisition of the entire Northern site will also prevent any adverse or unfavourable land use on the southern parcel of the Northern site by Exxon-Mobil. A hazard identification study has been undertaken by Lloyd's Register, noting the various issues for potential off-site impacts to the ADP due to the operations of the refinery. The preliminary hazards identified include tank fires, pool fires, flash fires and explosions. It will therefore be in SA Water's best interests, from an operations and personnel safety perspective, to both maximise and secure its distance from Exxon-Mobil's operations.
 - **Re-vegetation and Opportunities to promote and preserve Aboriginal sites of significance** –The future use of the southern parcel of the Northern site could involve maintaining the area as a native revegetation area. This may have potential to become a keystone of the Tjilbruke Dreaming Trail which follows the entire coastline of the Fleurieu Peninsula, with the exception of the area currently occupied by the Exxon-Mobil refinery. There are also known sites of Aboriginal significance along the natural stormwater creek/drain, and an Aboriginal heritage survey is planned to further confirm this. There is potential that the revegetation and conservation of this area could constitute a considerable negotiation point with the Kurna should any sites of Aboriginal significance be discovered as a result of the survey or during construction.
- 3.6 It is anticipated that acquiring the entire Northern site, rather than just the northern portion, would be more palatable to Exxon-Mobil, as they

would otherwise be left with a steeply sloping (less developable) allotment.

- 3.7 SA Water has sought specialist advice from CB Richard Ellis on the likely land cost / value of both the northern and southern parcels of the Northern site. CB Richard Ellis has advised that:
- The assumed acquisition cost for the Northern site on a “free and willing” basis, is between rates of \$30 to \$40 per square metre.
 - The cost to acquire the northern parcel is estimated to be approximately \$14 million against an approximate cost of approximately \$24 million to acquire the total Northern site.
- 4.1 SA Water’s Technical Specialists (Connell Wagner) recommends that the entire Northern site be acquired, rather than the Southern site. The Northern site will provide SA Water and the ADP with a safety buffer zone from the refinery, and area of revegetation, better opportunities to protect and enhance Aboriginal cultural, improved constructability and future operational flexibility, and likely improved negotiating potential with Exxon-Mobil.
- 4.2 The purchase of the ADP site from Exxon-Mobil needs to be further progressed to ensure rights of access to the site are obtained so as to enable commencement of construction power establishment works and other early preparatory site works including the potential for site remediation.
- 4.3 SA Water has sought legal counsel in relation to ascertaining the liabilities attached with the acquisition of the entire Northern site, particularly in relation to any potential existing and future ground water contamination.
- 4.4 The following aspects will need to be considered as part of the acquisition process:
- Potential for movement of groundwater contamination and the party which is liable for contamination.
 - Remediation costs
 - Potential future land use
 - Potential timing for Stage 2 of the ADP
 - SA Water land management costs for the site.

**ADELAIDE DESALINATION PROJECT
BRIEF PROGRESS UPDATE REPORT**

1 ADP PROGRESS UPDATE

Major Development Process

The ADP was declared a Major Project, under the Development Act 1993, on 17th April 2008 by the Minister for Urban Development and Planning, thereby subjecting the ADP to a comprehensive assessment process. An amendment to the originally declared area (encompassing a variation to the marine area to allow for greater design flexibility for the intake and outfall structures) was sought on 19th June 2008. This amendment was formally gazetted by the Minister for Urban Development and Planning on 24th July 2008.

As part of the Major Development Assessment Process, a Development Application was lodged on 24th June 2008. This was to enable the Development Assessment Commission (DAC) to determine the level of assessment, formulate the guidelines for the assessment, and to consult with the Environmental Protection Authority (EPA) and other relevant Government agencies in relation to formulating the guidelines.

It is anticipated that DAC will issue the formal guidelines to SA Water by mid-September 2008. SA Water has already anticipated the depth and breadth of information that will be required by the guidelines, on the basis of the draft guidelines that were issued for SA Water and Agency comment, and also on the basis of guidelines issued by DAC for similar projects.

Concept Design for the Desalination Plant and Marine Works

SA Water has received the final draft of the Concept Report for the Desalination Plant which combines the Desalination Plant, intake and outfall and infrastructure concept designs. The Concept Report comprises the basis of design, assumptions, options assessment, design development, drawings, technical data sheets, design matters and equipment schedules.

This Report will be used to demonstrate compliance with the key functional requirements and will be used for comparison of the DBOM Request for Proposal (RFP) submissions. It is anticipated that the issue of the RFP to the shortlisted respondents will commence on 23rd September 2008.

Aspects of the Concept Report will also be incorporated in the Major Project Assessment Document.

Transfer Pipeline System

The Transfer Pipeline System comprises a pump station at Port Stanvac, a transfer pipeline between Port Stanvac and the Happy Valley Treated Water Storage and the Happy Valley Reservoir and a storage tank at the Happy Valley Water Treatment Plant. Reviews are currently in progress, such as water quality investigations, network implications and potential options for mixing desalinated and reservoir water at the Happy Valley site.

As a result of comprehensive consultation within SA Water's ADP Team, a preferred route for the Transfer Pipeline has been selected. A search of Certificates of Title (CTs) relating to this pipeline corridor is being undertaken to ascertain the extent to which SA Water will be required to purchase easements, and to identify landowners with whom SA Water will be required to negotiate accordingly. These titles will also be used to gain approvals.

Stakeholder Workshops have been, and continue to be conducted with a view to obtaining permission in preparation for undertaking works along the nominated pipeline corridor, and involved representatives of DEH, Department of Transport, Energy and Infrastructure, City of Onkaparinga, University of Adelaide, City of Marion, TransAdelaide and the Natural Resources Management Board.

Independent Technical Review Panel (ITRP)

An Independent Technical Review Panel was established for the ADP to ensure the objectives of the environmental assessment are achieved, and to verify the transparency and appropriateness of the process applied to the environmental investigations.

At this stage, the ITRP is of the view that major environmental risks for the project have been identified and are being addressed. The ITRP is satisfied with the SA Water's effort to meet timeframes for environmental investigations and planning approval documentation, and continues to fulfil an active review and advisory role for the ADP.

Financial Update

The following table indicates approved funds which have been committed against the various budget elements of the Preliminary Works and Activities for the ADP:

	Budget (\$ '000)	Costs committed (\$ '000)
Baseline Environmental Monitoring	2,625	2,300
Professional Service Providers (Commercial, Financial, Technical, Environmental, Planning, Review, Probity, Community Engagement, Energy and Renewable Energy) and other Advisers	18,313	17,900
PB Due Diligence	16	20
Project Team	7,350	6,700
Environmental Investigations	470	550
KPMG / Procurement Investigations	104	150
Transfer Pipeline System	3,000	2,950
ETSA Investigations & Long Lead Items	2,200	2,350
Independent Technical Review Panel	23	150
External Government Advisers	58	120
Legal Advisers	1,445	1,400
Unallocated Contingency	696	1,000
Total	36,300	35,590

**ADELAIDE DESALINATION PROJECT
PLANNING AND ENVIRONMENTAL APPROVALS UPDATE
(Paper endorsed by ADP Steering Committee)**

ADELAIDE DESALINATION PROJECT STEERING COMMITTEE

Title: Planning and Environmental Approvals Update

Agenda item no: 7

Date: 1st September 2008

1. PURPOSE

To provide the ADPSC with an update on:

- The status of key Planning and Environmental assessments and approvals for the ADP including an update on the Major Development Process; and
- The status of the *Environment Protection Biodiversity Conservation Act* process for the ADP.

2. MAJOR DEVELOPMENT PROCESS

2.1 Background

The Adelaide Desalination Project was declared a Major Project, under the *Development Act 1993*, on the 17th April 2008 by the Minister for Urban Development and Planning. The declaration means the Minister for Urban Development and Planning (assisted by Planning SA) will comprehensively assess the proposal and its impact.

As part of the Major Development assessment process, a Development Application was lodged on the 24th June 2008. The purpose of the Development Application was to allow the Development Assessment Commission (DAC) to undertake the following:

- Determine the level of assessment (Environmental Impact Statement (EIS), Public Environment Report (PER) or Development Report (DR))
- Formulate guidelines for the assessment
- Consult with the Environment Protection Authority and other relevant Government agencies with regards to formulating the guidelines.

An amendment to the originally declared area (encompassing a variation to the marine area to allow for greater design flexibility for the intake and outfall structures) was sought on the 19th June. This amendment was formally gazetted by the Minister

for Urban Development and Planning on the 24th July allowing the progression of the Development Assessment Process.

2.2 Current Status

Planning SA (on behalf of the DAC) has prepared a set of draft assessment guidelines. The draft guidelines nominate the assessment level as a Public Environment Report (PER). The guidelines have been circulated to relevant Government Agencies for comment, with the statutory period for consultation closing on the 14th August 2008.

The DAC is scheduled to undertake a site visit and meet to consider the draft guidelines on the 29th August. Once the DAC has finalised the guidelines and confirmed the level of assessment they will report to the Minister for Urban Development and Planning. The Minister will then formally release the guidelines and assessment level.

Based on discussions with Planning SA, it is anticipated the guidelines should be formally available by mid September, provided the DAC are able to resolve the guidelines and assessment level in a single meeting. To meet project timeframes it will be important that there is no delay in finalisation and issuing of the guidelines.

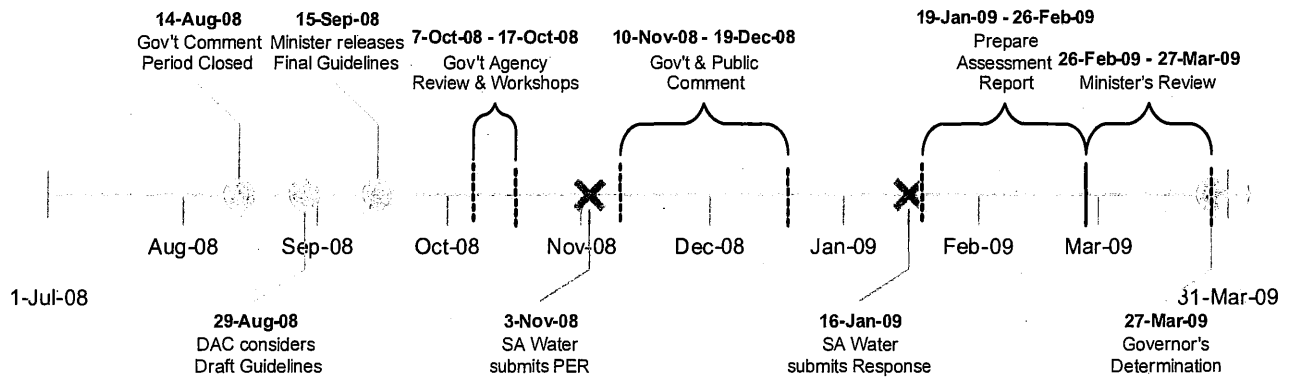
In the event that the formal issue of the guidelines is delayed beyond mid September 2008, the current schedule for submission of the environmental assessment document in October 2008 will be significantly at risk. A late release of the guidelines will leave insufficient time to ensure considered compliance and alignment with the guideline criteria. Lodgement of the assessment document too soon after release of the guidelines may generate criticism that the assessment could not have been thorough as the guidelines have only just been issued.

Initial drafting of the environmental assessment document, including preparation of a table of contents has commenced. As stated, the final guidelines are required to progress the document in detail to ensure alignment and compliance. A number of technical and environmental investigations are also due for submission in during early to mid September 2008, these studies form critical inputs to the preparation of the assessment document.

It should be noted, some of the environmental investigations will continued following preparation of the assessment document, including particularly the 12 month baseline investigations. It is intended that additional information from ongoing studies will be provided as part of the formal Response process in January 2009.

2.3 Look ahead

The proposed look-ahead timeline for approvals process is shown below:



Draft chapters of the environmental assessment document will be available for review and endorsement by SA Water during September, with the view to submit the draft assessment document to Planning SA and subsequently relevant Government Agencies for a compliance check, in October 2008.

During October 2008, workshops with Government Agencies are planned to discuss the draft document and incorporate feedback with the view to lodge the final document by early November 2008. Following formal submission, the document will be released for a six week period of Agency and public comment. A public meeting is required to be held during this period. The proposed schedule would achieve the public consultation period achieved by Christmas 2008.

Following the consultation period SA Water must prepare a written Response that addresses any matters raised either by Government Agencies, other stakeholders or in public submissions. This Response Document may include supplementary information or amendments to address matters raised. It should be noted that if substantial changes are made to the Assessment Document, a further public exhibition may be required. Following submission, the Minister for Urban Development and Planning (with assistance from Planning SA) will prepare an Assessment Report on the proposal. The Assessment Report is made available for inspection for a period specified by the Minister. *Following release of the Assessment Report as per the timeframe indicated above, four weeks have been allowed for Ministerial review and Cabinet process, prior to the Governor's decision. Support will be required from Government Agencies to support this 4-week timeline so that end March 2008 decision by the Governor is achieved.*

The Governor will then make a decision on the final proposal (on the advice of the Minister and Cabinet) having regard to the Assessment Report and other documentation.

3.0 ENVIRONMENT PROTECTION BIODIVERSITY CONSERVATION ACT (EPBC ACT)

3.1 Background

Under the Environment Protection Biodiversity Conservation (EPBC) Act actions that have a significant impact on a matter of national environmental significance (NES)

are required to be referred to the Commonwealth for assessment and/or approval. NES matters include listed threatened species and communities, listed migratory species, Ramsar listed wetlands, World Heritage Areas, Commonwealth land and nationally listed heritage sites.

3.2 Status

To date no significant impacts to any matters of national environmental significance have been identified. Whilst a nationally threatened plant species has been identified as possibly occurring within cliff vegetation on the Southern Port Stanvac site (it has been previously noted at the site), it is intended that impacts to this species and its habitat can be avoided.

SA Water is intending to lodge a referral to the Commonwealth to seek a formal determination on the basis of the project being a 'non-controlled action' (e.g. no significant impacts to NES matters and therefore not subject to further assessment or formal approval). A draft referral is currently being prepared on this basis incorporating the outcomes of the technical and environmental investigations as they become available.

It is intended to lodge the referral with the Commonwealth at the end of September 2008. The Commonwealth has a statutory 20 day period to make its determination, which will allow for a determination prior to final submission of the State environmental assessment documents.

It should be noted that in July 2008 the Commonwealth gave notice that it had entered into a bilateral agreement with South Australia. The agreement means that in assessing actions under the EPBC Act the Commonwealth Minister can rely on specified State environmental impact assessment processes, including the Major Project assessment process, thereby allowing a single assessment and approval process. It is understood from the SA DEH, the administrative arrangements to support the bilateral agreement are still being negotiated with the Commonwealth.

The opportunity to utilise the bilateral process has been reviewed however is not being pursued for a number of reasons including:

- The progress of the State assessment process and the potential for delays to this process by holding back finalisation of the guidelines whilst a referral to the Commonwealth is made to allow them to input to the guidelines. As stated above, no significant impacts to NES matters have been identified and as such it is anticipated the project will be deemed a 'non-controlled' action and therefore will not require formal assessment under the EPBC Act, on this basis there is no benefit in delaying the State assessment process.
- The complexity introduced to the assessment process by virtue that the referral (and any subsequent assessment) needs to cover the whole project which would be inclusive of the Transfer pipeline, however the State process (as declared) only covers the Desalination Plant and the intake/outfall works. It is likely that if the bilateral was pursued the State assessment process would need to be expanded to cover the Transfer pipeline.

SA Water has been and will continue to consult with the Commonwealth Department of Environment, Heritage and the Arts with respect to the project, and the approach for lodgement of a referral under the EPBC Act.

4.0 RECOMMENDATION

It is recommended that the Steering Committee note:

- The status of the Environmental and Planning Approvals, including the timeframes for review and submission of the environment assessment documentation.
- The involvement of the Government Agencies and the support required to providing comments (both on the draft and final assessment document) within the timeframes, to ensure no delays in the process.
- The request for the ADP Steering Committee to consider the ADPSC Independent Chair to inform the DAC (an Independent Committee) of the potential accelerated timeframes for the ADP and request support for timely consideration by DAC so that SA Water is able to receive the Guidelines and subsequent Assessments on time.

Milind Kumar
Project Director, Adelaide Desalination Project
25 August 2008