

# DEVELOPMENT ASSESSMENT FORUM

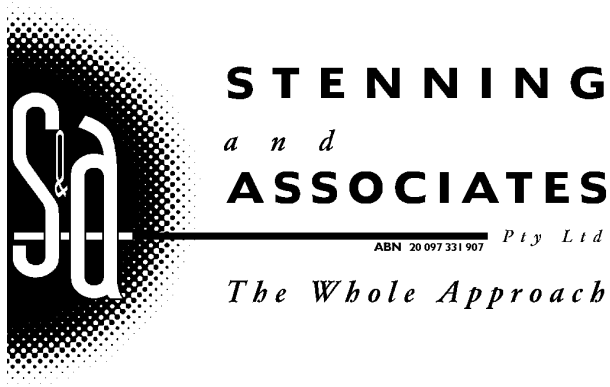
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## *Implementation Options for National Standard Communications Protocol for Electronic Development Assessment*

### *Final Report*

*May 2004*

Version 1.0



Commercial-in-Confidence

# DOCUMENT CONTROL

## Document Location

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## Final Approvals

This document requires the following approvals for release to client.

Name	Signature	Title	Date of Issue	Version
Nick McShane		Managing Director	13 May 04	0.5

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DAF (Adam Heather)	Final acceptance	13 May 04	1.0



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## DISCLAIMER

This report has been developed by Stenning & Associates Pty Ltd in association with Croger Associates Pty Ltd. Developing this report has required reliance on information sourced from various publications and websites (listed in the References) and through direct discussions and email communications with a number of stakeholders. While all due care has been taken in compiling this report, Stenning & Associates Pty Ltd accepts no responsibility for the accuracy or completeness of this information and recommends that readers exercise their own skill and care with respect to its use. We will not be responsible for any loss, however arising, from the use of, or reliance on this information.



# EXECUTIVE SUMMARY

## Purpose

This report provides a decision framework for the Development Assessment Forum (DAF) to determine the optimum value proposition for the implementation of the proposed National Standard Communication Protocol for the electronic exchange of development assessment (DA) information (proposed eDA protocol).

This report is part of a suite of work stemming from DAF's establishment of the electronic Development Assessment (eDA) Project, the aim of which is to create an eDA protocol for transferring DA data electronically. It is a companion to the report titled *Benefit Cost Analysis for Electronic Development Assessment*.

## Implementation Options – Required Features

When the proposed eDA protocol is developed and implemented, it will only be adopted by the DA industry (including State Agencies, Councils, referral bodies etc) if they have a sound business reason to do so. From a broader perspective, is reasonable for the organisations (government and industry) that adopt the proposed eDA protocol to expect, during its development and ongoing life:

- Input into the development and review of the protocol.
- The protocol to support the latest industry practice.
- The protocol to be maintained and revised to meet changing business needs.
- Mechanisms to be available for determining conformance with the protocol by other parties for inward and outward message exchanges. This would usually include electronic access to a testing facility (one that provides set responses to test messages sent) to support development of compliant software.
- Electronic access to set code tables, data dictionaries, namespace descriptions, possibly unique “project identifiers” to support implementation.
- Consistency of the protocol with relevant national and international standards.
- Consistent trading terms and conditions for all users of the protocol, without variation.
- Industry (including regulators) acceptance of the standards and their use in production processes.
- The building of relationships and standards with other parts of the broader industry to multiply the benefits gained.
- A process for disseminating any learnings from organisations that have adopted the protocol to support a smooth transition process for other adopters.

As many of these requirements are ongoing, it is necessary for a permanent management body to be appointed to:

- Schedule protocol development, industry rollout, review and maintenance.
- Facilitate the use of the proposed eDA protocol (marketing and publication) and conformance testing/certification.

## Implementation Options and Issues

Against these requirements the report evaluates three implementation models identified by the DAF eDA Steering Group. These models are the development and maintenance of the proposed eDA protocol by:

1. Standards Australia.
2. A DAF members-owned entity.
3. Australian Building Codes Board.

The report describes these options and identifies a number of important implementation issues that be need to be considered in determining the optimum value implementation arrangements for the proposed eDA protocol. These issues include:

- Focus – the need for the optimum value option to play a strong leadership role in the establishment and maintenance of the proposed eDA protocol.
- Vendor incentives – the need for software vendors to have a commercial imperative for them to adopt the proposed eDA protocol.
- Intellectual Property – the need to protect the intellectual property associated with the proposed eDA protocol and to ensure that the protocol is available on an “open access” basis to encourage stakeholder take-up.
- Confidence in outcomes – the need for the implementation option chosen to be credible with stakeholders and capable of providing them with an outcome that they can have confidence in adopting.
- Funding/costs – the need for a viable funding model to be developed to assist with meeting development, endorsement and implementation costs.
- Development timeframe – the need for a realistic timeframe to be adopted for the development and implementation of the proposed eDA protocol.
- Interaction with other related projects – the need for the development and implementation process to be consistent with other interoperability initiatives being undertaken by government.
- Take-up – the need for appropriate marketing and communication strategies to manage and influence the industry and vendor take-up of the proposed eDA protocol.
- Review/maintenance arrangements – the need to establish a process that guarantees effective ongoing review and maintenance of the protocol.
- Improving the DA process - to monitor opportunities to improve the DA process that arise during the standard making process with a view to taking action to facilitate/encourage them.

## Evaluation

The report details a series of critical evaluation criteria then evaluates the options against these criteria. The evaluation criteria are detailed in Table ES - 1 and the outcomes of the evaluation are set out in Table ES - 2.



Table ES - 1: Evaluation Criteria

Criteria	Weighting	Description
<b>Risk Management</b>	15	The degree to which the option is likely to control the range of risks associated with the future ongoing development of the proposed eDA protocol.
<b>Costs</b>	8 5	The level of costs associated with the option, including: <ul style="list-style-type: none"><li>• Support, administration and startup costs; and</li><li>• Costs incurred by industry stakeholders in providing voluntary input.</li></ul>
<b>Time</b>	10	The degree of control over the time taken to develop amendments and future stages of the protocol.
<b>Credibility</b>	20	The likely degree of credibility of the published protocol as perceived by stakeholders.
<b>Focus</b>	15	The degree of control that DAF will have over the direction, development and promotion of the protocol
<b>Protection of Intellectual Property</b>	12	The ability and means to control copyright and hence allow free access and use of the published protocol.
<b>Quality Assurance</b>	5	Does the option have a well-defined process and quality control measures in place that will ensure the protocol's technical quality and fitness for purpose.
<b>Expertise</b>	10	The degree of expertise associated with the option in: <ul style="list-style-type: none"><li>• Standards/protocol development; and</li><li>• The subject area of development assessment and related processes.</li></ul>
<b>Penetration – Software Vendors</b>	5	The ability of the option (on its own account) to liaise, market and promote the protocol to the suppliers of software solutions that service the various stakeholders. This is critical to ensure widespread acceptance of the protocol.
<b>Penetration - Stakeholders</b>	5	The ability of the option (on its own account) to market and promote the protocol to the stakeholders in a manner that is likely to maximize the uptake of the protocol.
<b>Sustainability</b>	10	The ability of the option to fund on an on-going basis the open source publishing, development and maintenance of the protocol, using a simple transparent business model. This also includes concepts such as succession planning and available support structure.
<b>Total Weighting</b>	<b>120</b>	

**Table ES - 2: Ranking of Options**

Criteria	Raw Score			Weighted Score		
	Standards Australia	DAF member-owned Entity	ABCB	Standards Australia	DAF member-owned Entity	ABCB
Risk Management	5	9	8	75	135	120
Costs - Support	9	6	8	72	48	64
Costs – Voluntary industry input	6	9	9	30	45	45
Time	4	9	8	40	90	80
Credibility	9	5	8	180	100	160
Focus	4	9	8	60	135	120
Protection of IP	6	7	9	72	84	108
Quality Assurance	8	9	8	40	45	40
Expertise	8	5	7	80	50	70
Penetration – Vendors	6	8	8	30	40	40
Penetration - Stakeholders	7	8	9	35	40	45
Sustainability	8	6	8	80	60	80
<b>Total (max raw score = 120, max weighted score =1200)</b>	80	90	98	794	872	972

The ranking exercise clearly indicates that the ABCB option is the best across the selection criteria. Its strengths are:

- The likelihood that it will produce a better quality outcome in a shorter timeframe than the other options (particularly the Standards Australia option).
- Its better understanding of the “business space” and hence its influence with stakeholders.
- Its credibility and experience as a standard setting body with a knowledge of and existing relationship with a large proportion of the stakeholders that would benefit from the proposed eDA protocol.
- The integration of the development, promotion and implementation of the proposed eDA protocol into a single process, thereby ensuring momentum and a high degree of market penetration.

## Recommendations

Base on outcomes of the decision framework, the report recommends that the optimum value proposition for DAF is to request the ABCB to facilitate and manage the standard development/consultation/endorsement process and own (on behalf of DAF) and maintain the proposed eDA protocol. Key features of this proposition should include:

- Establishing a formal agreement between DAF and the ABCB regarding the role that the ABCB will undertake with respect to the proposed eDA protocol and the inter-relationship between the ABCB and DAF on this matter.
  - This should include funding arrangement and the nature and processes for the ABCB to obtain relevant DAF sign-offs on the draft protocol that the ABCB is to use to begin the standard making process.
  - It is important that the standard making process undertaken by ABCB be self contained and governed by ABCB. Accordingly, it would not be feasible for DAF to have a sign-off role subsequent to the ABCB commencing its standard making process, as such role could be seen to undermine the ABCB's role and hence the credibility of the resulting eDA protocol.
- DAF itself undertaking preliminary development work to develop a draft of the proposed eDA protocol and formally endorse this draft prior to handing it over to the ABCB for passage through the standard making process.
  - The initial draft will play an important role in determining the direction and scope of the proposed protocol and hence is DAF's opportunity to ensure that its strategic objectives are properly considered in the subsequent standard setting process.
  - It is understood<sup>1</sup> that DAF will engage consultants to develop this initial draft of the proposed eDA protocol.
- DAF being represented on the technical committee established by the ABCB, given that it is an important stakeholder during the standards making process.
- It would be desirable if the standards development process was facilitated by the ABCB using an online discussion/consultation forum, similar to that used by Standards Australia. This would reduce the cost of collaboration and information dissemination to those involved in the development process and significantly reduce the reliance on physical meetings (which are expensive for those participating on a voluntary basis) and teleconferences.
- To the extent possible, the proposed eDA protocol should be developed using a modular approach (ie, as a series of messaging standards). This approach will reduce the risk inherent in developing the protocol and will allow the orderly development of a core protocol and extension to a range of related areas over time.

As with all identified options, this proposition will require the establishment of a funding mechanism. Funding by government appears the most feasible of the range of funding options identified due to the low potential for the protocol to be self-funding. Nevertheless, it is not possible for this report to make definitive recommendations concerning the best funding option, as this decision involves researching a range of policy and stakeholder considerations and judgement. This research is outside the scope of this report.

The recommendation on the optimum value proposition involves a number of judgements made by the consultants. DAF members may arrive at different judgements based upon knowledge and opinions not known or held by the consultants that prepared this report.

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<sup>1</sup> Advice received from DAF eDA Project Manager.

Accordingly, it is also recommended that DAF closely analyses the judgements that have been made as part of and within the framework to ensure that they concur with these judgements.

The report concludes by identifying a number of factors that can be used to help measure the success and effectiveness of the implementation of the proposed eDA protocol. These are outlined in

**Table ES - 3: Critical Success Factors**

<b>Critical Success Factor</b>	<b>Metrics</b>
High level of acceptance and use by governments and vendors in DA environment	Take-up rate by DA stakeholders and vendors
High quality of the protocol	Level of confidence that DA stakeholders have in the protocol
Effective ongoing implementation and support	Speed of take-up by DA stakeholders and vendors

It is recommended that strategies and arrangements for collecting data to support these metrics be investigated as part of the process of establishing the recommended optimum value proposition.

# 1 INTRODUCTION

## 1.1 Purpose

This report provides a decision framework for DAF to determine the optimum value proposition for the implementation of the proposed National Standard Communication Protocol for the electronic exchange of development assessment (DA) information (proposed eDA protocol).

This Report:

- Describes the main implementation models nominated by DAF for evaluation;
- Outlines the key issues to be faced in implementing the proposed eDA protocol;
- Evaluates the implementation options;
- Identifies potential funding options related to the implementation models; and
- Recommends an optimum value proposition for implementing the proposed eDA protocol.

## 1.2 The Project

This report is part of a project for which the primary objectives are to:

- Provide a picture of who will be impacted by the proposed eDA Protocol and in what way; and
- Recommend an optimum value proposition for the sustainable implementation and maintenance of the proposed eDA protocol.

This information will be used by DAF to assist in building stakeholder support for the proposed eDA protocol and inform the design of the implementation strategy.

The project is more fully described in the report titled *Benefit Cost Analysis for Electronic Development Assessment*.

## 1.3 Methodology

In compiling this report, we have:

- Undertaken an Internet based research on the implementation options and potential implementation issues.
- Sought information by email/telephone from selected stakeholders. Those consulted are detailed in Attachment A.
- Developed this draft report for consideration by the DAF eDA Steering Committee.



## 2 IMPLEMENTATION OPTIONS

### 2.1 Required Features

When the proposed eDA protocol is developed and implemented, it will only be adopted by the DA industry (including State Agencies, Councils, referral bodies etc) if they have a sound business reason to do so. Accordingly, the proposed eDA protocol must have a good fit with DA processes and data requirements.

From a broader perspective, is reasonable for the organisations (government and industry) that adopt the proposed eDA protocol to expect, during its development and ongoing life:

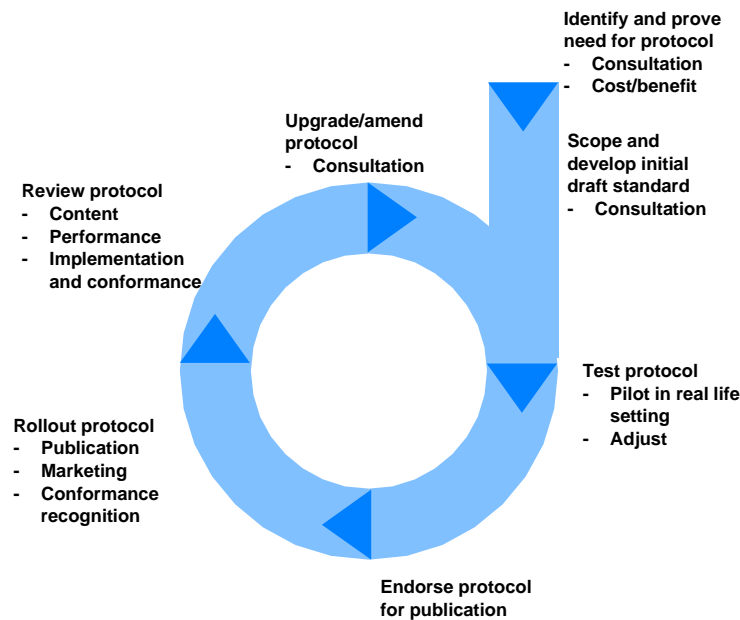
- Input into the development and review of the protocol.
- The protocol to support the latest industry practice.
- The protocol to be maintained and revised to meet changing business needs.
- Mechanisms to be available for determining conformance with the protocol by other parties for inward and outward message exchanges. This would usually include electronic access to a testing facility (one that provides set responses to test messages sent) to support development of compliant software.
- Electronic access to set code tables, data dictionaries, namespace descriptions, possibly unique “project identifiers” to support implementation.
- Consistency of the protocol with relevant national and international standards.
- Consistent trading terms and conditions for all users of the protocol, without variation.
- Industry (including regulators) acceptance of the standards and their use in production processes.
- The building of relationships and standards with other parts of the broader industry to multiply the benefits gained.
- A process for disseminating any learnings from organisations that have adopted the protocol to support a smooth transition process for other adopters.

As many of these requirements are ongoing, it is necessary for a permanent management body to be appointed to:

- Schedule protocol development, industry rollout, review and maintenance.
- Facilitate the use of the proposed eDA protocol (marketing and publication) and conformance testing/certification.

The main elements of protocol development and maintenance can be described in terms of a lifecycle approach, as illustrated in Figure 1.

**Figure 1: Protocol development and maintenance lifecycle**



The important features of this model include:

- Initial protocol justification and scoping.
- Consultation, development and testing.
- Endorsement and publication of the protocol by an appropriate body.
- Implementation of the proposed eDA protocol.
- Ongoing review and maintenance.

## 2.2 Option Descriptions

The DAF eDA Steering Group requested the evaluation of three implementation models for the purposes of this project, namely the development and maintenance of the proposed eDA protocol by:

- 1.4. Standards Australia.
- 2.5. A DAF members-owned entity.
- 3.6. Australian Building Codes Board.

All these models conform to some degree to the lifecycle outlined in Figure 1. The specifics of these options are outlined below.

It is important to recognise that all these options involve significant input by DA industry participants (principally commonwealth and state agencies, local government and industry) on a voluntary basis, with those participants needing to fund their own participation, including their physical attendance at committee meetings.

It should be noted that a number of alternative options were identified by the Steering Committee as part of its consideration of a draft of this report. These included:

1. PSMA Australia Limited

2. Intergovernmental Committee on Surveying and Mapping (ICSM)
3. Integrated Transactions Reference Group (ITRG)

These options were not assessed as they were outside the scope of this report.

### 2.2.1 Standards Australia

#### ***General***

This option involves DAF's eDA steering committee applying to Standards Australia to establish a Technical Committee within Standards Australia's Standard development framework. The Technical Committee would then drive the development of the proposed eDA protocol through a defined process that would eventuate in the protocol being endorsed as an Australian Standard.

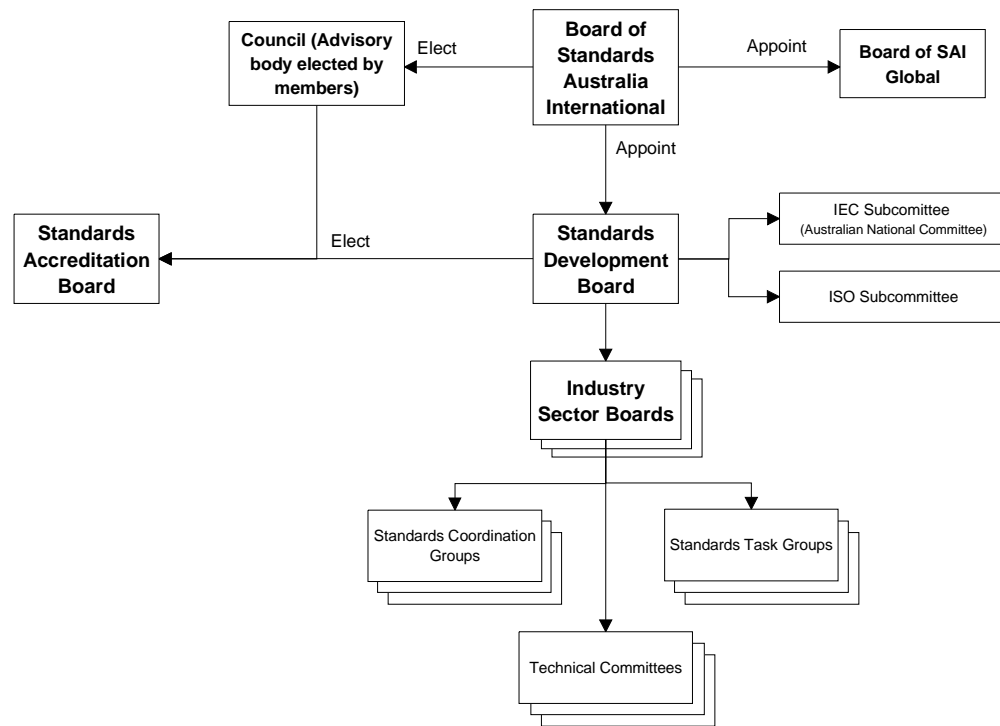
Throughout this process, Standards Australia would provide organisational support for the Technical Committee. Importantly, it would undertake a quality assurance role in ensuring that the Committee adhered to the specified standard development process (including consultation processes).

#### ***Governance***

Standards Australia would provide the appropriate governance structure for protocol development and maintenance, as illustrated in Figure 2. It is likely that the technical committee established to develop the proposed eDA protocol would fall under the Communications, Information Technology Standards Sector Board. This Board currently deals with standards relating to topic specific areas such as intelligent transport system, banking standard, broadcasting, health informatics and so on, as well as dealing with more generic standards within the communications and information technology area.

Standards Australia International Ltd is an independent company, limited by guarantee and trading under the name 'Standards Australia'. Its members include state and federal governments, professional, trade and industry associations, consumer organizations, trade unions, research organizations and educational establishments.

**Figure 2: Standards Australia Governance Structure<sup>2</sup>**



**Costs/Funding**

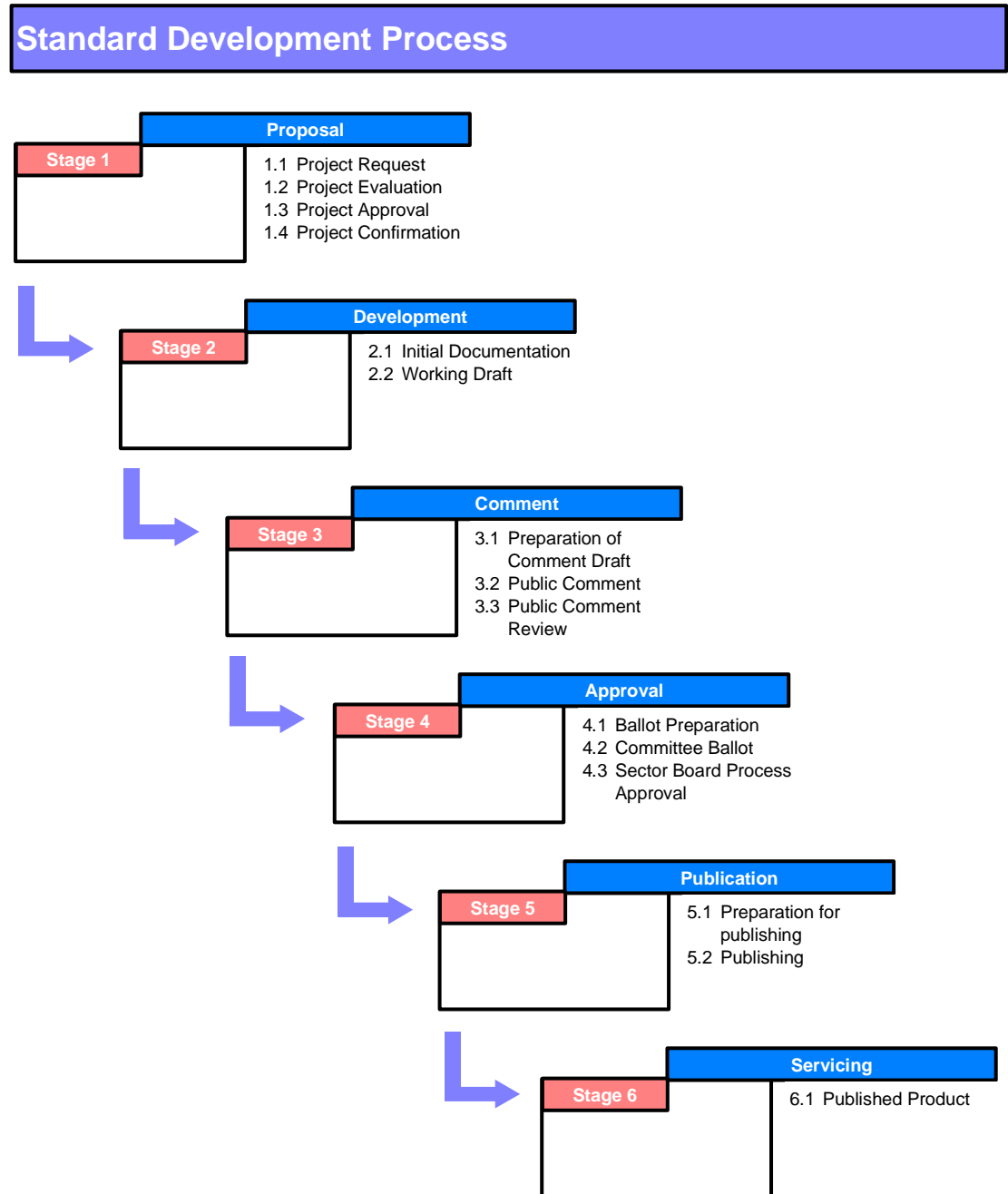
This option would be largely self-funding insofar as the costs of supporting the technical committee are concerned. Specifically, Standards Australia would provide a project manager and would meet the support costs for that project manager and related administrative costs involved in the standard development process. However, any consultancy work required during the development stage to support or speed the formation of the proposed eDA protocol would require separate funding by the industry sponsors.

**Process**

The standard development process utilised by Standards Australia is illustrated in Figure 3 and outlined in Table 1. It is noted that Standards Australia does not have a specific technical committee that could deal with the proposed eDA protocol. It does, however have a range of technical committees in the Information Technology Area, including *IT – 027 Personal and Corporate Data - Representation and Management*, on which DAF is currently represented.

<sup>2</sup> Sourced from *Standardization Guide – 005 – Technical Governance of the Standards Development Process*, Standards Australia website, [www.standards.org.au](http://www.standards.org.au), 15 Mar. 04.

Figure 3: Standards Development Process Used by Standards Australia<sup>3</sup>



<sup>3</sup> Sourced from *Standardization Guide – 001- Preparing Standards*, Standards Australia website, [www.standards.org.au](http://www.standards.org.au), 12 March 04.

**Table 1: Standards Australia Standard Development Process<sup>4</sup>**

Step	Description
Request for a Standard	This involves a formal request to establish a standard, often coming from an industry body or a government department. It is important to note that Standards Australia only initiates standards by request, it does not initiate a new Standard project off its own volition.
Project approved	This involves research to determine if there is genuine community/industry support for the Standard. Once research has proven this to be the case, a new Standards project is approved by the appropriate Technical Committee and Standards Sector Board.
Formation of a Technical Committee	Standards are prepared by Technical Committees. The essential characteristic is that membership is balanced, and that it represents the broadest possible spectrum of interests. Each Committee has an unpaid external chairperson, and Standards Australia provides a Projects Manager to be Committee secretary, responsible for coordinating committee work, and ensuring the draft Standard follows the basic principles of standardization.
Preliminary draft	Before any drafting work is undertaken, the Committee must ensure that the proposed Standard will not act as a barrier to trade, competition or innovative development. It is Standards Australia policy to adopt International Standards to the maximum possible extent. In the absence of an appropriate international Standard, and verification that the proposed Standard will in no way be anti-competitive, the Committee proceeds to prepare a draft for a new Australian Standard.
Committee draft	Most of the necessary drafting work is done off-line in subcommittees and expert working groups, using advanced web-based authoring, administration and balloting systems. The Committee meets to discuss progress, coordinate work programs and seek to maintain consensus in the technical content of the emerging draft.
Draft for public comment	This very important stage requires the draft to be published and made available to the public for two or three months.
Consideration of comment	All comments of the public are considered in detail by the Committee and, if necessary, further drafting is undertaken.
Draft for postal ballot	The Committee then votes on the final draft. For the Standard to be published, the ballot must demonstrate substantial agreement with no major dissenting interests.
The published Standard	A final process approval is then given by the relevant Standards Sector Board on behalf of the Council of Standards Australia and the Standard is then ready for publication.

<sup>4</sup> This process is drawn from information provided on Standards Australia's website – [www.standards.org.au](http://www.standards.org.au)

It is difficult to predict how long it would take for the proposed eDA protocol to be developed under this process, as this depends upon the amount of preparatory analysis and development work undertaken, the degree of stakeholder agreement and the ability of the stakeholders to commit their time to the process. Nevertheless, on the basis of consultation with various people with experience with Standard Australian processes, a reasonable forecast would be that the process would take between two to four years to complete.

### ***Intellectual Property***

The copyright to the standard would be owned by Standards Australia.

### ***Marketing and Distribution***

The published protocol would be available for purchase at commercial rates from Standards Australia. Consultation with Standards Australia indicates that it recovers its operational costs across the broad range of standards that it publishes. The purchase costs for the type of publication involved with the proposed eDA protocol may range from \$50-\$100 per copy.

Standards Australia does not have a role in actively promoting or encouraging the use of specific standards that it publishes. Industry sponsors of the standard normally undertake that function. In the case of the proposed eDA protocol, this function would have to be separately undertaken by DAF and its members.

This option does not include a conformance testing service, which would have to be separately established.

## 2.2.2 DAF Members-Owned Entity

### ***General***

This option involves establishing an entity (or finding an existing entity) to develop, own and maintain the proposed eDA protocol. A created entity could be a “not for profit” company limited by guarantee or some other form of ownership structure. The principal requirement of DAF for the structure should be that it is able to protect the copyright of the developed protocol. This will enable DAF to promote and disseminate the proposed eDA protocol in the manner best suited to maximising stakeholder uptake.

The arrangements underpinning the SuperEC Programme provide a comparable benchmark for this option. SuperEC is an initiative of the Australian superannuation industry that develops and promotes industry message standards (XML schemas) for electronic commerce.

Based on this benchmark, this option would involve:

- Establishing an entity and associated governance arrangements with ownership by those DAF members that choose to be involved.
- Establishing a protocol development, review and maintenance process.
- Establishing a conformance accreditation arrangement.
- Establishing marketing and distribution arrangements.
- Establishing funding arrangements for the entity.

### ***Governance***

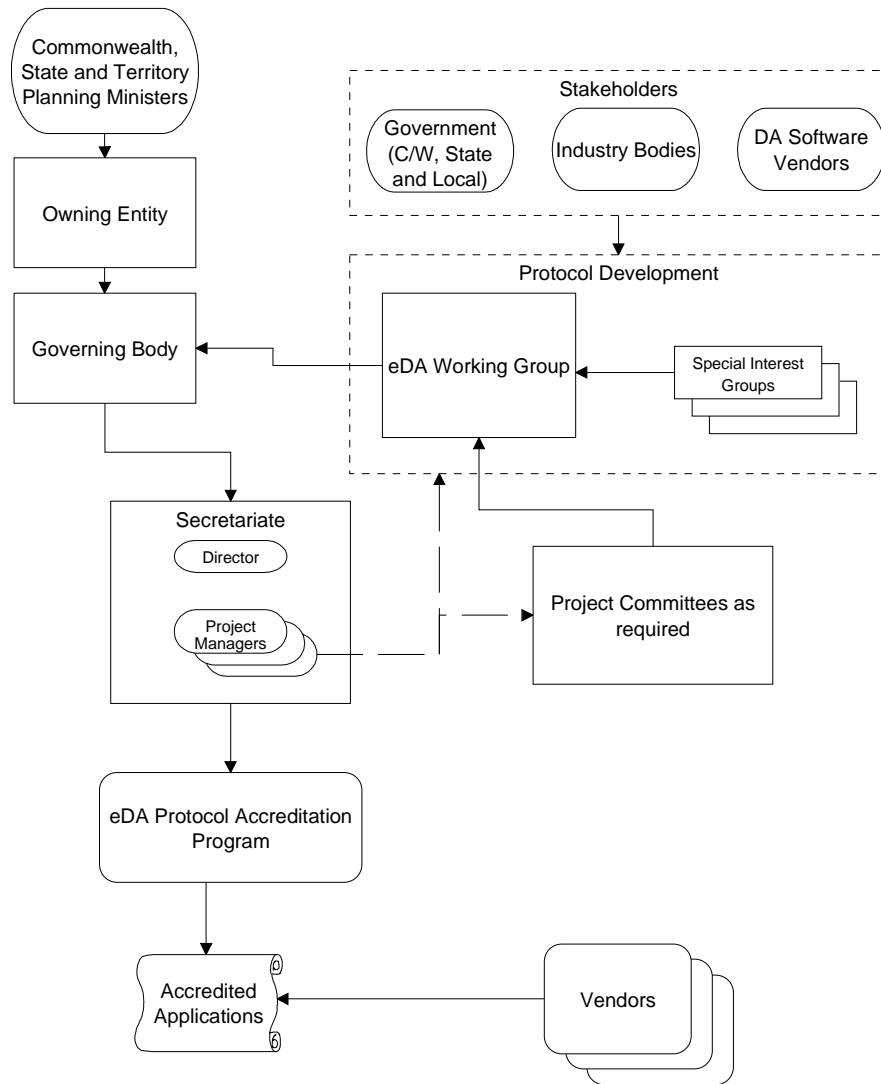
Governance arrangements that enable the development and maintenance of the proposed eDA protocol would involve establishing:

- An administering Council responsible for eDA protocol governance and the final endorsement of the proposed eDA protocol.

- A Working Group that acts as the main forum for determining the development and improvement of the eDA protocol.
- As required, Special Interest Groups (SIGs) are appointed to develop particular aspects of the proposed standard relating to particular information flows between participants in the DA process. They would exist for a finite period to undertake functions and specific tasks (by following appropriate analytical processes) and are disbanded at the completion of the work. These SIGs report to the Working Group.
- Specific project committees responsible for protocol testing and its roll-out into production.
- A secretariat to provide support to the Board of Directors, Working Group, SIGs and project committees.

These arrangements are illustrated in Figure 4.

**Figure 4: Potential Governance Arrangements for the DAF members-owned Entity Model**



### **SuperEC Governance History**

The SuperEC Programme was established by the Association of Superannuation Funds (ASFA) in conjunction with a series of industry players including the Investment and Financial Services Association (IFSA), the Association of Payroll Providers (TAPS) and the ATO.

The SuperEC Council, which administered the programme, is a joint committee formed by the program proponents.

When the SuperEC development work commenced in 1998, the standards body that had developed message standards for the Superannuation industry was UN/CEFACT (part of United Nations). At the time the proponents of SuperEC considered that UN/CEFACT was the best group with which to align to ensure consistency with international standards.

In Australia, Tradegate was the organisation that was the Australian representative for UN/CEFACT. For this reason, the initial SuperEC work was linked to international standards development through Tradegate, which is a not-for-profit, non-government, user organisation whose foremost role is to facilitate the use of electronic commerce techniques for the exchange of information between customers and their suppliers.

At that time of the establishment of SuperEC, the lack of activity of both the International Organization for Standardization (ISO) and Standards Australia in this area was a principle reason why neither was considered as options for the establishment and development of the program.

Specifically, at that time the ISO (of which Standards Australia is a member) did not have work groups that focused on message standards for the financial services industry. It is only in the last three years that such ISO has taken on this subject area with the establishment of workgroups.

Recently SuperEC has merged with MfundEC, which was a similar programme in the managed funds industry, to form swimEC (Super, Wealth and Investment Management Electronic Commerce). SwimEC has similar governance arrangements to SuperEC and has been extended to incorporate the financial planning industry. SwimEC is being aligned with the ISO because the ISO recently announced they were planning to develop standards for managed funds, equities, etc.

### ***Costs/Funding***

A funding arrangement would need to be established. As a guide, the SuperEC programme required funding of around \$1 million over 4 years for the development of the relevant messaging standards (3 standards were developed). The annual budget rose to a maximum of around \$390 000 per annum. No ongoing costs are being incurred now the development has finished and the programme has moved into maintenance mode. However, the programme has a reserve fund of \$180 000 to cover future maintenance, publication and publicity costs.

Table 2 outlines the likely funding components and indicative budget requirements for the DAF members-owned entity option:

**Table 2: Required Funding Components and Indicative Budget**

Funding Component	Indicative Budget
• Staffing establishment	\$ 180 000 (1.5 FTEs)
• Operational Costs	
- Office rental	\$ 30 000
- Office equipment rental	\$ 15 000
- Office expenses	\$ 15 000
- Process support costs (eg, development of website to support committee process, test server etc)	\$ 40 000
• Marketing and promotional costs	\$ 25 000
• Travel and accommodation costs	\$ 25 000
• Development advice (consultants)	\$100 000
<b>Total</b>	<b>\$430 000</b>

The above estimates are indicative only and will vary depending on the location and extent of the support arrangements established. It assumes that those involved in the governance structure (except secretariat officers) give their time voluntarily.

On this basis, it is reasonable to assume that a budget of about \$330 000 per annum for support during the development phase and about \$100 000 for specialised consultancy work will be required for this option.

**Process**

The process for protocol development within the governance structure would involve:

- The eDA Working Group establishing the scope of protocol development required and establishing any required Special Interest Groups with defined terms of reference.
- The eDA Working Group preparing a draft protocol (utilizing discussion paper and industry consultation steps) with appropriate input from Special Interest Groups.
- The eDA Working Group establishing a project committee to test the proposed eDA protocol to the point where it is ready for rollout to production.
- The project committee submits the final protocol to the eDA Working Group for endorsement.
- The eDA Working Group endorses the proposed eDA protocol and appoints a project committee to oversee protocol implementation and undertaken periodic reviews and maintenance.

For similar reasons to the Standards Australia option, it is difficult to predict how long the standard development process will take. Nevertheless, it is considered that the process should be possible of being completed in less time than that taken by the Standards Australia process because of the greater degree of flexibility attached to this option and the fact that DAF members will be able to drive the process more actively. It is anticipated that a reasonable development timeframe would be eighteen to thirty six months, provided that sufficient

preliminary technical development work was undertaken at the commencement of this timeframe.

***Intellectual Property***

Whilst legal advice will need to be obtained on the most efficient form for ensuring that the entity owned the copyright, it is assumed for this option that the entity would own the copyright associated with the proposed eDA protocol.

***Marketing and Distribution***

A marketing and distribution program would need to be established. Given the nature of the proposed eDA protocol, it is considered that a web-based marketing arrangement would be satisfactory, with customers able to purchase/subscribe online.

To encourage take-up and promotion of the proposed eDA protocol, the DAF members-owned entity would establish a mechanism to allow the accreditation of software vendors whose products complied with the protocol. Vendors would be allocated a unique accreditation number and would be able to use a specified logo that indicated compliance with the protocol.

2.2.3 Australian Building Codes Board

***General***

The ABCB is highly experience in developing national regulatory building standards. They also have significant input into the Australian Standards for building related product standards.

This option would involve the ABCB creating a process to suit the development of the proposed eDA protocol. For simplicity, it is assumed that the process that the ABCB creates would be the same as that operating under the DAF member-owned entity model.

The arrangements for this option have been derived from discussions with ABCB officers only and do not bind the ABCB Board. The ABCB Board would need to approve any arrangements regarding this option prior to any implementation.

***Governance***

Governance would be provided by the existing ABCB governance arrangements, together with the establishment of a specialised advisory group to develop and maintain the proposed eDA protocol. Accordingly, the governance arrangements would be similar to those illustrated in Figure 4, except that the ABCB would be the owning entity. The ABCB is a company limited by guarantee, which is owned by the relevant Commonwealth and State/Territory ministers.

***Costs/Funding***

A funding arrangement would need to be established. This may be similar to the DAF member owned entity model.

***Process***

The process would be the same as for the DAF member-owned entity option, with a similar timeframe.

***Intellectual Property***

The ownership of the intellectual property would be the same as for the Building Code of Australia – that is, it would be jointly owned by the Commonwealth, States and Territories. The ABCB protects its intellectual property and does not allow unauthorised publications. It would not, however, restrict who can utilise the proposed eDA protocol, as the ABCB's



protection endeavours would relate to the sale of a document detailing the protocol, not the use of the protocol itself within software.

***Marketing and Distribution***

It is expected that updates of the protocol would be available at regular intervals (likely to be 12 months). The protocol would be available electronically, on disk, hardcopy via the ABCB's outsourced printer. The protocol could be ordered over the web or toll free on line.

Marketing would be an extension of the ABCB's existing marketing of its suite of products. The ABCB currently has 18,000 subscribers (The ABCB focuses more on subscribers than one-off sales as this enables customers to have up-to date information).

ABCB officers have indicated that the sale price for the proposed eDA protocol would be determined based on the recovery of the costs incurred in protocol development and publication. However, such pricing is very unlikely to be commercially viable and hence the publishing cost would need to be subsidised through alternative funding arrangements.

***Costs***

The costs of this option are likely to be largely commensurate with those for the DAF members-owned entity, however some efficiencies are likely to be experienced given the existing support infrastructure that can be provided by the ABCB.

The ABCB officer consulted indicated that costs would be negotiable with DAF, however no firm costing of ABCB support was provided.

## 3 IMPLEMENTATION ISSUES

There is a range of issues that need to be considered in determining the optimum value implementation arrangements for the proposed eDA protocol. Some of these issues can be addressed through the specific implementation option adopted. A few of them are common across all options and must be dealt with by separate means.

### 3.1 Focus

The establishment and maintenance of standards or protocols demand a leadership role to be undertaken by key stakeholders in the particular industry/service area.

As the driving force behind the development of the proposed eDA protocol to date and given its strong links with relevant stakeholders, DAF is ideally placed to lead and direct eDA protocol development and implementation. Therefore the selection of the preferred model should have regard to the leadership role DAF can continue to play.

### 3.2 Vendors incentives

Software vendors will play a critical role in the development and implementation of the proposed eDA protocol. The reality will be that the protocol will be adopted by industry through two main paths:

- Industry stakeholders (local government, state agencies, etc) wanting to utilize the eDA protocol will:
  - Seek specific services to amend legacy software systems to accommodate the protocol; or
  - Will incorporate the protocol as part of a functional requirements of new software development initiatives; and/or
- Vendors will amend their existing products to incorporate the proposed eDA protocol through their normal upgrade cycle.

The latter path is more powerful as it will open up many more opportunities for advancing eDA initiatives at a significantly reduced cost to individual clients. For this path to be adopted by vendors, it is critical that they see a commercial imperative for them to adopt the proposed eDA protocol. Accordingly, the extent to which vendors are invited to participate in the protocol development process, the nature of the marketing strategy adopted and the strength of industry acceptance of the proposed eDA protocol will play a large part in convincing vendors to adopt the protocol of their own volition.

Consultation with vendors has indicated that, from a technical perspective, incorporating the proposed eDA protocol in their existing applications or new applications will not present any significant technical issues and is also likely to be a relatively low cost exercise, particularly if XML is used as the basis.

### 3.3 Intellectual property

For successful implementation, there are two issues that need to be considered in relation to the intellectual property (IP) associated with the proposed eDA protocol.

- The need to prevent IP being claimed by commercial entities. Any such claims can have potentially serious implications for the implementation and industry acceptance of the protocol.

- Allowing stakeholders, particularly vendors, access to the IP at reasonable cost – that is, making the protocol available on an “open access” basis. This would encourage as many stakeholders as possible to take up and implement the protocol.

### 3.4 Confidence in outcomes

A key to the successful adoption of the proposed eDA protocol will be gaining the confidence of stakeholders, ie, Government organizations, particularly local government, vendors and end users. As is the case with any new initiative, particularly those changing traditional thinking and practices, there is always an element of caution and even suspicion. Accordingly, the implementation option chosen will need to be credible with stakeholders and capable of providing stakeholders with an outcome that they can have confidence in adopting.

In this respect, utilizing a process that has a significant amount of *pro bono publico*<sup>5</sup> style input by the industry stakeholders will increase the perception (and reality) that the stakeholders feel they ‘own’ the resulting protocol, rather than just being consulted during its development. This in turn will increase confidence in the outcomes, leading to greater stakeholder acceptance.

### 3.5 Funding/costs

The development, endorsement and implementation of the proposed eDA protocol will involve significant costs in terms of money, time and resources regardless of which implementation option is adopted. As with all standard development processes, much of the development work will involve a *pro bono publico* style input by the industry stakeholders as they contribute their time and expertise on a voluntary basis. Nevertheless, there will be costs associated with providing support services during the development and endorsement phase, together with ongoing review/maintenance costs. Furthermore, any consultancy costs incurred during the development phase will need to be funded.

A viable funding model must be developed to assist with meeting these costs. Importantly, it is not necessary for this funding model to be exclusive to any single implementation option. A range of funding models are possible, however those that seek to align funding arrangement with the level of DA participant benefits are likely to be very difficult to achieve. The possible funding models include:

#### **Funding by Governments**

- This would involve Commonwealth & States governments providing funding in a similar manner to which they provide support to organisations such as the ABCB, PSMA Australia Ltd or education.au Ltd<sup>6</sup>. In the case of the ABCB, the Commonwealth provides half of the funds, with the States contributing the other half in proportions according to the values of their respective total building approvals for the preceding financial year two years<sup>7</sup>.
  - The main advantage of this arrangement is its simplicity and general acceptance as a funding model in a variety of areas of government. It is well suited to situations where strategic government investments of relatively modest amounts can achieve significant benefits across a diverse range of industry stakeholders.
  - Its main drawback is that it is hard to link funding contributions directly to those that gain the most benefits, ie the DA industry and local government). One potential

<sup>5</sup> Latin for “in the public good”.

<sup>6</sup> education.au limited is the company owned by the State, Territory and Commonwealth education ministries that manages and administers Education Network Australia (EdNA) Online.

<sup>7</sup> *Intergovernmental Agreement to Establish the Australian Building Codes Board*, As amended 27 July 2001, www.abcb.gov.au

solution to this drawback is for Local Government to contribute funding out of the Financial Assistance Grants provided by the Commonwealth to local government each year<sup>8</sup>. However, this solution is likely to be very difficult to achieve politically due to the sensitivities associated with these grants.

### ***Funding by Development Participants***

- This involves obtaining funding through contributions levied on those participating in the development of the proposed eDA protocol (vendors, the DA industry and local government associations). The potential advantage to those who participate is that they are involved in the development and can gain the advantage of being an early adopter. Participation costs would vary according to the size of the organisation and the potential benefits they gain. This option is based on the model used in the development of the SuperEC messaging standards, where participating organisations contributed between \$2,750 and \$27,500 per annum.
  - The advantage of this option would be that participating organisations contribute at a level commensurate with the perceived benefits they will receive, thus applying equity to the funding process.
  - The principal disadvantage of this option will be the difficulty in persuading industry and local government to fund their participation, particularly if this is to be achieved through their peak organisations. In particular, the nature of local government is not similar to the superannuation industry, with their technical environment, e-business maturity and financial incentives and pressures being quite different.

### ***Funding by licensing***

- The entity that owns the intellectual property to the proposed eDA protocol could licence the protocol to users (vendors, local government, government agencies, DA industry firms and organisations etc). This option would require an initial source of development funding that could be recouped over time from licence fees, which would also fund ongoing maintenance of the protocol.
  - The advantage of this option is its equity, as it is a relatively direct user-pays arrangement (with the users being the providers of eDA services). Further, it would provide a long-term revenue stream to cover both development and maintenance costs.
  - The main disadvantage of this option is likely to be user resistance for paying ongoing fees for the use of what will be perceived to be an industry standard that should be freely available to all. This is particularly so for vendors, as it is likely that most licence fees would be payable by them. Furthermore, this option would require some means of upfront working capital, as it would take time for licence revenue to build.

### ***Funding by local government***

- Funding could be provided by local government, who would then recover their funds through increases in development application fees.
  - The advantage of this option is that is a fairly direct user-pays option.
  - The principal disadvantage is that this option would be almost impossible to achieve, particularly as there is no way of compelling local government to contribute in this manner.

### ***Funding by a transaction levy***

- This option is similar to the licensing option, but involves users paying a levy per

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<sup>8</sup> These grants (untied general purpose grants and identified local government road grants) are provided under the Commonwealth's *Local Government (Financial Assistance) Act 1995*.

transaction. This options has similar advantages and disadvantages to the licensing option, plus:

- The added advantage that it is a true user pays option, with the licence fee payable by the users of the proposed eDA protocol is dependant on the level of customer usage.
- The more significant disadvantage is that, in practical terms, it would be impossible to implement. Specifically, the revenue collection method would be much more complicated due to the variety of “transactions” that can occur that utilise the proposed eDA protocol.

Of these funding options, the funding by Government option appears the most feasible. This is particularly so given the relatively modest amount of funding required that arguably does not warrant the establishment of complicated (and potentially expensive) funding arrangements. Nevertheless, given the scale of potential benefits afforded to local government by the proposed eDA protocol, some effort should be made to ensure that local government makes a contribution.

### 3.6 Development timeframe

Once the interest of stakeholders is engaged, it will be important to deliver the output before interest wanes and those wanting to fast track eDA look to do so outside of any agreed implementation framework. Accordingly, a realistic timeframe must be adopted for the development.

The length of the development phase timeframe can be greatly influenced by the manner in which the development takes place.

- If reliance is placed upon the industry stakeholders to undertake most of the development work in preparing drafts through *pro bono publico* input, then the development timeframe is likely to be lengthy and perhaps prone to stakeholder disagreements. Alternatively, much of the extended timeframe can be avoided by having consultants work intensively with stakeholders to identify stakeholder requirements and then develop the initial drafts of the proposed eDA protocol, with stakeholder input then being concentrated on refining this body of work.
- Trying to develop an all encompassing protocol involves a significant amount of risk, as the completion of an all encompassing protocol can be substantially delayed by the need to resolve a range of issues of varying complexity and importance. Alternatively, a much less risky alternative is to develop the proposed eDA protocol as a series of messaging standards, each dealing with discrete information transactions between DA process participants. For example, a logical initial module would deal with the information necessary for the lodgment and acknowledgement of a development application.

The different transactions would, in effect, become the modules of the protocol. This approach would need to be prefaced by a high-level business process analysis to ensure that all relevant business processes and dependencies were identified and that a logical development path was identified. This modular approach would allow the steady development of a core protocol and extension to a range of related areas over time. It can also provide significant efficiencies in reviewing and updating the protocol (or rather the messaging standards within the protocol) over time.

### 3.7 Interaction with other related projects

It will be important for the successful development and implementation of the proposed eDA protocol for the development and implementation process to be consistent with other interoperability initiatives being undertaken by government.

In particular, it should link with relevant initiatives under the Local Government Interoperability Framework (LGIF) project being overseen by the Australian Local Government Association (ALGA).

Reference should also be made to the DA Interface project also being conducted under the auspices of the ALGA as a Project of National Significance. This project is dealing with the creation of a development application lodgement and assessment interface between State and Local Government for sub-division applications and is being managed through Planning South Australia.

In addition, there would need to have regard to relevant international standards or standard initiatives. Whilst research indicates there are no internationally agreed standards dealing directly with the DA process, some of the other related (national and international) standard initiatives may include GIS standards, name and address standards, etc. The degree of importance of international standards will depend in part on the degree to which the software market for relevant products is an international one. At this stage, it would appear that the market for DA related systems is more domestically orientated.

### **3.8 Take-up**

It has been proven over time that when introducing significant change on a large scale the best approach is an incremental one. In addition to the change management aspect of implementing the proposed eDA protocol, the sheer numbers of stakeholders will require the development of a segmented and targeted approach. Hence, marketing and communication strategies will be an important element of managing and influencing take-up.

For example, the early adopters in state and local government and software vendors and developers will be in a position to provide input to the review and evaluation process whilst other stakeholders may still be at the 'starting line'. Therefore, DAF will need to ensure that the lessons learned by the early adopters are shared with and communicated to others.

In this environment, an obvious strategy to help boost the take-up rate is for DAF to identify and lever off "champions" who will influence others in adopting the protocol. The obvious choice is those state agencies, local governments and software vendors/developers who are well down the track in shaping e-government and e-business. It is understood that a number of state-based eDA initiatives have indicated that they are keen to be involved as test cases in the development of the proposed eDA protocol.

Take-up is likely to be positively influenced by the fact that:

- The DA industry is relatively highly IT literate and predisposed to using eDA initiatives; and
- It is likely to be easy to convince the relatively small number of large urban councils of the benefits of using the proposed eDA protocol and progressing to eDA initiatives. For example, around 51 councils (8 percent) are responsible for about 50 percent of all development applications (assuming that there is a strong correlation between the number of development applications received by decision authorities and the number of building approvals granted).

This strategy would need to be accompanied by an initial promotion and information campaign designed to deliver rapid public visibility and credibility to the proposed eDA protocol.

### **3.9 Review/maintenance arrangements**

To ensure the currency and usefulness of the proposed eDA protocol, implementation options will need to include a process that guarantees effective ongoing review and maintenance

arrangements. Reviews lend themselves to various approaches. On the one hand a formal review by an independent consultant engaged by the approving authority could be undertaken. Alternatively, a working group containing stakeholder representatives could be established for this purpose. Any approach should include input from early adopters reflecting their experience in using the protocol.

Again, this will require a commitment in terms of funding and Resourcing and will need to be addressed by the funding option adopted.

Any global review of the protocol will incur similar costs to the establishment of the protocol where amendments are required. For example, irrespective of how changes/amendments come about, the process involved in consultation and endorsement will be similar to that experienced in the establishment phase. Once the protocol is amended, all stakeholders will need to be advised of the change.

### **3.10 Improving the DA Process**

Regardless of the implementation option used, the establishment of the proposed eDA protocol will present opportunities to expand the protocol (or develop other communications protocols) into other areas associated with the DA industry. It is also likely to trigger opportunities (eg, stakeholder cooperation generating its own momentum for change) for DA participants to consider ways in which to improve the DA processes, particularly through improvements to information provision, information requirements or data flows.

For example, the proposed eDA protocol will make the development of integrated pre-lodgement/lodgement services more viable. These types of initiatives could even be extended to enable representations to be consistent with formal DA control requirements. Such services, through improved information provision and a customer-orientated focus, have the potential to significantly improve the quality of development application, leading ultimately to more efficient DA processes.

Accordingly, to extract maximum value from the implementation of the proposed eDA protocol, attempts should be made to monitor such opportunities with a view to taking action to facilitate/encourage them when they arise.

## 4 EVALUATION OF IMPLEMENTATION OPTIONS

### 4.1 Advantages and Disadvantages

Based on an analysis of the various models and discussions with various stakeholders<sup>9</sup>, a number of broad advantages and disadvantages can be determined for the different implementation models. These are outlined in Table 3.

**Table 3: Advantages and Disadvantages of Implementation Options**

Option	Advantages	Disadvantages
Standards Australia	<ul style="list-style-type: none"> <li>• Well established standard development and review process.</li> <li>• Credible standards publisher.</li> <li>• Significant linkages to international standards bodies.</li> <li>• Partial self financing (support costs).</li> <li>• Direct experience in developing communication protocol standards.</li> <li>• Relatively low cost publishing policy.</li> </ul>	<ul style="list-style-type: none"> <li>• The potential for DAF to lose control of standard development direction.</li> <li>• A Lengthy development/ amendment process.               <ul style="list-style-type: none"> <li>– Can take years to finalise</li> </ul> </li> <li>• A lack of control over the length of the process can impose additional costs on those participating.</li> <li>• The consensus style approach can result in stakeholders effectively employing delaying tactics (ie, acting in a spoiling role) for commercial advantage.</li> <li>• The need to separately fund any consulting services required during development phase.</li> </ul>
DAF members-owned Entity	<ul style="list-style-type: none"> <li>• DAF control of standard development direction.</li> <li>• DAF has proven knowledge of development assessment processes and requirements and a record of collaboration amongst key stakeholders.</li> <li>• Control over process and timelines.</li> <li>• Direct ownership of IP allows DAF to control the approach to standards publishing – eg, to pursue free/low-cost policy to encourage use and take-up.</li> </ul>	<ul style="list-style-type: none"> <li>• The need to create specialist standard development and review process and develop expertise in this process.</li> <li>• The need to fund any consulting services required during development phase</li> <li>• The need to provide ongoing funds for executive support.</li> <li>• DAF does not have a track record as a credible standard setting body.</li> <li>• The initial time taken to establish the new entity.</li> </ul>

<sup>9</sup> This included discussions with Standards Australia, the SuperEC secretariat, the Australian Building Codes Board, Mr Olaf Hedberg (Chair –PSMA Australia Limited), Mr Adam Heather (Project Manager – DAF eDA Project) and Ms Cath Parker (Director-Standards, education.au limited).

Option	Advantages	Disadvantages
Australian Building Codes Board	<ul style="list-style-type: none"> <li>• Credible standards publisher.</li> <li>• Has expertise in standards development.</li> <li>• Current publishing approach allows consistent customer terms.</li> <li>• Convenient vehicle for ensuring IP control.</li> </ul>	<ul style="list-style-type: none"> <li>• The need to create a specialist protocol development and review process.</li> <li>• The need to fund any consulting services required during the development phase</li> <li>• The need to provide ongoing funds for executive support.</li> <li>• Has no direct experience in developing and publishing information and communication technology protocol standards.</li> </ul>

There are a number of clear differences between the options, including the areas of:

- Credibility as a standard setting body;
- The degree of control over direction and development;
- The costs involved and hence funding requirements;
- Experience in standard setting processes; and
- Experience in the development assessment subject area.

## 4.2 Ranking of Options

To evaluate the options, we have applied an option ranking framework involving a number of critical evaluation criteria.

Criteria	Weighting	Description
<b>Risk Management</b>	15	The degree to which the option is likely to control the range of risks associated with the future ongoing development of the proposed eDA protocol.
<b>Costs</b>	8 5	The level of costs associated with the option, including: <ul style="list-style-type: none"> <li>• Support, administration and startup costs; and</li> <li>• Costs incurred by industry stakeholders in providing voluntary input.</li> </ul>
<b>Time</b>	10	The degree of control over the time taken to develop amendments and future stages of the protocol.
<b>Credibility</b>	20	The likely degree of credibility of the published protocol as perceived by stakeholders.
<b>Focus</b>	15	The degree of control that DAF will have over the direction, development and promotion of the protocol
<b>Protection of Intellectual Property</b>	12	The ability and means to control copyright and hence allow free access and use of the published protocol.

Criteria	Weighting	Description
<b>Quality Assurance</b>	5	Does the option have a well-defined process and quality control measures in place that will ensure the protocol's technical quality and fitness for purpose.
<b>Expertise</b>	10	The degree of expertise associated with the option in: <ul style="list-style-type: none"> <li>Standards/protocol development; and</li> <li>The subject area of development assessment and related processes.</li> </ul>
<b>Penetration – Software Vendors</b>	5	The ability of the option (on its own account) to liaise, market and promote the protocol to the suppliers of software solutions that service the various stakeholders. This is critical to ensure widespread acceptance of the protocol.
<b>Penetration - Stakeholders</b>	5	The ability of the option (on its own account) to market and promote the protocol to the stakeholders in a manner that is likely to maximize the uptake of the protocol.
<b>Sustainability</b>	10	The ability of the option to fund on an on-going basis the open source publishing, development and maintenance of the protocol, using a simple transparent business model. This also includes concepts such as succession planning and available support structure.
<b>Total Weighting</b>	<b>120</b>	

In each case, the options were given a score out of 10 for each criterion. Each criterion was given a weighting reflecting its overall importance. The final score is the sum of the weighted scores for each criteria (that is final score =  $\Sigma\{\text{raw score} \times \text{criteria weighting}\}$ ).

**Table 4: Ranking of Implementation Options**

Criteria	Raw Score			Weighted Score		
	Standards Australia	DAF member-owned Entity	ABCB	Standards Australia	DAF member-owned Entity	ABCB
Risk Management	5	9	8	75	135	120
Costs - Support	9	6	8	72	48	64
Costs – Voluntary industry input	6	9	9	30	45	45
Time	4	9	8	40	90	80
Credibility	9	5	8	180	100	160

Criteria	Raw Score			Weighted Score		
	Standards Australia	DAF member-owned Entity	ABCB	Standards Australia	DAF member-owned Entity	ABCB
Focus	4	9	8	60	135	120
Protection of IP	6	7	9	72	84	108
Quality Assurance	8	9	8	40	45	40
Expertise	8	5	7	80	50	70
Penetration – Vendors	6	8	8	30	40	40
Penetration - Stakeholders	7	8	9	35	40	45
Sustainability	8	6	8	80	60	80
<b>Total</b> (max raw score = 120, max weighted score =1200)	80	90	98	794	872	972

The ranking exercise clearly indicates that the ABCB option is the best across the selection criteria. Its strengths are:

- The likelihood that it will produce a better quality outcome in a shorter timeframe than the other options (particularly the Standards Australia option).
- Its better understanding of the “business space” and hence its influence with stakeholders.
- Its credibility and experience as a standard setting body with a knowledge of and existing relationship with a large proportion of the stakeholders that would benefit from the proposed eDA protocol.
- The integration of the development, promotion and implementation of the proposed eDA protocol into a single process, thereby ensuring momentum and a high degree of market penetration.

The main weakness of the DAF member owned entity option were:

- Its higher support costs;
- Its lack of credibility as a standard setting body;
- Its lack of expertise in standard setting processes; and
- It’s the higher chance that it would not prove to be sustainable option.

In most cases these weaknesses arise because the option has no track record (ie, it doesn’t yet exist).

The main weaknesses of the Standards Australia option were:

- Its perceived lower capacity to manage the risks inherent in implementing and sustaining

the proposed eDA protocol;

- The greater potential for significant time delays in the development of the proposed eDA protocol; and
- The lack of focus and control that DAF would have over the development of the eDA protocol.

### 4.3 Recommendations - Optimum value proposition

This report provides DAF with a decision framework for determining a value for money implementation proposition that involves balancing a range of factors. The framework describes the implementation options for evaluation, identifies the range of implementation options that need to be considered and then evaluates the options through a ranking process against defined evaluation criteria.

Base on outcomes of the decision framework, it is recommended that the optimum value proposition for DAF for the development and implementation of the proposed eDA protocol is for DAF to request the ABCB to facilitate and manage the standard development/consultation/endorsement process and own (on behalf of DAF) and maintain the proposed eDA protocol. Key features of this proposition should include:

- Establishing a formal agreement between DAF and the ABCB regarding the role that the ABCB will undertake with respect to the proposed eDA protocol and the inter-relationship between the ABCB and DAF on this matter.
  - This should include funding arrangements and the nature and processes for the ABCB to obtain relevant DAF sign-offs on the draft protocol that the ABCB is to use to begin the standard making process.
  - It is important that the standard making process undertaken by ABCB be self contained and governed by ABCB. Accordingly, it would not be feasible for DAF to have a sign-off role subsequent to the ABCB commencing its standard making process, as such role could be seen to undermine the ABCB's role and hence the credibility of the resulting eDA protocol.
- DAF itself undertaking preliminary development work to develop a draft of the proposed eDA protocol and formally endorse this draft prior to handing it over to the ABCB for passage through the standard making process.
  - The initial draft will play an important role in determining the direction and scope of the proposed protocol and hence is DAF's opportunity to ensure that its strategic objectives are properly considered in the subsequent standard setting process.
  - It is understood<sup>10</sup> that DAF will engage consultants to develop this initial draft of the proposed eDA protocol.
- DAF being represented on the technical committee established by the ABCB, given that it is an important stakeholder during the standards making process.
- It would be desirable if the standards development process was facilitated by the ABCB using an online discussion/consultation forum, similar to that used by Standards Australia. This would reduce the cost of collaboration and information dissemination to those involved in the development process and significantly reduce the reliance on physical meetings (which are expensive for those participating on a voluntary basis) and teleconferences.

<sup>10</sup> Advice received from DAF eDA Project Manager.

- To the extent possible, the proposed eDA protocol should be developed using a modular approach (ie, as a series of messaging standards). This approach will reduce the risk inherent in developing the protocol and will allow the orderly development of a core protocol and extension to a range of related areas over time.

As with all identified options, this proposition will require the establishment of a funding mechanism. Of the range of options identified in Section 3.5, the funding by government option appears the most feasible. Nevertheless, it is not possible for this report to make definitive recommendations concerning the best funding option, as this decision involves researching a range of policy and stakeholder considerations and judgement. This research is outside the scope of this report.

It should be noted that DAF would have dual roles as both a stakeholder in the standards making process and as a funding provider to the ABCB. It will be important for DAF to clearly recognise and separately manage these roles.

The recommendation on the optimum value proposition involves a number of judgements made by the consultants. DAF members may arrive at different judgements based upon knowledge and opinions not known or held by the consultants that prepared this report. Accordingly, it is also recommended that DAF closely analyses the judgements that have been made as part of and within the framework to ensure that they concur with these judgements.

#### 4.4 Ongoing Implementation - Critical Success Factors and Metrics

There are a number of factors that can be used to help measure the success and effectiveness of the implementation of the proposed eDA protocol. Table 5 details a set of critical success factors that have been identified as relevant.

**Table 5: Critical Success Factors for Implementation**

Critical Success Factor	Metrics	Issues
High level of acceptance and use by governments and vendors in DA environment	Take-up rate by DA stakeholders and vendors	<ul style="list-style-type: none"> <li>• Effective marketing and communication of the protocol to key stakeholders.</li> <li>• User understanding and acceptance of protocol.</li> <li>• Existence of champions/ leaders within the various jurisdictions.</li> <li>• Readiness of government agencies and customers to use the protocol.</li> </ul>
High quality of the protocol	Level of confidence that DA stakeholders have in the protocol	<ul style="list-style-type: none"> <li>• Credibility of the protocol and endorsement body.</li> <li>• Acceptable level of privacy and security.</li> <li>• Accessible, interoperable and scalable.</li> </ul>



Critical Success Factor	Metrics	Issues
		<ul style="list-style-type: none"><li>• Demonstrated ability to meet needs of users.</li><li>• Cost effective, dependable and sustainable system and process.</li></ul>
Effective ongoing implementation and support	Speed of take-up by DA stakeholders and vendors	<ul style="list-style-type: none"><li>• Compatibility with existing processes and legacy systems.</li><li>• Effectiveness of administration, publication, user support and 'after sales service'</li><li>• Effectiveness and efficiency of review, evaluation and feedback mechanisms</li></ul>

It is recommended that strategies and arrangements for collecting data to support these metrics be investigated as part of the process of establishing the recommended optimum value proposition.

## 5 REFERENCES

### 5.1 Documents

*Financial Assistance Grants to Local Government*, National Office of Local Government, [www.nolg.gov.au/fags/index.htm](http://www.nolg.gov.au/fags/index.htm)

*Intergovernmental Agreement to Establish the Australian Building Codes Board*, As amended 27 July 2001, [www.abcb.gov.au](http://www.abcb.gov.au)

*Standardization Guide – 001- Preparing Standards*, Standards Australia website, [www.standards.org.au](http://www.standards.org.au), 12 March 04.

*Standardization Guide – 005 – Technical Governance of the Standards Development Process*, Standards Australia website, [www.standards.org.au](http://www.standards.org.au), 15 Mar. 04.

### 5.2 Websites

Australian Building Codes Board – [www.abcb.gov.au](http://www.abcb.gov.au)

education.au website – [www.educationau.edu.au](http://www.educationau.edu.au)

National Office of Local Government – [www.nolg.gov.au](http://www.nolg.gov.au)

Standards Australia's website – [www.standards.org.au](http://www.standards.org.au)

SuperEC website – [www.superec.org](http://www.superec.org)



## ATTACHMENT A – STAKEHOLDERS CONSULTED

<b>Stakeholder</b>	<b>Contact Name</b>
Association of Superannuation Funds of Australia	Mr Robert Hodge
Australian Building Codes Board	Mr Jack Bramwell
education.au limited and AICTEC Standards and Interoperability Committee	Ms Cathy Parker
Planning Portal – UK	Mr Richard Goodwin
Standards Australia	Messrs Peter Walch and Mark Bezzina
PSMA Australia Pty Ltd	Mr Oalf Hedburg