Business Plan 2016

November 2015
Business Plan 2016

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1. Executive Summary

The Australian Access Federation (AAF) provides the solution for accessing online resources and services within the Australian Education and Research sector. This is achieved by delivering a secure framework which exchanges information between an individual and a provider of digital data resources. The outcome of the AAF’s work is to facilitate collaboration and sharing of data for the benefit of end users in Australian universities and research organisations.

The AAF was initiated by the Council of Australian University Directors of Information Technology (CAUDIT) in December 2008 and seed funded by the Department of Education (the then Department of Industry, Science and Research) in 2009 to provide an access Federation for organisations and institutions which undertake or support education, research, or research and development in Australia.

With 92 subscribers and in excess of 250 service registrations in the federation (as at September 2015), the AAF has reached critical mass and has been operating as a self-funded service since January 2012.

The AAF has established a vital role as part of the Australian eResearch infrastructure landscape through its core value proposition of a shared service for the Australian research/education sector, and is an integral part of the National Collaborative Research Infrastructure Strategy (NCRIS). The AAF lowers the costs and effort associated with managing federated identity in each individual subscriber organisation. The AAF also removes inter-organisational barriers to collaboration by enabling people to quickly and easily connect with resources (e.g. national eResearch infrastructure such as research data storage (Research Data Storage (RDS), virtual laboratories (National eResearch Collaboration Tools and Resources (NeCTAR), eResearch tools (NeCTAR) and instrumentation). Conversely, resource providers are able to quickly and easily connect their services to people. A national Federation also provides the capability for collaboration on a global scale through the interconnection of national federations.

In 2016, the AAF will continue to undertake the following operational activities:

1. Provide operational support services (Service Desk, Knowledge Base and technical documentation, assisting subscribers identify services of value to the Federation and best practice and technical architecture advice) to ensure existing Subscribers gain best value from their subscription;
2. Provide a range of professional services (install and configure Identity Providers, and software development services for bespoke federated identity management solutions) billed at market rates;

3. Provide compliance support activities associated with the Federation Rules and annual Compliance Statements;

4. Undertake marketing and communication activities that focus on promoting the AAF’s value proposition;

5. Develop and deliver on-demand training workshops aimed at increasing the skill base across the higher education and research sector with respect to federating services for access via the AAF;

6. Ensure the technology on which the AAF depends is appropriately maintained (application patching, security bug fixes and minor enhancements to AAF’s software stack where activities are critical for the successful operations of the federation);

7. Continue partnerships with national eResearch infrastructure projects and other subscribers where mutually beneficial opportunities exist. Continue bronze sponsorship of REFEDS (Research and Education Federations\(^1\)), AeRO (Australian eResearch Organisation\(^2\)) membership, committee support to REFEDS, and support the APAN community through chairing the APAN (Asia Pacific Advanced Networking) Federated Identity Management Working Group; and

8. Continuation of AAF’s business development and innovation capabilities to further build upon the utility and value of the federation.

In 2016 the AAF will continue to undertake a program of activities as part of the $850,000 Department of Education funded Next Generation of the AAF project. Activities include enhancing the capacity of the infrastructure to meet government requirements for participation in the AAF, next generation software extensions and the development of a Software as a Service Identity Provider.

Commencing in 2016 for a period of three years (subject to 20 confirmed members); the AAF will be the ORCID (Open Researcher and Contributor ID) Consortium Lead for Australia. Participation in the consortium will be open to organisations and institutions of higher education, non-profit organisations and government research institutes and funding agencies in Australia. This service will be funded via an annual leader fee associated with consortium membership.

Subscription fees for AAF Enterprise, AAF Team and AAF Hosted will increase by 11% in 2016 (and 4% in 2017) in line with the 2015 Member approved strategy to introduce the business development and innovation capabilities and AAF’s strategic intent to operate at a break-even level. The joining fee, and base price for AAF Publisher subscribers, will have a 4% CPI applied (2016-2017) in line with the strategy to attract new services connected to the federation (as outlined in the 2016-2017 Strategic Plan).

\(^1\) refeds.org

\(^2\) aero.edu.au
The 2016-2017 operating budget is summarised in Table 1.

<table>
<thead>
<tr>
<th></th>
<th>Budget 2016</th>
<th>Forecast Budget 2017</th>
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<tr>
<td><strong>Retained Earnings</strong></td>
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<td>Forecast Retained Earnings as at 1 January</td>
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<td><strong>Income</strong></td>
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<td><strong>Subscription</strong></td>
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<td>Forecast Subscription Income (existing subscribers)</td>
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<td>Forecast Increase in Subscription Income through Business Development activities</td>
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<td>Forecast Professional Service Income</td>
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<td>Forecast ORCID Consortium Support Income</td>
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<td>$118,450</td>
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<td>Forecast Interest</td>
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<td><strong>Project Income</strong></td>
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<td>Next Generation AAF Project</td>
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<td><strong>Total Income</strong></td>
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<td><strong>Total Income + Retained Earnings</strong></td>
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<td>Innovation Expenses (new)</td>
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<td>Operating Surplus (2% Safety Margin)</td>
<td>$27,824</td>
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<tr>
<td><strong>Project Expenses (Dept Edu Grant - 2015 only)</strong></td>
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<tr>
<td>Project Expenses</td>
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<td><strong>Total Expenses</strong></td>
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<tr>
<td><strong>Retained Earnings as at 31 December</strong></td>
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<td>$369,636</td>
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</table>

Table 1: 2016-2017 Operating Budget

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3 Based on a medium case forecast for new subscriptions.
4 A medium case Professional Services income forecast to support NCRIS funded activities.
5 The AAF aims to maintain a cash flow buffer with its retained earnings of approximately 3 to 4 months of its annual operating costs.
2. Introduction

The Australian Access Federation (AAF) provides the solution for accessing online resources and services within the Australian Education and Research sector. This is achieved by delivering a secure framework which exchanges information between an individual and a provider of digital data resources. The outcome of the AAF’s work is to facilitate collaboration and sharing of data for the benefit of end users in Australian universities and research organisations.

The Australian Access Federation (AAF) was initiated by the Council of Australian University Directors of Information Technology (CAUDIT) in December 2008 and seed funded by the former Department of Industry, Science and Research, now Department of Education, in 2009 to provide an access Federation for organisations and institutions which undertake or support education, research or research and development in Australia.

With 92 subscribers and in excess of 250 service registrations in the federation (as at September 2015), the AAF has reached critical mass and has been operating as a self-funded service since January 2012.

The AAF has established a vital role as part of the Australian eResearch infrastructure landscape through its core value proposition of a shared service for the Australian research and education sector, and is an integral part of the National Collaborative Research Infrastructure Strategy (NCRIS). The AAF lowers the costs and effort associated with managing federated identity in each individual subscriber organisation. The AAF also removes inter-organisational barriers to collaboration by enabling people to quickly and easily connect with resources (e.g. national eResearch infrastructure such as research data storage (RDS), virtual laboratories (NeCTAR), eResearch tools (NeCTAR) and instrumentation. Conversely, resource providers are able to quickly and easily connect their services to people. A national Federation also provides the capability for collaboration on a global scale through the interconnection of national federations.

Our Vision and Mission

The AAF’s vision is to lead access management for Australian education and research.

The AAF’s mission is to support collaboration through effective access management.
3. Operational Business Activities in 2016

This section outlines the key operational business activities planned for 2016.

3.1 Operational Support Services

AAF personnel will provide a range of support services to Subscribers including:

1. Identifying services of value to federation Subscribers;
2. Ongoing technical support to current and new Subscribers via the service desk, technical documentation and knowledge base; and
3. Subscriber support with interpreting best practice technical architecture as well as Service Provider and/or Identity Provider configurations.

3.2 Professional Services

The AAF will provide a range of Professional Services (billed at market rates) to the sector in 2016. This includes:

1. On-request, and where practical, professional service engagements to install and configure Identity Providers;
2. Software development services for bespoke federated identity management solutions.

3.3 Compliance Support Activities

AAF will support the following key activities:

1. Annual Federation Rule compliance program:
   AAF Personnel will assist Subscribers to meet their compliance requirements, in particular to submit their annual Compliance Statement on or before 30 June 2016.
2. Compliance with any applicable legislation in relation to data protection and privacy including, without limitation, the Australian Privacy Act.
3.4 Marketing and Communications

The AAF will execute a marketing and communication plan that focuses on promoting its value proposition. Activities include:

- Annual AAF roadshow (Brisbane, Sydney and Melbourne) to gather feedback from subscribers about future federated identity management needs;
- Presence at key industry events locally and internationally (e.g. eResearch Australasia, Géant Association Conference, international Research Education Federations (REFEDS) meetings and APAN (Asia Pacific Advanced Networking) conference and Identity Management Access Working Group);
- Quarterly newsletters; and
- Content rich product centric website which describes AAF products to Service Providers, Identity Providers and End Users.

3.5 Training Workshops

The AAF’s training strategy aimed at increasing the skill base across the higher education and research sector commenced in 2012. To date, AAF’s training workshops have received a positive response from Subscribers. Workshops will be provided on an on-demand basis over 2016. All attendees will be levied an attendance fee to cost recover expenses.

3.6 Technology Maintenance

The AAF will continue to maintain the software stack of the Federation. This includes planned maintenance activities for application patching, security bug fixes and minor enhancements to the AAF software stack where activities are critical for the successful operations of the AAF.

3.7 Partnerships, Memberships & Supporting International Initiatives

3.7.1 Partnering with national eResearch Infrastructure Projects

The AAF will continue to partner with the NCRIS capabilities to assist with developing and supporting their identity management needs. This work will be done as part of AAF’s Professional Services capability.
3.7.2 Partnering with Subscribers

The AAF will continue (where practical) to seek mutually beneficial opportunities with its subscribers for service enhancement.

3.7.3 Sponsorships and Memberships

The AAF will continue to remain a Bronze sponsor of REFEDS in 2016. It will also continue to remain a Member of the Australian eResearch Organisation (AeRO) through payment of an annual fee.

3.7.4 Supporting International Initiatives: REFEDS and APAN Federated Identity Management Working Group

The General Manager will continue to support REFEDS through being a member of REFEDS Committee. The Technical Engagement and Support Manager will continue to assist the APAN community through being the Chair of the APAN working group for federated identity management.

3.8 Continuation of AAF’s Business Development & Innovation Capabilities

In addition to the business activities required for AAF operations, two new capabilities commenced in 2015, business development and innovation. These capabilities aim to further build upon the utility and value of the federation to AAF subscribers and ensure long term sustainability of the service into the future.

The introduction of business development and innovation capabilities as from 2015 was part of a three year strategy to build and sustain these capabilities as ongoing (11% subscription fee increase in 2015, 11% subscription fee increase in 2016 and 4% subscription fee increase in 20176).

3.8.1 Business Development

While the AAF provides an efficient authentication framework for collaboration and access between its current subscriber base (all Australian Universities, CSIRO and a number of state based research and research organisations), the need for collaboration beyond these boundaries is forever increasing. In line with the AAF Business Development Plan, the focus for 2016 will see it prioritise its business development activities into two core categories:

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6 fee increases over 2015-2017 to AAF Enterprise, AAF Team and AAF Hosted subscriptions. AAF Publisher will remain at 4% increase.
Category 1: Primary target markets:
- TAFE and VETs; and
- ICT Service Providers within the higher education and research sector.

Category 2: Secondary target markets:
- State Government: QLD Government (commence with the Queensland market as a pilot to understand the broader need and complexities of other state governments);
- Federal Government: Australian Government Science ICT Network; and
- Medical Research Institutes and facilities.

The progress of penetrating each target market in 2016 will be closely monitored as part of an ongoing review process. Through growth, new opportunities will arise that naturally fit within AAF’s remit. Engagement with the identified target markets will lead to ongoing refinement of the current strategy and also the development of further strategy.

Business Development activities that run in parallel with strategic marketing activities will provide a well-rounded approach to creating new business and improve the probability of success for the AAF.

3.8.2 Innovation

2015 saw the introduction of an innovation capability to AAF’s operations. The continuation of this capability in 2016 is vital to enable the AAF to build upon its services and remain relevant to its subscribers as their requirements and platforms continue to evolve.

Innovation is important to the AAF for a number of reasons; firstly, the technology landscape of federated identity management continues to evolve at a rapid pace. There is a greater need for tools and technology to assist with collaboration both locally and internationally and new and emerging standards for authentication and authorisation are being developed and adopted. Secondly, in many cases research infrastructure projects make their own ‘fit for purpose’ choice of technology for authentication and authorisation. This makes it difficult for the AAF to plan for these requirements and an innovation capability is required to respond to these needs. Finally, innovation of federated identity management technologies is not an activity that AAF subscribers could cost effectively undertake individually.

To address these requirements and ensure that the AAF maintains a service in line with international best practice, 2016 will continue to build upon its two key innovation activities which commenced in 2015 (see below).

1. Technologies and Trends Supporting Global Research and Education – Internationalisation of the Federation

The internationalisation of the AAF is an important part of connecting organisations using the AAF with their counterparts operating services connected to other federations globally.
It will also provide international collaborators with access to AAF connected teaching, learning and research applications.

In Q3 2013, the AAF signed the eduGAIN\(^7\) policy declaration to be part of the global framework of federating with other international federations. The AAF undertook the technical work to connect its services to eduGAIN in 2015. 2016 will see the AAF continue the work to enable this service, namely the policy and service delivery components required. 2016 will also see the AAF work with a number of pilot activities to further imbed eduGAIN into its service offering. Subsequent years will see the AAF’s innovation capability evolve this service into a full production offering as it matures.

2. **Extending AAF Services - expand AAF’s identity and access management products**

The technology requirements for federated identity management are often complex, diverse and in many cases still evolving. In addition the authentication and authorisation landscape is continuing to evolve with the emergence and adoption of other sources of trusted and not-trusted login mechanisms, for example self-asserted authentication sources such as Google and Facebook.

To support these requirements into the future, AAF’s innovation capability will see it continue to undertake a program of work each year to expedite the development of technologies in line with AAF’s technology roadmap: see: [http://aaf.edu.au/technical/tech-roadmap/](http://aaf.edu.au/technical/tech-roadmap/). 2016 would see it undertake evaluation and development, where appropriate, of the following kinds of new technologies:

- Shibboleth Version 3;
- Attribute Authorities; and
- Other authentication protocols such as OpenID Connect and OAuth2.

AAF will evaluate technologies in line with best practice to determine their suitability to meet subscriber requirements and as a future service of the AAF through pilot group evaluation. Should technologies be proven to meet these needs they would then be further developed to form part of the AAF’s production service offering.

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\(^7\) eduGAIN is a service developed within the GÉANT (the pan-European research and education network that interconnects Europe’s National Research and Education Networks (NRENs)) project. eduGAIN interconnects identity federations around the world, simplifying access to content, services and resources for the global research and education community. eduGAIN enables the trustworthy exchange of information related to identity, authentication and authorisation (AAI) by coordinating elements of the federations’ technical infrastructure and providing a policy framework that controls this information exchange.
4. Project & Other New Initiatives

This section outlines the project and other new initiatives for 2016.

4.1 Next Generation AAF Project

In July 2015 the Department of Education awarded $850,000 funding to the AAF to undertake a program of initiatives to build the next generation AAF.

The project, which commenced in July 2015 and will conclude in January 2017, seeks to enhance the capability of the AAF services through a program of activities aimed at achieving the following:

- Enhancing the capability of the AAF to facilitate research collaboration and accessibility between research capabilities and government organisations;
- Enhance and extend its existing software infrastructure underpinning the authentication requirements of Australia’s National Collaborative Research Infrastructure Strategy (NCRIS) capabilities and the growing number of research and education organisations connected to the AAF; and
- Developing software infrastructure, which lowers the barriers of AAF subscription.

4.1.1 Government Requirements for AAF Participation

Completing in 2016, AAF will undertake a program of work to enhance the capacity of its infrastructure to facilitate research collaboration and accessibility between research capabilities and government organisations. In order to meet the extended security requirements of government organisations, the work will see AAF compare and contrast its current technical environment to the additional standards required by the Australian Government which are above the current research and education environment with which the AAF currently operates.
4.1.2 Next Generation AAF Software Extensions

Completing in 2016, AAF will undertake a program of work to enhance and extend its existing software infrastructure underpinning the authentication requirements of the AAF.

This activity will focus on three key areas:

1. Software development of a next generation AAF Discovery Service (DS)\(^8\);  
2. Software development of a next generation AAF Reporting Service; and  
3. The development of infrastructure for non-web access.

4.1.3 Next Generation AAF Software as a Service (SaaS) Identity Provider

Completing in 2016, AAF will undertake a program of work to develop software infrastructure (SaaS hosted Identity Provider service), which lowers the barriers of AAF subscription. This software infrastructure will provide connectivity for potential subscribers who are currently limited by technology and/or policy, to participate in the federation without needing to acquire or manage additional skills and/or infrastructure.

4.2 ORCID Consortium Lead

ORCID (Open Researcher and Contributor ID)\(^9\) is an international, open, non-profit, community-driven effort developed by and for the research community to provide a unique persistent identifier for researchers; it is used to link research publications, data and other research activities to the right researcher.

In mid-2015 the AAF participated in a working group\(^10\) to develop a national consortium model for ORCID licenses. Members of the consortium obtain significant cost savings for the Premium ORCID licence.

Commencing in 2016 for a period of three years (subject to 20 confirmed members), the AAF will be the Consortium Lead for Australia. Participation in the consortium will be open to organisations and institutions of higher education, non-profit organisations and government research institutes and funding agencies in Australia.

The key responsibilities for the AAF as Consortium Lead will include the provision of administrative, technical and training support to members of the Consortium. Participation

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\(^8\) The AAF Discovery Service (DS) or commonly known as the Where are You From service (WAYF). It is an essential piece of AAF infrastructure allowing end users to authenticate against their organisations.  
\(^9\) See: orcid.org  
\(^10\) The ORCID Working Group comprised of representatives from Universities Australia (UA), the Council of Australian University Librarians (CAUL), the Australasian Research Management Society (ARMS), the Australian National Data Service (ANDS), the Australian Access Federation (AAF), and the Council of Australian University Directors of Information Technology (CAUDIT). The Australian Research Council (ARC) and the National Health and Medical Research Council (NHMRC) also provided input throughout the development of the Model.
in the consortium will be based on an annual member subscription fee which will include the consortium licence and a margin to cost recover expenses for the AAF to undertake the following:

- Provide administrative support to the consortium;
- Manage and support the on boarding of consortium members;
- Be the central technical support contact to all members (Tier 1); and
- Maintain consortium documentation and technical documentation repositories.

The AAF will employ one full time equivalent staff member as the ORCID Support Analyst to support 20 consortium members. Support resources will scale in line with the growth of the consortium membership.
5. Support Model

This section outlines the support model for 2016.

5.1 Organisational Structure

The AAF organisational structure is shown in Figure 1. In addition to the General Manager, Technical Engagement and Support Manager (Previously Technical Manager), Technical Lead (Innovation, Software Development and Infrastructure), Senior Developer (Development Operations) and Service Delivery Manager, 2015 saw the addition of the Senior Developer (Innovation), Business Development / Client Relationship Manager and a Technical Analyst to assist with frontline support. These roles will continue in 2016. The ORCID Support Analyst position(s) will commence in 2016 to provide technical support to ORCID consortium members. The Senior Project Manager, Project Technical Lead and Developers will be responsible for delivering the Next Generation AAF Project. The AAF will also continue to engage casual administration assistance for support with daily administration activities.
Figure 1: Organisational Structure 2016

5.2 Infrastructure Hosting

In 2016 as part of the Next Generation AAF project, the AAF will undertake a program of work to enhance the capability of its infrastructure to meet the extended security requirements of government organisations (See section 4.1.1).

This activity will see the AAF:

- Undertake a review and migration (if required) to a new hosting environment for the technology used for AAF’s high-availability Discovery Service/Where are You From servers (WAYF); and
- Undertake a review and migration to a new hosting environment for the Test and Production Federation infrastructure.
The AAF will continue to use cloud-based services for its support systems (DNS, email, service desk, mail campaigns, client management system, accounting and source code repository).

5.3 Member Meeting Support

Given the considerable overlap in the Primary Representatives for CAUDIT Inc and AAF Inc, AAF Inc will work with CAUDIT Inc to schedule the AAF Inc Annual General Meeting (AGM) and General Meeting (GM) in conjunction with major CAUDIT meetings. This approach should reduce travelling costs for AAF Members.
6. Operating Expenses & Subscriptions

This section outlines the operating costs and subscriptions for 2016.

6.1 Overview

The AAF was incorporated in June 2009 with funding provided by a $2.0M grant from the Department of Education. A subscription model has been applied since 2011 with the strategic intent to be self-funded and operate at a break-even level. As at 1 January 2016, the AAF expects to have forecast retained earnings of $501,673, noting that it is forecast that this amount will be reduced to an estimated $343,132 at 31 December 2016.

Operating costs have risen with the addition of a Technical Support Analyst (2015-2016) and the introduction in 2015 of the business development and innovation capabilities in line with the three year strategy to build and sustain these capabilities as ongoing\(^\text{11}\).

Figure 2 outlines the 2009-2017 income sources for the AAF. Figure 3 outlines the 2009 – 2017 expenses matched to funding sources.

\(^{11}\) The introduction of business development and innovation capabilities as from 2015 is part of a three year strategy to build and sustain these capabilities as ongoing. The strategy consists of the following fee increases over 2015-2017 to AAF Enterprise, AAF Team and AAF Hosted subscriptions in line with AAF’s strategic intent to operate at a break-even level:

- 11% (inclusive of CPI) subscription fee increase in 2015;
- 11% (inclusive of CPI) subscription fee increase in 2016; and
- 4% (CPI) subscription fee increase in 2017.

AAF Publisher subscriptions will maintain a 4% CPI increase annually over the three years in line with the strategy to attract new services connected to the federation (as outlined in the 2016-2017 Strategic Plan).
6.2 Subscriptions

The subscription fees outlined in Table 2 are based on the three year strategy to build a sustainable business development and innovation capability for the AAF. For the typical subscriber (AAF Enterprise, AAF Team and AAF Hosted) to the AAF, subscription fees will raise 11% (inclusive of CPI) in 2016 and 4% CPI in 2017. Based on a subscription income forecast in Table 4, subscriptions will be set to raise a total forecasted income of $1,027,462 in 2016, and $1,187,291 in 2017 (inclusive of forecast new subscriptions through business development).
The joining fee, and base price for *AAF Publisher* subscribers, will have a 4% CPI applied annually (2016-2017) in line with the strategy to attract new services connected to the federation (as outlined in the 2016-2017 Strategic Plan).

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</tr>
<tr>
<td>Base price</td>
<td>$925</td>
</tr>
<tr>
<td>Fee per user &gt; 40</td>
<td>$22.77</td>
</tr>
<tr>
<td>Extra Service provider registration bundle</td>
<td>$5,286</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subscription Component</th>
<th>AAF Publisher</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year</strong></td>
<td>2016</td>
</tr>
<tr>
<td>Joining fee</td>
<td>$3,692</td>
</tr>
<tr>
<td>Base price</td>
<td>$1,055</td>
</tr>
<tr>
<td>Extra Service provider registration bundle</td>
<td>$1,055</td>
</tr>
</tbody>
</table>

<sup>12</sup> Full Time Equivalent Staff Member

Table 2: Subscription Fees for 2016 and 2017 (ex GST)
6.3 2015 Expenses

Table 3 outlines the operating expenses inclusive of new business development, innovation expenses and project expenses for 2016.

<table>
<thead>
<tr>
<th>2016 Expenses</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary Expenses</td>
<td>1,175,836</td>
</tr>
<tr>
<td>General Supplies and Expenses</td>
<td>37,469</td>
</tr>
<tr>
<td>Professional Development</td>
<td>7,000</td>
</tr>
<tr>
<td>Professional Fees</td>
<td>31,727</td>
</tr>
<tr>
<td>Marketing and Communication</td>
<td>8,075</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>6,433</td>
</tr>
<tr>
<td>Software and Certificate Services</td>
<td>16,073</td>
</tr>
<tr>
<td>Hosting Services</td>
<td>16,327</td>
</tr>
<tr>
<td>Engagements, Meetings and Events</td>
<td>87,239</td>
</tr>
<tr>
<td>ICT</td>
<td>5,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,391,179</strong></td>
</tr>
<tr>
<td>Operating Surplus (2% Safety Margin)</td>
<td>27,824</td>
</tr>
<tr>
<td>Project Expenses (Dept Edu Grant)</td>
<td>570,000</td>
</tr>
<tr>
<td><strong>Total (inc Operating Surplus &amp; Project Expenses)</strong></td>
<td><strong>1,989,003</strong></td>
</tr>
</tbody>
</table>

*Table 3: 2016 Operating Expenses*
### 6.4 2016-2017 Operating Budget

Table 4 outlines the 2016-2017 budget.

<table>
<thead>
<tr>
<th></th>
<th>Budget 2016</th>
<th>Forecast Budget 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Retained Earnings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forecast Retained Earnings as at 1 January</td>
<td>$501,673</td>
<td>$343,132</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subscription</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forecast Subscription Income (existing subscribers)</td>
<td>$902,556</td>
<td>$938,659</td>
</tr>
<tr>
<td>Forecast Increase in Subscription Income through Business Development activities&lt;sup&gt;13&lt;/sup&gt;</td>
<td>$124,906</td>
<td>$248,632</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forecast Professional Service Income&lt;sup&gt;14&lt;/sup&gt;</td>
<td>$100,000</td>
<td>$30,000</td>
</tr>
<tr>
<td>Forecast ORCID Consortium Support Income</td>
<td>$115,000</td>
<td>$118,450</td>
</tr>
<tr>
<td>Forecast Interest</td>
<td>$18,000</td>
<td>$18,000</td>
</tr>
<tr>
<td><strong>Project Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Next Generation AAF Project</td>
<td>$570,000</td>
<td>$10,000</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td>$1,830,462</td>
<td>$1,363,741</td>
</tr>
<tr>
<td><strong>Total Income + Retained Earnings</strong></td>
<td>$2,332,135</td>
<td>$1,706,873</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operating</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operational Expenses</td>
<td>$1,021,244</td>
<td>$922,501</td>
</tr>
<tr>
<td>Business Development Expenses</td>
<td>$140,450</td>
<td>$144,664</td>
</tr>
<tr>
<td>ORCID Consortium Support Expense</td>
<td>$115,000</td>
<td>$118,450</td>
</tr>
<tr>
<td>Innovation Expenses (new)</td>
<td>$114,485</td>
<td>$117,920</td>
</tr>
<tr>
<td>Operating Surplus (2% Safety Margin)</td>
<td>$27,824</td>
<td>$23,702</td>
</tr>
<tr>
<td><strong>Project Expenses (Dept Edu Grant - 2015 only)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Expenses</td>
<td>$570,000</td>
<td>$10,000</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>$1,989,003</td>
<td>$1,337,237</td>
</tr>
<tr>
<td><strong>Retained Earnings as at 31 December&lt;sup&gt;15&lt;/sup&gt;</strong></td>
<td>$343,132</td>
<td>$369,636</td>
</tr>
</tbody>
</table>

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<sup>13</sup> Based on a medium case forecast for new subscriptions.
<sup>14</sup> A medium case Professional Services income forecast to support NCRIS funded activities.
<sup>15</sup> The AAF aims to maintain a cash flow buffer with its retained earnings of approximately 3 to 4 months of its annual operating costs.
7. Risk Management

The AAF maintains an ongoing evaluation of its risk profile via the AAF Inc Risk Management Register which covers the following risk categories:

- Human capital management;
- Financial management;
- Business and service continuity;
- Governance;
- Workplace Health and Safety;
- Compliance;
- Remaining relevant and subscriber retention;
- Reputation.

Any risks associated with the introduction of the new capabilities in 2016 have been incorporated into the overall risk profile for AAF Inc. These risks will be managed by the General Manager and AAF Inc Executive Committee.