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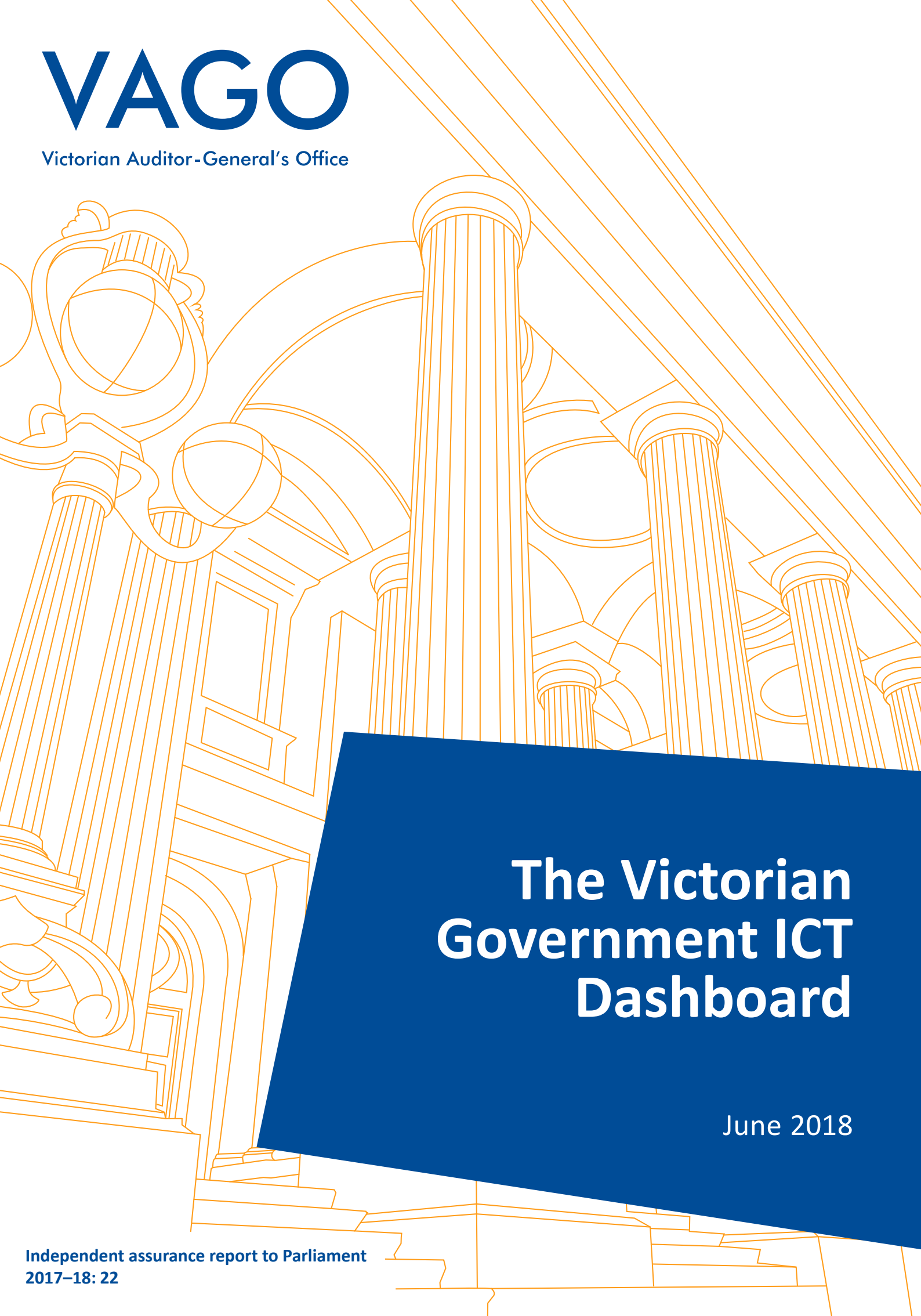
Victorian Auditor-General's Office



The Victorian Government ICT Dashboard

June 2018

Independent assurance report to Parliament
2017–18: 22

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Victorian Auditor-General's Office

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Victorian Auditor-General's Office

The Hon Bruce Atkinson MLC
President
Legislative Council
Parliament House
Melbourne

The Hon Colin Brooks MP
Speaker
Legislative Assembly
Parliament House
Melbourne

Dear Presiding Officers

Under the provisions of section 16AB of the *Audit Act 1994*, I transmit my report *The Victorian Government ICT Dashboard*.

Yours faithfully

Dave Barry
Acting Auditor-General
20 June 2018

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Acronyms

BAU	Business as usual
CFO	Chief Financial Officer
CIO	Chief Information Officer
DEDJTR	Department of Economic Development, Jobs, Transport and Resources
DHHS	Department of Health and Human Services
DPC	Department of Premier and Cabinet
DTF	Department of Treasury and Finance
FMA	*Financial Management Act 1994*
FRD	Financial Reporting Direction
HVHR	High Value High Risk
ICT	Information and communications technology
IT	Information technology
MW	Melbourne Water
PMO	Project management office
PR	Public reporting
PTV	Public Transport Victoria
RAG	Red/amber/green
USA	United States of America
VAGO	Victorian Auditor-General's Office
VAHI	Victorian Agency for Health Information
VSB	Victorian Secretaries' Board

Audit overview

Information and communications technology (ICT) is integral to how governments manage information and deliver programs and services. ICT projects need to be diligently monitored and successfully implemented, so that services to the government, public sector and community can be efficient and effective.

Comprehensive reporting on ICT expenditure and projects is important to improve transparency and provide assurance that public sector agencies have used public resources in an efficient, effective and economic way.

Our previous 2015 audit

In our 2015 report *Digital Dashboard: Status Review of ICT Projects and Initiatives* (Digital Dashboard Phase 1 report) we found that public sector agencies' financial and management processes did not enable the comprehensive reporting of actual ICT expenditure across the public sector.

During that audit, many agencies found it difficult to provide basic information on their ICT spend and projects. Because of this difficulty, we had to estimate the Victorian Government's total ICT expenditure, which we conservatively estimated to be about $3 billion per year.

Within this total spend we found that, for capital ICT expenditure, agencies spent an average of $720 million each year, from 2011–12 to 2013–14. Capital expenditure is usually the largest component of an ICT project's budget so it is a useful indicator of total project expenditure. Typically, this type of expenditure is recorded as an asset in the balance sheet.

We also found that agencies involved in the 2015 audit were not able to assure Parliament and the Victorian community that their ICT investments had resulted in sufficient public value to justify the significant expenditure of taxpayers' money.

As a result, we recommended that the Department of Premier and Cabinet (DPC) publicly report on ICT projects across the public sector. This reporting was to include relevant project status information, such as costs, time lines, governance and benefits realisation.

The Victorian Government ICT Dashboard

DPC launched the Victorian Government ICT Dashboard (ICT Dashboard) in March 2016 to improve transparency and provide assurance that agencies have efficiently, effectively and economically used public resources in their ICT projects.

Agencies subject to the *Financial Management Act 1994* (FMA) must provide quarterly updates on their ICT projects valued at more than $1 million.

Since the dashboard's inception, 84 of the 184 agencies that are required to report projects to the ICT Dashboard have reported on 439 projects. There have been 191 projects reported as complete, with a combined value of $907.9 million.

In March 2018, DPC went live with a new dashboard system, which offers more functionality than the previous tool.

Conclusion

The implementation of the ICT Dashboard has improved the transparency of public sector ICT projects. Information reported on the ICT Dashboard is accessible, interactive and easy to understand.

It is also reasonably timely, taking into consideration the data handling and sign-off processes in place for entering, checking and publishing the dashboard data.

It is reasonable for the public to expect information sources like the ICT Dashboard to be authoritative and reliable. If they are not, then public confidence in the integrity of this information may be eroded.

The information on the ICT Dashboard is 'complete' in terms of reporting agencies entering relevant and coherent data in mandatory fields for the projects that they have disclosed.

However, we are not able to give assurance on the overall completeness, accuracy or integrity of the data on the dashboard because:

- we detected a number of data errors for the projects we reviewed
- we detected some projects that were not reported by the agencies we reviewed
- we observed that nearly one-third of all projects reported on the ICT Dashboard were disclosed later than they should have been.

Based on the anomalies we detected in a small subset of all the reported data, we suspect that this problem is more widespread.

These inaccuracies show that DPC and agency processes are not adequate to properly assure the integrity and reliability of source data, which is fundamental to the overall accuracy and completeness of the ICT Dashboard.

Despite these accuracy and completeness challenges, the ICT Dashboard is a marked improvement in the availability and visibility of ICT project data. There are further opportunities for the ICT Dashboard to improve transparency as it matures, particularly by:

- providing more useful and descriptive narratives on the purpose and status of projects
- capturing and reporting expected project benefits
- better identifying and confirming what ICT category a project fits into.

Findings

ICT Dashboard accessibility and ease of understanding

The ICT Dashboard is publicly available and can be viewed from any internet connection. It is designed to be compatible with multiple devices such as desktop computers, tablets or mobile phones.

DPC conducted accessibility testing on the new ICT Dashboard before it was publicly rolled out in March 2018. At the time of this audit, DPC stated that it intends to conduct regular accessibility audits of the ICT Dashboard.

All the source data files used to populate the ICT Dashboard can be accessed and downloaded at the Victorian Government's public data repository known as data.vic.

We downloaded this data into a typical spreadsheet program and observed that it correctly tabulated against column headings and was consistent from quarter to quarter.

ICT Dashboard timeliness and completeness

By its nature, the ICT Dashboard is a repository of data from public sector agencies sent to DPC. This means that its content relies on the completeness, accuracy and candour of the data and status updates that agencies provide.

Historically, DPC and the Department of Treasury and Finance (DTF) have taken an 'arm's length' approach to their roles and responsibilities in assuring the accuracy and integrity of government frameworks and reporting processes.

DPC and DTF both stated in their response to the Digital Dashboard Phase 1 report that they believed that primary responsibility for compliance with government policies, including expenditure policies (such as specific ICT reporting requirements), rests with individual entities in accordance with Victoria's financial management framework.

If this approach to governance and oversight is to work effectively, then reporting agencies need to be committed to, and capable of, providing accurate and complete data in a timely fashion.

Timeliness

Due to the various processes required to collect, upload, review, approve and report the ICT Dashboard data, there is a lag of at least three months before data is published.

Many of these processes are discretionary, and DPC and reporting agencies could streamline them to reduce the time taken from data collection to data publication.

However, process reform may not improve the frequency of dashboard updates. We observed that most of the agencies in this audit have limited capability to provide updates in real time or more frequently than quarterly, due to internal resource and system constraints.

This data lag means that the ICT Dashboard has limited utility as a management support tool. For many fast-moving ICT projects, a three-month data delay can mean that what is publicly reported does not reflect what is actually currently happening with the project.

On a positive note, the upgraded ICT Dashboard, launched in March 2018, has automated some of the more laborious data entry and formatting activities that DPC previously needed to do. This should free up DPC resources to give more focus to higher-order analytical tasks rather than mundane data validation and data cleansing activities.

Completeness

For this audit, we considered two perspectives of completeness when reviewing the dashboard.

The first was about the completeness or integrity of the data reported to DPC, requiring all mandatory fields to be filled in with relevant data. We found no omissions in the uploaded data files that we reviewed. The new tool has an inbuilt data verification process that will not allow an agency to upload its data unless all required fields are filled in with data that meets the required parameters.

The second view of completeness relates to whether all the projects that should be reported on the ICT Dashboard have been reported.

During the audit, we identified five eligible ICT projects which the agencies involved in this audit had not reported on the ICT Dashboard.

Agencies are not consistently identifying whether their ICT projects will have, or already have, reached the threshold of $1 million.

ICT Dashboard reporting systems and processes

The agencies that we audited are very reliant on manual processes to identify reportable projects. DPC and DTF have no real-time visibility of agency financial systems to help identify projects that should be reported on, apart from public information such as media mentions, press releases or Budget Papers.

In Victoria, the devolved financial accountability system means that responsibility for the accuracy and completeness of data rests with agencies.

However, DPC does not have a process to assure government or the public that agencies have correctly identified and reported all the ICT projects that should be reported on the ICT Dashboard.

As a consequence, there is limited oversight and assurance of the completeness and accuracy of reported projects and data. Errors in the reported data highlight the need for both agencies and DPC to have stronger systems in place to report accurately.

We tested 18 projects and their source documents in detail and found that the accuracy of the information reported on the ICT Dashboard varies by agency—DPC, Melbourne Water (MW) and Public Transport Victoria (PTV) were mostly accurate, but the Department of Health and Human Services (DHHS) was not accurate.

Agencies' compliance in disclosing and reporting their projects to the ICT Dashboard in a timely manner also varied. Since the ICT Dashboard commenced, 128 projects out of 439 (29 per cent) were reported later than they should have been. Agencies advised us that this can be due to the cost being unknown at the start of the project, or scope changes that increase the cost of the project.

Agencies have processes in place to report data to the ICT Dashboard, but these processes do not always ensure that data is reported in accordance with the *ICT Reporting Standard for the Victorian Public Service* (ICT Reporting Standard). We found instances where the project's red/amber/green (RAG) status and items included in project budgets were inconsistent with the ICT Reporting Standard.

For example, we found that the four projects we examined at MW and the one project we examined at DPC reported the whole project cost as delivery costs, rather than separately identifying the initiation and delivery costs, as required by the ICT Reporting Standard.

Agencies have adequate processes to complete their mandatory ICT expenditure reporting, however, better coordination between Chief Financial Officers (CFO) and Chief Information Officers (CIO), or their equivalent, could help systematically identify projects that need to be reported on the ICT Dashboard.

Recommendations

We recommend that the Department of Premier and Cabinet:

1. amend the *ICT Reporting Standard for the Victorian Public Service* to:
    - require that agencies provide a more descriptive and standardised narrative about their ICT projects, including:
        - information on the purpose of the project and overall value proposition (see Section 2.5)
        - a description of the expected impact on the efficiency and effectiveness of service delivery (see Section 2.5)
        - information on the benefits expected from the project's implementation (see Section 2.5)
    - require the capture and reporting of expected project benefits on the Victorian Government ICT Dashboard, including a capability for reporting agencies to monitor benefits realisation (see Section 2.5)
    - clarify that any agency-derived red/amber/green statuses used for a quarterly data update must align with the high-level red/amber/green definitions specified by the Department of Premier and Cabinet to ensure a consistent view across the public sector of ICT project status (see Section 3.4)
    - require that the Chief Information Officer and Chief Financial Officer (or equivalent roles) jointly sign-off the list of ICT projects that underpins the Financial Reporting Direction 22H reporting process and attest that all required projects have been identified and correctly reported (see Section 3.2)
2. continue to consult with agencies subject to the *Financial Management Act 1994* to determine the most useful data fields to be included in the *ICT Reporting Standard for the Victorian Public Service* with a key focus on avoiding any unnecessary reporting burden for agencies (see Section 2.4)
3. conduct strategic analysis of ICT project categories and spend to support the intent of the *Information Technology Strategy: Victorian Government 2016–2020* for agencies to share existing solutions within the public service or identify services that could be transitioned into a shared services model (see Section 2.5)
4. identify methods to review and confirm the accuracy and completeness of data reported on the Victorian Government ICT Dashboard and communicate the results back to agencies (see Section 2.2).

We recommend that the Department of Treasury and Finance:

5. implement a common chart of accounts across agencies subject to the *Financial Management Act 1994*, to consistently capture and code ICT-related expenditure, to allow better assessment and analysis across all these entities, regardless of their size or portfolio (see Section 3.2).

We recommend that the Department of Health and Human Services, the Department of Premier and Cabinet, Melbourne Water and Public Transport Victoria:

6. improve records management practices for ICT projects, giving particular attention to capturing and recording key project documents which show evidence of decisions and approvals (see Section 3.3).

Responses to recommendations

We have consulted with DHHS, DPC, DTF, MW and PTV. We considered their views when reaching our audit conclusions. As required by section 16(3) of the *Audit Act 1994*, we gave a draft copy of this report to those agencies and asked for their submissions or comments.

The following is a summary of those responses. The full responses are included in Appendix A.

DPC fully accepted four of the five recommendations directed to it, and accepted the majority of the other recommendation. DPC stated that it shares VAGO's focus on improving transparency in ICT investments across government and provided an action plan for the recommendations it had accepted.

DTF noted the findings of the report and accepted in principle the recommendation to establish a common chart of accounts to consistently capture and code ICT-related expenditure. DTF agreed that improving the quality of performance data, both financial and non-financial, is essential to better inform government policy decisions and prioritisation of resource allocation, including for ICT investment.

DHHS, DPC, MW and PTV accepted the recommendation directed to them to improve records management practices for ICT projects. DHHS committed to developing and communicating guidelines for the storing of key project documentation and project status reporting. All agencies provided an action plan detailing how they will address the recommendation.

1 Audit context

1.1 Background

ICT is integral to how governments manage information and deliver programs and services.

Our April 2015 Digital Dashboard Phase 1 report found that, in general, government agencies' financial and management processes did not enable the comprehensive reporting of actual ICT expenditure across the public sector. During that audit, many agencies found it difficult to provide basic information on their ICT spend and projects.

We also found that agencies involved in the 2015 audit were not able to assure Parliament and the Victorian community that their ICT investments had resulted in sufficient public value to justify the significant expenditure of taxpayers' money.

As a result, we recommended that DPC publicly report on ICT projects across the public sector. This reporting was to include relevant project status information, such as costs, time lines, governance and benefits realisation.

DPC, in conjunction with DTF, accepted this and all the other recommendations directed to it, and committed to implementing a quarterly report covering all ICT projects with a budget greater than $1 million, by 31 March 2016.

DPC noted that it did not have the authority to require departments and agencies to report the status of their ICT project, however, it would work with public sector bodies to request this information.

DTF and DPC also noted that primary responsibility for compliance with government policies, including with expenditure policies, rests with individual entities in accordance with the financial management framework.

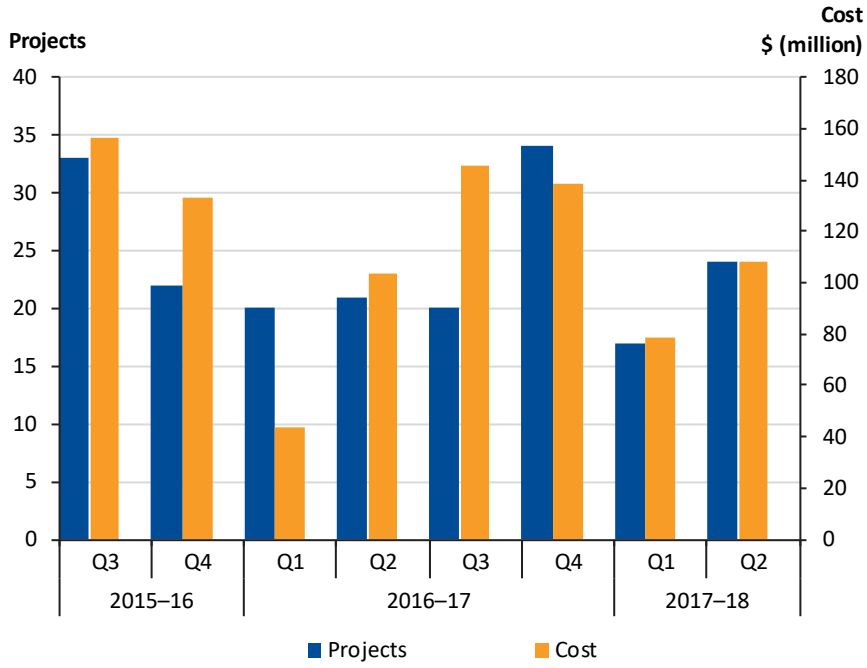
Victorian Government ICT expenditure

The Digital Dashboard Phase 1 report estimated that the Victorian Government's total ICT expenditure was about $3 billion per year. This was a conservative estimate because we found that financial processes in Victorian agencies did not enable comprehensive accounting of actual ICT expenditure.

We found that agencies spent an average of $720 million on capital ICT expenditure each year, between 2011–12 and 2013–14.

From March 2016 to December 2017, agencies have reported 191 projects as complete, valued at $907.9 million. These are shown in Figure 1A.

Figure 1A
Number of completed projects and reported cost, by quarter



Source: VAGO, based on the data files available from data.vic.

Information Technology Strategy: Victorian Government 2016–2020

The *Information Technology Strategy: Victorian Government 2016–2020* (the Victorian IT Strategy) was released in May 2016. The Victorian IT Strategy gives direction and targets for public sector information management and technology over a five-year time frame.

The Victorian IT Strategy has four priorities:

1. reform how government manages its information and data and makes these transparent
2. seize opportunities from the digital revolution
3. reform government's underlying technology
4. lift the capability of government employees to implement ICT solutions that are innovative, contemporary and beneficial.

In response to one of our recommendations from the Digital Dashboard Phase 1 report, one of the Victorian IT Strategy's actions was to launch a public dashboard covering ICT projects worth over $1 million.

Other ICT dashboards across the world

Governments in other countries and Australian states have established mechanisms to publicly report on their ICT projects.

The format of this reporting varies, with some dashboards showing data at an aggregate level, such as expenditure by department, while others show very detailed project-specific information and even identify key individuals by name and photograph.

International ICT dashboards

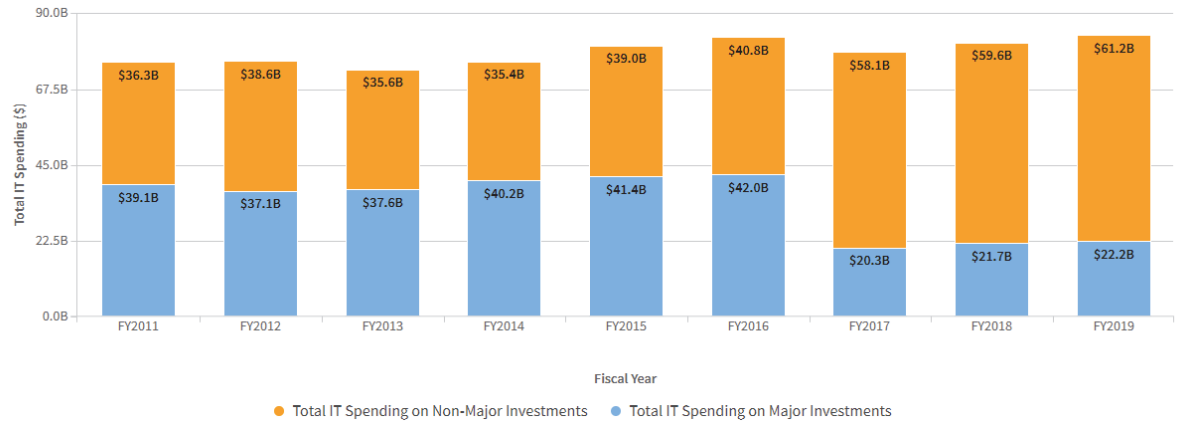
United States of America

The United States of America's (USA) IT Dashboard was launched in 2009 to provide information about 26 federal agencies' IT expenditure and the progress of their projects.

In March 2018, this dashboard contained data on over 7 000 projects, including 700 identified as 'major' projects. Major projects are required to submit a business case detailing the cost, schedule and some performance data, however, there is not a dollar figure specifying when a project requires a business case.

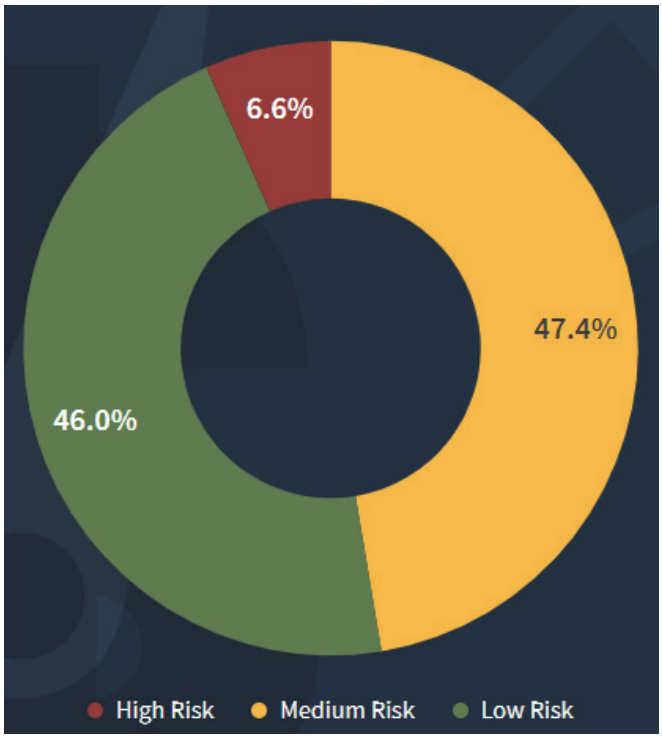
The USA IT Dashboard gives an overview of historical IT spending and forecasts future spending. In the 2019 fiscal year (1 October to 30 September), the USA expects to spend $83.4 billion on ICT projects, as shown in Figure 1B. The USA IT Dashboard also provides an overview of all projects' risk ratings, as shown in Figure 1C.

Figure 1B
USA's total IT spending by fiscal year



Source: USA IT Dashboard, www.itdashboard.gov.

Figure 1C
USA's collated risk ratings for all reported ICT projects



Source: USA IT Dashboard, www.itdashboard.gov.

The Netherlands

The Netherlands' dashboard, called the Central ICT Dashboard, provides information about major ICT projects, defined as valued at more than €5 million. In March 2018, this dashboard reported on 199 projects, with 96 of them in progress.

The dashboard compares total spend on multi-year projects by ministries (equivalent to departments). The most recent data on the dashboard is current to 31 December 2016.

Australian ICT dashboards

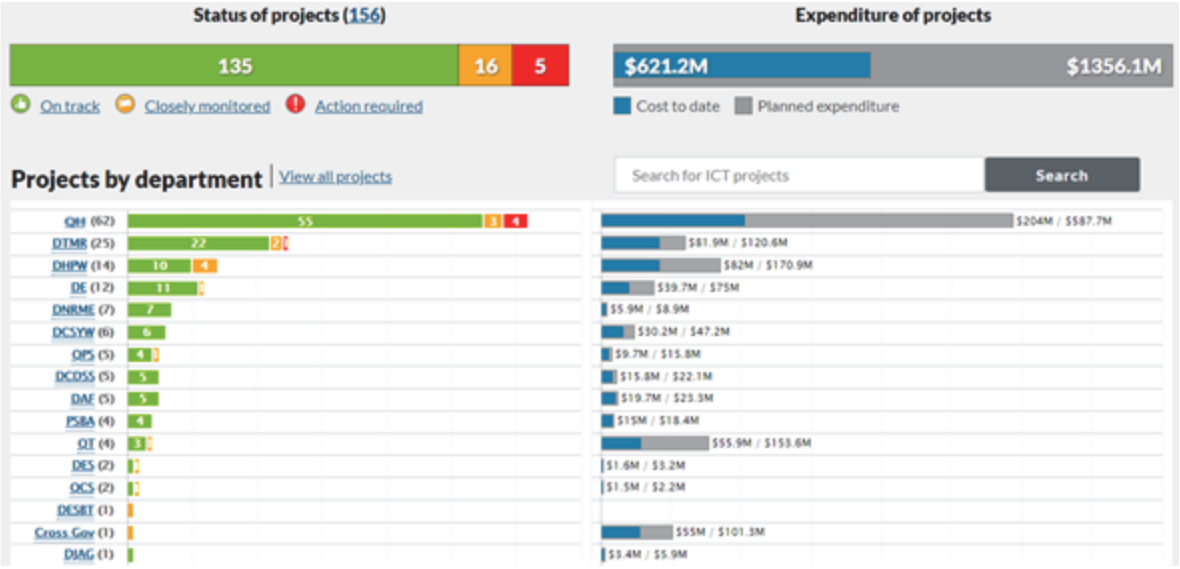
Queensland

Queensland's ICT Dashboard was launched in August 2013 and gives information on all major ICT projects overseen by the Queensland Government. By March 2018, the dashboard reported on 156 projects worth a total of $1.4 billion. Each department decides which projects to report on the dashboard.

Queensland ICT projects use a RAG status rating. The dashboard provides summary statistics on projects by department, RAG status and expenditure per department.

Figure 1D shows the Queensland ICT Dashboard landing page, and summary snapshot.

Figure 1D
Landing page of Queensland's ICT Dashboard



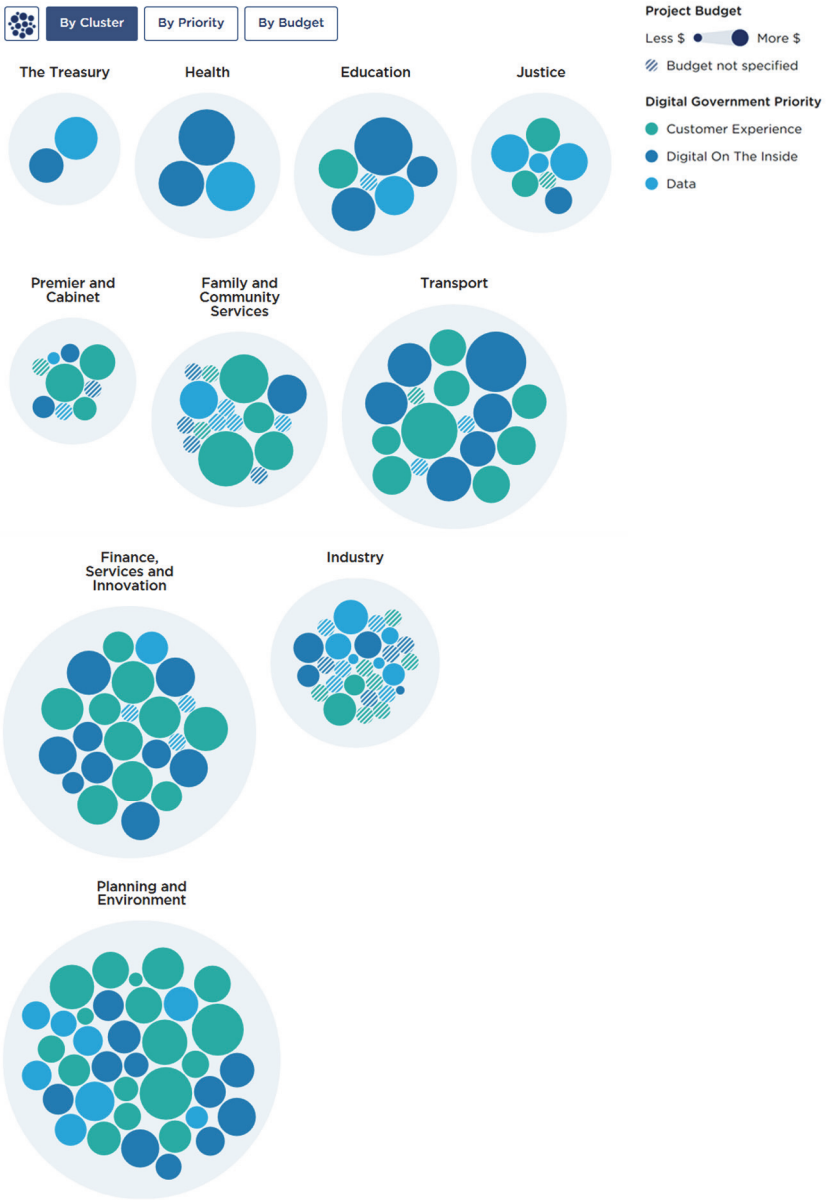
Source: Queensland ICT Dashboard, www.qld.gov.au/ictdashboard.

New South Wales

New South Wales launched the digital.nsw dashboard in November 2017. This dashboard reports on the New South Wales Government's progress on projects that contribute to achieving its three digital government priorities.

The website gives an overview of each project and its budget. Figure 1E displays the landing page and summary information.

Figure 1E
Summary information provided on digital.nsw



Source: New South Wales dashboard, www.digital.nsw.gov.au.

1.2 The Victorian Government ICT Dashboard

DPC manages the Victorian Government ICT Dashboard, which was launched in March 2016. The ICT Dashboard is a reporting tool that shows key metrics from public sector ICT projects valued at more than $1 million.

The ICT Dashboard fulfils a component of action 22 of the Victorian IT Strategy.

The ICT Dashboard is available to anyone with an internet connection, is interactive and allows users to see and filter data in different ways.

Figure 1F shows the dashboard's overview of ICT projects, as at April 2018.

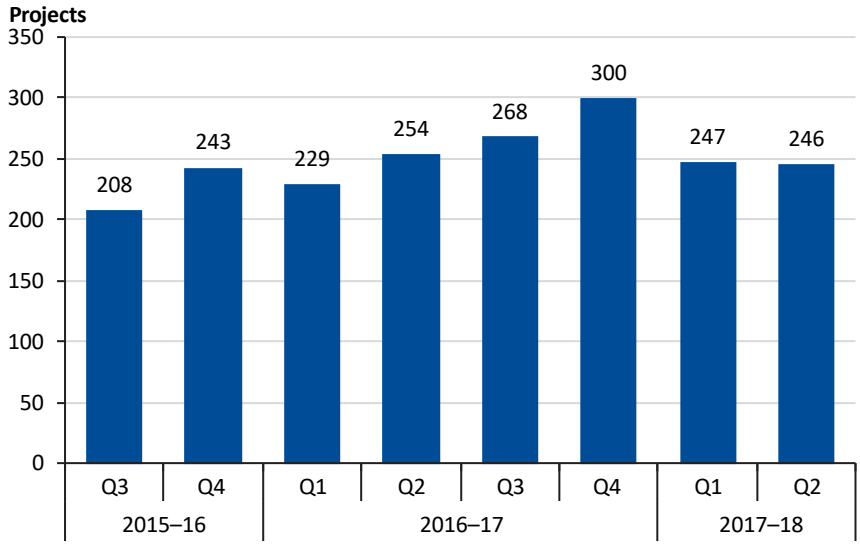
Figure 1F
Overview of reported ICT projects on the ICT Dashboard, April 2018

Source: ICT Dashboard.

Project information is required for every ICT project that has a total projected, estimated, current or actual ICT cost of $1 million or more and is initiated or in delivery, or was completed, postponed or terminated, in the quarter.

Since the dashboard's creation, 84 of the 184 agencies that are required to report on the ICT Dashboard have reported on 439 projects. The number of reported projects has gradually risen since March 2016, as shown in Figure 1G.

Figure 1G
Number of projects reported on the ICT Dashboard, by quarter



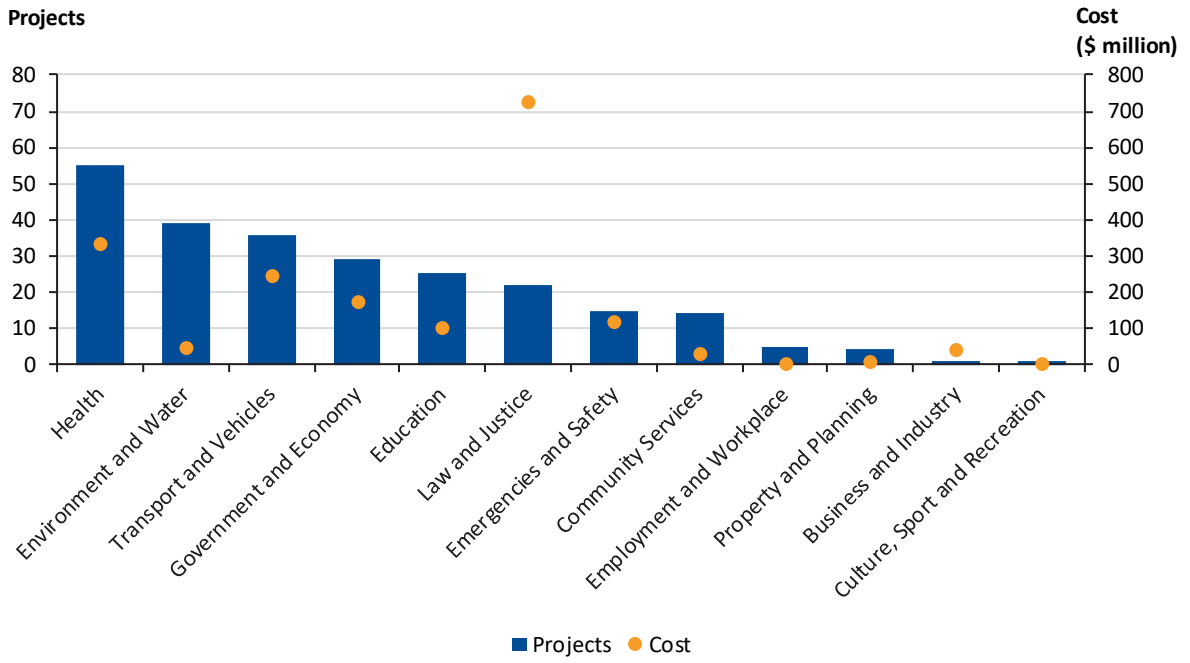
Note: Until Q2 2017–18, agencies were required to report on projects until the end of the financial year, even if the project was concluded. It was therefore expected that the number of projects would increase throughout the financial year. From Q2 2017–18, DPC advised that it would now remove projects from the dashboard as they were completed, terminated or merged.
Source: VAGO, based on the data files available from data.vic.

ICT projects reported on the ICT Dashboard

The latest available data, for the December quarter 2017, shows 246 projects from 65 agencies. These projects are valued at $1.8 billion.

Figure 1H shows the number of projects reported and the budgeted cost, by government domain. The Health domain has the largest number of projects at 55 and second highest cost at $337.1 million. The Law and Justice domain has the highest combined project cost of $730.2 million.

Figure 1H
Number and cost of projects, by government domain, December quarter 2017



Source: VAGO, based on the data files available from data.vic.

Agencies are required to report on their projects' current implementation stage. The dashboard has seven implementation status categories, as shown in Figure 1I.

Figure 1I
Stages of implementation

Stage	Definition
Initiated	Pre 'project delivery' activities are underway including preliminary planning, feasibility study, business case development and/or funding request.
Business Case Approved	Project business case has been approved or funding has been allocated.
Delivery	Project has commenced delivery.
Completed	Project has delivered its outcomes, and is being, or has been closed.
Postponed	Project has been temporarily put on hold.
Terminated prior to 'project completed'	Work on the project has ended prematurely (i.e., a decision has been made to stop work).
Merged	Scope of the project has been merged into another project.

Source: Version 2.0 of the ICT Reporting Standard.

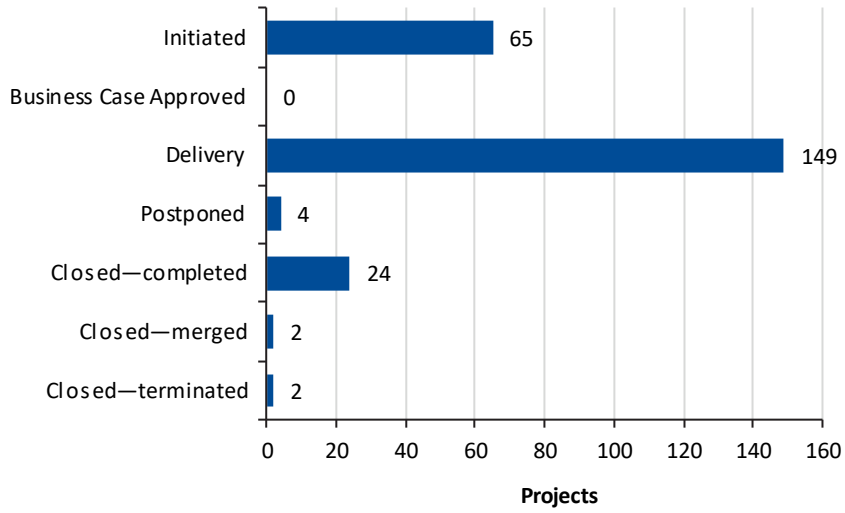
Under version 1.0 of the ICT Reporting Standard, agencies reported against six stages:

- initiated
- in progress—pre-implementation activities
- in progress—implementation activities
- project completed—project closed
- project postponed
- project terminated (prior to completion).

As shown in Figure 1I, version 2.0 of the standard has not significantly altered the project stages.

Figure 1J shows the breakdown of the 246 reported projects, by stage. The majority (149, or 61 per cent) are listed as in 'delivery'.

Figure 1J
Projects by stage of implementation, December quarter 2017



Source: VAGO, based on the data files available from data.vic.

The ICT Dashboard reports the status of projects using a RAG format. Agencies report the status of the project, as per their most recent project control board (or equivalent) report, using the definitions outlined in Figure 1K.

Under version 1.0 of the ICT Reporting Standard, the RAG status used the same definitions, however, the status only reflected whether the current implementation time line was on schedule. It did not take account of other matters such as risk, functionality or cost.

Figure 1K
RAG status definitions

Status	Definition
●	On track
●	Issues exist but they are under the project manager's control
●	Serious issues exist that are beyond the project manager's control

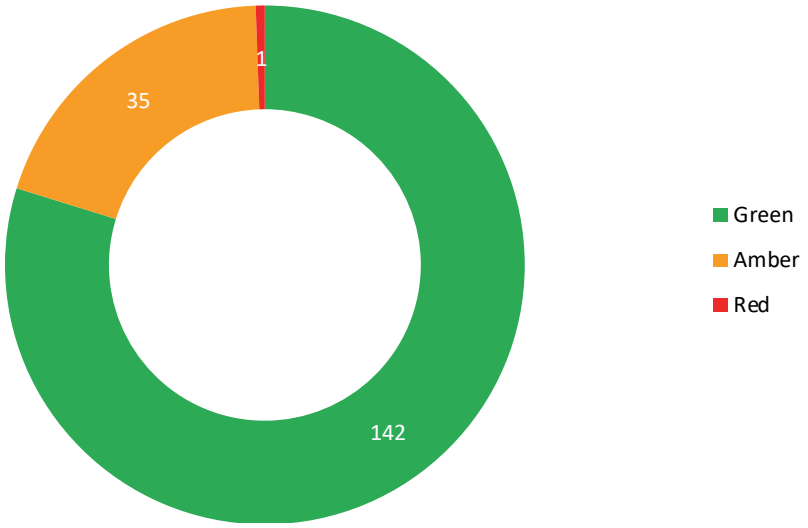
Source: Version 2.0 of the ICT Reporting Standard.

There is no guidance in the ICT Reporting Standard regarding when a project needs to start reporting a RAG status. DPC advised that its new online reporting tool has built-in functionality to activate RAG status reporting when a project moves into the delivery stage. However, this has not been observed or tested by the audit team.

In the December quarter 2017, 178 of the 246 projects (72 per cent) reported a RAG status.

Figure 1L shows the RAG status of reported projects, for the December quarter 2017. Just under 80 per cent of projects were reported as on track.

Figure 1L
Reported projects by RAG status, December quarter 2017



Source: VAGO, based on the data files available from data.vic.

New dashboard tool launched in early 2018

In March 2018, DPC went live with a new dashboard system, which offers more functionality than the previous tool.

The new tool continues most of the previous dashboard's public-facing functionality and is highly interactive. It allows a user to receive a high-level overview, such as RAG status, domain or ICT project type, or to specifically focus on a single project or agency. Users can apply filters for project costs and duration.

The new dashboard home page has three categories for users—understand, explore and improve.

The 'understand' section provides the dashboard's strategic objectives and data collection process, and discusses how the data is used.

New features give users a historical overview of all ICT projects. Users can download quarterly data files and, as of March 2018, this download includes how projects have progressed over the previous five quarters.

The 'explore' section allows users to explore the reported government ICT projects across stage, status and domain. A dashboard overview summarises projects by stage and status, by cost tiers, top five departments/agencies ranking, government domains and ICT project categories.

A search, filter and sort function has been added in the new dashboard system to improve useability. A revision history is now available for each agency to track any changes to project schedules and costs.

The new dashboard system can also generate a 'project on a page' summary, which gives agencies snapshots of their projects' status and data.

The last section is 'improve' where users can provide feedback to dashboard administrators.

1.3 Legislation and standards

Financial Management Act 1994

The FMA governs Victorian Government financial investments and reporting. The FMA requires government to apply the principles of sound financial management.

In the context of this legislation, sound financial management is to be achieved by:

- establishing and maintaining a budgeting and reporting framework
- prudent management of financial risks, including risks arising from the management of assets
- considering the financial impact of decisions or actions on future generations
- disclosing government and agency financial decisions in a full, accurate and timely way.

Under section 8 of the FMA, the Minister for Finance issues directions, which apply to public sector bodies.

These include Financial Reporting Directions (FRD), which are mandatory and must be applied if the public agency is subject to the FMA.

Financial Reporting Direction 22H—*Standard disclosures in the report of operations*

The purpose of FRD 22H is to prescribe the content of agencies' report of operations within their annual report to ensure consistency in reporting.

One of the requirements of FRD 22H is for agencies to disclose total ICT business as usual (BAU) expenditure and total ICT non-BAU expenditure for the relevant reporting period.

This part of FRD 22H was first applied in the 2016–17 financial year and attestations on ICT expenditure were included in agencies' annual reports for that period.

ICT Reporting Standard for the Victorian Public Service

Prior to the issuing of the FRD 22H reporting requirements for ICT expenditure, DPC released version 1.0 of the ICT Reporting Standard in September 2015.

The ICT Reporting Standard sets the business reporting requirements for ICT expenditure and ICT projects with budgets over $1 million and applies to all departments and bodies, as defined by the FMA.

At the same time, DPC released the *ICT Expenditure Reporting Guideline for the Victorian Government*. The guideline gives data reporting recommendations and guidance to agencies.

In September 2017, DPC issued version 2.0 of the ICT Reporting Standard. Version 2.0 references the requirement for agencies to comply with FRD 22H and added seven extra reporting fields.

The revised ICT Reporting Standard was first used for the 2017–18 December quarter data which was released to the public in late March 2018.

1.4 Governance framework

There are a number of governance bodies that are relevant for ICT:

- The Minister for Finance is the responsible minister under the FMA and also issues FRDs.
- The Special Minister of State is responsible for the Victorian IT Strategy, including the ICT Dashboard.
- The Victorian Secretaries' Board (VSB) comprises the Secretaries of each department, the Chief Commissioner of Victoria Police and the Victorian Public Sector Commissioner. The aim of the VSB is to coordinate policy initiatives across the public sector, and promote leadership and information exchange. The VSB was the approval authority for the original and revised ICT reporting standards.

- The Integrity and Corporate Reform subcommittee of the VSB was delegated responsibility, by the VSB, for dealing with operational matters in relation to the ICT Dashboard.
- The Victorian CIOs' Leadership Group (formerly known as the CIOs' Council) includes the CIOs from bodies who are members of the VSB plus any invited observers. The group is responsible for setting technical ICT standards and guidelines and for coordination of major ICT issues across agencies.

1.5 Agency roles

The following describes the departments with responsibilities for the ICT Dashboard and gives information on the agencies that we included in this audit for focused testing.

Department of Premier and Cabinet

DPC is the owner of the ICT Dashboard and oversees the reporting process. It collects data from FMA agencies and publishes quarterly reports on the ICT Dashboard.

DPC is also a reporting agency and has reported six projects on the ICT Dashboard. We reviewed one of DPC's ICT projects in detail.

Department of Treasury and Finance

DTF is the owner of the overall State Budget process that is key to the funding approval for most ICT projects. DTF also manages the High Value High Risk (HVHR) process which requires the ongoing monitoring of more complex, higher-risk ICT projects.

As an entity, DTF has reported three projects on the ICT Dashboard since it launched in March 2016, with two of these currently in the initiation stage.

Department of Health and Human Services

DHHS develops and delivers policies, programs and services that support and enhance the health and wellbeing of all Victorians.

DHHS has reported 51 projects on the ICT Dashboard since the dashboard's inception. We reviewed eight of DHHS's ICT projects in detail.

Melbourne Water

MW is a statutory authority that manages and protects Melbourne's major water resources on behalf of the community.

MW has reported 33 projects on the ICT Dashboard since its launch. We reviewed four of MW's ICT projects in detail.

Public Transport Victoria

PTV is a statutory authority that acts as a system coordinator for all public transport in Victoria. It aims to improve public transport in Victoria, by ensuring better coordination between modes, facilitating expansion of the network, auditing public transport assets and promoting public transport.

PTV has reported 20 projects on the ICT Dashboard since its launch. We reviewed five of PTV's ICT projects in detail.

1.6 Previous audits

Our Digital Dashboard Phase 1 report estimated that the Victorian Government's ICT expenditure was $3 billion per year and found that Victorian agencies did not have comprehensive accounting in place to identify actual ICT expenditure.

Our follow-up March 2016 report *Digital Dashboard: Status Review of ICT Projects and Initiatives – Phase 2* examined a selection of ICT projects in detail.

Although some elements of better practice were identified, the audit confirmed that the Victorian Government needed to be more effective in planning and managing ICT projects, as they continued to show poor planning and implementation, resulting in significant delays and budget blowouts.

1.7 Why this audit is important

ICT projects are a significant component of the Victorian public sector's annual expenditure.

It is important to track information on the status and outcomes of public sector ICT initiatives to monitor whether public resources have been spent in an efficient and effective manner. Greater transparency also helps to assess whether these investments have enhanced government services or addressed the problems they were meant to resolve.

The ICT Dashboard was developed to provide accurate, reliable and complete information about ICT expenditure by Victorian Government departments and agencies and to provide assurance and transparency to the public.

The ICT Dashboard has now reported eight quarters of data and this audit gives some insight into whether agencies are now more reliably monitoring and recording—as well as transparently reporting—their ICT investments.

1.8 What this audit examined and how

The objective of this audit was to examine whether transparency in government ICT investments has improved since the development of the ICT Dashboard.

We examined whether:

- information reported on the ICT Dashboard is accurate, timely and complete
- information reported on the ICT Dashboard is accessible and easy to understand
- agencies have systems and processes to ensure that data reported on the ICT Dashboard meets the ICT Reporting Standard.

We examined DPC in its role as the system owner of the ICT Dashboard and also examined one of its ICT projects which is also scrutinised by DTF's HVHR process.

We examined DTF due to its role in overseeing the State Budget process, financial compliance frameworks and the HVHR process.

DHHS, PTV and MW were included in the audit to allow us to examine a spread of projects across different areas of the public sector. Across these three entities we examined 17 ICT projects in detail.

These projects were chosen on a risk and materiality basis, which included factors such as schedule, cost, type of project and reported RAG status.

The full list of projects we examined in detail can be found in Appendix B.

The methods for this audit included:

- a review of corporate documents, including project plans, policies, frameworks, and briefings at selected departments and agencies
- interviews with staff and senior management at selected departments and agencies
- a review of processes and key information systems used to collect, analyse and report information to the ICT Dashboard
- a review of financial data related to the case study ICT projects and expenditure at selected departments and agencies.

We conducted our audit in accordance with section 15 of the *Audit Act 1994* and ASAE 3500 *Performance Engagements*. We complied with the independence and other relevant ethical requirements related to assurance engagements. The cost of this audit was $310 000.

1.9 Report structure

The structure of this report is as follows:

- Part 2 discusses our review of the ICT Dashboard
- Part 3 discusses our review of case study projects at selected agencies.

2 The ICT Dashboard—transparency and oversight

The ICT Dashboard launched in March 2016 and, since then, there have been eight quarters of data reported. From the potential 184 FMA agencies required to report on the ICT Dashboard, 84 have reported 439 ICT projects.

The ICT Reporting Standard requires applicable agencies to report data on the ICT Dashboard for projects worth over $1 million. The ICT Reporting Standard's key objectives are to:

- increase government transparency in managing ICT expenditure and project status
- identify emerging trends in ICT expenditure and project types
- discover collaboration and shared services opportunities
- promote consistency in tracking ICT expenditure and the performance of ICT projects
- enable clear oversight for a more effective approach to future information management and technology
- meet our Digital Dashboard Phase 1 report audit recommendations.

This part of the report discusses our review of the application of the ICT Reporting Standard, with a particular focus on the transparency, accuracy and usefulness of the data that the ICT Dashboard displays.

2.1 Conclusion

The information reported on the ICT Dashboard is accessible and easy to understand. It is also reasonably timely, taking into consideration the processes that need to be followed for the data to be collected and published.

The information is also 'complete' from a data entry perspective for the projects that agencies are reporting. However, we are not able to give assurance that all projects that should be included in the dashboard were reported, because we detected a number that had been omitted. We found the omissions were due to human error and had no discernible pattern.

Although the ICT Dashboard has been a marked improvement on the previous quality and availability of ICT project data, it could further mature and improve transparency, particularly by:

- providing more useful descriptive narratives of the purpose and status of projects
- capturing and reporting expected project benefits
- better identifying and confirming what ICT category a project fits into, such as 'records management'.

2.2 Has the dashboard improved transparency?

Since its launch, the ICT Dashboard has created a substantial increase in the quality and availability of information about public sector ICT projects.

Our Digital Dashboard Phase 1 report identified the need for such a tool due to historically poor transparency within the public sector around what was being spent on ICT, in which agency and for what purpose.

In response to our Digital Dashboard Phase 1 report, both DPC and DTF agreed that there was a need to set up an ICT-specific dashboard.

The Victorian IT Strategy authorised the establishment of the ICT Dashboard, and the ICT Reporting Standard gives operational authority to the content and requirements of the ICT Dashboard. The ICT Reporting Standard was approved by the VSB in September 2015 and updated in September 2017.

The ICT Reporting Standard also notes that where the project includes non-ICT-related investment, agencies should only report on the ICT project component.

By its nature, the ICT Dashboard is a repository of data from public sector agencies sent to DPC. This means that its content is driven by the completeness, accuracy and candour of the data that agencies provide when responding to the mandatory elements of the ICT Reporting Standard.

An apparent transparency challenge is that reporting agencies are not consistently identifying whether their ICT projects will have, or already have, reached the ICT Reporting Standard's threshold of $1 million.

The agencies that we audited rely on staff manually checking lists extracted from different systems to identify reportable projects. DPC and DTF have no real-time visibility of agency financial systems to help identify projects that should be reported, apart from public information sources such as media mentions, press releases or Budget Papers.

During the audit, we identified five eligible ICT projects that agencies did not report on the ICT Dashboard. We discuss this in detail in Part 3.

DPC does not have a process to assure itself, government or the public that agencies have correctly identified and reported all ICT projects that should be on the ICT Dashboard. During this audit DPC stated that it does not believe it has a role in assuring the data that agencies provide.

The devolved financial accountability system in Victoria means that the responsibility for the accuracy and completeness of data rests with agencies. The consequence of this approach is that there is limited oversight of and assurance about the accuracy and completeness of reported data.

Likewise, the agencies where we detected errors and omissions do not have adequate processes to make sure the data they report is accurate and complete.

2.3 Is it easy to understand and accessible?

The ICT Dashboard is publicly available and can be viewed from any internet connection. It is designed to be compatible with multiple devices such as desktop computers, tablets and mobile phones.

Accessibility of the ICT Dashboard tool

In addition to the continuous availability of the ICT Dashboard for any internet user, DPC states that it strives for the ICT Dashboard to comply with the World Wide Web Consortium's *Web Content Accessibility Guidelines (WCAG) 2.0*. These guidelines are designed to help people with disabilities who face challenges when accessing material on the internet.

The Victorian Government has publicly stated that it will ensure its online content is available to the widest possible audience, including readers using assistive technology or other accessibility features.

DPC conducted accessibility testing of the new ICT Dashboard tool before it publicly rolled out in March 2018. DPC also advised us that it had commissioned a disability advocacy agency to conduct a user experience test for people with impaired vision. At the time of this audit, DPC stated that it intends to conduct regular accessibility audits of the ICT Dashboard.

Accessibility of the ICT Dashboard data

During the audit, we were able to access and download all the source data files that had been used to populate the ICT Dashboard since it was launched.

A data file for the most recent quarter is available on the dashboard's 'understand' page, while previous quarters are located on the Victorian Government's public data repository known as data.vic.

There are no hyperlinks to historical datasets from the ICT Dashboard page to data.vic and identifying and downloading historical files was not a simple process.

We downloaded the data into a typical spreadsheet program and observed that it correctly tabulated against column headings and had consistency from quarter to quarter.

We identified some minor discrepancies related to project codes and naming conventions. We understand DPC resolved this when transitioning to the new ICT Dashboard.

2.4 Is the information timely and complete?

The technology used to display the ICT Dashboard data has matured over the last two years.

The new ICT Dashboard is a cloud-based ICT platform which allows reporting agencies to directly upload required data into the system. The most recent data upload (December quarter 2017) is now in the cloud-based database and displayed through a data visualisation tool.

This is an efficiency improvement over the previous system, which required agencies' spreadsheet data files to be uploaded into a shared repository for checking and formatting offline by DPC, before being imported into a data visualisation tool for online publication.

The new system's data entry approach has streamlined the review process for agencies and DPC because validation checks are now built into data fields that will only accept a data input that meets required parameters.

Once entered into the system, the data is staged from 'draft' to 'approved' by the reporting agency, then held by DPC as 'confirmed' until all the dashboard data is 'published' at the end of the quarter, after the Special Minister of State is provided with a briefing.

Is the dashboard timely?

Due to the various processes required to collect, upload, review, approve and report the ICT Dashboard data, there is a lag of at least three months before data is published on the dashboard.

This means that data could be nearly six months old just before the dashboard has its quarterly refresh.

For many fast-moving ICT projects, this can mean that what is publicly reported does not reflect what is actually currently happening.

We observed that, at present, there are limited opportunities to reduce this data lag due to:

- manual and time-consuming data collation and data entry processes at agencies
- agency internal sign-off for RAG status and progress commentary
- cross-checking with DTF information related to ICT projects that are subject to HVHR processes
- DPC-initiated reviews of any major data anomalies and projects with consecutive red or amber RAG statuses
- a quarterly briefing to the Special Minister of State, which gives a summary of the ICT Dashboard's results prior to publication.

On a positive note, the new tool has automated some of the more laborious data entry and data formatting activities which should free up DPC resources to give more focus to higher order analytical tasks rather than mundane data validation and data cleansing activities.

Is the dashboard complete?

Between March 2016 and September 2017, agencies reported against 17 data fields. Since December 2017, when version 2.0 of the ICT Reporting Standard became operational, agencies have reported against 24 fields.

A complete list of the data fields agencies need to report against can be found in Appendix C.

For this audit, we considered two views of completeness when reviewing the dashboard.

The first view was about the completeness or integrity of the data reported to DPC, requiring all mandatory fields to be filled in with relevant and coherent data.

We reviewed the data for the September 2017 quarter that was published in December 2017. We found no omissions in the mandatory data fields that we reviewed.

The new tool has an in-built data verification process that will not allow an agency to upload its data unless all required fields are complete. An incomplete upload is listed as 'draft' and will attract a follow up from DPC if it is not actioned promptly by the reporting agency.

The second view of completeness related to whether all the projects that should be reported on the ICT Dashboard have been reported.

As stated earlier, we identified five eligible ICT projects that agencies had not reported on the ICT Dashboard. We discuss this further in Part 3 of this report.

We also found that a significant number of projects have not been reported on the dashboard according to the time frame set by the ICT Reporting Standard.

We analysed when a project commenced and when the project was first reported on the ICT Dashboard. We found that 128 of 439 (29 per cent) projects were reported later than they should have been. The longest disclosure delay was 21 months late for two projects, followed by 18 months late for three projects. The average delay in disclosure was seven months.

2.5 Does it provide better oversight?

Between March 2016 and the end of December 2017, the ICT Dashboard site had about 10 400 unique page views from internet users. The tracking software for the site does not show which domain these users come from so it is not possible to attribute these views to a particular type of user.

The new system's functionality increases the opportunity for better oversight of all ICT projects. In particular, showing RAG status trends over time will give users of the ICT Dashboard a longer-term view of how a project is progressing.

The new system also allows reporting agencies to use non-mandatory fields in the system to track a wider range of project attributes beyond the cost or schedule data, such as issues, risks and benefits.

Identifying opportunities to better align investments across agencies

One of the actions of the Victorian IT Strategy is 'Following on from the ICT Projects Dashboard, establish a high level "portfolio management office" function to form a portfolio view of government ICT projects over $1 million, providing templates, advice and assistance where relevant'.

Establishing this function requires data to be visible across all portfolios, to gain a broad view of ICT projects across the public sector. The current dashboard has substantively achieved this.

However, to move to a more strategic view, the ICT Dashboard should aim to provide more meaningful, qualitative information on the nature, purpose and benefits of an ICT project. It also needs to categorise ICT projects consistently.

Quality and usefulness of project descriptive narratives

One of the goals of the ICT Reporting Standard is to identify emerging trends in ICT expenditure and project types across government.

The latest ICT Dashboard data has taken the first step towards collecting standardised ICT project category descriptions. The 30 project type descriptions are from the *Australian Government Architecture Reference Models* published in 2011 by the now defunct Australian Government Information Management Office.

At present, it is difficult to derive a detailed understanding of the nature and purpose of a reported ICT project from the descriptive material that agencies report on the ICT Dashboard.

Project titles do not allow users to understand the functionality or capability of the project or why it is being implemented.

We also observed that although the project type descriptor is standardised, DPC has included an extra category of 'other' and allows agencies to select multiple categories for their ICT projects. DPC advised us that the 'other' option was provided because the project category field is mandatory.

DPC also advised us that where an agency selected 'other', DPC worked with the agency to assist them to choose a more relevant field, and that currently no agencies have projects categorised as 'other' on the ICT Dashboard.

We query whether allowing multiple selections or the 'other' category will provide a more granular view of ICT investments, without some level of justification by the agency or more quality control and oversight by DPC.

Benefits and impacts from ICT projects

Our Digital Dashboard Phase 1 report found that Victorian agencies and entities were not in a position to assure Parliament and the Victorian community that their ICT investments resulted in sufficient public value to justify the significant expenditure of taxpayers' money.

This was because the agencies were unable to demonstrate that the expected benefits from ICT investments had been realised. At the time of the Digital Dashboard Phase 1 report, only a quarter of the 1 249 projects that were reported to VAGO had a benefits realisation plan. Only 33 per cent of the reviewed sample effectively laid out the expected benefits and set out measures and targets for these.

The Digital Dashboard Phase 1 report also found that it was very difficult to obtain consistent and meaningful data on benefits realisation. Of the 788 projects reported as 'completed', a little over 10 per cent had had their expected benefits assessed.

Based on these findings, we recommended establishing a public reporting (PR) mechanism that provides relevant project status information on ICT projects across the public sector, with key metrics and project information to be included in this reporting such as costs, time lines, governance and benefits realisation.

Low rates of tracking or assessment of benefits realisation is not confined to the ICT domain. We have commented in other reports that a lack of a methodical evaluation culture in the Victorian public sector often means there is no systematic and objective collection of lessons learned, to better inform the planning and execution of future projects.

We have observed this deficiency in audits of projects across many sectors and have also identified a comparatively low number of post-implementation Gate 6 'Benefits Realisation' reviews done under DTF's gateway review process, compared to other earlier stage gates.

Our review of the new ICT Dashboard software tool identified that it has capacity to include more information about ICT projects such as issues, stakeholders, risks and benefits.

We understand that the system also has a purpose-designed module which agencies can use to track benefits for each of their reported ICT projects.

To fully meet the benefits realisation component of our 2015 recommendation, DPC should promptly examine the implementation of this functionality. DPC should also amend the ICT Reporting Standard to require agencies to report on the expected impact of their ICT investments and to track benefits as they are realised.

3 The ICT Dashboard—agency data and reporting

In Victoria's devolved financial accountability system, responsibility for the accuracy and completeness of data rests with the board or accountable officer of each entity, and is certified through the entity's governance process, rather than by DPC or DTF.

This part of the report discusses the results of our testing of the data reported on the ICT Dashboard by the agencies involved in this audit.

3.1 Conclusion

The accuracy of the information reported on the ICT Dashboard varies by agency. We found that the information entered by DPC, MW and PTV was mostly accurate, but the information entered by DHHS was not accurate.

Agencies' compliance in reporting projects to the ICT Dashboard was varied. We found two projects at MW were not disclosed for 18 months and one project at DHHS was not reported until 15 months after it commenced.

Project-related data reported on the ICT Dashboard is complete, in that all necessary fields have been filled in correctly, however, because we detected five projects that were omitted in the agencies we reviewed, we cannot be sure that all ICT projects that should be reported have been reported.

Agencies have manual processes to report data on the ICT Dashboard, but these processes do not always ensure that data is reported in accordance with the ICT Reporting Standard. We found instances where a project's RAG status was inconsistent with the ICT Reporting Standard's definition, as well as inconsistencies in recording items in project budgets, such as the allocation of staffing costs.

Agencies have adequate processes to complete their mandatory reporting on ICT expenditure, however, better coordination between CFOs and CIOs (or their equivalent) could help systematically identify ICT projects that should be reported on the ICT Dashboard.

3.2 Are agencies following the ICT Reporting Standard?

The current ICT Reporting Standard defines 24 data fields that agencies are required to publish on the ICT Dashboard. It also specifies agency requirements for reporting their BAU and non-BAU ICT expenditure in their annual financial reports.

For this audit, we focused on the fields reported on the dashboard and non-BAU expenditure. We did not assess BAU expenditure, apart from examining the most recent attestation made by the agencies in this audit, as ICT projects are not typically funded from this expenditure category.

Are ICT Reporting Standard requirements being met?

We expected to see that agencies were timely in identifying and reporting relevant projects on the ICT Dashboard, in accordance with the ICT Reporting Standard.

High-level results by agency

The four agencies we reviewed are meeting most of the ICT Dashboard reporting requirements. However, we observed some anomalies and small errors, which shows that they are not consistently meeting the ICT Reporting Standard.

We found that some agencies were using different criteria to determine their RAG status than those required by version 1.0 of the ICT Reporting Standard. There was also often a delay between the start of the project and when the project was reported on the ICT Dashboard.

We also detected examples where a project was omitted from the dashboard. We discuss this further in the section on mandatory ICT expenditure reporting requirements.

Department of Health and Human Services

We found that although DHHS generally follows the ICT Reporting Standard, it did not follow the standard for all projects when determining RAG status.

DHHS previously defined and reported its RAG status based on a combination of schedule, budget and risks, whereas under the version 1.0 of the ICT Reporting Standard, the RAG status should only have been based on schedule.

We found that half of the projects we reviewed were late in being reporting on the dashboard:

- One project commenced in May 2016 and was reported in December 2016—seven months after starting.
- One project that commenced in June 2016 was not reported until September 2017—15 months after starting.
- One project commenced in December 2016 but was not reported until September 2017—nine months after starting.
- One project commenced in February 2017 and was first reported in September 2017—seven months after starting.

DHHS advised us that during the early stages of analysis and planning a project, the scope of the project may increase or decrease. As a result, some projects are not immediately identified as likely to exceed the $1 million threshold and have to be reported on the ICT Dashboard.

Department of Premier and Cabinet

We assessed one project at DPC and found that it did not report an initiation cost, but reported all costs as implementation costs.

The project team advised that the project's use of two different project management methodologies meant that classifying the phases of the project as initiation or delivery was difficult. In order to provide some transparency about the project's cost, DPC decided to report the full amount as implementation costs.

DPC advised that some of the product concepts it developed during the planning phase actually delivered some aspects of the final product. So, while these concepts included both initiation and delivery costs, the costs were only reported as delivery costs.

Melbourne Water

MW adhered to the ICT Reporting Standard, except for reporting of initiation costs and RAG status.

MW does not separately report initiation costs, with all costs reported as delivery costs. This means that there is no transparency about planning costs. MW advised that it believed that, at the time the report was developed, it was not practicable to reliably automate the reporting of separate initiation and delivery costs.

MW previously reported its RAG status based on the overall status of the project, whereas under version 1.0 of the ICT Reporting Standard, the RAG status should have only been based on schedule.

MW previously only reported projects to the ICT Dashboard when the project was confirmed as proceeding. This resulted in MW reporting 19 projects later than they should have been. MW told us that it sought advice from DPC in late 2017 regarding when projects should start being reported on the ICT Dashboard and, as a result of that advice, will now report projects earlier in their planning phase.

This earlier identification and reporting of projects will be a positive step towards transparency.

Public Transport Victoria

For the projects that we assessed at PTV, we found that the agency adheres to the ICT Reporting Standard.

However, PTV may face challenges reporting its project RAG status going forward, as the RAG status definitions were altered in version 2.0 of the ICT Reporting Standard and PTV's internal RAG status definitions do not match the revised definitions.

This means that if PTV were to report internally that a project had a 'red' status, it would not necessarily equate to the 'red' status description in the ICT Reporting Standard, that 'serious issues exist and they are beyond the project manager's control'.

PTV advised us that there is a variation between its internal RAG status definitions and the ICT Reporting Standard definitions because PTV has implemented a project methodology that it believes suits the wide range and type of projects that it delivers.

FRD 22H requirements

FRD 22H prescribes ICT expenditure disclosures that agencies must make in their annual report of operations.

Under the *Standing Directions of the Minister for Finance*, the accountable officer or governing board of an agency must attest—that is, personally sign and date—this disclosure within the annual report of operations.

Attestation assurance processes in agencies

All the agencies we examined completed the required FRD 22H attestation in their 2016–17 annual report.

Because the FRD 22H attestation is a component of the report and not a component of FMA agencies' yearly financial statements audited by VAGO, there is no external assurance provided in regard to its accuracy.

Non-BAU ICT expenditure disclosure

FRD 22H requires that entities report their total non-BAU ICT expenditure, broken down between operational expenditure and capital expenditure.

We examined the non-BAU expenditure for agencies in this audit, to identify if any ICT projects were underway that met the $1 million reporting threshold but were not included on the ICT Dashboard.

We also asked agencies to provide us with a list of their current ICT projects, including the name of the project, start and expected completion date and forecast or approved total cost. We used this list to cross-check information reported under FRD 22H and ICT projects reported on the ICT Dashboard.

Department of Health and Human Services

All DHHS's ICT projects that should have been reported were correctly disclosed on the ICT Dashboard, although four projects we reviewed were disclosed late.

Department of Premier Cabinet

We identified one project that should have been reported on the ICT Dashboard earlier than it was. DPC identified this project through its internal financial management processes when project expenditure reached $1 million, however, the project's projected cost had been known for at least six months prior to this.

As DPC does not centrally track projects until project expenditure reaches $1 million, DPC cannot be sure that it is reporting all the projects that should be on the ICT Dashboard.

Department of Treasury and Finance

All DTF's ICT projects that should have been reported were correctly disclosed on the ICT Dashboard.

Melbourne Water

We found one project currently underway at MW that should have been reported on the ICT Dashboard but was not.

After we told MW about this, it advised us that this project had been missed due to a data entry error in its project management tool. The project's final delivery cost was under $1 million but should have been reported under the process that MW follows. MW advised us that it has since changed to a new project management tool where reporting is set up in a way that this particular error can no longer occur.

Public Transport Victoria

We identified four projects that were not, but should have been, reported on the ICT Dashboard.

PTV advised us that two of these had the status 'postponed' when the ICT Dashboard launched in March 2016, and were not reported after the projects recommenced. The third project was omitted due to an administrative error. The two projects that were postponed have since been completed and the third will be included in the March 2018 quarter reporting, which is expected to be published on the ICT Dashboard in June 2018.

The fourth missing project is a joined-up project with the Department of Economic Development, Jobs, Transport and Resources (DEDJTR), which was missed due to an assumption by PTV that the project would be reported by DEDJTR.

PTV told us that it did not think it needed to report this project, as it was part of a broader DEDJTR project. However, DEDJTR only reports its component of this project on the ICT Dashboard, not the PTV component. PTV has rectified this oversight, with the project included in the March 2018 reporting upload, which is expected to be published in June 2018.

3.3 Are agencies reporting accurate data?

For the ICT Dashboard to effectively improve the transparency of ICT projects, it is important that the data underpinning agency reporting is verifiable and accurate. We assessed the accuracy of the data reported on the ICT Dashboard by reviewing 18 projects from four agencies.

To determine the accuracy of this data (dates, dollar figures, RAG status), we assessed whether the data on the dashboard was verifiable against source documents held at the agency.

We found that the reported data is mostly accurate in three of the four agencies we tested, however one agency had a larger number of inaccuracies, as shown in Figure 3A.

Figure 3A
Agencies reviewed and overall accuracy assessment for selected projects

Agency	Number of projects reported on the ICT Dashboard (1 March 2016 to 30 September 2017)	Number of projects we examined	Overall accuracy assessment against projects we examined
DHHS	51	8	Not accurate
DPC	6	1	Mostly accurate
MW	33	4	Mostly accurate
PTV	20	5	Mostly accurate

Source: VAGO and data from the data files, available from data.vic.

We found that the reviewed agencies had the most difficulty when providing documentation to verify the initiation phase end date and cost of the initiation phase.

A summary of results from our 18 detailed project data reviews is in Appendix B.

High-level results by agency

We expected that agencies would be able to provide us with source documentation, such as project status reports, project initiation approvals and approved budgets and time lines, for the 17 data fields that were reported on the ICT Dashboard under version 1.0 of the ICT Reporting Standard. This version was applicable between March 2016 and September 2017.

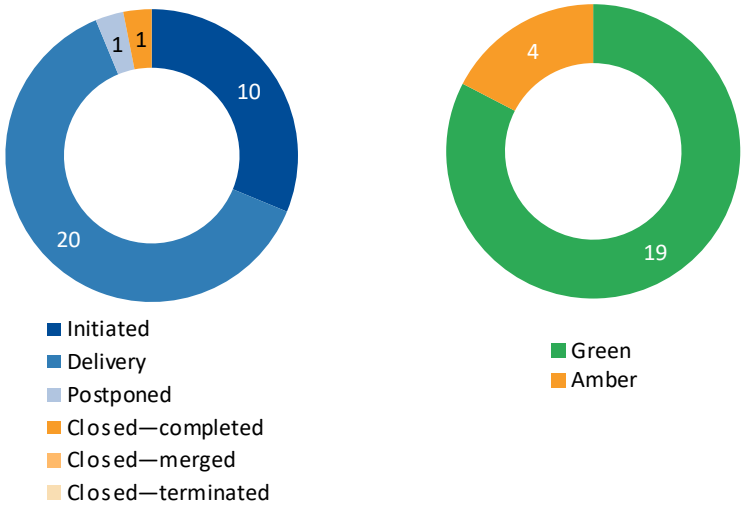
Appendix C contains details of the data fields required under both versions of the ICT Reporting Standard.

Department of Health and Human Services

DHHS has reported 51 projects since the ICT Dashboard's inception. For the December quarter 2017, DHHS is reporting 32 projects, which are valued at $132.6 million.

Figure 3B displays the implementation stages of these projects, and their status.

Figure 3B
DHHS project breakdown, by implementation stage and status, December quarter 2017



Note: Agencies apply RAG statuses at different implementation stages, so not all projects reported on the ICT Dashboard have a RAG status.
Source: VAGO, based on the data files available from data.vic.

For this audit, we reviewed eight of these DHHS projects in detail.

For the projects we reviewed, DHHS could not verify all the data reported on the ICT Dashboard and we experienced substantial difficulty in obtaining documentation for some data fields.

We identified inaccuracies in the eight projects we examined at DHHS. Although some of the inaccuracies are minor, there was a large number of data fields where the documentation provided did not match published data, or source documentation could not be provided.

DHHS told us that it had not had a consistent project management office (PMO) or project reporting tool. This has resulted in differing maturity of practices in project status reporting and knowledge management.

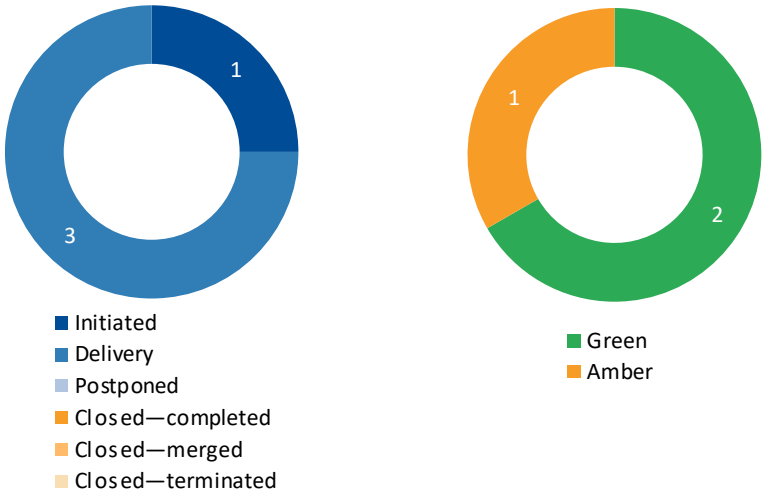
Appendix B has further details of our testing.

Department of Premier and Cabinet

DPC has reported a total of six projects on the ICT Dashboard since its launch.

For the December quarter 2017, DPC reported four ICT projects with a total planned expenditure of $102.5 million. The implementation stage and RAG status of these projects are shown in Figure 3C.

Figure 3C
DPC project breakdown, by implementation stage and status, December quarter 2017



Note: Agencies apply RAG statuses at different implementation stages, so not all projects reported on the ICT Dashboard have a RAG status.
Source: VAGO, based on the data files available from data.vic.

We reviewed one project in detail at DPC, which is also designated as an HVHR project.

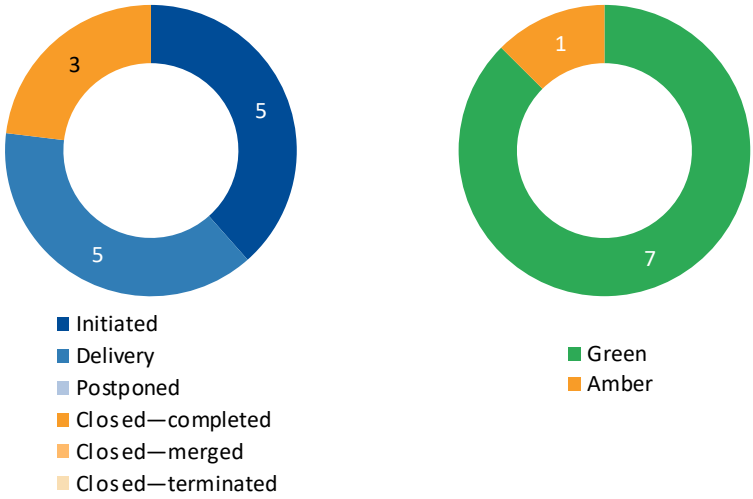
DPC provided us with most of the information we needed to verify project data reported on the dashboard. We observed, however, that all of the project's costs were reported as delivery costs, when, under the ICT Reporting Standard, initiation costs should have been separately reported.

Melbourne Water

Since the ICT Dashboard's launch, MW has reported 33 projects.

MW is currently reporting 13 projects with a planned expenditure of $16.7 million, as shown in Figure 3D.

Figure 3D
MW project breakdown, by implementation stage and status, December quarter 2017



Note: Agencies apply RAG statuses at different implementation stages, so not all projects reported on the ICT Dashboard have a RAG status.
Source: VAGO, based on the data files available from data.vic.

MW provided us with documentation to verify the majority of the data reported on the ICT Dashboard.

We found six inaccuracies in MW's projects' revised completion dates and costs. These inaccuracies do not materially detract from the time and cost reporting of MW's ICT projects.

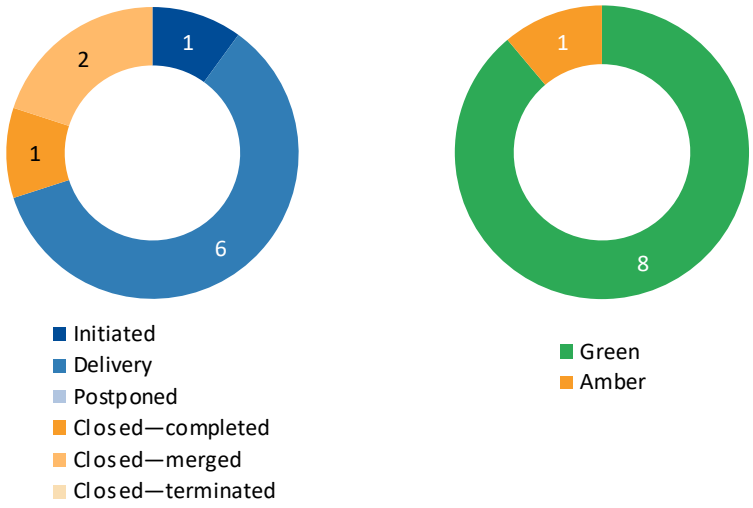
Public Transport Victoria

PTV has reported a total of 20 projects on the ICT Dashboard since its inception.

In the December quarter 2017, PTV reported 10 projects with a planned expenditure of $89.9 million.

Figure 3E shows the breakdown of PTV's projects by implementation stage and status.

Figure 3E
PTV project breakdown, by implementation stage and status, December quarter 2017



Note: Agencies apply RAG statuses at different implementation stages, so not all projects reported on the ICT Dashboard have a RAG status.
Source: VAGO, based on the data files available from data.vic.

PTV provided us with documentation to verify the majority of the data reported on the ICT Dashboard. We found that reported dollar figures were mostly accurate, although, in one case, the amount was rounded up from an internal estimate of $9.3 million to $10 million.

PTV could not provide us with documentation to verify some data for two projects that were approved and commenced under the former Department of Transport.

PTV told us that this was due to limited documentation being handed over when the former Department of Transport transferred the projects to PTV.

3.4 Do agencies consistently apply the guidance?

Consistency of interpretation and categorisation

The ICT Reporting Standard and *ICT Expenditure Reporting Guideline for the Victorian Government* provide guidance on how agencies should compile their data for reporting on the ICT Dashboard, and to comply with FRD 22H.

The agencies we audited are not consistently applying the ICT Reporting Standard. We noted different interpretations by agencies of the criteria they should use to determine their overall RAG status, allocate internal staff costs to projects, and select a project category.

Application of RAG status

Agencies we audited were aware of the ICT Reporting Standard, although some of their staff were not overly familiar with its details, especially the requirements around allocating a RAG status.

We observed that some agencies were not aware that, under version 1.0 of the ICT Reporting Standard, the RAG status was solely based on the project's performance against schedule. When these agencies reported a RAG status, they had based it on the overall status of the project or a combination of the schedule and budget status.

Under version 2.0 of the ICT Reporting Standard, the RAG status is now based on the overall status of the project, as reported in the most recent project status update to the project control board (or equivalent) within the reporting agency.

We observed during fieldwork that MW, PTV and some staff at DHHS were not aware of version 2.0 of the ICT Reporting Standard.

We also observed that each agency uses a slightly different set of criteria to determine its overall RAG status, as shown in Figure 3F.

Figure 3F
Criteria used to determine overall RAG status

Criteria	DHHS[(a)]	DPC[(b)]	MW	PTV
Budget	✓	✓	✓	✓
Schedule	✓		✓	✓
Scope	✓		✓	✓
Risks	✓	✓	✓	✓
Issues	✓	✓	✓	✓
Resources	✓		✓	
Zero harm			✓	
Deliverables		✓		
Benefits		✓		
Key stakeholders		✓		
HVHR		✓		
Change requests		✓		

(a) Criteria according to DHHS official project status reporting template, however some projects have established their own criteria for the RAG status.
(b) Criteria used by the DPC project we reviewed. DPC does not have a standardised RAG reporting criteria.
Source: VAGO, based on information provided by agencies.

This means that while agencies may be accurately reporting the project's RAG status on the ICT Dashboard, it is not possible to compare RAG status between agencies due to the different criteria used.

We expected to find that agencies would have one set of criteria used to determine the overall RAG status. While not all agencies use the same criteria, we expected that the RAG criteria would be consistent within agencies. We found this was not the case at DHHS, as outlined in Figure 3G.

Figure 3G
Variances in determining RAG status in DHHS

DHHS's PMO has been disbanded and re-formed a number of times. Most recently the PMO was re-established in late 2016.

One of the consequences of this is that projects have established their own project reporting mechanisms, including RAG status.

Of the eight projects we examined at DHHS, we found that:

- one project had no formally defined criteria for determining the RAG status
- four projects used the PMO's criteria, as outlined in Figure 3F (scope, schedule, budget, risk, resources and issues)
- one project used scope, schedule, budget and resources
- one project used scope, schedule, budget, benefits, dependencies and governance
- one project used scope, schedule, quality and risk/issues.

DHHS is in the process of implementing a project management tool that is intended to facilitate consistency in RAG status and project reporting.

Source: VAGO, based on information from DHHS.

Cost components

We observed that agencies use different practices when accounting for ongoing employees within ICT project costings. At MW and PTV, staff costs and overheads for public sector staff who work full-time on projects are allocated to the project's cost, but at DHHS and DPC they are not. DHHS advised us that occasionally staff costs are allocated to projects, however, it does not require activity-based costing which would give a more accurate allocation of costs.

In all agencies, contractor costs directly attributable to a project were allocated to the project.

ICT system description

The ICT Reporting Standard requires that agencies select a project category for their project. Agencies have 31 categories to choose from and may select more than one category.

Examples of categories include 'customer relationship management', 'supply chain management', 'analysis', 'statistics' and 'other'. The ICT Reporting Standard refers agencies to the Australian Government Architecture framework for assistance in selecting categories.

Currently, there is limited oversight or quality assurance by DPC of the project categories selected by agencies. DPC only intervenes when a project type of 'other' is selected, and then assists the agency to select one, or more, of the remaining 30 categories.

For example, we observed that DHHS and the Environment Protection Authority were implementing very similar projects—an electronic document and records management system. The Environment Protection Authority selected three categories for this project—'document management', 'knowledge management', and 'records management'—while DHHS only selected one category, 'records management'.

In another example, seven hospitals and health services are implementing electronic medical record projects. Figure 3H shows the different categories selected by each agency for the project.

Figure 3H
Project categories selected for electronic medical record projects

Project	Customer relationship management	Records management	Management of process	Knowledge management	Development and integration
Project 1		✓			
Project 2	✓	✓	✓		
Project 3	✓				
Project 4		✓			
Project 5	✓	✓	✓		
Project 6					✓
Project 7	✓	✓		✓	

Source: VAGO, from information from the ICT Dashboard.

While none of the selections in these examples is incorrect, they illustrate that if DPC is relying on this self-reported information to conduct analysis of ICT activity and spend in certain categories, then DPC will need to assure itself about the quality and appropriateness of project category selections by agencies.

Implications for accuracy

In most of the agencies we audited, the level of inaccuracies or errors we detected did not materially undermine the overall accuracy of data reported on the ICT Dashboard by that agency.

However, the two projects at DHHS where we could not verify most of the data fields were an issue. These projects are detailed in Figures 3I and 3J.

Figure 3I
Housing Infrastructure Capital Refresh

The Housing Infrastructure Capital Refresh project is replacing ageing and unsupported hardware for the Housing Integrated Information Program. This is a computer system used to deliver housing services to Victorians.

The project commenced in May 2015 and is valued at $5.4 million.

Based on the available information, we could not verify the project's:

- initiation phase end date of 13 December 2016
- initiation cost of $415 000
- revised delivery dates of 30 June 2017 and 30 May 2018
- revised delivery cost of $5.1 million.

DHHS was able to provide us with documentation detailing the start date and planned delivery end date. DHHS also provided us with some documentation around the planned delivery cost of $5 million, however, we found inaccuracies in the figure provided to us.

Source: VAGO, based on information provided by DHHS.

If the level of inaccuracy described in Figure 3I also exists in projects or agencies that we did not examine for this audit, it would raise concerns about the overall accuracy of the ICT Dashboard.

3.5 Are agency systems and processes adequate?

We found that agencies have varied processes to identify and report on ICT projects valued at more than $1 million that should be reported on the ICT Dashboard.

Identifying projects over $1 million

Agencies have varied processes to identify projects valued at over $1 million. No agency has a fully automated system for identifying all ICT projects worth over $1 million.

DHHS and MW use an automated search of their project management tool to identify projects. PTV uses a manual process to identify projects. DPC does not have a formal process for identifying projects that need to be reported. All the agencies that we audited manually verify the projects reported in the previous quarter.

MW has an automated process to identify all projects valued at over $1 million, but still missed one project that should have been reported on the ICT Dashboard.

This shows that having a partially automated system is one control to assist agencies to identify all ICT projects for reporting, but it should not be the sole method used to identify relevant projects.

Reporting on projects

Agencies have varied processes for how they internally collate information for reporting on the ICT Dashboard. Agencies generally either have the project management team collate status reporting or have individual project managers complete the data update.

At MW and PTV, the project management or reporting team compiles the report, with quality assurance provided by program managers. At MW, external quality assurance is also provided by the finance team. In DHHS, the project managers compile the report and the PMO team provides oversight and quality assurance.

We found that all agencies have established internal approval and quality assurance processes. ICT Dashboard reporting is approved by a suitably senior officer, after a series of data checks.

Knowledge management and record keeping

Knowledge management and record keeping are critical to maintaining corporate and project-specific knowledge. Previous audits have highlighted knowledge management and record keeping challenges across the public sector.

We found that agency record keeping and knowledge management processes were generally acceptable, but were more problematic when it came to older projects that had been transferred between agencies, as shown in Figures 3J and 3K.

Sound record keeping and knowledge management processes were lacking at DHHS.

Figure 3J
Victorian Health Incident Management System

The Victorian Health Incident Management System project involves improving the system's functionality, reporting process and data analysis capability.

DHHS advised that the project commenced in July 2015. In 2017, the Victorian Agency for Health Information (VAHI), an administrative office under DHHS, took over responsibility for the project.

Based on the available information, we could not verify the project's:

- reported start date of 6 July 2015
- initiation phase end date of 1 January 2017
- initiation cost of $2.25 million
- planned implementation cost of $2.7 million
- RAG status.

VAHI advised that there was limited documentation transferred when the project moved from DHHS to VAHI, including the project's initial approval. VAHI reported $2.25 million and $2.7 million as the initiation and delivery costs, respectively. However, we found that the $2.25 million was not for initiation activities as defined under the ICT Reporting Standard. Rather, this amount was the cost incurred prior to VAHI taking on the project, which was for delivery activities.

Source: VAGO, based in information provided by DHHS and VAHI.

Figure 3K
Regional Radio Communications Network

The Regional Radio Communications Network project involves the modernisation of three legacy train communications systems.

Based on available information, early works for the project commenced sometime in 2011, and the business case was completed in early 2013. The former Department of Transport completed both the early works and business case. PTV took over responsibility for the project in April 2012.

Based on the available information, we could not verify the project's:

- reported start date of 1 March 2012
- initiation cost of $7.25 million.

PTV was able to provide us with some information regarding the start date and pre-implementation costs, however, we were unable to identify the source documentation for either field or how the figures were determined.

Source: VAGO, based in information provided by PTV.

Appendix A
Audit Act 1994 section 16—submissions and comments

We have consulted with DHHS, DPC, DTF, MW and PTV, and we considered their views when reaching our audit conclusions.

As required by section 16(3) of the *Audit Act 1994*, we gave a draft copy of this report to those agencies and asked for their submissions and comments.

Responsibility for the accuracy, fairness and balance of those comments rests solely with the agency head.

Responses were received as follows:

DHHS....56

DPC....59

DTF....62

MW....63

PTV....64

RESPONSE provided by the Secretary, DHHS

Secretary

Department of Health and Human Services

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e4837272

Mr Andrew Greaves
Auditor-General
Victorian Auditor-General's Office
Level 31, 35 Collins Street
MELBOURNE VIC 3000

Dear Mr Greaves

Thank you for providing me with the opportunity to comment on your Proposed report for the *Victorian Government Information Communication and Technology Dashboard* performance audit.

I accept and welcome your recommendations to improve the department's project management reporting. Please find attached the action that my department will undertake to address the report's recommendation to the department.

In addition, the department will also identify and implement opportunities to improve data quality to meet ICT Dashboard requirements, including:

- developing and communicating guidelines for the storing of key project documentation;
- developing guidelines and standards for project status reporting that align with the Department of Premier and Cabinet's *Information Communication Technology Reporting Standard*;
- adjusting our delivery framework for in-scope projects to better align with the aforementioned Standard; and
- developing agreed processes with the department's Finance branch to ensure that all in-scope projects are identified and correctly reported.

Additionally, the department has made progress over the past few years to improve our project management reporting capabilities by:

- establishing an Enterprise Program Management Office to provide project management, monitoring and reporting, and strengthen the governance arrangements in place for ICT projects;
- introducing a project portfolio management tool (OneView PPM) to facilitate consistency in project management processes and reporting; and
- rolling out a new Electronic Document and Records Management System (EDRMS) across the department to improve record keeping practices.

VICTORIA State Government

RESPONSE provided by the Secretary, DHHS—continued

These efforts are ongoing as part of a continuous improvement program that will strengthen project reporting capabilities as the processes, systems and practices mature and become embedded more widely across the department.

I thank your staff for their work and the professional manner in which they engaged with my department on this audit.

I look forward to using your report to further improve our project management reporting capability.

Yours sincerely

Kym Peake
Secretary

18 / 5 / 2018

DHHS Action Plan to the VAGO performance audit, *Victorian Government ICT Dashboard*

No	Recommendation	DHHS action	Proposed start date	Proposed end date
6	Improve records management practices for ICT projects, giving particular attention to capturing and recording key project documents which show evidence of decisions and approvals	The department accepts this recommendation. The department will develop and communicate guidelines for the storing of key project documentation in alignment with the *Department of Premier and Cabinet's Information Communication Technology Reporting Standard*. These guidelines will focus on when key project documents need to be produced in the project lifecycle and where they need to be stored, to improve timeliness and reduce inconsistencies in record keeping.	1/06/18	01/04/19

RESPONSE provided by the Secretary, DPC

Department of
Premier and Cabinet

1 Treasury Place
Melbourne, Victoria 3002 Australia
Telephone: 03 9651 5111
dpc.vic.gov.au

Mr Andrew Greaves
Auditor-General
Victorian Auditor-General's Office
Level 31, 35 Collins Street
MELBOURNE VIC 3000

D18/101718

Dear Mr Greaves Andrew

Thank you for your letter dated 10 May 2018 in regard to your final proposed audit report on the Victorian Government ICT Dashboard.

I appreciate the opportunity to consider the audit findings and recommendations. My department shares your focus in improving transparency in ICT investment across government and supports recommendations 2 to 4 and 6. DPC accepts the majority of recommendation 1, except for including capability on the dashboard for reporting agencies to monitor benefit realisation. DPC can capture and report on expected benefits for projects until the project is completed. Once a project is completed, it will no longer be required to report to the ICT Dashboard.

Our response to each recommendation is attached.

Yours sincerely

Chris Eccles AO
Secretary

DPC response to VAGO audit recommendations

Victorian Government ICT Dashboard audit

VAGO Recommendation	DPC response

1. Amend the ICT Reporting Standard for the Victorian Public Service to:
• require that agencies provide a more descriptive and standardised narrative about their ICT projects, including:
  o information on the purpose of the project and overall value proposition
  o a description of the expected impact on the efficiency and effectiveness of service delivery
  o information on the benefits expected from the project's implementation
• require the capture and reporting of expected project benefits on the ICT Dashboard, including a capability for reporting agencies to monitor benefits realisation
• clarify that any agency-derived Red/Amber/Green statuses used for a quarterly data update must align with the high level Red/Amber/Green definitions specified by DPC to ensure a consistent view across the public sector of ICT project status.
• require that the Chief Information Officer and Chief Financial Officer (or equivalent roles) jointly sign off the list of ICT projects that underpins the Financial Reporting Direction 22H reporting process and attest that all required projects have been identified and correctly reported.
	DPC accepts the majority of the recommendation except for the inclusion of a capability on the dashboard for reporting agencies to monitor benefit realisation.
	
	This is because most projects benefits will not be realised until after the project is completed. DPC can capture and report on expected benefits for projects until the project is completed. Once completed, projects will no longer be required to report to the ICT Dashboard.
	
	DPC will complete this recommendation in financial year 2018/19.

2. Continue to consult with agencies subject to the Financial Management Act 1994 to determine the most useful data fields to be included in the ICT Reporting Standard for the Victorian Public Service with a key focus on avoiding any unnecessary reporting burden for agencies.	DPC accepts. DPC will continue to be collaborative and consultative in the development of whole-of-government policy and standard when a review is required to refresh the ICT Reporting Standard.
3. Conduct strategic analysis of ICT project categories and spend to support the intent of the government's IT strategy for agencies to share existing solutions within the public service or identify services that could be transitioned into a shared services model..	DPC accepts. ICT Reporting Standard has already been updated to include ICT project category reporting in the dashboard, starting from Q2 2017-18. DPC will continue to collect the data and conduct strategic analysis. DPC will complete this recommendation in financial year 2018-19.

VICTORIA State Government | Premier and Cabinet

RESPONSE provided by the Secretary, DPC—continued

4. Identify methods to review and confirm the accuracy and completeness of data reported on the ICT Dashboard and communicate the results back to agencies DPC	DPC accepts. DPC will work with relevant departments and agencies to identify appropriate methods for data assurance.
6. Improve records management practices for ICT projects, giving particular attention to capturing and recording key project documents which show evidence of decisions and approvals.	DPC accepts. In alignment with PRINCE2 methodology, DPC has governance in place already, and will continue to follow the set governance to ensure appropriate documents are captured for decisions and approvals made for projects.

RESPONSE provided by the Secretary, DTF

Department of Treasury and Finance

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Mr Andrew Greaves
Auditor-General
Level 31
35 Collins Street
MELBOURNE VIC 3000

28 MAY 2018

Dear Auditor-General

PERFORMANCE AUDIT: THE VICTORIAN GOVERNMENT ICT DASHBOARD

Thank you for your letter of 10 May 2018 inviting me to respond to your proposed performance audit report: *The Victorian Government ICT Dashboard*.

The Department of Treasury and Finance (DTF) notes the findings of the report. In particular, DTF supports in principle Recommendation 5, the only recommendation directed to this department.

DTF agrees that improving the quality of performance data, both financial and non-financial, from departments and agencies is essential to better inform government policy decisions and prioritisation of resource allocation, including for ICT investment.

To this end, DTF and the Department of Premier and Cabinet (DPC) are already engaged in an ongoing program to develop and upgrade data collection to facilitate performance monitoring and analysis, including work on improving the whole of government chart of accounts.

Further work will be undertaken to determine the processes and systems that should be implemented throughout the general government sector to optimise data collection and analysis.

Thank you for the opportunity to comment on the proposed report.

Yours sincerely

David Martine
Secretary

RESPONSE provided by the Managing Director, MW

Melbourne Water
Enhancing Life and Liveability

Your ref: 33540

25 May 2018

Mr Andrew Greaves
Auditor General of Victoria
Victorian Auditor General's Office
Level 24, 35 Collins Street
MELBOURNE VIC 3000

Dear Mr Greaves,

Proposed Draft Performance Audit Report: The Victorian Government ICT Dashboard

Thank you for your letter of 10 May 2018 inviting Melbourne Water Corporation (Melbourne Water) to respond to the Proposed Draft Performance Audit Report *The Victorian Government 'Information Communication and Technology' (ICT) Dashboard.* Melbourne Water is appreciative for the opportunity to contribute to improving public visibility of ICT project expenditure through its participation in the ICT Dashboard.

Melbourne Water accepts your general recommendation number six (6) that there are opportunities for all agencies to improve ICT project records management practices. Since the time period considered in this audit, Melbourne Water has chosen to make improvements that include alignment of our reporting to the ICT Reporting Standard, working with the Department of Premier and Cabinet DPC, and implementing an enterprise-wide project management system. We will continue to work with the DPC to further improve the accuracy and effectiveness of reporting through the ICT Dashboard.

Should you require further information regarding Melbourne Water's response, please contact our Internal Audit Manager, Ilan Zipor or IT Program Specialist, Andrew Bifield.

Regards,

Michael Wandmaker
Managing Director

Ref	VAGO Recommendation to Melbourne Water	Melbourne Water response
p 12, no. 6	'We recommend that the Department of Health and Human Services, the Department of Premier and Cabinet, Melbourne Water and Public Transport Victoria... improve records management practices for ICT projects, giving particular attention to capturing and recording key project documents which show evidence of decisions and approvals.'	Melbourne Water accepts the recommendation and will review its ICT record management practices with particular attention to retention of key project decision documentation to ensure evidence of decisions and approvals for ICT projects is retained. Due Date: 30th Sept 2018

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VICTORIA State Government

RESPONSE provided by the Chief Executive Officer, PTV

PUBLIC TRANSPORT VICTORIA PT

Our Reference: DOC/18/309043

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Mr Andrew Greaves
Auditor-General
Victorian Auditor-General's Office
Level 31, 35 Collins Street
MELBOURNE VIC 3000

Dear Mr Greaves

Proposed Performance Audit Report *The Victorian Government ICT Dashboard*

Thank you for your letter dated 10 May 2018 inviting a response to the proposed performance audit report *The Victorian Government ICT Dashboard*.

Public Transport Victoria (PTV) has reviewed the proposed report, notes the findings raised and accepts the recommendation addressed to PTV for action.

PTV acknowledges the importance of Information and Communication Technology (ICT) in the management of information and delivery of programs and services across Victorian government as outlined in the report. PTV recognises and supports the value of the ICT Dashboard and strong need for reporting and monitoring of ICT expenditure and projects to improve transparency and achieve value.

We are committed to working with the Department of Premier and Cabinet and the Department of Treasury and Finance to further enhance our processes for reporting ICT project information in the ICT Dashboard.

Thank you for the opportunity to comment on the report.

Yours sincerely

Jeroen Weimar
Chief Executive Officer
Public Transport Victoria

23/5/18

TRANSPORT FOR VICTORIA

RESPONSE provided by the Chief Executive Officer, PTV—continued

Public Transport Victoria – Response to Recommendation

No.	VAGO Recommendation	Public Transport Victoria - Response	Action Date
6.	Improve records management practices for ICT projects, giving particular attention to capturing and recording key project documents which show evidence of decisions and approvals.	PTV accepts the recommendation. PTV will establish processes to improve records management practices for ICT projects to ensure key decision making and approval activity is adequately captured, recorded and supported by key project documents.	September 2018

Appendix B
Detailed results from agency testing

To assess the accuracy and completeness of the ICT Dashboard, we examined source data from projects reported by four of the agencies involved in this audit:

- DHHS
- DPC
- MW
- PTV.

We tested the information published on the ICT Dashboard for 18 ICT projects, and asked these agencies to provide source data or documentation to verify their published data.

Figure B1 shows a summary of the results from our detailed audit testing.

Figure B1
Results of agency testing

Project	Start date	Initiation end date	Initiation cost	Planned delivery end date	Planned delivery cost	Revised delivery cost	December quarter 2017–18 RAG status
DHHS							
Feedback Management System	◆	✗ (a)	◆	✗ (b)	◆	◆	✗ (c)
Housing Infrastructure Capital Refresh	✓	⊘ (d)	⊘ (d)	✓	✗ (e)	⊘ (d)	⊘ (d)
Information Sharing Gateway	◆	✗ (b)	✓	◆	✓	✓	✓
Modelling and Payments System	✓	◆ (f)	✓	✓	✓	N/A	◆ (g)
Personal Hardship Assistance Programs	◆	◆	✗ (h)	✓	✓	N/A	✗ (c)
Victorian eReferral Program	✓	✗ (a)	✓	✓	✓	N/A	✓
Victorian Health Incident Management System	⊘ (i)	⊘ (i)	✗ (j)	✓	✗ (j)	N/A	✗ (d)
Windows Server Remediation Program	✓	✓	✓	✓	◆	◆	✓
DPC							
Service Vic	✓	✓	⊘ (k)	✓	✓	N/A	✓
MW							
Developer Funded Works System	✓	✓	⊘ (l)	✓	✓	◆	✓
Site Security Upgrades	✓	✓	⊘ (l)	✓	✓	◆	✓
SCADA Mosaic Upgrade	✓	✓	⊘ (l)	✓	✓	✓	✓
Website—Digital Customer Experience Platform	✓	✓	⊘ (l)	✓	✓	◆	✓

Figure B1
Results of agency testing—*continued*

Project	Start date	Initiation end date	Initiation cost	Planned delivery end date	Planned delivery cost	Revised delivery cost	December quarter 2017–18 RAG status
PTV							
Bus Information Improvement Project	✗ *(f)*	✓	✓	✓	✓	N/A	✓
Operator Payment System Modernisation	✓	✓	✓	✗ *(m)*	✗ *(n)*	✓	N/A *(o)*
Regional Radio Communications Network	⊘ *(i)*	◆	⊘ *(i)*	✓	✓	N/A	✓
Train SCADA (Electrol) Replacement	✓	⊘ *(i)*	⊘ *(i)*	◆	✓	✓	N/A *(o)*
Vehicle Passenger Information System A & C Class	✓	✓	✓	✓	✓	✓	✓

Key: ✓ Accurately verified; ◆ verified with minor errors; ✗ large errors; ⊘ could not be verified; N/A means the agency has not needed to complete this field.
(a) Error due to agency publishing a planned date, not actual date.
(b) Discrepancy unable to be explained by agency.
(c) Agency used different criteria to determine RAG status, rather than criteria under ICT Reporting Standard, version 2.0.
(d) No documents available to verify the data.
(e) Large difference between published data and documentation provided by agency to verify the data.
(f) Agency advised that this inaccuracy was due to a translation or typographical error.
(g) DHHS internal project status report reported the status as half green, half yellow, but reported green on the ICT Dashboard.
(h) Cost not reported.
(i) Unable to verify due to a lack of project documentation being handed over when the project transferred between responsible agencies.
(j) Agency reported delivery costs as initiation costs.
(k) DPC reported all costs as delivery costs, including initiation costs, due to the challenges of determining the split between initiation and delivery phases when using the Agile methodology.
(l) Agency reported all costs as delivery costs, including initiation costs.
(m) PTV advised this error was due to the selection of a point in time milestone date being reported, and then the cell was locked down.
(n) PTV advised this inaccuracy was due to a rounding error of $700 000.
(o) Project was completed in Q1 2017–18, so did not report in Q2 2017–18.
Source: VAGO assessment of information provided by audited agencies.

Appendix C
ICT project reporting requirements

During the audit, we conducted detailed testing of a selection of agencies, and projects reported on the ICT Dashboard. Figure C1 shows the ICT project reporting requirements for PR under version 1.0 of the ICT Reporting Standard. We undertook detailed testing using version 1.0 of the ICT Reporting Standard.

Figure C1
ICT PR requirements, under version 1.0 of the ICT Reporting Standard

Reference	Requirement	Detail
PR-01	Agency name	The name of the public body.
PR-02	Government domain	• Business and Industry • Community Services • Culture, Sport and Recreation • Education • Emergencies and Safety • Employment and Workplace • Environment and Water • Government and Economy • Health • Law and Justice • Property and Planning • Tourism • Transport and Vehicles
PR-03	Project title	The name of the project for reporting purposes.
PR-04	Description	Short description and objectives of the project.
PR-05	Start date	The start date or day one of the pre-implementation activities of the project.
PR-06	Project management methodology used	Primary project management methodology used/to be used to manage the project (select one): • PMBoK • PRINCE2 • Agile • Other—please specify.

Figure C1
ICT PR requirements, under version 1.0 of the ICT Reporting Standard—*continued*

Reference	Requirement	Detail
PR-07	Current project stage	The current project stage as defined below (select one): • Initiated—includes projects in feasibility, planning or business case development phases, including those that never progressed beyond this phase and those that may have been postponed • In progress—pre-implementation activities • In progress—implementation activities • Project completed—project closed • Project postponed • Project terminated (prior to completion).
PR-08	Pre-implementation stage end date[(a)]	Project end date for all pre-implementation activities.
PR-09	Pre-implementation cost	The cost of all pre-implementation activities of the project.
PR-10	Planned implementation end date[(b)]	The planned implementation completion date for the project that was estimated on completion of pre-implementation phase. This field is not required until the project enters the implementation stage but once entered remains set for the remainder of the project.
PR-11	Planned implementation cost	The planned implementation expenditure for the project that was estimated on completion of pre-implementation phase. This field is not required until the project enters the implementation stage but once entered remains set for the remainder of the project.
PR-12	Revised implementation end date	The revised implementation end date for the project if this changes from the planned implementation date.
PR-13	Revised implementation cost	The revised implementation expenditure for the project if this changes from the planned implementation cost.
PR-14	Implementation status	Status of the current implementation timeline: • Green (G)—time line is on track • Amber (A)—time line issues exist but they are under the project manager's control • Red (R)—serious time line issues exist that are beyond the project manager's control. They require assistance to resolve. The time line is likely to change.
PR-15	Previous implementation status	Implementation project status for the last 12 months: • Last reporting period – 3 months ago • Reporting period 6 months ago • Reporting period 9 months ago • Reporting period 12 months ago.
PR-16	Reporting period comments	General comments for the current reporting period including an explanation of any project variances.
PR-17	Date at which data was current	The date of the information used to compile this report.

(a) Under version 2.0 of the ICT Reporting Standard, pre-implementation was re-named 'initiation'.
(b) Under version 2.0 of the ICT Reporting Standard, implementation was re-named 'delivery'.
Source: VAGO, based on version 1.0 of the ICT Reporting Standard.

Version 2.0 of the ICT Reporting Standard altered the fields that are reported on the ICT Dashboard. Figure C2 shows the data fields under version 2.0 of the ICT Reporting Standard.

Figure C2
ICT PR requirements, under version 2.0 of the ICT Reporting Standard

Reference	New data fields	Detail
PR-01	Agency name	Refer to Figure C1 PR-01.
PR-02	Government domain	Refer to Figure C1 PR-02.
PR-03	ICT project category	• Customer Relationship Management • Customer Preferences • Customer Initiated Assistance • Tracking and Workflow • Routing and Scheduling • Management of Process • Organisational Management • Investment Management • Supply Chain Management • Content Management • Document Management • Knowledge Management • Records Management • Analyses and Statistics • Visualisation • Knowledge Discovery • Business Intelligence • Reporting • Data Management • Human Resources • Financial Management • Assets/Materials Management • Development and Integration • Human Capital / Workforce Management • Security Management • Collaboration • Search • Communication • Systems Management • Forms Management • Other—please specify
PR-04	Project title	The name of the project as per the business case.
PR-05	Description	Refer to Figure C1 PR-04.

Figure C2
ICT PR requirements, under version 2.0 of the ICT Reporting Standard—*continued*

Reference	New data fields	Detail
PR-06	Project management methodology used	Refer to Figure C1 PR-06.
PR-07	Current project stage	The current project stage as defined below (select one): • Project Initiated—pre-'Project Delivery' activities are underway including preliminary planning, feasibility study, business case development and/or funding request. • Business Case Approved—project business case has been approved or funding has been allocated. • Project Delivery—project has commenced delivery. • Project Completed—project has delivered its outcomes, and is being or has been closed. • Project Postponed—project has been temporarily put on hold. • Project Terminated prior to 'Project Completed'—work on the project has ended prematurely (i.e., a decision has been made to stop work). • Project Merged—scope of the project has been merged into another project.
PR-08	'Project Initiated' start date	The start date or day one of the 'Project Initiated' activities.
PR-09	Planned 'Project Initiated' end date	The planned end date for all 'Project Initiated' activities.
PR-10	Revised 'Project Initiated' end date (if applicable)	The revised end date for all 'Project Initiated' activities if date differs from PR-09.
PR-11	Planned 'Project Initiated' cost	The planned expenditure for all 'Project Initiated' activities.
PR-12	Revised 'Project Initiated' cost (if applicable)	The revised expenditure for all 'Project Initiated' activities if expenditure differs from PR-11.
PR-13	'Business Case Approved' date	The date when the business case was approved.
PR-14	Planned 'Project Delivery' start date	The planned start date for all 'Project Delivery' activities specified on completion of the 'Business Case Approved' stage.
PR-15	Revised 'Project Delivery' start date (if applicable)	The revised start date for all 'Project Delivery' activities if date differs from planned 'Project Delivery' start date.
PR-16	Planned 'Project Delivery' end date	The planned end date for all 'Project Delivery' activities specified on completion of the 'Business Case Approved' stage.
PR-17	Revised 'Project Delivery' end date (if applicable)	The revised end date for all 'Project Delivery' activities if date differs from PR-16.
PR-18	Planned 'Project Delivery' end cost	The planned expenditure for all 'Project Delivery' activities specified on completion of the 'Business Case Approved' stage.
PR-19	Revised 'Project Delivery' cost (if applicable)	The revised expenditure for all 'Project Delivery' activities if expenditure differs from PR-18.

Figure C2
ICT PR requirements, under version 2.0 of the ICT Reporting Standard—*continued*

Reference	New data fields	Detail
PR-20	Project status	Overall status of the project as per the most recent project control board report: • Green (G)—on track • Amber (A)—issues exist but they are under the project manager's control • Red (R)—serious issues exist that are beyond the project manager's control.
PR-21	Previous project status	Project status for the last 12 months: • Last reporting period – 3 months ago. • Reporting period 6 months ago. • Reporting period 9 months ago. • Reporting period 12 months ago.
PR-22	Reporting period comments	General comments for the current reporting period including an explanation of any project variances, including plans to recover if the project status is amber (A) or red (R) as per PR-20.
PR-23	Date at which data was current	The date of the information used to compile this report. The date should reflect the current reporting period.
PR-24	Date project completed, postponed, terminated or merged	The date the project was completed, postponed, terminated or merged with another project.

Source: VAGO, based on version 2.0 of the ICT Reporting Standard.

Auditor-General's reports tabled during 2017–18

Report title	Date tabled
V/Line Passenger Services (2017–18:1)	August 2017
Internal Audit Performance (2017–18:2)	August 2017
Effectively Planning for Population Growth (2017–18:3)	August 2017
Victorian Public Hospital Operating Theatre Efficiency (2017–18:4)	October 2017
Auditor-General's Report on the Annual Financial Report of the State of Victoria, 2016–17 (2017–18:5)	November 2017
Results of 2016–17 Audits: Water Entities (2017–18:6)	November 2017
Results of 2016–17 Audits: Public Hospitals (2017–18:7)	November 2017
Results of 2016–17 Audits: Local Government (2017–18:8)	November 2017
ICT Disaster Recovery Planning (2017–18:9)	November 2017
Managing the Level Crossing Removal Program (2017–18:10)	December 2017
Improving Victoria's Air Quality (2017–18:11)	March 2018
Local Government and Economic Development (2017–18:12)	March 2018
Managing Surplus Government Land (2017–18:13)	March 2018
Protecting Victoria's Coastal Assets (2017–18:14)	March 2018
Safety and Cost Effectiveness of Private Prisons (2017–18:15)	March 2018
Fraud and Corruption Control (2017–18:16)	March 2018
Maintaining the Mental Health of Child Protection Practitioners (2017–18:17)	May 2018
Assessing Benefits from the Regional Rail Link Project (2017–18:18)	May 2018
Results of 2017 Audits: Technical and Further Education Institutes (2017–18:19)	May 2018
Results of 2017 Audits: Universities (2017–18:20)	May 2018
Community Health Program (2017–18:21)	June 2018

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