

Western Australian Auditor General's Report



Implementation of the GovNext-ICT Program



Report 3: August 2018-19

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WESTERN AUSTRALIAN AUDITOR GENERAL'S REPORT

Implementation of the GovNext-ICT Program

Report 3
August 2018-19



**THE PRESIDENT
LEGISLATIVE COUNCIL**

**THE SPEAKER
LEGISLATIVE ASSEMBLY**

IMPLEMENTATION OF THE GOVNEXT-ICT PROGRAM

This report has been prepared for Parliament under the provisions of section 25 of the *Auditor General Act 2006*.

Performance audits are an integral part of my Office's overall program of audit and assurance for Parliament. They seek to provide Parliament and the people of WA with assessments of the effectiveness and efficiency of public sector programs and activities, and identify opportunities for improved performance.

This audit reviewed whether the GovNext-ICT program is meeting its stated objectives.

I wish to acknowledge the staff at the Department of the Premier and Cabinet for their cooperation with this report.

A handwritten signature in black ink, appearing to read "Caroline Spencer".

CAROLINE SPENCER
AUDITOR GENERAL
30 August 2018

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Auditor General's overview

Agencies depend on their information and communication technology (ICT) to deliver a vast array of services to the public including essential services like health care, policing and education. Many agencies deliver their services through legacy ICT models that fail to take advantage of significant improvements in both cost and function.



GovNext-ICT has been promoted to agencies as a coordinated opportunity to modernise ICT functionality and delivery, at less cost. WA is not alone in progressing this shift from a traditional 'own and maintain' to a 'pay-as-you-use' model. However, the program represents a significant whole-of-government change process, the success of which depends to a large extent on how effectively agencies are engaged.

Ultimately, modernising agency ICT must be about providing agencies with approaches that are flexible, secure and cost effective. All agencies need to consider the approach that best fits their purpose and service delivery, having regard to ongoing system security and continuity. This requires ICT that is nuanced enough for agencies to employ configurations that deliver the best result for their unique circumstances.

My report does not offer a view in support of any one model for supplying ICT. Rather, it looks at how the Government's current preferred model, GovNext-ICT, was planned and implemented and whether it is achieving its stated objectives. My report highlights some weaknesses as well as barriers that agencies perceive to adoption of the program.

My recommendations are intended to help the Department of the Premier and Cabinet (DPC) rethink its role and what more it can do to help agencies through this substantial change process. In doing so, it may be prudent for DPC to look more broadly than its current focus to also consider non-financial risks and benefits to the State.

Executive summary

Introduction

This audit reviewed whether the GovNext-ICT program (GovNext) is effectively meeting its stated objectives.

We reviewed the planning and implementation of GovNext by the then Office of the Government Chief Information Officer (OGCIO), as the agency responsible for the program.

On 1 July 2018, the OGCIO was integrated into the Department of the Premier and Cabinet to become the Office of Digital Government.

Background

In May 2016, the State launched its information and communication technology (ICT) strategy, Digital WA (Digital WA). The strategy aimed to improve Government's use of ICT by simplifying technology; better connecting agencies and community; and better informing decision makers, staff and the public. Agencies were required to follow the strategy, and its associated policies¹ until it was rescinded on 2 July 2018.

GovNext was the first initiative released under Digital WA. The program aimed to progress the State's then strategic ICT objectives by creating more agile, scalable and flexible ICT solutions. Planning for GovNext started in 2015. At the time, ICT infrastructure cost the State about \$170 million each year².

The GovNext Business Case (Business Case), which estimated annual savings of up to \$82 million, was approved and contracts signed with 3 vendors in January 2017. It focused on reducing ICT costs and identified 6 other benefits for agencies and Government, including greater security and improved information sharing. GovNext is delivered through a mandatory Common Use Agreement (CUA) from which agencies can purchase ICT services. Since November 2017, agencies have been able to apply for an exemption.

Agency approaches to ICT vary but a large number of agencies still own and maintain their infrastructure including servers, data centres, and network equipment. GovNext provides agencies with a way to move away from owning and maintaining their ICT infrastructure, towards purchasing these as a service. This allows agencies to only pay for ICT as it is needed, reducing capital and maintenance costs.

The Business Case presented 2 models for how agencies could take advantage of the program:

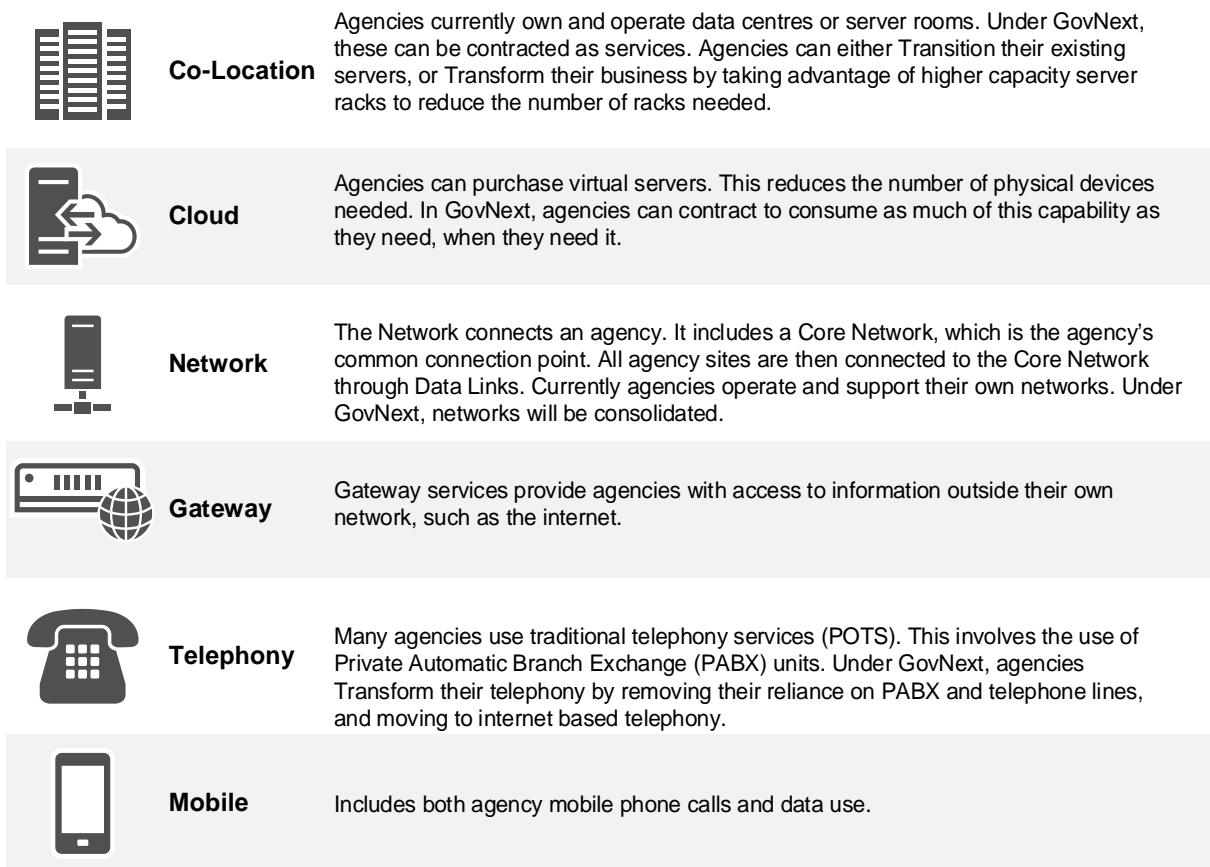
- Transition: agencies reproduce their approach 'as is' but use a GovNext vendor. Savings are anticipated through the improved buying power of the CUA.
- Transformation: agencies review their practices and needs and optimise their ICT management processes. Savings are anticipated through lower overheads and improved, streamlined systems.

Agencies are encouraged to Transform as they adopt GovNext. However, it was expected that agencies would at first simply Transition or Transform only some parts of their business.

ICT services in the program are divided into 6 service areas (Figure 1).

¹ Premier's Circular 2016/03

² Based on 2016 estimates generated during the GovNext Business Case.



Source: OAG

Figure 1: GovNext service areas

Audit conclusion

GovNext can deliver savings to Government, but will not deliver the savings originally anticipated in the Business Case. Assumptions used to develop the Business Case did not fairly reflect agency ICT services or pricing, and presented a best case picture of potential savings.

The take-up of program services to date is also low. Many agencies we consulted are reluctant to buy services while several barriers to adoption remain unresolved, including advice and assurances around security and service continuity. However, the program has started to progress the State's ICT strategic objectives, by reducing the number of agencies that own and maintain ICT infrastructure.

Low uptake of GovNext services is also due to agencies not understanding all of the benefits the program may offer them. The initial planning and ongoing engagement have focused heavily on cost savings. As a result, the potential to deliver other benefits was only partially explored with agencies.

Recommendations

The Department of the Premier and Cabinet should:

1. Recalculate the anticipated savings from GovNext, including confirmation that benefits exceed the costs of migration to this model and adequately supports the sector's diverse needs.

DPC response: Agreed

Implementation timeframe: by 31 December 2018

2. Develop and implement approaches to better educate agencies on program benefits beyond cost, to better achieve the program's intended objectives.

DPC response: Agreed

Implementation timeframe: by 31 December 2018

3. Actively work with agencies and vendors to facilitate solutions to meet agencies' business needs.

DPC response: Agreed

Implementation timeframe: Ongoing

4. Actively monitor GovNext vendor contractual obligations are being met in the key areas of security, competitive pricing and reporting to the GSB by:

- a. conducting an independent assessment to verify vendors meet their contracted security requirements, or request regular independent industry certification by vendors to that effect.

DPC response: Agreed

Implementation timeframe: by 30 September 2018

- b. ensuring vendors complete the 6-monthly market reviews, to confirm CUA pricing remains competitive.

DPC response: Agreed

Implementation timeframe: by 31 October 2018

- c. following up on vendor reports to ensure timely corrective action is taken.

DPC response: Agreed

Implementation timeframe: by 31 October 2018

Response from the Department of the Premier and Cabinet

The Department of the Premier and Cabinet (DPC) wishes to thank the Office of the Auditor General (OAG) for completing its review of the GovNEXT ICT program.

DPC agrees with the findings and the recommendations of the OAG review.

Foremost among the OAG's findings was an opinion that the level of savings likely to be achieved from GovNEXT ICT was overstated in the original business case. There is now little doubt that the projected \$65 million savings over three years, which were claimed in 2016, will not be achieved. It is also very clear that the highly transformational nature of GovNEXT ICT has meant that many agencies have had difficulty coming to terms with its potential benefits over the short term and have been reluctant to adopt the program.

Recognising these limitations, the Government has taken a number of steps to improve the governance of GovNEXT and increase the rate of adoption by agencies.

As a strategic priority, the Office of the Government Chief Information Officer (OGCIO) has now been transferred from the Department of Finance and incorporated as a division of DPC. Under its new identity, the Office of Digital Government (DGov), forms an integral part of DPC as a central agency. DGov's agenda of digital transformation, data sharing, enhanced digital service delivery for the community and cybersecurity now sits at the centre of the Government's policy reform agenda.

With respect to GovNEXT ICT, there has been a repositioning of approach through DPC, so that DGov now serves as a responder and resolver of agency concerns. This contrasts with previous perceptions of the former OGCIO, which (to a greater or lesser extent) was viewed by agencies as driving a very firm agenda of implementation, without full regard to their day-to-day operational concerns. This approach has arguably resulted in a culture of resistance to GovNEXT ICT across some parts of Government.

Changing this culture is now a priority for DPC.

The positions of Chair of the Directors General ICT Council and the GovNEXT Program Board have now been transferred from the Chief Executive of the former OGCIO, to CEOs of agencies which have adopted GovNEXT ICT. These independent Chairs now drive an agenda which reverses the onus of accountability onto DGov.

Supporting this change has been a comprehensive independent review of GovNEXT ICT. The findings of the independent review are complementary to the findings of the OAG. Importantly, the independent review has noted that the underpinnings of GovNEXT ICT are sound and that the benefits of the program are now beginning to be realised. However, while the GovNEXT ICT model is consistent with an increasingly contemporary approach to ICT delivery across many public sector jurisdictions (and large corporate entities), the focus of implementation needs to be on resolving agency service delivery concerns and supporting the key personnel who will be responsible for dealing with day-to-day operational concerns.

The Government is committed to ensuring that these challenges can be met, so that GovNEXT ICT has the potential to realise its full benefits.

Audit findings

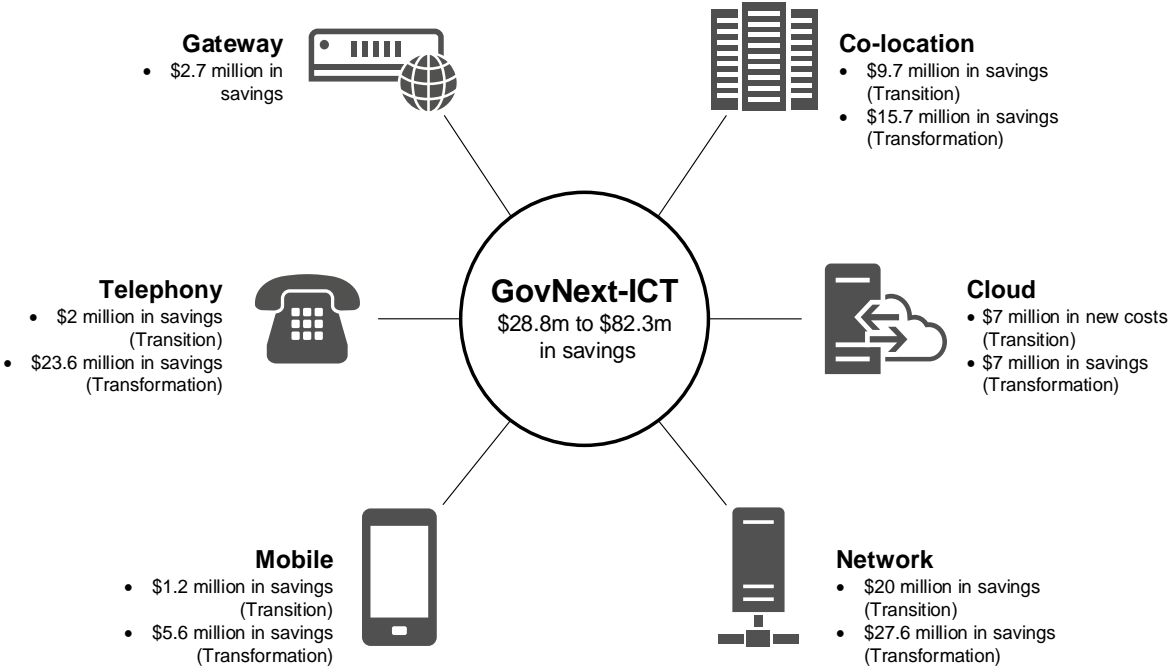
The Business Case overstated the savings to Government

Actual savings from GovNext will be less than what was originally estimated. Proposed savings were based on incorrect assumptions about pricing and agency spend in key areas. Savings will also be reduced as mobile services has now been removed as a service area.

While the program’s full estimated savings are unlikely to be delivered, we found agencies may make savings when they adopt GovNext. Agencies that have purchased Network services have achieved average annual savings of 22%, against the estimated 37-46%. Similarly, an agency in our sample is saving about 11% per year on Gateway services, against an estimate of 27%.

The Business Case outlined savings across all 6 service areas (Figure 2), with greater savings if agencies Transformed. It estimated annual savings of up to \$82.3 million:

- up to \$28.8 million if agencies Transition
- up to \$82.3 million if agencies first fully optimise and then Transform. The Business Case recognised that this model was unlikely to be fully adopted, and includes a more conservative figure of \$68.4 if agencies partially Transform.



Source: OAG based on GovNext Business Case

Figure 2: Estimated savings in the GovNext Business Case

Cost estimates for Cloud and Network were built on least expensive quotes

The OGCIO received quotes from the 3 vendors that went on to form the GovNext CUA. It used the least expensive quote to estimate costs for Cloud and the majority of Network service areas. This created an unrealistic view of potential savings. When we recalculated the estimates, using an average of the quotes, projected savings under a Transformation model decreased from:

- \$7 million to \$0.9 million (-87.5%) for Cloud
- \$27 million to \$12 million (-55.5%) for Network.

These two service areas are critical to the program and are likely to be used by most agencies. As shown in Figure 2, Network was anticipated to create the largest savings of all services, and a shift to Cloud is central to the GovNext approach. Savings can still be made, but the full estimate will not be delivered. Agencies will not always choose the least expensive vendor, as their decisions will also be influenced by location and service needs.

Actual costs for Cloud are considerably higher than estimated

The Business Case estimated annual savings of \$7 million for Cloud services (Figure 2). However, the estimated prices under the GovNext Business Case are considerably less than what agencies are paying to use GovNext services. Higher actual prices mean proposed savings are unlikely to be delivered in full.

We found agencies using GovNext have been quoted, and are paying, prices between 39% and 156% higher than the initial quotations used to generate the estimates. None of the agencies we had information for were paying prices as low as those used in the business case.

Incomplete understanding of agency ICT spend

The business case proposed annual savings between \$9.7 million and \$15.7 million for Co-location services (Figure 2). Co-location is an important part of GovNext, representing 34% of estimated savings in a Transition model. These full savings are unlikely to be delivered, as the Business Case overestimated what agencies spend on their data centres – specifically, their server racks.

The Business Case estimated that the Government spent \$29.6 million annually on data centres. These are either owned and maintained by agencies (65%), or outsourced (35%). However, estimated costs for both arrangements were inaccurate:

- Owned and maintained – Detailed information on what it costs agencies to manage their own data centres was not captured during planning. As a result, the estimate was built by extrapolating 1 larger agency's spend across the whole-of-government. Due to differences in size and needs, this agency's spend is likely to be much higher than most other agencies and therefore not representative of the whole-of-government. For example, 1 agency in our sample had self-managed racks but pays 39% less than the figure used to create the Co-location estimate.
- Outsourced – Detailed information on what agencies actually pay for outsourcing was not captured during planning. As a result, the estimate was built using the full prices from the previous buying arrangements. However, agencies can negotiate to pay less. In our sample, 2 agencies had outsourced servers and their costs were 25-30% less the previous buying arrangements.

Removal of mobile services

The OGCIO estimated that by improving and aligning contracts, GovNext could provide annual savings of between \$1.2 million and \$5.6 million for Mobile services through such things as sharing of data limits and volume discounts. However, these savings will not be delivered and Mobile services have now been removed from the program.

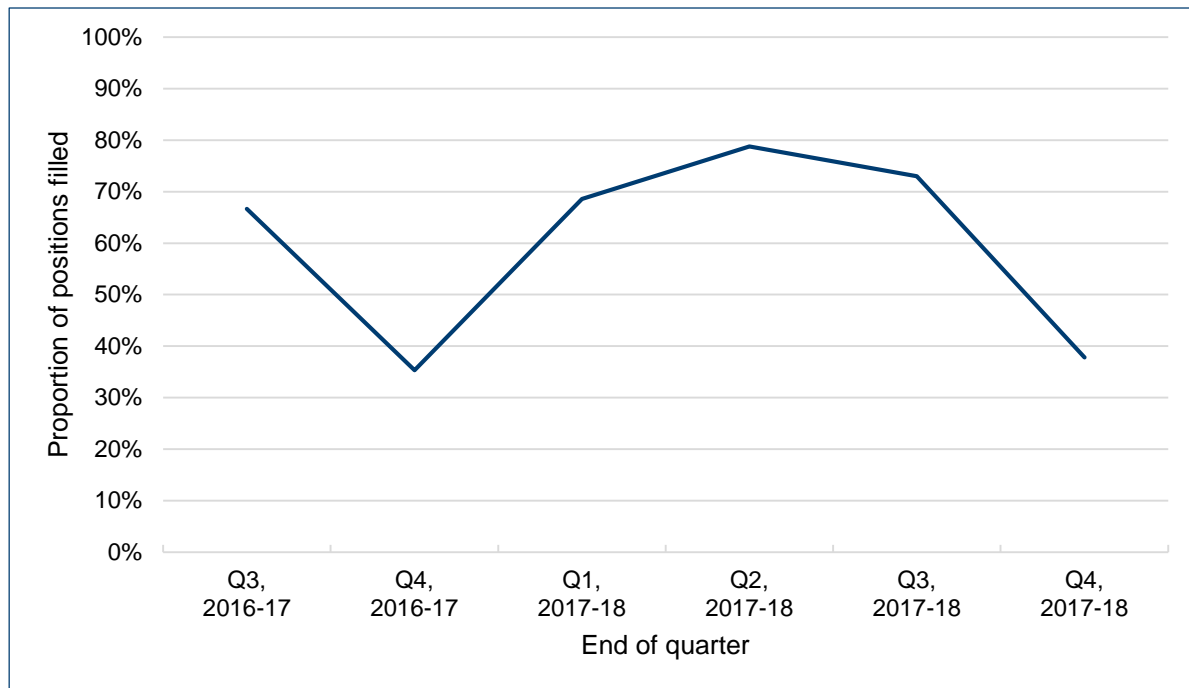
The OGCIO has not successfully engaged with agencies, and the program is behind schedule

The OGCIO has not met its engagement and reporting targets, and adoption of GovNext is behind schedule. Within the OGCIO, the responsibility for delivering the benefits of GovNext, supporting agencies, handling contract management and validating vendor services lies with the Government Service Broker (GSB). However, since it was formed, the GSB has had

limited resourcing and struggled to supply agencies with the advice and assurances they need, including around security and service continuity. Some key agencies are reluctant to adopt GovNext services as they are not convinced it will suit their business needs or be cost effective.

The GSB has not been fully resourced

The GSB has never been fully resourced to its forecast staffing levels of between 9 and 18.5 FTE. Levels of resourcing have fallen significantly since December 2017 and by June 2018, less than 40% of positions were filled (Figure 3).



Source: OAG based on OGCIO data

Figure 3: GSB resourcing over time

During our audit, several agencies raised concerns about their working relationship with the GSB. Agencies considered that the GSB did not fully understand their needs or operations, and were poorly positioned to assist or advise. The GSB team needs to build constructive relationships with agencies if the objectives of the program are to be met.

Vendor compliance with security and pricing obligations have not been well monitored

The GSB is responsible for managing vendor compliance, but its management of security and pricing obligations has not been effective. Agencies have expressed reluctance to adopt GovNext while there is uncertainty about compliance with these obligations, and it is unclear how the GSB is addressing these concerns and the associated risks.

The CUA requires vendors to:

- review market prices and report the results to the GSB every 6 months. So that pricing remains competitive, CUA prices cannot exceed the market
- provide security controls in line with industry good practices and standards. These include compliance with:
 - ISO/IEC 27001:2005 and 27001:2013 Information Security Management System Standard

- Australian Signals Directorate Guidelines: Cloud Computing Security for Cloud Service Suppliers IaaS & PaaS
- ISO/IEC 27017:2015 Information Technology.

The GSB has not insisted that vendors complete the 6-monthly market reviews and therefore cannot be sure that prices in the GovNext catalogue are still competitive. The GSB advised us that it intends to start these in the third quarter of 2018. Further, while vendors have informed the GSB that contract security requirements are being met, this has not been verified through independent assessment.

The GSB has continued to receive and monitor monthly reports from vendors on agency uptake and spend on the program.

Messaging to agencies did not explore all potential benefits of the program

The GSB has not provided detailed information to agencies on all program benefits. Engagement documentation has focussed almost entirely on potential cost savings. However, agencies need to consider a range of factors when changing their ICT arrangements. In responding to the *Special Inquiry into Government Programs and Projects*³, the OGCIO expressed a belief that agencies do not fully understand the opportunities of GovNext.

In developing the GovNext program, the OGCIO focused its engagement efforts on 11 agencies it identified as critical to the program's success, as they included 80% of public sector FTEs. Eight of these 'primary agencies' provided the OGCIO with information on ICT expenditure and staffing, using a self-reported, benchmarking survey and a series of workshops.

The OGCIO also identified 8 medium-large 'secondary agencies' which could achieve substantial benefits from the program. All remaining agencies were classified as 'tertiary'. A small number of secondary and tertiary agencies also provided information through the benchmarking survey.

Although the Business Case focused on reducing ICT costs, it also identified 6 other benefits for agencies and Government:

- improved transparency
- improved agility
- increased reliability
- greater security
- reduced risk
- improved information sharing.

However, in the absence of more detailed guidance on the full range of benefits, some agencies have struggled to see the advantages of the program when immediate cost benefits cannot be realised.

How an agency can benefit from the program beyond cost savings is illustrated in the following example.

³ Public Sector Commission 2018 *Special Inquiry into Government Programs and Projects*. Volume 2: pp. 560.

Achieving wider program benefits

One of the agencies in our sample told us that while GovNext offered minimal savings, it has allowed the agency to increase its information sharing and staff access. Recent Machinery of Government changes saw multiple entities joined into this single agency. Adopting GovNext as a central ICT solution, has allowed the agency to easily connect its previously separate entities and made it easier for regional staff to access central systems.

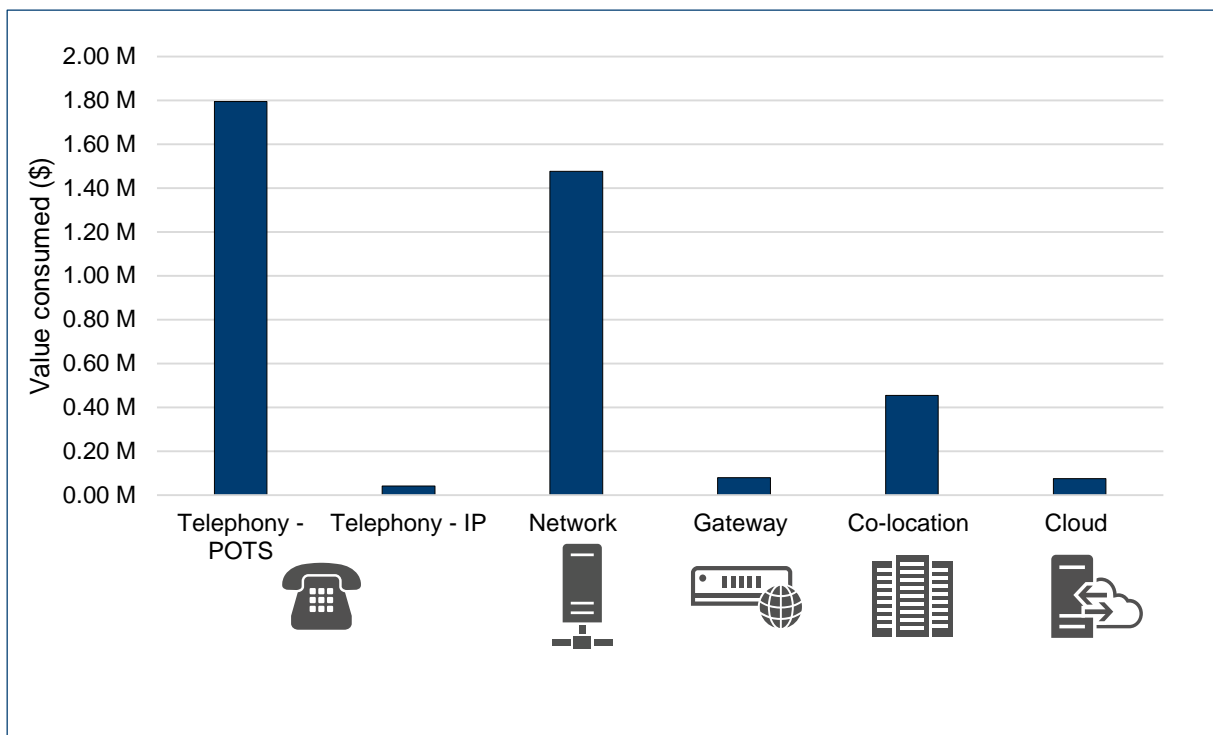
Source: OAG

Figure 4: Example of GovNext-ICT benefits beyond savings

GovNext adoption is behind schedule

Although 31 agencies are purchasing services, by April 2018 there had been a relatively small total spend of \$3.9 million (Figure 5). OGCIO has also not met its targets for assisting agencies to adopt GovNext. The targets for December 2017 intended:

- 70% of primary and secondary agencies, and 50% of tertiary were to report consumption of GovNext services. However, only 16% of primary and secondary were consuming services by the target date. By April 2018, this had increased to 58% of primary and secondary, and 12% of tertiary agencies
- the 11 primary agencies would have developed roadmaps and associated business cases for adopting GovNext. The GSB team were to assist and guide entities in this process. However, in April 2018, at least 4 of these agencies had still not developed these documents as they had only just started looking at GovNext, or had not been convinced of the program value.



Source: OAG based on OGCIO information




Figure 5: Value of GovNext services consumed at April 2018

Agencies see barriers to adopting GovNext

Agencies we spoke with raised a number of concerns about whether GovNext can improve their business or meet future needs. While some agencies have continued to purchase GovNext services, or develop plans to do so, a number of issues have slowed the process. These include:

Cost effectiveness

Not all agencies in our sample were convinced that GovNext will be cost effective. Agencies have found less expensive arrangements outside the program for some service areas, or their existing contracts provide better cost savings. The following examples illustrate some of the cost saving agencies can access outside of GovNext (Figure 6).

 <p style="text-align: center;">Cloud</p> <p>A small agency office just outside the metropolitan area needs a new server. As the area does not have good infrastructure, it will cost over \$40,000 per year to move into GovNext Cloud. Alternatively, a replacement server would only cost \$18,000 over 5 years.</p>	 <p style="text-align: center;">Network</p> <p>We reviewed Network costs for an agency that works in remote areas. Its existing Network contract is 60%, or \$166,000 per year, less expensive than the GovNext quotes received.</p>	 <p style="text-align: center;">Cloud</p> <p>One agency we sampled is looking to move its ICT to a Cloud platform outside GovNext, as it can save \$1.2 million over the next 5 years compared with GovNext quotes obtained.</p>
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Source: OAG based on information from sampled agencies

Figure 6: Examples where greater savings could be found outside GovNext

Levy disincentive

Until the CUA vendors recoup their initial Network investments, agencies that use GovNext Network services are required to pay a monthly levy of \$20.45 per FTE. This levy places an additional cost on early adopters and will be in place for longer if agencies do not join the program.

The levy impacts any savings under the program. This is particularly so for larger agencies. We looked at ICT spend and staff details for 3 small and 1 large agency. The levy varied from \$21,000 to \$770,000 per month. This represented 1% to 3% of the small agencies' current ICT spend, and 10% of the larger agency's spend.

Security concerns

Agencies are not confident that CUA vendors meet the security controls specified in the contract. While vendors have assured the GSB that required controls are being implemented, this has not been verified through independent assessment.

Currently, agencies can only be certain that controls are in place if they carry out their own independent assessments. Not all agencies may require this level of assurance, but a number of agencies that handle sensitive or personal information do. Efficiency gains are achievable if this assessment is done for whole-of-government.

Continuity of service

GovNext timeframes to restore reduced Network services are considerably longer than existing agency arrangements. Standard GovNext service contracts specify service restoration in the Perth metropolitan area within 30 days. Three of the agencies in our sample provide critical services and their existing arrangements offer service restoration by the next day. Network services are an essential part of an agency's ICT systems. Agencies are reluctant to take on the risk presented by longer restoration times, as this may impact the speed and quality of services they deliver to the public or other entities.

Audit focus and scope

This audit assessed whether the GovNext program is effectively meeting its stated objectives. We focused on the following questions:

1. Was the program well planned to support the stated objectives?
2. Are there adequate processes in place to measure and monitor program outcomes?
3. Does the OGCIO know if program outcomes are being achieved?

We focused on the OGCIO, as the agency responsible for developing and implementing the program. We considered information from October 2015 to April 2018.

During the audit we:

- reviewed the Business Case, pricing calculations and agency current spend
- reviewed reporting by vendors, agencies and the OGCIO
- interviewed OGCIO staff
- sampled 8 agencies. This included interviews with key IT staff and review of agency ICT expenditure and business needs. Our sample included 7 of the 11 'primary agencies' consulted during GovNext planning
- considered the 2018 *Special Inquiry into Government Programs and Projects*⁴ which found merit to the program, but identified that a lack of program management has slowed adoption.

The audit did not assess the procurement process used to generate the GovNext CUA.

This was a narrow scope performance audit, conducted under section 18 of the *Auditor General Act 2006* and in accordance with Australian Auditing and Assurance Standards. Performance audits primarily focus on the effective management and operation of agency programs and activities. The approximate cost of undertaking and tabling this audit is \$235,000.

⁴ Public Sector Commission 2018 *Special Inquiry into Government Programs and Projects*. Volume 2: pp. 545-568.

Auditor General's reports

2018-19 reports		Date tabled
2	Young People Leaving Care	22 August 2018
1	Information Systems Audit Report 2018	21 August 2018
2018 reports		Date tabled
13	Management of Crown Land Site Contamination	27 June 2018
12	Timely Payment of Suppliers	13 June 2018
11	WA Schools Public Private Partnership Project	13 June 2018
10	Opinions on Ministerial Notifications	24 May 2018
9	Management of the State Art Collection	17 May 2018
8	Management of Salinity	16 May 2018
7	Controls Over Corporate Credit Cards	8 May 2018
6	Audit Results Report – Annual 2017 Financial Audits and Management of Contract Extensions and Variations	8 May 2018
5	Confiscation of the Proceeds of Crime	3 May 2018
4	Opinions on Ministerial Notifications	11 April 2018
3	Opinion on Ministerial Notification	21 March 2018
2	Agency Gift Registers	15 March 2018
1	Opinions on Ministerial Notifications	22 February 2018

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