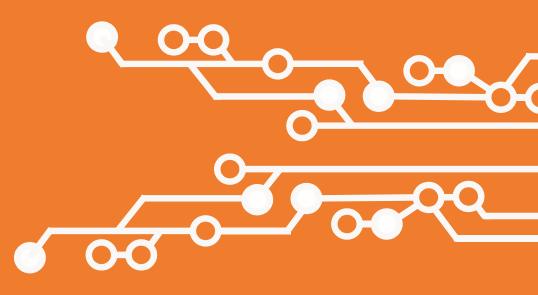




NATIONAL ARCHIVES OF AUSTRALIA

#### Check-up PLUS 2018 Whole of Government Summary Report

February 2019



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A note on presentation of results: The report presents results from the first cycle of the NAA Check-up PLUS online survey that was conducted between July and October 2018. Percentages are based on the total number of valid responses made to questions in the survey. Percentage results throughout the report may not add up to 100% due to rounding. Results reflect responses from agencies where the particular questions were applicable and where they were answered.

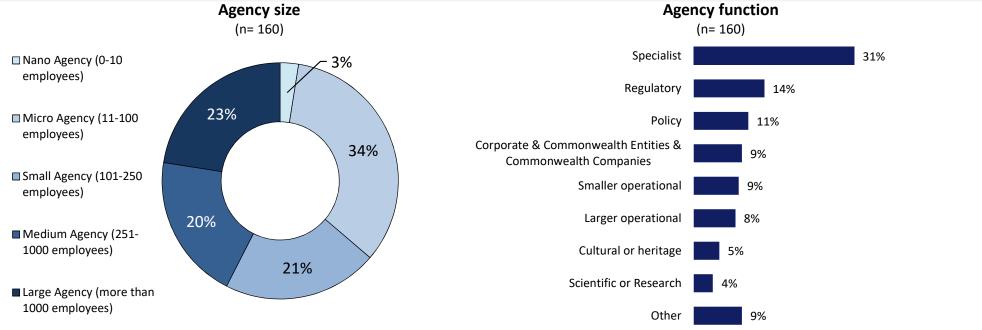
#### **About Check-up PLUS**



In 2018 the National Archives of Australia (the National Archives) commissioned ORIMA Research to conduct an annual information management survey, Check-up PLUS. Check-up PLUS is an online self-assessment tool designed to gauge Australian Government agencies' maturity and performance in information and data management.

Check-up PLUS is structured to align with the National Archives' Information Management Standard, which was developed to assist Australian Government agencies to create and manage business information effectively. The Information Management Standard comprises eight principles, consistent with the key concepts and principles of Australian Standard AS ISO 15489.1 (2017) - *Records Management*. The findings of the survey give an understanding of information management maturity and progress towards Digital Continuity 2020 targets.

A total of **160 agencies** completed the 2018 Check-up PLUS survey, representing 100% of in-scope agencies that were asked to make a Check-up submission. This report presents a summary of the findings of Check-up PLUS across all in-scope agencies. The size and functional profile of these agencies is presented below:



#### **Executive Summary**

The 2018 Check-up PLUS survey found that the overall **information management maturity index recorded a score of 3.1 out of 5**. This rating is **just above the mid-point level** and suggests that considerable progress is required before these practices are consistently followed across agencies.

The survey also showed that the **highest** maturity levels were recorded in **creating** and **storage** of information, while the **lowest** maturity levels were recorded for **interoperability**, **disposal** and **governance** of information.

While information maturity levels showed no clear trend by size of agency, there was some variation by agency type:

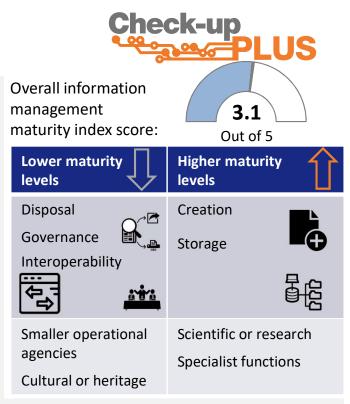
- agencies with scientific or research and specialist functions recorded relatively high maturity levels on average
- smaller operational agencies and those with cultural or heritage functions generally recorded lower maturity levels.

Almost two-thirds of agencies indicated that their information and records were **covered by agency-specific records authorities.** However, **awareness of the volume of Retain as National Archive (RNA) records was mixed** – agencies were much more likely to know the volume of physical RNA records than digital RNA records.

- 50% of physical records have been sentenced compared to only 12% of digital records.
- Over 439,000 shelf metres of physical material and 95,000 TB of digital material holdings are un-sentenced with unknown disposal classifications.
- Of the 1.7 million shelf metres of physical records held by agencies, only 6% is estimated as RNA records. Digital material holdings by comparison extend beyond 128,000 TB with only 3% estimated to be RNA material.

**Outsourcing** of the delivery of information management functions occurred in around two-thirds of agencies, most commonly for **cost or efficiency reasons**.

Average costs for storing physical information assets for the 12 month reporting period (2017-18) are estimated at around \$170,000 per agency. Only one-third of agencies calculate the cost of digital storage for reporting purposes.

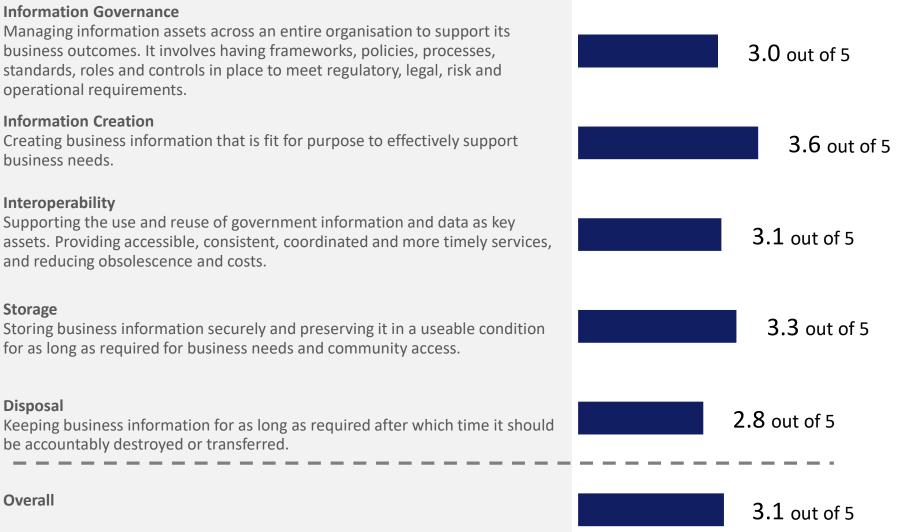


## Information management maturity indexes



2018 Check-up PLUS Survey results:

#### The 2018 survey measured agency performance against five information management indexes:



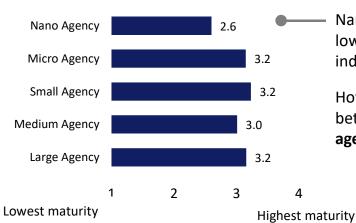
Overall

5

# **Overall information management**

#### agency size:

Agency size key: Nano Agency: 0-10 employees Micro Agency: 11-100 employees Small Agency: 101-250 employees Medium Agency: 251-1000 employees Large Agency: more than 1000 employees



Nano sized agencies recorded lower average overall maturity index scores.

5



However, there was no general correlation between maturity ratings and the **size of agency**.

	ency nction:	Scientific or Research Specialist Policy		3.6 3.4 3.2	•	<ul> <li>Agencies with scientific or research (3.6) and specialist (3.4) functions recorded the highest maturity scores on</li> </ul>
		Regulatory		3.2		average.
	The <b>lowest</b> maturity	Larger operational		3.1		
	scores recorded were for agencies with smaller	Corporate & Commonwealth Entities &		3.0		
5	operational (2.5) and	Cultural or heritage		2.6		
•	cultural or heritage (2.6)	Smaller operational		2.5		
	functions.	Other		2.9		
		Lowest maturity	1 2	3 4 Highest ma	5 aturity	

#### **Governance – Strategies,** policies and procedures



59%

51%

49%

46%

39%

36%

32%

28%

23%



Over 80% of agencies had strategies, policies and procedures in place in relation to **information security**, agency specific records authorities, confidentiality, privacy or data protection and information management. In contrast, only 35% of agencies had enterprise-wide information architecture in place.

Agency specific records authorities

Information management policy

Information risk management strategy

Information security policy (including PSPF requirement)

Confidentiality, Privacy or Data protection strategy and

disclosure policy

Open access to information policy (OAIC requirement)

Information governance and management strategy

Data policy and data management strategy (PM&C

requirement)

Enterprise-wide information architecture

Accountable Disposal policy and procedures

The proportion of agencies that had implemented the following strategies, policies and procedures (either needing to be updated or in place and up to date):

- 191
  - **83%** of agencies had in place:
  - an information security policy ٠
  - a Confidentiality, Privacy or Data **Protection Strategy and Disclosure** policy
- 84% had agency specific records authorities in place

81% had an information management policy in place

**35%** had **enterprise-wide** information architecture in place

Colour coding key:

Is not developed/ planned (yet)

Planning/ consultation has commenced to develop

A draft version is under development Is in place but needs to be updated/ revised

6% 6%

5%

9%

14%

9%

23%

13%

18%

16%

7% 8%

6% 7%

10%

10%

8%

24%

33%

34%

13%

13%

26%

27%

21%

32%

42%

9%

28%

23%

36%

16%

23%

Is in place and up-todate/ current

17%

19%

7

16%

#### **Governance – Practices**





72% of agencies were usually or always implementing best practice in relation to **requiring the complete and consistent management of Australian Government information in contractual arrangements.** Less than half were doing so in relation to **managing data across the lifespan using systems and process to reduce manual effort** and **implementing information governance holistically.** 

The proportion of agencies that had implemented the following best practices usually / most of the time or almost always / always:

- **72%** required the complete and consistent management of Australian Government information in contractual arrangements
- 45% managed data across its lifespan using systems and process to reduce manual effort

**43%** implemented information governance holistically

Contractual arrangements require the complete and consistent management of Australian Government information.

Everyone has been made aware of their information management responsibilities.

Information management roles and responsibilities are established and articulated throughout the agency.

Everyone has had access to appropriate training to develop contemporary information management skills.

Data is managed across its lifecycle using systems and processes to reduce manual effort.

Information governance is implemented holistically to ensure complete & consistent management of all information assets.

			_							
9%	16	5%		33%	6			39	9%	
1	9%	1	6%		28%			3	85%	6
	23%		229	%	2:	1%			32	%
6%	23%	,	19	%	2	1%		31%		.%
5%	289	%		23%			29%			16%
6%	3	0%		21	%		2	7%		16%

Colour coding key:



Sometimes



#### **Governance – Information governance committee**



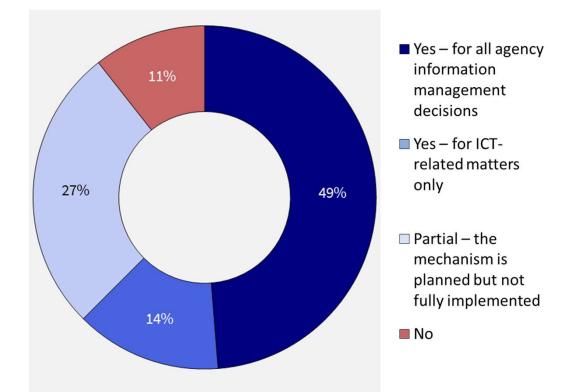
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**Nearly half** of all agencies reported that they have a formal governance mechanism with broad representation for ensuring information management requirements are considered in decision making

The proportion of agencies that had formal governance mechanisms (for example an information governance committee) for ensuring information management requirements are considered when making decisions:

**49%** of agencies had established a formal governance mechanism for <u>all</u> agency information management decisions.

- 14% had a mechanism for ICT only
- 27% had planned but not fully implemented a formal governance mechanism for information management
- **11%** did not have a mechanism in place.



#### **Governance – Risk Management**





Agencies recorded **mixed to low ratings** on average about their maturity in implementing a range of better practice approaches to managing their information management risk.

The areas with the most scope for improvement were in relation to using analytics to identify how information is being used and how long it needs to be kept and reporting results of information management risks assessments.

Proportion of agencies where the following best practices were implemented rarely / never or sometimes:

63% rarely / never or sometimes reported results of information management risks assessments

**75%** rarely / never or sometimes used analytics to identify how information is being used and how long it needs to be kept Create and maintain an information asset register, catalogue or systems register.

Undertake regular, systemic risk management activities such as training, process reviews and application of security protocols specifically focused on information management.

> Undertake audits or reviews to identify the agency's information assets and the business owners.

Describe information assets through taxonomies, ontologies, categorisation tools, creating architecture that enables seamless sharing & reuse of information.

Report results of information management risk assessments, including metrics and the level of success achieved.

Use analytics to identify how information is being used and how long it needs to be kept.

19%		19%		2	4%		13%	, 5		26%	6
18%		30%	6		23	3%		10%	6	1	9%
14%		28%			23%			17%		1	8%
23%		2	9%			26	6%		1	.2%	11%
	35%			28	3%		18	3%		10%	10%
	4	48%			1	279	6		14	4%	7%

Colour coding key:

Rarely / never

ever

Sometimes, for our highest value assets Often, for our high value information Usually, with only low value or legacy still to be managed

Almost always / always 10

#### **Creating – Information** governance requirements



54%

51%

29%

39%

31%

21%

17%



At least half of agencies indicated that recent internal audits and other evidence showed that they usually or always complied with a range of information governance requirements associated with creating records.

Agencies recorded highest compliance with practices relating to appropriately creating and capturing records, while compliance was lower regarding practices related to management and storage of information.

The proportion of agencies that had complied with the following information *governance requirements* usually / most of the time or almost always / always:

**88%** create information as

evidence of government business enabling business operations, decisions and continuity



**85%** capture communications, research and investigations, deliberations, decision made and actions taken



**50%** store unstructured and semi-structured information in the agency's approved information management systems

Create information as evidence of government business, enabling business operations, decisions and continuity.

Capture communications, research and investigations, deliberations, decisions made and actions taken.

Create and capture information that is complete, accurate and reliable.

> Manage information in place, in business systems with appropriate functionality.

Store unstructured and semi-structured information in the agency's approved information management systems.

Keep information and data in uncontrolled environments\*

9% 34% 17% 38%

> 10% 23% 32% 19% 26%

8%

34%

38% 39%

\* Note: Unlike other questions in this figure, higher frequency is associated with lower maturity for this question. The colour coding has therefore been reversed for this question (blue results reflect higher maturity and red lower maturity).

Colour coding key:

Often

#### **Creating – Practices**





Agencies reported **mixed ratings** about implementing a range of better practices for creating information. Over half reported they usually or always **continually identify and remove paper from internal and external processes, convert analogue to digital formats** and **automate the process of information creation**. Almost three quarters reported they only rarely or sometimes **automate the discovery and removal of duplicate, redundant, obsolete and trivial information**.

The proportion of agencies that had implemented the following best practices usually / most of the time or almost always / always:



**58%** continually identify and remove paper from internal and external processes to improve efficiency



**53%** convert existing analogue formats to digital formats where there is a value to business



**13%** automate the discovery and removal of duplicate, redundant, obsolete and trivial information

Continually identify & remove paper from internal & external processes to improve efficiency.

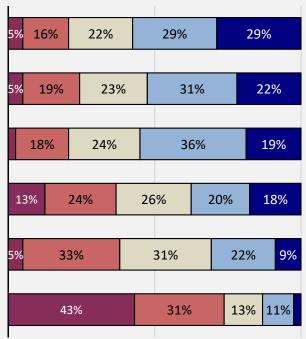
Convert existing analogue formats to digital formats where there is a value to business.

Automate the process of information creation with digital systems and tools, for efficient & effective information management.

Ensure new or updated business systems and services (SaaS) have the capacity to manage information in place for its whole life.

Use appropriate technologies to automate processes.

Automate the discovery & removal of duplicate, redundant, obsolete & trivial information.







## **Creating – Barriers to best practice**





Just under three-quarters of agencies indicated that **access to appropriately secured systems** for security classified digital information issues **was rarely or never a barrier** to progressing digital information management. A range of other barriers to digital information management were 'sometimes' experienced by 37%-54% of agencies.

The proportion of agencies that indicated the following barriers rarely / never existed to best practice in digital information management was:



**73%** for lack of access to appropriately secured systems for security classified digital information



42% for risk averse culture



**41%** for the agency's technological environment (with relation to use, reuse and sharing)



**34%** for lack of suitably qualified and experienced information management staff



**21%** for manual processes (54% of agencies indicated this was 'sometimes' a barrier)

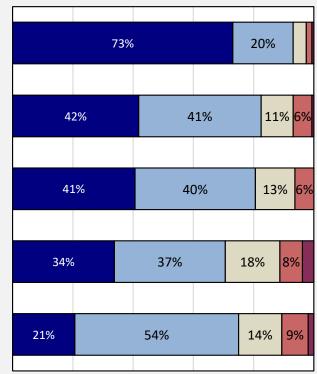
Does lack of appropriately secured systems for security classified digital information prevent progress toward digital information management?

Is a risk averse culture preventing progress toward digital information management?

Does your agency's technological environment prevent data use, reuse and sharing?

Does lack of suitably qualified and experienced information management staff prevent progress toward digital information management?

Are manual processes preventing your agency's progress toward digital information management?



Sometimes



#### Interoperability – Describing data assets





Less than 40% of agencies had implemented a range of interoperability measures about describing data assets.

The proportion of agencies that have implemented the following interoperability measures (is in place and up-to-date, or needs to be updated):

**36%** have adopted relevant metadata standards at the appropriate level

**31%** have adopted standardised data models at the appropriate level



**31%** manage metadata using a metadata repository or register



**29%** have undertaken data discovery and indexing activities using data catalogues, dataset registers or indexes.

Adopt relevant metadata standards at the appropriate level (e.g. enterprise, domain, government, international).	18%	32%	14%	19%
Adopt standardised data models at the appropriate				
level (e.g. enterprise, domain, government, international).	24%	28%	17%	16%
Manage metadata using a metadata repository or	29%	29%	11%	18%
register.				
Undertake data discovery and indexing activities using data catalogues, dataset registers or indexes.	25%	31%	16%	16%

Colour coding key:

Is not developed/ planned (yet) Planning/ consultation has commenced to develop

A draft version is under development

Is in place but needs to be updated/ revised

Is in place and up-todate/ current

14

17%

14%

14%

13%

# Interoperability – Accessing and Camaintaining quality of data assets



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56% of agencies usually or always **adopt standardised file formats to enable use and reuse** of information. In contrast, less than one-third of agencies usually or always **identify data flow issues** and **ensure robust data governance guides their data functions**.

The proportion of agencies that had implemented the following best practices usually / most of the time or almost always / always:	Adopt standardised file formats to enable use and reuse.	6% 15%	6 23%	30	%	26%
<b>56%</b> adopt standardised file formats to enable use and reuse	Assign roles and responsibilities for data management, curation or stewardship.	10%	23%	19%	25%	24%
data management, curation and	Monitor data for accuracy, providing and documenting remediation where needed.	11%	24%	24%	22%	18%
stewardship	Collect descriptive information (metadata) in line with the Information Management Standard.	19%	21%	22%	20%	18%
•••• <b>26%</b> identify data flow issues, using for example, data profiling or search and query tools	Identify data flow issues, using for example, data profiling or search and query tools.	22%	29	%	22% 1	2% 14%
and embedded, guiding all other data functions	Ensure data governance is strong and embedded, guiding all other data functions.	15%	35%	2	1% 18	8% 11%
Colour coding key: Rarely/never	Sometimes Often	Usually/n	nost of the ti	me 📕 A	lmostalway	ys/always

## Interoperability – Enabling access to information



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More than three-quarters of agencies usually or always implement authentication processes, access rights and privileges to systems and applications that are responsive to users' roles.

Results were mixed with regard to agencies adopting **an 'open by default' position** in enabling access to information, with over one-third indicating that this only happens sometimes or rarely in their agency.

<b>79% implement authentication processes,</b> access rights and privileges to systems and applications that are responsive to users' roles sometimes or usually /always	Implement authentication processes, access rights and privileges to systems and applications that are responsive to users' roles.	8% 1	3%	27%		52%	
• 70% assign roles and responsibilities to	Assign roles and responsibilities to improve and coordinate access.	11%	16%	3	0%	40	%
improve and coordinate access sometimes or usually /always	Automate information access based on business rules and roles.	9%	18%	18%	26%		29%
<b>36%</b> rarely / never or sometimes adopt an open by default position, documenting exceptions and the conditions upon whether access can be granted	Determine custody, ownership and negotiate conditions for sharing information and data. Adopt an open by default position, documenting	6% 2	22%	16%	30%		27%
	exceptions and the conditions upon whether access can be granted.	19%	179	% 16	5% 2	.9%	20%
Colour coding key: Rarely/never	Sometimes Often Usu	ally/mo	stofthe	time	Almost	always/a	lways <sup>16</sup>

## **Storing (and preserving) information digitally**



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Agencies recorded mixed results about storing and preserving information digitally. Over three-quarters usually or always ensure information that needs to be protected or secured is identified and managed appropriately. In contrast, only 38% usually or always ensure digital repositories have appropriate functionality to preserve information according to its value.

**78% ensure information that needs to be** protected or secured is identified and managed appropriately sometimes or usually /always

55% migrate information into current business systems where there is need or business value sometimes or usually /always



**43%** rarely / never or sometimes **convert and migrate information and its metadata to ensure it remains usable** 



Colour coding key:



Sometimes





Usually / most of the time

8% 11%

27%

Almost always / always<sup>17</sup>

51%

Ensure information that needs to be protected or secured is identified & managed appropriately.

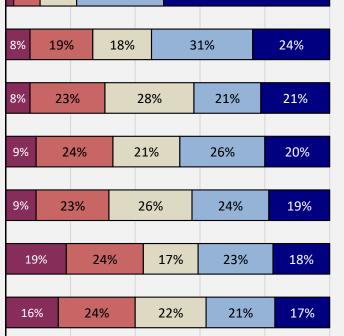
Migrate information into current business systems where there is need or business value.

Use contemporary technologies to reduce the cost of providing and managing digital information storage.

Implement preservation strategies, procedures & activities to ensure information can be accessed, used & understood for as long as it is required. Ensure information and data movements are traceable & transparent and metadata accompanies data throughout its life.

Convert and migrate information and its metadata to ensure it remains usable.

Ensure digital repositories have appropriate functionality to preserve information according to its value.



#### **Disposing – Destruction and** transfer



Less than half of agencies indicated that they usually or always complied with better practices for disposing of information. The area with the most scope for improvement was automating the identification and destruction of **Iow value and low risk information**, which 64% of agencies indicate they do rarely / never or sometimes.

The proportion of agencies that had implemented the following best practices usually / most of the time or almost always / always:

46% base the transfer of information, to the National Archives or during MoG changes, on shared standards & agreed business requirements

**42%** establish governance across all 30 business systems for the identification,

destruction or transfer of agency information assets

**37%** ensure business systems with high risk information are configured to identify information for disposal based on records authorities

**21%** automate identification and destruction of low value and low risk information

Base the transfer of information, both to the Archives or during MoG changes, on shared standards and agreed business requirements.

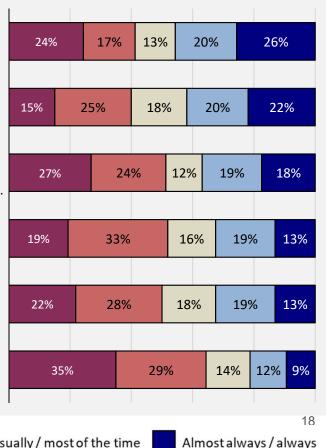
Establish governance across all business systems for the identification, destruction or transfer of agency information assets.

Ensure business systems with high risk information are configured to identify information for disposal based on records authorities (including identifying...

Ensure RNA information assets across systems and locations have been identified to ensure appropriate management & governance are in place.

Ensure existing information has been sentenced & the disposal action is known (even if it has not been carried out).

Automate identification and destruction of low value and low risk information.



Colour coding key:

Often

#### **Records authorities and RNA arrangements**



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On average, almost two-thirds of agencies' information and records were **covered by agency-specific records authorities**. More than half of agencies had **destroyed information** in the last 12 months, and approximately onequarter were planning to **transfer RNA to the National Archives** in the next 12 months.



On average, **63%** of the information and records of agencies' core business was covered by agency-specific records authorities



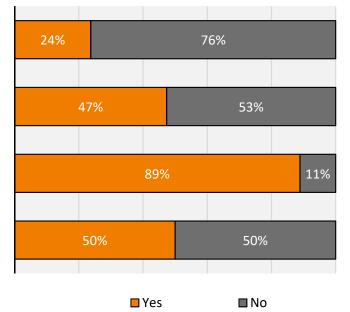
**53%** of agencies had destroyed information in the last 12 months

Is your agency planning to transfer RNA to the National Archives in the next 12 months? (n=160)

Is your planned transfer already on the National Archives' Transfer plan? (n=38)

Has the information been sentenced in preparation for transfer? (n=18)

Has a declassification activity been completed for the proposed transfer? (n=16)





**24%** of agencies are planning to transfer RNA to the National Archives in the next 12 months.



**47%** of planned transfers were already on the National Archives' National Transfer plan. Of these,

89% had sentenced the information

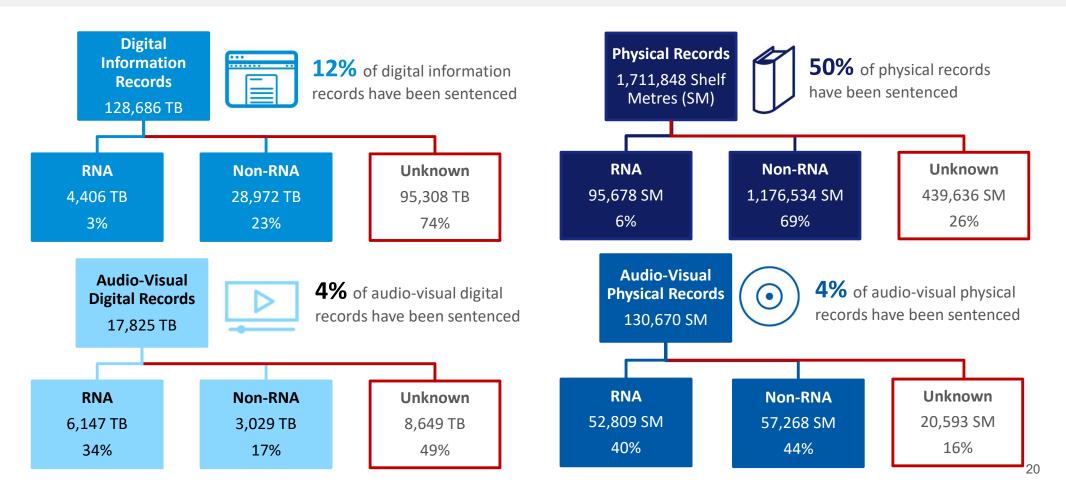
in preparation for transfer and **50%** had completed a declassification activity for the proposed transfer.

#### **RNA volumes**



Agencies were much more likely to **know the volume of physical RNA records** (74% for non-AV and 84% for AV) than digital RNA records (26% non-AV and 51% AV).

**AV records were more likely to be RNA** than non-AV records **but they were much less likely to have been sentenced**, particularly for physical records (4% for AV compared with 50% for non-AV)



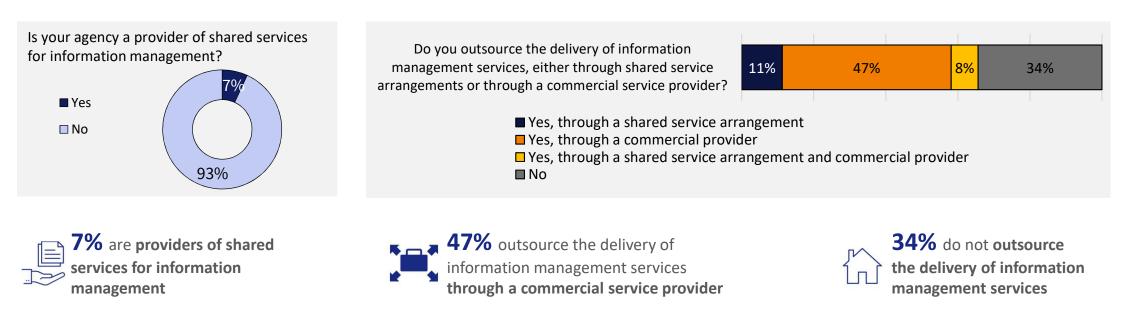
#### **Outsourcing arrangements**



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7% of agencies are providers of shared services for information management.

Two-thirds of agencies outsource the delivery of information management services, most commonly through a commercial provider.



Average cost of outsourcing contracts:
\$111 013.95 Shared service
\$431 892.40 Commercial provider

\$405 804.38 Overall average\*

\* Average cost across agencies that outsource via shared services and/or commercial providers.



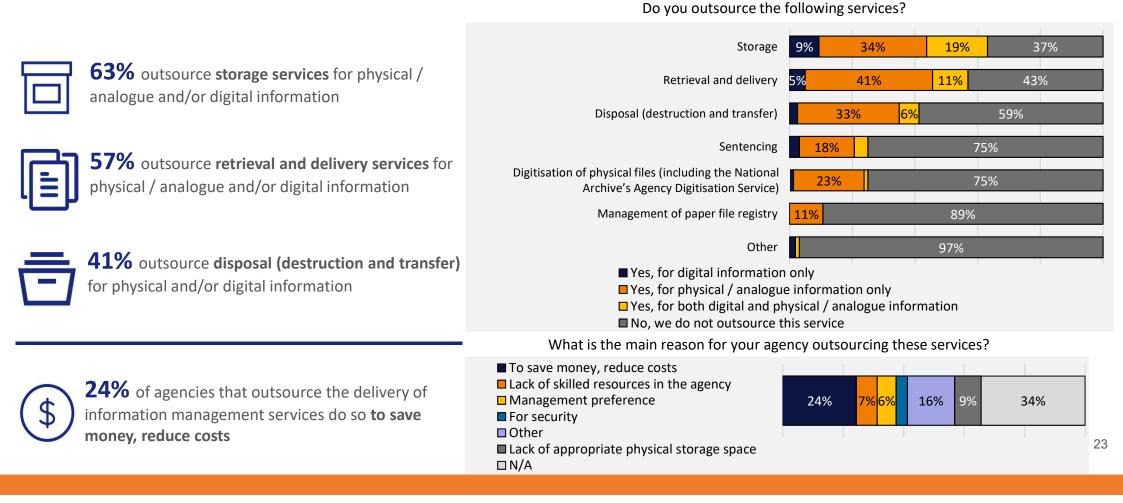
**70%** of agencies that outsource the delivery of information management services **participate in a single shared service arrangement** 

#### **Outsourcing arrangements services**



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Agencies were more likely to outsource services for **physical / analogue information only** than for digital information only or for both physical and digital information. **More than half** of agencies outsource **storage** and **retrieval and delivery** services, while **one-quarter or less** outsource services for **sentencing** or **the management of paper file registry**. Agencies cited a range of reasons for outsourcing, of which the most common was **cost savings**.



#### **Costs and efficiencies**



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**Offsite storage under third party control** accounts for the largest share, in terms of both cost and shelf metres, of agencies' information assets storage. There was no clear trend about whether the volume of physical records being stored by agencies is increasing or decreasing. More than half of agencies also reported that they do not calculate the cost of digital storage for reporting purposes.

Cost to agencies of storing physical information assets

(Figures represent averages across reporting agencies)

	Average % of records held in:	Average shelf metres *	Average storage cost in previous 12 months*
Onsite dedicated storage	17.1	1 940m	\$33 099
Offsite (under agency control)	9.8	1 110m	\$20 101
Offsite (under third party control)	73.1	8 285m	\$113 839
Total	100.0	11 546m	\$170 675

\* Total figures in this table are greater than the sum of the components because some agencies only provided total amounts.



On average, **54%** of an agency's information assets are stored offsite under third party control



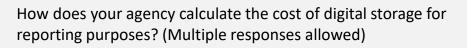
**26%** of agencies reported a decrease in their volume of physical records in the past 12 months

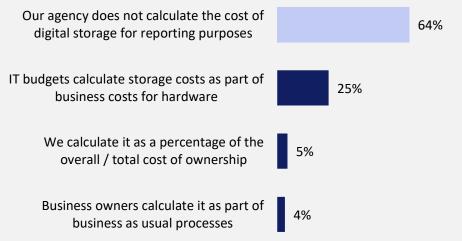


**25%** of agencies reported an increase in their volume of physical records in the past 12 months



64% of agencies do not calculate the cost of digital storage for reporting purposes





#### **Further information and resources**

If you have any queries about Check-up PLUS, please email the Commonwealth Information Management Team at the National Archives at information.management@naa.gov.au.

Please contact Mabel Dela Cruz from ORIMA Research at <u>Check-upPLUS@orima.com</u> if you have any questions about accessing or using the online report.

Please visit the National Archives website for more information about Check-up PLUS: <u>http://www.naa.gov.au/information-management/check-up-digital/index.aspx</u>

This project was conducted in accordance with the international quality standard ISO 20252 and the Australian Privacy Principles contained in the Privacy Act 1988.







Australian Government

National Archives of Australia