



**Tasmanian**  
Audit Office

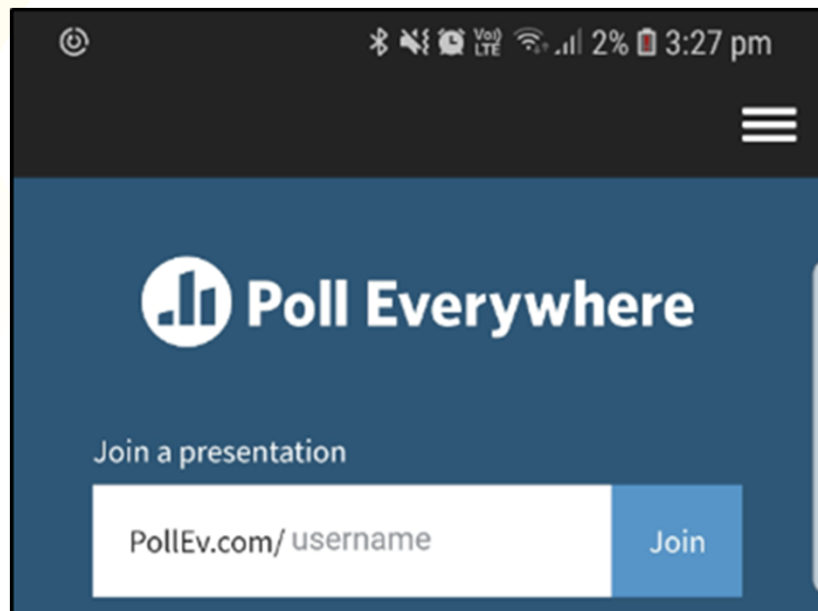
Audit Committee Members  
and Senior Managers  
Information Session  
2019

Welcome

# Overview

Time	Presentation	Presenter
1.00 – 1.35	Accounting standards and audit update	Jeff Tongs Stephen Morrison
1.35 – 2.05	Pilot Project - ED 01/18 Proposed Auditing Standard ASA 315 Identifying and Assessing the Risks of Material Misstatement	Rod Whitehead
2.05 – 2.50	Managing Cyber Complexity	Ross Byrne
2.50 – 3.20	Afternoon Tea	
3.20 – 3.50	Cybersecurity is a Business Risk	Glenn Lewis
3.50 – 4.35	<b>Panel Discussion</b> – Cyber security questions Audit Committees should ask	<b>Panel members:</b> Glenn Lewis Ross Byrne Michelle Swallow Yvonne Rundle <b>Facilitator:</b> Ric De Santi
4.35	Close	Rod Whitehead





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App username: TAO144



**Tasmanian**  
Audit Office



# *Accounting Standards and Audit Update*

Hobart  
May 2019

*Jeff Tongs & Stephen Morrison*

# Accounting Standards Update

- Are you ready for:

Australian Accounting Standard	Effective Date – Year beginning on or after	30 June Year-end
AASB 9 <i>Financial Instruments</i>	1 January 2018	30 June 2019
AASB 15 <i>Revenue from Contracts with Customers</i>	1 January 2018 (For-profit) 1 January 2019 (Not-for-profit)*	30 June 2019 30 June 2020*
AASB 1058 <i>Income of NFP Entities</i>	1 January 2019	30 June 2020
AASB 16 <i>Leases</i>	1 January 2019	30 June 2020

\* AASB 2016-7 Amendments to Australian Accounting Standards  
– Deferral of AASB 15 for Not-for-Profit Entities

# Transition Choices



OR

## Fully Retrospective

Prepare statements as if standard had always applied.

Restate comparative information, adjust prior year opening retained earnings and disclose effects.

Consider relief and options available

Disclose effects and options taken

## Cumulative Approach

Adjust for new standard in current year. Prior year still under previous standard.

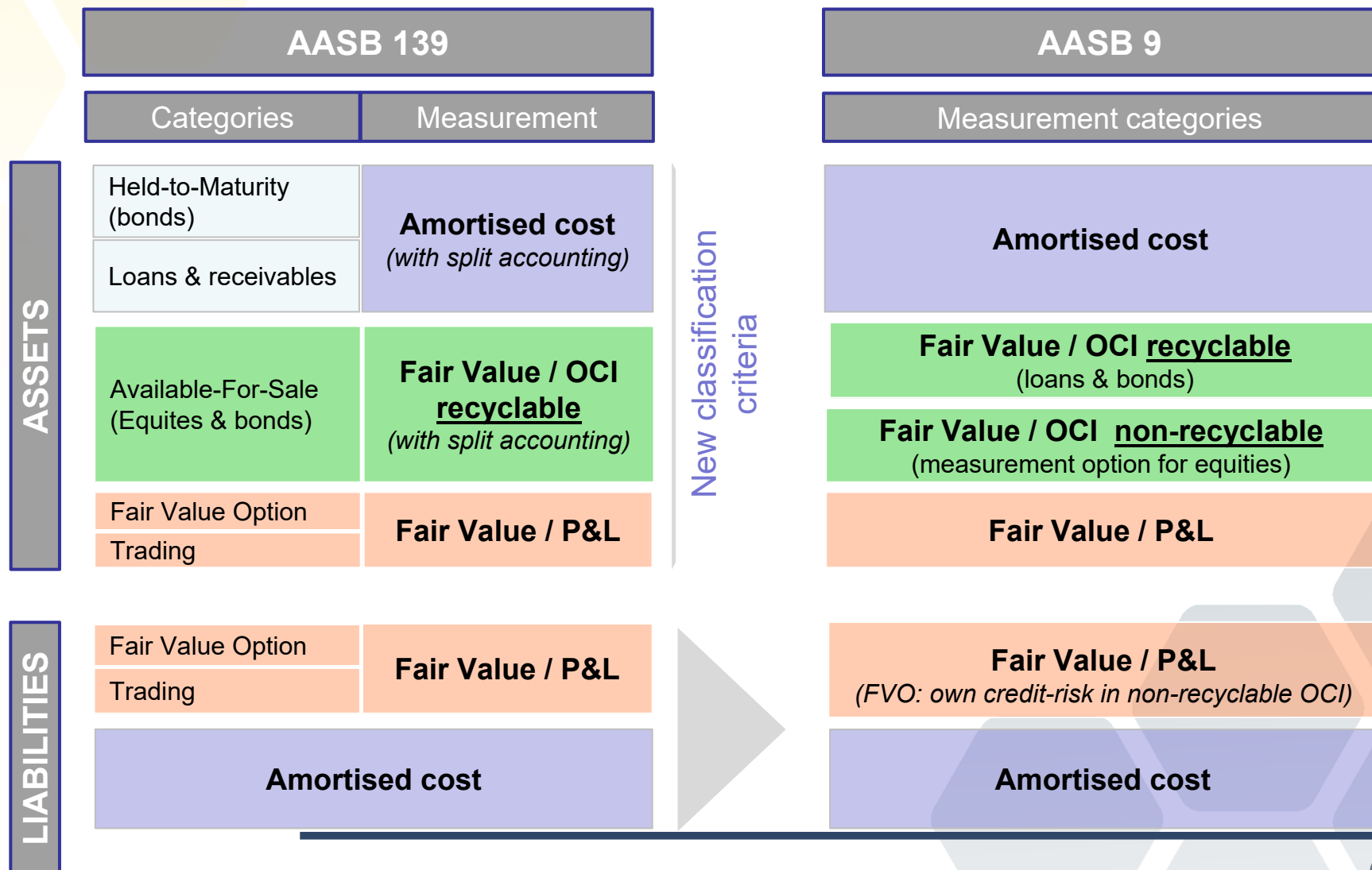
Do not restate comparatives. Recognise effect on application to opening retained earnings in current year.

Consider relief and options available

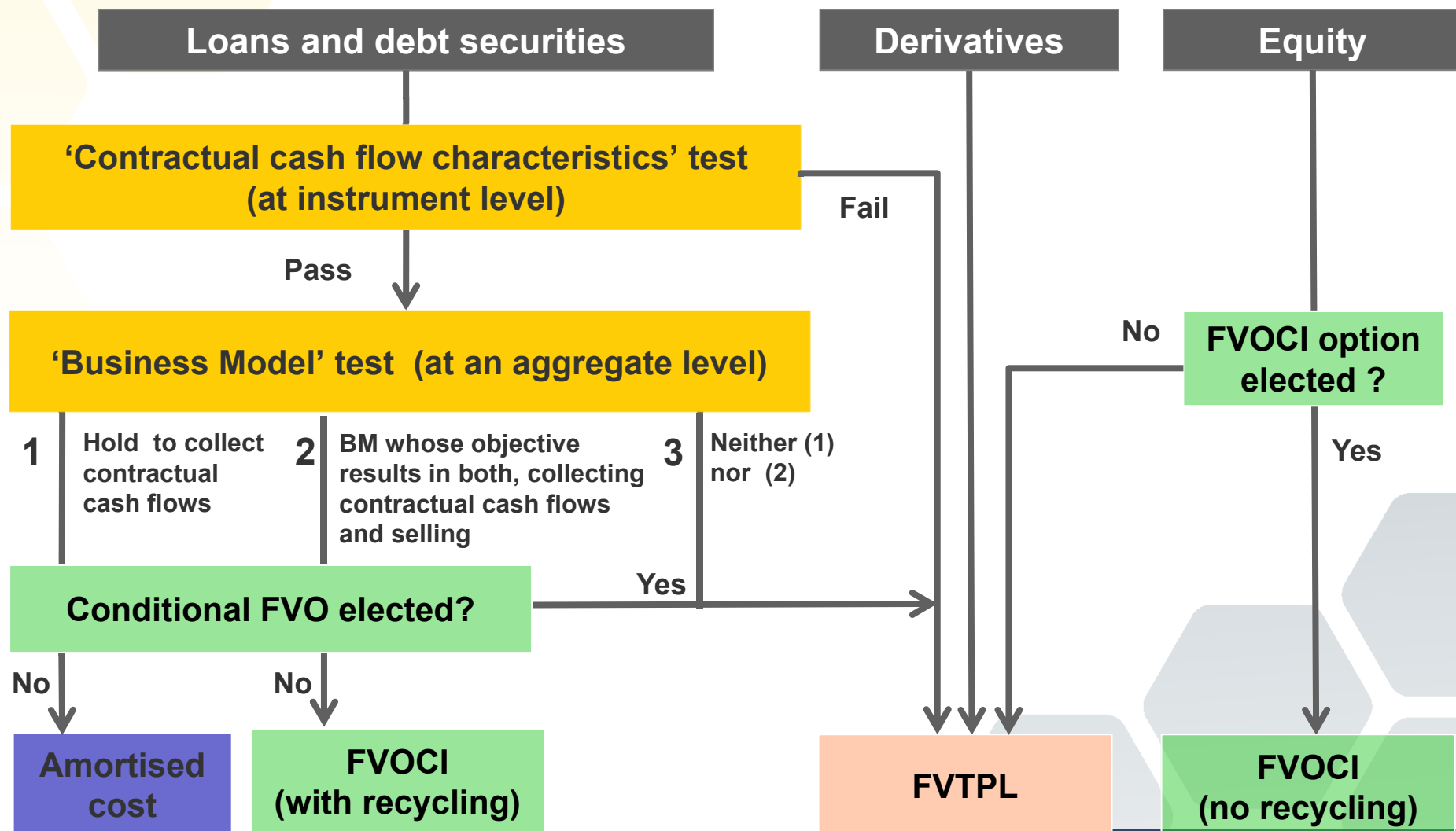
Disclose effects and options taken

# AASB 9: *Financial Instruments*

## Classification & Measurement: overview

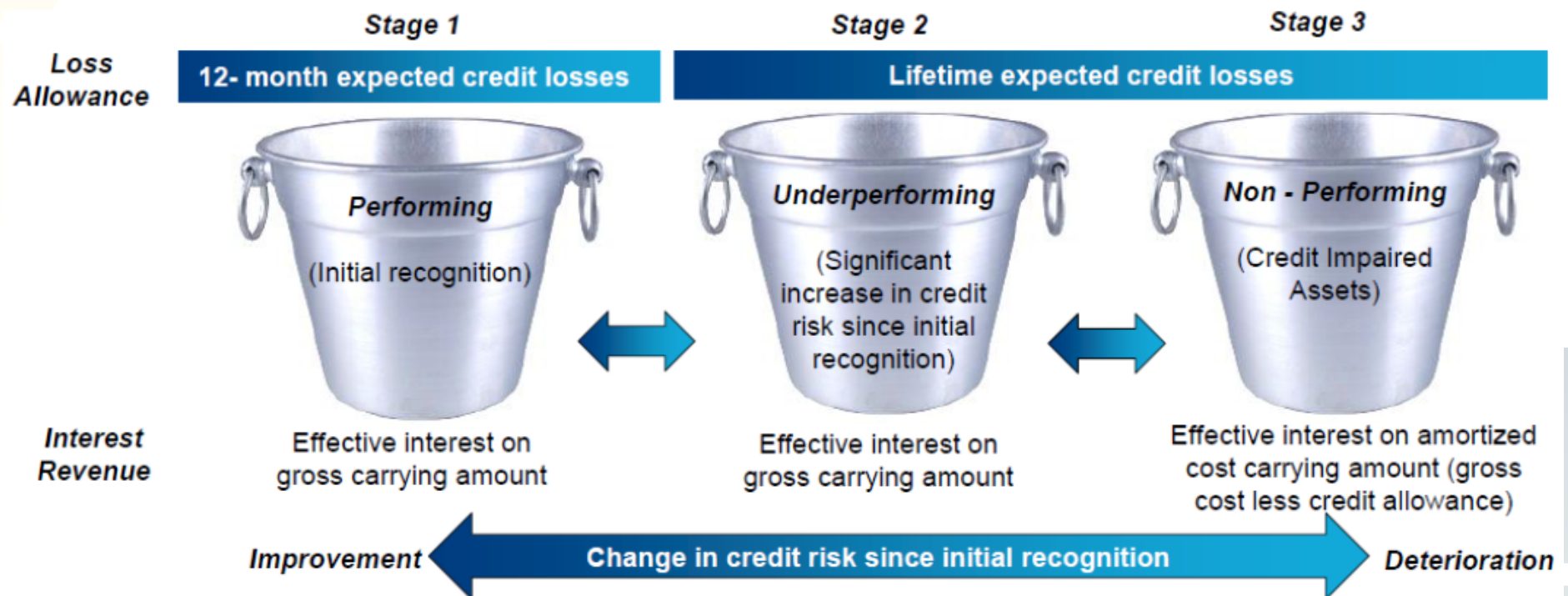


# Criteria for classification and measurement





# Summary of Expected Credit Loss Model (General Approach)



# New disclosure requirements

- Ongoing
  - Classification and measurement policies (incl' Bus Model)
  - Impairment (Policies, quantitative info' on loss calc's and a reconciliation of the expected credit loss allowance)
  - Hedging (policies and narrative and quantitative info' about strategies, objectives, instruments, reserves and ineffectiveness)
- On adoption
  - Narrations (Explaining choices, designations, reasons and how classifications applied for each instrument. Comparative policies if Cumulative Approach adopted on transition. )
  - Reconciliations of quantitative information in a tabular form

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(Remember – *AASB 7 Financial Instruments: Disclosures* applies)

## Reconciliation of financial instruments on adoption of AASB 9

On the date of initial application, 1 January 2018, the financial instruments of the Group were reclassified as follows:

	Notes	Measurement Category		Carrying Amount		
		Original AASB 139 category	New AASB 9 category	Closing balance 31 December 2017 (AASB 139)	Adoption of AASB 9	Opening balance 1 January 2018 (AASB 9)
		\$'000	\$'000	\$'000	\$'000	\$'000
<b>Assets</b>						
<b>Current financial assets</b>						
Trade and other receivables	12	Amortised cost	Amortised cost	23,441	(22)	23,419
Derivative instruments (not used for hedge accounting)	13.7	FVPL	FVPL	212	-	212
Derivatives - Hedge accounting applied	13.7	Fair value with effective movements included in cash flow hedge reserve	Fair value with effective movements included in cash flow hedge reserve	230	-	230

AASB 7.42I (a),(b)  
AASB 108.8.28(f)

Reconciliation of the statement of financial position balances from AASB 139 to AASB 9 at 1 January 2018:

	AASB 139 carrying amount 2017 \$'000	Re- classification \$'000	Re- measurement \$'000	AASB 9 carrying amount 2018 \$'000
<b><del>Held to maturity</del></b>				
Closing balance 31 December 2017	1,189			
To amortised cost		(1,189)		
Opening balance 1 January 2018 - AASB 9	<b>1,189</b>	<b>(1,189)</b>	-	<b>-</b>
<b>Amortised cost</b>				
Closing balance 31 December 2017 - AASB 139	34,638			
From Available for sale (AFS) - government bonds		1,189		
Impairment - receivables			(22)	
Impairment - government bond			(30)	
Opening balance 1 January 2018 - AASB 9	<b>34,638</b>	<b>1,189</b>	<b>(52)</b>	<b>35,775</b>

Reconciliation of equity for the impact of AASB 9 at 1 January 2018:

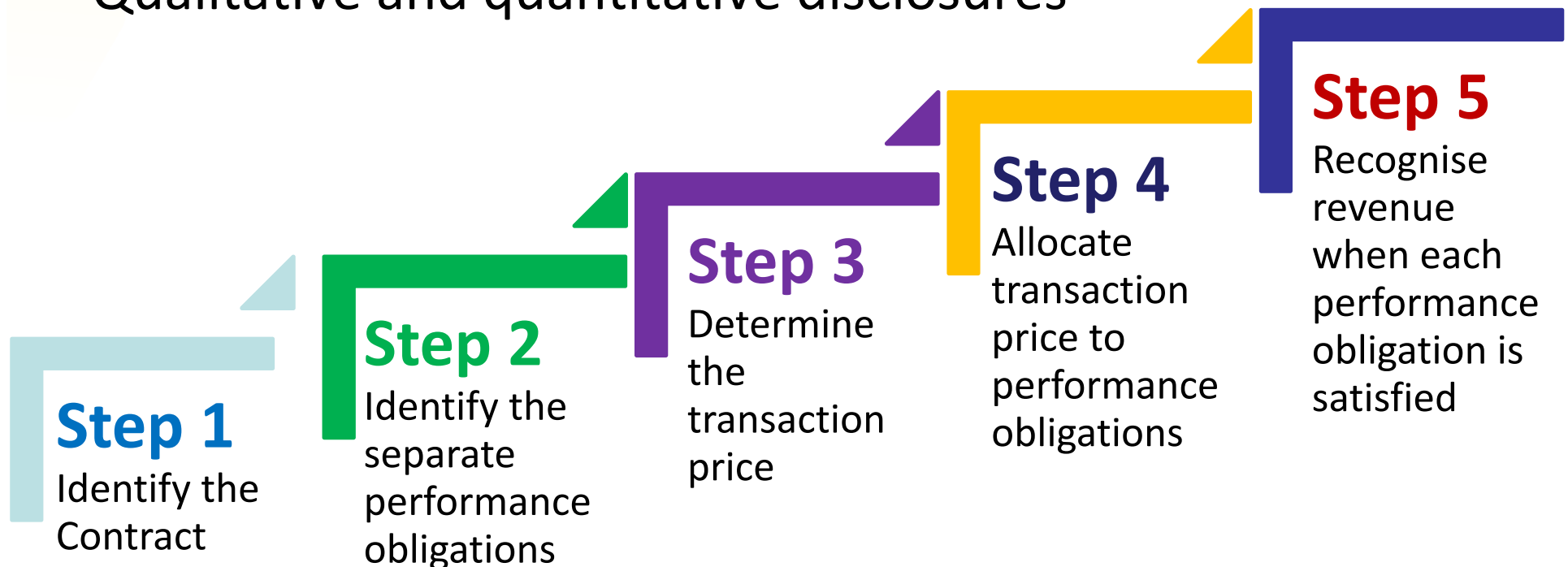
Impacted area	AFS financial assets reserve	FVOCI reserve	Retained earnings
	\$'000	\$'000	\$'000
Closing balance 31 December 2017 - AASB 139	(22)	-	37,282
Reclassify listed equities from AFS to FVPL	22	-	(22)
Remeasurement - unlisted equities XY Ltd	-	-	27
Impairment - receivables	-	-	(22)
Impairment - government bonds	-	-	(30)
Opening balance 1 January 2018 - AASB 9	-	-	37,235



# AASB 15: Revenues from Contracts with Customers

## The 5 Revenue Steps

- Recognise revenue for the **transfer of promised** goods or services in **an amount that reflects the consideration** to which **the entity expects to be entitled** to in exchange
- Qualitative and quantitative disclosures



# AASB1058: Income for Not-For-Profit Entities

Deals with:

a) Transactions where consideration to acquire an asset is significantly less than fair value, principally to further NFP objectives

1. Assets received below fair value
2. Transfers to acquire or construct
3. Grants
4. Non-contractual statutory income
5. Peppercorn leases

b) Receipt of volunteer services.

## Amending Standard AASB 2018 – 8: *Right-of-use Assets of Not-for-Profit Entities*

- **Temporary options** when measuring ROU assets arising from leases that have significantly below-market terms and conditions principally to enable the entity to further its objectives

NFPs lessees can elect to:

- FV per *AASB 13 Fair Value Measurement*; **or**
- Cost in accordance with AASB 16
- Option applies **both** on transition and new leases
- Additional qualitative and quantitative disclosures





## AASB 16: *Leases*

- Leased assets and liabilities to be recognised on the Balance Sheet
- Measured at the present value of unavoidable lease payments

Not included -

- Leases of low-value assets (approx. \$10,000)
- Short-term assets (<12 months)

Excluded -

- Variable lease payments
- Optional payments (not reasonably certain)

- Leased/Right-of-use Asset (Depreciated)
- Lease Liability (Lease & Finance Exp)

- Departments –Draft TI FC19 Leases – Approvals/accounting

## Client Reference Information:

### Change to Submission of Financial Statement Requirements 2018

- [Management Certification To Be Provided by Those Responsible for Financial Reporting At The Time of Submission Of Financial Statements.pdf](#)
- [Management Certification To Be Provided by Those Responsible for Financial Reporting At The Time of Submission Of Financial Statements.docx](#)
- [Financial Statements Submissions Checklist \(Updated July 2018\)](#)

### Other Client Information

- [AASB 119 Employee Entitlements 30 June 2019 – \(Updated to April\)](#)
- [AASB 124 Related Parties for Councils February 2017](#)
- [AASB 124 Related Party Disclosures – Your Questions Answered](#)
- [Guidance to Local Government Councils on calculating Underlying Result \(revised June 2017\)](#)
- [Guidelines for Tas Gov Businesses – Director & Executive Remuneration – Disclosure Template \(Updated May 2019\)](#)
- ~~[TAO Local Gov Model Accounts 30 June 2018 \(Excel\)](#)~~

## Presentations, Seminars and Information Sessions

### Client Seminar 2019

- [Client Seminar Presentation 2019 – Hobart – Handouts](#)
- [Accounting Standards Update – Slides](#)
- [Pilot Project – Slides](#)
- [Audit Update – Slides](#)
- [Recently Tabled Performance Audits – Slides](#)
- [Client Seminar Presentation \(TAO Presentation Slides Only\) 2019 – Handout](#)



# Disclosure Update

## Template updated by Advisory Panel

2019 Executive Remuneration

Name	Position	Period	Base Salary <sup>1</sup> \$'000	Short-Term Incentive Payments <sup>2</sup> \$'000	Superannuation <sup>3</sup> \$'000	Vehicles <sup>4</sup> \$'000	Other Monetary Benefits <sup>5</sup> \$'000	Other Non-Monetary Benefits <sup>6</sup> \$'000	Total Remuneration Package <sup>9</sup> \$'000	Termination Benefits <sup>7</sup> \$'000	Other Long- Term Benefits <sup>8</sup> \$'000	Total \$'000
Mr J Napier	Chief Executive Officer	Full year	270	25	44	25	2	2	368	0	5	373
Mr O C Cobblepot	General Manager Safety	Full year	130	0	20	8	0	1	159	0	14	173
Prof. J Crane	General Manager Research	Full year	175	12	28	6	0	0	221	0	1	222
Mr H Dent	Director Project Delivery	Full year	165	0	25	16	0	0	206	0	(14)	192
Mr V Fries	General Manager Cold Storage	To 28/2/2019	145	0	34	5	0	0	184	81	(55)	210
Dr. P Isley	Director - Distribution	Full year	145	12	24	12	2	0	195	0	(11)	184

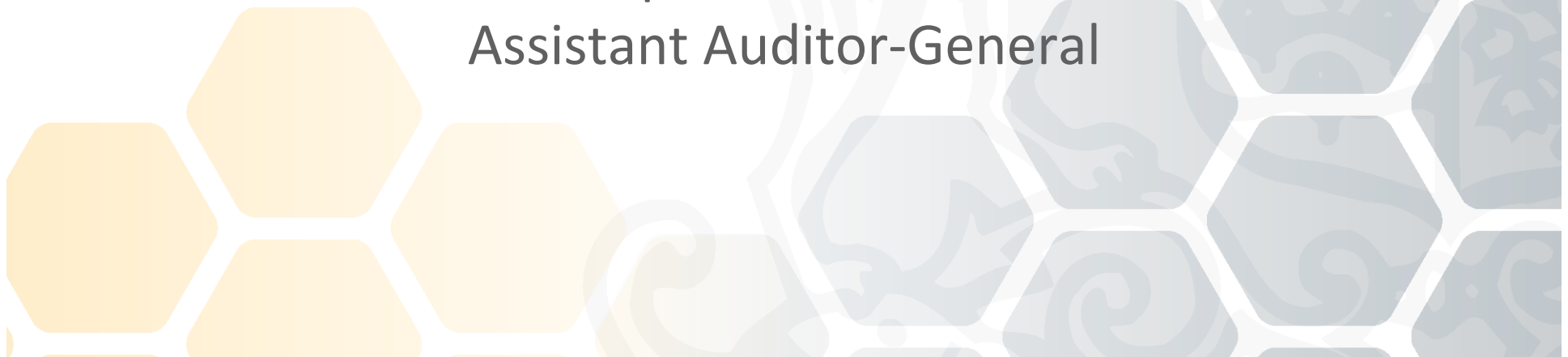
- “Other Non-Monetary Benefits” now part of “Total Remuneration Package”
- Only termination benefits & leave movements outside “Total Remuneration”
- Definition Updates - “Other Monetary Benefits” & “Other Non-Monetary Benefits”
- Applies this year
- Revised template available on TAO Website
- Comparatives to be presented into new layout.  
(\$ remain unchanged)



# Tasmanian Audit Office

Audit Update

Stephen Morrison  
Assistant Auditor-General



# Outline

- Audit findings and key and significant risk areas
- Audit focus and changes 2019
- Are subsidiaries State entities?
- Do you have internal controls in place to protect against fraudulent email/communication attempts?
- Some resources



## Outcomes of audits



## 2018 Audit Findings by area

	High Risk	Moderate Risk	Low Risk	Total
Assets	3	14	7	24
IT Security	0	6	8	14
Expenditure	1	4	3	8
Payroll	0	3	15	18
Revenue/Debtors	0	2	3	5
Other	7	37	23	67
<b>Total</b>	<b>11</b>	<b>66</b>	<b>59</b>	<b>136</b>

## 2018 Audit Findings by sector

	High Risk	Moderate Risk	Low Risk	Total
General Government Sector	1	13	14	28
Government businesses	3	16	14	33
Local government	7	35	27	69
Other	0	2	4	6
<b>Total</b>	<b>11</b>	<b>66</b>	<b>59</b>	<b>136</b>



# PPE valuation – Common challenges

1. Determining the valuation approach with consideration for highest and best use
2. Identifying the significant parts of an infrastructure asset
3. Deciding whether to use greenfield or brownfield costs
4. Reviewing useful lives and residual values
5. Utilising condition ratings appropriately
6. Reviewing and documenting valuation assumptions and inputs





# Other matters

## Asset recognition/de-recognition or valuation

Found assets	➤ Prior period error
Land transfers	➤ Asset recognised at fair value in income statement
Scrapped or demolished assets	➤ Derecognised
Damaged assets	➤ Reduced useful life or derecognised
Assets held for sale	➤ Reclassify, market valuation
Impairment (NFP)	➤ Replaced by obsolescence

# Audit focus 2018-19

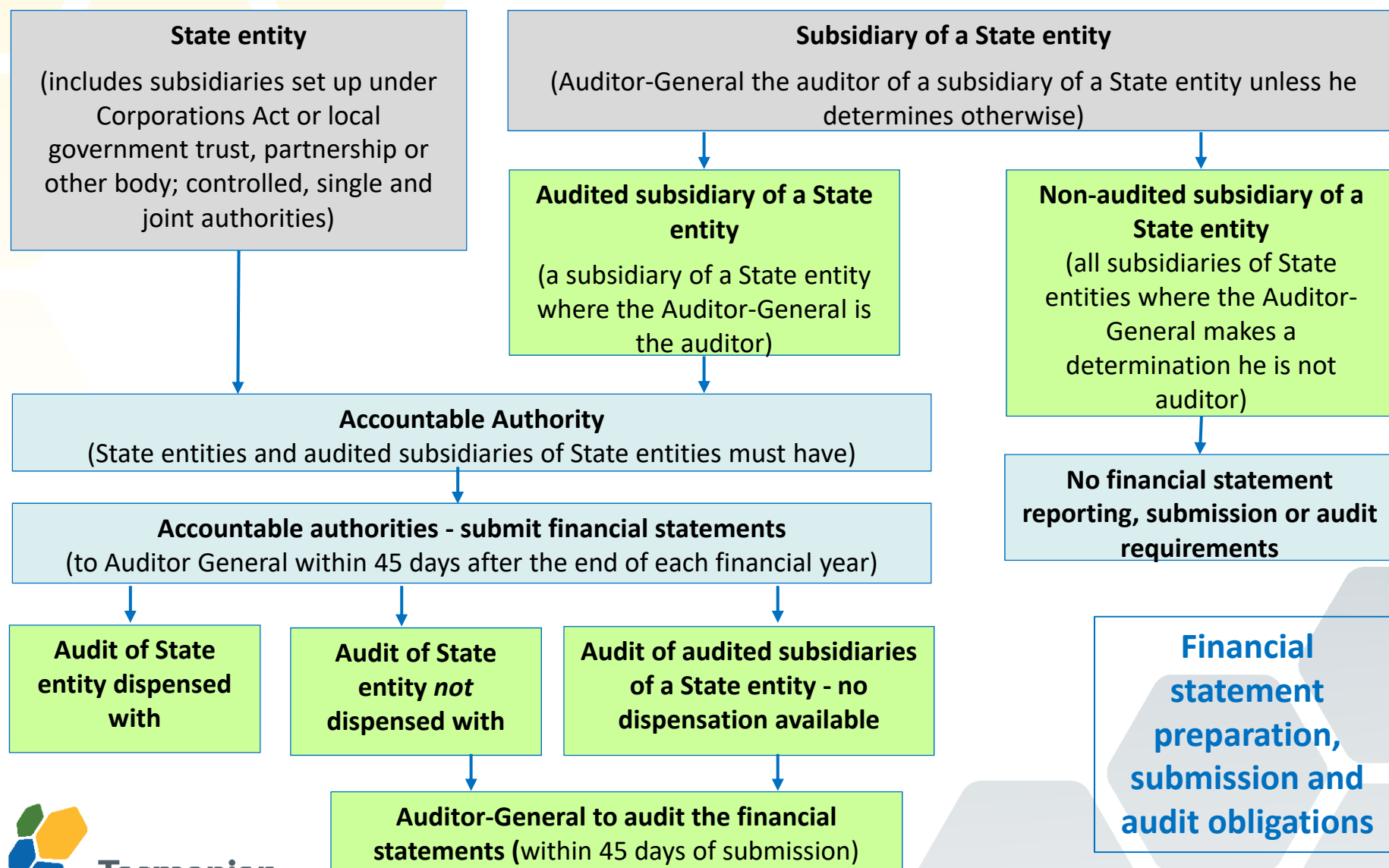
- Inclusion of key audit matters in opinions for all councils
- Greater focus on IT controls
- Bringing work forward, especially asset revaluations
- Focus on:
  - Asset WIP capitalisation policy – overhead allocations
  - Valuations
  - Asset lives – determination and consistency
  - Prior period errors
- Report to Parliament -
  - Capital expenditure – explanations for not achieving capital expenditure plans

# Are subsidiaries State entities?

- If an entity is a State entity in its own right, it will not be a subsidiary of a State entity, regardless of the relationship it has with another State entity.
- Subsidiary incorporated under Corporations Act that is controlled by a State authority falls into the meaning of a State owned company = State entity
- Body or authority established under section 21 (corporation, trust, partnership or other body), section 29 (controlling authorities) or 30 (single or joint authorities) of LGA 1993 = State entity

So what does this all mean?

# Are subsidiaries State entities?





Do you have internal controls in place to protect against fraudulent email/communication attempts?

Public sector entities have recently received emails or other communications where fraud was attempted by requesting changes to the bank account details of employees or suppliers.

Do you have internal controls in place to protect your organisation against fraudulent email/communication attempts?

**Here's what you can do to help prevent frauds**

- Conduct a risk assessment and verify legitimacy of any changes in employee or supplier bank account details recently processed.
- Take the following steps for change requests:
  - treat with suspicion
  - have effective verification controls (in place and tested)
  - authenticate directly with the employee or supplier
  - segregate access privileges
  - introduce controls immediately.

# Useful resources

## Tasmanian Audit Office:

### Guide to Using our Reports

- [Guide to the Auditor-General's Report on the Financial Statements of State Entities](#)

## Client Reference Information:

### Change to Submission of Financial Statement Requirements 2018

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# Useful resources

## Presentations, Seminars and Information Sessions

### Client Seminar 2018

- [Accounting Issues – Slides](#)
- [Accounting for Property, Plant and Equipment – Slides](#)
- [New Standards \(AASB 16 Leases\) – Slides](#)
- [Changes for 30 June 2018 and New Standards – Slides](#)
- [Client Seminar Presentation 2018 – Handout](#)

### Information Session for Senior Management and Members of Audit Committees 2018

- [Managing Conflicts of Interest – Richard Bingham, Integrity Commission](#)
- [Standards Update and Audit Findings – Jeff Tongs and Stephen Morrison](#)
- [Case studies about public sector corruption – Mark Eady, Derwent Valley Council](#)
- [Contentious Accounting Issues and Tasmanian Audit Office Matters – Rod Whitehead](#)
- [2018 Information Session for Senior Management and Members of Audit Committees – Handout](#)
- [2018 Information Session for Senior Management and Members of Audit Committees – Program](#)





# Useful resources



<https://www.audit.tas.gov.au/publication/local-government-authorities-2017-18/>



**Tasmanian**  
Audit Office

LOCAL GOVERNMENT COMPARATIVE ANALYSIS Comprehensive Income Statements - 2016-17								
Council	Operating Revenue * \$'000s	Non-Operating Revenue * \$'000s	Total Revenue \$'000s	Operating Expenditure \$'000s	Non-Operating Expenditure ** \$'000s	Total Expenditure \$'000s	Underlying Surplus/(Deficit) \$'000s	Net Surplus/(Deficit) \$'000s
<b>Urban medium</b>								
Clarence	63 015	11 980	74 995	58 212	0	58 212	4 803	16 783
Glenorchy	54 002	4 378	58 380	53 399	5 656	59 055	603	(675)
Hobart	126 006	7 381	133 387	124 869	0	124 869	1 137	8 518
Kingborough	38 510	5 613	44 123	38 896	231	39 117	(376)	5 006
Launceston	103 102	135 536	238 638	101 841	5 612	107 453	1 261	131 185
UM Total 2016-17	384 635	164 888	549 523	377 207	11 499	388 706	7 428	160 817
UM Average per Council 2016-17	76 927	32 978	109 905	75 441	2 300	77 741	1486	32 163
<b>Urban small</b>								
Brighton	14 359	3 416	17 775	14 349	0	14 349	10	3 426
Burnie	35 541	4 851	40 392	36 485	5 333	41 818	(944)	(1 426)
Central Coast	26 416	6 163	32 579	24 988	233	25 221	1428	7358
Devonport	39 773	7 600	47 373	38 548	737	39 285	1 225	8 088
West Tamar	24 433	34 469	58 902	22 331	826	23 157	2 102	35 745
US Total 2016-17	140 522	56 499	197 021	136 701	7 129	143 830	3 821	53 191
US Average per Council 2016-17	28 104	11 300	39 404	27 340	1426	28 766	764	10 638
<b>Rural agricultural, very large</b>								
Derwent Valley	12 951	1 709	14 660	11 858	0	11 858	1093	2802
Huon Valley	24 136	2 691	26 827	23 129	0	23 129	1007	3 698
Meander Valley	19 325	5 748	25 073	17 836	708	18 544	1489	6 529
Northern Midlands	17 096	4 608	21 704	17 774	793	18 567	(678)	3 137
Sorell	17 177	3 579	20 756	17 128	0	17 128	49	3 628
Waratah-Wynyard	17 615	3 737	21 352	17 481	443	17 924	134	3428
RAVL Total 2016-17	108 300	22 072	130 372	105 206	1 944	107 150	3 094	23 222
RAVL Average per Council 2016-17	18 050	3 679	21 729	17 534	324	17 858	516	3 870
<b>Rural agricultural, large</b>								
Break O'Day	13 757	2 742	16 499	13 145	458	13 603	612	2 896
Circular Head	14 122	3 627	17 749	13 837	163	14 000	285	3 749
Dorset	12 609	3 768	16 377	10 964	293	11 257	1 645	5 120
George Town	10 622	1 620	12 242	11 735	(128)	11 607	(1 113)	635
Kentish	9 436	7 317	16 753	9 336	2 701	12 037	100	4716
Latrobe	12 418	3 813	16 231	11 902	139	12 041	516	4190
Southern Midlands	10 233	3 460	13 693	10 211	0	10 211	22	3482
RAL Total 2016-17	83 197	26 347	109 544	81 130	3 626	84 756	2067	24 788
RAL Average per Council 2016-17	11 885	3 764	15 649	11 590	518	12 108	295	3541
<b>Rural agricultural, small and medium</b>								
Central Highlands	6 550	2 693	9 243	6 430	62	6 492	120	2 751
Flinders	4 331	1 411	5 742	5 456	0	5 456	(1 125)	286
Glamorgan Spring Bay	12 495	5 574	18 069	12 109	0	12 109	386	5960
King Island	6 387	1 552	7 939	7 214	0	7 214	(827)	725
Tasman	6 386	975	7 361	5 482	0	5 482	904	1 879
West Coast	10 764	1 548	12 312	10 211	253	10 464	553	1 848
RASM Total 2016-17	46 913	13 753	60 666	46 902	315	47 217	11	13 449
RASM Average per Council 2016-17	7 819	2 292	10 111	7 817	53	7 870	2	2 242
<b>Total 2016-17</b>								
Average per Council 2016-17	763 567	283 559	1 047 126	747 146	24 513	771 659	16 421	275 467
	26 330	9 778	36 108	25 764	845	26 609	566	9 499



# Tasmanian Audit Office

Pilot Project - ED 01/18 Proposed Auditing  
Standard ASA 315 *Identifying and Assessing  
the Risks of Material Misstatement*

Rod Whitehead  
Auditor-General



# Outline

- Proposed auditing standard ASA 315 future changes
- ASA 315 pilot project objectives
- Pilot participants
- Materiality
- Risks of material misstatement
- Controls to mitigate the risks

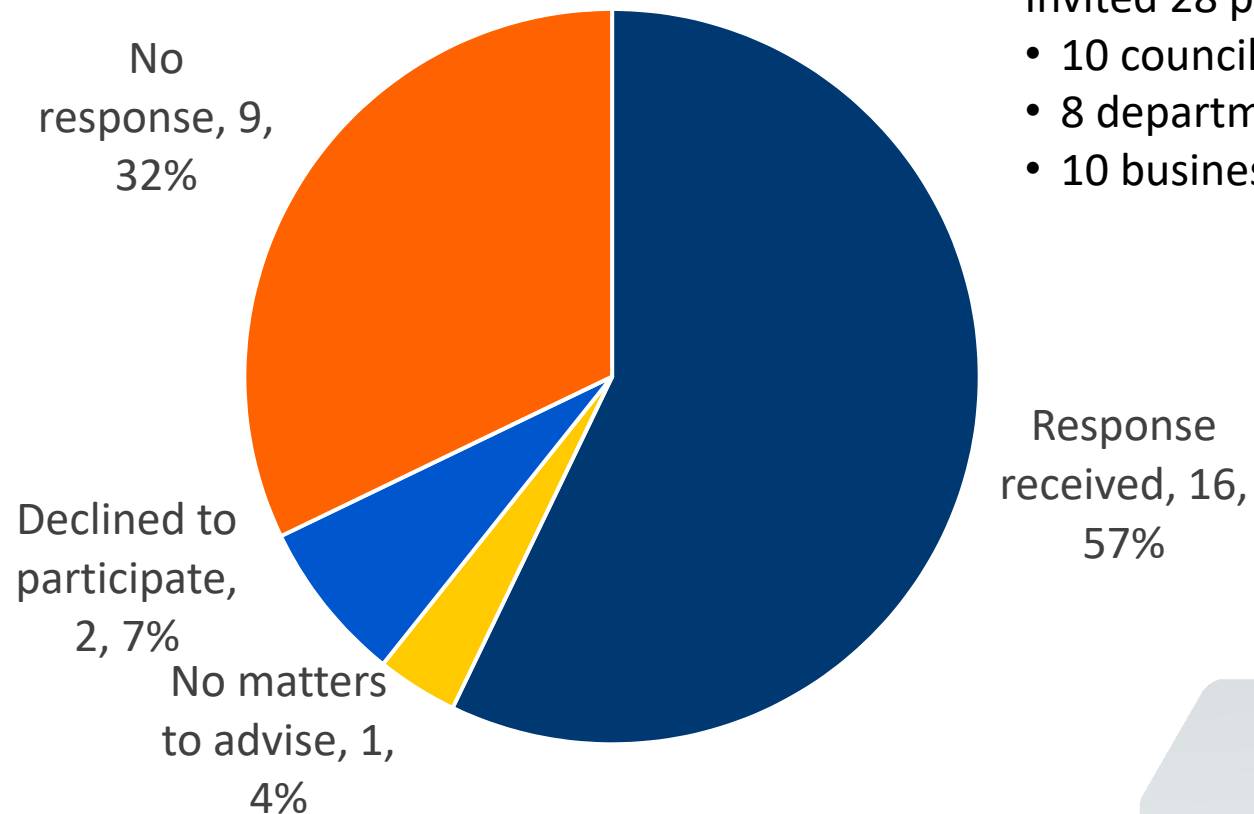
# Proposed ASA 315 future changes

- Exposure draft released August 2018
- Proposed to be operative for financial reporting periods commencing on or after 15 December 2020
- Improved understanding of the risk identification process
- Promote a more robust process for the identification and assessments of the risks of material misstatements
- Revised definition of “significant risk”
- Enhanced and clarified identification of relevant controls
- Paragraphs 29 – 31 – auditor evaluation of identified risks and risk assessment process

# ASA 315 pilot project objectives

- Objective - to understand entities' assessment of:
  - what is material in the context of the financial report
  - risks that could result in material misstatements the financial report
  - controls relied upon to address those risks
- Expected outcomes:
  - comparison of views around the determination of materiality
  - 'gaps' in the identification of risks relevant to financial reporting
  - potential deficiencies in entity risk assessment processes

# Pilot participants



Invited 28 participants:

- 10 councils
- 8 departments
- 10 businesses

# Who is responsible for establishing thresholds for materiality for financial statement reporting?

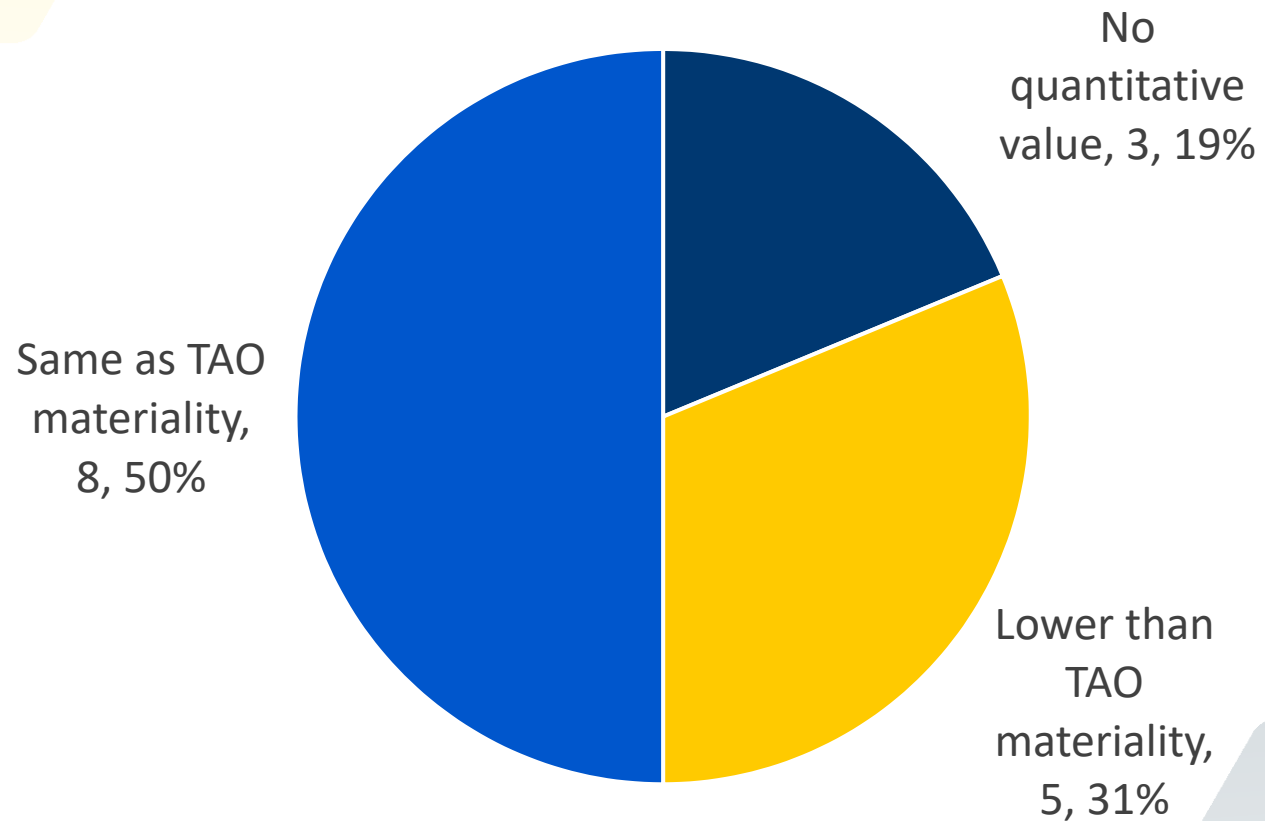
a) Management

b) Internal audit

Audit Committee/Panel,  
TCWG

External auditor

# Materiality





# Materiality

- Should materiality be quantified?

“Materiality assessed on both the nature and/or magnitude of information that could misstate or obscure information”

- Should different materiality amounts be used?

“We look at each financial item and determine what we think is an appropriate materiality given its size and nature and resulting impact on the financial statements. Therefore we don't have just one dollar amount we use to determine materiality as it will be different for every type of financial item.”

# Materiality

- Should materiality be based on prior year information or using current year budget or forecast information?

‘Materiality 1% of 2017-18 actual expenditure adjusted for activities transferred as part of machinery of government changes’

- Are other non-financial reporting indicators appropriate for assessing misstatements in the financial statements?

‘Materiality based on the amount used for Major Risk in the risk management policy rating table’

- Does your entity have a stated position on assessing the impact of misstatements in the financial report?

# Who is responsible for identifying risks of misstatement (errors or non-disclosures) in the financial statements?

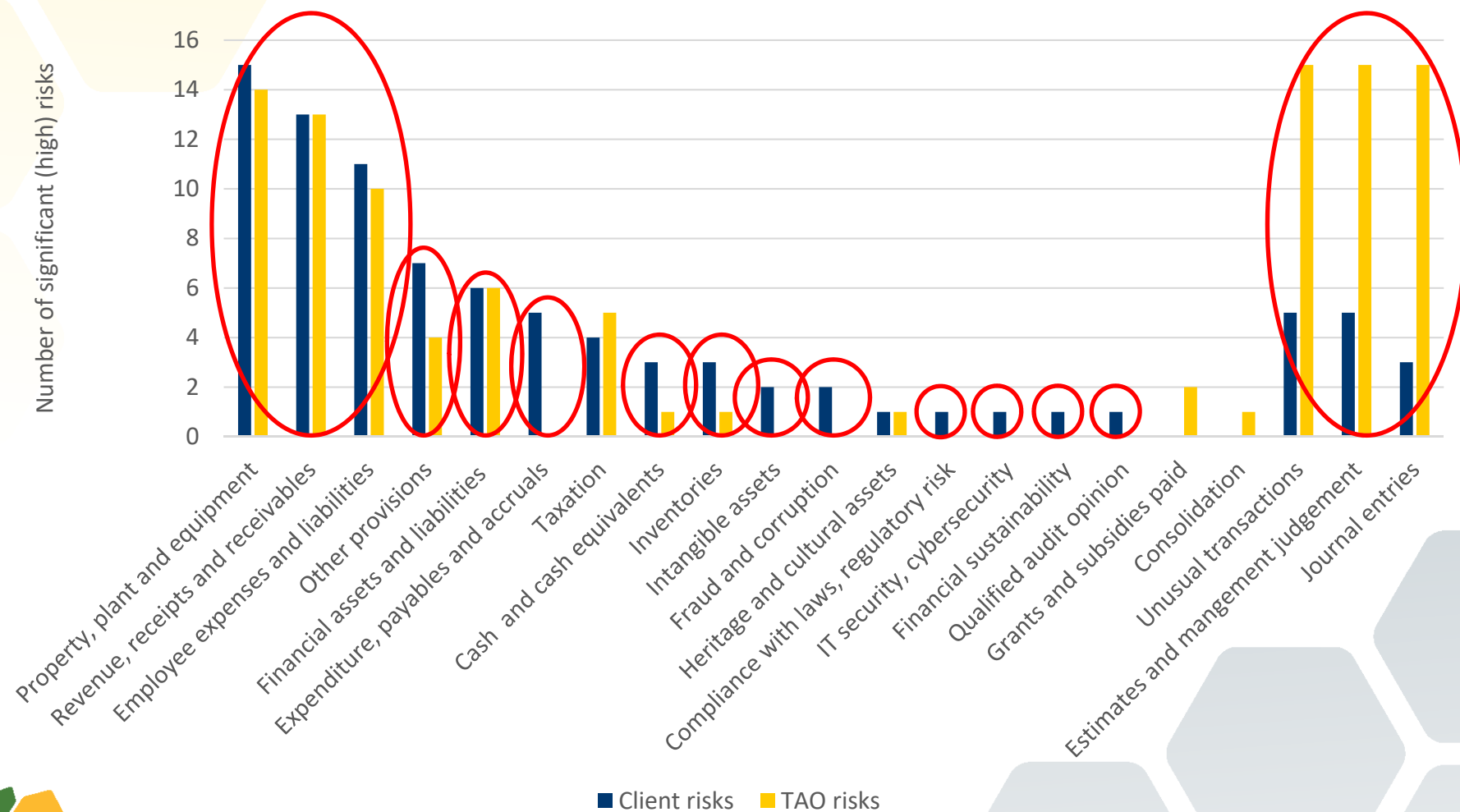
a) Management

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Audit Committee/Panel,  
TCWG

External auditor

# Risks of material misstatement



# Risks of material misstatement

Significant risks:

- possibility of, or exposure to, fraud
- recent significant economic, accounting or other developments
- complex transactions
- significant transactions with related parties
- subjectivity in the measurement of financial information related to the risk, e.g. valuations
- significant transactions that are outside the normal course of business for the entity, or appear to be unusual
- risks arising from IT

# Risks of material misstatement

Routine, non-complex transactions that are subject to systematic processing are less likely to give rise to significant risks.

Possibly not significant risks:

- risks relating to miscoding of transactions, incorrect recognition of transactions in correct financial year, incomplete transactions
- cash and cash equivalents (unless fraud risks are evident)
- 'Accuracy of financial reporting'

# Who is responsible for ensuring controls to prevent risks of misstatement (errors or non-disclosures) in the financial statements are working effectively?

a) Management

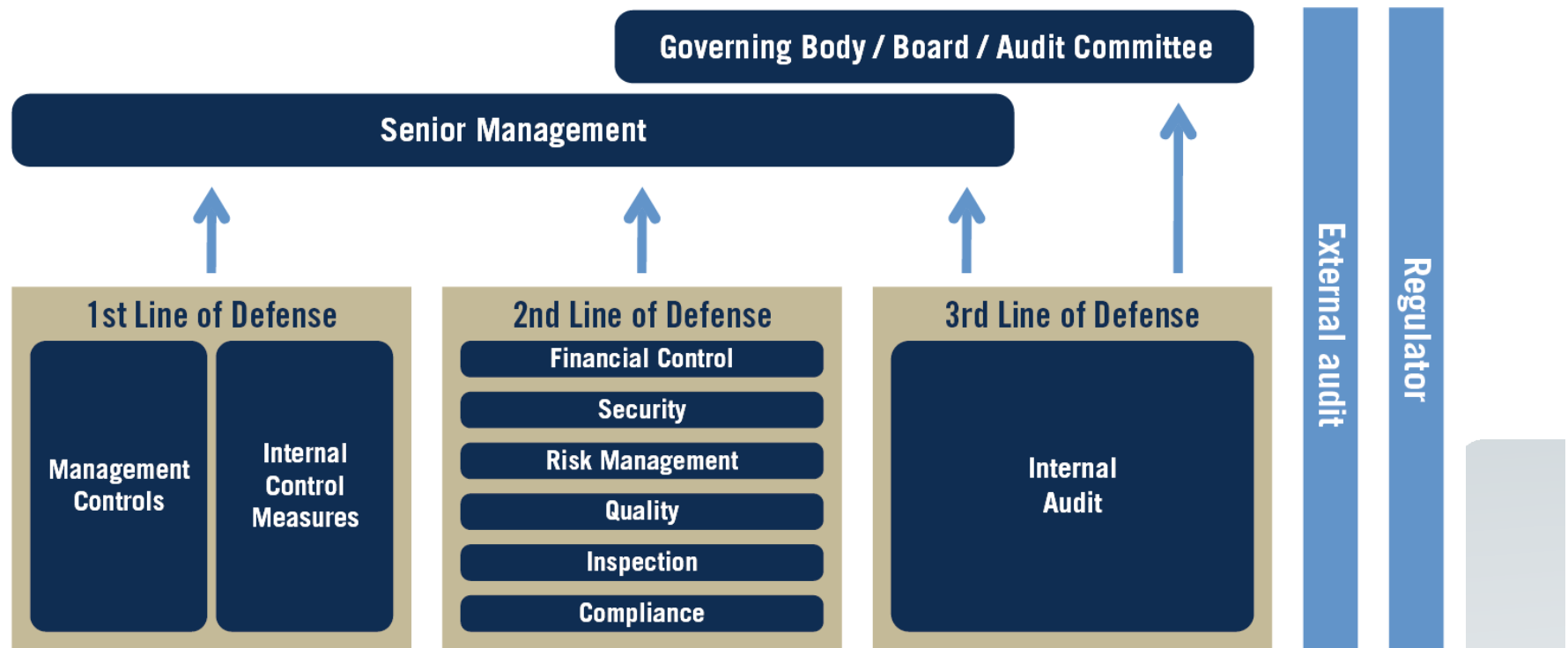
b) Internal audit

Audit Committee/Panel,  
TCWG

External auditor

# Controls

## The Three Lines of Defense Model





# Controls – ‘good’

- Segregation of duties
- Delegations
- Periodic reconciliations
- Review and approval of journals
- Management review
- Critical accounting estimates and judgements are reviewed and approved by Managers, Audit Committee, TCWG
- Reliance on internal audit
- Reliance on experts

# Controls – ‘better’

- System access controls and role security controls that govern access to (electronic) information
- System managed delegations
- Dual authorisation controls
- Staff training and acknowledgements/representations
- Calls to vendors to confirm vendor bank account changes
- Bank files uploaded by person with no access to financial system
- IT service continuity and incident management processes are in place and tested regularly
- Dedicated cybersecurity team established



# Controls – ‘hmm...’

- Descriptions of processes rather than controls
- Controls are not clearly defined, e.g. ‘monitoring of transactions’, ‘monitoring of Standards for compliance’, ‘financial statements are reviewed and approved’
- Controls do not appear to mitigate the risk, e.g. ‘revaluations and annual escalations are designed to provide an asset valuation that is as accurate as possible’
- Very high level of reliance on management review – any assurance this is happening?
- Reliance on experts – is the work of the expert assessed?
- Reliance on the TAO – beyond the three lines of defense!

# Time for a break



# Cybersecurity is a Business Risk

## Dr Glenn Lewis

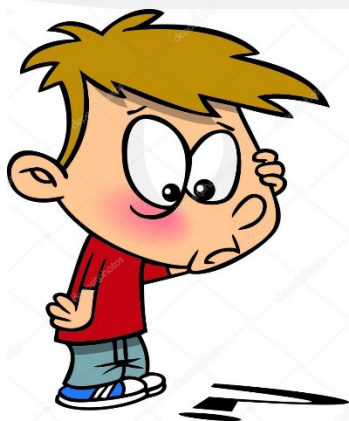
# Cybersecurity is a Business Risk



Dr Glenn Lewis  
Tasmanian Government CIO – Digital Strategy and Services  
Department of Premier and Cabinet  
May 2019



# Key Messages



- Cybersecurity is rated as one of the top five global threats.
- Attacks are increasing exponentially in frequency and sophistication.
- We are not immune.
- The risks are **BUSINESS RISKS** to your organisation.
- The risks **MUST** be considered by Audit & Risk Committees

Are your risks being appropriately managed?  
Is your organisation prepared?

# Cyber?

*adjective - relating to or characteristic of the culture of computers, information technology, and virtual reality*



Cyber Security

Cyber Incident

Cyber Attack

Cyber Space

Cyber Resilience

Cyber Crime

Cyber Crisis

Cyber Warfare

Cyber Threat





# CyberSecurity



## What is CyberSecurity?

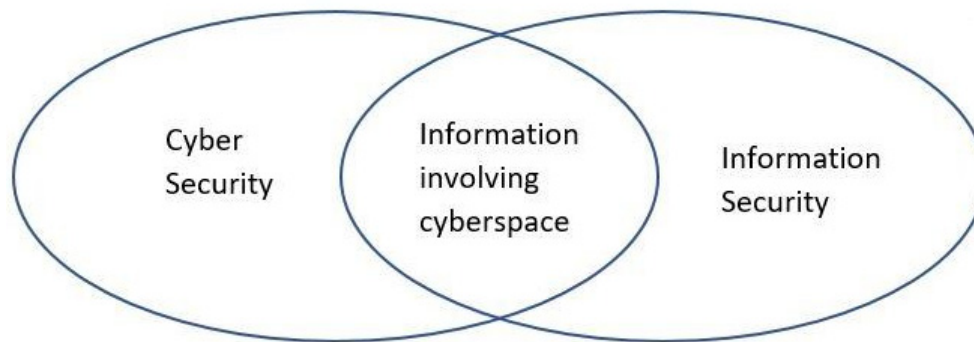
The body of technologies, processes and practices designed to protect networks, computers, programs and information from attack, damage or unauthorised access

Or in English....

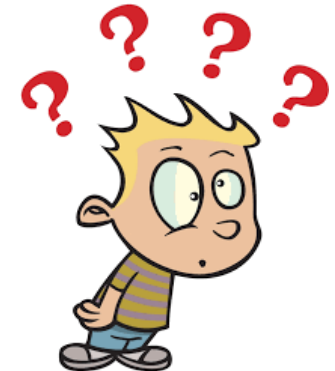
The things required to protect electronic information and services from threats.



# Cyber versus Information Security



- Information doesn't have to be on a computer to be in need of an information security system.
- Cybersecurity protects computer based information and services.



# Media reports on Cyber....



itnews NATIONAL VICTORIA

## Mal system Royal Melbourne Hospital attacked by damaging computer virus

By All Jan

One of Victoria's largest health networks is grappling with an unnamed strain of malware that attacked its Windows

Forbes

Billionaires Innovation Leadership Money Consumer Industry Life

12,486 views | Sep 9, 2018, 01:00pm

## 380,000 Passengers Affected By 'Malicious' British Airways Hack

itnews

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## Toyota Australia hit by cyber attack

By Ry Crozier Feb 21 2019

Takes down email and other systems.

nyrstar

Google+ LinkedIn Twitter Facebook

Nyrstar cyber attack

9NEWS LOCATION: Hobart, Tas Change

Just In Australia Votes World Business Sport Science Health Arts A

Print Email Facebook Twitter More

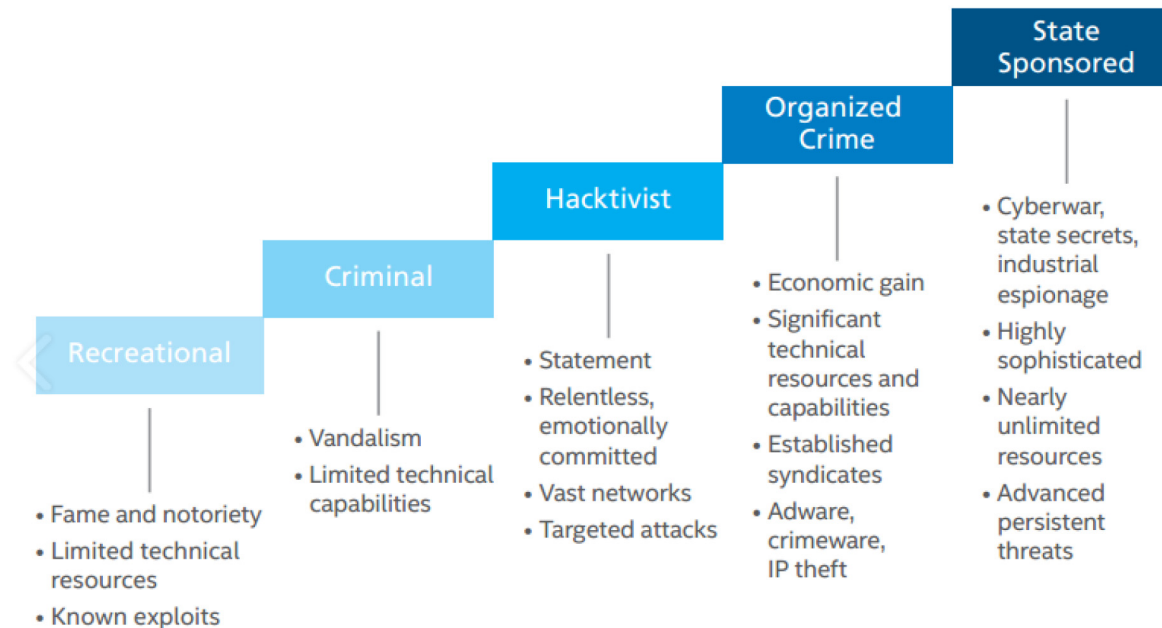
## Facebook cyber attack sees data stolen from 29 million accounts in its largest ever data theft

Updated 14 Oct 2018, 1:36pm

## PageUp data breach: thousands of job seekers' details potentially exposed

Software provider used by companies for job applications has been hacked

# Cyber Adversary Profiles



INCREASING RESOURCES AND SOPHISTICATION

The expansion of attacker types, their resources, and their sophistication.

Source: **McAfee Labs Threats Report, August 2015**



# Cyber Threats - Hacktivist



## HACKTIVIST

**LEADERSHIP:**  
Totally decentralized, but follows similar beliefs with others in the organization.

**MOTIVES:**  
Disrupt the status quo, make a point to government and large corporations, vigilante-ism, cyber protest, anarchy.

**CLAIMS TO FAME:**  
2016 NSA/Equation Group hacking toolkit leak, Project Chanology.

**KNOWN ASSOCIATES:**  
Anonymous, Shadow Brokers, LulzSec.

**METHODS:**  
Organized hacktivists specialize in DDoS attacks, using tools like HOIC or LOIC. The more advanced hacktivists rely on web application attacks (like SQLi) to steal data from certain targets, with the goal of embarrassing them or outing their faults.

WatchGuard

Source

<https://www.secplicity.org>

# Cyber Threats – Cyber Criminal

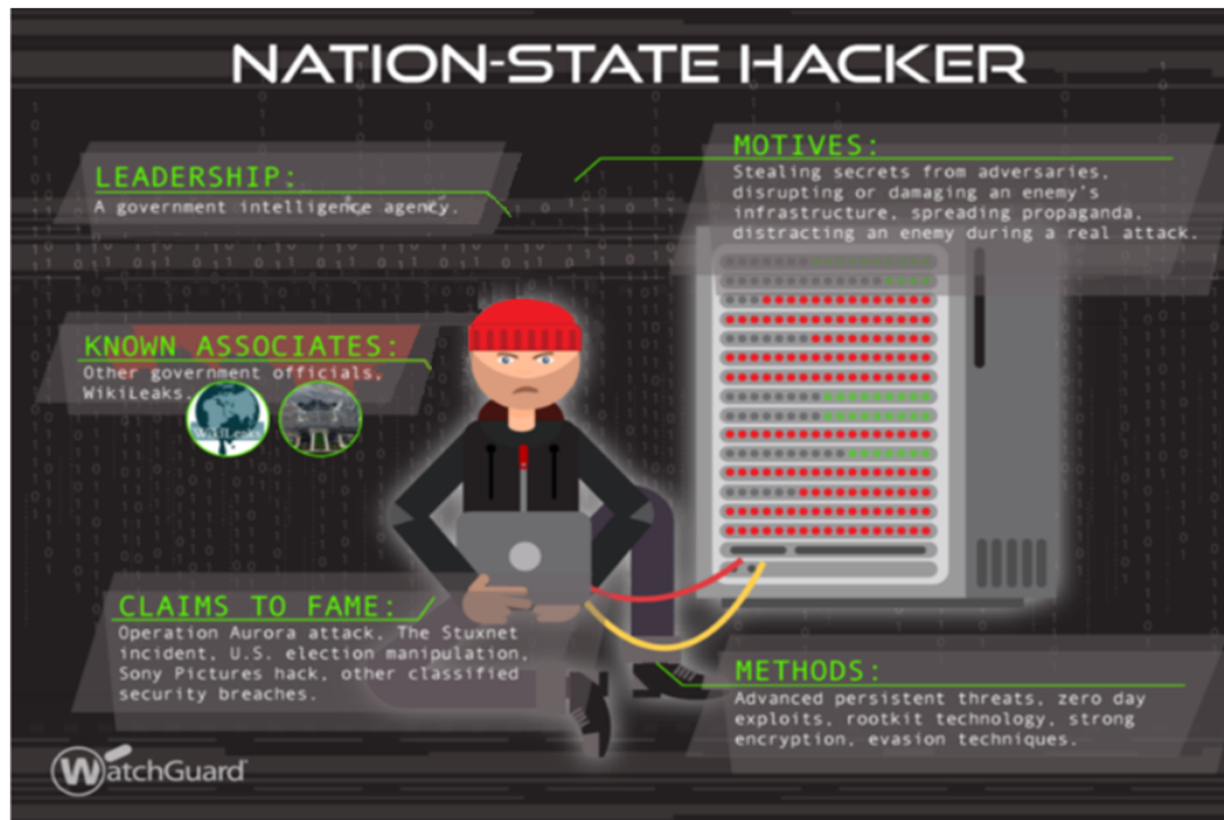


Source

<https://www.secplicity.org>



# Cyber Threats -Nation State Actor



Source

<https://www.secplicity.org>

# Cyber Attacks are a pervasive and endemic global threat:

- Global cost of cybercrime now \$600 billion annually
- Australians and businesses lose \$7 billion each year
- **Data Breaches** are common occurrences

Source [McAfee Economic Impact of Cybercrime— No Slowing Down 2018](#)





***Human Element....***

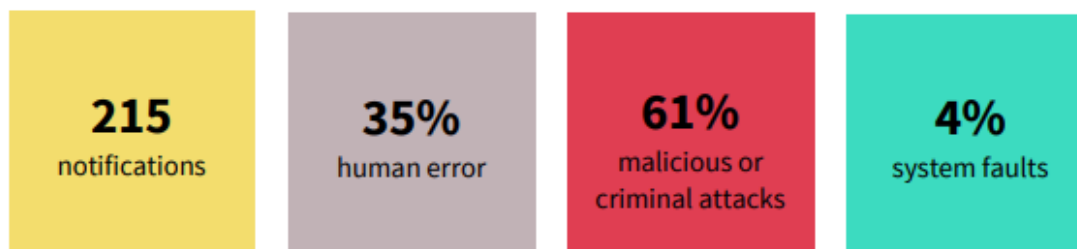
***A short video will be shown***



# First Quarter 2019 OAIC Reported



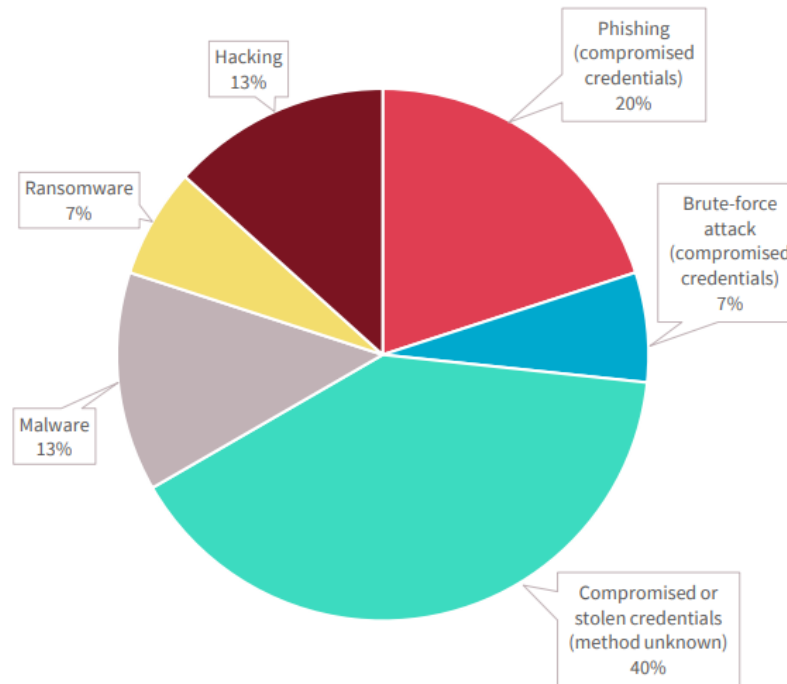
## Key statistics



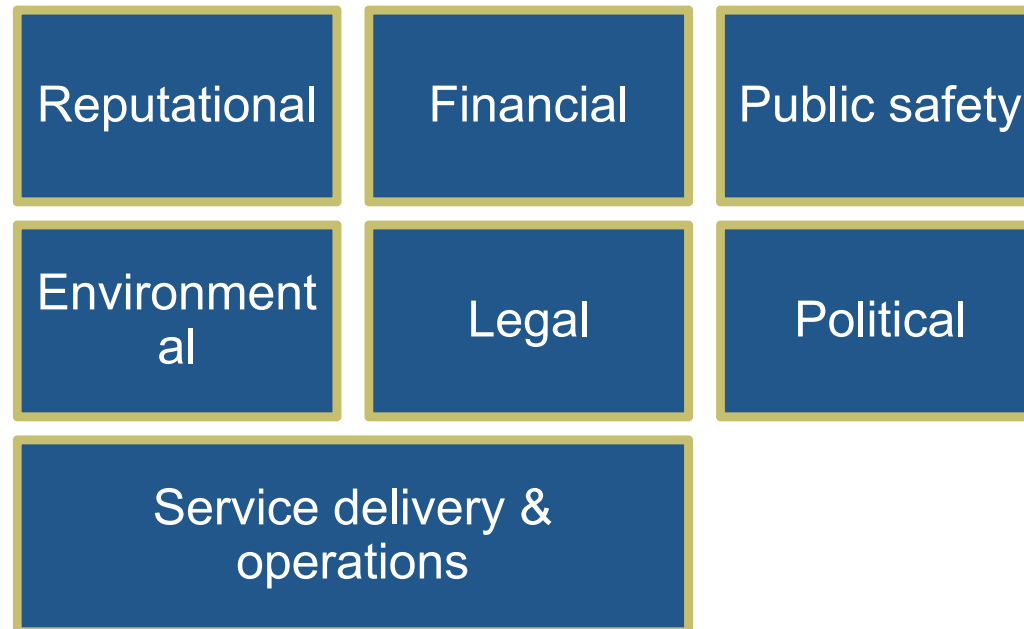
# First Quarter 2019 OAIC Reported



Chart 1.7 — Cyber incident breakdown — All sectors



The risks are ***Business Risks***



# **We are not immune!**



- PageUp Cybersecurity Incident
- Tas Electoral Commission Data Breach

## Let's Talk Risk Hypothetical Questions?

Would you go bush bashing and camping with this?  
That is likely to end up maybe something like this?



Something like this you would probably consider more appropriate?



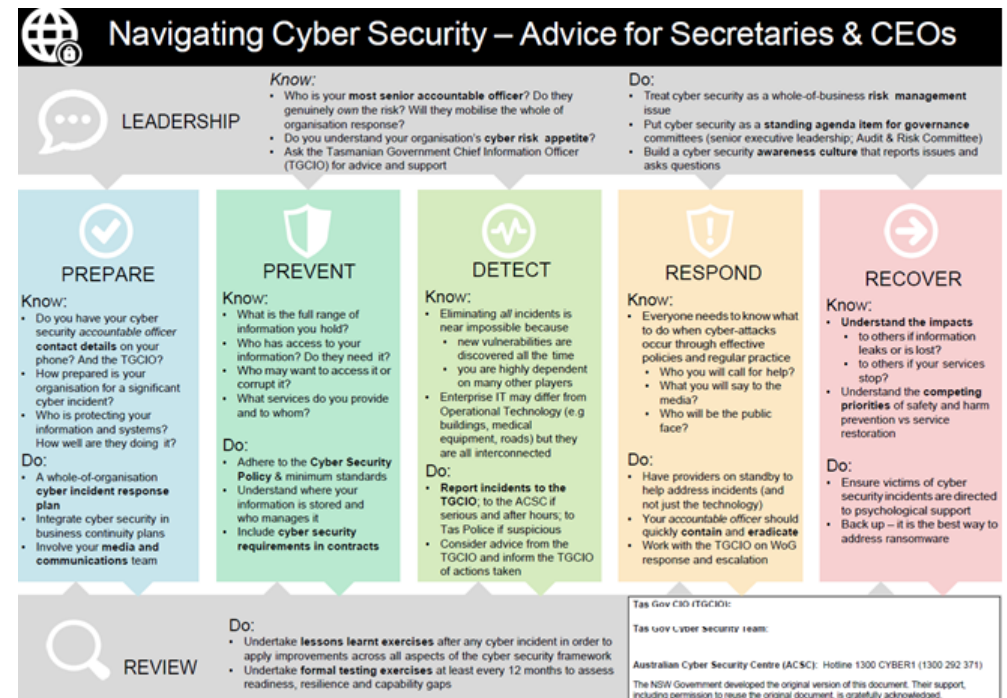
What about this, is it more appropriate?



If you were taking your family, does this change the way you think about it?

# Not *if* but *when*!

- Prepare
- Prevent
- Detect
- Respond
- Recover



# Cyber Resilience....

## What is Cyber Resilience?

*“The ability to prepare for, respond to and recover from adverse cyber events”*

How is this achieved?

### Defence in Depth!!

- Governance
- Education and awareness
- Policy, standards and processes
- Knowing what's important, why it is and what to protect
- Appropriate tools and technologies
- Plans to continue WHEN something does happens





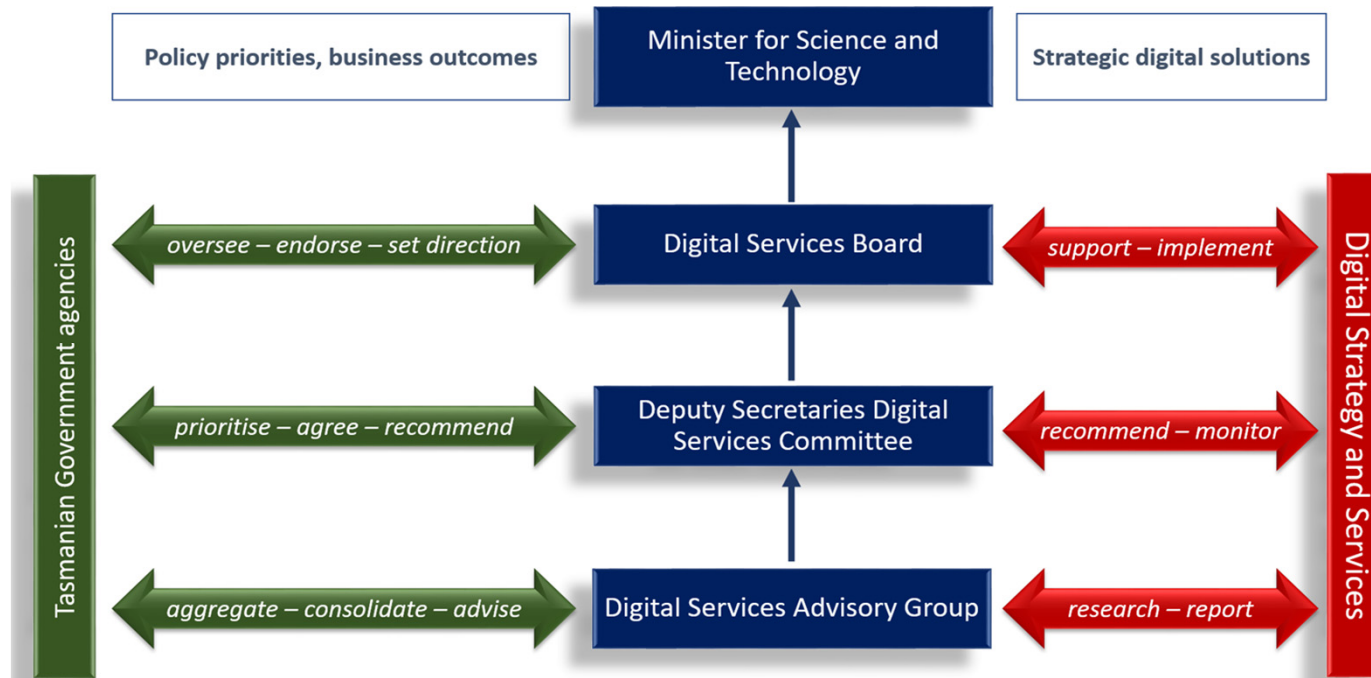
# Building our Resilience

Focus for the Tasmanian Government Cybersecurity team over the next 12 months is to lead Government by:

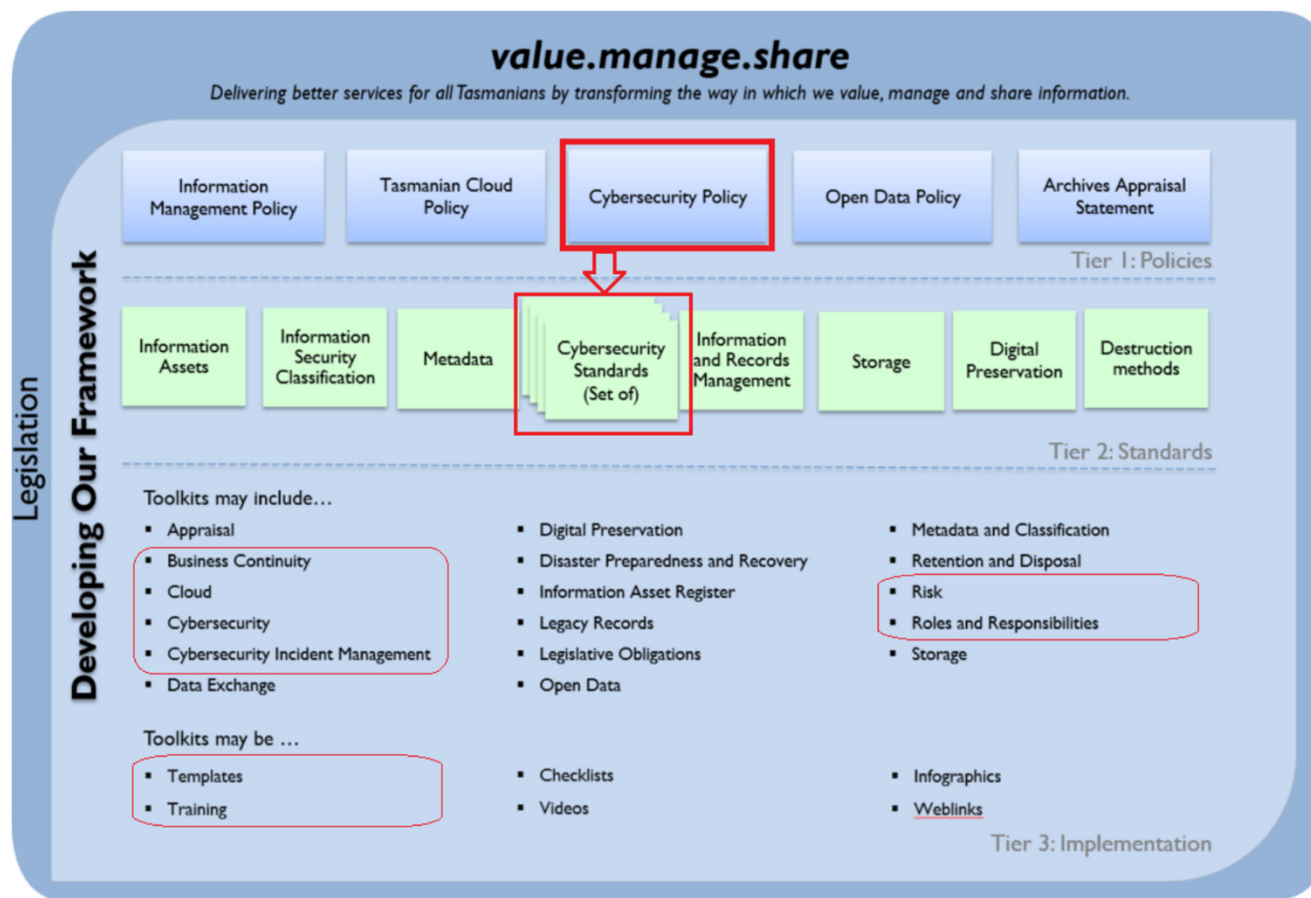
- Enhancing cybersecurity policies across Government
- Defining and implementing some baseline controls
- Developing cybersecurity leadership and culture
- Raising general security awareness across Government
- Holding targeted security training
- Identifying and protecting the things that are important
- Collaborating with Service Providers to enhance the cybersecurity posture of services provided to Government.



# Digital Governance Framework



# Information Management Framework



< Why

< What

< How



In the pipeline we have:

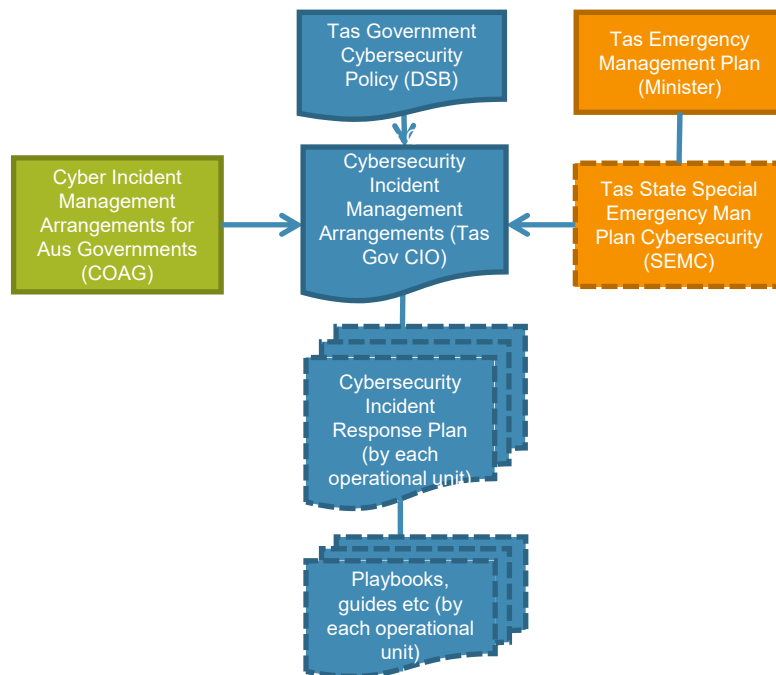
- Cyber standards
- Updated Cloud policy
- Information Mgt Policy
- Information Classification Standard

# Tas Gov Cybersecurity Policy

- Approved by Digital Services Board in December 2018
- Each Head of Agency / CEO is **responsible** for cybersecurity in their agency
- Each Agency's *Audit and Risk Committee* **must** consider cybersecurity risks.



# Incident Management Arrangements



- Four tier model
- Integration with State Emergency and National Management arrangements
- Tas Gov CIO and DSS have a pivotal coordination role for escalated cyber incidents.
- Planning to run training and exercises later in the year.



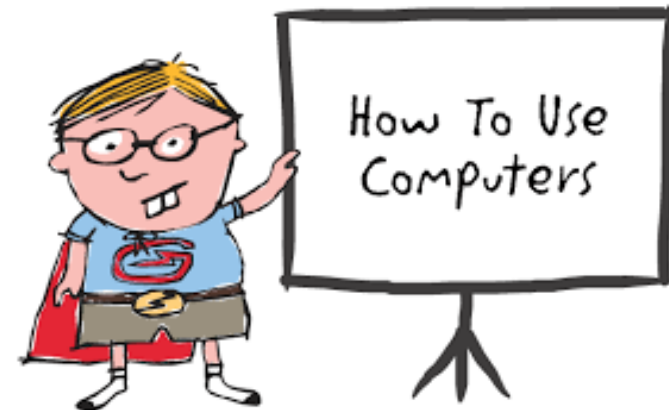
# Education and Awareness Activities

## Education for ICT Practitioners

- Information Security Management System (ISMS) Foundation and Implementation Training
- Incident Response facilitation training

## Awareness Raising – (on going process)

- JCSC partnership
- Cybersecurity Practitioners primarily across Government
- Government Service Providers and Vendors
- Ministers, Heads of Agencies and other key stakeholders
- Anyone and everyone that we can reach 😊



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# Tasmanian Audit Office

## Panel Discussion Managing Cyber Security Risks

Facilitated by Ric De Santi  
Deputy Auditor-General



**Excluding what you may have learnt from the media, do you know of cases where an organisation has been subjected to a cybersecurity attack?**

Yes

No

Start the presentation to see live content. Still no live content? Install the app or get help at [PollEv.com/app](https://PollEv.com/app)

ou

# Your audit committee knows what key assets need to be protected?

Assets identified

Assets in  
process of being  
identified

Assets not  
identified

## Your audit committee knows what level of cyber risk is acceptable?

Strongly Agree

Agree

Neutral

Disagree

Strongly  
Disagree

# Your audit committee knows how key assets are being protected?

Strongly Agree

Agree

Neutral

Disagree

Strongly  
Disagree

## Your audit committee knows how your organisation would respond to a cyber security incident?

Strongly Agree

Agree

Neutral

Disagree

Strongly  
Disagree

# What would you do?

***It is 3am on Tuesday morning and you have been notified that there has been a breach of your security such that access to key systems and associated data have been locked by an unknown hacker.***

***You have the option of paying a \$10,000 ransom or starting the business day without your key systems meaning a significant loss of income estimated at \$5,000 per hour you are not operational.***

## Would you pay the ransom?

Definitely  
yes

Probably  
yes

Undecided

Probably  
no

Definitely  
no



# THANK YOU



**Tasmanian**  
Audit Office