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## Acronyms

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<th>Acronym</th>
<th>Definition</th>
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<tr>
<td>ASRR</td>
<td>All Sectors Resilience Report</td>
</tr>
<tr>
<td>DEDJTR</td>
<td>Department of Economic Development, Jobs, Transport and Resources</td>
</tr>
<tr>
<td>DELWP</td>
<td>Department of Environment, Land, Water and Planning</td>
</tr>
<tr>
<td>DHHS</td>
<td>Department of Health and Human Services</td>
</tr>
<tr>
<td>DPC</td>
<td>Department of Premier and Cabinet</td>
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<tr>
<td>EMC</td>
<td>Emergency Management Commissioner</td>
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<tr>
<td>EMV</td>
<td>Emergency Management Victoria</td>
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<tr>
<td>Igem</td>
<td>Inspector-General for Emergency Management</td>
</tr>
<tr>
<td>SCRC</td>
<td>State Crisis and Resilience Council</td>
</tr>
<tr>
<td>SRN</td>
<td>Sector Resilience Network</td>
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<tr>
<td>SRP</td>
<td>Sector Resilience Plan</td>
</tr>
<tr>
<td>TISN</td>
<td>Trusted Information Sharing Network</td>
</tr>
<tr>
<td>Viccat</td>
<td>Victorian Criticality Assessment Tool</td>
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## Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
<th>Reference</th>
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<tbody>
<tr>
<td>Criticality assessment</td>
<td>A process to categorise infrastructure based on the potential damage to the Victorian community if the infrastructure and/or its service is degraded or lost.</td>
<td>Section 74D – Part 7A of the Emergency Management Act 2013</td>
</tr>
<tr>
<td>Designation</td>
<td>A process whereby the Governor in Council, at the recommendation of the relevant Minister, may choose to specify an infrastructure to be a vital critical infrastructure. Owners and/or operators of vital critical infrastructure must meet the requirements under the Resilience Improvement Cycle.</td>
<td>Section 74E – Part 7A of the Emergency Management Act 2013</td>
</tr>
<tr>
<td>Relevant Minister</td>
<td>A Minister who has been designated by the Governor in Council as the relevant Minister. Under the new arrangements, relevant Ministers have legislative responsibilities in relation to critical infrastructure under their portfolio.</td>
<td>Section 74F – Part 7A of the Emergency Management Act 2013</td>
</tr>
<tr>
<td>Resilience Improvement Cycle</td>
<td>A four stage cycle comprising risk management planning, exercising, validation and positive assurance designed to build resilience of vital critical infrastructure.</td>
<td>Sections 74M to 74U – Part 7A of the Emergency Management Act 2013</td>
</tr>
<tr>
<td>Responsible entity</td>
<td>Owners and/or operators of designated vital critical infrastructure. Responsible entities are required to meet the legislative requirements under the Resilience Improvement Cycle.</td>
<td>Section 74H – Part 7A of the Emergency Management Act 2013</td>
</tr>
<tr>
<td>Viccat</td>
<td>A custom built tool used by portfolio departments to assess the criticality of infrastructure within their sector(s).</td>
<td>Page 22 – Critical Infrastructure Resilience Strategy</td>
</tr>
<tr>
<td>Victorian Critical Infrastructure Register</td>
<td>A register that contains specific information on all infrastructure assessed as major, critical or vital.</td>
<td>Section 74J – Part 7A of the Emergency Management Act 2013</td>
</tr>
</tbody>
</table>
Critical infrastructure is essential for the functioning of our society and economy. It includes, but is not limited to, physical facilities, supply chains, systems, assets, information technologies and communications networks.

It is important to build the resilience of critical infrastructure to limit disruption to the supply of essential services to Victorian communities as a result of emergencies.

On 1 July 2015, new emergency risk management arrangements for critical infrastructure resilience in Victoria came into effect. The new arrangements aim to drive a consistent, yet flexible, approach across eight critical infrastructure sectors:

- Banking and Finance
- Communications
- Energy
- Food and Grocery Supply Logistics
- Government
- Health
- Transport
- Water.

This is so that suitable approaches are developed and applied that are commensurate to:

- the nature of the sector
- national arrangements and regulatory requirements
- the specific risks that they face.

As part of the new arrangements, the Inspector-General for Emergency Management (IGEM) has a legislated responsibility to monitor, review and assess critical infrastructure resilience at a system level.

This is IGEM’s inaugural critical infrastructure resilience report, which focuses on the first year of implementation progress of the new arrangements.

This progress report avoids providing specific details that would compromise commercial and protective security.
1.1 Summary of implementation progress

IGEM assessed the implementation progress of the new arrangements, focusing primarily on 2015–16. As at the time of this progress report, only the Energy, Transport and Water sectors have obligations under Part 7A of the Emergency Management Act 2013 (the Act).

The Critical Infrastructure Resilience Strategy[2] (the Strategy) encourages other owner and/or operators to undertake similar activities voluntarily and IGEM has provided examples of work undertaken to strengthen resilience across all eight sectors.

IGEM’s findings were based on sightings of outputs required under the new arrangements, as well as consultations with Emergency Management Victoria (EMV), portfolio departments and Victoria Police.

Overall IGEM is satisfied that EMV, portfolio departments and industry partners have made considerable progress in implementing the new arrangements and delivering the outputs within the first year particularly given:

- the varying maturity levels of existing resilience measures across sectors
- responsible entities and portfolio departments having limited time to implement mandatory resilience improvement requirements the Act and the Strategy.

IGEM notes that the dedication, knowledge and experience of key departmental staff and their informal relationships with industry were enablers of the progress made in the first year of implementation. IGEM also identified many good practice examples across different sectors, which may provide lessons for other sectors.

Table 1 summarises IGEM’s findings on the implementation progress of the new arrangements.

### TABLE 1: SUMMARY OF IMPLEMENTATION PROGRESS

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>REQUIREMENT</th>
<th>FINDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part 7A of the Emergency Management Act 2013</td>
<td>The criticality of infrastructure is assessed or reassessed (Energy, Transport and Water sectors only).</td>
<td>IGEM is satisfied that the Department of Economic Development, Jobs, Transport and Resources (DEDJTR) and the Department of Environment, Land, Water and Planning (DELWP) have complied with section 74D of the Act in relation to the assessment of infrastructure.</td>
</tr>
<tr>
<td>Part 7A of the Emergency Management Act 2013</td>
<td>Governor in Council has designated infrastructure as vital on the recommendation of the relevant Minister (Energy, Transport and Water sectors only).</td>
<td>IGEM is satisfied that DEDJTR and DELWP have broadly complied with sections 74J and 74K of the Act in relation to designation of infrastructure as vital critical infrastructure, with the exception of section 74E(3)(d). IGEM notes that a strategy is being developed to inform Chief Executive Officers of municipal councils of vital critical infrastructure located in their municipal district.</td>
</tr>
<tr>
<td>Part 7A of the Emergency Management Act 2013</td>
<td>EMV has established and maintained the Victorian Critical Infrastructure Register (the Register).</td>
<td>IGEM is satisfied that EMV has broadly complied with sections 74J and 74K of the Act in relation to the establishment and maintenance of the Register. IGEM notes a need to ensure the date of declaration is reflected in the Register.</td>
</tr>
<tr>
<td>Part 7A of the Emergency Management Act 2013</td>
<td>Responsible entities prepare an emergency risk management plan in accordance with the Ministerial Guidelines for Critical Infrastructure Resilience and the Emergency Management (Critical Infrastructure Resilience) Regulations 2015 (vital critical infrastructure only).</td>
<td>IGEM is satisfied that emergency risk management planning is occurring as per the intent of section 74P of the Act.</td>
</tr>
<tr>
<td>Part 7A of the Emergency Management Act 2013</td>
<td>Responsible entities developed, conducted and evaluated an exercise (vital critical infrastructure only).</td>
<td>IGEM is satisfied that exercises completed as part of the first Resilience Improvement Cycle (the Cycle) meet the intent of sections 74Q and 74R of the Act.</td>
</tr>
<tr>
<td>Part 7A of the Emergency Management Act 2013</td>
<td>Responsible entities conducted audits of their emergency risk management processes (vital critical infrastructure only).</td>
<td>IGEM finds that there was limited opportunity in this first Cycle for responsible entities to complete the audit requirements under sections 74S and 74T of the Act.</td>
</tr>
<tr>
<td>Part 7A of the Emergency Management Act 2013</td>
<td>A responsible entity must submit a statement of assurance (vital critical infrastructure only).</td>
<td>IGEM is satisfied that statements of assurance submitted by responsible entities comply with section 74N of the Act.</td>
</tr>
<tr>
<td>Critical Infrastructure Resilience Strategy</td>
<td>Relevant departments lead the development of a Sector Resilience Plan (SRP) for their relevant sectors in collaboration with industry.</td>
<td>IGEM is satisfied that all sectors have completed or are in the process of finalising their SRP.</td>
</tr>
<tr>
<td>Critical Infrastructure Resilience Strategy</td>
<td>EMV, through the State Crisis and Resilience Council Risk and Resilience Sub-Committee, produce an annual All Sectors Resilience Report (ASRR).</td>
<td>IGEM is satisfied that the ASRR accurately reflects the information in the SRPs, noting that there are opportunities to enhance information on shared or common risks and resilience improvement initiatives across sectors.</td>
</tr>
</tbody>
</table>
1.2 Towards continuous improvement

The scope of this progress report is on the implementation of the new arrangements, with a particular focus on the outputs from the Act and the Strategy.

In the course of collecting information to assess compliance, IGEM observed many examples of good practice aligned to the intent of the Strategy. These include:

- industry and government participation in national resilience building activities through the Trusted Information Sharing Network (TISN) under the auspices of the Australian Government Attorney-General's Department
- portfolio departments' emphasis on continuous improvement, in addition to compliance, in the course of supporting industry exercising
- portfolio departments' focus on establishing and maintaining strong relationships with industry partners.

IGEM also identified opportunities for improvement in relation to the Victorian Criticality Assessment Tool (viccat)\(^1\) and the Register:

- progressing towards an agreed and more objective criticality assessment methodology
- increasing recognition of existing resilience building initiatives, including national and industry regulatory oversight, in the designation process
- clarifying the purpose and intent of the Register, taking into consideration the needs of industry, government and emergency management organisations.

Commitment and contribution of all relevant stakeholders will be vital to ensuring these improvement opportunities are considered, and where appropriate, implemented.

1.3 Future assurance priorities

Through the conduct of this progress report, IGEM has observed the following themes for further consideration and analysis as part of its next report.

- Continued progress towards consistent criticality assessment and designation across sectors, which promotes consideration of existing regulatory oversight and resilience building initiatives. This is to ensure a focus on the most important assets and services and appropriate and commensurate regulation based on risk.
- Ongoing implementation of the Resilience Improvement Cycle (the Cycle), with an emphasis on the conduct of audits as well as progress with respect to statements of assurance. This includes consideration of whether emergency risk management actions and activities proposed in previous statements of assurance have been undertaken.
- Evolution of Sector Resilience Plans (SRPs) including broadened consultation with industry, other government departments, Victoria Police and agencies (including regulators), where appropriate. This is with a view to strengthening identification and management of cross-sector dependencies.
- Evidence of implementation of resilience improvement initiatives from 2016–17 SRPs.

IGEM is committed to working collaboratively with EMV, portfolio departments, Victoria Police and other stakeholders to ensure its system level assurance priorities are:

- proportionate
- fit for purpose
- foster continuous improvement of the arrangements.

As such IGEM will not unnecessarily create any new reporting requirements, but seek to leverage existing outputs to inform its assurance activities.

To enable more streamlined and proportionate assurance moving forward, IGEM proposes that it attends, where appropriate, system level forums relevant to the implementation of the arrangements as an observer. These include:

- the Critical Infrastructure Resilience Sectors Forum\(^1\)
- the All Sectors Resilience Network Forum
- sector specific forums by invitation.

Through its observer status, IGEM can minimise administrative burden on EMV, portfolio departments and Victoria Police through ongoing collection and monitoring of progress. Additionally, IGEM would gain valuable understanding of the contextual factors which enable or inhibit progress with respect to the arrangements.

IGEM will continue to report on the implementation of critical infrastructure resilience in its next report in 2017.

\(^1\) Formerly the Sector Resilience Network Coordination Group.
The Inspector-General for Emergency Management (IGEM) is a legislated appointment established under the *Emergency Management Act 2013*\(^1\) (the Act) to:

- provide assurance to government and the community in respect of emergency management arrangements in Victoria
- foster continuous improvement of emergency management in Victoria.

The Act requires IGEM to develop and maintain a monitoring and assurance framework for emergency management, against which the capacity, capability and performance of the emergency management sector (the sector) is to be assessed.

Implementation monitoring is a key element of the *Monitoring and Assurance Framework for Emergency Management*\(^3\) (the Framework).

This progress report focuses on the first year of implementation progress of the new critical infrastructure resilience arrangements (the new arrangements) in Victoria.

It is prepared in accordance with IGEM’s legislated responsibility to monitor, review and assess critical infrastructure resilience at a system level.
2.1 Introduction

Critical infrastructure is essential for the functioning of our society and economy.

It is important that measures are taken to build the resilience of critical infrastructure to limit disruption to the supply of essential services to Victorian communities.

In this context, resilience includes resistance, reliability, redundancy, response and recovery from all potential hazards to Victoria’s critical infrastructure, whether natural or human induced.

2.2 Reform of Victorian critical infrastructure resilience arrangements

On 1 July 2015, the new emergency risk management arrangements for critical infrastructure resilience in Victoria came into effect. These entail:

- Part 7A of the Emergency Management Act 2013 (the Act)
- the Critical Infrastructure Resilience Strategy (the Strategy)
- the Ministerial Guidelines for Critical infrastructure Resilience (the Ministerial Guidelines)
- the Emergency Management (Critical Infrastructure Resilience) Regulations 2015 (the Regulations).

A key tenet of the new arrangements is a shift from a counter-terrorism focus to an all-hazards resilience model, including terrorism and security risks. The model promotes a consistent but flexible approach for management of these risks across sectors.

To support this, the new arrangements include enhanced governance, with links to state emergency management committees, and a focus on continuing to build on the strong partnerships between government and industry.

2.3 Victorian critical infrastructure resilience arrangements

This section provides an overview of the new arrangements relevant to the scope of this progress report. For further detail, refer to Part 7A of the Act, the Strategy, the Regulations and Ministerial Guidelines.

Governance

Under the new arrangements, Emergency Management Victoria (EMV) has the lead role in maintaining and coordinating whole of government strategy and policy for critical infrastructure resilience to ensure a consistent but flexible approach for emergency risk management across sectors.

The Department of Premier and Cabinet (DPC) has the lead role in government strategy and policy development for counter-terrorism and Victoria Police is the control agency for terrorism and other human-induced deliberate threats to critical infrastructure.

Portfolio departments play a vital role and provide the primary interface between government and critical infrastructure owners and/or operators.

Critical infrastructure sectors

In Victoria, eight critical infrastructure sectors have been defined. The sectors and their lead portfolio department are shown in Table 2.

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>LEAD PORTFOLIO DEPARTMENT</th>
</tr>
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<tbody>
<tr>
<td>Banking and Finance</td>
<td>Department of Treasury and Finance (DTF)</td>
</tr>
<tr>
<td>Communications</td>
<td>Department of Economic Development, Jobs, Transport and Resources (DEDJTR)</td>
</tr>
<tr>
<td>Energy</td>
<td>Department of Economic Development, Jobs, Transport and Resources (DEDJTR)</td>
</tr>
<tr>
<td>Food Supply</td>
<td>Department of Economic Development, Jobs, Transport and Resources (DEDJTR)</td>
</tr>
<tr>
<td>Government</td>
<td>Department of Premier and Cabinet (DPC)</td>
</tr>
<tr>
<td>Health</td>
<td>Department of Health and Human Services (DHHS)</td>
</tr>
<tr>
<td>Transport</td>
<td>Department of Economic Development, Jobs, Transport and Resources (DEDJTR)</td>
</tr>
<tr>
<td>Water</td>
<td>Department of Environment, Land, Water and Planning (DELWP)</td>
</tr>
</tbody>
</table>

Sector Resilience Networks (SRNs) aim to improve the resilience of each sector’s critical infrastructure assets and operations through joint planning, information sharing and reporting to government.

SRNs are typically chaired by portfolio departments and are attended by representatives from industry, except for the Government SRN, which is attended by representatives of portfolio departments.

An All Sectors Resilience Network Forum, comprising members from all SRNs, is also convened. This forum aims to identify interdependencies between sectors and increase understanding of vulnerabilities across sectors.

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2 Transition arrangements from DEDJTR to DELWP underway.
Assessment of criticality

In Victoria, critical infrastructure is assessed according to its criticality as follows:

- **Vital** critical infrastructure that is of state significance and is critical to the continuity of supply of essential services to the state and to the overall economic and social functioning of Victoria

- **Major** critical infrastructure that is critical to the continuity of supply of essential services to more than one region, or to the overall economic and social functioning of those regions

- **Significant** critical infrastructure that is critical to the continuity of supply of essential services to a region or to the overall economic and social functioning of that region

- **Local** critical infrastructure that is critical to the continuity of supply of essential services to a community or to the overall economic and social functioning of that community.

The State has adopted the Victorian Criticality Assessment Tool (viccat) to guide assessment of the level of criticality. The final criticality rating is determined by the relevant Minister.

Critical infrastructure designated as vital and assessed as major or significant are captured on the Victorian Critical Infrastructure Register (the Register).

Resilience Improvement Cycle

Owners and/or operators of vital critical infrastructure, designated as responsible entities under section 74H of the Act, are required to comply with mandatory measures under legislation known as the Resilience Improvement Cycle (the Cycle).

The cyclical process of activities helps industry and government identify and assess the emergency risks to the supply of essential services to the Victorian community and to develop risk management strategies to mitigate those risks.

This is achieved through responsible entities, with support from relevant portfolio departments, undertaking a range of activities including:

- undertaking emergency risk management planning and preparing documentation
- undertaking an exercise
- completing an audit
- preparing a statement of assurance.

As at the time of this progress report, the Energy, Transport and Water sectors, have had infrastructure designated as vital, with legislative requirements under Part 7A of the Act. Other critical infrastructure owners and/or operators across all eight sectors are encouraged to undertake similar actions voluntarily under the Strategy.

Undertaking emergency risk management planning, exercises and audits all inform a responsible entity’s statement of assurance, in terms of reflecting activities that have strengthened resilience within a Cycle.

This is complemented with the responsible entity committing to implement a range resilience improvement initiatives in the next Cycle.

Therefore, a statement of assurance outlines past and future resilience improvement activities, and is the link from previous Cycle to the next.

Sector Resilience Plans

Under the Strategy, a Sector Resilience Plan (SRP) is produced annually to provide the government with the status and continuous improvement arrangements for each critical infrastructure sector’s overall resilience.

Portfolio departments lead the development and drafting of annual SRPs in collaboration with industry, through their SRN.

Secretaries of portfolio departments are required to attest to the accuracy of the SRP, the status of emergency risks faced by the sector as advised by industry and the appropriate measures to address these emergency risks, where required.

The SRPs are then used to inform EMV’s development of an annual All Sectors Resilience Report (ASRR) to provide government with a consolidated overview of status and resilience improvement measures across sectors.

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Designation occurs by Governor in Council Order (refer to section 3.2).
2.4 **Scope**

This progress report focuses on assessing the implementation progress of legislative requirements and key outputs from the Strategy as depicted in Figure 1. Figure 1 also shows the relevant sections of this report for each element, and the sectors that were required to implement the respective elements in the first Cycle.

IGEM recognises the varying maturity levels of existing resilience measures across sectors and the relative infancy of the new arrangements, which came into effect on 1 July 2015.

Therefore, it is acknowledged that not all of the activities under the Cycle have been fully implemented at the time of this progress report.
2.5 Approach

IGEM’s critical infrastructure resilience implementation progress report was developed in four phases.

**Phase 1: Confirmation of information collection requirements**

IGEM worked with EMV, portfolio departments and Victoria Police (via the Critical Infrastructure Resilience Sectors Forum), to identify and confirm information required to inform the progress report, prior to commencement.

IGEM sought to leverage outputs created under the new arrangements and not unnecessarily create any new reporting requirements.

**Phase 2: Stakeholder notification and engagement**

IGEM provided written notification to the Emergency Management Commissioner, the Chief Commissioner of Police and Secretaries of portfolio departments to inform them of the preparation of the progress report.

IGEM liaised with the Critical Infrastructure Resilience Sectors Forum throughout the conduct of the progress report to keep members apprised of status and next steps.

**Phase 3: Information collection**

IGEM issued an information request to EMV and portfolio departments. This included customised templates to assist with collection of relevant information for each sector and EMV.

IGEM also visited portfolio departments to sight information that was commercially and security sensitive, and worked with EMV to sight the Register.

For contextual purposes IGEM representatives attended and observed three exercises, at the invitation of DEDJTR, as well as attending the inaugural national Critical Infrastructure Resilience Forum.

Finally, IGEM met with representatives of EMV, portfolio departments and Victoria Police to discuss implementation progress and, where appropriate, document any relevant sector specific or broader contextual factors that impacted on the implementation of the new arrangements.

**Phase 4: Information consolidation and reporting**

Once all information was received or sighted, IGEM assessed this against the relevant requirements under the Act, the Strategy, the Regulations and the Ministerial Guidelines.

Additionally, IGEM sought to draw out good practice themes and lessons that support continuous improvement of the new arrangements.

This formed the basis of this progress report which deliberately avoids providing specific details that would compromise commercial and protective security.

IGEM provided a draft of this progress report to EMV, portfolio departments and Victoria Police for comment and response prior to finalisation.

Source: Shutterstock
This section provides an overview of the implementation progress of the new critical infrastructure resilience arrangements (the new arrangements) in Victoria which came into effect on 1 July 2015.

IGEM's findings should be read taking into account the varying characteristics of existing resilience measures across sectors and the relative infancy of the new arrangements.

At the time of this progress report, the Energy, Transport and Water sectors, as required under the Act, have undertaken criticality assessments using viccat and had infrastructure designated as vital. Owners and/or operators of designated vital critical infrastructure – known as responsible entities under the Act – are obliged to meet requirements under the Cycle. IGEM has assessed legislative compliance accordingly.

The Strategy recognises the need for flexibility in the new arrangements. Therefore, other critical infrastructure owners and/or operators across all eight sectors are encouraged to undertake similar actions voluntarily.

Additionally, the Strategy states that where other standards or legislation lead to comparable processes, the Victorian requirements can be considered as being met. IGEM has assessed implementation of the broader arrangements accordingly and provided good practice examples where they align with the intent of the new arrangements.
3.1 Assessment of infrastructure

The Strategy outlines a shift to an all-hazards resilience approach, which “...focuses on managing uncertainty in the emergency risk environment by building resilience to a number of hazards”.

Recognising that resources are finite and that comprehensive protection against all hazards and threats is impossible, the Strategy proposes alignment with international practice and risk-based methods of managing vulnerabilities of critical infrastructure systems.

Criticality assessment to prioritise resource allocation for risk mitigation, is a fundamental component of this approach. By identifying which infrastructure is most crucial to essential service delivery, the relevant entity is able to better prioritise mitigation measures to minimise service disruption during emergencies.

Victoria’s Critical Infrastructure Model (the Model), illustrated in Figure 2, describes criticality by the expected reach that a disruption might have within the State. Legislative requirements for owners and/or operators are based on the level of criticality that each infrastructure is assessed at.

Only owners and/or operators of designated vital critical infrastructure – known as responsible entities under the Act – are required to comply with the requirements of the Cycle within the Act.

Section 74D of the Act outlines that undertaking a criticality assessment is the responsibility of the relevant Minister as designated under section 74F of the Act.


DEDJTR and DELWP are the two portfolio departments with oversight of the three sectors that have undergone the Victorian criticality assessment process using viccat, during the first year of the new arrangements.

Given resource constraints and DEDJTR’s responsibility for four critical infrastructure sectors at the time, assessment was planned and occurred in tranches. DEDJTR prioritised assessing infrastructure based on the ‘declared essential services’ under Part 6 of the Terrorism (Community Protection) Act 2003.

DEDJTR advised IGEM that a systems approach has been adopted. The assessment takes into account the redundancies and shortfalls of entire networks when assessing levels of criticality.

DELWP adopted a broad assessment approach based on the premise that water infrastructure is essential at all levels. IGEM notes positively the number of infrastructure and/or infrastructure systems that had been assessed and progressively inputted into the viccat system by DELWP. On completion of the process, DELWP notified EMV of the outcome of the assessment process for all infrastructure.

In accordance with the process of infrastructure assessment required under section 74D of the Act, IGEM has sighted the viccat methodology and IT system.

**FIGURE 2: VICTORIAN CRITICAL INFRASTRUCTURE MODEL**

![Diagram of Victorian Critical Infrastructure Model]

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5 At the time of the Order of the Governor in Council the relevant Ministers were the Ministers for Energy and Resources, Roads and Road Safety, Ports, Public Transport, and the Minister for Environment, Climate Change and Water.
viccat is a custom-built tool, based on the Model, used to guide assessment of criticality levels of infrastructure in Victoria. The relevant Minister makes the final determination of the criticality rating for critical infrastructure in their sector. The Strategy and Ministerial Guidelines outline the various standards and national guidelines that inform viccat.

The Ministerial Guidelines describe the process as one of self-assessment by the identified owners and/or operators of critical infrastructure. This is then validated by the relevant portfolio department, with the final criticality rating determined by the relevant portfolio department and the respective Minister.

This collaborative method is supported by training for identified critical infrastructure owners and/or operators as well as an individual login to the viccat IT system to maintain security of the system.

IGEM also sighted the Register to validate that it contains infrastructure assessed as major or significant as required under section 74J of the Act. Sections 3.2 and 3.3 provide further detail with respect to infrastructure designated as vital.

Through the conduct of this progress report, including consultations with EMV, portfolio departments and Victoria Police, IGEM notes a number of improvement opportunities for future consideration which are discussed in section 4.2.

**Progress in other sectors**

Among the key roles and responsibilities that support critical infrastructure resilience, the Strategy specifies that portfolio departments lead the planning for their sector.

As mentioned above, the criticality assessment is an initial process that enables targeted, efficient risk mitigation measures.

This has also been recognised by those sectors that are not subject to the requirements under the Act.

Based on learning from the Energy and Transport sectors, DEDJTR will work with the Food and Grocery Supply Logistics, and Communication sectors to progress criticality assessment in those sectors.

In implementing the assessment process, DEDJTR has developed a questionnaire to collect important information. This complements viccat and minimises administrative burden.

DTF’s approach for the Banking and Finance sector leverages work undertaken by the national Trusted Information Sharing Network (TISN) – Banking and Finance Sector Group. IGEM sighted the use of robust assessment models and analysis to identify risks to mission critical assets and systems as well as dependencies on essential services.

The Government sector is planning on undertaking assessments of mission critical services in the next Cycle, while DHHS is considering an assessment methodology appropriate to the wide-ranging variety of service providers in the Health sector.

Acknowledging the need for flexibility, IGEM nonetheless sees value in working towards a consistent methodology for criticality assessment applicable to all sectors.

In this regard, IGEM considers the Critical Infrastructure Resilience Sectors Forum as a collaborative space where individual sector experiences and learnings from criticality assessments can be discussed and analysed. This will assist in shared learning, capacity building and inform criticality assessment moving forward.

Source: Newspix, Zoe Phillips
3.2 Designation of infrastructure

The Energy, Transport and Water sectors have infrastructure or infrastructure systems designated by the Governor in Council as vital under section 74E of the Act. Once designated, owners and/or operators of these vital critical infrastructure are recognised as responsible entities under the Act.

As the custodian of the Register, EMV currently holds copies of all the Governor in Council Orders (the Orders). Only responsible entities of designated vital critical infrastructure must comply with the mandatory requirements under the Cycle. Therefore, designation of vital critical infrastructure is a crucial step under the new arrangements.

To assess compliance with the designation process required under section 74E of the Act, IGEM has sighted copies of:

- the signed Ministerial Briefings to the relevant Ministers seeking designation of infrastructure that have been assessed as vital critical infrastructure for the Energy, Transport and Water sectors
- the signed Orders designating infrastructure and/or infrastructure systems within the Energy, Transport and Water sectors as vital critical infrastructure and entities as responsible entities as recommended by the relevant Minister
- letters, with the Orders attached, sent to responsible entities within the Energy, Transport and Water sectors notifying them of the designation
- letters, with the Orders attached, sent to the Emergency Management Commissioner and the Chief Commissioner of Police notifying them of the designated vital critical infrastructure and the responsible entities.

Under section 74E(3)(d) of the Act, there is a requirement for the relevant Minister to provide a copy of the Order to the Chief Executive Officer of any municipal council in the municipal district of which the relevant vital critical infrastructure is wholly or partly located.

IGEM notes this did not occur for this first Cycle. This was due to the vast physical coverage of certain vital critical infrastructures across Victoria. In addition, there are potential security issues involved with distributing this sensitive information to a large number of municipal councils, which may not all have the necessary systems to securely store this information.

Portfolio departments advised IGEM they are working with EMV on a strategy to inform council Chief Executive Officers of vital critical infrastructure located in their municipality.

This strategy will need to be consistent and integrated with the new emergency management planning arrangements, which are expected to be progressively implemented from mid-2017.

Awareness of critical infrastructure will contribute to more holistic and effective planning.

The designation process reflects the importance and contribution of these vital critical infrastructure to the wellbeing of all Victorians. With this, comes a requirement for designated entities to comply with the Cycle, which involves an investment in time and resources for both industry and government.

To ensure resources are used as efficiently as possible and promote better integration with existing arrangements, there may be an opportunity for the designation process to better reflect the existing national and/or international regulations and/or standards that many of these designated vital critical infrastructure are required to comply with. This is discussed further as a future consideration under section 4.1.
3.3 Victorian Critical Infrastructure Register

**Legislative requirement**
EMV has established and maintained the Register.

**Finding**
IGEM is satisfied that EMV has broadly complied with sections 74J and 74K of the Act in relation to the establishment and maintenance of the Register. IGEM notes a need to ensure the date of declaration is reflected in the Register.

The Act requires EMV to establish and maintain the Register, which must contain specific information on all infrastructure that has been designated as vital or assessed as significant or major. IGEM notes that the Register was established by DPC and was operational by 1 July 2015.

The Register is at a protected information security level, and section 74K of the Act places responsibility on EMV to ensure secure access to information on the Register.

The Register is populated by extracting information entered into the viccat IT system by portfolio departments and/or industry for the purposes of criticality assessment. In August 2016, IGEM sighted the Register and confirms that it contains all the information required under section 74J of the Act except for the date on which critical infrastructure were declared as vital. IGEM notes this date was only available after the designation stage.

IGEM acknowledges that the Orders contain the date of declaration, copies of which are held by EMV. However, to ensure the completeness of the Register and legislative compliance, this information should be reflected in the Register.

The Register also contains some information that is not required under the Act – most notably a description of the infrastructure. This is useful and practical information over and above legislative compliance.

IGEM observed that EMV maintains the Register by conducting periodic updates, primarily by extracting the most up-to-date information from the viccat IT system. In this regard there is a shared responsibility among owners and/or operators, portfolio departments and EMV to ensure currency of information.

EMV is developing a Register Information Policy to provide a specified and regular timeframe for it to activate the update function. This policy acknowledges that changes in viccat IT system are not frequent, and consideration should also be given to the administrative burden on portfolio departments.

IGEM has sighted the existence and application of appropriate security protocols and processes to ensure access to the Register is only provided to persons under section 74K of the Act. These measures include:

- protocols for access and a registration process for personnel intending to access the register
- reference checks of applicants
- confidentiality and conflict of interest declarations.

In assessing compliance of the Register against the legislative requirements, neither the Act nor the Strategy explicitly state the purpose or intent of the Register. The Register, in its current form, simply extracts specific information from the viccat IT system in order to comply with the Act.

EMV and portfolio departments indicate that the Register, in its current form, is not suitable for operational or strategic decision making purposes.

EMV advised IGEM that its focus in the near future is to work with portfolio departments and other agencies to clarify the purpose of the Register and how it can best meet the intent of the new arrangements. Some considerations are discussed in section 4.2.
3.4 Resilience Improvement Cycle

This is the first Cycle, which was a six-month cycle instead of 12 months for all subsequent cycles. Furthermore, varying maturity levels for continuous improvement processes exist within responsible entities across the Energy, Transport and Water sectors as they transition to the new arrangements.

IGEM accounted for these factors in its assessment of compliance with the Act and the Ministerial Guidelines in relation to all elements of the Cycle, namely:

- undertaking emergency risk management planning and preparing documentation
- undertaking an exercise
- completing an audit
- preparing a statement of assurance.

Emergency risk management planning

Legislative requirement
Responsible entities prepare an emergency risk management plan to assist preparation for an emergency.

Finding
IGEM is satisfied that the process of emergency risk management planning is occurring at the responsible entity level with oversight from DEDJTR and DELWP.

Under the Act, responsible entities are not mandated to submit their emergency management plans, unless requested by the relevant Minister. Nonetheless, responsible entities voluntarily provided copies of relevant planning documentation to the departments.

The sample of statements of assurance that IGEM sighted indicated that responsible entities incorporated emergency risk management planning as part of the new arrangements.

The primary responsibility for critical infrastructure resilience lies with infrastructure owners and/or operators.

Simultaneously, the partnership approach underpinning the new arrangements allows portfolio departments to support industry to build critical infrastructure resilience. This includes a more consistent process for risk management planning, as well as legislated requirements to assist with and assure exercising and auditing of these risk management plans as discussed in this section.

While supporting, assuring and maintaining oversight of individual infrastructure activities, portfolio departments can also build greater sector-wide resilience through collaborating with all critical infrastructure owners and/or operators to identify risks to the operation of a sector as a whole. This includes consideration of dependencies, interdependencies, cascading events and critical vulnerabilities.

Exercising

<table>
<thead>
<tr>
<th>Legislative requirement</th>
<th>Finding</th>
</tr>
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<tbody>
<tr>
<td>Responsible entities developed, conducted and evaluated an exercise (vital critical infrastructure only).</td>
<td>IGEM is satisfied that exercises completed as part of the first Cycle meet the intent of sections 74Q and 74R of the Act.</td>
</tr>
</tbody>
</table>

Exercises are an essential component of preparedness. They may be used to enhance capability and contribute to continuous improvement in building resilience.

Section 74Q of the Act requires all responsible entities to develop, conduct and evaluate an exercise, as part of the Cycle. The exercise should test their preparedness, prevention, response or recovery capability in respect of an emergency.

As the first Cycle is a half-cycle, not all responsible entities within the Energy, Transport and Water sectors had the opportunity to develop, conduct and evaluate an exercise in accordance with section 74Q of the Act.

For the responsible entities that did conduct exercises, IGEM sampled and sighted:

- exercise concept documents
- exercise planning documents
- portfolio department feedback documents
- exercise evaluation reports.

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6 Refer to section 74N(1) of the Act.


8 The exception is if an event occurred during the Cycle which demonstrated compliance with exercising requirements under the Act, refer to section 74Q(8) of the Act.
IGEM also attended three Part 7A exercises conducted by responsible entities within the Energy sector. Based on the exercise documentation and IGEM’s attendance at the three exercises, IGEM observed:

- positive and collaborative relationships between portfolio department and industry representatives
- emphasis on learning and continuous improvement, in addition to compliance
- strong support provided by portfolio departments to industry from concept to feedback
- an appetite to involve industry from other sectors where dependencies exist in exercising
- commitment from industry to build resilience to minimise impact to Victorian communities.

IGEM commends the effort and dedication shown by DEDJTR and DELWP in supporting their respective sectors to deliver valuable exercises. This included:

- working with industry partners to develop the exercise concept
- observing the conduct of the exercise and providing feedback on the exercise, in accordance with section 74R
- incorporating feedback into the responsible entities’ exercise evaluation reports.

Conducting an effective exercise, from concept to evaluation, is a significant task involving many hours of investment in time and resources for both industry and government.

It is IGEM’s view that while compliance is important, exercising should not be purely an administrative activity. IGEM supports the approach adopted by portfolio departments, which focuses on lessons learning. It is essential that lessons are extracted from exercises and embedded to build resilience.

Progress in other sectors

Under the Strategy, owners and/or operators of non-vital critical infrastructure who do not have to comply with the mandatory requirements under the Cycle are nonetheless encouraged to undertake exercises voluntarily to improve resilience.

Based on consultations with relevant portfolio departments and sighting of available exercising documentation, IGEM observed that:

- structured exercises have been conducted and/or are programmed across sectors at the state and/or national levels (through the TISNs9), including an industry-wide exercise within the Banking and Finance sector
- the Health sector conducts surge capacity exercises in accordance with an exercising calendar – four exercises have been completed since January 2016, and six more are scheduled to take place by December 2016
- business continuity exercising was a focus for some sectors, however there is an opportunity to broaden this to include inter-agency risk exercises
- findings from exercising have been used to identify critical dependencies and inform future resilience initiatives.

The Australian Government Attorney-General’s Department’s Critical Infrastructure Resilience Strategy: Plan[8] highlights exercising as a key activity to establish strong and effective business–government partnership, enhance risk management of the operating environment, and better understand and manage strategic issues.

Therefore it is highly beneficial that the Victorian Government and relevant critical infrastructure sectors continue to influence, contribute to and/or participate in exercising at the national level, where possible and appropriate.

Source: Shutterstock

9 The TISNs were established by the Australian Government in 2003 to enable business-government information sharing and resilience building initiatives on critical infrastructure resilience.
Auditing

**Legislative requirement**
Responsible entities conducted audits of their emergency risk management processes (vital critical infrastructure only).

**Finding**
IGEM finds that there was limited opportunity in this first Cycle for responsible entities to complete the audit requirements under sections 74S and 74T of the Act.

Under the Cycle, responsible entities must conduct an audit of their emergency risk management processes following the completion of an exercise.

Similar to IGEM’s assessment of the exercising requirements under the Act, audit requirements under sections 74S and 74T will also be assessed in the context of the six-month Cycle and varying maturity of responsible entities as they transition to the new arrangements.

IGEM sighted one audit certificate from a responsible entity within the Transport sector and an audit scope document from a responsible entity within the Water sector. The completed audit certificate complies with audit requirements under the Act and the Ministerial Guidelines as it:

- was conducted by internal auditors who were independent from the emergency risk management planning process and exercise conducted
- detailed the outcome of the audit
- included a list of preventative actions to ensure compliance and/or continuous improvement.

Independent audits provide some assurance to government that responsible entities are continuing to improve their emergency risk management processes in order to build resilience.

IGEM acknowledges that there was limited opportunity for responsible entities to complete an audit in this first Cycle, but expects to see more audits completed in the next Cycle.

Statements of assurance

**Legislative requirement**
A responsible entity must submit a statement of assurance (vital critical infrastructure only).

**Finding**
IGEM is satisfied that statements of assurance submitted by responsible entities comply with section 74N of the Act.

As per the Act, all entities responsible for a designated vital critical infrastructure are required to submit a statement of assurance to the relevant Minister within six months after receiving a copy of an Order.

Section 74N(2) specifies that a statement of assurance must contain:

- the emergency risks in relation to the vital critical infrastructure
- the emergency risk management actions or activities that the entity will undertake to address the emergency risks
- an attestation signed by the Industry Accountable Officer (in accordance with section 74N(3) of the Act).

IGEM sighted copies of all the statements of assurance provided to DEDJTR and DELWP and is satisfied that they comply with the requirements of section 74N.

However, IGEM found some discrepancy in the interpretation of the time period covered by the attestation by the individual responsible entities.

Departments are aware of and working to address this issue by influence, given that time periods for statements of assurance are not prescribed in legislation.
From the samples of statements of assurance IGEM identified the following examples of good practice.

- Utilising the Emergency Risk Context section to outline the responsible entity’s past and present relationship with government in terms of emergency management, its current role, its relationship with identified key stakeholders, and information on its existing internal emergency management processes. Detailing these factors assists the building of shared understanding between the responsible entity and government.

- The inclusion of risk consequence rating tables that consider human, financial, service delivery and other factors. As well as shared understanding, this information will allow an overview of key factors relevant to that sector and a richer picture of expected consequences.

- The inclusion of an action plan table that provides a description of the action or activity, an indicative implementation date and accountability for implementation.

As per section 74N(4) of the Act, it is expected that the next iteration of statements of assurance will include feedback on the proposed actions and activities of the previous Cycle, as well as closing the loop of the exercise and audit process as depicted in Figure 3.

Therefore, statements of assurance outline past and future resilience improvement activities, and are the link from previous Cycle to the next.
3.5 Sector Resilience Plans

**Strategy component**

Relevant departments lead the development of a Sector Resilience Plan (SRP) for their relevant sectors in collaboration with industry.

**Finding**

IGEM is satisfied that all sectors have completed or are in the process of finalising their SRP.

The Strategy outlines that each SRP is to provide the Victorian Government with an overview of the sector’s current resilience and proposed initiatives to strengthen this. Specifically, the Strategy and Ministerial Guidelines require SRPs to include:

- an overview of the sector
- key emergency risks and dependencies of the sector
- resilience improvement initiatives.

In addition, Secretaries of portfolio departments are required to attest to the accuracy of the SRP, the status of emergency risks faced by the sector as advised by industry and the appropriate measures to address these emergency risks, where required.

IGEM confirms that all sectors have followed the format above, as per the template provided in the Ministerial Guidelines. In sighting all eight SRPs, IGEM also notes varying levels of detail within each plan.

Both the Strategy and Ministerial Guidelines highlight that SRPs should be developed in collaboration with industry and Victoria Police. SRNs are seen as the key vehicle to enable this collaboration.

For those sectors with designated vital critical infrastructure, the Ministerial Guidelines also require that all responsible entities participate in developing the relevant SRP.

In reviewing SRN meeting minutes and sector workshops on identifying key risks and dependencies, IGEM commends the approach of DEDJTR, DELWP and DPC. The departments utilised the process of developing the SRP as a vehicle for building capacity and understanding within the sector, as well as getting a better insight into how the department can provide value to industry.

For example, DEDJTR worked with its Energy sector partner to identify state and national government partners whose collaboration with Victorian industry helped to manage sector vulnerabilities.

Another positive example was DELWP working with its Water sector partners to develop sector emergency risks and statements. Initially 22 risks were identified, then these were further prioritised to 14 key risks and descriptors. The risk statements were then adopted by the owners and/or operators to inform their risk management plans.

DPC also worked with Government sector partners to conduct a maturity review, which incorporated a self-assessment and independent appraisal. This encouraged the government sector to think about managing individual risk to service delivery, while developing a greater understanding of where to prioritise future resilience building initiatives.

The Key Success Factors in Business Continuity Management – A Guide, developed by the Government sector, is a principles-based document allowing for broader application and providing entities a greater flexibility in implementation.

Overall, IGEM found that cooperation with industry was a common occurrence in the development of the SRPs. In IGEM’s view, a collaborative approach resulted in SRPs that demonstrated greater alignment with the intent of the new arrangements.

IGEM will continue to monitor the evolution of SRPs, including implementation of resilience improvement initiatives outlined in 2016–17 SRPs.
Sector Resilience Networks

SRNs aim to improve the resilience of each sector’s critical infrastructure assets and operations through joint planning, information sharing and reporting to government.

In this first year of implementation, most portfolio departments established SRNs. Given the varying maturity level of different sectors in relation to resilience arrangements at the state level, it is reasonable that not all were able to engage industry to the same degree or in the same manner.

One example is DTF who identified the national TISN Banking and Finance Sector Group to stand as proxy for a Victorian Banking and Finance SRN. This is due to the nature of the sector, its interconnectedness with national operations and that all key stakeholders are already represented on the existing TISN Banking and Finance Sector Group.

The departmental attestation, which is being finalised, clearly identifies the processes DTF has undertaken to ensure engagement with industry during the infancy phase of the new arrangements.

As per the Strategy, IGEM expects to see further development of collaboration processes in the future as roles and responsibilities at the state level mature.

Portfolio departments identified a number of underlying factors that can influence the effectiveness of SRNs.

- Appropriate representation is vital. Attendees from industry and government must understand their representative role at these meetings. They must be knowledgeable and, if not empowered to make decisions, be in a position to inform decision makers on the importance and implications of sector resilience matters.
- SRNs must provide value to industry. Industry become more engaged once they see the value provided by interacting with government through the SRN.
- SRNs provide an opportunity for the emergency management sector to support industry in aligning with broader Victorian emergency management arrangements.
- Informal relationships play a key role in the effectiveness of an SRN, which is outlined further in section 4.1.

IGEM considers that the first year of the new arrangements has provided portfolio departments an opportunity to identify and understand key processes, as well as clarifying individuals’ roles within the relevant sectors. Moving forward, lessons from year one are a basis from which to form a robust awareness of inter-sectoral linkages.
3.6 All Sectors Resilience Report

Strategy component
EMV, through the State Crisis and Resilience Council (SCRC) Risk and Resilience Sub-Committee, produce an annual All Sectors Resilience Report (ASRR).

Finding
IGEM is satisfied that the ASRR accurately reflects the information in the SRPs, noting that there are opportunities to enhance information on shared or common risks and resilience improvement initiatives across sectors.

The Strategy envisages the ASRR as a document that consolidates the key emergency risks facing Victoria's critical infrastructure, including interdependencies between sectors. Its purpose is to:

- brief the SCRC and the Minister for Emergency Services on the resilience of Victoria’s critical infrastructure
- assist the SCRC to determine if any further actions by portfolio departments are required.

IGEM sighted the draft ASRR provided to the SCRC Risk and Resilience Sub-Committee for comment and feedback. It was then tabled at SCRC in October 2016. EMV's development of the ASRR was based on the information in the SRPs.

The ASRR largely reflects the structure and information within the SRPs and includes a list of key emergency risks across the eight sectors.

This was the first ASRR and was produced based on information collected as part of the first Cycle, which was a part-cycle.

As the new arrangements are implemented, and government-industry and cross-sector relationships mature, there will be richer information and deeper insights incorporated into SRPs in the future for EMV to consider when developing the ASRR.

To better meet the Strategy’s objectives, future ASRRs may wish to consider:

- providing more detail around the most common risks shared across the sectors, such as short risk statements or historical/hypothetical examples as demonstrated in the Water sector SRP
- providing more detail in the future initiatives section (for example highlighting common or similar resilience improvement initiatives from the SRPs) which may assist identifying opportunities for different sectors to work together or leverage in implementing identified resilience initiatives.

The All Sectors Resilience Network Forum is another potential source of information to support the ASRR.

IGEM notes that the inaugural forum, held in April 2016, included a workshop involving government and industry participants from all sectors, except for the Food Supply sector.

The purpose of the workshop was to identify joint industry-government and emergency management sector initiatives that could help build critical infrastructure resilience across sectors.

In future, the ASRR may be able to reflect the outputs from this workshop and other similar workshops to demonstrate how government and industry are working or planning to work together to address cross-sector dependencies.

Source: Shutterstock
4 Towards continuous improvement

The scope of this progress report is on the implementation of the new arrangements, with a particular focus on the outputs from the Act and the Strategy.

In the course of collecting information to assess compliance, IGEM observed many examples of good practice and areas for consideration.

In alignment with IGEM’s statutory obligation to foster continuous improvement10, this section outlines observations on areas which do not fall strictly within its assessment of compliance.

IGEM does not make any findings or recommendations within this section. Its observations are made for the purposes of highlighting good practice and opportunities for consideration which may contribute to the continuous improvement of the arrangements.

10 Refer to section 62(b) of the Act.
4.1 Good practice themes and lessons

Existing regulatory oversight and resilience building initiatives

The new Victorian critical infrastructure resilience arrangements came into effect on 1 July 2015. However, in preparing this progress report, IGEM notes the ongoing resilience building activities through existing national regulations and work of government and industry groups.

Trusted Information Sharing Network (TISN)

In 2003, the Australian Government established the TISN. It, like the new Victorian arrangements, takes an all-hazards approach to resilience.

It is Australia's primary national engagement mechanism for information sharing between industry and government for the purposes of enhancing the resilience of critical infrastructure. The sector groups operating within the TISN broadly mirror those of the Victorian critical infrastructure sectors.

IGEM's consultations with portfolio departments indicated that the TISN sector groups undertake a range of collaborative activities to build resilience.

Notably, in May 2016, the Attorney General's Department commissioned a consultant to survey the national critical infrastructure sectors. The survey aimed to benchmark indicative sector resilience with a repeat survey intended for 2019–20.

IGEM sighted the sector benchmarking report for the Banking and Finance sector and notes that such work enables sectors to identify their strengths as well as potential areas for improvement. IGEM notes these reports may be worthwhile to consider with respect to resilience measurement in the Victorian context.

The collaborative nature of the TISN and industry's engagement in resilience building are further evidenced by IGEM's sighting of outputs from TISN sector groups and IGEM's attendance at the inaugural national Critical Infrastructure Resilience Forum held in June 2016 in Melbourne.

National and international regulation

In addition to TISN related activities, many critical infrastructure owners and/or operators conduct their business at a national and/or international level, and are therefore subject to a range of existing national regulations and industry protocols.

This was evident in the annexes included as part of the Energy and Transport sector SRPs, which outline a range of existing resilience building activities, including national and industry regulation.

The Food and Grocery Supply Logistics and Communications SRNs identified that clear communication between industry and the Victorian Government during times of emergency was a key priority. The endorsed Interface Protocols illustrate how each sector is working towards integrating the intent of the Victorian arrangements into existing regulatory frameworks at all levels of government.

In light of this, it is important that national resilience arrangements, including through the TISN, are reflected in Victorian arrangements where appropriate and feasible.

This may reduce potential inefficiencies associated with resilience activities being governed by multiple legal and governmental jurisdictions, as well as provide an opportunity for Victorian Government and industry to work with and learn from members at a national level.
Portfolio department capacity and capability

In assessing the implementation progress of the new arrangements across all eight sectors, IGEM identified that departmental staff are mission critical assets to the implementation of the new arrangements.

Departmental capacity

Ensuring successful implementation and continued functioning of the arrangements includes management strategies for sudden shocks as well as long term stressors that could affect departmental staff.

For example, by having redundancies of knowledge within different branches of DPC, the Department has the ability to provide continued critical infrastructure related functions to the Government sector in the face of unexpected events.

In order to manage longer term stressors such as departure of key personnel, DEDJTR is developing succession planning processes. IGEM recognises that adequate handover in the area of managing risks to critical infrastructure is central to ensuring sustainable development towards the aim of the new arrangements.

Staff capability

IGEM’s consultations with portfolio departments and observations at industry exercises highlighted that staff capability is fundamental for effective public-private collaboration for resilience building. IGEM identified four characteristics as most relevant to successful implementation of the new arrangements:

- The value of experience and knowledge of individual staff affect levels of initial and continued engagement. This relates to sector-specific insights, such as key stakeholders, their roles, motivators and history, as well as an understanding and knowledge of Victorian emergency management arrangements.

  At the municipal and regional levels, Victoria Police are relied upon heavily for local and organisational knowledge, due to significant past experience relating to critical infrastructure protection.

- Informal relationship management plays a major role in successful implementation of the new arrangements. This includes the acknowledgement that informal relationships require significant time and effort to develop and realise benefits.

  For example, DEDJTR and DELWP have been able to promptly deliver on many initiatives due to established informal networks both between individual owners and/or operators and between departmental staff and industry. Similarly, staff at DHHS have connections to a variety of networks that aim to build resilience to surges in service requirements.

  IGEM was pleased to note formal and informal networking also occurring between portfolio departments. Including representatives from other sectors in resilience initiatives, such as exercising and planning, increases understanding across sectors and can lead to more robust and informed outcomes for specific initiatives.

- Trust is a key element in resilience building, with transparency and clarity fundamental factors to securing stakeholder buy-in. Proposals to utilise SRN meetings to clarify Victoria’s emergency management arrangements and DELWP’s SRP Framework are examples of how leadership and guidance can provide diverse stakeholders with an overall direction and boundaries to ensure achievable common goals aligned to government policy.

- A central tenet of resilience is that collaborative approaches are more effective than traditional directive ones. Being able to facilitate partnership processes without dominating them is essential to ensure alignment to the intent of the Strategy.

  One example comes from the Energy sector. DEDJTR enabled industry to guide the conversation around what was most useful to the sector as a whole. The department then created connections with the appropriate national body to affect change.
Providing value

Strong and collaborative relationships between industry and government are a vital ingredient in building resilience of Victoria's critical infrastructure now, and into the future. The Strategy reinforces that partnerships between industry and government are key to ensuring the safety and wellbeing of Victorian communities.

Portfolio departments appreciate that industry, particularly responsible entities, has considerable knowledge and expertise with respect to ensuring continuity of supply of essential services. Owners and/or operators also invest significant time and resources in order to comply with the new and existing arrangements, including legislative requirements.

This investment is mirrored in part by the support provided by portfolio departments to assist their industry partners to build resilience, often over and above the legislated requirements.

If well facilitated, SRNs not only serve to build capacity of individual entities to manage broader sector risks, but also provide an avenue for industry to discuss common vulnerabilities that can only be addressed with government advocacy.

The supporting role provided by government can be further enhanced by maximising the critical infrastructure resilience governance arrangements depicted in the Strategy, which as noted are in their infancy.

As the new arrangements become embedded over time, this may include tabling long-standing industry challenges at the SCRC and/or its Sub-Committees so that common issues can be addressed at the appropriate levels.

This will strengthen the linkages and build stronger government–industry partnerships, and also raise awareness of industry issues that have the potential to affect longer-term government planning considerations.
4.2 Other considerations

IGEM makes the following observations acknowledging the infancy of the new arrangements and that sustainable improvements will require time and resources.

Commitment and contribution of all relevant stakeholders will be vital to ensuring these improvement opportunities are considered, and where appropriate, implemented.

Criticality assessment and designation

The government has adopted viccat as the standardised tool/methodology to guide assessment of criticality under the new arrangements.

IGEM has sighted the viccat IT system, where the data is stored. Based on this and subsequent consultations with EMV and portfolio departments, IGEM observed that improvement opportunities for criticality assessment of infrastructure include:

- developing and applying an agreed approach to identify infrastructure for criticality assessment
- developing and applying an agreed and more objective methodology to assess the criticality of infrastructure – currently criticality assessment relies heavily on the knowledge and experience of key departmental staff in assigning a criticality rating and in interpreting information submitted by owners and/or operators
- making the viccat IT system more user-friendly.

Within the designation process, there is also a need for greater reflection of the existing national regulation and/or standards which some responsible entities are required to comply with.

One potential approach, raised through IGEM’s consultations with stakeholders, is to first assess the criticality of infrastructure. An additional overlay would then be applied which examines the degree of external regulation vital critical infrastructure is subjected to.

Vital critical infrastructure that are not subjected to strong external regulations would then be designated and must comply with the requirements of the Resilience Improvement Cycle.

In an environment of limited resources, this additional overlay following assessment may help further prioritise resources to infrastructure that will gain most from the mandatory resilience building activities under Part 7A of the Act.

The Register

Following IGEM’s sighting of the Register and consultations with EMV, portfolio departments and Victoria Police, IGEM observed that:

- the date of declaration for vital critical infrastructure needs to be included
- there is an opportunity to clarify the purpose and intent of the Register.

Within this context, the Register and the information contained within currently are only for the purposes of compliance with section 74J of the Act.

There were differing views on what information the Register should contain and how it should be used. IGEM acknowledges that the Act does not specify the Register’s purpose. However it is important that there is an agreed position, which best addresses the needs of government and industry moving forward.

IGEM notes that EMV is aware of the limitations of the Register in its current form and has commenced investigating the possibility of the Register having broader emergency management applications. For example, informing emergency management planning at various levels or to inform decision-making during emergency response.

Source: Shutterstock
This section provides an overview of future assurance priorities in accordance with IGEM’s legislated role to monitor, review and assess critical infrastructure resilience at a system level.

IGEM is committed to working collaboratively with EMV, portfolio departments, Victoria Police and other stakeholders to ensure its system level assurance priorities are proportionate, fit for purpose and foster continuous improvement of critical infrastructure resilience arrangements.

IGEM recognises the primary responsibility for critical infrastructure resilience lies with infrastructure owners and/or operators.

Portfolio departments support critical infrastructure owners and/or operators in building capability for this through mechanisms of internal assurance processes. These include, but are not limited to, exercising, evaluating and audits.

As such IGEM will not unnecessarily create any new reporting requirements and will seek to leverage existing outputs to inform its assurance activities.

5.1 Critical Infrastructure Resilience Assurance Plan

IGEM developed a Critical Infrastructure Resilience Assurance Plan to provide a high-level overview of how critical infrastructure resilience assurance will be delivered. The Plan will be progressively updated over time to reflect future assurance priorities.

This progress report is the first output created under the Plan and focuses on the first year of implementation progress of the new arrangements.
5.2 Assurance approach for 2017

Through the conduct of this progress report, IGEM has observed the following themes for further consideration and analysis as part of its next critical infrastructure resilience assurance report.

- Continued progress towards consistent criticality assessment and designation across all sectors, which promotes consideration of existing regulatory oversight and resilience building initiatives. This is to ensure a focus on the most important assets and services and appropriate and commensurate regulation based on risk.

- Ongoing implementation of the Cycle, with an emphasis on conduct of audits as well as progress with respect to statements of assurance. This includes consideration of whether emergency risk management actions and activities proposed in previous statements of assurance have been undertaken.

- Evolution of SRPs including broadened consultation with industry, other government departments, Victoria Police and agencies (including regulators), where appropriate. This is with a view to strengthening identification and management of cross-sector dependencies.

- Evidence of implementation of resilience improvement initiatives from 2016–17 SRPs.

To enable more streamlined and proportionate assurance moving forward, IGEM proposes that it attends, where appropriate, system level forums relevant to the implementation of the arrangements as an observer. These include:

- the Critical Infrastructure Resilience Sectors Forum\(^{11}\)
- the All Sectors Resilience Network Forum
- sector specific forums by invitation.

Through its observer status, IGEM can minimise administrative burden on EMV, portfolio departments and Victoria Police through ongoing collection and monitoring of progress. Additionally, IGEM would gain valuable understanding of the contextual factors which enable or inhibit progress with respect to the arrangements.

IGEM will consult further with EMV, portfolio departments and Victoria Police prior to finalising its assurance approach and scope for 2017.

\(^{11}\) Formerly the Sector Resilience Network Coordination Group.
IGEM notes the sound progress of the emergency management sector and critical infrastructure owners and/or operators in implementing the new critical infrastructure resilience arrangements in Victoria.

While the specific approach taken varied from sector to sector, IGEM found that these were aligned to the intent of the Strategy, and were commensurate to characteristics of the sector and its specific risks.

This reinforces the need for a consistent but flexible approach across sectors, rather than being prescriptive. It also reflects the inherently interdependent and complex nature of critical infrastructure in Victoria and, in some cases, their national significance.

For relevant sectors with infrastructure designated as vital, IGEM commends the diligence and efforts of DEDJTR and DELWP to ensure compliance with legislative requirements.

In addition, EMV has demonstrated positive implementation progress with respect to their obligations under legislation and as outlined in the Strategy. While primarily focused on legislative compliance, IGEM has observed that consideration is being given to broader matters and longer term improvements.

Through the conduct of this progress report, IGEM has identified a number of good practice themes and lessons, as well as other considerations. Where relevant and appropriate, IGEM encourages EMV and portfolio departments to consider these themes, lessons and considerations as they relate to their sector(s) but also across sectors.

IGEM will continue to report on the implementation of critical infrastructure resilience in its next report in 2017.

The Inspector-General thanks EMV, portfolio departments and Victoria Police for their contribution to this progress report and continued support with future assurance activities.
7 Bibliography
