1. **What is the Safety, Productivity & Environment Construction Transport Scheme?**

The Safety, Productivity & Environment Construction Transport Scheme (SPECTS) is a voluntary scheme designed to enable the efficient movement of construction materials to support growth of the greater Newcastle-Sydney-Wollongong area by allowing enrolled trucks carrying more materials greater road access in return for meeting higher environmental, safety and compliance standards.

Enrolled vehicles are required to have a Performance Based Standards (PBS) Vehicle Approval, have, at least, a Euro 5 engine, be fitted with a range of safety features, be enrolled in the Intelligent Access Program (IAP) and equipped with On Board Mass (OBM) monitoring systems linked to the IAP, to provide compliance assurance in return for improved access.

2. **What benefits does the Scheme aim to provide?**

The Scheme aims to deliver up to 50,000 fewer truck movements per year from major government infrastructure projects alone, helping to reduce wear and tear on local and major roads, and ease congestion.

However, the Scheme expands beyond these government infrastructure projects to include all construction projects within the NSW Urban Zone to ensure the benefits flow to a greater number of communities.

A map of SPECTS roads can be accessed by clicking here.

3. **What are the benefits of SPECTS for transport operators?**

SPECTS provides heavy vehicle operators that want to carry more materials with the opportunity for greater road access than they currently have available. For example, transport operators utilising seven axle truck and dog combinations that wish to transport a total vehicle combination and load mass of more than 50.5 tonnes are able to transport a total of up to 57.5 tonnes under SPECTS.

At this higher mass, general access is available on the state road network and approved local council roads with very few restrictions compared to the restrictions on the current B-double network.

For semi-trailer combinations, a total mass of up to 50.5 tonnes is available and general access will also be available rather than the current Higher Mass Limits (HML) PBS Level 1 Network.

Independent research estimates that enrolled transport operators can increase productivity benefits through SPECTS, including increased revenue of up to $80,000 per vehicle during the first year and $100,000 each subsequent year based on operating 300 days. This estimate accounts for the approximate cost of retro-fitting the required safety features and installing Intelligent Access Program route monitoring and On Board Mass measuring devices.

Enrolled vehicles must display a SPECTS sticker to show that they are a participant in the scheme.

4. **How does the community benefit from the use of the Scheme by transport operators?**

The community will benefit from industry’s use of smarter, cleaner and safer trucks on the roads:
• The Scheme aims to reduce truck movements by 17 per cent around major government infrastructure projects which equates to roughly 50,000 fewer truck movements per year.

• Enrolled heavy vehicles are required to meet higher environmental, safety and compliance standards including:
  - Vehicles must be Performance Based Standards (PBS) approved to perform their task as productively, safely and sustainably as possible. This means they have passed a rigorous process to meet 16 national safety standards. Vehicles must be equipped with an Intelligent Access Program (IAP) in-vehicle unit to enable satellite-based tracking, providing Roads and Maritime and the community with greater assurance that the right heavy vehicles are operating on the right roads.
  - Vehicles must be fitted with On Board Mass (OBM) measurement devices linked to IAP so Roads and Maritime knows how much is being carried on the road and when crossing structures. Vehicles are required to be fitted with a minimum Euro 5 diesel engine to reduce harmful emissions, such as particulate matter.

Roads and Maritime will apply a comprehensive risk-based compliance strategy combining on-road enforcement and follow-up investigations to manage risk and maximise the benefits of the Scheme for industry and the community.

Operators are required to have arrangements in place to ensure that enrolled vehicles meet all applicable roadworthiness standards.

5. What types of vehicles are eligible to join the Scheme?

The following heavy vehicles are eligible to apply for enrolment in SPECTS, provided they have a Performance Based Standards (PBS) approved vehicle that meets the PBS Bridge Loading standard at Tier 1 (except for the quad axle prime mover semi-trailer combinations listed at paragraph c) and paragraph e) which may operate under the Scheme if they meet the PBS Bridge Loading standard at Tier 3) and is:

a) A PBS Level 1 or 2A 3 or 4 axle rigid truck towing a 3 axle dog trailer with a current PBS Vehicle Approval for operation at up to 54.0 tonnes and with a maximum overall length no greater than 20.0 metres; or

b) A PBS Level 1 or 2A 3 or 4 axle rigid truck towing a 4 axle dog trailer with a current PBS Vehicle Approval for operation at up to 57.5 tonnes and with a maximum overall length no greater than 20.0 metres; or

c) A PBS Level 1 prime mover semi-trailer combination with a quad axle group with a current PBS Vehicle Approval for operation at up to 50.5 tonnes and with a maximum overall length no greater than 20.0 metres (this combination may operate if it meets the Bridge Loading standard at Tier 3); or

d) A PBS Level 1 prime mover semi-trailer combination with a tri-axle group with a current PBS Vehicle Approval for operation at up to 46.0 tonnes and with a maximum overall length no greater than 20.0 metres; or

e) A PBS Level 1 concrete agitator prime mover semi-trailer combination with a quad axle group with a current PBS Vehicle Approval for operation at up to 50.5 tonnes and has a maximum overall length no greater than 20.0 metres (this combination may operate if it meets the Bridge Loading standard at Tier 3); or

f) A PBS Level 1 concrete agitator prime mover semi-trailer combination with a tri-axle group with a current PBS Vehicle Approval for operation at up to 46.0 tonnes and has a maximum overall length no greater than 20.0 metres; or

g) A rigid concrete agitator with a current PBS Vehicle Approval for operation at PBS Level 1; and

h) Has a maximum height of 4.3m; and

i) Is engaged in “construction activity”.

An operator must **not** exceed the mass available under the PBS Vehicle Approval and must comply with the **lower** of: the applicable mass set out above or the mass stated in the PBS Vehicle Approval.

Eligible vehicles must have the following safety and environmental features set out in the Scheme Business Rules:

- Electronic Stability Control (ESC) – on vehicles manufactured on or after 1 January 2017 as defined in the SPECTS Business Rules
- Roll-over control system on trailer – to be fitted to vehicles manufactured on or after 1 January 2017 in conjunction with ESC as defined in the SPECTS Business Rules
- Systems to improve visibility and detection of vulnerable road users, such as blind spot mirrors as defined in the SPECTS Business Rules
- Reversing lights on both truck and trailer as defined in the SPECTS Business Rules
- Enhanced vehicle visibility markings – using retro-reflective tape to provide a contour outline of the vehicle as defined in the SPECTS Business Rules
- “Smart” reversing alarm, which adjusts the noise level to be appropriate for the environment that the vehicle operates in, on both the truck and trailer as defined in the SPECTS Business Rules
- At least Euro 5 diesel engine as defined in the SPECTS Business Rules.

Eligible vehicles must also:

- Be enrolled in the Intelligent Access Program (IAP) and IAP-linked On Board Mass (OBM) in NSW
- Be currently registered in an Australian jurisdiction
- Be issued and comply with the PBS Vehicle Approval, which sets out the approved combination and the required national operating conditions
- Comply with all the conditions set out in the SPECTS Business Rules and the *NSW Class 2 Safety, Productivity & Environment Construction Transport Authorisation Notice 2016.*

An enrolled operator must have arrangements in place that ensure each nominated vehicle meets all of the heavy vehicle standards and that no vehicle is operated on a road when it is unsafe.

### 6. What legal framework does the Scheme operate under?

The Scheme has been established through the *NSW Class 2 Safety, Productivity & Environment Construction Transport Authorisation Notice 2016* and was issued under the Heavy Vehicle National Law and published by the National Heavy Vehicle Regulator in the Commonwealth Gazette.

It is a condition of the Notice that operators enrolled in the Scheme comply with all of the requirements set out in the SPECTS Business Rules and other Scheme documents such as the application form. The SPECTS Business Rules and the SPECTS Network Map detailing the legally approved network are available at [www.rms.nsw.gov.au/spects](http://www.rms.nsw.gov.au/spects).

### 7. How much mass are operators able to carry and where are they able to travel?

Vehicles enrolled in SPECTS are able to carry their maximum allowable mass as approved on their NHVR PBS Vehicle Approval.

SPECTS eligible vehicles may operate up to the maximum SPECTS approved mass limits set out in the table below on routes shown on the SPECTS Map.
<table>
<thead>
<tr>
<th>Eligible vehicle</th>
<th>SPECTS approved mass (maximum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBS Level 1 and 2A 3 or 4 axle truck towing 3 axle dog trailer¹</td>
<td>Up to 54.0 tonnes</td>
</tr>
<tr>
<td>PBS Level 1 and 2A 3 or 4 axle truck towing 4 axle dog trailer¹</td>
<td>Up to 57.5 tonnes</td>
</tr>
<tr>
<td>PBS Level 1 prime mover semi-trailer combination with quad axle group¹</td>
<td>Up to 50.5 tonnes</td>
</tr>
<tr>
<td>PBS Level 1 concrete agitator prime mover semi-trailer combination with quad axle group¹</td>
<td>Up to 50.5 tonnes</td>
</tr>
<tr>
<td>PBS Level 1 prime mover semi-trailer combination with tri-axle group¹</td>
<td>Up to 46 tonnes</td>
</tr>
<tr>
<td>PBS Level 1 concrete agitator prime mover semi-trailer combination with tri-axle combination¹</td>
<td>Up to 46.0 tonnes</td>
</tr>
<tr>
<td>PBS Level 1 rigid concrete agitator</td>
<td>As per PBS Vehicle Approval</td>
</tr>
</tbody>
</table>

The eligible vehicles listed in the table above may apply for enrolment in the Scheme if they are a PBS approved vehicle that meets the PBS Bridge Loading standard at Tier 1 (except for the quad axle prime mover semi-trailer combinations which may operate under the Scheme if they meet the PBS Bridge Loading standard at Tier 3).

The listed eligible vehicles are able to travel on all approved State Roads and local council roads in the NSW Urban Zone, excluding bridges signposted with load limits. This is known as the SPECTS network and can be accessed on the Roads and Maritime website by clicking on the button below. Operators will require National Heavy Vehicle Regulator (NHVR) issued permits to travel on local council roads within the Urban Zone for roads that have not been approved for inclusion in the SPECTS Network.

There are no bridge restrictions for 6 axle truck and dog combinations and 20 metre prime mover semi-trailer combinations and, only one bridge restriction for 7 axle truck and dog combination, on the state road network in the NSW Urban Zone - Gasworks Bridge at Macarthur Street in Parramatta.

8. What type of materials are transport operators able to carry?

SPECTS eligible vehicles operating under the Scheme are required to carry one or a combination of the following construction materials:

¹ Overall combination length is limited to a maximum of 20.0 metres
<table>
<thead>
<tr>
<th>Material</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bitumen</td>
<td>Resinous or tar-like substance used for road construction and for roofing</td>
</tr>
<tr>
<td>Bricks and masonry</td>
<td>Includes fired clay blocks; stone blocks; glass blocks; and concrete blocks (often but not always bound with mortar) for construction, also includes clay, glass, concrete and terra cotta tiles</td>
</tr>
<tr>
<td>Cement and concrete</td>
<td>Cement powder; concrete in wet mix form; crushed concrete; and pre-cast concrete products used for construction (such as noise walls), drainage and landscaping</td>
</tr>
</tbody>
</table>
| Fly ash and slag         | Fly ash is a cementitious material used in the production of concrete and mortar
Slag is a by-product from steel production used in concrete production |
| Glass                    | Includes glass used for internal and external glazing, as a structural item (e.g. curtain walls) and for decorative purposes. Does not include non-fixed items made from or including glass such as shelves, table tops and household products |
| Plasterboard             | Solid sheets of gypsum between sheets of paper used for walling, includes buckets, tape and other fixings for the installation of plasterboard |
| Quarry products (including aggregates and sand) | Aggregates (crushed rocks) and sand (including manufactured sand) for example, as used in concrete production and as a road base |
| Spoil and demolition waste | Spoil is dirt and rock excavated from a construction site
Demolition waste is waste material from the demolition of an existing structure including:
Concrete;
Bricks;
Insulation materials;
Electrical wiring and conduit;
Plumbing;
Reinforcing rods or mesh and other metals;
Glass; and
Wood
Does not include hazardous waste such as contaminated soil or material removed from a structure prior to its demolition |
| Steel                    | An alloy of iron and carbon commonly used in construction as structural beams, roofing and concrete reinforcement. May be in the form of rods, sheets, coils or mesh and also includes fabricated items such as stairways, doors and window frames |
| Timber                   | Milled or dressed timber intended for use in construction including as a structural item, for internal or external flooring or cladding, also includes plywood and particleboard |

Drivers will be required to carry a document that identifies which construction materials are being carried and which accurately identifies the driver’s origin and destination. A load being carried in or on a nominated vehicle of an enrolled operator may comprise more than one type of construction material. Loads consisting of one or more construction materials together with other types of goods are not permitted.

9. How can transport operators join the Scheme?
Operators may enrol eligible vehicle units in the Scheme by lodging an application with Roads and Maritime Services along with documented proof of eligibility for each vehicle unit, including prime movers, hauling units and trailers.
Download a copy of the application form at the bottom of this page.

At the time of lodging the application form for enrolment in SPECTS the applicant must provide satisfactory documentary evidence that the vehicle meets all of the conditions set out in the SPECTS Business Rules. The following forms of evidence are acceptable for use for enrolment in SPECTS:

- Where the vehicle is new and the required equipment and fittings were included as part of the manufacture process a letter or report from the vehicle manufacturer. The letter or report must specify each part of the equipment or fittings that is fitted to the vehicle; or
- Where the required equipment and fittings were fitted after the manufacture process a letter or report from the vehicle or equipment manufacturer or dealer or supplier or installer who fitted the equipment. The letter or report must specify each part of the equipment or fittings that is fitted to the vehicle; or
- A letter or report from an Authorised Vehicle Examiner (AVE) certifying that the vehicle is fitted with the required equipment and fittings. The letter or report must specify each part of the equipment or fittings that is fitted to the vehicle. (Note that in providing such a letter or report the AVE is not exercising a function under the Vehicle Standards Compliance Certification Scheme (VSCCS)); or
- A statutory declaration from the applicant attesting that the vehicle is fitted with the required equipment and fittings. The declaration must specify each part of the equipment or fittings that is fitted to the vehicle.

In addition the applicant must provide:

- Application form completed and signed
- PBS Vehicle Approval
- Letter from the vehicle/suspension manufacturer stating the Road Friendly Suspension (RFS) details of the suspension system(s) certified in accordance with the Commonwealth VSB 11 (if required)
- Letter of consent from registered operator for registering vehicles in the IAP (if the applicant is not a registered operator).

An applicant may use a combination of these forms of documentary evidence to establish that the vehicle meets the SPECTS vehicle requirements.

Scheme enrolment is subject to annual renewal of enrolment of all vehicle units. Operators must advise Roads and Maritime of changes to vehicle ownership or registration. An operator may terminate their enrolment in the Scheme at any time.

All enrolled vehicles, including trailers, are issued with a SPECTS label which must be displayed in accordance with the following:

- Heavy motor vehicle SPECTS stickers should be affixed in clear view on, or adjacent to, the driver’s side door (at eye level);
- Trailer stickers should be affixed to a piece of perspex (or similar) and attached to the rear of the trailer in clear view as near as possible to the number plate.
No enrolment fee is charged.
Interstate registered vehicles are also eligible to be enrolled in the Scheme.

10. **What does an operator have to do if they are not yet enrolled in the Intelligent Access Program in NSW?**

Operators will need to enrol in the Intelligent Access Program (IAP) as part of the SPECTS enrolment process.


Note, an IAP in-vehicle unit and On Board Mass (OBM) linked to IAP equipment is required for a vehicle to be operating compliantly under the *NSW Class 2 Safety, Productivity & Environment Construction Transport Authorisation Notice 2016*. 
11. **What if an operator is already enrolled in the Intelligent Access Program in NSW?**

Operators already enrolled in the Intelligent Access Program (IAP) in NSW are still required to enrol in the SPECTS and OBM SPECTS IAP schemes.


Note, an IAP in-vehicle unit and On Board Mass (OBM) linked to IAP equipment is required for a vehicle to be operating compliantly under the *NSW Class 2 Safety, Productivity & Environment Construction Transport Authorisation Notice 2016*.

12. **What is the Intelligent Access Program?**

The Intelligent Access Program (IAP) provides restricted access and over dimension/mass vehicles with improved access to NSW's road network. In return, their compliance with approved access conditions is monitored using certified satellite-based tracking technology. This provides Roads and Maritime and the community with greater assurance that the right heavy vehicles are operating on the right roads.

For more information on the Intelligent Access Program [click here](#).

13. **What is On Board Mass monitoring?**

OBM systems monitor all the axle groups in the vehicle combination and provide the mass readings of these axle groups to the Intelligent Access Program (IAP) system.

Approved OBM systems linked to the IAP are administered by [Transport Certification Australia (TCA)](https://www.tc.gc.gov.au/) and allow Roads and Maritime Services and other road managers in NSW to grant access to routes approved as suitable that may have previously been unavailable for these vehicle types due to identified infrastructure risks.

The use of approved OBM systems linked to the IAP provides road managers and other asset managers with a high level of assurance that bridge and road mass limits have not be exceeded.

For more information on On Board Mass [click here](#).

14. **What are Performance Based Standards vehicles?**

Performance Based Standards (PBS) is a national heavy vehicle scheme, administered by the NHVR, designed to offer the heavy vehicle industry the potential to achieve higher productivity and safety through innovative and optimised vehicle design.

PBS vehicles are designed to perform their tasks as productively, safely and sustainably as possible, and to operate on networks that are appropriate for their level of performance. The basic principle of PBS is matching the right vehicles to the right tasks.

PBS vehicles are tested against 16 stringent safety standards and four infrastructure standards to ensure they fit the existing road network and are safe.

For more information on Performance Based Standards [click here](#).

15. **What is the role of local councils in relation to the Scheme?**

Councils are road managers under the Heavy Vehicle National Law and need to provide their consent for eligible vehicles to use their local roads. The Scheme requires operators to enrol in the IAP and for the enrolled vehicles to be fitted with approved OBM systems linked to the IAP in order to provide all road managers and asset managers (including Roads and Maritime Services and councils) with a high
level of compliance assurance that eligible vehicles are complying with mass limits and are staying on approved routes.

16. **How does access under SPECTS differ from access under the National Class 2 PBS Level 1 & 2A Truck and Dog Trailer Authorisation Notice 2016 (No.1)?**

SPECTS provides greater access for eligible vehicles by removing the restriction on nearly all "do not cross" structures (other than those with signposted load or other limit).

For example, under the **National Class 2 PBS Level 1 & 2A Truck and Dog Trailer Authorisation Notice 2016 (No.1)**, at masses above 43 tonnes a prime mover semi-trailer combination with a quad axle group may operate on the approved HML PBS Level 1 network. This network has 41 bridges on State classified roads in the NSW Urban Zone that cannot be crossed by combinations with a total mass above 43 tonnes. The SPECTS access for the same combination has the same approved roads and only 1 signposted mass limited bridge on State classified roads.

Similarly, a 3 axle truck and 4 axle dog trailer combination at an approved mass up to 57.5 tonnes, under the **National Class 2 PBS Level 1 & 2A Truck and Dog Trailer Authorisation Notice 2016 (No.1)**, has access to the GML/CML PBS 2A network which is based on the GML 25/26m B-double network. Under SPECTS the same combination has broadly general access on State classified roads with only 1 signposted mass limited bridge on State classified road in the Urban Zone.

17. **How can I give feedback or make enquiries?**

Roads and Maritime Services welcomes feedback or enquiries. Please send your comments or questions to iap@rms.nsw.gov.au or call 1300 364 847.

18. **Where can I find out more information?**

Click on the following links for more information:

- [Safety, Productivity & Environment Construction Transport Scheme](#)
- [Performance Based Standards](#)
- [Intelligent Access Program](#)
- [Transport Certification Australia](#)
- [On Board Mass](#)