

Heavy Vehicle Policy Determination

Mandatory Intelligent Access Program monitoring of Category 1, Category 2 and Category 3 Special Purpose Vehicles including heavy mobile cranes, concrete pump trucks and drill rigs in Queensland

Effective Date: 9 July 2020

Purpose: The purpose of this policy is to provide a framework for the consistent approach to the application of mandatory Intelligent Access Program (IAP) monitoring of Category 1, Category 2 and Category 3 Special Purpose Vehicles (SPVs) in Queensland.

Definitions:

IAP means the Intelligent Access Program. The IAP is a national program that uses satellite tracking and wireless communication technology to monitor where, when, and how heavy vehicles operate on the road network. A module that provides on board mass information can also be included as part of the IAP. In Queensland the program allows heavy vehicles to operate under enhanced conditions, usually around increased mass and network access.

Of significant benefit to the Department of Transport and Main Roads (TMR) is the IAP's capability to effectively monitor the travel information of vehicles enrolled in the scheme, and in particular, if and when a vehicle is off an approved route or has crossed a restricted bridge or culvert. If a vehicle travels outside their permit conditions the IAP Service Provider provides a non-compliance report to the department for investigation.

Specified route means the entire continuous route, including all roads to be travelled on, from the point of origin (start of route) to the destination (end of route) of the vehicle.

Special Purpose Vehicle means a motor vehicle or trailer, other than an agricultural vehicle or a tow truck, built for a purpose other than carrying goods; or a concrete pump or fire truck.

VLM means Vehicle Limits Manual. The VLM details the technical and administrative policies and procedures used by TMR officers to assess vehicles requiring an excess mass and dimension permit.

Application: This policy applies to all IAP Category 1, Category 2 and Category 3 SPVs in Queensland. (Refer to Table 1 for IAP SPV categories and descriptions.)

As a mandated policy, all SPVs that fall into the IAP categories (including interstate operators), must be enrolled under the IAP framework.

Background: In 2010, TMR introduced the voluntary application of the IAP for selected SPVs in Queensland, including heavy mobile cranes, concrete pump trucks and drill rigs, to improve the management of road network access. By participating in IAP, operators were able to qualify for excess mass period permits of extended duration and increased road network access. Operators that chose not to participate in the IAP remained eligible for more restricted permit durations and road network access.

On the 12 October 2016, the Minister for Transport and Main Roads approved the mandating of IAP on all IAP Category 1, Category 2 and Category 3 SPVs. There was a six month transition period to allow operators time to install approved IAP devices and become conversant with IAP operating arrangements.

IAP registration became mandatory in Queensland from 1 June 2017. Under the new arrangement, there are substantial benefits to TMR, industry and the community, including increased assurance

around infrastructure protection and network access, productivity gains, and significant administrative and cost savings around the issuing of permits.

Determination: In implementing this policy, the following criteria applies:

- Mandatory IAP will be applied on IAP Category 1, Category 2 and Category 3 SPVs (refer to Table 1 for category descriptions).
- IAP Category 1 and Category 2 SPVs will be issued with 3 year area permits for all State-controlled roads.
- Permits issued for IAP Category 1 and Category 2 SPVs include conditions for specified structures that can only be crossed if the appropriate Specified Route permit is obtained, including a structural assessment by the Structure Assessment Team (SAT) within Engineering & Technology (E&T). (Operators will need to apply for Specified Route permits in these instances.)
- All Category 3 SPVs must obtain a Specified Route permit, including a structural assessment by SAT for each requested route. Operators are to include the entire continuous route, including all roads to be travelled on, for the point of origin (start of route) to the destination (end of route) in their permit application.
- As a mandated policy, all SPVs that fall into the IAP categories (including interstate operators), must be enrolled under the IAP framework.

Table 1 – IAP Special Purpose Vehicle Categories

IAP Vehicle Category	Description
Category 1	SPVs which comply with TMR's Vehicle Limits Manual (VLM) Single Trip permit requirements, that is, a vehicle with a total mass between 40t and 70t and complying with a Gross Mass Limit formula of $3L+15\pm G$ for all combinations of axle groups. (See Attachment A for Gross Mass formula calculation).
Category 2	SPVs, not complying with $3L+15\pm G$ that have been assessed and approved by SAT for operation under 48t SPV restrictions. These restrictions are based on the structural loading effects of a "standard" 4 axle all terrain crane operating at 12 tonnes per axle.
Category 3	SPVs, not complying with $3L+15\pm G$ that have been assessed by SAT and determined to be not suitable for operation under 48t SPV restrictions.

Process:

- Permit applications for IAP Category 1, Category 2 and Category 3 SPVs must be submitted to the National Heavy Vehicle Regulator (NHVR). The NHVR will then forward the relevant application to TMR for Road Manager consent and/or refusal.
- On receipt of the permit application request by TMR's Heavy Vehicles section, it is assessed as follows:
 - All IAP Category 1, Category 2 and Category 3 Specified Route applications will be forwarded to the relevant TMR District and SAT for approval and/or refusal.
 - All IAP Category 1 and Category 2 area permits will be forwarded to the relevant TMR District for approval and/or refusal.
 - SAT and TMR District responses will be collated and sent to the NHVR for approval or refusal, as appropriate.

Approved by:



Mark Mitchell

Director (Heavy Vehicle Policy)

Date 9 / 07 / 2020

Date for Next Review	9 July 2023
Amendment History	
7 November 2016	Version 1.0 - New Policy
4 February 2020	Version 2.0 - Policy reviewed. Major amendments for SPV Return of Delegations to the NHVR. Amendments include: <ul style="list-style-type: none">• removal of 300km radius,• revisions to reflect current permit terminology,• revised policy determination template, and• removal of irrelevant internal team procedures.
15 June 2020	Version 2.1 - Include detailed requirements for origin and destination details for Specified Route permit applications.
9 July 2020	Version 2.2 – Minor amendments: <ul style="list-style-type: none">• definition of 'Specified route' has been updated for clarity, inclusions of 'start of route' and 'end of route' wording, and• revision to dot point 4 under Determinations.

Attachment A – Gross Mass Calculation

The sum of the mass on each single axle and axle group in the distance "L" described below (including those from which the distance is measured) must not exceed the number of tonnes represented by the figure "M", and calculated as follows:

$M = 3L + 15$, *plus* 1 tonne for each 100mm by which the ground contact width in the distance exceeds 2.5m, *or minus* 1 tonne for each 100mm by which that ground contact width is less than 2.4m.

L is the distance in metres between:

- (a) the centre lines of any two single axles; or
- (b) the centre line of any single axle and the centre line of the furthest axle in any axle group; or
- (c) any 2 axle groups, measured from the centre lines of the axles furthest apart from each other.

“ground contact width”:

- (a) in relation to an axle, means the distance between the outermost point of ground contact of the outside tyres on each end of the axle; and
- (b) in relation to an axle group, means the greatest ground contact width of all the axles in the group.

The width for the purposes of gross mass calculation shall be the ground contact width across axles of the heaviest axle group.

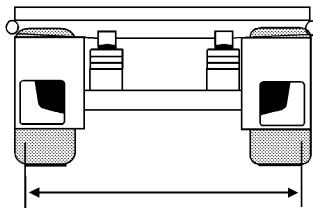


Illustration of ground contact width of an axle

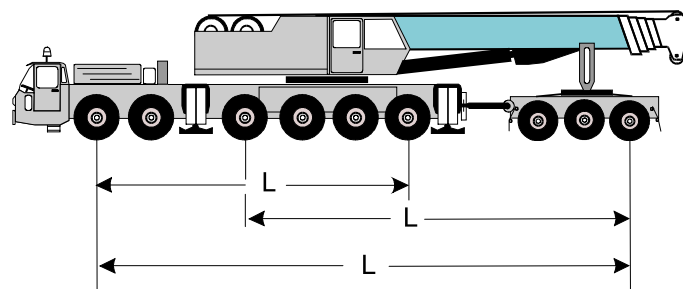


Illustration of "L" distances