Assessor Sign-Off (ASO)

PBS Certification Anomalies - Work Procedure

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1 Background

An as-built Performance Based Standards (PBS) vehicle may not conform to one or more aspects of its PBS Design Approval (DA), resulting in deviations. These deviations are referred to as **Certification Anomalies.**

The process of the PBS Assessor confirming that the as-built combination continues to meet PBS standards at the same or higher level as indicated in the DA is referred to as **Assessor-Sign Off** or **ASO**. The ASO pathway is intended to provide a practical way of dealing with minor anomalies identified during the certification of PBS vehicles.

This document sets out a work procedure for PBS Assessors and PBS Certifiers to follow when signing-off PBS vehicles with certification anomalies.

If an as-built combination contains certification anomalies, an ASO must be provided as part of a PBS Vehicle Approval (VA) application.

2 PBS ASO Records Management

This section applies from 16 June 2025.

For auditing and assurance purposes, Assessors must adhere to the governance principles outlined in this section.

ASO Document Requirements

1. Assessors must use the approved document template as listed on the NHVR website - ASO Template.
2. The ASO document must:
    a. Be assigned a unique ID number. See notes below.
    b. Specify the design application number (V number).
    c. Include the number and details of each type of anomaly.
    d. Contain a declaration prescribed by these rules.
    e. Be signed and dated by an accredited PBS Assessor. Exception: when adding identical VIN's the ASO may be left unsigned – refer to section 19 'Inclusion of Additional Vehicles and ASO'.

Notes:

- The unique ASO ID number must be stated within the ASO document; the ID number should also be included in the filename.
- Each ASO document, or new version of an existing ASO (whether signed or unsigned), must have a unique ID number. For related ASOs, it is recommended to append version number as a suffix to the main ID — for example, 'ID-1' for the first version, 'ID-2' for the second version, and so on.

3. Declaration Requirements

All ASOs must include the following declaration:

Note: The declaration cannot be altered and must appear on the ASO exactly as stated below.

"I declare that I have evaluated the as-built PBS vehicle with regards to physical characteristics referred to in the application for PBS Vehicle Approval and confirm that it continues to meet the PBS performance standards at the PBS level consistent with the original Design Approval (e.g. Level 1), as outlined in the PBS Standards and Vehicle Assessment Rules of the PBS scheme.

I agree that in conducting the assessment pursuant to this ASO my obligations under the Assessor Agreement between me and the NHVR apply.

I understand that giving an official a document containing information I know to be false or misleading is an offence under Section 702 of the Heavy Vehicle National Law, and that penalties may apply."

[Assessor's Name and Signature]
[Date]

ASO Register Requirements

1. Assessors must maintain a register of all issued ASOs, which must include the following information at a minimum:
    a. Unique ASO document ID number.
    b. Design application number (V number).
    c. Name of the Assessor authorising the ASO.
    d. Date of issuance.
    e. Name of the requesting Certifier.
    f. Name and company name of the design holder.
    g. VIN count for each vehicle unit type - e.g., prime mover, lead trailer, dolly. Refer to example below.
    h. Total number of anomalies, this being the total anomaly count for each combination added together, including duplicate anomalies. Refer to example below.
    i. Assessment evaluation method used (e.g., computer simulation, engineering judgment).

Note: ASO register must be maintained per Assessor and not Company as Assessors are accredited on an individual basis.

Example: Anomaly and VIN Count

The example table shows the total number of VINs for each vehicle unit in the combination. If individual units contain multiple labels, i.e. PM1, PM2 and so on, a VIN count for each label is not required—only the overall total number of VINs per vehicle unit is required.

The total number of anomalies is the sum of all anomalies across all combinations, including any duplicate anomalies (sum of anomalies shown in the Combination Matrix).

PM VINs	Lead VINs	Dolly VINs	Rear VINs	Total Anomaly Count
42	55	15	33	10

Self-Audit Requirements

Assessors must perform an annual self-audit of the record-keeping requirements of the ASO procedure, as well as any additional requirements stated in the Assessor Agreement. The Assessor must have a record of these documents and be able to provide them to the NHVR upon request.

Technical Results

Assessors must be able to produce and provide technical results for any issued ASO upon request by the NHVR. The Assessor will have **5 business days** to respond to such a request.

Retention Requirements

ASO files and records must be stored for **5 years**. This includes signed ASO documents, technical results and assessments, correspondence related to ASO requests and approvals, supporting documentation for anomalies, simulation and engineering assessment reports, vehicle drawings and specifications.

3 Who Can Approve Anomalies

Anomalies can be signed off by any authorised PBS Assessor. While it is preferable that the original PBS Assessor who performed the simulations for the original Design Approval should approve and sign off on anomalies, any authorised PBS Assessor may do so.

By signing off on anomalies, the Assessor assumes liability for the standards that are directly affected by the stated anomalies.

4 Categories of Anomalies

There are two categories of certification anomalies in PBS vehicles – **Dimensional anomalies** and **Component anomalies**.

4.1 Application of Assessor Sign-Off (ASO)

When the limits are not exceeded for Dimensional or Component anomalies, the ASO pathway can be used.

An ASO is an approval from the Assessor confirming that the as-built combination continues to pass the PBS standards at the same or higher PBS level shown on the DA.

4.2 DA Modification

If the limits are exceeded for Dimensional or Component anomalies, a Design Approval Modification is required.

This is the preferred method for addressing certification anomalies as it eliminates the need for an ASO and offers a more robust and accurate way of completing a certification. If a DA Modification is required, it is advisable to obtain one before submitting a VA application.

5 Dimensional Anomalies

Dimensional anomalies are variances in the dimensions of the as-built vehicle that are not within the PBS Certification Tolerance when compared to the DA.

The PBS Certification Tolerance is *the lesser of 1% or 20mm*. If a dimension falls within this tolerance, it is considered compliant and no ASO is required.

5.1 Limits for Dimensional Anomalies

Limit of **six dimensional anomalies per entire combination**, not per vehicle unit.

If a vehicle unit is certified against two or more dimension-sets, the dimensional anomaly limit applies per dimension-set.

5.2 Summary of Dimensional Anomalies

Table 1 Summary of Dimensional Anomalies and Corresponding Pathways

Dimensional Anomalies permitted via ASO	Dimensional Anomalies requiring DA Modification
Dimensions deviating to a max. ±300mm	Width exceeding the original approved DA limit
OAL change to a max. +500mm	OAH exceeding the original approved height bracket 4.3m/4.6m
OAL increase exceeding the original approved length bracket specified in the PBS Network Classification Guidelines is permitted*	Changes to dimensions that cause the dimension between adjacent axle groups to be less than 2.5m
FWO is exempted from ±300mm limit; there's no limit on FWO deviation, but counted towards the dimensional anomalies limit	
Deck height change to a max. +100mm	

* Please note that any changes to the overall length that cause the vehicle to exceed the originally approved length bracket specified in the PBS Network Classification Guidelines will automatically result in the below condition being imposed. The operator should be made aware that this may adversely impact network access.

Operating Condition:

> *1. Due to the vehicle's length (<comb length>) exceeding the maximum permitted length for <Level> access as prescribed by the Network Classification Guidelines, the access of this vehicle will be limited, and an individual route assessment will be required. The operation of the vehicle on the road network will require a permit subject to Road Manager Consent, unless otherwise specified by the Road Manager.*

6 Component Anomalies

Component anomalies refer to variations in individual components of the as-built vehicles that differ from the DA.

6.1 Limits for Component Anomalies

Component anomaly limits:

- Hauling unit limited to 5 component anomalies
- Trailing unit limited to 3 component anomalies.

If a vehicle unit is certified against two or more dimension-sets, the component anomaly limit applies per dimension-set.

6.2 Summary of Component Anomalies

Table 2 Summary of Component Anomalies and Corresponding Pathways

Component Anomalies permitted via ASO	Component Anomalies requiring DA Modification
Any Component listed on the Part B, including:	Addition/removal of steerable axles or changes to the steerable axle position
Tare Weight	Addition/removal of lift axles or changes to the lift axle position
Track Width and Dual Tyre Spacing – counted as one component anomaly	Tyre size and load rating
GCM, GVM and ATM	
Truck/PM and Trailer/Dolly Make and Model – is a component anomaly	
DAs containing specific requirements for dog trailers, i.e., a dog trailer must be a single unit or made up of a dolly and semitrailer; deviation from this requirement is a component anomaly	
Body Type change	
Changes to deck type i.e., single drop deck to double drop deck	
Transmission - If Make and/or Model differs, but ratios are exactly the same and the FDR falls within the allowed range, this is considered compliant and no ASO is required	
Engine – If Make and/or Model differs, but the horsepower and torque requirements are met, this is considered compliant and no ASO is required	

7 Exclusions to ASO

The following exclusions to ASO apply:

1. Maximum total mass and axle group masses cannot be increased above the limits on the original DA. However, mass reduction is permitted.
2. Changes to Payload Heights or Fill Levels are not permitted.
3. The as-built combination must comply with the operating conditions applicable to the nominated dimension-set of the original DA. The inclusion of new or changes to existing operating conditions are not permitted.

4. The mass transfer allowance available for Euro VI vehicles cannot be granted through an ASO.

8 Changes to Body Type

Certain changes to the vehicle body type are considered a component anomaly and thus are permitted via an ASO, provided the following criteria is met:

1. The new body type must be eligible to carry the same payload type and at the same payload heights.
2. An as-built combination can be changed to carry containers, provided payload type and payload heights remain the same. In this case, a Payload Management condition will be automatically applied, even if it is not on the original DA.
3. A tanker body type cannot be changed to any other body types. Changes to fill levels are not permitted.

9 Changes to Required Exemptions

Dimensional anomalies that require changes to the approved list of exemptions stated on the relevant DA are permitted, provided they comply with the following guidelines:

1. Changes fall within the standard list of exemptions listed under Section 28 of the *Heavy Vehicle (General) National Regulation*.
2. Additional exemptions that are not covered in the above list of PBS exemptions are not permitted. For example, Vehicle Standards exemptions for non-compliant axle groups.

10 Split Axle Groups

The following exclusions apply to vehicles fitted with split axle groups – these changes are not permitted via the ASO process; a DA modification is required.

The following changes to the split axle groups are not permitted:

1. Suspension or suspension Ride Height.
2. Changes to load sharing split.
3. Changes to s-dimension and ROH.
4. Changes to axle spacing in the split axle groups.

11 Trailer ATM Anomalies

Aggregated Trailer Mass (ATM) reduction is considered a **component anomaly**.

Where an ATM of an as-built vehicle is less than the minimum value specified in the DA, and a mass reduction method is not provided in the Part B, the ASO must provide the adjusted masses as applicable – GCM and/or axle group masses.

If, despite reduced ATM, mass adjustment is not required, this must be clearly stated on the ASO. i.e., *ATM reduction does not require total or axle group mass reductions*.

Truck and Dog combinations are exempted from the requirements in this section – mass reductions for as-built combinations are applied by NHVR during VA checking.

For more information refer to IPAC-14 ATM Reductions.

12 ASO Suspensions and Payload Heights

Suspension change is permitted via the ASO process. If the DA uses suspensions to dictate payload heights, the ASO document must clearly state which Payload Heights from the original DA apply to the new suspension option

13 B-Double X-Y Rule

B-Double combinations fitted with tri-tri axle groups that do not comply with the X-Y Rule will require a Tier 2/3 bridge assessment. Tier 1 cannot be added via the ASO process and would require a DA modification.

For more information refer to IPAC-5 X-Y Rule check on PBS Design Approvals.

14 Vehicle Standards Exemptions and the ASO Process

If a DA requires Vehicle Standard (VS) exemptions, dimensions that relate to that exemption cannot be changed via the ASO process, as changes to those dimensions may invalidate the corresponding Vehicle Type Approval (VTA) or Identification Plate Approval (IPA).

If changes to the concerned dimensions are required, a DA modification is required along with an update to the VTA or IPA.

15 Designs containing Section 8 or Section 9 Exemption

Section 9 Exemption that relates to geometrical performance

If a DA contains a Section 9 Exemption that relates to geometrical performance – changes to vehicle dimensions are not permitted via an ASO; a DA modification is required. Dimensional changes will affect the geometric performance of the vehicle and may invalidate the underlying risk assessment that enabled the grant of the exemption.

Section 8 Exemptions for PHL or PVL

If a DA contains a Section 8 Exemption that relates to Pavement Horizontal Loading Standard (PHL) or Pavement Vertical Loading Standard (PVL), such as exceeding the GCM limit for the nominated level i.e., 85.5t at Level 2 as opposed to 85t (PHL), ordinary ASO process applies with all types of anomalies permitted, unless explicitly excluded by this work procedure.

Other Section 8 and Section 9 Exemptions

For other Section 8 and Section 9 Exemptions, caution should be used to ensure anomalies do not affect the aspects of the vehicle linked to Section 8 or Section 9 exemptions.

If unsure, please seek advice from the NHVR's Engineering Team.

16 Tyres

Since Generic Tyre Approach introduction, changes to tyre size or load rating are no longer permitted via ASO.

For more information refer to IPAC-13 Implementation of the generic tyre approach.

17 Completing an ASO Template

When completing an ASO template:

1. Ensure consistent labelling across all application documents, including the Certificate, Part B, as-built drawings, and ASO.
2. List new VINs added to the ASO in bold, while previously approved VINs should be un-bolded.
3. Keep removed VINs on the list but use a ~~strikethrough font~~.
4. Specify every anomaly against each vehicle unit for every combination. Each combination's anomalies must be grouped together and separate from other combinations.
5. Update Note 1 to ensure that "<V NUMBER>" corresponds to the DA being used for certification.
6. Submit a copy of the ASO that complies with the governance requirements to NHVR as part of the VA application.

18 Grandfathering of Previously Approved Anomalies

When adding vehicles to an existing VA:

1. New Standalone Combinations:

   If adding a new standalone combination (a completely new combination consisting solely of new vehicles, with no existing vehicles mixed in), previously approved anomalies for existing combinations on the VA can be grandfathered.

   Anomalies related to the new standalone combination must be recorded on an ASO.

2. New Mixed Combinations:

   If new vehicles are mixed with existing vehicles, this creates new combinations.

   Previously approved anomalies for the existing vehicle units used in the new combination must comply with the current ASO Procedure and be recorded in accordance with this ASO procedure.

3. Incorrectly Approved Anomalies:

   Anomalies cannot be grandfathered if they were approved in error.

   If such errors are discovered, the NHVR may require verification of the anomaly by an Assessor.

As a best practice, it is strongly recommended to transition all previously approved anomalies to the latest ASO format. This approach ensures clarity and serves as a unified point of reference for all anomalies, streamlining their management and improving consistency in future approvals.

The ASO document must contain all VINs, as they will appear on the Vehicle Approval, regardless of whether anomalies for those VINs are recorded on the ASO document.

19 Inclusion of Additional Vehicles and ASO

Fully identical units (with the exact same specifications and dimensions as existing vehicles on the VA) may be added to the existing ASO, and the ASO does not need to be re-signed by the Assessor.
If adding identical VINs to an existing ASO and leaving it unsigned, the updated copy of the ASO must:

- Retain the name of the Assessor who signed the previous version.
- Be dated; the date must reflect when the identical VIN's were added.
- Be provided with the VA submission. The updated ASO will be forwarded by the NHVR to the last signing Assessor for their information and record-keeping purposes.

20 Submission of ASO

If an as-built combination contains certification anomalies, an ASO must be provided as part of a VA application.

By signing and dating the ASO, the Assessor confirms that the listed combinations comply with the PBS standards at the same or higher level of performance as shown on the corresponding DA.

In cases where an ASO is required but not submitted along with the VA application, an Information Request will be sent to the Certifier and DA Holder to obtain the missing ASO.

For more information refer to IPAC-15 VA Applications: Closing and Putting on Hold.

21 Access Considerations

The ASO process serves as a streamlined avenue for approving certification anomalies. However, it is crucial to assess the potential impact of these anomalies on the vehicle's performance, particularly with regard to the reported performance values in the Technical Results Sheet (TRS), a crucial component of the access permit application provided to Road Managers.

The TRS aims to offer insights into how the vehicle performs concerning individual PBS standards, thereby aiding informed decision-making in the access approval process. Anomalies in the vehicle can distort the original TRS values, especially when multiple dimensional changes are present, thereby affecting geometric performance of the vehicle.

When there are multiple anomalies and particularly dimensional changes, it is advisable to consider pursuing a DA Modification. Opting for this approach facilitates the updating of TRS values, ensuring their accuracy and alignment with the actual performance of the vehicle. This, in turn, can significantly benefit the outcome of the access permit application.