# Schedule 4 - Key Performance Indicators

## Definitions and Interpretation

- (a) In this Schedule:
  - (i) all terms that have defined meanings in the Contract have the same meaning in this Schedule as they do in the Contract;
  - (ii) a reference to a Clause is a reference to a Clause in the Contract; and
  - (iii) a reference to a paragraph is a reference to a paragraph in this Schedule.
- (b) In this Schedule, the following words have the following meanings:

**Abatement** means the amount payable by the Operator to TfNSW for a KPI Default.

**Boardings** means the number of Trips taken by all passengers.

**Booked On Demand Services** means an On Demand Service that has been booked by a passenger and a booking confirmation has been provided to the passenger by or on behalf of the Operator.

**Calendar Month** means the period that commences on the first day of the month and ends on the last day of the month.

**Cancelled Trip** means the whole of the Contracted Timetable Trip was cancelled or did not operate.

**Complaint** means each report of a negative experience in relation to the Services including the Salesforce categories of "Complaint" and "Feedback".

**Contracted Accessible Trips** means all Trips that are published as, or contracted as, utilising or requiring a Wheelchair Accessible Bus.

**Contracted Timetable Trips** means trips on Routes Services, Dedicated School Services, Event Services and Rail Replacement Services that are scheduled by Timetable rather than Headway.

**End Transit Stop** means the last Transit Stop of the Contracted Timetable Trip or another agreed "End Transit Stop" that is near the last Transit Stop of the Contracted Timetable Trip.

#### **Excused Performance Incident means**

- (i) an Incident resulting in the Operator's inability to meet a KPI, which:
  - (A) affects one or more Trips on one Route within a six hour period; and
  - (B) is caused directly by a Relief Event for which relief is granted in accordance with Clause 44; or
- (ii) an Incident resulting in the Operator's inability to meet a KPI that affects one or more Trips on one Route within a six hour period and which:
  - (A) involves attendance by police, ambulance or emergency services (which for the avoidance of doubt does not include towing services or roadside assistance such as NRMA roadside assistance);
  - (B) causes a road closure on a Route;
  - (C) causes all reasonable detours to the Route to close; and
  - (D) was not caused or contributed to by the Operator or an Operator's Associate; or
- (iii) any other Incident nominated by TfNSW (in its absolute discretion).

**First Transit Stop** means the first Transit Stop of a Contracted Timetable Trip or another agreed "First Transit Stop" that is near the first Transit Stop of the Contracted Timetable Trip.

Flexible KPI means any of the KPIs contemplated by paragraph 3.

**In-Service KM** means distance in kilometres travelled in performing the Bus Services, in which passengers are able to board the Bus services (for the avoidance of doubt this excludes the distance for that Contract Bus to travel the most direct practicable route between the finishing point of that Bus Service and the starting point of the next Bus Service or between a Contract Depot and a starting or finishing point of that Bus Service).

**Incomplete Trip** means only a part of the Contracted Timetable Trip operated. This means the Trip was shortened to start or end at a point/s between the start and finish, and/or intermediate Transit Stops are missed.

KPI Default means failure to comply with a KPI Target.

**KPI Negative Trend** means a trend in the measured results of a KPI, or an associated lead indicator, which demonstrates a reduction in the performance with respect to that KPI resulting in, or likely to result in a KPI Default.

KPI Relief has the meaning given in paragraph 8 of this Schedule.

**KPI Satisfaction** means the Operator has met or exceeded the Performance Payment Threshold for a KPI.

KPI Table means the individual KPI tables set out in paragraph 11 of this Schedule.

Measured Bus has the meaning given in KPI SA4 (CCTV and Duress Alarm Reliability).

**Mid Transit Stop** means a Transit Stop near the middle of a Route or another "Mid Transit Stop" agreed between the parties.

On Time means, for Contracted Timetable Trips:

- (i) At First Transit Stop; a Contract Bus departing a Transit Stop no more than 59 seconds early and no more than 5 minutes 59 seconds late compared to Timetable;
- (ii) At Mid Transit Stop; a Contract Bus departing a Transit Stop no more than 59 seconds early and no more than 5 minutes 59 seconds late compared to Timetable; and
- (iii) At End Transit Stop, a Contract Bus arriving at a Transit Stop no more than 5 minutes 59 seconds late compared to Timetable.

**Performance Improvement Initiative** means all actions planned and undertaken by the Operator to:

- (i) reverse a KPI Negative Trend; or
- (ii) remediate the cause of any KPI Default.

**Performance Payment** means the amount payable by TfNSW to the Operator for a KPI Satisfaction.

**Published Headway Trips Weighting (PHTW)** means the percent of In Service Km for Headways Trips on each individual Route as a percentage of all Headway Trips and Contracted Timetabled Trips.

**PHTW** = 100x (In Service KM (Headway Trips on individual Route))/ [(In Service KM (Headway Trips) + In Service KM (Contracted Timetable Trips)]

**Published Timetabled Trips Weighting (PTTW)** means the percent of In Service KM for Contracted Timetabled Trips as a percentage of all Headway Trips and Contracted Timetabled Trips.

**PTTW** = 100x (In Service KMs (Contracted Timetabled Trips))/ [(In Service KM (Headway Trips) + In Service KM (Contracted Timetable Trips)]

**Vexatious Complaint** means a Complaint where TfNSW have agreed in writing that the complainant is vexatious.

**Wheelchair Accessible Bus** means a Bus which complies with all of the requirements under DDA Legislation and all associated standards.

**Withholding Amount** means the monthly amount calculated in accordance with the Withholding Amount Calculation where the Operator's performance in respect of a KPI meets the Payment Withholding Threshold for that KPI.

(c) The following table sets out how the KPI Tables included in this Schedule 4 are to be interpreted, along with further defined terms:

	interpreted, along with further defined terms.		
Name	The name of the KPI		
Description	A description of what the KPI does and, at a high level, how it is measured and calculated.		
Hours measured	The hours during which the KPI calculation is applied.		
Calculation	The algorithm for calculation of the level of performance of the KPI for the KPI Reporting Period.		
KPI or KPI Target	The level which the performance of the Operator (calculation) must equal or exceed. If multiple levels are specified, the Operator must meet or exceed each level and failure to do so can cause a KPI Defaults and multiple KPI Defaults can result from the KPI.		
Abatement Thresholds	The thresholds that determine which Abatement Calculation is applied.		
Abatement Calculation	The calculation to determine the Abatement amount that is payable by the Operator to TfNSW.		
Abatement cap	The maximum Abatement that is applied for that KPI Default.		
Performance Payment Cap	The maximum Performance Payment that is applied for that KPI Satisfaction.		
Performance Payment Threshold	The thresholds that determine which Performance Payment Calculation is applied.		
Performance Payment Calculation	The calculation to determine the Performance Payment amount that is payable by TfNSW to the Operator.		
Cure Plan Threshold	The threshold at which the Operator must prepare a Cure Plan and which may trigger other rights or remedies of TfNSW.		
Payment Withholding Threshold	The threshold at which TfNSW is entitled to withhold the Withholding Amounts.		
Withholding Amount Calculation	The calculation to determine the amount of any Withholding Amount that may be withheld by TfNSW in accordance with paragraph 7.8.		
Measurement method	dology		
Measurement starting point	The point in time at which the Operator must commence measurement for any KPI Reporting Period.		

Name	The name of the KPI
KPI Reporting Period	The period over which the performance of the KPI must be measured.
Measurement unit	The granularity with which the KPI performance must be measured and reported against.
Data source	The data sources TfNSW will consider in order to provide an accurate measurement.
Measurement responsibility	States who is responsible party to calculate the KPI and collect any associated data.
Reporting frequency	How frequently performance against this KPI is to be reported.

## 2. KPI Principles

- (a) In accordance with Clause 18 (Key Performance Indicators) of the Contract, the Operator must perform the Services so as to meet or exceed the KPI Targets as set out in this Schedule 4.
- (b) The Operator acknowledges:
  - (i) the emphasis of the KPI regime is on delivery of the Services to meet TfNSW's business requirements and on performance improvement where the Services fail, or are likely to fail, to meet the requirements; and
  - (ii) unless otherwise specified in this Schedule 4 or directed by TfNSW, KPIs apply from the Service Commencement Date and data must be sourced from available sources if automation of data collection is not available.

### Flexible KPIs

- (a) For each Contract Year during the Term after the expiry of Contract Year 1, TfNSW will, at its discretion, nominate at least 1 and up to 3 Flexible KPIs as follows:
  - (i) no later than 2 months prior to the start of the relevant Contract Year, TfNSW will determine and notify to the Operator the Flexible KPIs that will apply to that Contract Year, including by providing the relevant KPI Tables and all associated calculations and thresholds;
  - (ii) TfNSW may select existing KPIs or nominate new KPIs. Where TfNSW selects any existing KPIs, TfNSW may nominate new or different calculation measures and targets for the purposes of associated Performance Payment Thresholds and Performance Payment calculations for that Flexible KPI;
  - (iii) without limiting paragraph (iv), the aggregate amount of Performance Payments to which the Operator may be entitled if its performance meets the Performance Payment Threshold for all Flexible KPIs for the entire Contract Year is 1% of the Annual Contract Price and TfNSW may determine how this amount is allocated between the relevant Flexible KPIs;

- (iv) TfNSW may determine the Performance Payment Thresholds and Performance Payment Calculations for each Flexible KPI at its discretion and noting that TfNSW may adopt stretch targets, however the measurement period for the Performance Payment Threshold and Performance Payment Calculations for the Flexible KPI will be the relevant Contract Year unless otherwise agreed; and
- (v) TfNSW will consult with the Operator prior to making TfNSW's determination on each Flexible KPI for each Contract Year and acknowledges that the Flexible KPIs are to be designed to cover the then current scope of Bus Services and Operating Activities.
- (b) If, during a Contract Year to which Flexible KPIs apply, TfNSW wishes to swap one Flexible KPI with a new proposed Flexible KPI or alter any Flexible KPI for the remainder of that Contract Year, it may notify the Operator of the same and the Parties will seek to negotiate the basis on which such change may occur. Any such change is subject to the agreement between the Parties (with the Operator's agreement not to be unreasonably withheld, conditioned or delayed where the change is proposed by TfNSW to address unforeseen issues or risks). For clarity, the Operator is not entitled to any additional fees or payments in relation to any such change, although the Parties may agree a pro-rated payment of the relevant Performance Payment to reflect KPI Satisfaction to date for that Flexible KPI.
- (c) Without limiting the Operator's obligations to meet or exceed the KPI Targets of any existing KPIs (including existing KPIs that may also be a Flexible KPI), the Parties agree that any failure by the Operator to achieve the Performance Payment Threshold for a Flexible KPI is not a KPI Default or breach of this Contract.

## KPI Reporting

- (a) Each month and otherwise in accordance with the reporting frequency specified for every KPI in the relevant KPI Table, and Schedule 5 (Governance and Reporting), the Operator must provide a written report to TfNSW containing, at a minimum, the following information:
  - numerical data setting out the KPI performance achieved during the KPI Reporting Period against, where applicable, the data for each of the preceding Quarter, 6 Calendar Months and 12 Calendar Months;
  - (ii) a graphical representation of that data highlighting the KPI, the actual performance during the KPI Reporting Period and the performance for each of the previous Quarter, 6 Calendar Months or 12 Calendar Months (as applicable);
  - (iii) a summary table demonstrating performance for each KPI;
  - (iv) details of any Abatements and Performance Payments incurred during the KPI Reporting Period;
  - (v) commentary explaining any performance variations and performance trends, including any KPI Negative Trends;
  - (vi) where, for the KPI Reporting Period, there is a KPI Default, or there is an indication of a KPI Negative Trend, an explanation of the causes of the KPI Default or KPI Negative Trend and (unless TfNSW accepts that this is caused by a one off issue resulting in KPI Negative Trend):
    - (A) details of any proposed Performance Improvement Initiative or any Cure Plan, developed by the Operator to address the causes of any KPI Default or KPI Negative Trend, including proposed actions for the Operator; and

- (B) where there has been a previous Performance Improvement Initiative or Cure Plan for the KPI, the status of the actions and an explanation of any relationship between the initiatives and plans and current performance; and
- (vii) any other information required by Schedule 5 (Governance and Reporting).
- (b) The Operator must include such other information in its reports to TfNSW as is specified in this Schedule 4 or as otherwise required by TfNSW from time to time.
- (c) The Operator must use the format for KPI reporting as required by TfNSW from time to time.
- (d) The Operator may propose additional or alternative data sources that would, in the reasonable opinion of the Operator, improve the quality of measurement and reporting against the KPI. TfNSW may consider any additional or alternative data sources proposed at its absolute discretion.
- (e) In addition to reporting in the KPI Reporting Period specified for each KPI, within 10 Business Days of each KPI Reporting Period, the Operator must provide a report to TfNSW that includes, with respect to each KPI for which there was a KPI Default during the preceding 12 months, the following:
  - (i) statistics on the Operator's monthly performance against each of the KPIs included in the report during the preceding year;
  - (ii) the yearly Performance Average for the KPIs included in the report;
  - (iii) the total amount of Abatements imposed for KPI Defaults; and
  - (iv) the total amount of Performance Payments for KPI Satisfaction.
- (f) Without limiting the Operator's other reporting obligations, the Operator must immediately notify TfNSW in writing if TfNSW becomes entitled to an Abatement or if the Operator becomes entitled to a Performance Payment, and must include any such notification in its reporting for each KPI in accordance with the reporting frequency specified for the KPI.

## 5. Performance Improvement Initiatives

- (a) In accordance with the reporting frequency specified for each KPI, when there is any KPI Negative Trend or KPI Default (that does not meet the Cure Plan Threshold) in respect of a KPI or TfNSW indicates to the Operator that it considers there is any KPI Negative Trend, TfNSW may require the Operator to:
  - (i) provide a report and analysis on the cause of that KPI Negative Trend or KPI Default;
  - (ii) propose all Performance Improvement Initiatives to be undertaken to rectify the performance and otherwise reverse the KPI Negative Trend; and
  - (iii) attend additional meetings as required by TfNSW to discuss the performance improvement imitative and implementation process.
- (b) The Operator must implement and diligently pursue Performance Improvement Initiatives to address the causes of any such KPI Default or a KPI Negative Trend in KPI performance and otherwise ensure that its performance meets or exceeds all KPI Targets.
- (c) Where the Operator develops a Performance Improvement Initiative under this section and proposes actions to be performed by TfNSW or other third party, including any government agency, the Operator acknowledges that:
  - (i) TfNSW may accept or reject those proposed actions at its absolute discretion; and

- (ii) nothing in the proposed Performance Improvement Initiative or any failure by TfNSW to undertake any proposed actions derogates from the Operator's responsibility to perform the Services so as to meet or exceed the KPIs and to otherwise rectify its performance and any KPI Negative Trend.
- (d) Nothing in this clause limits the Operator's obligations under Clause 46 (Cure Regime) of the Contract in relation to Cure Plans. The parties acknowledge that where a Cure Plan is required under that clause, that Cure Plan may incorporate and build on any Performance Improvement Initiatives contemplated under this section.
- (e) Any steps or actions undertaken or required to be undertaken by the Operator to ensure that its performance meets or exceeds any KPI Target, including any Performance Improvement Initiatives, is at the sole cost and expense of the Operator.

### 6. Cure Plan

Without limiting Clause 46 (Cure Regime) of the Contract, the Operator acknowledges and agrees that any failure to meet the Cure Plan Threshold is a Service Default in respect of which the Operator must provide a Cure Plan and otherwise comply with the requirements of Clause 46 (Cure Regime).

## 7. Abatements and Performance Payments

### 7.1 Applicability

- (a) The Operator must pay Abatements to TfNSW for a KPI Default of a KPI as specified in the KPI Tables and subject to the applicable Abatement Cap, other than where noncompliance with a KPI is as a result of an Excused Performance Incident for which the Operator has been granted KPI Relief, in accordance with section 8 of this Schedule 4.
- (b) Subject to section 7.6, TfNSW must pay Performance Payments to the Operator for a KPI Satisfaction of a KPI as specified in the KPI Tables, subject to the applicable Performance Payment Cap.
- (c) TfNSW at its sole discretion reserves the right to waive an Abatement.
- (d) Abatements and Performance Payments are applied in the Contract Month following the KPI Reporting Period for each KPI as specified in the KPI Tables.
- (e) The parties acknowledge and agree that any implementation or pursuit of a Cure Plan or any Performance Improvement Initiative does not entitle the Operator for any KPI Relief or any relief from Abatements or similar.

### 7.2 Abatements and Performance Payments

- (a) Abatements are:
  - (i) a reflection of the reduction in the value of the Services and does not represent an estimate of the amount of Losses that the Operator's failure to meet a KPI may cause to TfNSW;
  - (ii) a civil penalty for the purposes of section 38 of the PT Act 2014;
  - (iii) not a liquidated damage; and
  - (iv) are not a sole or exclusive remedy.
- (b) Performance Payments are a reflection of an increase in the value of the Services, but does not limit any of TfNSW's other rights or remedies or an acknowledgement that the Operator has otherwise complied with its other obligations under this Contract.

### 7.3 Calculation of Abatements and Performance Payments

- (a) Subject to sections 7.4 and 7.6, Abatements for any KPI Default and Performance Payments for any KPI Satisfaction are calculated in accordance with the relevant KPI Table.
- (b) Where the Operator fails to accurately measure and report on its performance with respect to any KPI as required by the relevant KPI Table, such failure is deemed to be a KPI Default for the relevant KPI Reporting Period and Abatements will apply as if the Operator's performance as at the relevant Abatement Threshold.

### **7.4** Caps

- (a) There is no aggregate cap or limit on either Abatements or Performance Payments under this Schedule.
- (b) However, in respect of any:
  - (i) KPI Default of a KPI during a KPI Reporting Period, the maximum amount of Abatement is the applicable Abatement Cap for that KPI; and
  - (ii) KPI Satisfaction of a KPI during a KPI Reporting Period, the maximum amount of any Performance Payment is the applicable Performance Payment Cap for that KPI.

### 7.5 Fixed Abatement or Performance Payment Indexation

- (a) The following KPIs have fixed Abatements or Performance Payment amounts that are subject to annual indexation:
  - (i) KPI SA2 (Contract Bus Maintenance Major Defects or Incidents); and
  - (ii) KPI SA4 (CCTV and Duress Alarm Reliability).
- (b) The indexation will be determined in accordance with Schedule 3 (Payment).

#### 7.6 Conditions to eligibility for Performance Payments

- (a) Performance Payments are subject to the following eligibility conditions:
  - (i) to be eligible for a Performance Payment for KPI SD2 (Punctuality Rate On Time Running (OTR) (Mid Transit Stop)), the Operator must have also met the following KPIs in respect of the same period:
    - (A) KPI SD3 (Punctuality Rate On Time Running (OTR) (End Transit Stop);and
    - (B) KPI SD8 (Tracked Trips); and
  - (ii) to be eligible for a Performance Payment for KPI SD3 (Punctuality Rate On Time Running (OTR) (End Transit Stop)), the Operator must have also met the following KPIs in respect of the same period:
    - (A) KPI SD2 (Punctuality Rate On Time Running (OTR) (Mid Transit Stop)); and
    - (B) KPI SD8 (Tracked Trips).
- (b) Without limiting paragraph 7.6(e) below or the conditions in paragraph (a) above, the Operator will not be eligible for any Performance Payments (under any and all KPIs) in respect of any period where:
  - (i) to the Operator is in breach of any term of Clause 46 (Cure Regime), including any:
    - (A) failure to submit a Cure Plan in accordance with (or within the time period required by) that clause; or

- (B) any failure to cure the Service Default or the circumstances giving rise to the Service Default by the Required Cure Date; or
- (ii) TfNSW reasonably considers that:
  - (A) a Cure Plan submitted by the Operator does not address or will not resolve the Service Default by the Required Cure Date; or
  - (B) the Operator is not diligently and promptly pursuing remediation of a Service Default or the Operator will not otherwise remediate such Service Default by the Required Cure Date.
- (c) For clarity, the circumstances and Cure Plans referred to in paragraph (b) do not need to be related to the relevant KPI. The Operator also acknowledges and agrees that TfNSW may suspend payments under Clause 47.2 (Suspension of payments) in the same circumstances as described in paragraph (b).
- (d) In respect of Flexible KPIs, paragraph (b) will operate so that any Performance Payment to which the Operator is otherwise eligible for that Flexible KPI will be reduced on a pro-rated basis to reflect any period during which Operator is not eligible for Performance Payments due to the operation of paragraph (b).
- (e) For clarity, TfNSW may elect (in its discretion) to pay Performance Payments despite the operation of paragraph (b).

#### 7.7 Multiple KPI Defaults

- (a) For each KPI, if more than one KPI Default has occurred in a single Calendar Month, the Operator must credit the sum of the corresponding Abatements to TfNSW in accordance with the KPI Tables.
- (b) For the avoidance of doubt, a single incident may give rise to multiple KPI Defaults in respect of a single KPI or in respect of different KPIs including where a KPI Table includes multiple KPIs. Abatements may apply in respect of all such KPI Defaults.

#### 7.8 KPI Withholding Payments

- (a) Without limiting TfNSW's rights and remedies, subject to paragraph (b), if the performance with respect to a KPI is at or below the applicable Payment Withholding Threshold, TfNSW may withhold and reduce from the Monthly Contract Price each month the relevant Withholding Amount until the Operator's performance in respect of that KPI meets or exceeds the all KPI Targets for that KPI, at which point the TfNSW will pay to the Operator such Withholding Amounts as part of the invoice for the Monthly Contract Price in the month after the Operator's performance meets or exceed all KPI Targets for that KPI.
- (b) If the Operator does not meet all KPI Targets for that KPI within 12 months from the month which triggered the retention of a Withholding Amount, such Withholding Amount is deemed to be an Abatement (provided that they are not subject to and do not contribute to any KPI Abatement Cap) and may be permanently retained by TfNSW on its own account. The Operator waives all rights to Claim or recover such Withheld Amounts.

### 8. Excused Performance Incidents

#### 8.1 Excused Performance Incident

- (a) In the event of an Excused Performance Incident, the Operator must:
  - (i) if the Excused Performance Incident relates to a Relief Event, apply for relief in accordance with Clause 44 (Relief); and

- (ii) in any other case, apply for relief as if the Excused Performance Incident were a Relief Event in accordance with Clauses 44.2 (Condition precedent to relief or compensation) and 44.3 (Relief).
- (b) The Operator acknowledges if TfNSW does not receive written notification in accordance with Clause 44 (Relief), the Incident will not be an Excused Performance Incident for the purposes of this Schedule 4.
- (c) In addition to and as part of the requirements in Clause 44 (Relief), in support of an application for KPI Relief, the Operator must provide TfNSW supporting documentation detailing the circumstances of the Excused Performance Incident and the effect of the Excused Performance Incident on one or more of the KPIs.
- (d) Where the Operator is entitled to relief in accordance with this section and Clause 44 (Relief) in respect of an Excused Performance Incident, the extent of the relief will be determined by TfNSW by excluding any directly impacted Trips, services, Routes or other items from the calculation of the relevant KPIs (being the KPI Relief). For clarity, Abatements may still apply despite KPI Relief being granted for impacted Trips, services, Routes or other items, for example, based on the Operator's performance of non-impacted Trips.
- (e) The Operator acknowledges that, despite any KPI Relief granted, the Operator's obligations in relation to the performance of the Services and compliance with the KPIs which are not the subject of KPI Relief continue. Further and notwithstanding any KPI Relief, the Operator must:
  - use commercially reasonable efforts to reinstate the Services affected by the Excused Performance Incident and meet the KPIs affected by the Excused Performance Incident as soon as possible in the circumstances;
  - (ii) track and monitor the performance against the KPIs affected by the Excused Performance Incident; and
  - (iii) continue to report Excused Performance Incidents as if they were any other Incidents for the purposes of analysis and corrective action.

## 9. Adverse passenger outcomes

- (a) If the Operator or any of its Associates have any operational practices or performs any of the Services (together **Operational Practices**) in a manner that TfNSW reasonably considers:
  - (i) is resulting or is likely to result in any KPI Default or KPI Negative Trend;
  - (ii) is or is likely to impact on the accurate measurement of performance against any KPI; or
  - is or is likely to negatively impact on achievement of the Contract Objectives or otherwise result in negative impacts on passenger outcomes or passenger confidence in the bus network and services,

then, within 14 days of any request to do so, the Operator must:

- (iv) provide detailed reasons as to why the Operational Practice was adopted;
- (v) analyse whether or not the Operational Practice is giving rise to the risks or circumstances referred to in paragraphs 9(i), (ii) or (iii); and
- (vi) if the Operator does not consider that it is giving rise to such risks or circumstances, give detailed reasons as to the basis of such view.
- (b) If at the end of such 14 day period, TfNSW remains of the view that the Operational Practice is giving rise to any of the risks or circumstances referred to in paragraphs (a)(i), (ii) or (iii), then TfNSW may:

- (i) require the Operator (at its cost) to cease any such Operational Practice within a time period reasonably nominated by TfNSW; and/or
- (ii) make such adjustments to any Abatements or Performance Payments (paid or owing) as TfNSW considers reasonably necessary to remove any benefit that the Operator may have obtained as a result of the Operational Practice.

## 10. Coverage of KPIs

The Operator acknowledges and agrees that each of the KPIs applies to all Bus Services and Trip types, including Special Services, as out outlined in the matrix in Appendix 4A.

## 11. KPIs

## 11.1 Customer Experience KPIs

Table CE1 (Customer Complaint per Boardings)
Table of Constant Complaint per Doardings)
Measures the level of customer Complaints per 100,000 Boardings to ensure that the level of Complaints is effectively managed and improvements are implemented to enhance customer satisfaction.
In this KPI:
A re-opened Complaint shall be considered a new Complaint.
Vexatious Complaints are excluded.
All hours of operation
Total Complaints received during the previous Contract Year per 100,000 Boardings for the previous Contract Year.
<22 Complaints per 100,000 Boardings
Beginning of each Contract Year
Contract Year
Rounded to two decimal places
Operator and TfNSW Customer Feedback System, Transport Infoline, Boardings (from Opal system)
Operator, subject to any audit specified by TfNSW
Monthly

KPI	Table CE2 (Customer Complaint Resolution)		
Description	Customer Complaint Resolution means the satisfactory closure of customer Complaints within agreed timeframes. It is measured from the time of receipt of the Complaint by the Operator to the resolution and closure of the Complaint.		
Hours measured	All Operational Hours		
Calculation	KPI CE2 (i): 100 x (Complaints resolved within 2 Business Days (In Hours) during the KPI Reporting Period / Total Complaints received for the KPI Reporting Period)%		
	KPI CE2 (ii): 100 x (Complaints resolved within 20 Business Days (In Hours) during the KPI Reporting Period / Total Complaints received for the KPI Reporting Period)%		
	KPI CE2 (iii): 100 x (outstanding Complaints resolved within 20 Business Days (In Hours) in the KPI Reporting Period / Total outstanding Complaints from the previous months for the KPI Reporting Period)%		
	KPI CE2 (iv): 100 x (Calls included in the TfNSW Customer Feedback System within the KPI Reporting Period / Total calls received for the KPI Reporting Period)%		
KPI and KPI Targets	Each of the following:		
	KPI CE 2(i): 70% of all Complaints (when the customer has requested a response) are resolved by the Operator within 2 Business Days (In Hours) after the Complaint is received by the Operator.		
	KPI CE 2(ii): 100% of all Complaints (when the customer has requested a response) are resolved by the Operator within 20 Business Days (In Hours) after the Complaint is received by the Operator.		
	KPI CE 2(iii): 100% of all outstanding Complaints (when the customer has requested a response) received in previous months that were not resolved in the previous month are resolved by the Operator with 20 Business Days (In Hours) after the Complaint is received by the Operator.		
	KPI CE 2(iv): 100% of calls received in KPI Reporting Period are included in the TfNSW Customer Feedback System.		
	For the avoidance of doubt, a KPI Default can be triggered separately against each of these KPIs in a KPI Reporting Period.		
Payment Withholding Threshold	Failure of one or more part(s) of this KPI, including any of the KPI Targets above		
Withholding Amount Calculation	10% of Monthly Contract Price		
Measurement methodology			
Measurement starting point	First Business Day of each KPI Reporting Period		
KPI Reporting Period	Monthly		
Measurement unit	Rounded to two decimal places		

KPI	Table CE2 (Customer Complaint Resolution)
Data source	TfNSW Customer Feedback System and other customer Complaints registers as advised by TfNSW from time to time
Measurement responsibility	Operator, subject to any audit specified by TfNSW
Reporting frequency	Monthly

KPI	CE3 Customer Satisfaction – On Demand Service Feedback Rating		
Description	Feedback Rating means the level of satisfaction with the Operator's		
	performance as expressed by the feedback provided to the operator within their app.		
Hours measured	All Operational Hours		
KPI Calculation	100 x (The number of 4 or 5 star feedback ratings provided in the App by customers for a calendar month / the total number of ratings provided in the App for a calendar month)		
	5 Star - Excellent		
	4 Star - Good		
	3 Star - Average		
	2 Star – Below Average		
	1 Star - Poor		
KPI and KPI Target	95% of all feedback ratings provided by customers for the On Demand Services must be 4 or 5 stars based on the following categories:		
	5 Star - Excellent		
	4 Star - Good		
	3 Star - Average		
	2 Star – Below Average		
	1 Star - Poor		
Performance Payment Threshold	Flexible KPI (if nominated for a Contract Year)		
Performance Payment Calculation	Flexible KPI (if nominated for a Contract Year)		
Performance Payment cap	Flexible KPI (if nominated for a Contract Year)		
Measurement methodology			
Measurement starting point	First Business Day of the KPI Reporting Period		
KPI Reporting Period	Contract Year		
Measurement unit	Percentage rounded to two decimal places		
Data source	Operator App Data		
Measurement responsibility	Operator, subject to with any audit specified by TfNSW		
Reporting frequency	Monthly		

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KPI	CE3 Customer Satisfaction – On Demand Service Feedback Rating		
KPI	Table CE4 (Customer Satisfaction)		
Description	Customer Satisfaction means the level of satisfaction with the Operator's performance as expressed by a representative sample of the passengers (TfNSW to approve) as measured on a Likert Scale. The survey questions used in the calculation of this KPI will be as defined by TfNSW and will relate to services materially under the control of the Operator.		
	For the purposes of this KPI, the <b>Survey Period</b> will be the period from the Service Commencement Date to the completion of the first survey and thereafter the period between completion of each survey.		
Hours measured	N/A – by survey		
KPI Calculation	On the basis of a survey (the structure and content to be defined by TfNSW) on a Likert Scale, the number of the ratings above the mid-point divided by the total number of ratings times 100.		
KPI and KPI Target	95% of all ratings above the mid-point of the Likert Scale		
Abatement Threshold	KPI Abatement Band 1: Less than 93%		
	KPI Abatement Band 2: Less than 90%		
Abatement Calculation	KPI Abatement Band 1: 0.5% x the aggregate of the Monthly Contract Price paid or payable for the relevant Survey Period		
	KPI Abatement Band 2: 1.0% x the aggregate of the Monthly Contract Price paid or payable for the relevant Survey Period		
Abatement Cap	Cap Band 1: 0.5% of the aggregate of the Monthly Contract Price paid or payable for the relevant Survey Period		
	Cap Band 2: 1.0% of the aggregate of the Monthly Contract Price paid or payable for the relevant Survey Period		
Cure Plan Threshold	Less than 90%		
Measurement methodology			
Measurement starting point	First Business Day of the KPI Reporting Period		
KPI Reporting Period	Per Survey Period as determined and advised by TfNSW from time to time		
Measurement unit	Percentage rounded to two decimal places		
Data source	Surveys of customer satisfaction		
Measurement responsibility	TfNSW		
Reporting frequency	Per Survey Period as determined and advised by TfNSW from time to time		

KPI	Table CE5 (Asset Presentation)		
Description	This KPI aims to ensure Contract Buses remain clean and tidy for customers. Clean and tidy covers general bus presentation including being clean at the beginning of each Trip, free of graffiti, good external presentation and paintwork in accordance with the asset presentation standards set out in this KPI Table		
Hours measured	All hours of operation		
Calculation	CE5(i): 100 x (The number of Contract Buses inspected in the KPI Reporting Period which meet or exceed presentation standard 3 (Moderately Clean) / The number of Contract Buses inspected in the KPI Reporting Period)%; or		
	CE5(ii): 100 x (The number of Contract Buses inspected in the KPI Reporting Period which meet or exceed presentation standard 4 (Clean) / The number of Contract Buses inspected in the KPI Reporting Period)%		
KPI and KPI Targets	Each of the following:		
	CE5(i): 100% of Contract Buses inspected in the KPI Reporting Period meet or exceed presentation standard 3 (Moderately Clean) in accordance with the asset presentation standards below; and		
	CE5(ii): > 90% of Contract Buses inspected in the KPI Reporting Period meet or exceed presentation standard 4 (Clean) in accordance with the asset presentation standards below.		
	For the avoidance of doubt, a KPI Default can be triggered separately against each of these KPIs in a KPI Reporting Period.		
Abatement Threshold	CE5(i) <95%		
	CE5(ii) <85%		
Abatement Threshold	Failure of either CE5(i) or CE5(ii)		
Abatement Calculation	0.3% of the Annual Contract Price for a failure of either CE5(i) or CE5(ii)		
Abatement cap	0.3% of the Annual Contract Price		
Cure Plan Threshold	Failure of both parts of this KPI		
Measurement methodology			
Measurement starting point	First day of Contract Year		
KPI Reporting Period	Contract Year		
Measurement unit	Inspections, which can include in service inspections and at depots		
Data source	Mystery shopper and/or inspections		
Measurement responsibility	TfNSW via Mystery Shopper programs and audits		
Reporting frequency	Monthly		

КРІ	Table CE5 (Asset Presentation)
Asset Presentation Standards	
Presentation Standard	Description
5 – Very Clean	<ul> <li>Looks as new with some acceptable discolouration in original patterns and colours on seats</li> <li>No spills likely to soil or damage the clothing or luggage of customers</li> <li>No dry litter in or on the Contract Bus</li> <li>No graffiti</li> </ul>
4 – Clean	<ul> <li>Clean with minor areas of dust, grime, dirt, stains or marks on seats, seat frames, armrests or flooring</li> <li>No spills likely to soil or damage the clothing or luggage of customers</li> <li>No food litter and less than 2 pieces of dry litter (except 1st trip from depot which must have no litter)</li> <li>Up to 2 new graffiti tags but evidence of any minor graffiti tag</li> </ul>
3 – Moderately Clean	<ul> <li>shadow is acceptable</li> <li>Some areas of dust, dirt, staining or dried chewing gum residue on either seats, frames, armrest</li> <li>No liquid spills or reasonable risk of soiling or damaging the clothing or luggage of customers</li> <li>No food litter and up to 5 pieces of dry litter (except 1st trip from the depot which must have no litter)</li> <li>Up to 5 new graffiti tags but evidence of any graffiti tag shadow is acceptable</li> </ul>
2 – Dirty	<ul> <li>Dust, grime, stains or marks with a reasonable risk of soiling or damaging the clothing or luggage of customers</li> <li>Any food litter and up to 10 pieces of dry litter</li> <li>Up to 10 new graffiti tags but evidence of any graffiti tag shadow is acceptable</li> </ul>
1 – Unacceptable	<ul> <li>Hazardous substances (dried or wet) including vomit, excreta, blood or syringes</li> <li>Dirt, grease, stains or marks which will soil or damage the clothing or luggage of customers</li> <li>More than 10 items of litter of any type</li> <li>Offensive graffiti</li> </ul>

KPI	Table CE6	6 (Data Maintenance)			
Description	This KPI is designed to ensure critical information is accurate and available to customers and TfNSW within the timeframe determined by TfNSW. On time means correct information submitted and accepted by TfNSW systems.				
	Customer Facing Data Date means the date on which the Operator is to provide published timetables or operator scheduling data uploads to TfNSW (TODIS or equivalent) for the Services, including route mapping, bus stop, schedule, timetable or similar and or relevant service and operational data.				
	Term	Description	Timetable (days)	Vehicle Shift (days)	Driver Shift (days)
	Long Term	Change to a base timetable on going (include but not limited to changes to stops, route path, time updates, trips, routes (new/removal))	42	14	14
	Short Term	Change or supplement to the base timetable for a short, medium period of time that will expire and the timetable will return to the base timetable for example summer holiday timetables, event timetables, replacement	21	14 to 7	14 to 7
	Day of	Changes that are not planned and need to be made a few days or at least the day prior for an unplanned short term timetable changes to address an incident, stop work, road network change i.e. Bridge closure.	21 to 1	7 to 1	7 to 1
		Any change on the day must be made in TfNSW Operational real time service management tool (currently PTIPS) (cancel trips, skip trips, truncate etc.)			
	Customer Facing Data Failure means the Operator does not provide the published timetables or operator scheduling data uploads to TfNSW (TODIS or equivalent) for the Services, including route mapping, bus stop, schedule, timetable or similar data by the Customer Facing Data Date for any reason.				
	or omissio	ity Indicators Failure means an n on the part of the Operator wi n section 12 below.			

For the avoidance of doubt, where an Operator engages a third party to prepare or provide any of the abovementioned data for the Services on its

KPI	Table CE6 (Data Maintenance)		
	behalf, then an error or omission by that third party will be deemed to be an error or omission on the part of the Operator.		
Hours measured	24 x 7		
Calculation	CE6 (i) Number of Customer Facing Data Failures		
	CE6 (ii) Number of Data Quality Indicator Failures		
KPI and KPI Targets	Each of the following:		
	KPI CE6(i): Zero Customer Facing Data Failures		
	KPI CE6(ii): Zero Data Quality Indicator Failures		
	For the avoidance of doubt, a KPI Default can be triggered separately against each of these KPIs in a KPI Reporting Period.		
Cure Plan Threshold	One Customer Facing Data Failures; or		
	Three Data Quality Indicator Failures		
Withhold Payment	Two Customer Facing Data Failures; or		
threshold	Five Data Quality Indicator Failures		
Withholding Amount Calculation	10% of Monthly Contract Price		
Measurement methodology	!		
Measurement starting point	First Business Day of the KPI Reporting Period		
KPI Reporting Period	Monthly		
Measurement unit	Integer		
Data source	Operator and TfNSW		
Measurement responsibility	Operator, subject to any audit specified by TfNSW		
Reporting frequency	Monthly		

KPI	Table CE7 (Driver and Service Quality)
Description	This KPI ensures that the driver provides an excellent customer experience through:  Professionalism Interaction Serving the stop Comfort and Safety Fare collection, including ensuring school students use Opal and tap on
Hours measured	All hours of operation
Calculation	CE7(i): 100 x (The number of Contract Buses inspected in the KPI Reporting Period whose drivers meet or exceed the Customer Experience level 3 (Acceptable) / The number of Contract Buses inspected in the KPI Reporting Period)%; or
	CE7(ii): 100 x (The number of Contract Buses inspected in the KPI Reporting Period which meet or exceed the Customer Experience level 4 (Good) / The number of Contract Buses inspected in the KPI Reporting Period)%.
KPI and KPI Target	Each of the following:
	CE7(i): 100% of Contract Buses inspected in the KPI Reporting Period meet or exceed customer experience Level 3 (Acceptable) in accordance with the customer experience standards below; and
	CE7(ii): > 90% of Contract Buses inspected in the KPI Reporting Period meet or exceed customer experience Level 4 (Good) in accordance with the customer experience standards below.
	For the avoidance of doubt, a KPI Default can be triggered separately against each of these KPIs in a KPI Reporting Period.
Performance Payment Threshold	Flexible KPI (if nominated for a Contract Year)
Performance Payment Calculation	Flexible KPI (if nominated for a Contract Year)
Performance Payment cap	Flexible KPI (if nominated for a Contract Year)
Measurement methodology	
Measurement starting point	First day of Contract Year
KPI Reporting Period	Contract Year
Measurement unit	Inspections
Data source	Mystery shopper and inspections (both automated and manual)
Measurement responsibility	TfNSW via Mystery Shopper programs and audits
Reporting frequency	Monthly

KPI	Table CE7 (Driver and Service Quality)	
0	J.	
Customer Experience Standar		
Customer Experience Standard	Description	
5 - Very good	<ul> <li>Wears uniform as issued, clean and tidy appearance</li> <li>Is able to resolve difficult situations and interacts with passengers in proactive manner</li> <li>Pulls up close and parallel with the kerb at the head of the stop; waits for boarding passengers to be fully seated and checks bus stop for any intending passengers before departing</li> <li>Acceleration and braking is largely imperceptible to passengers, creating a superior ride quality</li> <li>Asks all school students in uniform to tap on with OPAL</li> </ul>	
4 – Good	Wears uniform as issued, clean and tidy appearance     Is able to diffuse difficult situations and interacts with passengers as required     Pulls up close to the kerb at the head of the stop; waits for passengers to be seated before departing     Acceleration and braking is generally smooth     Asks all school students in uniform to tap on with OPAL	
3 – Acceptable	<ul> <li>Wears uniform but untucked or minor elements missing (e.g. non-standard pants or shoes), minor scruffiness (unshaven)</li> <li>Responds to difficult situations with neutral effect and minimises interaction with passengers</li> <li>Pulls up near the kerb and waits for passengers to tap on before departing</li> <li>Some moments of harsh acceleration and/or braking</li> <li>Asks school students in uniform to tap on with OPAL</li> </ul>	
2 – Barely Acceptable	Wears uniform but is dirty/stained/damaged and/or minor elements missing (e.g. non-standard pants or shoes), looks untidy     Doesn't respond in difficult situations and avoids interaction with customers     Pulls up at any location within the bus stop; doesn't wait for passengers to tap on or sit down before departing     Accelerating and/or braking seems rough and creates an uncomfortable ride     Tailgates other road users and aggressive lane changing	
1 – Unacceptable	<ul> <li>Does not wear uniform</li> <li>Aggravates difficult situations and is actively rude in customer interactions</li> <li>Pulls up at a dangerous position within the bus stop; closes doors on boarding customers</li> <li>Drives in aggressive manner with excessive speed and traffic interactions</li> <li>Dangerous/aggressive 'at-fault' driving; causes injury to passengers when accelerating and/or braking</li> <li>Misses bus stops and does not pick up or set down passengers</li> <li>Does not appear to comply with bus operator and or TfNSW safety guidelines</li> <li>Does not engage with school students to ensure tap on with OPAL</li> <li>Makes errors on route knowledge driving not according to route path</li> </ul>	

### 11.2 Service Delivery KPIs

KPI	SD1 (Punctuality Rate – On Time Running (OTR) (First Transit Stop))	
Description	This KPI aims to ensure that Contracted Timetable Trips run to Timetable. It will measure the variation from Timetable for all Trips each month, measured at the First Transit Stop of each Trip.	
Hours measured	All hours of operation	
KPI Calculation	(Number Contracted Timetable Trips that leave the First Transit Stop On Time / Total number of Contracted Timetable Trips measured at First Transit Stop in the KPI Reporting Period) x 100%	
KPI and KPI Target	The minimum On Time performance required is 95%:	
	95% or greater of Contracted Timetable Trips leave the First Transit Stop of each Trip On Time.	
	Where a Dedicated School Service is directed by a school employee or bus marshal to leave early at a school Transit Stop, the Dedicated School Service will be deemed to be On Time.	
Abatement Threshold	94% for all Contract Years	
Abatement Calculation	Number of partial or complete 0.1% increments below Abatement Threshold x 50% x 0.1% Monthly Contract Price x PTTW	
Abatement cap	2.00% x PTTW of Monthly Contract Price	
Cure Plan Threshold	Less than 90% for any one month	
Measurement methodology		
Measurement starting point	First of each KPI Reporting Period	
KPI Reporting Period	Monthly	
Measurement unit	Percentage rounded to two decimal places	
Data source	Relevant system such as PTIPS, analysed to provide performance information. KPI will be based on TfNSW nominated Transit Stops for all Routes for which automated data is available.	
Measurement responsibility	Operator with selected audit by TfNSW	
Reporting frequency	Monthly	

KPI	SD2 (Punctuality Rate – On Time Running (OTR) (Mid Transit Stop))	
Description	This KPI aims to ensure that Contracted Timetable Trips run to scheduled Timetable. It will measure the variation from Timetable for all Trips each month, measured at the Mid Transit Stop of each Trip.	
Hours measured	All hours of operation	
KPI Calculation	Number Contracted Timetable Trips (excluding Event Services and Rail Replacement Services) that leave the Mid Transit Stop On Time / Total number of Contracted Timetable Trips (excluding Event Services and Rail Replacement Services) measured at Mid Transit Stop in the KPI Reporting Period) x100%	
KPI and KPI Target	The minimum On Time performance is expected to be 95%:	
	<ul> <li>95% of Trips that are Contracted Timetable Trips (excluding Event Services and Rail Replacement Services) leave the Mid Transit Stop of each Trip On Time.</li> </ul>	
	Where the Dedicated School Service is directed by a school employee or bus marshal at the school Transit Stop to leave early, the Dedicated School Service will be deemed to be On Time at the Mid Transit Stop.	
Abatement Thresholds	85% Contract Year 1	
	90% Contract Year 2 and all subsequent Contract Years	
Abatement Calculation	Number of complete or partial 0.1% KPI increments below KPI Abatement Threshold x 15% x 0.1% Monthly Contract Price x PTTW	
Abatement Cap	0.75% x PTTW of Monthly Contract Price	
Cure Plan Threshold	Less than 85% for any one month	
Performance Payment Threshold	95%	
Performance Payment Conditional Performance	For a Performance Payment to fall due both the following KPI Targets must be met	
	<ul> <li>SD3 (Punctuality Rate – On Time Running (OTR) (End Transit Stop)</li> <li>SD8 (Tracked Trips)</li> </ul>	
Performance Payment Calculation	Number of partial or complete 0.1% KPI increments above KPI Performance Payment Threshold x 58.33% x 0.1% Monthly Contract Price x PTTW	
Performance Payment Cap	1.75% x PTTW of Monthly Contract Price	
Measurement methodology		
Measurement starting point	First of each KPI Reporting Period	
KPI Reporting Period	Monthly	
Measurement unit	Percentage rounded to two decimal places	
Data source	Relevant system such as PTIPS, analysed to provide performance information. KPI will be based on TfNSW nominated Transit Stops for all Routes for which automated data is available.	

KPI	SD2 (Punctuality Rate – On Time Running (OTR) (Mid Transit Stop))
Measurement responsibility	Operator with selected audit by TfNSW
Reporting frequency	Monthly

KPI	SD3 (Punctuality Rate – On Time Running (OTR) (End Transit Stop))	
Description	This KPI aims to ensure that Contracted Timetable Trips run to scheduled Timetable. It will measure the variation from Timetable for all Trips each month, measured at the End Transit Stop of each Trip	
Hours measured	All hours of operation	
KPI Calculation	(Number Contracted Timetable Trips (excluding Event Services and Rail Replacement Services) that arrive at the End Transit Stop On Time / Total number of Contracted Timetable Trips (excluding Event Services and Rail Replacement Services) measured at End Transit Stop in the KPI Reporting Period) x100%	
KPI and KPI Target	The minimum On Time performance is expected to be 95%:	
	95% of Trips that are Contracted Timetable Trips (excluding Event Services and Rail Replacement Services) arrive at the End Transit Stop of each Trip On Time.	
Abatement Thresholds	90% for all Contract Years	
Abatement Calculation	Number of partial or complete 0.1% KPI increments below KPI Abatement Threshold x 15% x 0.1% Monthly Contract Price x PTTW	
Abatement Cap	0.75% x PTTW of Monthly Contract Price	
Cure Plan Threshold	Less than 85% for any one month	
Performance Payment Threshold	95%	
Performance Payment Conditional Performance	For a Performance Payment to fall due both the following KPI Targets must be met	
	<ul> <li>SD2 (Punctuality Rate – On Time Running (OTR) (Mid Transit Stop))</li> <li>SD8 (Tracked Trips)</li> </ul>	
Performance Payment Calculation	Number of partial or complete 0.1% KPI increments above KPI Performance Payment Threshold x 58.33% x 0.1% Monthly Contract Price x PTTW	
Performance Payment Cap	1.75% x PTTW of Monthly Contract Price	
Measurement methodology		
Measurement starting point	First of each KPI Reporting Period	
KPI Reporting Period	Monthly	
Measurement unit	Percentage rounded to two decimal places	
Data source	Relevant system such as PTIPS, analysed to provide performance information. KPI will be based on TfNSW nominated Transit Stops for all Routes for which automated data is available	
Measurement responsibility	Operator with selected audit by TfNSW	
Reporting frequency	Monthly	

КРІ	SD4 (Punctuality Rate – Headway Services -	- Excess Wait Time (EWT))
Description	This KPI aims to ensure that each individual H nominated frequency and applies to all Heads	
	Each Headway Service is measured individual	ly and subject to this KPI
Hours measured	All hours of operation or other time periods as nominated by TfNSW	
KPI Calculation	The EWT is calculated for each Headway Serv selected times and Transit Stops along the Ro from time to time. Calculation of EWT may be day per week based on weightings nominated will not change the amount at risk for this KPI	oute as nominated by TfNSW weighted by time of day and I by TfNSW. Such weightings
	Excess Wait Time = Actual Wait Time (AWT) – where:	Scheduled Wait Time (SWT)
	$AWT = \frac{\sum_{1}^{n} Aheadway^{2}}{2 \times \sum_{1}^{n} Aheadway}$	
	$SWT = \frac{\sum_{1}^{n} Sheadway^{2}}{2 \times \sum_{1}^{n} Sheadway}$	
	where:	
	Aheadway = the actual Headway in minutes	
	Sheadway = the Scheduled Headway in minut	es
KPI and KPI Targets	Excess Wait Time does not exceed the follow Service:	ing for each individual Headway
	priority/ bus rapid transit headway routes	1.0 minutes
	standard transit headway routes	1.2 minutes
KPI Review	The KPI Calculation and associated Abatement Calculations are to be jointly reviewed by TfNSW and the Operator on or before the end of the second Contract Year. TfNSW may, without requiring a Contract Variation, elect to change this KPI following such review by notice to the Operator. Such change is to be determined and approved by TfNSW in its sole discretion, acting reasonably.	
Abatement Thresholds	priority/ bus rapid transit headway routes	1.1 minutes
	standard transit headway routes	1.3 minutes
	For each new headway route there is a 6-mon which performance is measured but abateme	
Abatement Calculation	Number of partial or complete 0.1 minutes increments Above KPI Abatement Threshold x 0.44% x Monthly Contract Price x PHTW	
Abatement Cap	3.5% x PHTW x Monthly Contract Price	
Cure Plan Threshold	priority/ bus rapid transit headway routes	2 minutes
	standard transit headway routes	2.2 minutes
Performance Payment Thresholds	Flexible KPI (if nominated for a Contract year)	
Performance Payment Calculation	Flexible KPI (if nominated for a Contract year)	

KPI	SD4 (Punctuality Rate – Headway Services – Excess Wait Time (EWT))	
Performance Payment Cap	Flexible KPI (if nominated for a Contract year)	
Measurement methodology		
Measurement starting point	First day of each KPI Reporting Period	
KPI Reporting Period	Monthly	
Measurement unit	Number rounded to two decimal place	
Data source	Relevant system such as PTIPS, analysed to provide performance information. KPI will be based on TfNSW nominated Transit Stops for all Routes for which automated data is available.	
Measurement responsibility	Operator with selected audit by TfNSW	
Reporting frequency	Monthly	

KPI	SD5 (On Demand Booking Acceptance Rate)		
Description	This KPI aims to ensure that all on booking requests for On Demand Services made by customers are accepted		
Hours measured	All hours of operation		
KPI Calculation	100 x (number of bookings accepted / total number of booking requests)		
	Note: if a customer cancels a booking, it is not considered a booking for the purposes of this KPI		
KPI and KPI Target	95% of all booking requests made by Customers are accepted by the Operator		
Cure Plan Threshold	Less than 95%		
Performance Payment Thresholds	Flexible KPI (if nominated for a Contract Year)		
Performance Payment Calculation	Flexible KPI (if nominated for a Contract Year)		
Performance Payment Cap	Flexible KPI (if nominated for a Contract Year)		
Measurement methodology	Measurement methodology		
Measurement starting point	First day of each KPI Reporting Period		
KPI Reporting Period	Monthly		
Measurement unit	Percentage rounded to two decimal places		
Data source	Operator data		
Measurement responsibility	Operator with selected audit by TfNSW		
Reporting frequency	Monthly		

KPI	SD6 (On Demand Operator Booking Cancellation Rate)		
Description	This KPI aims to ensure that all On Demand Service bookings are delivered		
Hours measured	All hours of operation		
KPI Calculation	100 x (number of bookings cancelled by the operator / total number of accepted bookings)		
KPI and KPI Target	2% or less of all on demand service bookings are cancelled by the Operator		
Cure Plan Threshold	Greater than 5%		
Performance Payment Thresholds	Flexible KPI (if nominated for a Contract Year)		
Performance Payment Calculation	Flexible KPI (if nominated for a Contract Year)		
Performance Payment Cap	Flexible KPI (if nominated for a Contract Year)		
Measurement methodology	Measurement methodology		
Measurement starting point	First day of each KPI Reporting Period		
KPI Reporting Period	Monthly		
Measurement unit	Percentage rounded to two decimal places		
Data source	Operator data		
Measurement responsibility	Operator with selected audit by TfNSW		
Reporting frequency	Monthly		

KPI	SD7 (Cancelled and Incomplete Trips)	
Description	This KPI aims to ensure that Contracted Timetable Trips are delivered in full, and Transit Stops are not missed to correct timetable or frequency issues. All Cancelled and Incomplete Trips must be reported against the total Trips for the period.	
Hours measured	All hours of operation	
KPI Calculation	Cancelled Trips Percentage = ((Cancelled Trips + Incomplete Trips)/Total Trips) x 100%	
	Note: Dedicated School Service Trips that are truncated early due to having no further students to drop off must be updated in PTIPS as incomplete, but will be exempt from this calculation for the period between notification to TfNSW under paragraph 3.20 of Schedule 1A and implementation of an agreed solution provided that such a solution is provided within the time frames set out in paragraph 3.21 of Schedule 1A.	
	For clarity, all Dedicated School Service Trips that are not updated live on PTIPS (i.e. marked as incomplete) due to being truncated as contemplated above will be deemed as Incomplete Tips for the purpose of performance measurement through the KPI regime.	
KPI	0.50% or less Cancelled and Incomplete Trips	
Abatement Threshold	0.50% or more Cancelled and Incomplete Trips	
Abatement Calculation	(Cancelled Trips Percentage – KPI Abatement Threshold) x PTTW x Monthly Contract Payment	
Abatement cap	1.50% x PTTW of Monthly Contract Price	
Cure Plan Threshold	Greater than 2.00% Cancelled and Incomplete Trips	
Measurement methodology		
Measurement starting point	First of each KPI Reporting Period	
KPI Reporting Period	Monthly	
Measurement unit	Percentage rounded to two decimal places	
Data source	Relevant system such as PTIPS, Operator Systems analysed to provide performance information	
Measurement responsibility	Operator with selected audit by TfNSW	
Reporting frequency	Monthly	

KPI	SD8 (Tracked Trips)
Description	This KPI aims to ensure that all Trips, including Contracted Timetable Trips, Headway Services Trips and Trips for Special Services and On Demand Services, are run with tracking available to customers. This KPI seeks operators to manage the time to load ETS data to Contract Bus, Bus Driver Consoles at start of every trip.
Hours measured	All hours of operation or other time periods as nominated by TfNSW
KPI Calculation	(i) Start Transit Stop
	100 x (Numbers of Contracted Timetable Trips and Headway Trips that are tracked at Start Transit Stop / Total number of Trips in the KPI Reporting Period)
	(ii) Mid Transit Stop
	100 x (Numbers of Trips that are tracked at Mid Transit Stop / Total number of Trips in the KPI Reporting Period)
	(iii) End Transit Stop
	100 x (Numbers of Trips that are tracked at End Transit Stop / Total number of Trips in the KPI Reporting Period)
KPI and KPI Targets	Each of the following:
	(i) Start Transit Stop
	At least 98% Contract Year 1
	At least 99% Contract Year 2 and subsequent Contract Years
	(ii) Mid Transit Stop
	At least 98% Contract Year 1
	At least 99% Contract Year 2 and subsequent Contract Years
	(iii) End Transit Stop
	At least 98% Contract Year 1
	At least 99% Contract Year 2 and subsequent Contract Years
Cure Plan Threshold	Less than 90%
Performance Payment Thresholds	Flexible KPI (if nominated for a Contract Year)
Performance Payment Conditional Performance	For a Performance Payment to fall due both the following KPI Targets must be met:
	<ul> <li>SD2 (Punctuality Rate – On Time Running (OTR) (Mid Transit Stop))</li> <li>SD3 (Punctuality Rate – On Time Running (OTR) (End Transit Stop))</li> </ul>
KPI and KPI Targets	Each of the following:
	(iv)Start Transit Stop
	At least 98% Contract Year 1
	At least 99% Contract Year 2 and subsequent years
	1. Mid Transit Stop
	At least 98% Contract Year 1

KPI	SD8 (Tracked Trips)
	At least 99% Contract Year 2 and subsequent years
	2. End Transit Stop
	At least 98% Contract Year 1
	At least 99% Contract Year 2 and subsequent years
Cure Plan Threshold	Less than 90%
Measurement methodology	
Measurement starting point	First day of each KPI Reporting Period
KPI Reporting Period	Monthly
Measurement unit	Percentage rounded to two decimal places
Data source	Relevant system such as PTIPS, analysed to provide performance information. KPI will be based on TfNSW nominated Transit Stops for all Routes for which automated data is available.
Measurement responsibility	Operator with selected audit by TfNSW
Reporting frequency	Monthly

KPI	SD9 (Accessible Bus Services)
Description	This KPI aims to ensure that Contracted Accessible Trips (excluding Emergency Bussing Trips) are delivered as contracted. All Contracted Accessible Trips not operated must be reported against the total Trips for the period.
Hours measured	All hours of operation
KPI Calculation	100 X (Contracted Accessible Trips Operated in full by a Wheelchair Accessible Bus / Contracted Accessible Trips)%
KPI and KPI Target	100% of Contracted Accessible Trips are Operated by a Wheelchair Accessible Bus.
	Note: Commencing 1 January 2023, there are increased requirements for accessibility of public transport services under the DDA Legislation.
Cure Plan Threshold	Less than 95%
Performance Payment Thresholds	Flexible KPI (if nominated for a Contract Year)
Performance Payment Calculation	Flexible KPI (if nominated for a Contract Year)
Performance Payment Cap	Flexible KPI (if nominated for a Contract Year)
Measurement methodology	
Measurement starting point	First of each KPI Reporting Period
KPI Reporting Period	Monthly
Measurement unit	Percentage rounded to two decimal places
Data source	Relevant Systems such as PTIPS.
	Driver, customer Complaints, mystery shopper.
	Contract Bus designation to include information on accessibility.
Measurement responsibility	Operator with selected audit by TfNSW
Reporting frequency	Monthly

## 11.3 Safety Assets and Other KPIs

1.3 Safety Assets and Other KPIs	
KPI	Table SA1 (Asset Condition)
Description	This KPI aims to ensure that all Contract Buses are properly maintained
Hours measured	All hours of operation
Calculation	<ul> <li>SA1(i): 100 x (The number of Contract Buses inspected in the KPI Reporting Period which meet or exceed condition standard 3 (minor damage) / The number of Contract Buses inspected in the KPI Reporting Period)%; or</li> <li>SA1(ii): 100 x (The number of Contract Buses inspected in the KPI Reporting Period which meet or exceed condition standard 4 (Acceptable wear and tear) / The number of Contract Buses inspected in the KPI Reporting Period)%.</li> </ul>
KPI and KPI Target	Each of the following:
	SA1(i): 100% of Contract Buses inspected in the KPI Reporting Period meet or exceed presentation standard 3 (minor damage) in accordance with the asset condition standards below; or
	SA1(ii): > 90% of Contract Buses inspected in the KPI Reporting Period meet or exceed condition standard 4 (Acceptable wear and tear) in accordance with the asset condition standards below.
	For the avoidance of doubt, a KPI Default can be triggered separately against each of these KPIs in a KPI Reporting Period.
Abatement	SA1(i) <95%
Threshold	SA1(ii) <85%
Abatement Calculation	0.3% of the Annual Contract Price for failure of either SA1(i) or SA1(ii)
Abatement cap	0.3% of the Annual Contract Price
Cure Plan	SA1(i) <90%
Threshold	SA1(ii) <80%
Measurement metho	odology
Measurement starting point	First day of Contract Year
KPI Reporting Period	Contract Year
Measurement unit	Percentage to two decimal places
Data source	Mystery shopper and Inspections
Measurement responsibility	TfNSW via Mystery Shopper programs and audit
Reporting frequency	Monthly

KPI	Table SA1 (Asset Condition)	
Asset Condition Standards		
Asset Condition Standard	Description	
5 – Good Condition	<ul> <li>Generally new looking, mechanisms in working order, minimal wear and tear</li> <li>No etching on windows</li> <li>No body work damage or repairs in progress evident on bus in service</li> <li>Front, side and rear destinations functioning and legible</li> </ul>	
4 – Acceptable Wear and Tear	<ul> <li>Some fading and evidence of daily wear and tear, minor damage to paintwork or surfaces</li> <li>No canopy damage at any part of bus</li> <li>Minor etching on windows but with no effect on visibility</li> <li>Minor scratches or body damage by way of scrape or minor dents</li> <li>No interior hatches being loose or showing signs of any damage and sealed appropriately</li> <li>No damaged seats or seat frames</li> <li>No damage or loose edging on floors, steps, walls, ceilings</li> <li>No window seal damage</li> <li>Front, side and rear destinations functioning but minor legibility issues (dots not turning/faded or poor foot choice)</li> </ul>	
3 - Minor Damage	<ul> <li>not turning/faded or poor font choice)</li> <li>Use of duct tape or other temporary measures to repair interior fabric/surface or support material</li> <li>Any passenger "stop" push button not functioning and/or interior "bus stopping" sign not working</li> <li>Rear destination not working or night time illumination on any destination not working</li> <li>No canopy damage at more than one corner of bus</li> <li>Minor scratches or body damage by way of scrape or minor dents</li> <li>No interior hatches being loose or showing signs of any damage and sealed appropriately</li> <li>No damaged seats or seat frames</li> <li>No damage or loose edging on floors, steps, walls, ceilings</li> <li>No window seal damage</li> </ul>	
2 – Moderate Damage	<ul> <li>Evidence of unrepaired fabric/surface or support material</li> <li>Use of duct tape or temporary measures to repair exterior panels/material</li> <li>Etching covering approximately 50% of the window but doesn't obscure view</li> <li>Engine bay not clean and presents potential fire risk</li> <li>Sharp edges or damage to key components in the interior of the bus</li> <li>Canopy damage at more than two locations on the bus</li> <li>Damage to floor hatches of any kind</li> <li>Damage at floor at edges that create safety issues</li> <li>Missing seats</li> <li>Damaged seats</li> <li>Window seal damage</li> </ul>	
1 – Requires Immediate Attention	<ul> <li>Seat is broken or missing</li> <li>Substantial unrepaired fabric/surface on exterior or interior</li> <li>Any damage that presents a risk of injury to a customer</li> <li>Loose/broken handles, rails, doors</li> <li>Sufficient etching to completely obscure view out of a window</li> <li>CCTV not working</li> <li>Fire suppression system not working</li> <li>Cracked windscreen</li> <li>Faulty drivers' radio</li> <li>Faulty flip seats at wheelchair area</li> <li>Missing of damaged signage on floors or other parts of the interior</li> <li>Damage to interior including faulty hand rails, stanchions, flooring, loose floor hatch access points or leaking hatch seals, faulty interior lights, missing seats, exposed screws, bolts or other fixings, missing safety or warning signage (interior), any sharp edges that could cause any type of injury to customers, faulty or non-operative air conditioning system, excessively worn seating fabrics more than 2 seats with torn fabric or damaged seat backs including</li> </ul>	

holes or cracks in seat back materials, excessive engine noise or other
external noise in saloon area.

KPI	Table SA2 (Contract Bus Maintenance – Major Defects or Incidents)
Description	This KPI aims to ensure that all Contract Buses are properly maintained and do not have Major Defect Notices or Major Preventable Incidents which potentially impact reliability and safety.
	In this KPI:
	Major Defect Notice means a major defect notice or major grounded defect notice issued by TfNSW, police or any other Governmental Agency in relation to a major defect identified in a Contract Bus during regular and random inspections by TfNSW, the police or another Governmental Agency.
	Major Preventable Incident is defined as an accident or incident involving a Contract Bus that is caused by:
	• fire;
	runaway bus;
	wheel detachment;
	fluid leaks; or
	any driving incident resulting in significant public property damage, serious or critical injuries requiring transfer of any patients (in bus or external to bus) to a hospital or medical facility, any injuries that result in fatality.
Hours measured	All hours of operation
KPI Calculation	For KPI SA2(i):
	Number of Major Defects Notices issued on Contract Buses
	For KPI SA2(ii):
	Number of Major Preventable Incidents
	Note: Where a Major Defect Notice has more than one major defect or major grounded defect contained on it, it shall be reported to TfNSW based as the number of individual major defects and major grounded defects on that Major Defect Notice. However, the Abatement calculation is based on number of Major Defect Notices.
KPI and KPI Target	Each of the following:
	KPI SA2(i): Nil Major Defect Notices issued in respect of Contract Buses
	KPI SA2(ii): Nil Major Preventable Incidents
	For the avoidance of doubt, a KPI Default can be triggered separately against each of these KPIs in a KPI Reporting Period.
Abatement Threshold	For SA2(i): One or more Major Defect Notices issued in KPI Reporting Period
	For SA22(ii): One or more Major Preventable Incidents in the KPI Reporting Period
Abatement Calculation	SA2(i) \$15,000 for each Major Defect Notice

KPI	Table SA2 (Contract Bus Maintenance – Major Defects or Incidents)	
	SA2(ii) \$15,000 for each Major Preventable Incident	
	Note: these amounts are subject to annual indexation as contemplated by section 7.5	
Cure Plan Threshold	<ul> <li>Two (2) or more Major Defect Notices or Major Preventable Incident in any month (as interpreted under the KPI Calculation row above regarding each Major Defect)</li> <li>Any KPI Defaults in two or more in consecutive months</li> </ul>	
Measurement methodology		
Measurement starting point	First day of the KPI Reporting Period	
KPI Reporting Period	Monthly	
Measurement unit	Individual Major Defects on a Major Defect Notice	
	Major Defect Notices	
	Major Preventable Incidents	
Data source	Contract Bus maintenance records, notices issued by Governmental Agencies, TfNSW data sources	
Measurement responsibility	Operator, with selected audits by TfNSW	
Reporting frequency	Monthly	

КРІ	Table SA3 (Contract Bus Maintenance – Minor Defects/Self Clearing Defects)	
Description	This KPI aims to ensure that all Contract Buses are properly maintained and do not have minor defects or self clearing defects.	
Hours measured	All hours of operation	
KPI Calculation	100 x (Number of defects on minor defects notices and self clearing defects notices issued/ Number of Contract buses)	
KPI and KPI Target	The total number of individual defects on minor defect Notices and self clearing defect notices issued by TfNSW HVLIS or other Governmental Agencies <4% of all Contact Buses	
Measurement methodology		
Measurement starting point	First day of the KPI Reporting Period	
KPI Reporting Period	Six monthly	
Measurement unit	Percentage rounded to two decimal places	
Data source	Contract Bus maintenance records, RMS, notices issued by Governmental Agencies	
Measurement responsibility	Operator, subject to any audit selected by TfNSW	
Reporting frequency	Monthly	

KPI	Table SA4 (CCTV and Duress Alarm Reliability)
Description	Measures the reliability of the Closed Circuit Television (CCTV) and duress alarm system. For the purposes of this KPI:
	CCTV data reliability measures the retrieval of quality images from designated coverage areas (including because of faulty system or where no images are provided). Without limiting the foregoing, any Failure to identify people in CCTV images due to improper maintenance, including cleaning, is deemed to be a failure to retrieve images; and
	duress alarm reliability does not include known communication black spots as notified by the Operator to TfNSW and agreed to by TfNSW.
	Vehicles that did not contain operable CCTV systems at the Service Commencement Date will be excluded from this requirement for 12 months to enable the Operator to comply with this KPI.
	Vehicles that did not contain operable duress alarms at the Service Commencement Date will be excluded from this requirement for 1 month to enable the Operator to comply with this KPI.
Hours measured	N/A
Calculation	SA4(i): Number of incidents for which CCTV images were not successfully retrieved – for Measured Buses
	SA4(ii): Number of duress alarms not responded to within 30 seconds – for all Buses
	For the avoidance of doubt, a KPI Default can be triggered separately against each of these KPIs in a KPI Reporting Period.
	KPI SA4(i) only applies to Measured Buses.
	A <b>Measured Bus</b> is, subject to the below:
	<ul> <li>A bus less than 8 years old at Service Commencement Date</li> <li>Any new bus since Service Commencement Date</li> <li>All other buses transitioned to a "Measured Bus".</li> </ul>
	All Contract Buses within the Contract Bus fleet will be defined as a Measured Bus commencing day one of Contract Year 2.
KPI and KPI Target	Each of the following:
	SA4(i): All CCTV images are successfully retrieved
	SA4(ii): All duress alarms are responded to within 30 seconds
Abatement Threshold	SA4(i) 1 or more CCTV images were not successfully retrieved
	SA4(ii) 1 or more duress alarms not responded to within 30 seconds
Abatement Calculation	SA4(i) \$2,000 for each failed CCTV Image
	SA4(ii) \$2,000 for each failed Duress response
	Note: these amounts are subject to annual indexation as contemplated by section 7.5
Cure Plan Threshold	Any KPI Defaults in two or more in consecutive months

KPI	Table SA4 (CCTV and Duress Alarm Reliability)
Measurement methodology	
Measurement starting point	First day of each Calendar Month
KPI Reporting Period	Monthly
Measurement unit	Percentage rounded to two decimal places
Data source	Requests for images / Records of duress alarm calls
Measurement responsibility	Operator
Reporting frequency	Monthly

KPI	Table SA5 (Bus Valid Ticket Rate)
Description	This KPI aims to ensure that a suitable level of revenue protection is carried out as passengers enter a Contract Bus. The percentage of passengers travelling without tapping should be within acceptable limits and reducing as revenue management strategies improve compliance.
	The percentage of tapping passengers will be determined from the results of revenue inspections organised by TfNSW.
Hours measured	All hours of operation
Calculation	100 x (passengers inspected who have correctly tapped on for their Trip (excluding Special Services) / passengers inspected)%
	For avoidance of doubt, tapped include passengers who have paid the wrong Fare
KPI	At least 98.5% Year 1
	At least 99.0% Year 2 and subsequent years
Cure Plan Threshold	98% or less
Performance Payment Thresholds	Flexible KPI (if nominated for a Contract Year)
Performance Payment Calculation	Flexible KPI (if nominated for a Contract Year)
Performance Payment Cap	Flexible KPI (if nominated for a Contract Year)
Measurement methodology	
Measurement starting point	First of each KPI Reporting Period
KPI Reporting Period	Quarterly
Measurement unit	Percentage to two decimal places
Data source	Ticket inspectors. Following automation, report must be generated from data available from automated systems.
Measurement responsibility	Operator, with selected audit by TfNSW
Reporting frequency	Quarterly

KPI	SAS (Banarting and Information)
	SA6 (Reporting and Information)
Description	SA6 (i) This KPI aims to ensure all agreed reports are available to TfNSW within the agreed timeframe. This KPI measures the time taken to deliver reports starting from the end of the reporting period until the time that the reports are available for TfNSW. The scope is for all reports as set out in any schedules and specifically Schedule 5 (Governance and Reporting). Reports are to be available in an agreed repository or otherwise provided to TfNSW (e.g. provision to TfNSW of online access) within the timeframes nominated in Schedule 5 (Governance and Reporting).
	SA6 (ii) This KPI aims to ensure that responses to request for information about Services are provided in a reasonable timeframe as determined by TfNSW. Such requests for information could arise from varying sourcing, but would include information required to provide Ministerial responses, answering customer enquiries, providing information required by legislation, providing information to support transport planning etc.
Hours measured	24 x 7
KPI Calculation	SA6 (i) 100 x (Total number of reports presented within the required timeframe during the KPI Reporting Period / total number of reports due to be presented during the KPI Reporting Period)
	Any report which has material errors will be deemed not to have been received until a correct version is available.
	SA6 (ii) 100 x (Total number of information requests responded to within the required timeframe during the KPI Reporting Period / total number of information requests during the KPI Reporting Period)
	Any information provided which has material errors will be deemed not to have been received until a correct version is available.
KPI and KPI Targets	Each of the following:
	SA6 (i) 100%
	SA6 (ii) 100%
	For the avoidance of doubt, a KPI Default can be triggered separately against each of these KPIs in a KPI Reporting Period.
Withhold Payment threshold	Any KPI Default
Withhold payment Calculation	10% x Monthly Contract Price
Measurement methodology	
Measurement starting point	End of each KPI Reporting Period
KPI Reporting Period	Monthly
Measurement unit	Percentage rounded to two decimal places
Data source	Where possible, report to be generated directly from installed automated systems such as ticketing, traffic priority etc
	Record of requests
Measurement responsibility	Operator, with selected audit by TfNSW
Reporting frequency	Monthly

# 12. Data Quality Indicators

## 12.1 Data Quality Indicators

The Operator must ensure that prior to submission of a TODIS file, verification has been undertaken to ensure a basic level of data quality to reduce the impact of data quality issues on consumers of Operator TODIS files.

The following are the Data Quality Indicators:

ID	Section	Title
SC01	Schema	Contract ID must match to TfNSW reference source
SC02	Schema	Operator ID must match to TfNSW reference source
SC03	Schema	Operator Name must match to TfNSW reference source
SC04	Schema	Depot ID must match to TfNSW reference source
SC05	Schema	No orphan elements in the source files (e.g. stops not used by trips, or trips not associated with a route)
DD01	Data Delivery	Timetable End Date should be after Start Date on Validity Period, calendar dates and other ranges or any other dates in the calendar. It can be the same as Start Date for a one day file.
DD02	Data Delivery	The TODIS files Activation Date cannot be after the Expiry Date of the timetable data
DD03	Data delivery	Data must cover 90-days of services from day of submission (where applicable) but not more than 1 year
DD04	Data delivery	Data should include school days and school holidays, e.g., must include data for each of the TODIS 13 day types
R01	Routes	Must contain the contracted routes for the period of the TODIS file i.e. 20 Regular routes, 30 school routes, 1 free shuttle, including contracts for replacement buses etc.
R02	Routes	Route number must match to TfNSW reference source
RV01	Route Variant	Route Variant Types should be validated against the Master Reference Data
RV02	Route Variant	The correct route variant type must be applied and be stable i.e. Regular, school must match to TfNSW reference source, and not change between TODIS files
RV03	Route Variant	Validate that all valid & expected route variants (at the applicable point in time) have been supplied
RV03	Route Variant	The route variant direction must not change
RV04	Route Variant	Route Variant - Trip Head Sign must meet TfNSW requirements
RV05	Route Variant	Route Variant - Trip Head Sign must not change
RV06	Route Variant	Route Variant - Trip Head Sign consistent for route variants ending at the same/similar point
RV07	Route Variant	Route Variant – first and last stop must be a Stop with a public TSN and a timing point
RV08	Route Variant	Route Variant – must contain at least two timing points
RV09	Route Variant	Route Variant – A public timing point must be on a Public stop TSN and not "floating" i.e., referenced to a street junction, landmark or non-public TSN.
RV10	Route Variant	Route Variant - Timing Points must be stable and consistent for route variants

ID	Section	Title				
RV11	Route Variant	Route Variant - For a given route path segment common to 2 or more route variants the same route that stop at the same TSNs the stopping pattern sequence must be consistent for all route variants				
RV12	Route Variant	Route Variant - For a given route with both Inbound and Outbound service directions, all trips that share a sequence of TSNs must have the same service direction.				
		Example: for a route between Parramatta and Circular Quay with both Inbound and Outbound directions, all trips towards Circular Quay must have the same direction, and all trips towards Parramatta must be in the other direction.				
RV13	Route Variant	Loop routes must be classified as "IN" (not OUT) except where required to be LOOP for ETS reasons only.				
RV14	Route Variant	Route Variant – stop TSN and waypoint - In the TODIS Route file the element "Route Variant Points" describes the path of that route variant. Each Route Variant Points should start and end with a TSN and wherever there is a TSN defined, there must not be a waypoint entry as TSN itself has its own X and Y Coordinates.				
Rv15	Route Variant	Route Variant Types should be validated against the Master Reference Data				
T01	Trip	Trip ID must not be longer than 18 characters				
T02	Trip	The trips on a given day type must match the calendar date				
		Example: A calendar date which is a public holiday should have the public holiday day type & associated trips				
T03	Trip	Trip Count by route.				
		For each of the TODIS day types (Term M-F, Sa, Su, PH, Holiday M-F), by Route, the number of trips should match to previous equivalent day type within 5% (configurable); <i>Use case example:</i> Operator has not provided a holiday timetable for an upcoming public holiday. Products are reflecting the standard timetable.				
T04	Trip	Trip – Dwell time - For each trip the Scheduled Start Time and the first Passing Time of a trip must be the same in the TODIS file.  Failure to comply will result in the dwell time being added to the Passing times for the trip and the trip will appear to run later than actual by the dwell time.				
T05	Trips	Number of trips in the vehicle and driver shift files must equal the number of trips in the route/timetable file				
		Example: Including all trips in the Route file then using the Driver and/or Vehicle shift files to select which trips will actually operate on any given date is acceptable for PTIPS and ETS. However, the GTFS bundle provided to Open Data will contain all trips and hence provide incorrect trip plans for customers, resulting in customers missing trips or waiting for trips that are not scheduled to run				
T06	Trip	Validate that all valid & expected trip start times (at the applicable point in time) have been supplied - e.g. expired trips do not persist, seasonal trips have trips only present when required.				
T07	Trip	Scheduled trip wheelchair accessibility must be stable for a trip and day type				
ST01	Stop	For each TSN the sequence point-1 and sequence point +1 must be the point on the road perpendicular to the TSN to provide a smooth route path shape.				
ST02	Stop	Should not be more than 1 TSN for the same physical location (no duplicate TSN)				
ST03	Stop	Stop times should use the 36 hour format				
ST04	Stop	For a given route variant & trip start time the passing times at all subsequent stops must be consistent / stable and in a chronologically increasing sequence, no backwards times for stops further from the trip start.				
ST05	Stop	No more than 5 stops in a trip may have the same passing time				
ST06	Stop	Departure time for stop x must not be after the arrival time at stop x+1, e.g. to take into account dwell time.				

ID	Section	Title				
ST07	Stop	All stop times should have a valid Stop TSN that is registered in TfNSW TSM				
ST08	Stop	Set down/pick-up restrictions must be added to relevant stops as per operational requirements and must be stable/consistent				
		Example: A route that from an intermediate point to the end point is set-down only from a certain point and in the return direction is pick-up only up to the same point. Service restrictions must be applied to all these stops and not just the timing points.				
N01	Note	Passing time and trip notes Maximum length: 150-characters				
N02	Note	Passing time and trip note Codes must be unique and not reused/recycled				
N03	Note	Passing time and trip notes code for a given note should be stable				
N04	Note	Passing time and trip notes should be unique and only one note per concept.				
		Example: There should only be one note that indicates a trip operates on school days only, not several differentiated only by punctuation such as but not limited to:				
		School days only				
		School days only				
		Only on school days				
		School term only				
		Trip operates on school days				
		Apply one combined note that is used consistently on all relevant trips across all routes.				
N05	Note	Passing time and trip Notes should be Public / Customer facing and not contain any operational/driver information				

Appendix 4A – KPI Coverage Matrix

	Bus Services and Trip types						
KPI	Route Services	Dedicated School Services	Headway Services	On Demand Services	Event Services	Emergency Bussing Services	Rail Replacement Services
CE1. Customer Complaint per Boardings	Х	X	Х	X	Х	X	Х
CE2. Customer Complaint Resolution	Х	Х	Х	Х	Х	Х	Х
CE3. Customer Satisfaction – On Demand Service Feedback Rating				X			
CE4. Customer Satisfaction	Х	Х	X	Х	Х	Х	X
CE5. Asset Presentation	Х	Х	Х	Х	Х	Х	X
CE6. Data Maintenance	Х	Х	Х	Х	Х	Х	Х
CE7. Driver and Service Quality	Х	Х	Х	Х	Х	Х	Х
SD1. Punctuality Rate – On Time Running (OTR) (First Transit Stop)	Х	Х			Х		Х
SD2. Punctuality Rate – On Time Running (OTR) (Mid Transit Stop)	Х	Х					
SD3. Punctuality Rate – On Time Running (OTR) (End Transit Stop)	Х	Х					
SD4. Punctuality Rate – Headway Services – Excess Wait Time (EWT))			Х				
SD5. On Demand Booking Acceptance Rate				Х			
SD6. On Demand Operator Booking Cancellation Rate				Х			
SD7. Cancelled and Incomplete Trips	Х	Х			Х		Х
SD8. Tracked Trips	Х	Х	Х	Х	Х	Х	Х
SD9. Accessible Bus Services	Х	Х	Х	Х	Х		Х
SA1. Asset Condition	Х	Х	Х	Х	Х	Х	Х
SA2. Contract Bus Maintenance - Major Defects or Incidents	Х	Х	Х	Х	Х	Х	Х
SA3. Contract Bus Maintenance – Minor Defects/Self Clearing Defects	Х	Х	Х	Х	Х	Х	Х
SA4. CCTV and Duress Alarm Reliability	Х	Х	Х	Х	Х	Х	Х
SA5. Bus Valid Ticket Rate	Х	Х	Х	Х			
SA6. Reporting and Information	Х	Х	Х	Х	Х	Х	Х