



# **Traffic Control Equipment Maintenance and Related Services Contract**

## **Schedule 5**

### **Price & Payment**

## SCHEDULE 5

### PRICE & PAYMENT

#### Part 1 - Payment for Maintenance Works

##### 1. Total Maintenance Payment

- 1.1 For each Reporting Period, the Authority shall pay the Contractor for all Maintenance carried out in that Reporting Period the sum of:

$$\text{Total Maintenance Payment} = TRM - TEFAb + Dir + Adj$$

where:

*TRM* means the total payments for Regular Maintenance calculated in accordance with **paragraph 2** of this **Part 1** of **Schedule 5**;

*Dir* means the total payments for Directions calculated in accordance with **paragraph 6** of this **Part 1** of **Schedule 5**;

*TEFAb* means the total of the Emergency Fault Abatements (if any) incurred by the Contractor in such Reporting Period calculated in accordance with **paragraph 5** of this **Part 1** of **Schedule 5**; and

*Adj* means a sum equivalent to any other adjustment required to be made by the Authority within a Reporting Period which for the avoidance of doubt may be positive or negative.

##### 2. Total Payments for Regular Maintenance

- 2.1 For each Reporting Period, the Authority shall pay the Contractor the following sum in respect of total payments for Regular Maintenance (TRM):

$$TRM = \sum_n RM_n + TFI$$

where:

*n* means the relevant TC System;

*RM* means the Regular Maintenance payment for each relevant TC System calculated in accordance with **paragraph 3** of this **Part 1** of **Schedule 5**; and

*TFI* means the total of the Financial Incentives (if any) for every TC System calculated in accordance with **paragraph 4** of this **Part 4** of **Schedule 5** for such Reporting Period, which for the avoidance of doubt may be positive or negative.

### 3. Regular Maintenance Payments for Each TC System

- 3.1 For each Reporting Period, the Authority shall pay the Contractor for Regular Maintenance for each TC System (RM) calculated as follows:

$$RM = \sum_i ((FUR_i \times IA) / Ny) \times Nx \times AV_i$$

where:

*i* means a relevant Equipment Maintenance Category for the TC System;

*FUR* means the Fixed Unit Rate for the relevant Equipment Maintenance Category, for the relevant age band and for the relevant financial year (being the period from the Contract Commencement Date until the following 31 March, each successive period starting on 1 April and ending on 31 March during the Term and the period starting on the last 1 April during the Term and ending on the Termination Date or the date on which this Contract expires);

*IA* means the Indexation Adjustment;

*Ny* means 365 (or 366 in any leap year);

*Nx* means the number of calendar days in the relevant Reporting Period; and

*AV* means the average number of units in the relevant Equipment Maintenance Category that are in service in such Reporting Period. The average number of units will be calculated by a simple average utilising the sum of the quantities of units at the commencement of the Reporting Period and the quantities at the end of the Reporting Period divided by 2 (two).

- 3.2 The Fixed Unit Rates shall be deemed to cover all the Regular Maintenance duties of the Contractor under this Contract. This shall include all equipment and labour used for Preventative Maintenance, Reactive Maintenance, Emergency Maintenance and Third Party Damage (unless the conditions set out in **paragraph 4.7 of Part 4 of Schedule 3** are met), Minor Civil Engineering Works, Major Traffic Management, Minor Traffic Management, management of Third Party Supplier Faults and special access equipment, Lane Rental, Permitting, all allowances for overtime, night, or weekend working and all other costs, charges, materials and expenses whatsoever including, without limitation, congestion charge payments, and all taxes (other than VAT).

#### 4. Total Financial Incentives

- 4.1 The total financial incentives (TFI) payable or due for a Reporting Period is the sum of the Financial Incentives for each TC System for the Reporting Period, being:

$$TFI = \sum_n FI_n$$

where:

$n$  means the relevant TC System; and

$FI$  means the Financial Incentives for each relevant TC System calculated in accordance with **paragraph 4.2** of this **Part 1** of **Schedule 5**.

- 4.2 The Financial Incentives payable in respect of each relevant TC System for a Reporting Period shall be:

$$FI = ((AA - BA)/BA) \times RM \times MF$$

where:

$AA$  means the lower of:

- (a) the Availability for the relevant TC System for the Reporting Period (unless the conditions set out in **paragraph 4.3** of this **Part 1** of **Schedule 5** exist, in which case the Availability for the relevant TC System for the first 3 (three) Reporting Periods of the Term shall not be lower than the value set out in column 2 of the table at **paragraph 4.3** of this **Part 1** of **Schedule 5**); and
- (b) the cap set out in column 2 of the table below for the relevant TC System;

TC System	Cap on AA
Traffic Signals	99.50
OVD	97.20
VMS	97.76

$BA$  means the Availability Target for the relevant TC System;

*RM* means the Regular Maintenance payment for the relevant TC System calculated in accordance with **paragraph 3** of this **Part 1** of **Schedule 5**; and

*MF* means the multiplying factor applicable to the relevant TC System as set out in the table below:

TC System	Multiplying Factor when AA is greater than Availability Target	Multiplying Factor when AA is less than Availability Target
Traffic Signals	24.75	5.50
OVD	4.30	0.95
VMS	5.45	1.20

- 4.3 If the average Availability for the relevant TC System is 1% (one per cent) or more below the Availability Target during the Mobilisation Period, then for the purpose of **paragraph 4.2** of this **Part 1** of **Schedule 5** the Availability for the relevant TC System shall not be lower than the value set out in column 2 of the table below for the relevant TC System for the first 3 (three) Reporting Periods of the Term:

4.4

TC System	Limit on lower value of AA
Traffic Signals	98.10
OVD	94.00
VMS	95.00



## 5. Emergency Fault Abatements

- 5.1 If the Contractor fails to meet the Response Times for Emergency Faults, an Emergency Fault Abatement (*EFAb*) shall be due from the Contractor in respect of each such failure, calculated as follows:

$$EFAb = (W \times IA) \times N$$

where:

*W* means £600;

*IA* means the Indexation Adjustment; and

*N* means the appropriate multiplier set out in column 2 of the following table:

Hours exceeding appropriate Response Times for Emergency Faults	Multiplier (N)
up to and equal to 1	1
>1 and up to and equal to 2	2
>2 and up to and equal to 3	4
>3 and up to and equal to 4	8
>4	8 and the Authority shall be entitled to exercise its rights under <b>Clause 30</b> (Suspension of the Services)

- 5.2 The total Emergency Fault Abatement (*TEFAb*) for each Reporting Period shall be the total of the Emergency Fault Abatements (*EFAb*) (if any) incurred by the Contractor in such Reporting Period, calculated as follows:

$$TEFAb = \sum EFAb$$

- 5.3 Any Emergency Fault Abatement for a failure to meet the Response Times for Emergency Faults will be calculated and reported in the Reporting Period in which the Contractor responds, or (if applicable) fails to respond, to the Emergency Fault, even if such Emergency Fault spans more than one Reporting Period. The Emergency Fault Abatement will be calculated from the date and time the Fault is sent to the Contractor until the Contractor responds to the Emergency Fault, whether this is in the same Reporting Period or not.

## 6. Total Payments for Directions

6.1 Each Reporting Period, the Authority may direct the Contractor to attend a specific Fault (as set out in **paragraph 4.4 of Part 4 of Schedule 3**). Such directions will fall into one of two categories:

- (a) directions requiring an initial response by the Contractor within 3 (three) hours ("**Immediate Direction**"); and
- (b) directions requiring an initial response by the Contractor within 8 (eight) hours ("**Urgent Direction**").

6.2 The total payments for Directions (Dir) payable to the Contractor for a Reporting Period shall be calculated as follows:

$$Dir = (ID \times (IDR \times IA)) + (UD \times (UDR \times IA))$$

where:

*ID* is the number of Immediate Directions instructed by the Authority to the Contractor to which the Contractor has responded in time in the Reporting Period;

*IDR* is the rate applicable to each Immediate Direction as set out in the table at **paragraph 6.3 of this Part 1 of Schedule 5**;

*IA* means the Indexation Adjustment;

*UD* is the number of Urgent Directions instructed by the Authority to the Contractor to which the Contractor has responded in time in the Reporting Period; and

*UDR* is the rate applicable to each Urgent Direction as set out in the table at **paragraph 6.3 of this Part 1 of Schedule 5**.

6.3 The rate applicable to each category of Direction is set out in column 2 (two) of the table below.

Direction Category	Applicable Rate per Direction
Immediate Direction	
Urgent Direction	

6.4 The total payments for Directions is deemed to cover the additional cost to the Contractor of having to reallocate its resource in line with the Authority's instruction and is not intended to include the cost to the Contractor of rectifying any Faults identified following the initial response to the Direction.

- 6.5 For the avoidance of doubt any other payments due to the Contractor under this Contract following the initial response to the Direction is made through payment for Regular Maintenance.

## **7. Total Payment for Third Party Damage**

### **7.1 Where:**

- (a) the Authority has confirmed in writing it has received Sufficient Evidence in respect of an incident of Third Party Damage (other than Third Party Damage to Non-Traffic Signals or Sub-Surface Detection which becomes the subject of a Works Instruction issued by the Authority); or
- (b) the Contractor can demonstrate to the Authority's satisfaction that the cost of Rectification of Third Party Damage is greater than £10,000 (ten thousand pounds) where there is Insufficient Evidence; or
- (c) the Contractor is required to carry out any Rectification works in respect of any Faults caused by Third Party Damage which occurred prior to the Maintenance Commencement Date and of which the Authority was aware as at the Maintenance Commencement Date and the cost of which the Authority has notified the Contractor is recoverable in accordance with the requirements of **paragraph 4.7.10 of Part 4 of Schedule 3**; or
- (d) the Contractor is required to carry out any Rectification works in respect of any Third Party Damage to Vulnerable Installed TC Equipment (subject to the Contractor complying with its obligations in **paragraph 4.7.8 of Part 4 of Schedule 3**),

the Contractor shall be entitled to recover the cost of the Rectification of such Third Party Damage from the Authority in accordance with **paragraph 3 of Part 3 of this Schedule 5**.



## **ANNEX A**

### **Fixed Unit Rates for Each Equipment Maintenance Category**

**REDACTED**

## **ANNEX B**

### **Quantities per Equipment type per Cluster**

**REDACTED**

## ANNEX C

### Reporting Periods

Financial Year	Start of Period 1	Start of Period 2	Start of Period 3	Start of Period 4	Start of Period 5	Start of Period 6	Start of Period 7	Start of Period 8	Start of Period 9	Start of Period 10	Start of Period 11	Start of Period 12	Start of Period 13	End of Period 13
<b>2014-15</b>	01/04/14	27/04/14	25/05/14	22/06/14	20/07/14	17/08/14	14/09/14	12/10/14	09/11/14	07/12/14	04/01/15	01/02/15	01/03/15	31/03/15
<b>2015-16</b>	01/04/15	03/05/15	31/05/15	28/06/15	26/07/15	23/08/15	20/09/15	18/10/15	15/11/15	13/12/15	10/01/16	07/02/16	06/03/16	31/03/16
<b>2016-17</b>	01/04/16	01/05/16	29/05/16	26/06/16	24/07/16	21/08/16	18/09/16	16/10/16	13/11/16	11/12/16	08/01/17	05/02/17	05/03/17	31/03/17
<b>2017-18</b>	01/04/17	30/04/17	28/05/17	25/06/17	23/07/17	20/08/17	17/09/17	15/10/17	12/11/17	10/12/17	07/01/18	04/02/18	04/03/18	31/03/18
<b>2018-19</b>	01/04/18	29/04/18	27/05/18	24/06/18	22/07/18	19/08/18	16/09/18	14/10/18	11/11/18	09/12/18	06/01/19	03/02/19	03/03/19	31/03/19
<b>2019-20</b>	01/04/19	28/04/19	26/05/19	23/06/19	21/07/19	18/08/19	15/09/19	13/10/19	10/11/19	08/12/19	05/01/20	02/02/20	01/03/20	31/03/20
<b>2020-21</b>	01/04/20	03/05/20	31/05/20	28/06/20	26/07/20	23/08/20	20/09/20	18/10/20	15/11/20	13/12/20	10/01/21	07/02/21	07/03/21	31/03/21
<b>2021-22</b>	01/04/21	02/05/21	30/05/21	27/06/21	25/07/21	22/08/21	19/09/21	17/10/21	14/11/21	12/12/21	09/01/22	06/02/22	06/03/22	31/03/22
<b>2022-23</b>	01/04/22	01/05/22	29/05/22	26/06/22	24/07/22	21/08/22	18/09/22	16/10/22	13/11/22	11/12/22	08/01/23	05/02/23	05/03/23	31/03/23

## Part 2 - Availability

### 1. General

- 1.1. The Contractor shall ensure that, for each Cluster, each TC System is available throughout the Term and in each Reporting Period for at least the percentage of time set out in the table below as an Availability Target.

TC System	Availability Target (%)
Traffic Signals	99.10
OVD	95.00
VMS	96.00

- 1.2. Availability is calculated automatically by the System each day.
- 1.3. For each Reporting Period, Availability during that Reporting Period will be calculated from the Reporting Period end results. The Reporting Period end results are recalculated to take account of, for example, "No Fault Found" and agreed corrections (if any) identified after the end of each Reporting Period. This is normally done on or after the third calendar day following the end of each Reporting Period.

### 2. Availability Calculation

- 2.1. Availability will be calculated for each separate Cluster (even if a Contractor is responsible for more than one Cluster), for each TC System, for each Availability Category and for each Reporting Period in accordance with the following paragraphs.
- 2.2. The Availability of each TC System for each Cluster is calculated as follows:

$$Availability = \sum_n (ACA \times WF)_n$$

where:

$n$  is the relevant Availability Category;

ACA is the Availability for each Availability Category calculated in accordance with **paragraph 2.3** of this **Part 2** of **Schedule 5**; and

WF is the weighting factor applicable to each Availability Category for each TC System set out in **paragraph 2.6** of this **Part 2** of **Schedule 5**.

- 2.3. The Availability for each Availability Category (ACA), expressed as a percentage (%) is calculated as follows:

$$ACA = \frac{(\text{Elapsed Time} - \text{Unavailable Time})}{\text{Elapsed Time}} \times 100$$

- 2.4. For each Availability Category, Availability is a function of:
- (a) the total time in seconds the TC Equipment applicable to each Availability Category at each Site should be operating (“**Elapsed Time**”) in the relevant Reporting Period, which for the avoidance of doubt is normally 2,419,200 seconds for each Availability Category that applies to each particular Site in each Reporting Period; and
  - (b) the total time during which the Installed TC Equipment applicable to each Availability Category at each Site is Unavailable (Unavailable Time) calculated in accordance with **paragraph 2.11** of this **Part 2** of **Schedule 5**.
- 2.5. The Availability Categories applicable to each TC System are detailed in **paragraph 3** of this **Part 2** of **Schedule 5**.
- 2.6. For each TC System, other than Traffic Signals, each Availability Category for that TC System is weighted equally. For Traffic Signals, the Availability Categories are weighted as set out in the table below.

Availability Category	Weighting
Lamps	0.177
Vehicle	0.235
Pedestrian	0.235
Urban Traffic Controller	0.196
Remote Monitoring	0.157
Total	1.000

- 2.7. The calculation of Unavailable Time, and therefore Availability, will only include the following:
- (a) Faults confirmed in the System in the relevant Reporting Period; and
  - (b) Faults that were confirmed before the start of the relevant Reporting Period and not Rectified and Cleared before the end of the previous Reporting Period.
- 2.8. For the avoidance of doubt, only Unavailable Time incurred in the relevant Reporting Period shall be included in the Availability calculations for that Reporting Period.



- 2.9. The effect that each Fault has on the Availability Categories is determined by the Fault Definitions and Repair Definitions entered into the System during the life of the Fault provided that the entries are confirmed by the Authority.
- 2.10. Fault Definitions and the Repair Definitions are held in the System. A list of Fault Definitions and Repair Definitions and their effect on the Availability Categories used by the System as the basis for calculating Availability as at the date of this Contract is set out at **Annex A** to this **Part 2** of **Schedule 5**. The effect of Fault Definitions and Repair Definitions on Availability Categories can be modified by users at the point of data entry.
- 2.11. For the purposes of calculating Availability for each Availability Category pursuant to **paragraph 2.3** of this **Part 2** of **Schedule 5**, the Fault is deemed to start affecting Availability when it is confirmed in the System by the Authority and sent to the Contractor for Rectification and ends when a Repair Definition that Clears the Fault is selected in the System provided that this Repair Definition entry is also confirmed by the Authority. Each confirmed Repair Definition will be deemed to take effect from the time when it was entered in the System by the Contractor.
- 2.12. It is the Contractor's responsibility to ensure the correct Repair Definitions are entered into the System in a timely manner and that they accurately reflect the actions taken to Rectify each Fault, including requests for Exceptions in respect of Excusing Causes. It is the responsibility of the Authority to ensure all Repair Definitions entered into the System within 2 (two) calendar days of the end of a Reporting Period are confirmed or rejected prior to the calculation of Availability under **paragraph 2.3** of this **Part 2** of **Schedule 5**.
- 2.13. If the Authority rejects the Repair Definition selected by the Contractor because it is incorrect, incomplete or otherwise does not Clear the Fault, the Fault will be deemed to continue to affect Availability for the purposes of calculating Availability pursuant to **paragraph 2.3** of this **Part 2** of **Schedule 5**.
- 2.14. Where confirmed Faults are found to have "No Fault Found", or "Cancelled by FCC" or identified as "Erroneous Site" (as indicated by the relevant Repair Definition being entered and confirmed in the System) then, provided that the Repair Definition is entered in the System within 2 (two) calendar days of the end of the relevant Reporting Period, the Availability Categories affected to which the Fault applies shall not be counted as Unavailable as a result of the Fault. If the Repair Definition is entered into the System later than 2 (two) calendar days following the end of the relevant Reporting Period, the affected Availability Categories will be included up until the end of the Reporting Period and no retrospective calculation will be applied.

- 2.15. If the Authority wishes to propose a change to any of the Fault Definitions and/or Repair Definitions in the System and/or the relationship between descriptions and Availability Categories and/or to propose new descriptions, the following process will be followed (and the Change Control Procedure will not apply):
- (a) the Authority will notify the Contractor of its proposed changes;
  - (b) the Contractor will have 10 (ten) calendar days from notification of the proposed changes under **paragraph 2.15(a)** of this **Part 2** of **Schedule 5** to raise any queries and, if it has material concerns, to raise any objections regarding the proposed changes; and
  - (c) during the 10 (ten) calendar day period set out in **paragraph 2.15(b)** of this **Part 2** of **Schedule 5**, the Authority shall use its reasonable endeavours to try to clarify any queries and address any material concerns in discussions with the Contractor (who will also act reasonably in this regard). If the parties are unable to agree the proposed changes within such 10 (ten) calendar day period, then the Authority will impose any such changes unless in its sole discretion the Authority decides there are reasonable reasons not to.
- 2.16. The Contractor may propose changes to Fault Definitions and Repair Definitions in the System or to propose new descriptions including the relationship between descriptions and Availability Categories from time to time which the Authority shall consider acting reasonably but shall not be bound to accept.
- 2.17. Following any agreement of the Parties evidenced in writing of proposed changes pursuant to the processes set out in **paragraphs 2.15** and **2.16** of this **Part 2** of **Schedule 5**, the agreed changes will be implemented with immediate effect. Changes to Fault Definitions or Repair Definitions and their relationships with Availability Categories will be implemented in such a way that they have no impact on historical performance measures. The Authority will maintain and manage an audit trail for all such changes to the relationships between Fault Definitions, Repair Definitions and Availability Categories used in the System in calculating Availability for the Authority's own purposes.
- 2.18. In order for the Contractor to be able to claim an Excusing Cause for a particular Fault, the Contractor must request an Exception in the System related to the Fault, specifying an expected end date and time ("**Lift**" date and time). Acceptance of the Exception is required from the Authority, signified by confirmation of the requested Exception being entered in the System.

- 2.19. The period of time for which a confirmed Exception applies starts from the time when the Exception is entered and ends:
- (a) on the date and time a Lift relating to the Fault is manually entered into the System; or
  - (b) when the Lift date, entered as described in **paragraph 2.18** of this **Part 2 of Schedule 5**, is automatically applied by the System.
- 2.20. The period of time for which a confirmed Exception applies will be deducted from the Unavailable Time calculated for the Fault but only in respect of the Availability Categories identified by the Repair Definition entered in the Exception request.
- 2.21. At the end of the Exception, Unavailable Time will once again be calculated in respect of the Availability Categories affected immediately prior to the Exception being entered into the System. It is the responsibility of the Contractor to ensure the Fault is dealt with appropriately after the Exception has been Lifted.
- 2.22. In the event that any Faults affecting a particular Availability Category overlap in time, the overlapping portion will only be counted once for the purposes of calculating Availability. For the avoidance of doubt, if Faults affect two separate Availability Categories then both will contribute to the total Unavailable Time for their respective Availability Categories.
- 2.23. If, at the time of a Switch-Out or Planned Event, Availability Categories are affected by a Fault, Availability for such Availability Categories will continue to be affected adversely until the Fault is rectified or an Exception is raised and confirmed by the Authority.
- 2.24. Faults on Sites with more than one stream are reported in the System against the Site to which the Controller is allocated in the System ("**the Controlling Site**" as identified in the System) and only the Controlling Site is included in the Elapsed Time calculations in **paragraph 2.3** of this **Part 2 of Schedule 5**.
- 2.25. The measure of Cosmetic Availability applies to all TC Systems in a relevant Cluster and is used as a Service Level Indicator. For the avoidance of doubt, the Cosmetic Availability measure is not included in the calculation of Availability above.

- 2.26. Where an item of TC Equipment is Commissioned or Decommissioned at a Site during a Reporting Period, this may affect the Availability Categories applicable to the Site during that Reporting Period and this may affect the Availability calculations set out in this **paragraph 2** as follows:
- (a) the Elapsed Time for any Availability Category affected at the applicable Site shall start from the time when the TC Equipment is Commissioned;
  - (b) the Elapsed Time for any Availability affected at the applicable Site shall end at the time when the TC Equipment is Decommissioned; and
  - (c) when calculating the Unavailable Time this will be based on the Availability Categories applicable to the Site at the time the Fault is entered into the System.
- 2.27. If the Contractor identifies any errors, omissions or discrepancies in the Availability calculation, the Contractor shall notify the Authority within 5 (five) Business Days of receipt of the Availability calculation specifying in detail the errors, omissions or discrepancies and the Contractor's rationale for what are the correct details. In the event of any Dispute between the Contractor and the Authority in respect of the Availability calculation, the Authority shall remain the final arbiter. If no such notification is received by the Authority within 5 (five) Business Days of the Contractor receiving the Availability calculation, the Availability calculation will be final.
- 2.28. The Contractor may raise queries regarding Availability records at each Maintenance Performance Meeting provided that these queries relate to unresolved Objections raised under the provisions of **paragraphs 1.2** and **2.2** of **Part 3** of this **Schedule 5**. If the Contractor does not raise any queries relating to Availability records at a Maintenance Performance Meeting, the Contractor shall be deemed to have accepted the records for the preceding 6-week period.

### 3. Availability Categories

#### 3.16. Traffic Signals

There are 5 (five) Availability Categories for Traffic Signals and the requirements set out below shall apply as determined by the Fault Definitions and Repair Definitions selected by the user in the System.

Availability Category	Requirement
Lamps	Lamps must be correctly and safely illuminated in accordance with the Traffic Signal controller specification set out in Annex C7.
Vehicle	The Traffic Signal Site must receive correct vehicle inputs and provide valid signal timings allowing the safe efficient movement of vehicular traffic, operating in the manner detailed in the Traffic Signal controller specification set out in Annex C7.
Pedestrian	The Traffic Signal controller must receive correct pedestrian detector inputs and operate valid signal timings allowing the safe efficient movement of pedestrian traffic. All visual and non-visual indicators, including tactile and audible indicators must give the correct visual and non-visual indications to pedestrians.
Urban Traffic Controller (UTC)	The Traffic Signal controller must receive correct vehicle detector inputs, be able to receive UTC data (force bits), respond correctly to these data inputs whilst providing the correct responses (reply bits) and allow the safe efficient movement of traffic.
Remote Monitoring (RM)	The Traffic Signal controller must be able to receive remote monitoring commands, respond correctly to these commands whilst allowing the safe efficient movement of traffic and be able to report to the In-Station in a timely manner any Faults detected.

In addition, if the Contractor fails to complete the Periodic Inspections (as set out in **paragraph 4.18 of Part 4 of Schedule 3**), all Availability Categories will be considered Unavailable and a corresponding Fault will be raised in the System.



### 3.17. VMS

There are 3 (three) Availability Categories for VMS and the requirements set out below shall apply as determined by the Fault Definitions and Repair Definitions selected by the user in the System.

Availability Category	Requirement
Display/Sign	It shall be possible to set safely intelligible messages as part of a plan or individually in response to an incident via the Authority's VMS System.
Control	It shall be possible to set safely intelligible messages as part of a plan or individually in response to an incident via the Authority's VMS System.
Communication	It shall be possible to set safely intelligible messages as part of a plan or individually in response to an incident via the Authority's VMS System.

In addition, if the Contractor fails to complete the Periodic Inspections (as set out in **paragraph 4.18 of Part 4 of Schedule 3**), all Availability Categories will be considered Unavailable and a corresponding Fault will be raised in the System.

### 3.18. OVD

There are 3 (three) Availability Categories for OVD and the requirements set out below shall apply as determined by the Fault Definitions and Repair Definitions selected by the user in the System.

Availability Category	Requirement
Display	When triggered, the display shall correctly show a safely intelligible warning message advising of the potential danger.
Vehicle	TC Systems shall have no detection Faults (Infrared or inductive loop) and the associated communications facilities to the display shall be fully functioning without Fault.
Remote Monitoring	The OVD controller must be able to receive remote monitoring commands, respond correctly to these commands whilst allowing the safe efficient movement of vehicular traffic and be able to report to the In-Station in a timely manner any Faults detected.

In addition, if the Contractor fails to complete the Periodic Inspections (as set out in **paragraph 4.18 of Part 4 of Schedule 3**), all Availability Categories will be considered Unavailable and a corresponding Fault will be raised in the System.



## **ANNEX A**

### **List of the System Fault Definitions and the Repair Definitions and their effect on Availability Categories**

The Parties confirm that the full contents of Annex A of Part 2 of Schedule 5 are set out on the disk which, at the Contract Commencement Date, is set out in the attached plastic wallet ("Exhibit 001"). The Parties will, at the date of signing the Agreement, sign and date the cover of such disk to confirm that it is accepted as Annex A of Part 2 of Schedule 5 to the Agreement.

The Parties agree that such disk shall have full effect as if it was set out in this Agreement in writing on paper.



## **Part 3 - Invoicing**

### **1. Invoicing for Regular Maintenance**

- 1.1. The Authority will notify the Contractor within 5 (five) Business Days of the end of each Reporting Period of the relevant Availability for each TC System, the Total Payments for Regular Maintenance (as defined in **paragraph 2 of Part 1 of this Schedule 5**) due and detailing any Financial Incentives payable or due (as defined in **paragraph 4 of Part 1 of this Schedule 5**) and Emergency Fault Abatements due (as defined in **paragraph 5 of Part 1 of this Schedule 5**) for the Reporting Period just ended including its calculations.
- 1.2. The Contractor shall review the Total Payments for Regular Maintenance, Financial Incentives and Emergency Fault Abatements calculated by the Authority within 2 (two) Business Days of receiving such calculations and shall notify the Authority whether it accepts (an “**Acceptance**”) or disputes (an “**Objection**”) the Authority’s calculations, stating clearly why it reasonably believes such calculations are incorrect and providing evidence in support of such assertion. If the Contractor fails to provide clear explanations or satisfactory supporting evidence, the Authority shall request the Contractor to provide this.
- 1.3. If the Contractor notifies the Authority of an Acceptance it shall submit an invoice to the Authority for the agreed amount in the required format and in accordance with **paragraph 4.1 of this Part 3 of Schedule 5**.
- 1.4. If the Contractor submits an Objection to the Authority, the Authority shall, within 5 (five) Business Days of receiving such Objection or within 5 (five) Business Days of receiving a clear explanation or satisfactory supporting evidence notify the Contractor whether:
  - (a) it agrees with the Objection; or
  - (b) it disagrees with the Objection.
- 1.5. On receipt of a notification by the Authority pursuant to **paragraph 1.4 of this Part 3 of Schedule 5**, the Contractor will submit an invoice to the Authority in the required format and in accordance with **paragraph 4.1 of this Part 3 of Schedule 5**. The Contractor's invoice will specify the sum the Contractor considers to be due at the payment due date and the basis on which that sum is calculated, whether or not that sum is zero.

### **2. Invoicing for Directions**

- 2.1. The Authority will notify the Contractor within 5 (five) Business Days of the end of each Reporting Period of the Total Payments for Directions (as defined in **paragraph 6 of Part 1 of this Schedule 5**) due.



- 2.2. The Contractor shall review the Total Payments for Directions calculated by the Authority within 2 (two) Business Days of receiving such calculations and shall submit an Acceptance or an Objection, stating clearly why it reasonably believes such calculations are incorrect and providing evidence in support of such assertion, to the Authority. If the Contractor fails to provide clear explanations or satisfactory supporting evidence, the Authority shall request the Contractor to provide this.
- 2.3. If the Contractor notifies the Authority of an Acceptance it shall submit an invoice to the Authority for the agreed amount in the required format and in accordance with **paragraph 4.1** of this **Part 3** of **Schedule 5**.
- 2.4. If the Contractor submits an Objection to the Authority, the Authority shall, within 5 (five) Business Days of receiving such Objection or within 5 (five) Business Days of receiving a clear explanation or satisfactory supporting evidence notify the Contractor whether:
- (a) it agrees with the Objection; or
  - (b) it disagrees with the Objection.
- 2.5. On receipt of a notification by the Authority pursuant to **paragraph 2.4** of this **Part 3** of **Schedule 5**, the Contractor will submit an invoice to the Authority in the required format and in accordance with **paragraph 4.1** of this **Part 3** of **Schedule 5**. The Contractor's invoice will specify the sum the Contractor considers to be due at the payment due date and the basis on which that sum is calculated, whether or not that sum is zero.

### **3. Invoicing for Third Party Damage**

- 3.1. In each instance of Third Party Damage where:
- (a) the Authority has confirmed in writing that Sufficient Evidence in respect of an incident of Third Party Damage has been received; or
  - (b) the Contractor can demonstrate to the Authority's satisfaction that the cost of Rectification of Third Party Damage is greater than £10,000 (ten thousand pounds) where there is Insufficient Evidence; or
  - (c) the Contractor is required to carry out any Rectification works in respect of any Faults caused by Third Party Damage which occurred prior to the Maintenance Commencement Date and of which the Authority was aware as at the Maintenance Commencement Date and the cost of which the Authority has notified the Contractor is recoverable in accordance with the requirements of **paragraph 4.7.10** of **Part 4** of **Schedule 3**; or

- (d) the Contractor is required to carry out any Rectification works in respect of any Third Party Damage to Vulnerable Installed TC Equipment (subject to the Contractor complying with its obligations in **paragraph 4.7.8 of Part 4 of Schedule 3**),

the Contractor shall prepare and submit to the Authority for approval for each separate incident of Third Party Damage a quotation in the form of an activity schedule as if it were Capital Works (even though it is not) for the Rectification works detailing the actions taken by the Contractor to rectify the damage and Clear the relevant Fault as recorded on the System using the rates, prices, percentages and allowances stated in the Schedule of Capital Works Rates.

- 3.2. Within 5 (five) Business Days of receipt of the Contractor's activity schedule in respect of the relevant Rectification, the Authority shall notify the Contractor in writing whether it agrees with the activity schedule or disputes it.
- 3.3. On receipt of a notification by the Authority pursuant to **paragraph 3.2 of this Part 3 of Schedule 5**, the Contractor will submit an invoice for each separate incident of Third Party Damage to the Authority in the required format and in accordance with **paragraph 4.1 of this Part 3 of Schedule 5**. The Contractor's invoice will specify the sum the Contractor considers to be due at the payment due date and the basis on which that sum is calculated, whether or not that sum is zero.

#### **Incumbent suppliers**

- 3.4. If the Authority confirms in writing that:
  - (a) the Contractor is required to replace any tungsten filament, halogen bulb or fluorescent tube which was more than 6 (six) calendar months old as at the Maintenance Commencement Date; or
  - (b) the Contractor is required to Clear a Fault which was not in Exception and was more than 2 (two) calendar months old as at the Maintenance Commencement Date;

the Contractor shall prepare and submit to the Authority for written approval for each separate incident of replacement of tungsten filament, halogen bulbs or fluorescent tubes which were more than 6 (six) calendar months old as at the Maintenance Commencement Date or a Fault which was not in Exception and was more than 2 (two) calendar months old as at the Maintenance Commencement Date, a quotation in the form of an activity schedule as if it were Capital Works (even though it is not) for the required works detailing the actions to be taken by the Contractor to replace the relevant tungsten filament, halogen bulb or fluorescent tube or to Clear the relevant Fault as recorded on the System using the rates, prices, percentages and allowances stated in the Schedule of Capital Works Rates.

- 3.5. Within 5 (five) Business Days of receipt of the Contractor's activity schedule in respect of the relevant works required pursuant to **paragraph 3.4** of this **Part 3** of **Schedule 5**, the Authority shall notify the Contractor in writing whether it agrees with the activity schedule or disputes it.
- 3.6. On receipt of a notification by the Authority pursuant to **paragraph 3.5** of this **Part 3** of **Schedule 5**, the Contractor will submit an invoice for each separate incident to the Authority in the required format and in accordance with **paragraph 4.1** of this **Part 3** of **Schedule 5**. The Contractor's invoice will specify the sum the Contractor considers to be due at the payment due date and the basis on which that sum is calculated, whether or not that sum is zero.

#### 4. **General**

- 4.1. The Contractor will submit its invoices to the address set out in **Schedule 1**. Each such invoice will contain all information required by the Authority as specified in this **Schedule 5** together with this Contract's Reference Number, SAP purchase order number, the Contractor's name and address and a separate calculation of VAT. The Contractor will not make any separate charge for submitting such invoices. If an invoice does not contain the required information or is not in the specified format, the Authority will notify the Contractor and the Contractor will issue a revised invoice.
- 4.2. The due date for payment in respect of each invoice will be the date on which a proper and correct invoice (complying with the requirements of **paragraph 4.1** of this **Part 3** of **Schedule 5**) is received by the Authority. Invoices submitted prematurely or which do not comply with the requirements of **paragraph 4.1** of this **Part 3** of **Schedule 5** will not be valid and will be resubmitted in the proper form at the proper time.
- 4.3. The final date for payment in respect of each invoice will be 28 (twenty-eight) days from the end of the Reporting Period to which the invoice relates or 15 (fifteen) days from the receipt of the invoice, whichever is later. In the case of Third Party Damage, the final date for payment in respect of each invoice will be 28 (twenty-eight) days from the end of the Reporting Period in which the invoice is received.
- 4.4. Subject to **paragraph 4.6** of this **Part 3** of **Schedule 5** and unless the Authority has served a notice under **paragraph 4.5** of this **Part 3** of **Schedule 5**, the Authority will pay the Contractor the sum referred to in the Contractor's properly submitted invoice (the "**Notified Sum**") on or before the final date for payment of each invoice in accordance with **paragraph 4.3** of this **Part 3** of **Schedule 5**.

- 4.5. The Authority may give the Contractor a notice in writing specifying the Authority's intention to pay less than the Notified Sum (the "**Pay Less Notice**"). The Pay Less Notice will specify:
- (a) the sum that the Authority considers to be due on the date the notice is served, whether or not that sum is zero; and
  - (b) the basis on which that sum is calculated,
- and that sum will become the amount payable. The Pay Less Notice must be given no later than 1 (one) day before the final date for payment of the Notified Sum (the "**Prescribed Period**").
- 4.6. In respect of the difference between the Notified Sum and the Pay Less Notice, the Authority and the Contractor shall use their reasonable endeavours to try to resolve the Dispute. If resolved the Contractor shall invoice the Authority for the agreed amount (complying with the requirements of **paragraph 4.1** of this **Part 3** of **Schedule 5**).
- 4.7. If the Dispute is not resolved between the parties within 10 (ten) Business Days then the Dispute shall be referred to the Dispute Resolution Process.
- 4.8. Notwithstanding **paragraphs 4.4** and **4.5** of this **Part 3** of **Schedule 5**, if the Contractor suffers an Insolvency Event after the Prescribed Period, the Authority will not be required to pay the Contractor the Notified Sum on or before the final payment date.
- 4.9. If any sum payable under this Contract is not paid by the final date for payment then the Contractor will be entitled to serve on the Authority a notice in writing specifying the Contractor's intention to suspend performance of any or all of its obligations under this Contract stating the ground(s) on which the Contractor intends to suspend performance ("**Notice of Intention to Suspend**"). If the Authority has failed to pay any sum properly due to the Contractor for a minimum period of seven (7) days following the date on which the Notice of Intention to Suspend was served on the Authority, the Contractor will be entitled to:
- (a) suspend any or all of its obligations under this Contract; and
  - (b) reimbursement by the Authority of a reasonable sum to cover costs and expenses reasonably incurred by the Contractor as a result of exercising its right to suspend in accordance with this **paragraph 4.9**,
- provided that such right to suspend will cease immediately upon payment in full by the Authority of the sum due to the Contractor.
- 4.10. Payments will be made by bank transfer (Bank Automated Clearance System (BACS)) or such other method as the Authority may choose from time to time.

- 4.11. If the Authority considers that the sum claimed by the Contractor in any invoice has not been calculated correctly and/or if the invoice contains any other error or inadequacy, the Authority will notify the Contractor and the Parties will work together to resolve the error or inadequacy. Upon resolution or determination, the Contractor will submit a revised invoice to the Authority in accordance with **paragraph 4.1** of this **Part 3** of **Schedule 5**.
- 4.12. No payment made by the Authority (including any final payment) or act or omission or approval by the Authority or the Engineer (whether related to payment or otherwise) will:
- (a) indicate or be taken to indicate the Authority's acceptance or approval of the Services or any part of them or any act or omission of the Contractor, or otherwise prejudice any rights, powers or remedies which the Authority may have against the Contractor, or absolve the Contractor from any obligation or liability imposed on the Contractor under or by virtue of this Contract; or
  - (b) prevent the Authority from recovering any amount overpaid or wrongfully paid including payments made to the Contractor by mistake of law or fact. Without prejudice to **Clause 49** the Authority will be entitled to withhold such amount from any sums due or which may become due to the Contractor or the Authority may recover such amount as debt.
- 4.13. All amounts exclude any VAT which may be chargeable, which will be payable in addition to the sum in question at the rate and in the manner for the time being prescribed by law on delivery of a valid VAT invoice. The Contractor shall, if so requested by the Authority, furnish such information as may reasonably be required by the Authority as to the amount of VAT chargeable on the goods and services supplied in accordance with the Contract and payable by the Authority to the Contractor. Any overpayment by the Authority to the Contractor shall be a sum of money recoverable from the Contractor.
- 4.14. When the Contractor enters into any Sub-Contract in accordance with **Clause 25**, it will incorporate into such contract a term which requires payment to be made to the Sub-Contractor within not more than 28 (twenty-eight) days of receipt of the Sub-Contractor's invoice (or ten (10) days of receipt of invoice if the Sub-Contractor is an SME (as defined in **Schedule 12**).
- 4.15. If any sum due to the Contractor under the terms of this Contract shall be improperly delayed by the Authority an additional charge for interest, calculated on a daily basis at 2% above HSBC Bank plc's base rate from time to time in force during the period of delay, on the payment for the period of the delay shall be payable to the Contractor by the Authority. The parties agree that this **paragraph 4.15** is a substantial remedy for late payment of any sum payable under this Contract in accordance with s.8(2) of the Late Payment of Commercial Debts (Interest) Act 1998.



- 4.16. The Authority shall have the right to audit the Contractor's compliance with the provisions of this **Schedule 5** at any time in accordance with **Clause 46** of this Contract.