

## Annex 7c - Projected Inventory

Instead of replacing a certain lamp type & wattage with a specific LED luminaire, we plan on fitting a specific LED luminaire depending on the column height  
 We also plan on using a single Switch regime for LED Luminaires by using CMS to dim between 00:00 and 05:30 BST and using 35/18 Lux to switch on and off (currently this switch regime does not exist in UMSUG but through CMS we would be able to show this).

### For 4m columns we plan to replace existing with:

| Lamp Description                                       | Lamp Charge Code | Circuit Watts        | Current Inventory |                           |                          |                      |     |
|--|------------------|----------------------|-------------------|---------------------------|--------------------------|----------------------|-----|
| Urbis Axis 16 LED Luminaire @ 500mA                    |                  |                      |                   |                           |                          |                      |     |
|  | 41 0028 0015 100 | 28                   |                   |                           |                          |                      |     |
| LAMP   | SWITCH REGIME    | Switch Regime Code   | Quantity          | Annual Energy Consumption | Annual Energy Cost (£'s) | Annual CO2 emissions |     |
| SON (High Pressure Sodium) 70W lamp with Standard gear | 14 0070 1000 100 | Electronic PEC 70/35 | 821               | 1                         | 373                      | 43.32                | 0.2 |
| <b>TOTAL</b>   |                  |                      | <b>1</b>          | <b>373</b>                | <b>43.32</b>             | <b>0.2</b>           |     |

### For 5m columns we plan to replace existing with:

| Lamp Description   | Lamp Charge Code | Circuit Watts                             | Current Inventory |                           |                          |                      |       |
|--|------------------|---|-------------------|---------------------------|--------------------------|----------------------|-------|
| Urbis Axis 16 LED Luminaire @ 500mA  |                  |   |                   |                           |                          |                      |       |
|  | 41 0028 0015 100 | 28  |                   |                           |                          |                      |       |
| LAMP   | SWITCH REGIME    | Switch Regime Code                        | Quantity          | Annual Energy Consumption | Annual Energy Cost (£'s) | Annual CO2 emissions |       |
| SOX (Low Pressure Sodium) 35W lamp with Standard gear  | 11 0035 1000 100 | PEC Dusk to 24.00 / 05.30 to Dawn 70 lux  | 722               | 8                         | 1,216                    | 141.14               | 0.3   |
| SOX (Low Pressure Sodium) 35W lamp with Standard gear  | 11 0035 1000 100 | Electronic PEC 35/18                      | 808               | 8                         | 2,136                    | 247.99               | 1.1   |
| SOX (Low Pressure Sodium) 35W lamp with Standard gear  | 11 0035 1000 100 | Electronic PEC 70/35                      | 821               | 23                        | 6,198                    | 719.56               | 3.1   |
| SOX (Low Pressure Sodium) 35W lamp with Low Loss gear  | 11 0035 2000 100 | Timeswitch - Dusk to Dawn                 | 200               | 1                         | 227                      | 26.38                | 0.1   |
| SOX (Low Pressure Sodium) 35W lamp with Low Loss gear  | 11 0035 2000 100 | PEC Dusk to 24.00 / 05.30 to Dawn 70 lux  | 722               | 863                       | 117,026                  | 13,585.58            | 57.8  |
| SOX (Low Pressure Sodium) 35W lamp with Low Loss gear  | 11 0035 2000 100 | Electronic PEC 35/18                      | 808               | 649                       | 154,633                  | 17,951.38            | 76.4  |
| SOX (Low Pressure Sodium) 35W lamp with Low Loss gear  | 11 0035 2000 100 | Electronic PEC 70/35                      | 821               | 1,909                     | 459,053                  | 53,291.51            | 226.9 |
| SOX (Low Pressure Sodium) 55W lamp with Standard gear  | 11 0055 1000 100 | PEC Dusk to 24.00 / 05.30 to Dawn 70 lux  | 722               | 1                         | 180                      | 20.98                | 0.1   |
| SOX (Low Pressure Sodium) 55W lamp with Standard gear  | 11 0055 1000 100 | Electronic PEC 35/18                      | 808               | 2                         | 633                      | 73.44                | 0.3   |
| SOX (Low Pressure Sodium) 55W lamp with Standard gear  | 11 0055 1000 100 | Electronic PEC 70/35                      | 821               | 7                         | 2,235                    | 259.43               | 1.1   |
| SOX (Low Pressure Sodium) 55W lamp with Low Loss gear  | 11 0055 2000 100 | PEC Dusk to 24.00 / 05.30 to Dawn 70 lux  | 722               | 1                         | 173                      | 20.08                | 0.1   |
| SOX (Low Pressure Sodium) 55W lamp with Low Loss gear  | 11 0055 2000 100 | Electronic PEC 35/18                      | 808               | 2                         | 608                      | 70.58                | 0.3   |
| SOX (Low Pressure Sodium) 55W lamp with Low Loss gear  | 11 0055 2000 100 | Electronic PEC 70/35                      | 821               | 8                         | 2,454                    | 284.94               | 1.2   |
| SOX-E (Low Pressure Sodium) 18W lamp with Optimum gear   | 12 0018 4000 100 | PEC Dusk to 24.00 / 05.30 to Dawn 70 lux  | 722               | 19                        | 3,333                    | 354.71               | 1.7   |
| SOX-E (Low Pressure Sodium) 18W lamp with Optimum gear   | 12 0018 4000 100 | Electronic PEC 35/18                      | 808               | 1                         | 123                      | 14.31                | 0.1   |
| SOX-E (Low Pressure Sodium) 18W lamp with Optimum gear   | 12 0018 4000 100 | Electronic PEC 70/35                      | 821               | 15                        | 1,866                    | 216.59               | 0.9   |
| SON (High Pressure Sodium) 50W lamp with Standard gear   | 14 0050 1000 100 | PEC Dusk to 24.00 / 05.30 to Dawn 70 lux  | 722               | 301                       | 43,558                   | 5,037.08             | 24.0  |
| SON (High Pressure Sodium) 50W lamp with Standard gear   | 14 0050 1000 100 | Electronic PEC 35/18                      | 808               | 363                       | 102,893                  | 11,944.86            | 50.9  |
| SON (High Pressure Sodium) 50W lamp with Standard gear   | 14 0050 1000 100 | Electronic PEC 70/35                      | 821               | 693                       | 198,249                  | 23,014.76            | 98.0  |
| SON (High Pressure Sodium) 50W lamp with Zodion Electronic Ballast                                 | 14 0050 5000 100 | Electronic PEC 70/35                      | 722               | 53                        | 9,939                    | 1,151.29             | 5.4   |
| SON (High Pressure Sodium) 50W lamp with Zodion Electronic Ballast                                 | 14 0050 5000 100 | Electronic PEC 35/18                      | 808               | 21                        | 4,831                    | 560.83               | 2.4   |
| SON (High Pressure Sodium) 50W lamp with Zodion Electronic Ballast                                 | 14 0050 5000 100 | Electronic PEC 70/35                      | 821               | 135                       | 31,344                   | 3,638.70             | 15.5  |
| SON (High Pressure Sodium) 50W lamp with Micatronic Electronic Ballast                             | 14 0050 5040 100 | PEC Dusk to 24.00 / 05.30 to Dawn 70 lux  | 722               | 20                        | 2,478                    | 287.70               | 1.2   |
| SON (High Pressure Sodium) 50W lamp with Micatronic Electronic Ballast                             | 14 0050 5040 100 | Electronic PEC 35/18                      | 808               | 6                         | 1,396                    | 161.68               | 0.8   |
| SON (High Pressure Sodium) 50W lamp with Micatronic Electronic Ballast                             | 14 0050 5040 100 | Electronic PEC 70/35                      | 821               | 43                        | 9,449                    | 1,096.90             | 4.7   |
| SON (High Pressure Sodium) 70W lamp with Standard gear   | 14 0070 1000 100 | PEC Dusk to 24.00 / 05.30 to Dawn 70 lux  | 722               | 135                       | 28,407                   | 3,297.73             | 14.0  |
| SON (High Pressure Sodium) 70W lamp with Standard gear   | 14 0070 1000 100 | Electronic PEC 35/18                      | 808               | 126                       | 46,583                   | 5,408.02             | 23.0  |
| SON (High Pressure Sodium) 70W lamp with Standard gear   | 14 0070 1000 100 | Electronic PEC 70/35                      | 821               | 371                       | 138,435                  | 16,070.91            | 68.4  |
| SON (High Pressure Sodium) 70W lamp with Standard gear   | 14 0070 5000 100 | Electronic PEC 70/35                      | 821               | 1                         | 332                      | 38.50                | 0.2   |
| SON (High Pressure Sodium) 70W lamp with Standard gear   | 14 0070 5000 100 | PEC Dusk to 24.00 / 05.30 to Dawn 70 lux  | 722               | 1                         | 192                      | 22.22                | 0.1   |
| SON (High Pressure Sodium) 70W lamp with Standard gear   | 14 0070 5000 100 | Electronic PEC 35/18                      | 821               | 1                         | 340                      | 38.47                | 0.2   |
| SON (High Pressure Sodium) 70W lamp with Standard gear   | 14 0070 5000 100 | Electronic PEC 70/35                      | 821               | 3                         | 526                      | 61.07                | 0.3   |
| SON (High Pressure Sodium) 70W lamp with Standard gear   | 14 0070 5000 100 | Electronic PEC 35/18                      | 821               | 6                         | 1,866                    | 216.59               | 0.9   |
| SON (High Pressure Sodium) 70W lamp with Standard gear   | 14 0070 5000 100 | Electronic PEC 70/35                      | 821               | 1                         | 310                      | 35.20                | 0.2   |
| SON (High Pressure Sodium) 100W lamp with Dual Tapped gear complete with Micatronic Dimming Switch | 14 0100 2001 073 | Dimming from 22:00 to 06:00 (Clock) 35/18 | 598               | 1                         | 598                      | 45.71                | 0.2   |
| MBFU (High Pressure Mercury) 50W lamp  | 21 0050 1000 100 | PEC Dusk to 24.00 / 05.30 to Dawn 70 lux  | 722               | 2                         | 285                      | 33.11                | 0.1   |
| MBFU (High Pressure Mercury) 50W lamp  | 21 0050 1000 100 | Electronic PEC 70/35                      | 821               | 3                         | 759                      | 88.08                | 0.4   |
| MBFU (High Pressure Mercury) 80W lamp  | 21 0080 1000 100 | PEC Dusk to 24.00 / 05.30 to Dawn 70 lux  | 722               | 4                         | 722                      | 102.05               | 0.4   |
| MBFU (High Pressure Mercury) 80W lamp  | 21 0080 1000 100 | Electronic PEC 70/35                      | 821               | 1                         | 380                      | 45.24                | 0.2   |
| CD-D-TT (High Pressure Mercury) 70W lamp with Low Loss gear  | 26 0070 2000 100 | Electronic PEC 35/18                      | 808               | 3                         | 1,060                    | 123.04               | 0.5   |
| CD-D-TT (High Pressure Mercury) 70W lamp with Low Loss gear  | 26 0070 2000 100 | Electronic PEC 70/35                      | 821               | 7                         | 2,496                    | 289.75               | 1.2   |
| CD-D-TT (High Pressure Mercury) 70W lamp with Low Loss gear  | 26 0070 2000 100 | Electronic PEC 35/18                      | 808               | 3                         | 1,060                    | 123.04               | 0.5   |
| Philips Foremo LED 1800lm 740 (4000K) Neutral White  | 41 0024 0001 100 | Electronic PEC 35/18                      | 821               | 1                         | 197                      | 22.88                | 0.1   |
| <b>TOTAL</b>   |                  |   | <b>5,820</b>      | <b>1,379,793</b>          | <b>160,180.20</b>        | <b>682.0</b>         |       |

### For 6m columns we plan to replace existing with:

| Lamp Description   | Lamp Charge Code | Circuit Watts                            | Current Inventory |                           |                          |                      |      |
|--|------------------|--|-------------------|---------------------------|--------------------------|----------------------|------|
| Urbis Axis 24 LED Luminaire @ 500mA                                |                  |  |                   |                           |                          |                      |      |
|  | 41 0040 0005 100 | 40                                       |                   |                           |                          |                      |      |
| LAMP   | SWITCH REGIME    | Switch Regime Code                       | Quantity          | Annual Energy Consumption | Annual Energy Cost (£'s) | Annual CO2 emissions |      |
| SOX (Low Pressure Sodium) 35W lamp with Standard gear              | 11 0035 1000 100 | Electronic PEC 35/18                     | 808               | 1                         | 267                      | 31.00                | 0.1  |
| SOX (Low Pressure Sodium) 35W lamp with Low Loss gear              | 11 0035 2000 100 | PEC Dusk to 24.00 / 05.30 to Dawn 70 lux | 722               | 8                         | 1,085                    | 125.94               | 0.5  |
| SOX (Low Pressure Sodium) 35W lamp with Low Loss gear              | 11 0035 2000 100 | Electronic PEC 35/18                     | 808               | 11                        | 2,621                    | 304.26               | 1.3  |
| SOX (Low Pressure Sodium) 35W lamp with Low Loss gear              | 11 0035 2000 100 | Electronic PEC 70/35                     | 821               | 50                        | 12,023                   | 1,395.80             | 5.9  |
| SOX (Low Pressure Sodium) 55W lamp with Standard gear              | 11 0055 1000 100 | Electronic PEC 35/18                     | 808               | 3                         | 483                      | 56.16                | 0.3  |
| SOX (Low Pressure Sodium) 55W lamp with Standard gear              | 11 0055 1000 100 | Electronic PEC 70/35                     | 821               | 16                        | 5,108                    | 592.97               | 2.5  |
| SOX (Low Pressure Sodium) 55W lamp with Low Loss gear              | 11 0055 2000 100 | Electronic PEC 35/18                     | 808               | 2                         | 608                      | 70.58                | 0.3  |
| SOX (Low Pressure Sodium) 55W lamp with Low Loss gear              | 11 0055 2000 100 | Electronic PEC 70/35                     | 821               | 40                        | 12,272                   | 1,426.28             | 6.1  |
| SOX (High Pressure Sodium) 50W lamp with Standard gear             | 14 0050 1000 100 | PEC Dusk to 24.00 / 05.30 to Dawn 70 lux | 722               | 5                         | 807                      | 93.64                | 0.4  |
| SON (High Pressure Sodium) 50W lamp with Standard gear             | 14 0050 1000 100 | Electronic PEC 35/18                     | 808               | 11                        | 3,118                    | 361.97               | 1.5  |
| SON (High Pressure Sodium) 50W lamp with Standard gear             | 14 0050 1000 100 | Electronic PEC 70/35                     | 821               | 33                        | 9,440                    | 1,096.94             | 4.7  |
| SON (High Pressure Sodium) 70W lamp with Standard gear             | 14 0070 1000 100 | Timeswitch - Dusk to Dawn                | 200               | 1                         | 253                      | 40.38                | 0.2  |
| SON (High Pressure Sodium) 70W lamp with Standard gear             | 14 0070 1000 100 | PEC Dusk to 24.00 / 05.30 to Dawn 70 lux | 722               | 17                        | 3,577                    | 415.27               | 1.8  |
| SON (High Pressure Sodium) 70W lamp with Standard gear             | 14 0070 1000 100 | Electronic PEC 35/18                     | 808               | 23                        | 3,504                    | 397.18               | 1.6  |
| SON (High Pressure Sodium) 70W lamp with Standard gear             | 14 0070 1000 100 | Electronic PEC 70/35                     | 821               | 98                        | 33,203                   | 3,852.29             | 16.4 |
| SON (High Pressure Sodium) 70W lamp with Zodion Electronic Ballast | 14 0070 5000 100 | Electronic PEC 70/35                     | 821               | 1                         | 332                      | 38.50                | 0.2  |
| SON (High Pressure Sodium) 70W lamp with Zodion Electronic Ballast | 14 0070 5000 100 | Electronic PEC 35/18                     | 808               | 1                         | 340                      | 38.11                | 0.2  |
| SON (High Pressure Sodium) 70W lamp with Zodion Electronic Ballast | 14 0070 5000 100 | Electronic PEC 70/35                     | 821               | 1                         | 340                      | 38.11                | 0.2  |
| SON (High Pressure Sodium) 250W lamp with Standard gear            | 14 0250 1000 100 | Electronic PEC 35/18                     | 808               | 1                         | 1,237                    | 143.55               | 0.6  |
| CD-D-TT (High Pressure Mercury) 70W lamp with Low Loss gear        | 26 0070 2000 100 | Electronic PEC 70/35                     | 821               | 1                         | 357                      | 41.39                | 0.2  |
| <b>TOTAL</b>   |                  |  | <b>315</b>        | <b>96,542</b>             | <b>11,207.62</b>         | <b>47.72</b>         |      |

| Converted to LED and using current switch regime |                          |                               |
|--|--------------------------|-------------------------------|
| Annual Energy Consumption (kWhr)                 | Annual Energy Cost (£'s) | Annual CO2 emissions (tonnes) |
| 116  | 13.48                    | 0.1                           |
| <b>116</b>                                       | <b>13.48</b>             | <b>0.1</b>                    |

| Converted to LED and using Switch Regime - Dimming from 00:00 to 05:30 (Clock) Lux 55/28 (Code = 543) |                          |                               |
|---|--------------------------|-------------------------------|
| Annual Energy Consumption (kWhr)  | Annual Energy Cost (£'s) | Annual CO2 emissions (tonnes) |
| 77  | 8.96                     | 0.0                           |
| <b>77</b>   | <b>8.96</b>              | <b>0.0</b>                    |

| Converted to LED and using current switch regime |                          |                               |
|--|--------------------------|-------------------------------|
| Annual Energy Consumption (kWhr)                 | Annual Energy Cost (£'s) | Annual CO2 emissions (tonnes) |
| 602,916  | 69,992.56                | 298.0                         |
| <b>602,916</b>                                   | <b>69,992.56</b>         | <b>298.0</b>                  |

| Converted to LED and using Switch Regime - Dimming from 00:00 to 05:30 (Clock) Lux 55/28 (Code = 543) |                          |                               |
|---|--------------------------|-------------------------------|
| Annual Energy Consumption (kWhr)  | Annual Energy Cost (£'s) | Annual CO2 emissions (tonnes) |
| 449,252   | 52,151.32                | 222.0                         |
| <b>449,252</b>  | <b>52,151.32</b>         | <b>222.0</b>                  |

| Converted to LED and using current switch regime |                          |                               |
|--|--------------------------|-------------------------------|
| Annual Energy Consumption (kWhr)                 | Annual Energy Cost (£'s) | Annual CO2 emissions (tonnes) |
| 602,916  | 69,992.56                | 298.0                         |
| <b>602,916</b>                                   | <b>69,992.56</b>         | <b>298.0</b>                  |

| Converted to LED and using Switch Regime - Dimming from 00:00 to 05:30 (Clock) Lux 55/28 (Code = 543) |                          |                               |
|---|--------------------------|-------------------------------|
| Annual Energy Consumption (kWhr)  | Annual Energy Cost (£'s) | Annual CO2 emissions (tonnes) |
| 449,252   | 52,151.32                | 222.0                         |
| <b>449,252</b>  | <b>52,151.32</b>         | <b>222.0</b>                  |

| Converted to LED and using current switch regime |                          |                               |
|--|--------------------------|-------------------------------|
| Annual Energy Consumption (kWhr)                 | Annual Energy Cost (£'s) | Annual CO2 emissions (tonnes) |
| 49,980   | 5,802.22                 | 24.70                         |
| <b>49,980</b>                                    | <b>5,802.22</b>          | <b>24.70</b>                  |

| Converted to LED and using Switch Regime - Dimming from 00:00 to 05:30 (Clock) Lux 55/28 (Code = 543) |                          |                               |
|---|--------------------------|-------------------------------|
| Annual Energy Consumption (kWhr)  | Annual Energy Cost (£'s) | Annual CO2 emissions (tonnes) |
| 34,734  | 4,032.32                 | 17.17                         |
| <b>34,734</b>   | <b>4,032.32</b>          | <b>17.17</b>                  |