



UK LIGHTING AND TECHNOLOGY BOARD

UK Lighting and Technology Board Meeting Agenda

Date: 3 November 2022

Venue: Teams Meeting

Timing: 10.00-12.30

The Board is chaired by David Denner (Welsh Government) and has the following members:

- Bijan Bassiri, representing Transport Scotland
- Michael Levack, representing the Industry, HEA & HEMSA
- Simon Langley, representing National Highways
- Guy Harding, representing the Institution of Lighting Professionals (ILP)
- Dean Wendelborn (Westminster Council) representing the London Lighting Engineers Group, (LoLEG) and London's Highways Asset Management Forum (LoTAG)
- Scott Denyer, (Street Lighting Partnership) representing SCOTS
- Keith Tovee, (Essex Highways) representing ADEPT
- Gary Ross, representing the Department for Infrastructure Northern Ireland
- Jonathan Hurley (Swansea City Council) representing CSS Wales
- Gafoor Din, (Warwickshire County Council) representing ADEPT Traffic Systems Group
- Toby Penter, representing Young Lighting Professionals (YLP Chairman)
- Matthew Eglinton / Gary Kemp, representing the Department for Transport
- Vacant, representing OFGEM

In attendance:

Bijan Bassiri
Gafoor Din
Gary Kemp
Guy Harding
Jonathan Hurley
Keith Tovee
Simon Langley
Michael Levack
Gary Ross
Scott Denyer
Toby Penter
Gareth Pritchard
Dean Wendelborn

1. Welcome, introduction and apologies

Apologies from Dean Wendelborn (who joined further in to the meeting)

David made the point that you can always invite junior members or new graduates from your companies to observe these meetings which many agreed with.

2. Information around the research for the UKLTB board, two proposals and the planned future research

David sent out the UKRLG Research Proforma and the UKLTB Strategic themes and activities for 2022/23 to 2024/25 ahead of the meeting and asked for the boards thoughts on these documents.

UKRLG Research Proforma

Street Lighting State of the Nation 2022

Keith – it should emphasise that the advantage of LEDs is not just about saving energy on lights but will increase maintenance savings too (fewer visits etc)

Bijan – savings are self evident, as part of maintenance if you have CMS you need to add nodes and controllers within the unit. Worthwhile highlighting that it's often forgotten that, as the nodes need to be replaced in 5-7 years.

David – this research will be about collecting lighting data as in the number of lighting points, i.e. how many street lights are there and what kind are they?

Gafoor – Traffic system group are doing something identical on asset management i.e. what's out there, what age is it, what needs updating, which will create a comprehensive list. Also looking at funding on how to action this.

Michael – our annual highway electrical handbook (Spinfish) has statistics and analysis on the number of lighting units – happy to share and see how they match up i.e. how accurate are the figures that we already have?

David – we plan to use Spinfish data as a baseline, then get data from DNOs to get detailed info on lamp source rather than just number

Guy – will we collect information on LED colour temperature?

David – we don't ask about this, too hard to collect this type of data (would need to contact every council)

Scott – in Scotland and Wales they send information annually to apse reports

David – not all LAs are apse members so not complete data sets to work from – would have to divide between apse members and non-apse members

Toby – so many local authorities report lamppost data to CMS companies – is that a way to gather data?

David – this data is commercial which is hard to get from the manufacturers. All good points which show we need to open up data

David – we have been asked to look at commissioning a piece of work which researches how much we are paying for energy per unit around the country

Scott – in Scotland everyone purchases energy on same contract (Scottish Procurement) so all LAs are on same contract. EDF won current contract to supply Scotland. At the moment this is around 17.2 p/kwh roughly. They have also had advice issued for next two years from Scottish Procurement as energy prices are expected to rise by 58% next year then 34% the year after that

Keith – most councils use energy companies like LASER, street lighting is part of an overall energy portfolio. Are you going to look at district and parish councils not just county councils?

David – if they are willing to share info, it will be a big task to ask all these people. Will be interesting to see how parish councils who don't have procurement teams submit energy portfolios.

Gareth – are we asking the start and end dates of current procurement arrangements as this will have an effect on the individual rates being paid

David – haven't thought of that but will add it into brief to include

Gary R – NI are currently on a flexible contract. Recently, because of the price hike,

energy companies refuse to let you buy energy more than a month ahead. Trying to get something in place for next three years (unmetered energy) didn't attract any tenders- so now trying with a one year contract

David went over the UKLTB Strategic themes and activities for 2022/23 to 2024/25
Jonathan – concrete columns are in better condition than steel – should we go into condition testing in addition to electrical condition? Structural testing details will cover all assets hopefully to give better data.

Scott – column data is coming back – age profile, all data etc is available already – target the ones that aren't in apse report

David –On 16th Nov UKRLG are meeting to hopefully sign off on this plan.

Actions

David - to add that start and end dates of current procurement arrangements in the Street Lighting State of the Nation brief.

Everyone – provide David with information we should be collecting to help the industry, which will then be put into the strategic plan.

3. UKRLG Strategic Plan

Scott – difficulty in recruitment for contracting approved electricians as need to have category C1 on their driving license to drive a tower. Anyone aged ~40 or under no longer have C1 on driving license whereas anyone older than this does. Increasingly making it difficult to hire young electricians

Michael – echoes this and has had similar problems. Young people are put off learning to drive due to the cost of driving and insuring a car. It is also becoming less necessary to drive these days. Likely to get worse with recession + energy prices, will young people be able to afford the cost of a car?

David – this is a huge issue. Should driving be seen as a competency/skill we need in the workforce and therefore be supported by training budgets and skills funding?

David shared work on a document that will map out all the companies and organisations that work within the lighting sector

Guy – already done something similar that shows how street lighting team in linked to stakeholders. <https://theilp.org.uk/publication/ilp-guide-to-the-lighting-industry/>

Gafoor – traffic system group already engaging with TTF and LCRIG – will update how TSG is engaging and how to promote best practice. LCRIG run conferences which gives networking opportunities, doesn't cost anything from a training perspective. Recommends to keep an eye on what they are doing.

David – we could invite LCRIG to come to a meeting and give a presentation

Toby – how the industry is structured is very confusing for someone new. This is a barrier to engagement for young people who have no idea what each company does and where it feeds into the bigger picture. This is a worthwhile exercise to condense information and avoid duplication.

4. Minutes of the last UKLTB Meeting 23 June 2022

Actions carried forward: David will share dynamic dimming work

Nominate someone to be a vice chair for this group:

Keith Tovee volunteered for this position

5. Verbal updates from UKLB member organisations

a. ADEPT Lighting and TSG

Keith - biggest things affecting local councils are dramatic increase in energy costs, Essex monthly bill is now what they would expect to pay for 6 months. Savings are being negated. Makes LED conversions more attractive. Considering adaptive dimming/ turning lights off. However, reduction in lighting will affect public safety. East Riding expected to put bid in to live labs 2 which will include street lighting.

Gafoor –getting hold of halogen lamps and cost of them is becoming a key issue.

Supply chain issues – delivery period of 9-8 weeks has increased to 12-24 weeks. Recruitment – very difficult to compete with the private industry for talent. UTMC urban traffic management system – working with Daren Capes in tech forum how different technologies can be used at the same sites with better connectivity – plug and play.

Topas – critical for street lighting teams / traffic management. Good document

b. CSS Wales

Jonathon – started inviting traffic signals professionals to meetings to minimise duplication of work

Halogen end of life – will share document on this

Have encouraged all staff in Wales to get G39 training.

Had an issue with identification of cables – warranty is with local distributor to maintain – grey area

Have had a few projects to install solar lighting but this hasn't been successful, looking for recommendations

Action – Jonathon to share halogen end of life document

c. DfT

Gary Kemp - Richard Holden been appointed DfT minister

d. Department for Infrastructure, NI

Gary Ross – undertook a huge exercise to see where to save money – switching off street lighting is a possibility.

Currently have 8 street lighting contracts in NI; 4 renewed at start of October, (rates have gone up) hope other 4 will be renewed in Dec.

Recruitment – struggling big time, positions for electrical staff not attractive anymore, currently have about 30% vacancies.

e. National Highways

Simon – starting LED rollout /retrofit of lanterns. 3 different tranches – 1st tranche columns that are 18 years or less to have an immediate swap out to LED, anything older will need to have an electrical test passed. 5000 LEDs to be replaced by end of year.

Released asset class strategies to set direction for key assets.
Big meeting to happen on 30th Nov to discuss possible power cuts. Identified that the key problem will be with big tunnels – only have 10 mins of UPS if there's a power cut meaning tunnels will have to be closed which will be very problematic in rush hour

- f. Highway Electrical Association
Mike – awards last week at Celtic manor, went very well and was a great way to celebrate, network and acknowledge achievements and successes.
Key messages from conference – 3 technical papers were presented which were very interesting and well delivered.
Also having recruitment issues and can't fill vacancies, staff are being poached.
Procurement – good procurement (best practice) is something that needs to be looked at. Construction playbook
(<https://www.gov.uk/government/publications/the-construction-playbook>) shows longer term contracting programs.
Commercial tensions are coming to a head – concerned about organisations that are paying contractors slower and slower.
- g. ILP
Guy – Peter's retirement/handover going well.
From the previous minutes:
3 guidance docs ready for publication, on G10 overhead lines, surge protection, brightness of lamination for LEDs.
Bats conservation trust – 40 page comprehensive document
3 local events coming up Bristol, Durham, Scotland. In person/online.
Lighting diploma – lots of new people coming through industry
- h. LGTAG
Dean – inviting LoLEG meeting to highways - AI to look at highway maintenance; do we need something similar in lighting?
Looking at forming two new sub-groups – EV and Climate change.
Solar lights – put up 4 outside the palace and they have been brilliant, have ordered more
Agreed that wording around roles for recruitment is needed – climate/smart city better. They are no longer using the term engineer
Had more issues with EVs – melting the cut-outs. Need something more can't use 24 amp on a 25 amp with 40 yr old cable. Need to go over and above the regulations.
£260 mil backlog for lighting.
Currently meeting residents for guest parking review.
- i. SCOTS
Scott – street lighting material framework – all authorities share a framework just ended (3rd framework), 4th goes to committee today.
Suppliers now need to update prices every 3 months not 12 months
EV charging – shell offering trials for EV charging in lighting columns, not going through lighting engineers, going through LAs.

j. Transport Scotland

Bijan (sent by email as they had to leave the meeting)

Transport Scotland is progressing with LED Upgrade of illuminated assets on trunk road network (TRN) in Scotland – including disaggregation of power supplies. However, restrictions on all budget lines (including those for lighting) may not allow us to progress further.

We are also looking into dynamic control of road lighting assets as part of our aspiration for intelligent lighting operations.

(Note : we would appreciate any lessons learnt from WAG and would be content to share the outcome of our work wider community via UKRLG/UKL&TB)

On A9 (Huntly), a number of years ago, there was an unfortunate fatality during hours of darkness in an unlit part of the road network. Options were considered by our road operator and recommended provision of low-level pedestrian lighting – i.e. just pedestrian lighting on 5m columns using solar panels to charge battery as the only source of energy for illumination. This mainly to minimise costs. An inconclusive trial was carried out and I was asked to comment.

I wasn't aware of the trial but soon found myself not in favour – e.g. due to focusing only on pedestrian lighting (no consideration as part of road lighting due to higher costs), source of energy relying on solar panels on columns only, continuity of lighting during hours of darkness (longer nights in Scotland), security of proposed assets from vandalism/theft, etc... and deviation from BS5489.

So, I was wondering if our road operator colleagues in the Board have had any experience or comments in this regard.

We have a number of 1000 W floodlight luminaires in use on our South Queensferry Crossing bridge which were recently handed over to TS Operator for ongoing operations and maintenance. These assets are monitored and controlled via SQC's SCADA – via a bespoke Honeywell system. Our Operator is investigating LED upgrade of these assets (150 of them) using Honeywell's platform.

So, I was going to ask whether anybody in the Board has had experience of LED based lantern operated via SCADA system. Perhaps using usual CMS rather than a bespoke system?

Finally, TS' asset management system (AMPS) has a performance indicator for lighting – i.e. PI 11 for Well Lit Network. As it stands, this PI provides a percentage of illuminated assets on TRN (i.e. road lighting + illuminated signs + illuminated bollards) vs. number of faulty assets. Ideally 100% of assets work all the time but realistically some assets will fail. In principle, for PI 11, any figure lower than 92.5% is expected to attract penalties. There is a scale for higher penalties for lower percentages.

k. Welsh Government

David – recruitment/staffing issues – lots of vacancies. Plenty of work, struggle to find the people

I. YLP

Recruitment – YLP sees the biggest problem facing them to be young professionals not getting days off to leave office on networking events – due to manager's fears that productivity will decrease and the danger of them being poached. Young professionals need to be incentivised to go out in the world and need the opportunity for networking etc.

6. Supply Chain Issues – currently being reviewed by Michael Levack

Bulletin out, trying to put it all together is challenging. Objective to give realistic update on market. Cost of materials, lead times, global picture. How to collectively manage these challenges – will be faced with these for years to come. Problems not been helped by Brexit. Procurement – plea on client bodies to be sensible on purchasing. Getting confirmation on price and delivery dates are very difficult.

7. AOB

Actions: Isobel to update list of board members on the website few weeks ahead of URKLG meetings