

UK Lighting Board meeting 29 June 2018 held at 37 Union Street, Dundee, Scotland

Lindsay McGregor
David Denner
Stuart Beale
Gary Kemp
Dave Johnson
Bijan Bassiri
Joe Cochrane
Justin Ward

Chair, UK Lighting Board
Welsh Government
Highways England
Department for Transport
Transport for London representing ADEPT
Transport Scotland
Infrastructure Northern Ireland
Secretary

1. Welcome, introduction and apologies

Lindsay McGregor welcomed everyone to the meeting. Apologies were received from Mark Anderson, Ian Hardy and Graham Smith. The Board noted that Dave Franks was leaving Westminster City Council and was standing down as the Chair of LoLEG. The Board expressed their thanks to Dave Franks for this contribution to the work of the Board. Lindsay said this was his last meeting.

2. Update on LED conversion programmes in Scotland and Wales and saving opportunities in England

Lindsay McGregor gave a presentation on the outline of work on LED conversion across Scotland, Wales and England.

Lindsay noted that 10,000 to 400,000 Scotland had converted to LEDs from 2013/14 to 2017/18. Lindsay showed a graph of individual authority's progress with converting to LEDs from 2013/14 to 2017/18 and there were a couple of questions on particular authorities' progress with upgrades to their street lighting.

The summary from Lindsay said that for those yet to convert to LED street lightings there is investment in process over the next four years. Bijan said that Transport Scotland is up to 42% conversion to LEDs.

The presentation then showed percentage of street lights converted to LEDs in Wales. Lindsay said that what is missing from the data is the future investment programme. David Denner said that the data was very powerful and then asked what the next steps would be. Lindsay said that CSS Wales had a copy of these.

There was then a graph showing the increase of electricity costs over the next 10 years showing an increase in the future. In 2013/14 Scotland the cost for electricity was £40.81m for all the Local Authorities in Scotland. If Scotland had not embarked on an LED programme in 2017/18 the cost would be £49m, but as a result of the LED programme the costs is £36m. However, there is still an opportunity to reduce this further (i.e. for the remaining stock to be converted to LED lighting). Lindsay said that doing nothing was not an option.

Lindsay then presented the opportunities for English authorities. Lindsay said that some of the key findings of this would be covered in the UKRLG pages in Transportation Professional in July.

Joe Cochrane said that in Northern Ireland about 13% of street lighting has been converted. Joe said that there is a lot of enthusiasm to invest capital into street lighting as this will

create savings that can be reinvested into other activities on the network such as highway maintenance activities.

David Denner asked for clarification on the savings given that there is a period of payback for the loan that has been given to support the programme (e.g. through PWLB or Salix e.g. interest free loans) i.e. the savings go back on paying the loan back for the first 8/9 years.

Lindsay asked about the Challenge Fund as this is a grant (as opposed to a loan) and the opportunity for street lighting. Gary Kemp said that it was unlikely that Ministers would allocate the Challenge Fund to street lighting.

Lindsay said that one of the key points was to demonstrate that electricity prices will be going up and that authorities will be faced with increased electricity costs and therefore without focusing on converting to LEDs then authorities are faced with increasing financial burdens.

Dave Johnson said that there was an issue that a lot of authorities, the people in charge of converting to LEDs are not necessarily updating their inventory for energy savings. Just changing the kit without updating the inventory means that authorities are not having their savings realised as it has not been recorded in the inventory. Stuart Beale said that Highways England has clear instructions on LED conversions that explicitly notes the need to record this on the inventory for benefit realisation and if this does not happen then this is considered negligent.

Action: UK Lighting Board to highlight to authorities of the need to update their asset inventory when they convert to LED streetlights to ensure that the savings are captured.

David Denner made a point about the poor asset condition of columns was an issue to consider within the context of the push for LEDs savings as, without consideration of this, the industry could be storing up problems in the future within the short term push to convert to LEDs. Stuart Beale said that there would be a replacement programme necessary to undertake at some point and given that consideration of LED.

The Board reflected well on the work by Lindsay and said that the understanding of LEDs within the industry and increased considerably during his work at Scottish Futures Trust and through the Board's work.

3. Minutes of UK Lighting Board meeting

Lindsay said that he still thinks that links with OFGEM would be useful.

Action: Justin Ward to load EV presentations on LED website

It was noted that there is benefit of emailing Wayne.Mullin@highwaysengland.co.uk as he would be the contact for register for safety alert updates from Highways England.

The minutes were approved as an accurate recording of the meeting and agreed.

4. Minutes of the UK Roads Liaison Group meeting

The meeting was held on 20 April 2018 with a focus on the illuminated traffic signs document and future research. The Board also clarified the process for updating the Code.

Action: Justin Ward to add updates/amendments to the Code of Practice as a standing item on the Board agendas

There was a discussion research and the Board noted the work by Sheffield University. Stuart Beale said that Highways England has researched the impact of lighting on road safety and said that the results were very useful as there is now a separation of non-geographic and geographic causes behind road casualties - i.e. drink-driving road casualties would be classed as non-geographic. This helps make the case for lighting specific parts of the network for safety reasons. Or not.

There was a discussion on the appointment of the next UK Lighting Board Chair. Lindsay said that he hoped that the next Chair would have a background with a lighting background.

Action: Justin Ward to send a reminder about the deadline for the appointment for the next Chair of the UK Lighting Board [deadline 5 July 2018]

5. Lighting and health

There was a discussion about the research by the University of Exeter on the impacts of blue lighting on health.

Action: Justin Ward to invite Dr Alejandro Sanchez de Miguel – the research lead at the University of Exeter – to discuss the impact of blue light [LEDs] impact on health - to the next UK Lighting Board meeting

The Board noted that LightAware was open to hosting a meeting in Lancaster and wanted to work supportively with LightAware to understand their concerns.

Action: Dave Johnson to explore links through ADEPT to link to LightAware in Lancaster to attend a meeting in-person with the LightAware members

6. Research

Lindsay said there were 28 research projects in total. Two of the lighting research projects were selected as to be progressed for finalising.

State of Nation of Street Lighting

Lindsay report on the first research project on the State of Street Lighting. The Board was asked if they supported Salix being the grant awarded organisation. The Board agreed to this. Given the timescale pressures for this and the fact that Salix has the contacts with local authorities, already has some data, this means that this fits well with their existing knowledge and activities and makes them uniquely positioned to lead this work. Dave Johnson confirmed that he would be the project manager for this.

Action: Dave Johnson to ask Salix that they are willing to engage with the UKRLG research project

Collecting structural load data from LED fitted lighting columns in high winds

Stuart Beale said that from tall column units and those with long bracket arms would be useful to gain research data from. Stuart said the video evidence from Qatar showed that the way that columns react to wind causes more of a snaking rather than swaying action (due to uniformity of wind in Qatar this was possibly to clearly assess).

Stuart Beale would be the project manager for this work. Stuart said that the project would be allocated to Highways England's framework contractors. David Denner said that University of Swansea – Aluminium Lighting Company (ALC) – have been doing work with accelerometers within the rail industry.

Action: David Denner to provide contacts to Stuart Beale on the work at the University of Swansea by ALC [completed]

Bijan offered a few suggestions for sites for testing in Scotland and David offered sites in Wales for testing.

7. State of Nation Whole of Government Accounts

Lindsay asked about the situation across the sector and noted the need to do something on the state of condition of lighting columns. Lindsay said that if this information was going back to the Treasury then this would be useful information to obtain. Dave Johnson said that TfL's return was probably better than average compared to other highway authorities. But Dave added in terms of street lighting an average has been estimated and this does not allow detailed investigation of the data as it does not provide specific information.

SCOTS/CSS Wales – joint asset management programme – David Denner said that there was good information there and that further investigation of this data to undertake analysis was going to take place. Lindsay said that the limitations of the data would be based on the lack of input information.

Dave Johnson said that there are 9m columns in the UK and that they last about 40 years; therefore the industry should replace 250,000 columns per year to maintain a steady state. Graham Smith has talked to HEA members and indications are around 20,000 per year. Therefore it appears there is a huge gap to maintain steady state. This is not an exact position, but an indication of the situation. Stuart Beale said that the condition data was being used to help inform the development of the next Road Investment Strategy.

Lindsay said that as part of the State of Nation research then asking local authorities for some data would be part of this and that this data would help assist with asset information e.g. how many columns, how many over their expected life and so on.

Stuart Beale said that the use of LIDAR was helping Highways England collect asset data.

Condition of the columns/expired life of the columns was an important component of data to identify. David Denner said that the software providers to develop a report template [State of Nation report template] that could then be provided to Local Authorities might be a better way of securing the data as this would require extracting the data from a few suppliers [to develop a standard report].

8. ADEPT updates

Dave Johnson gave a brief update on ADEPT activities. Electrical Association presented on the work that they do. There was a presentation also from Illumetric – a van that provides luminance off the road surface. The Board noted an interest in this technology and Highways England are keen to investigate further. The final presentation was from research by Sheffield University – on the threshold level of street lighting that encourages walking and cycling. Good inventories will help with the analysis – PDA are now trying to identify and authority with really good inventory data and once identified, this will help with conducting the research project.

Dave Johnson also mentioned the Illumination of Sign Guidance documentation providing a bit more detail on the discussion at UKRLG. The document is currently circulated among UKRLG members and that the next step will be to discuss with DfT.

Lindsay said that it is disappointing as many local authorities have gone down the risk-based approach. Lindsay reported that Graham Pendlebury, Chair of UKRLG, was keen to get a

resolution to the issue. Lindsay added that a working group to look at the issues and identify areas of common ground to work through these would be helpful and added that Graeme McQuaker, from Transport Scotland, was unable to attend the UK Lighting Board meeting today. Bijan said that Graeme had sought legal advice and as a result of this Transport Scotland cannot support the document (on 12 June).

Action: Bijan Bassiri to send Transport Scotland's viewpoint (as per communication from Graeme McQuaker) on the Illumination of Sign Guidance to UKLB members

Action: Gary Kemp to ask for DfT to feedback to Dave Johnson on the current version of the Illumination of Sign Guidance

The UK Lighting Board noted the good work on the document and asked that, given the work that has been taken, that a focus to finalise the document is provided by the UKRLG.

Action: UKRLG to set-up a working group to progress the document of the Illumination of Sign Guidance

Action: Stuart Beale to review the document with a view to the references for certain types of the safety critical signs such as 'No Entry' signs where the risk assessment would result in a high rating and ensure this is clarified in the document.

Dave Johnson also noted a short paper that had been circulated on safety inspections as referenced within Well-managed Highway Infrastructure. Currently the document says that when safety inspections are conducted every safety inspection is recorded.

Dave said that if weekly inspections (safety patrol checks) are being undertaken then does this require reporting every time (even if they are low risk), or does this require reducing the amount of inspections undertaken. Or is this more a matter of interpretation of the Code. Gary Kemp and Joe Cochrane said that once it has been reported then the defect had been recorded. Next time it is inspected then it would not require reporting again. The Board noted that only when changes are identified then the defect might require an update on the recoding system. As soon as it is safety critical will require immediate attention. However after further discussion the Board agreed that an amendment to clarify the Code was required to make the issue clearer.

Action: Dave Johnson to draft a suggested amendment to the text in the Code of Practice on safety inspections and clear with Board members for this to be then considered by UKRLG

9. Any other business

The Board thanked Lindsay McGregor for all his work on the UK Lighting Board and his contribution to the UKRLG.

10. Date of next meeting

17 October 2018