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CIHT Dubai Online Seminar – Bulletin

David George – Road Safety Specialist, Al Ain Municipality

About the Event

In this eye-opening session, David George expertly explained the common pitfalls and challenges surrounding the production and design of these crucial navigational aids.

Road signs are not merely symbols; they are the silent guardians of safety and efficiency on our highways and byways. Yet, despite their importance, many regions, including the Middle East, grapple with issues stemming from subpar design processes and implementation.

From confusing layouts to inconsistent messaging, the flaws in road signage are as diverse as they are impactful. But what lies at the heart of these deficiencies? This webinar aims to dissect the root causes behind the poor design of road signs, shedding light on the systemic issues that hinder effective communication on our road networks.

Through expert analysis and real-world examples, we explored a myriad of factors contributing to the lackluster state of road signage in the Middle East. From excessive implementation, contractual obligations, incorrect placement, maintenance and general engineering considerations, no stone was left unturned as our guest speaker walks through real examples that are common within the region as we seek to understand why so many signs fall short of their intended purpose.

About the Panel Speakers

David George IEng FIHE MCIHT FSoRSA RegRSA (IHE)

David is a seasoned road safety engineer currently leading road safety initiatives for the Al Ain Region in Abu Dhabi, UAE. With experience in both public and private sectors, he specializes in collision investigation, prevention, and road safety audits meeting international standards. David has investigated diverse accident locations worldwide and led audit teams on various projects, including major schemes in the Middle East and Europe. He's developed IHE-approved road safety training courses and spoken at national conferences. David's expertise extends to expert witness services, collision research, and advisory roles, making him a valuable asset in advancing road safety globally.

Webinar Content Summary

In his opening address, David warmly welcomed attendees and highlighted common misconceptions he often encounters. At the core of this webinar lies the critical issue of the substandard quality of road sign and marking designs submitted to local authorities. In the Middle East, it's customary for CAD technicians to play a significant role in producing road marking and sign drawing packs, diverging from European norms. However, David emphasized that the design process for road markings and signs appears to have been neglected in recent times. Several specific points were raised:

- Drafters of road sign and marking drawings lacking driver's licenses.
- Overuse of signs, diminishing their effectiveness.
- Incorrect usage of signage, evidenced by road engineers scoring poorly on MUTCD quizzes.

David then delved into site-specific issues consistently observed throughout the Emirates, particularly in Al Ain and Abu Dhabi. He highlighted the misuse of double chevrons, commonly seen in low-speed residential areas, however, they should only be used on unlit rural roads with 95th percentile speeds exceeding 60 kph. Additionally, he addressed the incorrect use of the blue roundabout sign (no. 329 Abu Dhabi, MUTCD) as a warning sign on roundabout approaches, when it should indicate nonstandard junctions/gyratories functioning as roundabouts.

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While similar inconsistencies are witnessed in neighbouring areas, David noted ongoing revisions to Abu Dhabi's design guidance aimed at rectifying these errors. Common mistakes such as arrow markings, stop and turning signs in inappropriate locations, and confusing directional signage were discussed. He also touched on issues like zebra crossings on three-lane roads or excessive use at every dropped curb. David describes his observations on directional signage usage throughout the region which can and has been known to cause confusion on the roads.

In his closing remarks, David explored the implementation of alternative traffic calming approaches currently underway across Abu Dhabi. Citing the TRL WCC 2004 and TFL study, which demonstrated a 13% reduction in traffic accidents on residential streets by removing lane line markings, he advocated for a "more with less" approach through safety in design, emphasizing benefits for all stakeholders.

Questions

Will signs and marking issues be picked up during RSA and at what stage/s?

Yes, some municipalities are requesting a review for the road signs and markings at the preliminary design stage however that may be too early. All road signs and markings must be picked up at RSA stage 2 at the absolute latest. If this is left until stage 3 the need to burn off road markings and change the design is simply too late for all parties involved.

How would/should CAD technicians be made aware/trained to appropriate highways engineering skills?

It is possible however from Davids's experience there is a clear difference between CAD technicians in the Abu Dhabi / Al Ain region with the CAD technicians in the UK. The main issue being the use of engineering judgement instead of direct interpretation of the design manual. Training is consistently being held but for this to be taken to the level required it would almost need to be considered a separate discipline whereby engineers can use engineering judgement with confidence.

What about the introduction of a woonerf-type road design in the UAE -ie remove all signs/road markings / shared space / 20kph

It would be great, but the question is are we ready for this with the diversity of people and cultures in the region the traffic calming would have to be specifically engineered for it to work.

Hi, with zebra crossings are there any provisions to improve lighting conditions in the UAE. IN the UK it's a requirement with belischa beacons and increased lux levels while here there are still very poorly lit Zebra crossings.

It has started to improve however the pressures from maintenance and power supply. The more pressing issue appears to be the number of conflicts with trees and other objects casting shadows onto zebra crossings which is being tackled through design reviews and RSA's. If the municipality is ever asked to comment on lighting manuals David would support the implementation of increased lighting provisions at zebra crossings.

With the TFL in the UK there are measures in place where the TFL gets involved very early in the planning process to implement lessons learnt.

That would be great to implement however there are many different bodies that provide approvals in the Abu Dhabi / Al Ain Region. Therefore, having that specific service in place works best when there is a single approving body. Efforts have been and continue to be made to implement mandatory processes within the planning stage.

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