

Introduction

The Association for Consultancy and Engineering Cymru Wales' response comprises the agglomerated views and evidence from some key member organizations.

The structure follows the three bullets in the consultation commissioning document, assigning them Sections 1, 2 and 3. Each Section is sub-divided to deal with the facets of each premise.

Response

Section 1. "The current condition of roads in Wales and whether the approach to funding and delivery of maintenance programmes for the local road, trunk road and motorway network in Wales is effective, managed so as to minimise disruption to road users, and provides value for money."

1.1. The current condition of roads in Wales

1.1.1. The condition of Welsh road infrastructure is generally poor.

1.1.2. Funding is insufficient, so maintenance is generally reactive rather than planned, with seasonal and climatic issues impacting heavily on road condition. On the motorway and trunk roads, in addition to failing surfacing, there are many sub-standard bridges and retaining walls etc that have management plans in lieu of maintenance.

1.2. Is the approach to funding and delivery of maintenance programmes for the local road, trunk road and motorway network in Wales effective?

1.2.1. No, but we see some evidence of improvement.

1.2.2. We suspect the root of the problem in Wales lies in the general approach to asset management. The key to maintaining roads efficiently is to have evidence-based asset management (ISO 55000) in place and to invest sufficient capital to avoid spending revenue on reactive maintenance. There needs to be strong emphasis on undertaking a programme of planned interventions to prevent failure. Whereas current practice seems to be undertaking maintenance once the asset, whether that be a bridge, tunnel, carriageway etc., reaches a critical condition.

1.2.3. The water industry appears to have much better focus on asset management and there are good models running elsewhere in the UK, so there is the potential for cross-industry/Authority learning. For example, there are English HAs controlling local road, trunk road and motorway networks, that are implementing Lifecycle Asset Management Plans that feature decision support and whole life costing tools and 10 to 30-year long-term programmes on the key assets as a minimum. In addition, the asset

management incentive scheme in England is proving successful in encouraging LHAs to development plans to improve their asset management capability.

1.2.4. Forward visibility of budgets creates opportunities to consolidate road space access. Schemes may be combined with smaller schemes close by, enabling whole-route resurfacing rather than in patches. In addition, better forward planning means better prioritization and coordination with works on utilities, other assets and drainage renewal. This avoids cutting and patching, one of the big factors responsible for shortening carriageway life. Such an approach will minimize disruption to road users, improve cost efficiency and realise economies of scale.

1.2.5. Regarding Local Highway Authorities (LHA), Welsh Government (WG) funding for their roads is not ring-fenced, so there is no guarantee of investment. This makes it difficult to plan and execute maintenance. However, the recent £30 million additional capital from the WG for local road maintenance should help LHAs improve performance. In addition, we feel that there is significant scope for simplifying Welsh Highway Authorities to reduce cost and better coordinate maintenance. There should be greater emphasis on road users' whole journeys, no matter who maintains each section of road.

1.2.6. LHAs have roads where there is a much higher density of non-motorised users and more complex arrangements where these interact with motorised vehicles. From observation, there seems to be a growing aversion to risk, which is making junction design, urban infrastructure and signage more complex. We feel that there is scope to re-examine the design approach to realize whole life cost savings. Fewer road signs, fewer road markings and a more balanced approach to risk could deliver whole-life savings in infrastructure cost and some improvement in junction capacity.

1.3. Is the approach to funding and delivery of maintenance programmes managed to minimise disruption to road users?

1.3.1. Yes, generally. There is good guidance about acceptable times for road space bookings and embargo periods are in place for holiday periods etc. However, we feel that quite often minimising disruption overrides the need to carry out essential maintenance. As an example, sections of roads are often resurfaced rather than reconstructed. Resurfacing would have a life of say 5 years but can be executed with limited disruption. Whereas reconstruction could extend the life of a pavement to say 40 years, but the works would cause significant disruption. Effective asset management would weigh the options and inform a programme of planned interventions. Long-term planning is fundamental.

1.3.2. The way funding is allocated could be improved. Our understanding is that within maintenance funding cycles, budgets are confirmed at the beginning of each financial year. This makes long-term programming difficult. Contingency funds are typically made available at the end of each financial year, which is the worst time to undertake maintenance, especially on carriageways as construction is weather susceptible. Carriageway maintenance in winter months, at the end of the financial year, is not good practice. The result is reduced asset quality and hence a shorter expected life and unnecessary disruption. Refer also to paragraphs 1.2.4 and 1.2.5.

1.4. Does the approach to funding and delivery of maintenance programmes provide value for money?

1.4.1. We do not have the evidence to answer this question. We observe that generally defects are dealt with as they arise, which is not the most efficient practice. We are confident that a whole life cost approach and robust asset management planning would deliver savings over the long term.

1.4.2. We are aware that minimising third party liability claims must divert resources from a more strategic approach. There could be scope for reducing claims by choosing less troublesome materials and better asset management to intervene before pavements start to fail for example.

Section 2. “Whether major enhancement projects on the local road, trunk road and motorway network are prioritised, funded, planned and delivered effectively, and provide value for money. Relevant issues include the implementation of the Early Contractor Involvement approach and the opportunities offered by the WG’s Mutual Investment Model”

2.1. Are major enhancement projects on the local road network prioritised, funded, planned and delivered effectively?

2.1.1. We have no evidence to comment in detail, however some of the points in 2.2 below will be common.

2.1.2. As with maintenance, simplifying the LHA structure would deliver efficiencies and make delivery more joined up. There are, however, some good examples where shared resourcing between WG and LHA’s has been effective in delivering projects.

2.2. Are major enhancement projects on the trunk road and motorway network prioritised, funded, planned and delivered effectively?

2.2.1. In our opinion they are not overall. At the individual scheme level, there are plenty that have been delivered very successfully but there are a few examples where high-profile projects have been delayed or delivered over budget.

2.2.2. In recent years there has been a lack of visibility to contractors, consultants and the public of the forward programme for trunk road and motorway schemes in Wales. There has been some work done to produce various road programmes and the Welsh Infrastructure Investment Plan. However, the reality is that these are largely a wish list because political priorities change, and funding is unrealistic. This has forced a stop/start approach to delivery, created an uncertain market for suppliers at all levels and constrained the establishment of an efficient responsive construction sector. For example, we conclude that shelving the New M4 project twice must have incurred significant abortive cost and caused difficulties for major refurbishment plans for the existing motorway. Similarly, the shifting of east/west to north/south priorities must have disrupted and delayed programme delivery.

2.2.3. It is essential to plan strategically over the long term and decide where roads fit into future transport plans. In addition, the demands of maintaining the asset, increasing capacity, reducing injury and improving resilience must be prioritised robustly. A more joined-up approach and adequate funding would mean that asset management and enhancement over a long period could be prioritised and planned for more effectively.

2.3. Are major enhancement projects on the local road, trunk road and motorway network prioritised, funded, planned and delivered providing value for money?

2.3.1. We do not have the evidence to confirm this. However, as all Welsh transport schemes funded with public money are subject to a WelTAG (Welsh Transport Appraisal Guidance) appraisal, they would not go ahead were they not economically viable. Testing value for money relies on reviewing whether schemes' economic benefits were realized.

2.4. What is the effect of the implementation of the Early Contractor Involvement approach?

2.4.1. Views from ACE members are diverse, based upon varied experiences.

2.4.2. The effect varies from scheme to scheme and the number of completed projects is too few to assess the model's success overall. However, there are many good examples around the UK, and other examples where Early Contractor Involvement (ECI) hasn't necessarily delivered improved outcomes. The industry is still gaining ECI experience.

2.4.3. The main reasons ECI was brought in were to increase cost certainty, better manage risk, including construction risk, during scheme development, improve buildability of the design and optimize land take. Most parties appear to accept that a more-open acknowledgement of the allocation of risks is beneficial. In addition, there seems to be a growing view that this process would be aided by greater investment in procuring more information in advance of the ECI tender.

2.4.4. On some Welsh ECI projects, partners lower down the supply chain – many of whom are based in Wales – benefit from the earlier engagement of the main contractor.

2.4.5. ACE Cymru Wales is expecting to consult informally with WG and CECA on an industry review of ECI and welcomes the opportunity to do so. It has been observed that ECI involves a big team from the early stages and the review is likely to consider the most efficient ways of gaining Contractor involvement in design. The review will inevitably focus on some "lessons-learned" and could help to produce guidance for WG delivery teams to harmonize the ECI approach across Wales and bring some standardization of deliverables ("products") during scheme development.

2.5. What are the opportunities offered by the WG's Mutual Investment Model?

2.5.1. We are aware of the WG's Mutual Investment Model (MIM), but it is too early to comment on its performance. This a relatively complex model that places considerable financial risk on the private sector and the cautious response from the market so far is not encouraging. However, if it is successful and delivers value for money, it would be a much-needed way of financing strategic infrastructure.

2.5.2. Given the calls (above) for better-managed more consistent long-term planning of infrastructure investment, then we need to accept the need for private finance as without it schemes may be unaffordable.

Section 3. “Whether Wales is adopting a sustainable approach to the maintenance and enhancement of its road network in the context of key legislation such as the Well-being of Future Generations (Wales) Act 2015 and the Active Travel (Wales) Act 2013.”

3.1. Whether Wales is adopting a sustainable approach

3.1.1. ACE supports the Active Travel Act’s aims, but it considers that strong leadership will be required to effect cultural change and that adequate funding is essential to make a real contribution to modal shift.

3.1.2. ACE supports the Wales Future Generation Act’s aims and recognizes its growing influence on infrastructure investment planning. However, there must be dialogue about the contribution roads are to make in future transport systems and adequate funding to realize the plans.
