Competition Markets Authority (CMA) – Civil Engineering in Rail and Road Market Study

Transport Scotland Response

Introduction

Transport Scotland is an agency of the Scottish Government, with the purpose of delivering the Scottish Government's vision for transport which is set out in the National Transport Strategy 2. This states "Our vision is for a sustainable, inclusive, safe and accessible transport system helping deliver a healthier, fairer and more prosperous Scotland for communities, businesses and visitors.".

The below responses have been compiled based on the experiences of Transport Scotland's Major Projects Directorate, Rail Directorate and Roads Directorate.

We have assumed that Network Rail will be providing its own response to the Market Study.

Questions

Q1 - Do you agree with our articulation of the characteristics of a well-functioning market as set out in paragraph 1.11? If not, what could be changed and why?

[Extract] Paragraph 1.11: *We currently consider that a well-functioning civil engineering market would be expected to have the following characteristics, thereby serving the interests of consumers of those services, including public bodies:*

(a) Appropriate project budgeting and design specification, including input from potential suppliers, to test the viability of different options in advance of launching a procurement.

(b) Effective procurement design, which balances quantitative and qualitative criteria, and incentivises suppliers to participate in tenders, submit accurate cost estimates and articulate any quality / cost trade-offs.

(c) Proportionate planning and regulatory processes that minimise cost, complexity and unwarranted delays for both the procuring body and participating suppliers.

(d) Predictable and shorter timescales for the delivery of infrastructure projects, underpinned by a productive supply chain.

(e) Ultimately best value projects that deliver an efficient unit cost of infrastructure, meet high quality standards and underpin growth.

Response

Transport Scotland agrees with the articulation of the characteristics of a well-functioning market as set out in paragraph 1.11 of the Statement of Scope, and these align with the aims of Transport Scotland when undertaking the design, development, procurement and construction of major projects. Procurement processes and guidance within Transport Scotland places an emphasis on appropriate procurement development, project budgeting and market consultation prior to launching a procurement. These considerations are recorded in procurement strategies and these governance documents contribute towards our goal of delivering efficient and high-quality projects. With regards to point (a) and 'input from potential suppliers', Transport Scotland recognises the benefits that appropriate early supplier input can bring however would also note that any such engagement must comply with the relevant procurement regulations. Appropriate measures must be taken to avoid any risk of suppliers being precluded from taking part in future procurement competitions.

Q2 - Do you agree with our proposed scope (both the product and geographic scope) and themes for this market study, as set out in Section 3. If not, what areas would you suggest we include, exclude or prioritise, and why?

Response

Transport Scotland agrees with the proposed scope and themes outlined in Section 3 of the Statement of Scope document. This includes the focus on full project life cycle, roads and rail projects procured by the public sector and the enhancement, renewal and maintenance of public roads and railway as we believe these are key to a successful Civil Engineering market.

We would note that there are areas omitted from the Statement of Scope which have relevance to the Scottish Civil Engineering market, however we recognise and understand the need to limit the scope of study to rail and road infrastructure due to

the significant proportion of government expenditure that these areas represent. Nonetheless, and for completeness, additional areas which we would note are:

- The scope of the market study means that the procurement of ferries (and in particular their associated civil engineering infrastructure) is omitted. We would note that this is a critical consideration within the Scottish market, with communities in Scotland relying on ferries service as a key part of their transport network.
- The market study may benefit from considering regional differences in planning, procurement and infrastructure regulations within the scope, as these can have a significant impact on processes and project programmes, with a notable impact upon regional markets.

TS notes that the extent of road maintenance which is to be covered in this scope (large scale infrastructure projects) as defined in 3.5 (d) is restrictive. In Transport Scotland our Network Management Contracts for Management and Maintenance of the Trunk Road Network cover all aspects of road management and maintenance from inspection and asset management to network management, incident response, structural maintenance, minor improvements, road safety to design, construction and preparation of smaller contracts. Due to the complex nature of these contracts, they are procured through competitive dialogue. They last for between 8 and 12 years. Our current Network Management Contracts (NMC), covering each of the 4 geographically based Units, NE, NW, SE & SW can be obtained on the Transport Scotland website.

Q3 - What, if any, are the key differences in the markets for the supply of roads and railways across the 4 nations of the UK that should be reflected in our analysis?

Response

Transport Scotland notes that the market study will investigate how different markets work across the devolved nations and regions, and we agree that understanding these differences will be critical to the overall success of the exercise. There are several unique factors affecting the road and rail Civil Engineering markets in Scotland, some of which are summarised below:

1. Geographical and population density

   Scotland's geography and population density differ from other parts of the UK, with many rural, remote and island communities possessing unique transport

related needs. In addition, the location of major Scottish trunk road improvement projects (such as the A9 Dualling Programme) can bring its own unique logistical challenges to the market, with factors such as distances from suppliers and the supply chain, lack of accommodation, geographical challenges and weather disruption all key factors that impact on the market in delivering these projects. This can impact on project delivery timescales and costs. With regards to the Scottish trunk road network, the diverse nature of Scotland can create challenges in managing and maintaining this network, including attracting contractors to resourcing both people and materials.

2. Pipeline of work

   Transport Scotland feeds into pipelines for large scale infrastructure projects in Scotland (such as the Scottish Futures Trust Infrastructure Investment Pipeline) providing the market with long-term insights into planned investment. However, it is noted that the scale of the pipelines vary across the devolved nations of the UK, both in terms of quantity and value, and this difference can have a significant impact on market interest and in the establishment of a reliable and resilient supply chain.

3. Planning, procurement and infrastructure regulation differences

   As a Contracting Authority in Scotland, Transport Scotland is required to comply with the necessary public procurement regulations and legislation. This includes compliance with the Procurement Reform (Scotland) Act 2014, the Public Contracts (Scotland) Regulations 2015 and the Procurement (Scotland) Regulations 2016. The impacts of recent legislation such as the Transport (Scotland) Act 2019 should also be considered. The analysis should recognise the different regulations governing infrastructure delivery across the devolved nations, and how the introduction of new legislation (such as the Procurement Act 2023) has impacted upon the market across the devolved nations of the UK.

Q4 – Please suggest any rail and road infrastructure projects across the UK that could be useful case studies to inform our market study. We are particularly interested in understanding where:

a) **the project realised good outcomes in terms of cost, quality and innovation (including some explanation of the factors driving this in each area); or**

b) **the project realised poor outcomes in terms of cost, quality and innovation (including some explanation of the factors driving this in each area); and/or**

c) **the project yielded important lessons that could inform improvements in the operation of the market.**

Response

Transport Scotland Major Projects and Roads Directorate

(a) Transport Scotland would direct the authors of the study to the Transport Scotland website (Home | Transport Scotland) where the 'Projects' sections sets out the numerous major infrastructure projects which have been delivered by Transport Scotland. This includes various award winning projects which realised good outcomes, such as the A9 Dualling: Luncarty to Pass of Birnam project, the Forth Replacement Crossing project (Queensferry Crossing), and the A9 Berriedale Braes Improvement project.

- Project case study - Project awards | Transport Scotland
- Queensferry Crossing named best infrastructure project - BBC News
- GE Awards 2021: UK Project with a Geotechnical Value between £1M and £3M winner | Ground Engineering

With regards to **(b)** and **(c)**, Transport Scotland would highlight a recent procurement exercise which resulted in no award, and prompted changes to Transport Scotland's procurement and contract strategy. This may be considered an example of using market engagement and lessons learned to improve processes and contribute to a well-functioning market.

In 2021 Transport Scotland launched a procurement for the A9 Dualling: Tomatin to Moy project, the most northernly section of the Scottish Government's A9 dualling Programme which involved widening approximately 9.6km of the existing A9 carriageway. Three economic operators were invited to participate in a competitive

dialogue procurement procedure. Two of the three operators subsequently withdrew from the procurement process and as a consequence, we only received one tender submission.

This led to a scenario where the contract was not awarded, as value for money could not be demonstrated. As a result of this procurement, Transport Scotland embarked on a significant market consultation exercise with the aim of maximising competition for the procurement of the project and increasing the attractiveness of Transport Scotland's major works contracts to the market. This has resulted in a significant changes to Transport Scotland's works contract terms and conditions and our procurement processes. The lessons learned from this project resulted in positive changes to Transport Scotland's procurement and contract strategies, and proved successful with the market as a new procurement competition for the project was launched in late 2023 and the contract awarded in summer 2024.

New Tender opportunity launched for A9 Dualling: Tomatin to Moy Project | Transport Scotland

Next milestone reached for A9 Dualling Programme | Transport Scotland

Transport Scotland Rail Directorate:

The procurement of Road infrastructure is somewhat different to Rail infrastructure for Transport Scotland. Whereas Transport Scotland is the asset owner (on behalf of the Scottish Ministers) and procuring authority for Scottish Trunk Roads, Network Rail is the asset owner and procurement authority for the Scottish rail network. Network Rail will be best placed to advise on suitable projects; however, we suggest the following projects in relation to rail:

(a) – Projects

- Barrhead and East Kilbride electrification projects.
- Queen Street Station Redevelopment.

(b) and **(c)** Projects;

- Edinburgh – Glasgow Improvements Programme.

Q5 - How does public procurement and contracting in the markets for the supply of roads and railways contribute to, or undermine, the characteristics of a well-functioning market? In your answer, please comment on:

a) engagement between the procuring body and potential suppliers during the early stages of project design;

b) the use of different types of procedures (eg open competition, frameworks);

c) the design of tenders, including the number and type of requirements and the use of quantitative (eg price) and qualitative evaluation criteria;

d) the approach to risk allocation across different parties; and

e) the use of contract mechanisms (eg insurance provisions) and pricing mechanisms (eg fixed price, cost plus)

Response

Transport Scotland Major Projects Directorate:

(a) Transport Scotland recognises the benefits that appropriate early supplier input (such as pre-procurement market consultation and specimen design input) can bring when developing a project specification and procurement. However, any such engagement must comply with the procurement regulations, and ideally avoid precluding any suppliers from taking part in future procurement competitions. Transport Scotland routinely undertakes market consultation and seeks appropriate input from specialists at various stages of project lifecycles.

Transport Scotland Roads Directorate:

(a) Transport Scotland hold Supplier Information / Industry Day's to promote upcoming contracts and provide insight into associated requirements.

Industry and Local Authority consultation was a step undertaken to help inform NMC development.

The Competitive Dialogue procedure was used for each NMC. In addition to supporting the complex nature of the contracts, this procurement approach offered all economic operators, including any non-incumbent organisations, the ability to gain a full understanding of the requirements.

In our experience, we have received on the whole, positive feedback to the holding of Supplier Information Days as potential suppliers gain comfort from knowing they are not missing out on any information that will benefit their forward planning and supports the promotion of levelling the playing field and reduce any perception that an incumbent suppliers has an unfair advantage compared to new entrants. However, realising the full potential benefits of such events can be stifled due to suppliers' lack of willingness to raise aspects which they feel could lessen their advantage over competitors during the tender process.

As an additional point, direct appointment of organisations to support the development of contracts can be detrimental in reducing an already small number of tenderers due to the participants inability to tender for works for which they have had prior involvement.

Transport Scotland Major Projects Directorate:

(b) Transport Scotland undertakes a variety of functions, which often require different procurement procedures. The development of a procurement strategy is a critical step in evaluating, selecting and developing the correct procurement procedure and contracting option for individual projects. Transport Scotland recognises that different procedures (such as open competition and frameworks) can impact both positively and negatively on the market. Transport Scotland recently supported the Scottish Government in establishing the Scottish Government Civil Engineering Framework and associated Dynamic Purchasing System. This framework was developed in close collaboration with the construction industry, and the Dynamic Purchasing System allows for new suppliers in the market to gain access to work opportunities in a simple, straightforward manner. Where used correctly, these approaches can bring benefits to both suppliers and tendering organisations.

Transport Scotland Roads Directorate:

(b) Competitive Dialogue has been used for the NMC contracts as it helps to ensure that bidders understand the requirements, thus making it more likely that compliant tender submissions will be received. Transport Scotland incorporate a developing Quality Submission to safeguard tenderer compliance with contract requirements to provide a sustainable service that is fit for purpose and offers value for money.

While the Restricted procedure allows the number of bidders to be reduced at selection stage based on capacity, capability and experience to perform the contract. Transport Scotland ruled this out for NMC as the Employer cannot conduct any kind of dialogue until after tender return with the risk of bidders not understanding the requirements of the contracts resulting in submission of non-compliant tenders.

The Open procedure can produce a greater number of bidders; however this is resource intensive as all bids have to be evaluated with no opportunity to reduce the number of tenderers at a selection stage. There is also a risk that bidders may, conversely, be deterred if they know the field of bidders is large and cost of tendering is high. Therefore, this approach was also ruled out for NMC, for example.

Transport Scotland Major Projects Directorate:

(c) Transport Scotland recognises the importance of a fair balance between price and quality evaluation criteria. Transport Scotland notes the change in culture across the civil engineering market in recent years, with a shift towards quality being given greater prominence in evaluation criteria. This is reflected in our recent Works contracts which have used a 50:50 Price:Quality evaluation ratio, helping to drive better value for suppliers and improve long-term outcomes. Transport Scotland also, where appropriate, utilises a Graduated Pricing Mechanism approach where price submissions are evaluated in accordance with the Scottish Government Construction Policy Note (CPN) 3/2024. The aim of this approach is to encourage tenders to be appropriately priced, and minimise any incentive for suppliers to submit abnormally low tender bids. This will contribute towards a well-functioning market, and minimise unsustainable financial pressure on suppliers.

Transport Scotland Roads Directorate:

(c) Through the various iterations of the Operating Company contracts the number of quantitative items has reduced substantially. Many items were not used or rarely used but would be priced and could have an impact on the tender cost. A larger number of items allows a greater opportunity for strategic pricing, particularly when incumbents know that certain items are unlikely to be regularly used.

For NMC, using the Competitive Dialogue procedure allowed us to focus in on the qualitative evaluation criteria, testing (without evaluating) each economic operators knowledge of the subject area through submissions/dialogue meetings. We used one quality question per main area of our contract scope document, this resulting in 11 quality questions which we felt was proportionate to the scale of the Contracts.

Transport Scotland Major Projects Directorate:

(d) Risk allocation is a key project specific consideration within Transport Scotland projects, with each project utilising its own risk allocation within the terms and conditions. The project risks are developed through market consultation ensuring a fair and appropriate risk allocation for that project. Transport Scotland considers this

to be both a crucial element of market consultation, and input into the pre-procurement development of projects, and it is considered vital to understand and apportion risk in a manner which is appropriate for the available market. Inappropriate risk allocations could result in suppliers seeing this risk allocation as unfair, which could discourage them from bidding or lead them to tender inflated prices.

Transport Scotland Roads Directorate:

(d) Traditionally Transport Scotland used a bespoke contract, based on a modified version of the ICE 5th Conditions of Contract. A modified ICE 5th contract is used for the Network Management Contracts. This is often viewed as placing the risk on the contractor.

Transport Scotland are starting to use NEC forms, however, suitability for future iterations of NMC still needs to be considered and fully understood. There is a perception that NEC requires greater client resource.

The NMC's include a mix of Core items (fixed monthly price) and Ordered items (when required basis). There are various uplifts available for items such as working outside core operating hours and when specialist tasks are required. This mix has served TS well over the years, the NMC predecessor contracts including a similar bill of items as having some flexibility to alter programmes of work beyond essential Core deliverables is essential to manage annual fluctuations in budget allocations. Key Performance Indicators have been introduced into NMC with associated Performance Adjustment Factors (PAF's). Where performance is below a certain contractual threshold the PAF's will reduce payment to the Operating Companies.

(e) To support a well-functioning civil engineering market Transport Scotland carefully considers the contracting strategy and terms and conditions for each individual project. Recent Transport Scotland works projects have used an NEC4 Engineering & Construction Contract Option A form of contract, with secondary options such as price fluctuation clauses to mitigate the impacts of uncertain economic outlooks on bidders, which in turn helps maintain supplier participation and reduces risk of project delays due to financial disputes. Transport Scotland services contracts generally include provisions for annual ASHE uplifts to adjust staff rates in line with ONS published industry specific salary data, ensuring fair payment to suppliers.

Transport Scotland Rail Directorate Response:

Project and programme procurement on behalf Transport Scotland's Rail Directorate is undertaken by Network Rail. We therefore refer you Network Rail's comments in respect of Q5.

Q6 - To what extent do you think the structure of the industry contributes to, or undermines, the outcomes of a well-functioning market? In your response, please comment on:

a) differences in the size and degree of specialism of different companies;

b) the tiered nature of the supply chain and use of subcontracting; and

c) financial arrangements, such as payment periods and the use of retentions.

Response

Transport Scotland Major Projects Directorate:

(a) Transport Scotland acknowledges that large organisations (such as Tier 1 Contractors) are often best-suited to deliver large infrastructure projects procured by the public sector, with sub-contracting to specialist companies being a common approach for delivery. This can result in efficient project delivery with single points of contact, however, it risks creating barriers for SMEs (including specialist firms), where they struggle to compete for major procurements. In addition, this process can result in the supply chain being involved at a later stage in the project, limiting their ability to drive innovation.

Transport Scotland Roads Directorate:

(a) The nature of work in the management and maintenance of the trunk road network is varied involving design, inspection, asset management, performing works, therefore Operating Companies tend to be companies formed to specifically undertake the role such as BEAR Scotland (Jacobs, Eurovia and Ringway), a consortium or joint venture formed to fulfil the role (Scotland TranServ for 4G, NMC predecessor – Balfour Beatty and Mouchel) or a company such as Amey who work in many public service environments.

Consideration has been given previously to removing certain aspects of the contract to be performed as a separate contract, for example inventory collection and

elements of design. However, creating this split in dependant deliverables was not a step we have been prepared to take thus far as the risks associated with installing a model with an increased number of parties outweigh the potential benefits.

NMC requires each Operating Company to establish significant supply chains due to the scale of the contracts and the different specialisms included. Therefore, there are opportunities during bid development stages for ME's/SME's to promote their capabilities to gain a long term supply chain role.

Transport Scotland Major Projects Directorate:

(b) Transport Scotland recognises the importance of sub-contracting in the current civil engineering market. Our contracts generally require sub-contracting opportunities which are not confirmed at the tendering stage to be advertised through Public Contracts Scotland (PCS) portal, and for SMEs and supported businesses to be given the opportunity to bid for works where appropriate. This approach aims to mitigate the barriers to smaller, specialist and SME firms and help expand access to opportunities across the market.

Transport Scotland Roads Directorate:

(b) Operating Companies tend to have long term sub-contract arrangements in place at tender stage for many of the anticipated sub-contract works e.g. surfacing, joint replacement, Vehicle Restraint Systems (VRS)

Current Operating Company contracts require new sub-contract opportunities to be made available to subcontractors by advertisement through Public Contract Scotland. This allows sub-contractors the opportunity to apply for new opportunities.

Works over a specified value (£5M) are tendered with Operating Companies designing, procuring and supervising on Transport Scotland's behalf.

Transport Scotland Major Projects Directorate:

(c) Transport Scotland recognises that the civil engineering industry and market can be vulnerable to cashflow issues through the supply chain. To mitigate this, Transport Scotland complies with CPN 1/2019 and utilises Project Bank Accounts for civil engineering projects meeting the relevant criteria (£5m+ value). The aim of PBAs is to allow payments to be made directly to the supply chain and sub-contractors, to improve subcontractor's cashflow as well as ring-fencing it from any upstream insolvency risks.

Transport Scotland Roads Directorate:

(c) Operating Companies are paid on a monthly basis. The contract has a number of monthly payments for Core Operations such as winter maintenance, grass cutting, inspections. There are also Ordered Operations which are paid on a measure and value basis.

The contracts have a well-defined claims process to aid resolution of any disputes.

The contracts use Bonds & Undertakings rather than retention to limit the financial outlay for the companies while providing Transport Scotland with a level of assurance. Value of Bonds have been questioned in the past.

Mobilisation payments are made at the commencement of the contracts to aid cash flow when expenditure is considerable due to the initial set-up of the contract with purchase of new plant and machinery.

Contract Price Fluctuation are in place on the contract to reduce the risk to the Operating Companies over the duration of the contract.

Transport Scotland Rail Directorate:

(c) Due to the risks of working in the rail environment Network Rail usually requires insurance of £155m per occurrence, this acts as an inhibiting factor for certain contractors.

Q7 – What, if any, are the significant procurement, planning or other regulatory barriers that inhibit the performance of this market? What could be changed and why?

Response

The planning system faces challenges, including skills shortages within Local Authority planning departments. Lengthy procurement and planning processes can act as a constraint to timely project delivery.

As stated in the scope, Scotland is currently not included in the *Planning and Infrastructure Bill* passed in March 2025 (with the exception of some electricity infrastructure).

A variable budget limits forward planning and results in challenges to spend increased budgets – due to limited or available resource.

Competitive dialogue has been suggested as expensive for tenderers due to the preparation of submissions and dialogue meetings. As mentioned earlier Transport Scotland believe Competitive Dialogue is necessary to obtain surety that tenderers fully understand the requirements of the contract.

Competition is a challenge in Scotland with similar/same companies tendering for construction works contracts, as well as the Operating Company contracts.

There are aspects in which regulatory systems may be constraining innovation. Our railways are required to follow National Technical Specification Notices (NTSNs), for new or upgraded infrastructure and rolling stock. There are reasons for this in terms of achieving economies of scale in manufacture, however this system may inhibit innovation.

Q8 - What are the opportunities for further innovation in the markets for the supply of roads and railways across the UK? If yes, what are the barriers to achieving these and how might they be overcome?

Response

Transport Scotland considers that through using sufficiently flexible procurement and contracting strategies (including early contractor involvement), suppliers can be empowered and encouraged to develop and implement innovative solutions. For our high risk/high value procurements, where appropriate, we use the competitive dialogue procurement procedure. On our most recent high risk/high value procurements on the A9 Dualling programme, we have permitted the submission of variant tenders. This enables bidders to develop innovative solutions and submit proposals to alter the outline design with the potential to reduce costs and programme timescales

Operating Companies are encouraged to innovate where possible. Transport Scotland has a research fund which can be bid for and used to obtain funding to progress innovative solutions.

Increased use of modular construction and standardised designs across road and rail sectors is a well-established opportunity that could drive cost efficiencies, reduce programmes and improve quality control. The use of modular construction can be utilised in repeatable assets such as Train Stations, railway signalling, bridges and structures on the road and rail networks. However, these methods are currently limited by the wider industry uptake.

The emergence of AI tools offers opportunities to improve design and procurement efficiencies. Barriers to implementation include the maturity of these tools, questions over their effectiveness within the design process, and a potential lack of regulation on their use.

In recent years there has been a shift in industry towards low carbon and sustainable construction methods, which can be encouraged through contractual provisions and incentives such as the NEC4 X29 Climate Change secondary option clause. Examples include the increased adoption of electric plant, however barriers exist for these technologies which the market will need to work to overcome. These challenges can be particularly acute in projects located in rural or remote areas, where accessing facilities such as charging stations can be a constraint.