

Review of the Office and Functions of the Scottish Road Works Commissioner

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April 2016

Executive Summary

The remit of this Review is centred on the Office and functions of the Scottish Road Works Commissioner; how well the office meets its objectives and what, if any, changes might be made to support improved performance.

I have taken as my starting point for the review the need to gain an understanding of how well road works are co-ordinated and delivered in Scotland, how things might be improved and what changes to the way that the SWRC operates are required to support those improvements. From the outset, however, it has been clear to me that it is impossible to discuss potential changes to the SRWC's office and functions in any meaningful way without discussing the landscape within which the Commissioner operates; and potential changes to that landscape.

Road works in Scotland are co-ordinated and delivered as well as in any country in the world and better than most; that is my conclusion based on extensive discussion and consultation. The fact that we do this well in comparison to others does not mean, however, that we can't do it better; we can, and those affected by road works expect us to do so. Moreover, the very fact that we understand, better than most, how to deliver well means that we are well placed to make those further improvements.

My review makes 21 recommendations and I have grouped these in my Conclusions and Recommendations in Chapter 6 under the headings of Independence, Improved Communication and Enhanced Enforcement. Here I will provide an overview of the main thrust of my recommendations.

It has been clear from the outset of this review, that having a Scottish Road Works Commissioner is something that is hugely valued by all sides of the road works community and stakeholders more generally. The role is seen to be independent and that is fundamental to its acceptance and support. The Commissioner's team is small in number but that is right and in keeping with its role. I see no reason to fundamentally change the Commissioner's role or staff complement but I do see some changes in emphasis around performance monitoring, supporting innovation and public interfaces that might require some extra effort; however I have made some suggestions on how some of the administrative burden on the Commissioner might be reduced, thereby releasing some resource.

There are significant variations in the way the road authorities administer the different systems at their disposal and this is not helpful in seeking to bring forward improvements. Having 32 separate roads authorities, some with dedicated teams and others with staff dealing with this as part of other duties, is not an effective approach. Bringing staff resources together, possibly as part of the roads collaboration programme, would bring with it significant benefits in terms of consistency and efficiency. It would also make it much easier to apply a level playing field approach to road and utility works, both of which have an impact on the public and public perceptions.

One of the main reasons why some authorities are unable to properly resource inspections, in particular, is that the current inspection regime does not provide sufficient assurance to the roads authority that its asset will be protected, nor does it allow the authority to recover the true cost of doing so. Increasing the number of inspections paid for by those undertaking the works and at a price that meets the true cost of inspections is urgently required.

There are some 18 sections of the New Road and Street Works Act 1991 where failure to comply constitutes an offence; however just four of these might result in a Fixed Penalty Notice (FPN) and all four relate to potential noticing failures – there are no FPNs that apply to any failure connected to actually undertaking the works. The way in which the road works community operates is for road

works to be co-ordinated and delivery locally. Roads authorities are required to deal with non-performance in the first instance with the SRWC only stepping in when there is evidence of systematic non-performance; however, the lack of FPNs make it very difficult for roads authorities to levy appropriate sanctions. Extending FPNs to a number of other noticing offences as well as to inspection failures would improve effective local enforcement enormously. Tracking the number of FPNs issued would also provide, for the first time, a clear picture of how well road works are being co-ordinated and delivered across all aspects. Extending the scheme in this way would demand a better resourced and more consistent approach by all roads authorities as described above.

There is evidence that some defects resulting from reinstatements do not manifest themselves until after the end - and sometimes a number of years beyond the end - of the current guarantee period. There is also considerable evidence that a large number of reinstatements remain in an acceptable condition many years after installation, proving that reinstatements can be delivered effectively. Extending the guarantee period would encourage those undertaking the reinstatement to get it right first time more often. There is considerable debate about whether an extension is necessary, some arguing that current processes adequately safeguard the rights of roads authorities; others argue that the guarantee period should be extended from the current two years (three years for deep excavations) to ten years. I am not in a position to say how long that the guarantee period should be extended to but I am clear that an extended period is required. The current system is failing local authorities that have to pay for the consequences of poor quality reinstatements because the current 'latent defects' route is onerous, costly and, ultimately, not worthwhile pursuing. This is something that is currently being addressed and needs to be determined quickly. Getting this right will be the single biggest driver towards incentivising those carrying out the works to do it right first time. Introducing a requirement for contractor quality plans and contractor lead testing of materials and workmanship would support this drive.

Finally, and importantly, there needs to be more focus by all of the road works community on the impact that road works can have on the public. That is not to say that there is currently no focus, but the over-riding drive is around co-ordination with each other. Improvements to noticing requirements and to the public facing aspect of the Scottish Road Works Register would go a long way towards achieving a more inclusive approach; and there is a real appetite among the stakeholders outside the road works community to get involved in shaping this to meet their needs. We should embrace that opportunity.

Throughout the period of this review, I have been struck by the willingness of all that I have engaged with to offer constructive advice, comment and support. This has greatly helped me to understand the issues that surround this very important subject. My thanks go to all who have, in some way, been involved.

In April 2016 the Department for Transport launched a consultation on 'Reducing disruption on local 'A' roads' following an announcement by the Secretary of State for Transport stating that he wanted to see less disruption from road works where no work was actually taking place. The consultation document contains proposals requiring those carrying out road works on local A roads to either work every day, including weekends, that any traffic restrictions are in place or to remove those restrictions when no work is being undertaken. There has been considerable concern expressed by many of those involved in road works in England that the proposals lack detail and may well have unintended consequences. The SRWC is following developments following the consultation exercise closely.

Chapter 1 – The Current Model

The Role of the Scottish Road Works Commissioner

1.1 The role of the Scottish Road Works Commissioner (SRWC) is to work with the road works community to oversee improvements to the planning, co-ordination and quality of road works in Scotland. The Commissioner monitors performance and promotes and encourages good practice across both utility companies and roads authorities.

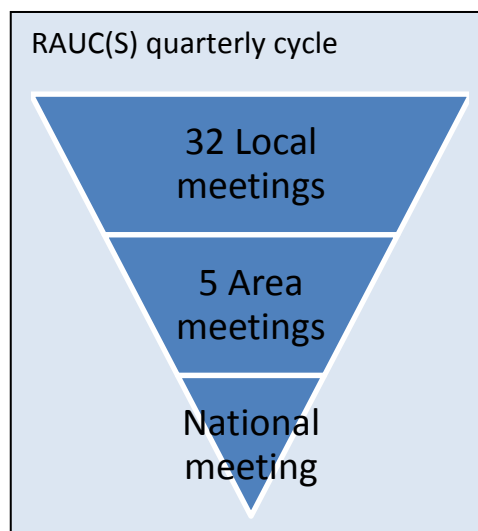
1.2 The position – a statutory office holder appointed by Ministers – was created with the coming into force of the Transport (Scotland) Act 2005. The Act also places a responsibility on roads authorities and utility companies to plan and co-ordinate their works by use of the Scottish Road Works Register (SRWR) and appoints the Commissioner as Keeper of the Register.

1.3 There is no equivalent role to that of the SRWC in the rest of the UK, nor, so far as I have been able to ascertain, in the rest of the world.

The Road Works Community

1.4 The road works community comprises the roads authorities (RA), the utility companies (UC), their agents and contractors and the SRWC. The Roads Authorities and Utilities Committee (Scotland) (RAUC(S)) provides the structure and the mechanism for engagement at a local, area and national level. Local RAUC(S) meetings take place at local authority (LA) level and are chaired by the RA. Representatives from all UCs working in the LA area are invited to attend as well as representatives from the SRWC, Scottish Government and public transport companies. The purpose of the meetings is to ensure that road works are properly co-ordinated and delivered within the LA area; issues that cannot be resolved locally should be reported to one of the five Area RAUC(S) meetings that follow the local meetings. Similarly, issues that cannot be resolved at Area level should be elevated to the National RAUC(S) meeting that is scheduled to follow the area meetings. The RAUC(S) meetings cycle operates on a quarterly basis.

1.5 The Highways Authorities and Utilities Committee (HAUC(UK)) is the body that draws together the activities of RAUC(S), the national HAUC (England and Wales) and Northern Ireland RAUC groups although, in practice, RAUC(S) and, presumably the other groups, function with a great deal of autonomy. The roads and utilities sides of HAUC(UK) are represented by the Joint Authorities Group (JAG(UK)) and the National Joint Utilities Group (NJUG) respectively. RAUC(S) representatives attend HAUC(UK) meetings and sit, as appropriate, on HAUC(UK) working groups; JAG(UK) and NJUG are represented at the RAUC(S) national meeting.



Enforcement and Inspection Regimes

1.6 The New Roads and Street Works Act 1991 (NRSWA), modified by the Transport (Scotland) Act 2005 requires that roads authorities and utility companies give notice of their intention to carry out works and subsequently that the work has been completed. There are four sections where failure to correctly submit a notice correctly gives rise to an offence that might be discharged by the RA issuing a Fixed Penalty Notice (FPN); the RA has discretion on whether to use these powers on each occasion and the UC has the facility to challenge the FPN where one is issued. FPNs can be levied for:-

- Failure to give the required advanced notice of certain works (3 months for major works and 1 month for other works) – Section 113
- Failure to give the necessary notice (7 days for standard works) of intended start of works – Section 114
- Failure to give notice of emergency works, usually within two hours of the works commencing – Section 116
- Failure to comply with requirements to give notice of completion of reinstatement (within one working day) – Section 129

1.7 There are a large number of other offences in the 1991 Act which are not subject to FPNs and which would need to be pursued by the RA as criminal prosecutions.

1.8 Section 131 of the 1991 Act states that the roads authority may carry out such investigatory works as appear necessary to ascertain whether a utility company has complied with his/her duties to properly reinstate the road. If the inspection identifies a failure the UC pays for the investigatory works; if not, the RA pays. The Road Works (Inspection Fees) (Scotland) Regulations modifies this, providing an inspection regime that is paid for (currently £36 per inspection) by the undertaker as follows:-

- 10% of all works inspected during the currency of the works (Category A inspections)
- 10% of all works carried out within six months of completion of the works (Category B inspections)
- 10% of all works carried out within three months of the end of the guarantee period (Category C inspections)

1.9 If RAs wish to inspect more than the 10% sample at any of the stages set out above, they must do this at their own cost. If a failure is identified the RA can carry out further inspections of those works at the cost of the UC. The UC is also required to repair the sub-standard work. Other than this, there is no sanction levied on the UC.

1.10 Roads authorities and utility companies also carry out coring programmes to check on the quality of reinstatements post completion. RAUC(S) collaborates to deliver the National Coring Programme once every two years. A 2% sample of all work carried out since the last programme is cored using accredited laboratories and the results made available to both RAs and UCs. If the core is acceptable the RA pays for the cost of coring; if it fails the UC pays for the core and repairs the sub-standard work. There is no further sanction levied against the UC for individual failures although the SRWC can and has levied fines where overall performance as measured by the coring programme is deemed to be unacceptable. Some UCs also carry out coring of their own works (which are carried out by their contractors) as part of their QA system and some RAs also carry out some coring to help ensure their asset is protected. Coring can only test the quality and thickness of the bound layers; it cannot check whether the unbound layers have been properly compacted.

RAUC(S) National Coring Programme (NCP)

The NCP was started by RAUC(S) in 2001 to measure the number of utility works that pass or fail inspection. The programme takes place every two years and the 2% sample is identified from information contained in the SRWR. The eighth and most recent programme was undertaken in 2012/13 and the results published in March 2014; the ninth programme is currently underway.

The table below shows a steady improvement in coring results for each programme. In September 2011, RAUC(S) agreed that, after a decade of coring, a minimum pass rate of 90% should be introduced for future NCPs.

Year	2001/02	2003/04	2005/06	2008/09	2010/11	2012/13
No of cores	1909	1861	1340	1566	1349	1534
Pass rate	44%	59%	60%	64%	74%	83%

In June 2014, the Commissioner imposed fines totalling £57,500 to six utility companies who failed to achieve a pass rate of 80% in the 2012/13 NCP.

Governance

1.11 The responsibilities of the SRWC as set out in the Transport (Scotland) Act 2005 are:-

- Monitor the carrying out of road works in Scotland
- Promote compliance with the New Roads and Street Works Act 1991
- Promote the pursuit of good practice

1.12 The 2005 Act also set out certain specific functions for the Commissioner to:-

- Publish an Annual Report
- Prepare an annual account
- Keep a register to be known as the Scottish Road Works Register

1.13 In order to discharge those responsibilities and functions, the Commissioner has powers to:-

- Do anything calculated to facilitate the discharge of any of the Commissioner's functions
- Require a road authority or utility company to provide the Commissioner with such information relevant to their respective functions and activities as the Commissioner reasonably requests
- Impose penalties (up to £50,000) when systematic failure of duties under the 1991 Act occurs by either the roads authorities or the utility company.

1.14 Primary responsibility for ensuring that road works are properly co-ordinated and delivered to the required quality therefore rests with the RAs and the UCs, with the SRWC responsible for monitoring how well that is happening and levying fines only in the case of systematic non-performance in the duty to co-ordinate or co-operate with each other. Consequently, the current Commissioner's team is relatively small with just six members of staff supporting him.

1.15 The Commissioner reports to Scottish Ministers and receives an annual grant from the Scottish Government. Audit Scotland audits the commissioner's annual accounts and reports them to Scottish Ministers with both documents being laid before the Scottish Parliament each year.

The Scottish Road Works Register

1.16 The Scottish Road Works Register is the central repository of all notifications of intended road works in Scotland. It is a crucial planning tool used by both the RAs and UCs to plan and co-ordinate their works and the FPNs identified above are measured in terms of the failure to properly place notices on the Register. The SRWC also uses the Register to monitor and report on performance of both the RAs and the UCs.

1.17 As Keeper of the Register, the SRWC is responsible for ensuring that the register continues to operate effectively, primarily by paying the annual costs of around £800k to the service provider, Symology Limited. These costs are met by the road works community through fees paid for access to the system and there is a RAUC(S) sub-group – The Scottish Road Works Steering Group - that oversees continued development and operational needs.

Chapter 2 – Conduct of the Review

Review remit

2.1 The position of Scottish Road Works Commissioner was created by the Transport (Scotland) Act 2005. When the second Commissioner stepped down from office in May 2015, Scottish Ministers decided to review the current arrangements for the Office, to see if they can be improved upon and to see how it fits within the context of the wider review of roads maintenance.

2.2 Consequently, Transport Scotland, on behalf of Scottish Ministers, established the following terms of reference:-

To review the arrangements for and functions of the Office of the Scottish Road Works Commissioner, and to make recommendations by the end of March 2016. Scottish Ministers, while not wishing to point the review to any particular outcome, required it to address three broad headings regarding the office and its functions:-

- **Independence** – necessity and extent of independence; governance models; how best to support the function/office; management of the SRWR and the statutory ‘Keeper’ role
- **Improved collaboration** – how best to fit with the wider agenda on roads maintenance and viewing the road network as an asset; and
- **Enhanced enforcement** – scope of offences, method of policing, possible sanctions.

2.3 In addition the following Audit Scotland risks identified in its Annual Report of the 2013/14 Audit of the SRWC are required to be considered in the review:-

Management/staff capacity:-

-the SRWC will not have the organisational capacity and resilience to meet the challenges of a more complex organisation.....
-there is mismatch between current organisational capacity and the workload arising from the discharge of statutory functions.....
-there is a risk that the organisation will not achieve its objectives if management capacity is not improved.

2.4 While additional resources would undoubtedly help to address the issues highlighted within the Audit Scotland report, given the long term financial projections, it is unlikely that additional funding will be available. Where the need for additional, or novel resources is identified, the review should consider how best these can either be provided within existing budgets or made self-financing.

Engagement

2.5 I was appointed to undertake the review in October 2015, following a competitive tendering process. Since that time I have engaged extensively with the road works community in Scotland, the rest of the UK and further afield. I have:-

- Held around 50 separate meetings with individuals or representative groups
- Attended 4 local, 4 Area and one National RAUC(S) meetings
- Had numerous telephone conversations and/or email exchanges

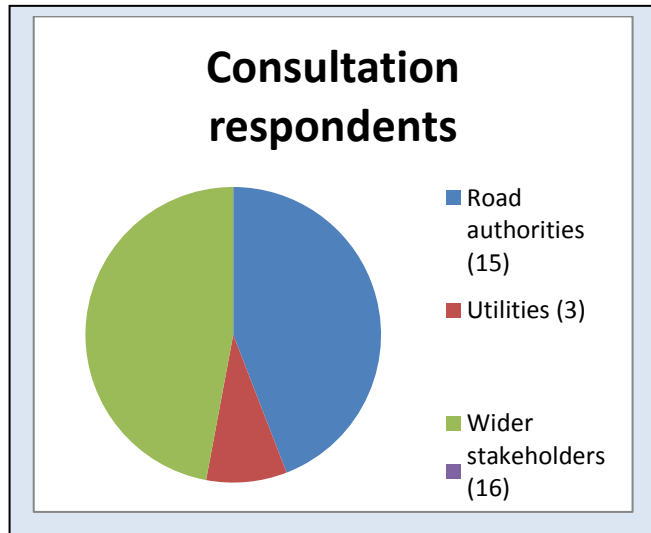
2.6 I have also engaged with a wider stakeholder group which I have described as:-

- Those who have an interest in how well road works are co-ordinated and delivered, either because of the constituency that they represent or because of a professional or technical interest.

2.7 On 23rd November 2015 I held a very productive meeting with this wider stakeholder group, following which, on the 27th November, I issued a Consultation Paper to the group and also to those in the road works community as described above.

2.8 I held a further consultation/feedback meeting on 14th March 2016 for all of those to whom I had issued the Consultation Paper. The meeting was attended by 38 people representing 36 organisations.

2.9 Throughout the review process I have been impressed and encouraged by the willingness of so many people and organisations to engage constructively and provide me with very useful insights and information. It is very clear that the way in which road works are co-ordinated and delivered is of great interest to very many people. I have received 34 responses to my consultation paper and well as a mass of supporting information and documentation. It is slightly disappointing that I have received relatively few responses to the consultation paper from the utility companies; however I have received a very full engagement at meetings from the Scottish Joint Utilities group (SJUG) representatives and a comprehensive response to the paper from NJUG, produced in consultation with SJUG. I am, therefore, of the view that I have received good engagement from the roads, utilities and wider stakeholder constituencies. A copy of the questions asked in the Consultation Paper, details of those with whom I have consulted and a summary of the responses is contained in Appendix A.



2.10 I have also taken account of the Strategic Consultation on Road Works on Scottish Roads which was issued in April 2013 and the Analysis of Consultation Responses which was published by Transport Scotland in 2014.

2.11 Finally, I have used my network of contacts that I developed when I was the UK First Delegate to the World Road Association to gain access to individuals in different countries who have a detailed knowledge of how road works are co-ordinated and delivered in their countries. The outcome of those discussions is contained in Chapter 4.

Format of Review Report

2.12 I have sought to address the terms of reference for the review by, first of all considering how well things are currently working; so my emerging findings in Chapter 3 are grouped under how well things are co-ordinated and delivered as well as how the current delivery models work. I have also used the same groupings when I consider, in Chapter 5, my options for change. However, in order to explicitly meet the requirement of the review, I have brigaded my recommendations and conclusions under the headings of Independence, Improved Collaboration and Enhanced Enforcement.

Chapter 3 – Emerging findings

The role of the SRWC

3.1 It is very clear from the range of discussions and consultation responses that the role of the SRWC is well respected and supported by the road works community in Scotland and is considered highly by those in the rest of the UK; in fact a number of people from outside Scotland expressed a view that they felt such a position would be beneficial to their area of interest.

3.2 The level of support within Scotland is striking with not one person that I spoke to expressing the view that the Commissioner does not provide a very welcome function. Central to that support is the independence of the Commissioner; the fact that the Commissioner, both in the manner that the post has been established and in the way that the current and previous post holders have engaged with others, is seen to be even handed and independent is something that is universally valued and seen by most people as a prerequisite for their continued support.

NJUG strongly supports the approach taken by successive Commissioners and supports the proposal for the Commissioner's office to provide quarterly reports so that RAs and PUs can be aware as soon as possible of any areas where improvement is needed - NJUG

Co-ordination

RAUC(S)

3.3 I attended four local RAUC(S) meetings (Fife, Perth & Kinross, Edinburgh and South Lanarkshire) and was generally impressed by the level of co-ordination and discussion that took place. In all cases the meetings were focussed and business-like, each lasting around 90 minutes. They were chaired by the RA representative who had prepared well and were all attended by representatives from Scottish Water, Scottish Gas Networks (SGN) and Scottish Power Energy Networks (SPEN). Attendance by the telecoms representatives was more variable with Openreach and Virgin Media being the only providers that attended all meetings and a number of telecoms companies not attending any; this is an issue that I will return to later. Public Transport representation was also variable with Stagecoach attending one meeting, the LA team attending two and no representation at one, although, in the latter case, the RA has developed very effective PT links outside the quarterly RAUC meeting; again I will return to this later in the report.

3.4 I attended four of the five Area RAUC(S) meetings (I was unable to attend the North of Scotland meeting as it was on the same day as the Road Expo event). All the meetings were well attended although, once again, there was variable attendance from the telecoms providers. The agenda for the area meetings comprises a number of standing items including reports on performance, including SRWR reports, updates on the rollout of Broadband and the SRWC's reports. Perhaps the main purpose of the Area meetings is to act as a conduit between the local and national meetings; local meetings are where co-ordination and quality issues are best addressed and the national meeting is where the overview of how things are working should be maintained and actions approved to remedy issues of concern and/or to introduce improvements. Whilst the area meetings fulfil this function to an extent (there are agenda standing items on both) there is no doubt that they could be more effective; in particular, there was no real discussion about how well local co-ordination is operating which should, naturally, lead to consideration of issues that cannot be resolved locally. Similarly, reviewing the minutes of the national meetings, there seems to be very

little reported to the national meeting by the area chairs – only the SE Area RAUC reported any items of interest to the National RAUC meeting of 2nd December 2015. Over the course of the review, I have been made aware of a number of issues that I would have expected to have merited discussion at area, and, possibly national meetings.

3.5 The SRWC was represented at one of the local meetings that I attended, all of the area meetings and attended the National meeting personally. With 32 local meetings every quarter taking place all over Scotland, it could be very time consuming for the SRWC to be represented at all of the meetings, however, where he was represented, this presence and contribution was appreciated. A standing item on the area meetings agendas is a report presented by the SRWC representative dealing with performance over the previous quarter. The report comprises outputs from the SRWR that have been circulated previously; however, it was disappointing to observe how little discussion there was at any of the meetings around what was presented by the SRWC. There might be more effective ways to present this data and further review of which metrics are most meaningful; I know that this is something that the Commissioner is currently considering.

SRWR

3.6 The Scottish Road Works Register is an extremely valuable tool that enables the co-ordination of road works, where they are included in the Register, to be managed effectively. It can be used to check potential conflicts between planned road works and will automatically identify

A requirement of the legislation is that all roads authority qualifying works are placed on the SRWR. The table below shows the range of works registered by roads authorities (divided into the SCOTS categories of groupings), trunk road operating companies (TROC) and trunk road DBFO companies.

Group	Range (works/100km)
Islands	9 – 28
Rural	5 - 42
Semi Urban	24 – 91
Urban	23 – 118
City	25 - 107
TROC	155 - 367

noticing failures (Potential Noticing Offences). Roads authorities can then take a view on whether to issue an FPN relating to the noticing failure. However, the forward programmes entered by both road authorities and utility companies are too often not long enough to allow proper forward planning and co-ordination with few RAs and UCs identifying forward programmes for work planned for more than one year ahead. This is a particular problem for utility companies when trying to adhere to the voluntary restriction around carrying out works within three years of resurfacing if they have no visibility of a roads authority's forward programme. Whilst there might be an issue around the extent to which reactive works (RA and UC) can be programmed in advance, that should not be the case for capital programmes. Roads authorities have made the point that annual budgets make it very difficult to plan ahead for three years, however there is a facility in the SRWR to mark work as 'Potential

Works' and, as all RA's are now developing Asset Management Plans, it should be possible for them to set out a provisional three year capital programme, even with the caveat that funding pressures and changed priorities might require the programme to be changed at any time.

3.7 There is also evidence that not all RAs are noticing all of their works. The SRWC has extracted information from the Register that shows that the number of schemes per 100km that RAs are noticing is highly variable, even for RAs that have similar road networks. The UCs have also expressed frustration at the number of times that they are advised by RAs that their proposed works cannot proceed because of a conflict with RA planned works that have not been placed in the Register. This is something that the current Commissioner is taking a close interest in.

3.8 The performance of the Roads Authorities relating to the number of Potential Noticing Offences that result in FPNs is also highly variable with some RAs not issuing any FPNs at all. However, it is quite striking that those authorities that issue the most FPNs have relatively few challenged and, consequently, few withdrawn. This is a strong indicator that those FPNs that are issued are generally seen to be legitimate.

The table below has been extracted from the SRWR and shows the highest and lowest number of FPNs issued in 2015 by Councils in the City (Edinburgh /Dundee) and Semi-urban(South Lanarkshire/East Lothian)groups (South Ayrshire also issued zero FPNs in the semi-urban group). It shows a huge variability in the way that RAs apply the current legislation. However, it is quite striking that the two RAs that issue the most FPNs have proportionally relatively few withdrawn. City of Edinburgh issued 989 and withdrew 49 whilst South Lanarkshire issued 863 and didn't withdraw any. The table shows that there is a relatively low level of challenge from the utility companies (number declined) and where there is a challenge, there is a reasonable level of acceptance by the RAs, as evidenced by the number of withdrawals. That is, in part, because many RAs voluntarily remove potential FPNs that they consider inappropriate (often following further investigation and/or discussion with the UC) before they are issued, which means that they don't appear as FPNs at all. This is a strong indicator that those FPNs that are raised are generally seen as legitimate.

Authority	Accepted	Declined	Issued	Withdrawn
Edinburgh	929	77	989	49
Dundee	44	5	40	1
Sth Lanark	862	1	863	0
East	0	0	0	0

Four of those stakeholders that responded said that they were unaware of the Register prior to the Review.

‘We were unaware of the website prior to the Review. We would be keen to work with the SRWC and others to deliver an improved product’ - Cycling Scotland

3.9 Feedback from the wider stakeholder group shows that a number of them were not aware of the existence of the Register, however, once they were made aware of it, many expressed a strong view that the Register has the potential to be a very useful tool which could be of great benefit to them and/or the constituency that they represent. Some have gone further, asking if they might get involved in developing a fit-for-purpose public facing aspect of the Register. There is currently a public facing element to the register but it has an opening message that warns against it being used as a journey planning tool. There are reasons for this but I think there are ways to deliver a product that is closer to meeting public aspirations without threatening the primary purpose for which this excellent product was developed.

3.10 There are two elements of the SRWR that support the general functions described above that are worthy of mention. The Gazetteer is a comprehensive, geographically referenced, list of roads and streets in Scotland. It is required to be updated quarterly by roads authorities or, where there are no updates to be added, the RA should so advise. Performance of the RAs in this regard is monitored and reported on by the SRWC to the SRWR Steering Group meetings and Area RAUC(S) meetings. There is some evidence that not all RAs are maintaining their Gazetteer records as accurately and up to date as they should. An accurate and up to date Gazetteer is very important if we are to properly co-ordinate and record all road works. Recently, Police Scotland and Fire Scotland have expressed an interest in using the Gazetteer; this seems to me to be something that should be encouraged as should feedback from them where they find any inaccuracies.

3.11 The second element is Vault. Vault is an electronic record of all underground apparatus. This is an excellent concept as it would allow those accessing the register – either in the planning stage or by operatives on the ground – to see where all apparatus is located, thus reducing the likelihood of damaging other undertaker’s services. This would be particularly useful to those carrying out emergency works where there simply isn’t time to carry out the normal checks with other organisations. Unfortunately, as providing information for Vault is on a voluntary basis, the extent to which RAs and UCs co-operate with the requirement to provide and update the necessary information is variable. This is an issue that was highlighted in the 2013 Strategic Consultation on Works on Scottish Roads; consultation responses showed considerable support for legislation to be introduced making compliance with Vault to be compulsory.

Apparatus

3.12 Section 131 of the 1991 Act allows a roads authority to inspect road works, recover the cost of those inspections and impose sanctions for non-performance, albeit in the form of requiring the utility to undertake remedial action or the RA undertaking that remedial action directly and being reimbursed for doing so. In the case of defective apparatus however, there is no such provision; consequently, whilst the RA has responsibility to inspect any damage to the road surface (including utility apparatus) or danger to road users under its duty of care, there is no facility to charge for those inspections nor to require defective apparatus to be repaired within set timescales, nor to impose sanctions. In many cases this results in a utility company’s apparatus being repeatedly reported as defective but no action taken by the UC. There are some voluntary agreements in place whereby some utilities will commit to reacting quickly to RA reports but these are by no means universal.

3.13 RAs being able to charge for inspecting apparatus, imposing a timescale for the UC to repair that apparatus and having the facility to impose an FPN for them failing to do so, would help RAs to properly fulfil their general duty of care responsibilities. As well as being more equitable (often RAs will carry out remedial work on utility apparatus at their own cost to ensure safety, purely because not doing so might put road users at risk) it would have the effect of incentivising all UCs to properly maintain their apparatus which would have a positive impact on safety.

Quality of delivery

Inspection/quality regime

3.14 The current inspection/quality regime does not ensure that quality is delivered. That is not to say that undertakers and their contractors do not wish to deliver quality road works, many do; however there are not the incentives or sanctions in the current system to ensure quality:-

- There are some 18 situations in the 1991 Act where failure to comply represents an offence. However, only 4 of these may result in the issuing of a FPN and all of them related to co-ordination and noticing; none relate to delivering work on the ground.
- There is no acceptance by utility companies of responsibility for reinstatements that fail beyond the guarantee period. There is a resistance towards making a contribution to the cost of long term damage, arguing that there is no evidence that properly constructed reinstatements cause long term damage; UCs dispute the findings of the TRL report into long term damage (paragraph 5.13). There is also a resistance to extending the length of the guarantee period, UCs arguing that there are currently actually two levels of guarantee; performance and design life. The performance guarantee relates to what is normally called the guarantee period (two or three years); the design life guarantee, NJUG argues, is a 20 year lifetime guarantee. However, before the UC will accept liability, the RA is required to prove that the reinstatement is at fault in terms of the way that it has been constructed. Proving a latent defect requires engineering investigation and involves a legal process and

The table below has been extracted from the SRWR and shows the highest and lowest number of inspections, again in the City and semi-urban groupings, carried out by RAs in the 2015. The table shows that there is a significant variation in the number of inspections carried out, even by similar authorities. This is something that the SRWC is aware of and is seeking to address.

Authority	No of inspections
Edinburgh	34,461
Dundee	742
Sth	6.732

the associated costs of pursuing the utility company through the courts. Importantly, the burden of proof shifts from the UC to the RA. Not surprisingly, very few RAs have ever pursued failures as latent defects.

- The current inspection and coring regime – 10% inspections each during works, within 6 months of the works being completed and within 3 months of the end of the guarantee period and 2% coring of all works can hardly be described as comprehensive and a number of roads authorities undertake extra inspections and/or cores at their own cost in order to ensure that they protect their asset.

3.15 There is a huge lack of consistency in the extent to which RAs undertake inspections, both in the number of inspections and the way that they are carried out. A robust, fair and consistent approach to inspections of both UC and RA works would go a long way to addressing many of the quality and, in particular public/stakeholder concerns. COSLA and a number of RAs have stated that the inspection fees do not at present allow councils to recover the expenditure associated with inspection and enforcement, citing this as a reason for the lack of consistency.

Street audits carried out over the last eight years have consistently highlighted issues related to poor renewals and reinstatements. Poorly managed road works particularly in relation to the needs of pedestrians and people with disabilities is a recurring issue. There is strong evidence that the system is failing to take the needs of pedestrians and disabled people seriously.

Paths for all/Living Streets

Public interface

3.16 It is clear from the responses to my consultation paper that those representing road users are not sufficiently informed about road works and are regularly inconvenienced by the manner in which road works are delivered, be it poor signing, blocked footways or disruption to bus services, to name just three.

Innovation

3.17 Utility companies are required to carry out proper reinstatements in line with the Ministerial code 'The Specification for Reinstatements of Openings in the Road' (SROR). The code has been developed and is updated collaboratively by the road works community and is a well-respected document. The last update (3rd edition) was published on 1st January 2015. The code describes accepted practices and techniques for carrying out reinstatements in a variety of circumstances. Where a utility company wishes to use a product or technique that is not in the Code, it is allowed to do so with the approval of the RA. Whilst this might appear to allow the necessary flexibility to support new or innovative techniques, utility companies find that they are faced with seeking the approval of each road authority separately – a process that they find extremely slow and burdensome.

Delivery

Capacity of SRWC

3.18 The Scottish Road Works Commissioner's team comprises the Commissioner and six staff. The Commissioner is appointed directly by Scottish Ministers and the Commissioner's staff are appointed by him directly. The Commissioner receives an annual grant to support his activities. Audit Scotland's Annual Report raised questions about the capacity and resilience of the SWRC to meet all that it is expected to do. These risks were identified largely following discussions with the previous Commissioner who was also very concerned about the lack of clarity around certain functions, responsibilities and legal powers. I understand that the current Commissioner's view is that the staffing establishment is now well placed to achieve the remits of the Transport (Scotland) Act 2005 whilst addressing the governance required of a public office. Nevertheless, I will discuss later some changes to the way that the SRWC support team is established which, if introduced, should lead to a lower administrative burden. This may be important as some of my other recommendations would, again if accepted, lead to a greater role for the Commissioner and his team.

The role of Regulators

3.19 The performance of the utility companies is monitored by the industry Regulators – OFGEN, OFCOM and The Scottish Water Commission. From the discussion that I had had, it seems that the Regulators' main, perhaps overwhelming, interest is related to how well the utilities deliver the services required of them. Whilst, at one level, this is completely understandable, it does mean that they do not appear to have any insight – or even any interest – in the way in which those utilities for which they have a Regulatory function carry out road works. This has resulted in minimal engagement with the Regulators throughout this review, despite numerous attempts to involve them.

Chapter 4 – The situation in the rest of the UK/other countries

4.1 This chapter discusses how road works are co-ordinated and delivered in a number of other countries. The situation in England, Wales and Northern Ireland has been drawn together from information provided by and discussions with a number of people and organisations in those countries. This situation in New Zealand, USA, Canada and Australia has been provided by individuals who are all expert in their respective countries. For clarity, it is presented in italics and represents information provided by those named individuals.

England, Wales and NI

4.2 The arrangements for roads and street works throughout the UK are, very broadly, similar although there are some significant differences; probably the most significant being that there is no equivalent to the SRWC anywhere else in the UK. There is not, either, a single register operating in England or Wales. Northern Ireland does have a single register which was initially based on the SRWR.

4.3 HAUC(UK) has been making considerable efforts in recent years to improve performance monitoring, particularly in England and Wales, and had developed the National Performance Scorecard with a view to helping HAUC members to:

- Benchmark performance
- Identify strengths and weaknesses
- Monitor trends overall
- Provide robust evidence for policy making or intervention

The data required for the scorecard is drawn from information already held within systems at local authorities. Consequently, the initiative does not require any extra data to be collected.

4.4 There are now 118 Authorities in England and Wales having made a submission and 112 in a single quarter; however as submission is voluntary, the number varies with each quarterly report. For the Q3 2014/15 report, 72 authorities provided data. Whilst both Scotland (via the SRWC) and Northern Ireland (via Transport NI) are engaged with HAUC(UK) and have discussed producing Performance Scorecard outputs, much of the information is already available to them from the SRWR and its NI equivalent. In many ways, the work underway in England and Wales really just brings them up to the same level as Scotland and Northern Ireland.

4.5 The table below shows failures in utility performance in Scotland, Northern Ireland and in England and Wales, as extracted from the SRWR (Q4 2014 –Q3 2015), its equivalent in NI (April-Dec 2015) and the Performance Scorecard (Q3 2014/15). Performance of roads authorities is not always monitored to the same extent as utilities – this is an issue in seeking to improve performance universally. Noticing is significantly better in Scotland and NI, with Scotland best of all; this is probably a reflection of how long noticing performance has been monitored and having a single register and the role of the SRWC in monitoring performance. Scotland is generally performing better than England and Wales in terms of inspection failures but both are some way below those in NI, this might reflect the benefits of having a single authority carrying out inspections, and the consistency of approach that brings with it.

	Scotland	NI	E & W
Late/Incorrectly timed notices	0.07%	0.52%	43%
Category A sample utility inspection failures	11%	2.8%	19%
Category B sample utility inspection failures	8%	2.5%	7%
Category C sample utility inspection failures	7%	1.2%	11%

4.6 Permit Schemes are now used extensively by Highway Authorities in England with 85 out of a possible 150 HAs having adopted schemes. During the course of the review Professor Tom Rye of the Transport Research Institute, Edinburgh Napier University provided a paper the concluded that, inter alia, permit schemes have led to a reduction in the number of days on which utility companies work on the affected roads and they have also improved road's authorities own behaviour in relation to managing their own road works. The report goes on to suggest that this has been at a cost to utilities but that this cost is less than the monetised benefits to road users. This view is supported by JAG(UK) who suggest that permit schemes provide £6 of benefits for every £1 spent. NJUG, however, suggests that most, if not all, of the benefits that can be derived from permit schemes in England can be derived from the current Noticing regime in Scotland. This is a similar situation to that which exists in Northern Ireland. In September 2012 the then Roads Service NI carried out an assessment of the business case for introducing a Permit Scheme and concluded that the costs of the scheme compared with the likely benefits that might accrue made it poor value for money.

Overseas

New Zealand

4.7 Of the countries that I have been able to obtain information from, New Zealand is, perhaps the most similar country to Scotland, in terms of its population, and geography. Over the past few years, some fairly substantial changes to the way that road works are co-ordinated and delivered have been introduced. These changes seem to have resulted in substantial improvements to behaviours and outcomes and are described below by Ian Cox, Principal Advisor Network Management, NZ Transport Agency.

The Government drivers are exactly the same for delivery of utilities to communities in New Zealand as they appear to be in Scotland. As a result there are utility and roading acts in place that give a right of access to the roading corridors with the compensating right of the road controlling authorities to set reasonable conditions on access requests. This allows controls on proper management, reinstatement, finishing and maintenance. The original Acts however set out the rights but were a little bare on process. They do however allow road controlling authorities to recover costs of managing utility access to roads.

The New Zealand response to this is a little different due to a desire from Government for the industry (Utility Operators and Road Controlling Authorities together) to manage and regulate itself in the expectation that the Government does not have the resources, expertise or understanding of the industry to be other than the option of last resort. As a result the industry came together and formed a group called the New Zealand Utilities Advisory Group (NZUAG) and they developed a voluntary Code of practice for the industry. Unfortunately we have found that a voluntary code has no teeth and does not hold the parties sufficiently to account, so that too many parties were simply paying lip service. Suffice to say that those players prepared to work together towards better outcomes were not best pleased that others were not prepared to work towards improving the industry.

The outcome was joint industry representations to Government to provide a more formal approach. The result is the Utilities Access Act which allows for a mandated Code that all parties must abide by and sets out the mandatory issues to be addressed, including dispute resolution and review processes. The Act allows for either the industry to produce its own document or, as a last resort, for Government to do so by regulation. On behalf of the industry the NZUAG managed the development of a new Code using expertise from across the industry (but always in balance) and then took the Code through a wide consultation process designed to meet the Act requirements. The Code has now been operating for four years and has been through its first review process. The Code is available on the NZUAG website (<http://nzuaq.org.nz/>).

In NZ we have introduced Corridor Managers who are employed by the roads authority; this is a key position. The role of the Corridor Manager with respect to the Code is to ensure that the process happens properly for the road controlling authority and ensures that their obligations are met. Section 2.2.2 in the Code spells it out. The Corridor Manager is responsible for receiving the applications and seeing that they are properly processed, setting the conditions and ensuring that any co-ordination with other parties that the Corridor Manager is aware are interested in the same site in the near future. The Corridor Manager is then responsible for ensuring that the works are properly carried out meeting the requirements of the Code and the Works Access Permit.

The Contractor doing the works is required to have a quality plan in place specifying what quality measures including testing that will apply. Most of the larger Contractors already have good quality systems because they have become standard for civil works in New Zealand and therefore can co-ordinate the specific requirements with their established systems. The Code does not limit the number of works that the Corridor Manager may have inspected and the inspectors may take their own tests if required. Note that the Utility Operators generally do not do their own civil works so they are reliant on the performance of their contractors. The Code makes the parties responsible for the action of their agents. The sanctions can include making the contractor rip out the work and redo it. If the Contractor fails to do so or does so unsatisfactorily, the Corridor Manager may have the work done and bill the Utility Operator to recover the costs. The final sanction might be to refuse to accept the Contractor for works on the Corridor Manager's roads. The Utility Operator cannot be refused because the legislation gives them a right of access, but it can be an issue for them if their Contractor is not an acceptable provider of services. The Utility Operators have realised that hiring a poor Contractor is not necessarily the cheapest option and their best protection is a reputable Contractor with good systems in place. Most of the big players now have long-term contracts in place that give them longer-term economies of scale.

Most Corridor Managers have set the fees for their costs as an up-front recovery that gets billed with the Works Access permit. There haven't been too many quibbles about the level of costs being charged and the Utility Operators then know the costs ahead of time. It also helps the local authorities who are required to have transparent processes for setting fees.

One of the issues that the Code tries to address is communications between parties including requiring liaison meetings at local level. The Code suggests a number of things to be discussed at liaison meetings including co-ordination of works, reasonable conditions and making agreements to vary Code conditions locally (which the Code allows if it is by mutual consent). The Code tries to ensure that all things are done with balance in mind.

I believe that most players now realise that there is an opportunity to get value out of these meetings. In particular the Code allows for local agreements and to not be there means that these opportunities are lost. Indeed the boot is somewhat on the other foot as I have had Utility Operators

complaining about Corridor Managers who aren't organising meetings. The Code requires the Corridor Manager to organise the meetings and the Utility Operators to attend and the sanction for a serial non-attender might be for the Corridor Manager to take up a formal dispute with them so that the issue gets elevated to higher management. However, in most cases the small operators attend to make sure that the big players don't get too much advantage out of the meetings. I was invited to attend a major local authority meeting recently and the attendance was impressive. The Corridor Manager is responsible for letting the registered Utility Operators in their area know when and where the meeting will be held but not who will attend on their behalf. All Utility Operators that have rights under the legislation are approved and gazetted so they are known players and will also be known from their works requests. The Corridor Manager will generally have a list of their Utility operators and just has to keep an eye out for changes and new players e.g. a recent change where an established service provider became an infrastructure provider by forming a partnership with a multi-national who had bought a smaller infrastructure provider and together created a new entity with a new name.

Threaded through the Code is the message that working collaboratively is vital and this has generally been embraced by the industry. There isn't too much of an issue as any poor performance/behaviour is around the Contractor, not the Utility Operator. Both the Corridor Manager and the Utility Operator have a responsibility to ensure that the Contractor performs well. Initially there was a reluctance from the Utility Operators to get involved in their agents performance and rather to have the Corridor Managers virtually do the supervision for them. What they have realised is that they need to be involved to keep their own costs down as poor performance hits them in their pocket eventually. So the Utility Operators and Corridor Managers are not divided on the issue at all. They both realise that they are the long-term players, their relationship with each other is the important one and they will need to work on that while their agents come and go.

The industry in NZ is maturing but it is a slow process. Attitudes are gradually changing. NZUAG runs industry day workshops the in conjunction with its conference of the Road Information Management Forum to bring both sides of the industry together. This year there was more about changing and improving than about what was going wrong, which is a positive step.

One thing that having a Code has done is to allow software retailers to tailor applications for the industry that follow the Code provisions and allow for a lot of the underlying process to be handled electronically. These are slowly getting more sophisticated, to streamline management and improve efficiency.

Overall there seems to be greater acceptance that we all serve the community, which wants all of the services that we jointly provide, so we better make sure that we get ourselves sorted out for our customers.

Ian Cox, Principal Advisor Network Management, NZ Transport Agency

USA

4.8 Legislation around road works in the USA is developed and enacted at a State level. Through the Code of Federal Regulations, the US Department of Transportation requires each state to submit a statement to the Federal Highways Administration (FHWA) on the authority of utility companies to use and occupy the right of way of state highways, the state highway agency's power regulates the use and the policies the state employs or proposes to employ for accommodating utilities within the right-of-way of Federal-aided highways within its jurisdiction. Ken Lauderbert, Office of Programme Administration, FHWA advises as follows:-

Each state follows similar processes and these are set out in its Utility Accommodation Policy. These are based on the American Association of State Highway and Transportation Officials (AASHTO) publications 'A Guide for Accommodating Utilities within Highway Right of Way' and 'A Policy on the Accommodation of Utilities within Freeway Right of Way'.

Most states operate a permit system and levy a permit fee to cover administrative costs. States are responsible for co-ordination and, if appropriate, issuing the permit. States usually have a period after major reconstruction when works are not permitted – in the better states this is 5 years.

Utility company is required to provide a warranty – up to five years. Many require a warranty bond. The state defines how it will monitor works and what constitutes failure. States give the utility the opportunity to put right any defect with the option that the highway authority can draw on the bond at the end of the guarantee period.

Extracts from Utah DOT Utility Accommodation Policy:-

It is in the public interest for utility companies to be accommodated within the rights of way when accommodation does not adversely affect the integrity of highway features. The permitted use and occupancy of the right of way for non-highway purposes is subordinate to the primary interests for transportation and safety of the public.

This rule is provided to facilitate the establishment of consistent expectations and effective working relationships between UDOT and utility companies through continuous communication, co-ordination and co-operation.

UDOT has secured the authority to issue permits.

Utilities must be licenced; as part of the licence agreement, UDOT requires a continuous bond of \$100,000 to be posted to guarantee satisfactory performance. UDOT may exercise its bonding rights for costs incurred.

UDOT has the right to inspect all works to monitor compliance; costs associated with the inspection are the responsibility of the utility company. UDOT may require a separate inspection bond to ensure payment.

Ken Lauderbert, Office of Programme Administration, FHWA

Canada

4.9 As with the USA, there is no one single approach to this issue in Canada. Legislation is developed and enacted at the Province level. Steve Murphy, Co-Chair, TAC Public Utility Management Subcommittee has provided the following advice:-

Utility Coordination in Canada varies from province to province across our vast country therefore it is difficult to answer your question. In response to your utility coordination questions I have prepared the following bullet outline answer from a Province of Ontario perspective.

- ☐ *No central organization like the RAUC or Road Works Commissioner in Canada or Ontario. Each road authority is responsible for managing utilities agencies in their jurisdiction*
- ☐ *Each road authority develops their own coordination process through Public Utility Coordination Committees (PUCC). Governance of the PUCCs vary from road authority to road authority. (i.e. frequency of meetings vary from monthly to annually to none)*
- ☐ *Federal and provincial legislation, local By-Laws and agreements form the framework for utility coordination*
- ☐ *Utilities do not have free access to the roads. They have the right to install infrastructure in the road authorities right-of-ways but permission for utility agencies to install new infrastructure or maintain their existing system is granted by the road authority through approvals (Municipal Consent Approvals) and/or permits (Encroachment Permits, Road Occupancy Permits).*
- ☐ *Restoration standards and specifications are outlined in the approval/permit letters.*
- ☐ *Who does the restoration – two models that are currently implemented – 1) utility agency are responsible for all restoration. 2) Utility agency performs temporary restoration, Road authority performs final restoration and invoices utility agency for the final restoration costs*
- ☐ *Quality of restoration by utility companies is problematic in Canada. In an attempt to hold the utility agency accountable for their works with in road authority jurisdiction tighter requirements are spelled out in the conditions of the approvals and permits (i.e. compaction certification letter from a 3rd party geotechnical engineer, tighter installation tolerances from the approved location etc.). Compensation for road authority inspections of the utility works is outlined in the agreements between the road authority and the utility agency. In a recent decision by the Canadian Radio Television Commission (federal regulator for the telecommunication carriers in Canada) 50% of the road authority inspection costs are to be paid by the utility agency. Currently there is no mechanism to levy fines against utility companies for poor quality performance.*
- ☐ *Road authorities charge approval and permit fees to cover the casual costs incurred by the road authority through the review and issuance of approvals and permits. The fees amounts vary from road authority to road authority*
- ☐ *Open trenching of asphalt is typically discouraged. Trenchless installation (directional boring, tunnelling etc.) is the preferred method of installation under road surfaces. If open trench method is approved several road authorities charge the utility companies pavement degradation fees. The pavement degradation fees are to cover the long term impact road cuts have on the life cycle of the road.*

Through Transportation Association of Canada Public Utility Management Subcommittee (PUMS) coordination issues between road authorities and utility agencies are identified, openly discussed with all stakeholders and recommendations/guidelines developed to bring consistency to utility coordination across Canada. One such guideline that was recently approved for publication is the Guideline for the Coordination of Utility Relocations. PUMS has identified at least a dozen other utility coordination projects.

Although there is no legislative central overseer of utility coordination in Canada, there is the Transportation Association of Canada (TAC), and with its national platform they are able to tackle the utility coordination issue through its Public Utility Management Subcommittee (PUMS). The strength of PUMS is it communicates with utility agencies in a collaborative and cooperative manner to find solutions to utility coordination issues. There is greater buy in to the recommended guidelines or documents produced by PUMS because they were developed by both the road authorities and utility agencies working together. I have attached the following documents to help you better understand utility coordination in Canada:

Steve Murphy Co-Chair, TAC Public Utility Management Subcommittee

Australia

4.10 Legislation in Australia is developed and enacted at a State level. Queensland's approach is typical, with separate but similar arrangements between the road authority and the utility in force as described by Tom Orr, Assistant Director, Department of Transport and Main Roads, Queensland.

Queensland's Transport Infrastructure Act 1994 allows public utilities to be located in state transport land but includes the ability for Transport Main Roads (TMR) to impose reasonable conditions on the works and the construction activity.

A related issue for TMR is when we are undertaking infrastructure works that require us to relocate existing utility infrastructure. This can add cost and time to projects but we are working to improve our relationship with Public Utility Providers (PUPs) to improve these practices.

TMR places a lot of emphasis on its relationship with Public Utility Providers (PUPs) and has spent a lot of time over the last year improving TMR's relationship with PUPs and is working to introduce or update Memoranda of Understanding with key PUPs. The MOUs essentially detail how TMR and the PUP agree to work together in practice and the focus is moving towards joint planning, early notification, transparency in relocations costs and the like.

Whilst our district offices undoubtedly have issues with PUPs from time to time, my impression (from a head office policy and legislation perspective) is that TMR would seem to have a generally positive relationship with PUPs. I'm not aware that we regularly encounter issues around poor reinstatement, although TMR is fairly active in policing this and our standards and requirements are all publicly available. There certainly isn't any contribution from PUPs for the damage caused by openings – our approach is to reinstate it to specification in the first place and I would also suggest our PUPs are generally accepting of this as a reasonable requirement.

TMR is conscious that any costs we add in terms of PUP access increase the costs to consumers and Governments are generally very sensitive about this. Having said that, most PUPs (and the other departments that administer the legislation they operate under) also recognise that for the most part we're all spending public funds and trying to push costs onto each other doesn't really achieve much. There needs to be a more balanced and negotiated approach and I think this mostly occurs in practice.

Tom Orr, Assistant Director, Department of Transport and Main Roads, Queensland.

Chapter 5 – Options for change

5.1 In this section I will discuss a range of options that might be introduced. Some of these options I have identified, many more have emerged through discussion and some have been suggested to me. In some cases certain options are mutually exclusive or at least adopting both options would be unnecessary; in other cases two or more options might work synergistically together. I will identify as **recommendations** those which I think are worthy of taking forward as part of this review. I have also identified a number of **observations** which are not central to my review but which might, at some point, be worthy of further consideration. In Chapter 6 I will explain how some of the recommendations might work best together.

Improving co-ordination

Enforcement

5.2 A number of RAs have suggested that extending the sanctions available to them would provide them with the means to ensure that all aspects of road works co-ordination is properly co-ordinated. This argument also applies to extending the use of FPNs to inspection failures to help ensure the quality of road works as discussed in paragraph 5.20. Balanced against that, the utilities and NJUG in particular are strongly opposed to extending the scope and range of FPNs arguing that it would threaten the existing excellent working relationships within the Scottish roads community. It is also true to say that a number of RAs don't currently utilise the powers that they already have as described in paragraph 3.8. The case study below shows, quite strikingly, how noticing failures have reduced where FPNs apply and have increased where they don't and, whilst this is a snapshot of one month in one Authority, the scale of change is such as to suggest it is unlikely that the trend will be completely reversed in other authorities. There is also evidence that FPNs applied fairly but robustly can be acceptable to all parties and not threaten working relationships; South Lanarkshire Council, for example, issue more FPNs than any other semi-urban group but have very few challenged and, based on my observations at the local RAUC(S) meeting, seem to have a very positive and constructive relationship with UCs.

NJUG believes that we have a real opportunity to further drive up standards and reduce disruption in Scotland, building on which significant progress has been made by the utilities and their contracting partners, utilising the very positive relationships within RAUC(Scotland) and with the commissioner.

However, our experience elsewhere in Great Britain leads us to believe that simply adding a further layer of penalty based legislation/regulation will not deliver this positive change that we all want, as it will not drive the right behaviours, and will increase conflict between roads authorities and works promoters, instead of everyone working together to reduce disruption and drive up standards. – Bob Gallienne, CEO, NJUG

CASE STUDY

South Lanarkshire Council has carried out an interrogation of the SRWR to assess the changes in compliance associated with noticing failures subject to an FPN compared to those where no FPN is available to the RA. SLC compared February 2007 figures with those for February 2016. The table below shows a marked improvement in performance in every case where FPNs are available; in contrast, in two cases the failures are actually higher in 2016 with only actual start dates showing an improvement overall. Late noticing failures reduced from 246 to 16 where FPNs apply and increased from 75 to 88 where no FPN applies.

Notice type (FPN applies)	Feb '16	Feb '07
24 Hour	0	67
One month	1	18
Seven day	3	51
Two hours	5	21
Works clear	1	3
Works closed	6	86
TOTAL	16	246

Notice type (no FPN)	Feb '16	Feb '07
Works extension	20	18
Actual start	6	38
Registration	62	19
TOTAL	88	75

5.3 There may, therefore, be merit in increasing the sanctions available to roads authorities to address known areas that can prove to be problematic. Detailed below are those that have been brought to my attention:-

- Consider introducing FPNs for failure to properly identify the traffic management requirements associated with a notice. If a notice doesn't identify, for example, lane closures that are needed when the works are undertaken, this has impacts on the way that road works are co-ordinated and, ultimately, on the travelling public.
- Under S114 of the 1991 Act, the notice must contain certain valid information. Those fields include proposed start and proposed end. Whilst S129 goes on to confirm that completion date must be given within one working day and failure to comply can, therefore, result in an FPN, actual start date was given no such equivalent requirement. Although the Code of Practice requires update within one working day for start information – that being what RAUC(S) agrees to be a reasonable timescale, knowing the importance of this update – it is not covered by the option to levy a fixed penalty notice if not done. Given that co-ordination relates to current works, it seems strange that telling the community that the works have

finished is more important than telling it that they have started. If both are equally important (as they are in the Code) both should be subject to FPN.

- Works extensions mean that works have run past the anticipated duration, duration being one of the key factors that works are initially assessed on. The regulations require that a proposed end date be given in the initial notice. The 1991 Act requires that closure information be provided within one day of the site being closed. Nowhere does it state that the actual end date has to be the same as the proposed one given in the initial notice. That means that should works be proposed to last one day, Monday, but the works are not completed until Friday, the notice could lie expired provide that, on Friday, the notice is then closed; there is no FPN for having no valid cover in place from Tuesday onwards. Under these circumstances a UC can approach the RA and ask for an extension, which might be refused, or ignore the RA and simply stay on site and close the notice on Friday without penalty.
- Consider introducing penalties for failure to repair defective apparatus within defined required timescales. Defective apparatus is often dangerous and can have a major impact on the way that road works are perceived by the public. As explained in 3.12 there is presently no incentive for utility companies to repair defective apparatus quickly.

Recommendation 1: Consider introducing Fixed Penalty Notices for failure to properly identify traffic management requirements, actual start dates, failure to properly provide requests for extensions and failure to repair defective apparatus within

5.4 There is also an issue, as identified in 3.8, around the lack of consistency in the way that RAs currently decide which noticing failures should result in FPNs with some issuing no fines at all. The roads side of RAUC(S) should be encouraged to develop a common understanding and, thereafter, a protocol for the issuing of FPNs so that the utility companies can expect a greater consistency of approach. This is important in any case, as the UCs have a right to expect to be treated consistently; however this becomes even more important if FPNs are extended to other areas.

5.5 There is strong evidence from my discussions with UCs that the reputational impact of receiving FPNs has a greater deterrent effect than the cost of the fine itself. Nevertheless, part of the reason for the inconsistency with which RAs apply FPNs might well be linked to the resources available to the RAs and a question of whether the level of fine (£120, reduced to £80 for prompt payment) is sufficient to cover the administrative costs. A number of RAs have expressed the view that the current level of fine is less than the cost of enforcing the system. There are other options covered later that might reduce the administrative burden but, in any case, it would seem reasonable to increase the cost of the fine in line with inflation. The fine was introduced in 2005 and, if it were increased in line with the RPI the value of the FPN should be around £165, reduced to £110 for prompt payment.

Recommendation 2: Roads authorities should develop a common understanding of the circumstances under which a Potential Noticing Offence should be converted into an FPN. RAs should consider setting this understanding down as a protocol.

Recommendation 3: The cost of FPNs should be increased in line with inflation

5.6 If a greater range of FPNs were introduced, and I will return to this, there might be an attraction in introducing a totting up

A possible totting up approach might comprise:-

1. RAUC(S) agrees compliance targets for all FPNs (no of FPNs/Works undertaken not to exceed x%)
2. SRWC to monitor and report on FPN performance
3. Value of FPNs set at current value (or value to take account of inflation)
4. Value of FPNs moved up or down based on performance against targets

system which could increase or reduce the penalties levied based on performance. This should be quite straightforward to administer if it were linked to the metrics reported by the SRWC and drawn directly from the Register. The details of such a scheme would need to be developed and agreed through RAUC(S) but, in outline, could take the form shown in the adjacent dialogue box.

The role of the SRWC

5.7 There is scope for the SRWC and his staff to take a stronger role in using the outputs and metrics obtained from the SRWR to stimulate discussion at local, area and national RAUC(S) meetings and thereby encourage improved and more consistent performance. Areas of focus might include:-

- Using the outputs from the SRWR to measure what proportion of noticing failures result in FPNs; the extent to which long term planning is taking place and how many notices RAs produce per km and as a percentage of all notices in their LA area and thereby encourage consistency of approach
- Producing concise summary reports highlighting areas of good/poor performance drawn from SRWR outputs. If the summary reports were issued to attendees at the various RAUC(S) meetings one week ahead of the meeting, it is likely to form the basis of a more focussed and meaningful discussion than currently takes place.
- Ensuring that the issues around inconsistencies in updating the Gazetteer as discussed in paragraph 3.10 are properly addressed.

5.8 More work will need to be carried out to determine which metrics are most informative and helpful. There would also be a strong case for producing these metrics ahead of the RAUC(S) quarterly cycle and using the same metrics to report on performance in the Commissioner's quarterly and Annual reports. The Commissioner is already moving in this direction.

Recommendation 4: The SRWC should continue to develop a more focussed approach to using the outputs from the SRWR to stimulate discussion at local, area and national meetings with the aim of encouraging improved and more consistent performance. Summary outputs should be circulated ahead of RAUC(S) meetings; these outputs should be the same or similar to those reported quarterly and annually

Public interface

5.9 It is very clear from the responses to my consultation paper that those affected by road works would really value better information about proposed and current road works. Many, including CPT, MACS, RAC and CTC have expressed a wish to work with those responsible for the Register to see if a product that better meets their needs can be developed. The SRWR is due to be re-tendered in 2017; there is a window of opportunity to work with stakeholders to agree what is desirable and ensure that the specification for the next contract enables those desirable improvements to be implemented.

If the SRWC and SRWR were better known by the Voluntary Sector Disability Organisations they could have a very good tool to inform their members. The website would need to be accessible to sight impaired people. The Register should contain information on what is being done, duration and impact on footways so that disabled people are better informed. Name and details of the contractor are not sufficient. SRWR could actually become the 'Considerate Contractor' - MACS

5.10 One of the main drawbacks to developing the public facing aspect of the register is around the accuracy of when road works begin and end. The current requirement is for advance notice of works starting to be placed on the register 7 days before the proposed start date and for notice of works completion to be placed on the register within one day of completion. This is too vague - particularly the intended start date requirement - for journey planning purposes. Whilst the changes outlined in Recommendation 1 would address this in part, there are further improvements possible; most contractors' operatives already have access to hand held mobile devices which have a communication capability. I can see no reason therefore, why the current requirement should not be revised beyond that in Recommendation 1 to require notification of the start and end of any works, including emergency works being placed on the register within 2 hours of the start/end of the works, or as soon as internet access is available if this is a problem in certain remote areas. The SRWR would clearly need to be modified to communicate with these hand held devices and this should be something that would, if agreed, be incorporated into the next SRWR support commission. If this were linked to the shift towards open data requirements, it is very likely that data providers would develop a range of products for in-vehicle and hand held devices that would give the travelling public robust and accurate information about current road works.

5.11 This development work needs to be balanced against a recognition that the SRWR is an outstanding example of collaboration with the Scottish road works community working together over a long period to fund and develop a product that does what it was designed to do; support the co-ordination of road works and monitor how well all parties are performing. In developing different aspects to the register, it will be crucial not to threaten the continued excellent performance of what we already have; however, the re-tendering exercise should recognise that the next contract will need to support the Register for the next 7 years and that technology and public expectations will change over that time.

Recommendation 5: The SRWC should establish a Working Group, which should include representatives of the wider stakeholder group, to consider possible changes to the SRWR which might allow a better public facing aspect to be delivered without threatening the original purpose of the Register. The Group should report in time for any agreed changes to be incorporated into the next contract for SRWR support services.

Recommendation 6: Any changes to the noticing requirements for the start and finish of works required as a consequence of Recommendation 5 should be reviewed and changes made where appropriate.

Other issues

5.12 I have discussed, in paragraph 4.5, the emergence of Permit Schemes in England and the benefits that they appear to be delivering. Permit schemes were also discussed in the 2013 consultation. There was little support for their introduction in Scotland on the basis that most, if not all of the benefits could be achieved from the existing Noticing regime. Whilst I did detect some support for their introduction in Scotland, my over-riding impression is that views are largely the same and that Permit Schemes are not required in Scotland at this stage, particularly if some or all of the measures that I have suggested are adopted. I would, however suggest that the progress of Permit Schemes is something that the SRWC and the Scottish Government should maintain an interest in.

Observation 1: The current measures in place in Scotland, particularly if some or all of the measure recommended in this review are implemented, mean that the introduction of permit Schemes is probably unnecessary at this time. The SWRC and the Scottish Government should, however maintain an interest in the progress of Permit Schemes.

5.13 Another issue raised in the 2013 consultation was the proposal to make compliance with Vault mandatory. I discussed Vault in paragraph 3.11 and the fact that the potential benefits of what is, conceptually, an excellent system, are not being realised because too many organisations are not complying with the requirement to provide information. There was widespread support in the 2013 responses for making compliance mandatory and this is reflected in discussions and feedback that I have received. Whilst this is not an issue that is central to my review, I do think it worthy of mention.

Observation 2: It would be sensible to raise, perhaps through RAUC(S), the prospect of making compliance with Vault mandatory in line with consultation responses to the 2013 Consultation

Improving delivery

Delivering quality

5.14 I have discussed in paragraph 3.14 the current requirements placed on those carrying out road works; whilst I understand the arguments put forward by NJUG and included fully in Appendix B, I remain of the view that this is not the most appropriate way to place sufficient responsibility on those carrying out the works to ensure that the reinstatement is delivered to the right quality every time; neither do the current inspection and coring requirements provide the necessary level of assurance for roads authorities that the works will not impact adversely on their asset and/or the those affected by road works.

5.15 There is sufficient evidence available to be confident that defects related to reinstatements do not always become apparent within the two year guarantee (or three years for deep excavations) period. If a defect manifests itself beyond this period the only course of action open to roads authorities is to pursue the utility company via the latent defects route. This is onerous with the roads authority having to prove in a court of law that the defect has been caused by poor workmanship; it is hardly surprising that the costs and resources required to follow this route means that there are very few instances where the roads authority has pursued latent defects.

5.16 If the guarantee period was extended to ensure that any defects resulting from that reinstatement will always become evident, it would incentivise the utility company and its contractor to ensure that the reinstatement was delivered to the highest quality in order to avoid, so far as is possible, having to carry out remedial works at some future date. This has two important benefits; getting it right first time is more cost efficient and it is less disruptive. From discussions with utility companies it is clear that they consider the current guarantee period to be appropriate and that there are sufficient controls in place to ensure quality. They are concerned that increasing the guarantee period will result in them incurring extra costs that will ultimately be reflected in consumer bills. They also have concerns about their ability to require their contractor to take responsibility for the defect if they are no longer operating within the original framework contract, NJUG's position on this is explained in more detail in Appendix B. Neither of these points seems to me to be a good reason for not introducing these changes. Where providers are required to deliver long term commitments to quality, the amount of defective work reduces significantly and it is right and proper that those utility companies promoting the works take responsibility for them and don't merely offload that responsibility onto their contractors. Having said that, care will need to be taken to ensure that roads authorities do not abuse the system and see this as an opportunity to force utility companies to resurface roads that are failing more generally. All of this can be addressed in working through how the current processes in place will need to be adjusted to meet the needs of an extended guarantee period. This should be undertaken collaboratively by the road works community including representation from the SCWC.

In 2013 the Transport Research Laboratory (TRL) published a report, commissioned by the SRWC, 'Long-term damage to roads caused by utility reinstatements. The study reported on inspections of 127 reinstatements located in four different council areas. Reinstatements ranged in age from two to ten years old and had previously passed coring assessments. Whilst 100 of the reinstatements were assessed as acceptable, 27 (21%) were considered to need remedial treatment and repairs. The failures were spread fairly evenly across the 2 to 10 year old reinstatements, as were the sites that were deemed acceptable. The study concluded that utility reinstatements that comply with the SROR do cause long term damage. It also concluded that the quality of reinstatements was variable, particularly construction and reinstatement of edge joints. This could be addressed by better supervision and consideration of a chamfered joint detail. Very similar results were reported in a study carried out by South Lanarkshire Council in September 2012 .

Right first time, on time every time should always be the objective for road and footway reinstatements. The single most important change from this review that will fundamentally increase quality, durability and performance of permanent reinstatements and transform behaviours around self-improvement would be the introduction of a statutory minimum ten year guarantee period that should apply equitably to all statutory undertakers, public utilities, contractors and roads authorities – John W Mundell, SOLACE

5.17 There has been considerable discussion on this topic during the course of my review, not least on how long the guarantee period should be. SOLACE, CoSLA, SCOTS and many roads authorities have suggested 10 years and this may well be what is needed. Others have suggested less and, as indicated above, utility companies suggest the current periods are sufficient. My view is that the guarantee period needs to be sufficiently long to ensure that any defect which is the result of a reinstatement will have manifested itself. This may well be 10 years; certainly it is not 2 years, but this is something that needs to be addressed by others and I understand there is currently work underway on this very issue.

Recommendation 7: The guarantee period for reinstatements should be extended to ensure that any defect that is the result of the reinstatement will manifest itself within the period of guarantee. The existing procedures for administering the current guarantee period should be reviewed and adjusted as required to ensure that they remain fit for purpose.

5.18 Whether or not the guarantee period is extended there are other measures that would help assure roads authorities that road works are being undertaken effectively. Increasing the number of inspections that are paid for by those responsible for carrying out the works would go a long way to providing that assurance. However, linked to this, there is an urgent need to agree what the true cost of undertaking those inspections is and adjust the fees accordingly.

5.19 Inspections carried out as the works are being undertaken (Category A inspections) will generally provide a check on how well the traffic management, signing, etc. has been installed, it is unlikely to be able to check on the quality of the reinstatement. That is not to say that category A inspections are not important; the way in which traffic management, signing and pedestrian facilities are provided have a significant impact on safety and on the public. Given that on average over one in ten (and in some cases one in five) Category A inspections are currently failing, it is unlikely that continuing a regime that allows the road authority to be reimbursed for just a 10% sample will provide the roads authorities with the necessary assurance; a figure of around 50% would seem to be more appropriate as a starting point; however this might be reduced if a particular utility company were able to meet or exceed agreed performance targets or, indeed, increased in the case of persistent failure. These targets could then be increased over time as part of a continuous improvement programme. Experience from the National Coring Programme shows that this approach works with the pass rate rising from 44% when the NCP was introduced in 2001/02 to 83% for the last programme, undertaken in 2012/13. For the current programme a target of 90% has been set. This is described in paragraph 1.10.

5.20 Greater assurance on the quality of the reinstatement could be achieved if a requirement was introduced for the contactor undertaking the works to have a quality plan in place specifying what quality measures including testing would be applied to any road works. Contractors that I have spoken to are receptive to this approach and, indeed, some already carry out, for example, tests on the compaction of the unbound materials using a Clegg tester. It has also been suggested by contractors that backfilling the reinstatement with similar material to the that surrounding the excavation might not always be the most appropriate solution as that material might be changed by the length of time that it has been in place. This aligns with other advice that I have received around a performance based approach. This might be an area for further research by the Scottish Road Research Board of which the Commissioner is a member.

A performance based approach to the specification and reinstatement of utility openings in roads.
The current approach with the specification of the reinstatement of utility openings in roads is based on material prescription and method of reinstatement. The approach is construction focussed and is limited to traditional materials generally, although alternative materials are allowed. With road design and construction today there is a move towards a performance based approach. Pavements are engineered to optimise whole-life performance and cost. Materials are engineered to match the performance needs of the pavement. Pavements are constructed to a performance specification.
Land Engineering Research Centre

5.21 Roads authorities could be given a right of access to the contractor's quality plans and have the ability to levy fines for non-compliance. This type of system has been introduced in New Zealand where it has been linked to a significant improvement in quality. This is described in more detail in Section 4.6.

Recommendation 8: Those undertaking road works should be required to produce and operate quality plans that set out the proposed method of investigation, excavation and reinstatement. The plans should include proposals for testing of materials and workmanship and should be updated with records of those test results. The quality plans should be made available to the RA for inspection and audit as required.

CASE STUDY

Extract from Utah DOT Utility Accommodation Policy

Utilities must be licenced; as part of the licence agreement, UDOT requires a continuous bond of \$100,000 to be posted to guarantee satisfactory performance. UDOT may exercise its bonding rights for costs incurred.

UDOT has the right to inspect all works to monitor compliance; costs associated with inspection are the responsibility of the utility company. UDOT may require a separate inspection bond to ensure payment.

5.22 Category B and Category C inspections have similar failure rates only slightly better than those for Category A (8% for category B and 7% for category C) and so it would seem logical to increase inspection levels in line with those suggested above. The Category B failure rate is surprisingly high, given that this is within 6 months of interim or permanent reinstatement; one might expect contractors to have the ability to leave the site in an acceptable condition in a much higher proportion of cases. However, it has been asserted that the inspection failures can cover things such as missing road markings that have yet to be

reinstated as well as more fundamental quality failures. Introducing a FPN for inspection failures which, as with the current FPNs, would include discretion on whether to invoke the FPN would provide a clearer measure on how well works are being delivered. If the guarantee period is significantly extended then it would be appropriate to monitor the performance of the reinstatement at regular (annual or biennial) intervals. This is something that happens in some States in the USA for example Utah where the guarantee period is 5 years.

Recommendation 9: Fixed penalty Notices should be introduced for Category A, B and C inspection failures.

Recommendation 10: The level of sample inspections should be increased to provide assurance that all works are being properly undertaken. As a starting point, the 10% level at each of category A, B and C should be increased to 50% and thereafter adjusted up or down depending on performance.

5.23 Coring could be incorporated into a utility/contractor quality system. Currently, some utility companies carry out their own coring programme as a way of helping to ensure quality of their supply chain; this is to be commended. A requirement to core certain type of works and/or a proportion of all works could be part of a quality plan approach. The National Coring Programme might then be refocused to mesh with contractor/utility coring programmes, sampling road works that are, say, two years old. The National Coring Programme is currently procured at Area RAUC(S) level which means that there are five separate contracts for the national coring programme. This seems unnecessarily complicated, particularly as there are really only two or three accredited laboratories capable of delivering this service. It would seem sensible to utilise the procurement expertise of either Transport Scotland or Scotland Excel to award a single framework contract, perhaps divided into Lots, for the National Coring Programme. Given that these same laboratories will be carrying out the cores for the utilities/contractors, I can see no reason why they couldn't use the same framework contract and share the results. Rationalising coring in this way should lead to greater trust and openness with universal acceptance of coring outputs. It would make sense that the framework was procured and overseen by the SRWC.

Recommendation 11: The SRWC and RAUC(S) should discuss with Transport Scotland and/or Scotland Excel the merits of procuring all coring via a national framework contract.

5.24 Whether those that undertake road works should make a contribution to the cost of long term damage is an issue that has been discussed extensively, including as part of the 2013 Consultation. Unsurprisingly, it is an issue that has caused much discussion and comment in this review. Any such payment, was it to be introduced, would do nothing to improve the quality of delivery; in fact, some utility companies have put the view that, having paid for the cost of any perceived damage, some might see delivery of quality as less of a commitment. Such a payment, therefore relates to equity rather than improved quality and so falls outside the remit of this review. However, I would make the observation that introducing an extended guarantee period as well as a contribution to the cost of long term damage would be too onerous and, given the choice, most that I have spoken to, including the utility companies would prefer an extended guarantee period.

Cost of Inspections

5.25 The cost of inspections in Scotland is £36 per inspection. In England and Wales, following a review carried out by HAUC(UK), the costs were set at £47.50 for planned inspections, £50 for repeat inspections resulting from failure and £68 for failed inspections identified by the public. RAUC(S), being a part of HAUC(UK), was originally represented on this group but left before the group reached a conclusion. I have not been able to determine the reason for this. RAUC(S) currently has a working group looking at inspection charges in Scotland but progress has been slow, not least because of a difficulty in obtaining details of costs from Scottish local authorities.

5.26 Receiving adequate reimbursement for the full cost of inspections is crucially important for roads authorities, where resources are an issue. Not receiving full reimbursement will go some way towards explaining why some roads authorities fail to carry out all inspections in line with the requirements of the Act. By RAUC(S) disengaging in the HAUC(UK) review Scottish roads authorities have missed out on, and continue to miss out on, potential increased revenue. I understand, however, that all of the data that guided the review is available to RAUC(S) and I would recommend that this data is reviewed as a matter of urgency by the inspections working group; I can see no valid reason why the charges in Scotland should not be the same as, or very similar to, those that apply in

the rest of the mainland UK and to Wales in particular where the range of road network, topography and population density is broadly similar.

Recommendation 12: The review into the cost of inspections in Scotland needs to be concluded as soon as possible. As a first step, the inspections working group should, as a matter of urgency, review the evidence collected as part of the HAUC(UK) review to determine the extent to which it might be an appropriate basis for the Scottish review. If it is determined not to be appropriate, the group should report the reasons for this to the national RAUC(S) meeting.

Enforcement

5.27 In paragraph 3.14 I discussed the fact that all of the current FPNs that can be levied by the roads authorities relate to co-ordination and noticing with no such sanctions available to the roads authorities for failures during and post construction; this seems wrong and is an issue that has been raised by many of those consulted. Introducing FPNs for inspection failures would provide roads authorities with an effective way exerting greater control over the way the road works are delivered. Monitoring the level of FPNs issued to a utility or contactor would also give a very clear picture of how well road works are being delivered; it would be important that roads authorities dealt with the way and extent to which they converted inspection failures into FPNs consistently and I have expanded on this 'level playing field' issue in paragraph 5.4. It would also be possible to develop a totting up approach to FPNs which would reward good performance and penalise poor performance. Repeated poor performance by a contractor might even result in that contractor being suspended from working on the road network. This type of approach is described in 5.6, although more work on this model would be required before it could be introduced. A similar approach has been successfully adopted in New Zealand and is described in Section 4.6 although, in practice it has seldom, if ever been required, the threat of such an action being sufficient deterrent.

Recommendation 13: Any enhanced system of inspection and enforcement should be applied consistently across all of those working on the road network.

5.28 The current approach to co-ordination and delivery of road works places primary responsibility locally; local roads authorities and utility companies are required to work together at a local level and sanctions for individual failures, such as they exist, are applied locally. That, to me, seems right and is a position that is supported by the road works community. Changes that I have recommended are aimed at supporting and strengthening that approach. The SRWC's role is to encourage, support and monitor how well that approach is working; he does, however have the sanction of levying fines on both the utility companies and roads authorities where he identifies repeated or systematic failures and he has used these powers on a number of occasions. The maximum penalty that the Commissioner can levy is currently £50,000. Whilst this is a significant sum, it is relatively small compared to those available to other bodies; the Information Commissioner can levy fines up to £500,000 and the industry regulators (OFCOM, OFGEM, ORR) up to 10% of the annual turnover. The annual turnover of SPN, for example, was £1,100m in 2014/15. There might be a case for increasing the level of fines available to the Commissioner; the 2013 consultation suggested a maximum of £200,000. The response to this was mixed with utility companies being against any increase and roads authorities split with a majority in favour of an inflation linked increase.

Recommendation 14: Consideration should be given to the level of fines available to the Commissioner in the light of the 2013 Consultation responses to determine whether an increase is appropriate.

Impact on the public

Information about road works and their likely impact needs to be in the public domain sufficiently early for them to plan journeys – Transport Focus

Better signing would identify contractors and let the public know who to contact. It would reinforce that it's not the buses that are inconvenienced; it's the passengers - CPT

5.29 I have discussed in paragraphs 5.9 and 5.10 how the public might be better informed about forthcoming and current road works. Responses to my consultation paper and discussions that I have held have highlighted a number of areas where changes to the way that road works are delivered would have a significantly beneficial impact on the public.

5.30 The way that road works are signed should be reviewed and clarified as there are some disputes in the interpretation of the current requirements; this is not helpful and needs to be addressed. Consideration

should also be given to explaining why the road works are needed, if no works is happening, why that is, and an easily understood road works reference number that would enable the public to identify the road works in the case of a complaint.

5.31 One issue that was raised by more than one stakeholder was the importance of understanding the impact that road works can have on people with disability and the benefits that would accrue from all of those involved in road works having disability awareness training. Interestingly, and encouragingly, the contractors that I spoke to about this were very supportive of the suggestion. Linked to this is the question that I asked about the benefits of introducing a Considerate Contractor scheme. Responses to the consultation question was mixed as indicated in the dialogue box opposite however, the contractors, and their representative body the Confederation of Civil Engineering Contractors (CECA) are extremely supportive of the proposal, pointing out that the scheme should be as much about promoting the right cultures within an organisation as it is about the external interfaces. Requirements around disability awareness training and considerate contractor scheme could be incorporated into future utility company contracts.

The Civil Engineering Contractors Association (CECA) strongly supports the use of the Considerate Contractors Scheme (www.ccscheme.org.uk) on planned utilities road works where traffic management measures (e.g. traffic lights) are in place. CECA members are committed not only to upgrading Scotland's utilities but also to causing the least disruption possible to the general public. - CECA

Recommendation 15: The SRWC and RAUC(S) should engage with CECA to consider whether there would be merit in developing a Considerate Contractor scheme and, if so, what it might look like and how it could be incorporated into future utility contracts. The way in which road works are signed should be reviewed as part of this process to ensure that they are clear and consistent and provide the public with information about who is carrying out the works and why the works are needed.

5.32 Quality of delivery can vary within a contractor's organisation and can be dependant of the approach of individual operatives. Training and accreditation can play a huge part in raising the standard; sector scheme approval could be an important part of improving consistency of approach. From discussions that I have had with individual contractors and CECA, it is clear that they are very receptive to 'raising the bar' for all contractors working in the road works sector. They recognise that there is often a skills gap in some of the softer areas around road works and their impact on the public and would welcome the opportunity to work with others to deliver a better product.

Recommendation 16: The SRWC and RAUC(S) should engage with CECA to consider how best to develop a training and possible accreditation scheme for operatives that would ensure that all operatives engaged with the public appropriately.

5.33 One issue that can frustrate members of the public is them understanding who to contact to enquire or complain about road works, and having confidence that the issue that they have raised has been taken seriously and addressed. When such issues are raised with the SRWC, they are passed on to the appropriate road authority or utility company to action; whilst this is probably appropriate, there would be benefit in the SRWC taking an interest in how these matters have been dealt with and resolved, perhaps by an email confirming the substance of the issue and asking to be advised of progress.

Recommendation 17: The SRWC should review how he wishes to track enquiries and/or complaints that come into his office but which are then passed onto others for action.

Innovation

5.34 The Specification for Reinstatements of Openings in Roads (SROR) sets out the requirements for utility companies and their contractors. As discussed in paragraph 3.17, where utility companies wish to introduce new techniques the process can be onerous. There clearly needs to be a robust structure around introducing new processes or techniques but it also needs to be not so onerous that it stifles innovation. Transport Scotland manages the Scottish Road Research Board that is charged with, inter alia, researching close to market products. It would be sensible to tap into this facility with the support of the SRWC, who sits on the Board. The process might be that the organisation wishing to introduce that innovation agrees with a small RAUC(S) representative group (perhaps four people) precisely what the proposal is - when, where and how it would be used - and that when approved, this proposal is passed to the SRWC for consideration by the Board who could then seek advice from the research framework contractor. If this advice proved positive the product could be approved for use and an amendment to the SROR introduced. Fundamental to any proposal being taken forward would be an undertaking by the organisation making the proposal that the product would be guaranteed for a reasonable period. If the guarantee period for all works were extended in line with Recommendation 7 then this would also be appropriate for innovative products, however, the current two year guarantee period might not give all roads authorities the necessary assurance.

Recommendation 18: The SRWC, RAUC(S) and Transport Scotland should discuss how the resources of the Scottish Road Research Board might be utilised to support a more flexible but robust process to support innovations in the way that road works might be delivered.

Engagement with Regulators

5.35 As discussed in paragraph 3.19, the industry regulators have taken very little interest in this review; none have attended any of my stakeholder engagement meetings and the only response to my consultation paper was from OFCOM and on the specific topic of extending the one year period of restriction after resurfacing from one year to three – something that was discussed in the 2013 consultation but is not central to my review.

5.36 It is clear that the current interest of the regulators does not extend to the way in which the utility companies that they regulate carry out road works. I think this is unfortunate and there might be a role for the Commissioner in engaging with the regulators to discuss whether and how they might take a greater interest.

Recommendation 19: The SRWC should seek to engage with the industry regulators to explore how they might take a closer interest in the way that road works are delivered.

Delivery structures

Different models for SRWC's team

5.37 It is clear that, within the road works community, the way that the Commissioner and his team operates is well respected and supported. Central to that is the independence of the office. However, whilst the establishment needs of the office does not need to be large, currently six people support the Commissioner, some of the review recommendations might need extra resources to be deployed. One area where some of the function could be delivered differently is the administrative support functions.

5.38 Part of the problem stems from the fact that, although the organisation is small, it still requires all of the corporate administration of much larger autonomous bodies implying the need for skills and experience in corporate accounting, payroll and HR for example. It would be possible to relieve most of this pressure if the administrative functions were brought under local or central government control. However, moving the whole of the team to become part of the Scottish Government or, say, the Improvement Service might threaten its perceived independence and, consequently, the very basis on which the office has been successfully established.

5.39 An option that might deliver the efficiencies whilst maintaining that level of independence would be for the Commissioner to continue to be appointed by Ministers in the same way as currently happens but for his/her administrative support staff to be housed within either local or preferably central government within Scottish Government. There could also be the opportunity for Scottish Government to make use of inward secondment arrangements to import specialist expertise from local authorities and utility companies to assist with specific projects

Recommendation 20: The Scottish Government should explore different ways of supporting the SRWC that would reduce the administrative burden on the Commissioner whilst maintaining his/her independence.

Different support structures

5.40 A recurring theme throughout the review has been around inspections and noticing; in particular the importance of consistency of approach in the way in which they are administered and applied from authority to authority and the need for parity of treatment of roads authorities and utility companies. Grouping road authority areas together to deliver the SRWR noticing back office functions as well as the inspections could deliver that required level of consistency as well as operational efficiencies. Staff could be seconded from local authorities – largely those currently doing this work – and could be grouped to align with the RAUC(S) area structure, although it could require, perhaps, two or three groups per area. These teams would report either within the local government structure or directly to the SRWC. Funding could come from inspection costs if the inspection regime and the cost of inspections were revised to cover the true costs of administering an appropriate inspection regime as described in Recommendations 10 and 12. The cost of inspection would be levied on both roads authorities and utility companies, however this increased cost to roads authorities would be more than offset by the roads authorities not having to pay for the inspectors. The costs of the back office staff managing the SRWR operations could be covered by the introduction of a small Noticing Charge – again applied to all – or from the revenue generated by FPNs.

5.41 The Improvement Service is currently developing ‘Regional Clusters’ as the main way in which it is seeking to deliver road maintenance efficiencies. One of these regional clusters has ‘co-ordination of road works’ as one of its target initiatives; there would be an opportunity for the road works community to work with the Improvement Service to explore how grouping of these functions would fit within this initiative.

Recommendation 21: The SRWC, Transport Scotland and RAUC(S) should engage with the Improvement Service to develop a pilot project through one or more of the Regional Clusters aimed at grouping RAs together to deliver back office and inspection services more effectively and efficiently

An independent inspectorate

5.42 An alternative approach would be to establish an independent inspectorate, that would operate autonomously but report to the SRWC in a similar way to the model above. The inspectorate could be fully funded from inspection charges if they were reviewed as described in recommendations 10 and 12. If the inspection costs continue to fail to cover the true costs of all inspections funding could also be supported by FPNs. Many consultees have expressed concerns about the concept of generating funding from FPNs in order to sustain the organisation; in any case, it would seem sensible, in setting up an independent inspection regime, to set the costs of inspections at a level that supports the organisation.

5.43 A truly independent inspectorate would allow the same level of scrutiny to be applied to both roads authorities and utility companies. Furthermore, it would help to ensure that a consistent level of enforcement was applied at a Scotland-wide level. As the structure of an independent inspectorate is likely to be quite similar to that described in 5.38 above, one option would be to work with the Improvement service to introduce that model and only move towards an independent inspectorate if that model failed to deliver the desired outcomes. It is interesting to note that road works in Northern Ireland, which are overseen by one organisation, appear to have the lowest level of Inspection failure in the UK. This is described in Paragraph 4.5.

Chapter 6 – Conclusions and recommendations

High level issues

6.1 The way in which road works are co-ordinated and delivered in Scotland compares favourably with approaches in other countries. The organisational structures are similar to those operating elsewhere and, whilst there are some things that might, if introduced, bring improvements there are elements in what we do in Scotland that are better than elsewhere; the Scottish Road Works Register being the most obvious example.

6.2 The SRWR is an outstanding demonstration of collaboration and co-operation of the Scottish road works community over a sustained period of time to develop, deliver and operate a system that meets the needs of the community and supports effective management of the administrative processes. It reflects the high level of co-operation and collaboration that clearly exists across the road works community in Scotland.

6.3 Throughout the review I have been very aware of the strengths of the current delivery landscape and, in bringing forward suggestions for change, to consider the likely impacts – positive and negative – on what is currently in place. So, whilst I do believe that there is a lot that is good in what we currently do, I am also convinced that we could do things better; and I sense that there is a real appetite amongst many to do just that.

6.4 In the sections below I discuss where I think we are and where things might be improved under the three headings of Independence, Improved Collaboration and Enhanced Enforcement, as requested in the review brief; I have also brigaded the 21 recommendations contained in Chapter 5 under the same headings and incorporated them into my overall conclusions.

Independence

6.5 It is very clear from the range of discussions and consultation responses that the role of the SRWC is well respected and supported by the road works community in Scotland and is considered highly by those in the rest of the UK; in fact a number of people from outside Scotland expressed a view that they felt such a position would be beneficial to their area of interest.

6.6 The level of support within Scotland is striking with not one person that I spoke to expressing the view that the Commissioner does not provide a very welcome function. Central to that support is the independence of the Commissioner; the fact that the Commissioner, both in the manner that the post has been established and in the way that the current and previous post holders have engaged with others, is seen to be even handed and independent is something that is universally valued and seen by most people as a prerequisite for their continued support.

Governance models

6.7 It is clear that the way in which roads authorities carry out their noticing and inspection regimes is hugely variable. This is, perhaps, one of the most significant issues to be addressed as it impacts on co-ordination and delivery at a fundamental level. Reducing the number of separate authorities that undertake this function whilst at the same time strengthening the linkages to the SRWC would establish the organisational structure that would enable a more consistent and effective regime to be put in place whilst maintaining the independence of the Commissioner.

Recommendation 21: The SRWC, Transport Scotland and RAUC(S) should engage with the Improvement Service to develop a pilot project through one or more of the Regional Clusters aimed at grouping RAs together to deliver back office and inspection services more effectively and efficiently

Supporting the functions and office

6.8 As I discussed in paragraphs 5.37 to 5.39, the independence of the SRWC is derived almost exclusively from the way in which the Commissioner is appointed and in the manner that he/she conducts him/her-self. It should be possible to maintain that highly valued level of independence whilst reducing the staffing and administrative burden on the commissioner by the commissioner seconding staff, rather than employing them directly. This would have added advantages in terms of the quality of staff that the Commissioner would be likely to be able to draw on and opportunities to second staff from roads authorities and utility companies.

Recommendation 20: The Scottish Government should explore different ways of supporting the SRWC that would reduce the administrative burden on the commissioner whilst maintaining his/her independence.

Management of SRWR and 'keeper' role

6.9 There is no doubt at all that the SRWR is an excellent tool, capable of delivering on the purpose for which it was developed extremely well. However, whilst there is a map based interface that is available for public use, it is really not that useful. That, in part, is around the user interface but is also related to the current noticing requirements related to the start and finish of works. Consultation with stakeholders has provided a very strong message that this is something that wider stakeholders would really wish to be addressed and many have expressed a strong desire to become involved in developing a better interface. If this were linked to a willingness to revise the noticing requirements it should be possible to deliver a better product. This might be done as part of the next SRWR support contract but could also be developed by independent providers if the data were made available in line with open data requirements.

Recommendation 5: The SRWC should establish a Working Group, which should include representatives of the wider stakeholder group, to consider possible changes to the SRWR which might allow a better public facing aspect to be delivered without threatening the original purpose of the Register. The Group should report in time for any agreed changes to be incorporated into the next contract for SRWR support services.

Recommendation 6: Any changes to the noticing requirements for the start and finish of works required as a consequence of Recommendation 5 should be reviewed and changes made where appropriate.

Improved collaboration

6.10 Whilst there is a general willingness within the road works community to seek to work together there is, at times, a lack of rigour around assessing how well things are working and addressing, robustly, areas of non-performance. There is a particular issue in this regard in the way that Area RAUC(S) meetings provide the linkage between local and national RAUC(S) meetings; the SRWC taking a stronger role in reporting on the performance of both roads authorities and utility companies that would demand discussion and explanation would go a long way to addressing this issue. I know that this is something that the current Commissioner is aware of and is currently discussing with RAUC(S) co-chairs.

6.11 I was very encouraged when I met contractors and their representative body, CECA, by their very receptive attitude to the issues that we discussed. Their level of interest and willingness to work with others to develop an industry considerate contractor scheme as well as a training and accreditation scheme for operatives was extremely encouraging. This is something that, most certainly, has the potential to deliver significant benefits for the public. Linked to this, it is important that the SRWC reviews and defines how he/she wishes to track enquiries and complaints, particularly those that come into his/her office.

6.12 One of the biggest concerns for utility companies is the difficulty that they believe they encounter in bringing forward better and innovative techniques and materials. Whilst it is right and proper that any potential amendments to the SROR are considered carefully, it does seem to me that the current process could be improved upon. Developing a process that defined, clearly the proposed circumstances under which the proposed method/technique would be used would allow the SRWC to take the proposal to the Scottish Road Research Board for independent assessment.

Recommendation 4: The SRWC should continue to develop a more focussed approach to using the outputs from the SRWR to stimulate discussion at local, area and national meetings with the aim of encouraging improved and more consistent performance. Summary outputs should be circulated ahead of RAUC(S) meetings; these outputs should be the same or similar to those reported quarterly and annually

Recommendation 15: The SRWC and RAUC(S) should engage with CECA to consider whether there would be merit in developing a Considerate Contractor scheme and, if so, what it might look like and how it could be incorporated into future utility contracts.

Recommendation 16: The SRWC and RAUC(S) should engage with CECA to consider how best to develop a training and possible accreditation scheme for operatives that would ensure that all operatives engaged with the public appropriately.

Recommendation 17: The SRWC should review how he wishes to track enquiries and/or complaints that come into his office but which are then passed onto others for action.

Recommendation 18: The SRWC, RAUC(S) and Transport Scotland should discuss how the resources of the Scottish Road Research Board might be utilised to support a more flexible but robust process to support innovations in the way that road works might be delivered.

Enhanced enforcement

Scope of offences

6.13 I believe that there is considerable scope for increasing the number of offences for which FPNs are applicable, both related to noticing requirements and also for inspection failures, for which no FPNs currently exist. Some consultees, NJUG in particular, warn that this could threaten the excellent working relationships that currently exist; I don't see why a more fit for purpose approach applied fairly should do that. Moreover, there is evidence that those offences that have been subject to FPNs have shown the greatest improvement in performance.

6.14 A number of roads authorities have said that the level of FPNs means that it costs more to administer the fine than is raised in revenue; whether that is always the case, it does make sense to raise the level of fine in line with inflation.

6.15 Whilst there is quite strong evidence that the reputational damage caused by FPNs is a significant deterrent for utility companies, there is also evidence that where the Commissioner chooses to intervene to address systematic failure, it has a huge impact. Whilst, again, the impact is probably related to the fact that the Commissioner has chosen to get involved as much as it is related to the actual size of the fine, it is right and proper that the level of fines at the Commissioner's disposal is appropriate to the magnitude of the failure and in this, comparison with other similar bodies might be useful.

6.16 There is evidence that some defects resulting from reinstatements do not manifest themselves until after the end - and sometimes a number of years beyond the end - of the current guarantee period. There is also considerable evidence that a large number of reinstatements remain in an acceptable condition many years after installation. Extending the guarantee period would encourage those undertaking the reinstatement to get it right first time more often.

Recommendation 1: Consider introducing Fixed Penalty Notices for failure to properly indentify traffic management requirements, actual start dates, requests for extensions and failure to repair defective apparatus within defined timescales.

Recommendation 3: The cost of FPNs should be increased in line with inflation

Recommendation 7: The guarantee period for reinstatements should be extended to ensure that any defect that is the result of the reinstatement will manifest itself within the period of guarantee. The existing procedures for administering the current guarantee period should be reviewed and adjusted as required to ensure that they remain fit for purpose.

Recommendation 9: Fixed penalty Notices should be introduced for Category A, B and C inspection failures.

Recommendation 14: The level of fines available to the Commissioner should be reviewed in the light of the 2013 Consultation responses to determine whether an increase is appropriate.

Method of policing

6.17 Sample inspections should be set at a level that would provide assurance that works are being undertaken appropriately and the cost of those inspections should be set at a level that covers all the costs associated with that inspection; in this way the inspection regime employed by roads authorities would be self-funding and therefore, equitable. If such an approach were to be adopted, it is essential that it is applied consistently across both roads authorities and utility companies. Roads authorities should develop a common understanding on which noticing failures – and inspection failures – result in FPNs.

6.18 Placing greater responsibility on those actually carrying out the road works to deliver the required quality, and being required to carry out testing as part of a quality plan places primary responsibility in the right place. This, linked to an extended guarantee period, should drive the right behaviours and outcomes. Centralising the coring framework commission would allow all to call off from that commission.

6.19 It is unfortunate that the industry regulators don't seem to consider the way that those that they regulate actually deliver road works is of interest to them; if they were to take an interest, this could only have a positive impact.

Recommendation 10: The level of sample inspections should be increased to provide assurance that all works are being properly undertaken. As a starting point, the 10% level at each of category A, B and C should be increased to 50% and thereafter adjusted up or down depending on performance.

Recommendation 12: The review into the cost of inspections in Scotland needs to be concluded as soon as possible. As a first step, the inspections working group should, as a matter of urgency, review the evidence collected as part of the HAUC(UK) review to determine the extent to which it might be an appropriate basis for the Scottish review. If it is determined not to be appropriate, the group should report the reasons for this to the national RAUC(S) meeting.

Recommendation 13: Any enhanced system of inspection and enforcement should be applied consistently across all of those working on the road network

Recommendation 2: Roads authorities should develop a common understanding of the circumstances under which a Potential Noticing Offence should be converted into an FPN. RAs should consider setting this understanding down as a protocol.

Recommendation 11: The SRWC and RAUC(S) should discuss with Transport Scotland and/or Scotland Excel (as the procurement organisation that supports Scottish local authorities) the merits of procuring all coring via a national framework contract.

Recommendation 8: Those undertaking road works should be required to produce and operate quality plans that set out the proposed method of investigation, excavation and reinstatement. The plans should include proposals for testing of materials and workmanship and should be updated with records of those test results. The quality plans should be made available to the RA for inspection and audit as required.

Recommendation 19: The SRWC should seek to engage with the industry regulators to explore how they might take a closer interest in the way that road works are delivered.

Possible sanctions

6.20 Most of the sanctions for non-delivery, both for roads authorities and utility companies are embedded in the recommendations above; most already exist but many would be enhanced through the recommendations.

6.21 FPNs and Commissioner fines have a major impact, particularly reputationally, on both RAs and UC's; whilst all sanction should always be applied fairly, consistently and reasonably, increasing the scope of FPNs would provide the necessary level of scrutiny across areas currently not covered and which have proved to be problematic. Importantly, more FPNs allows better monitoring and reporting of performance by the SRWC. If this is linked to the Commissioner's proposal to report quarterly to RAUC(S) on performance and, thereafter to RAs and UCs, then this will ensure that performance monitoring is highly visible.

6.22 One of the outcomes of taking forward recommendations 15 and 16 as described in paragraph 6.11 would be the opportunity to discuss with CECA and others the merits of developing a contractor registration scheme. Such a scheme, which would have as its ultimate sanction, the option to ban contractors from carrying out road works for a specified period, would enable

contractor's performance to be monitored more accurately. Evidence from other countries is that the mere threat of such a sanction means that using it is hardly, if ever, in practice required.

Other issues

6.23 This review has brought to my attention a very wide range of possible measures which I have set out in the form of 21 recommendations. Some of these, such as extending the guarantee period fall, strictly, outside the remit of this review; however, as I have explained, whether or not they are taken forward has a huge impact on the effectiveness of some of the other recommendations and so I consider it appropriate to bring them forward as part of my overall conclusions. Taken together, I have no doubt that adopting all of the recommendations would transform the way in which road works are delivered in Scotland.

6.24 We have a huge opportunity; and a road works community that is engaged and used to working collaboratively. Some of the recommendations will be universally popular but many will be less welcomed by some organisations; some, such as extending the FPN regime, will be strongly argued against by the utilities sector, for example. Taking forward those recommendations that are accepted by Ministers will require commitment if they are to be delivered in any reasonable timescale. My final recommendation is that Transport Scotland should work with the SRWC to identify and make available the necessary resources to ensure that this happens.

Appendix A – Consultation Responses

Introduction

A1 I received 34 responses to my consultation paper issued on 27th November 2015 as well as a number of written comments to the review more generally. This appendix reports on the 34 formal responses. A full list of consultees is contained at the end of this appendix.

A2 As I described in paragraph 2.9, of the 34 responses, 15 came from roads authorities or organisations aligned with roads authorities, 3 from utility companies including NJUG and 16 from the wider stakeholder group. Not all respondents answered every question. The responses to the questions asked are as follows:-

Question 1 a) How does the quality and delivery of road works impact on your organisation?

A3 All those who answered with one exception said that the way that road works are delivered had an impact on their organisation. In some cases this was specific to the constituency that they represent; in other cases it was around the broader impact that poorly planned and delivered road works have on public perceptions.

Has an impact – 33

No comment - 1

‘Sight impaired people need to plan and learn routes. Road works can disrupt that, including disruption to bus routes. Potentially road works have a negative effect on the ability of blind and partially sighted people to travel. Disability awareness training of road works personnel would help.’
– Guide Dogs Scotland

‘It has a very significant impact on the level of service delivery of bus and coach companies. This results in inconvenience to the public, extra costs to operators and possible censure from the traffic commissioner’ – Confederation for Passenger Transport

‘Vital to the economy – good co-ordination and road work delivery means less congestion, maximised road space, better reinstatements, reduced level of subsequent repair, secure utilities, a better asset, a network attractive to development, less complaints and reputational enhancement’ – SCOTS

Question 1 b) How well do you consider road works are co-ordinated and delivered in Scotland?

A4 With one exception, all of those who consider that road works are delivered well are within the road works community and all of those that think delivery is poor are in the wider stakeholder group. Of those that thought improvements could be made longer term planning, quality of reinstatements and road user impacts were mentioned.

Good – 11

Improvement possible – 13

Poor – 3

Don’t know/no comment – 7

‘Co-ordination of works programmes up to six months works relatively well. Longer term programme co-ordination would benefit from improvement’ – Dundee City Council

'In general, co-ordination is hard to judge – without good information highlighting good examples, the average road user is unlikely to notice any difference' – Institute of Advanced Motorists.

'Generally delivered well in Glasgow through a mix of formal process (RAUC, SRWR) and partnership working with PUs and road users. GCC has a dedicated SRWR team that includes noticing and inspection staff.' – Glasgow City Council

'Whilst co-ordination has improved there are still major issues around the quality of reinstatements, the competencies of some contractors and the longevity of repairs' – SOLACE

'Works on the footway seem to be poorly co-ordinated with resurfacing/reinstatement being confined to small areas. This can lead to poor quality footways with no plan or triggers for complete resurfacing' – Paths for All/Living Streets.

Question 1 c) Do you have any example of good practice and/or suggested areas for improvement?

A5 – There were a great number of suggestions where current practices could be improved across a wide range of issues. There were fewer examples of good practice cited.

'The SWRC should be more public facing taking up complaints raised by the public through to closing them out. SRWC should also undertake overall co-ordination role for planned road works' – SEStran

'Extend one year ban to three years. Currently a five year ban in England' – RAC

'Better quality reinstatements are linked to better inspection regimes. PUs should have their own inspectors and carry out their own inspections' – East Renfrewshire Council

'Good examples are where two areas of a council or two LAs co-ordinate road works on bus routes. RAs and PUs should be compelled to place notices on the Register as soon as work starts. Current system whereby works don't have to be placed until up to one day after commencement can cause difficulty for bus operators' – CPT

'Presently no incentive for utilities to repair defective apparatus within timescales – introduction of inspection fees would help.

Returning the carriageway to two-way traffic at weekends and evenings where no work is being carried out should be mandatory. Trained operatives should be on site at all times.

Extend guarantee period to 5 years as primary cause of failure is poor compaction which can develop over a longer period than two years. Pursuing utilities beyond 2 years is difficult' – CEC

Biggest example of bad practice is around RAs bringing out last minute resurfacing programmes, usually linked to end-year spending. SGN currently forecast mains replacement three years in advance but can't bring forward work to meet last minute resurfacing programmes. This means that works are often carried out soon after the three year embargo period' – SGN

'ACS has concerns about extending the ban to three years as it would be an impediment to roll out of Broadband. Other utilities already have infrastructure in the ground. BT/Openreach only able to predict 6 months ahead.' – OFCOM Advisory Committee for Scotland.

'Permit schemes in England have produced significant benefits, Whilst not necessarily needed in Scotland some of the benefits might be worth considering' –JAG(UK)

'Glasgow City council point to good compliance with extra management arrangements in place during the Commonwealth Games in 2014 and Scottish Water's self-coring programme as examples of good practice. Another council points to joint training of staff with utility contractors. There is a need for utilities to have longer term programmes to allow road authorities to better programme surfacing and, again, there is the issue of poor quality reinstatements' - SCOTS

Question 1 d) Do you see any merit in adopting a 'Considerate Contractor' scheme for all road works whereby members of the public would be invited to contact the contractor and/or the SRWC on how individual road works were being carried out?

A6 Responses were divided on this question with some very supportive and others strongly opposed; there were also a large number that declined to answer the question.

Agree – 13

Disagree – 16

No answer - 5

'IAM would support a high profile scheme that encouraged higher standards. Would need to be supported by unannounced expert visits and have sanctions for non- performance – TfL made safety part of the procurement process' – Institute of Advanced Motorists

'No formal scheme required. Information on site courtesy boards could be expanded. Additional information could be provided on roadworksscotland.org website' – GCC

'Yes, would identify contractors and let the public know who to contact. It would reinforce that it's not the buses that are inconvenienced, it's the passengers' – CPT

'Anything that improves accountability and ownership would be helpful provided there was an escalation process through the SRWC' – Fife Council

'Any proposal to engage directly with road network users is to be welcomed. Robust up to date information is the key to identifying problems and developing service improvements. A more public facing industry would also help clarify where responsibility lies for road repairs.' – SOLACE

'JAG(UK) considers there are better ways of delivering the same utilising the SRWR as a platform' – JAG(UK)

'Yes, would support CC scheme as it gives the public the opportunity to assist in monitoring of road works. Inspection regime could be targeted where faults are commonly reported.' – Cycling Scotland

'Rather than develop a CC scheme, NJUG believes that implementation of the HAUC Code of Conduct in a consistent manner would deliver the co-ordination benefits that all are seeking. This could be linked to the review of Scottish key performance indicators.' - NJUG

Question 2 a) Primary responsibility for ensuring co-ordination and delivery lies with the roads authorities and the undertakers with the SRWC responsible for monitoring, promoting compliance and promoting good practice: the Commissioner will only intervene when there is systematic failure – do you agree with this approach? Please give reason(s) for your answer.

A7 All who responded agreed that the role of the SRWC is positioned broadly correctly although a number thought that it might be extended and/or enhanced. A number commented that 'systematic failure' needs to be defined.

Agree – 34

'On the issue of the Commissioner only intervening where there is systematic failure it might be helpful for all, especially the public, for this term to be clearly defined. Whilst most of the other SRWC functions and powers have a clear statutory basis or definition, the potential for subjectivity by any Commissioner in exercising the 'systematic failure' criteria does not appear to provide the outcome of greater certainty and clarity to all parties within the process' – COSLA

'Technical and engineering aspects should remain as is. SRWC should perform predominant role in co-ordinating road works and interfacing with the public. Greater emphasis on improving performance on site rather than procedural aspects' – SEStran

'Commissioner's intervention should be on all failures. Once there is systematic failure it's too late' – East Renfrewshire Council

'Systematic' failure should be defined more clearly. The 2013 review highlighted that as many as 70% of all utility works go uninspected and there is a 9% failure rate; both of these figures are concerning. Generally better to deal with local issues locally but a formal avenue where users can raise concerns with the commissioner would be helpful' – CPT

'Yes, agree primary responsibility should lie with RAs (and PUs). However SWRC should do more to support RAs including their key obligations under the Equality Act 2010 and numbers of inspections and appropriately qualified inspectors. RAs should be able to benchmark inspection performance with other RAs. Put in place a full cost recovery scheme for RA inspections both during and after completion of works' – Paths for All/Living Streets

'Yes, agree that local issues should be dealt with locally and only escalated if necessary. Beneficial to have an independent body and system works better than in England, where no such body. SRWC should take a more active role in supporting innovation/new technologies' – SPEN

'JAG(UK) believes that intervening only when there is failure can be seen as too reactive an approach and the SRWC's role should be extended to take more of a lead in delivering change through innovation and closer working with industry partners. For example industry regulators are only focussed on connection of services. The SRWC could engage with Regulators to encourage them to consider road works performance. Important that the SRWC retains his/her independence. The scope of the commissioner's remit and power to issue penalties should be extended to include all duties under the 1991 Act, in particular the duty to maintain apparatus' – JAG(UK)

Question 2 b) How well known and understood do you perceive the SRWC to be? If not well known and understood, do you consider this to be an issue? Please give reason(s) why.

A8 Most of those who responded said that SRWC was well known within the road works community but that was not the case more generally. Six respondents said that they were unaware or only vaguely aware to the Commissioner prior to this review.

Aware - 21

Not/only vaguely aware – 6

No answer – 7

'The SRWC role is not understood outside the road works community. It needs to have a profile akin to the Information Commissioner or the SPSO (Scottish Public Services Ombudsman) where there is clarity on their roles and an understanding of the impact of their intervention can have on an organisation's reputation and financial position' - Ayrshire Roads Alliance

'Well known and respected in the industry. It is a role sought after by colleagues in England and Wales where no such role exists. Not well known outside community and scope to improve this' – SPEN

'I do not think that the Commissioner's role is understood outside the industry. Better promotion of the role, with a more effective armoury of legislative tools at his disposal could allow the post to become a positive beacon for improvement within the industry. The post needs to achieve a profile akin to the Information Commissioner or the SPSO where there is clarity on powers they have and an appreciation of the impact that their intervention can have on both an organisation's reputation and their financial position' – SOLACE

'Not aware of SRWC prior to this consultation. This will be an issue if SRWC wishes to engage more' – Guide dogs Scotland

Question 3 a) The Scottish Road Works register has a public facing element where all planned road works can be viewed at <http://www.roadworksscotland.org>. Were you aware of this facility? Could you comment on its usefulness to you/your organisation?

A9 Four respondents said that they were unaware or had a very low level of awareness prior to this review. Of those that were aware, there was a general view that, whilst it is an essential tool for the road works community, it was of relatively little use to the public in its current form.

Aware – 26

Unaware – 4

No response – 4

'Yes, aware of SRWR public facing website (and similar system in England - <http://roadworks.org>). Excellent tool. Adding contact details of those undertaking work would help but no other changes needed. Should be publicised more. Data should be in a form that can be shared electronically with other organisations' – RAC

'Yes, aware of site and find it very useful. Promoting the site more could be a help to the public' – Western Isles Council

'Website is not consumer friendly; opening message very negative. Maps and information relatively good but not enough detail provided. Information on duration of work needs to be accurate' – Institute of Advanced Motorists

'Aware of SRWR but Traffic Scotland is the first point of call for road users. Register is largely an industry system. Suspect that the public facing part is largely redundant (website hits could confirm?)' – HTMA

'Most operators aware of SRWR. Some use it to identify who is responsible to works that they were not aware of and advise of problems that their works are causing. Some operators prefer to use a combination of the Traffic Scotland and BBC traffic sites to view current and upcoming road works.

Previous work on engagement with PT operators accessing the SRWR has stalled; CPT would like to see this restarted' – CPT

'Were unaware of website prior to Review. Would be keen to work with the SRWC and others to deliver an improved product' – Cycling Scotland

'SRWR useful tool in line with open data requirements and data can be used by both public and private sector organisations. Our website has a link to SRWR website. It is an ideal tool for quick reference but should be advertised more widely to public' – Ayrshire Roads Alliance

'NJUG is very supportive of the SRWR as an effective tool for the recording of all road works; however, whilst the vast majority of works are recorded, there are still discrepancies in the number of road works recorded by RAs which account for 30% of all works in Scotland compared to 50% in England and Wales' - NJUG

Question 3 b) Are there areas where the SRWR might be used to support your organisation?

A9 There were 21 responses to this question, many of them offering suggested areas for improvement. A number of those responding expressed a willingness to become involved in developing an enhanced public facing aspect to the Register.

'If SRWC and SRWR better known by Voluntary Sector Disability Organisations they could have a very good tool to inform their members. Website would need to be accessible to sight impaired people. Register should contain information on what is being done, duration and impact on footways so that disabled people better informed. Name and details of contractor not sufficient. SRWR could actually become the 'considerate contractor'. Could Voluntary sector take on the Considerate contractor overseeing role?' – MACS

'NJUG believes that the public facing element is an important tool in making road works information publically available but it is important to recognise that it was developed to co-ordinate road works and not to aid journey planning. Consequently, notices are not updated in 'real time' – NJUG

'Legislation should be enacted to require electronic records of apparatus in the road to be made available through Vault' – JAG(UK)

'Vault area of register has a lot of potential but needs ALL utilities to commit to it and supply data' – SGN

'Yes, the SRWR has the potential to be an incredibly useful tool if reliably updated and containing accurate start dates. CPT would welcome further discussion with the SRWC on possible development of the SRWR, including possible payment for access' - CPT

Question 4 Do you think that it is fair and reasonable that the full economic cost of road works should be identified and borne by those carrying out the road works? If so, can you explain why? Do you have any thoughts how this would work in practice?

A10 The vast majority of those responding consider that the full economic cost of road works should be borne by those carrying out the works although, reading the answers, it appears that most respondents limit their answer to the cost of making good the damage that might be ascribed to road works – very few consider the wider economic cost of delays etc. to be included in the answer.

Both utility companies that responded and NJUG are against more costs being loaded on the undertaker.

Yes – 22

No – 3

Don't know – 2

No response – 7

'COSLA has suggested in the past rather than seek a monetary payment solution, as consulted upon in 2013, that instead extending the guarantee period to 9-10 years would be a far better way to ensure quality reinstatements, especially if, as argued by the industry, their reinstatements are not at fault and are long lasting, this could be a mutually acceptable option for all stakeholders. Albeit, members highlighted the need to further discuss the practicalities of holding utility companies to account after such a long period via a bond type structure as used in other regulated industries. Members were keen to look at a situation where in terms of complaints the SRWC had a role in holding bonds and retaining elements in some instances rather than handing out fines in partnership with the extension of warranties for repairs to roads from excavations' - COSLA

'Yes, it is right and proper that those benefitting from the road works bear the cost. Full cost recovery could be the catalyst for better co-ordination and co-operation e.g. different utilities utilising the same road opening' – Guide Dogs Scotland

'Majority of road works are essential and contribute to economic health of the country; it is reasonable that society (ie users) should bear cost. Exception might be works overrun – facility to claim. RAC/NJUG survey might provide more information' – RAC

'Some sort of cost per square metre levied at the time of undertaking the road works should be introduced to pay for the long term damage caused by excavations, often only dealt with beyond the guarantee period. Guidance (Code of Practice?) on plant/working methods to be used in excavations would be helpful' – Western Isles Council

'Roads are a national asset provided for the benefit of the community. Organisations needing to open up roads should pay for the 'privilege'. Fundamental priority must always be to keep traffic flowing rather than minimise administrative costs for RAs and PUs. IAM would support pilots and trials of new ways of paying for access' – Institute of Advanced Motorists

'System would be challenging to develop and difficult/costly to administer. May also encourage wrong behaviours' – HTMA

'Lane rental should be introduced for RAs that wish to apply. Costs to reflect loss to authorities economy, diversions, delays, etc and loss to business. Each authority to develop its own cost matrix. CEC does not consider that all costs should be borne by utility' – CEC

'Full economic costs of making good should be borne by those carrying out the works. For every saving a contractor makes by carrying out substandard work, there is a significant wider cost to society (e.g. fall/trips). This is not acceptable. RAs don't appear to have sufficient resources to carry out inspections. Realistic fees are needed and should be ring-fenced to pay for inspectors. Repeat inspections to verify compliance should be charged at a higher rate' – Paths for All/Living Streets
This has been looked at on numerous occasions and has always been too controversial. The best way to preserve the road network is to ensure that the correct reinstatement is carried out in compliance with SROR; if this is inadequate then SROR should be changed to a specification that does not affect

design life. The main reason for poor quality road works is lack of investment in roads infrastructure – SGN

Yes, costs should lie with those responsible for undertaking the works. The cost of long term damage, as discussed in the National Road Maintenance Review, should be part of that equation. Permit schemes in England have resulted in £6.00 of savings for every £1.00 spent; the benefits accruing and the way that they are accrued should be considered as part of the review, if not a permit scheme itself – JAG(UK)

NJUG is strongly against the full economic cost of road works being borne by those carrying out the works as it is incredibly difficult to calculate the economic cost of delays, a charge for long term damage is not proven and may encourage the wrong behaviours and both charges will result in increased utility bills - NJUG

List of Respondents to the Consultation Paper

Roads Authorities and those associated

Dundee City Council
Western Isles Council
Joint Authorities Group – JAG(UK)
East Renfrewshire Council
Perth and Kinross Council
Glasgow City Council
South Lanarkshire Council
Fife Council
SOLACE
City of Edinburgh Council
Shetland Islands Council
Angus Council
Ayrshire Roads Alliance
COSLA
SCOTS

Utility Companies and those associated

Scottish Gas Networks
Scottish Power Energy Networks
National Joint Utilities Group - NJUG

Wider stakeholders

OFCOM
SEStran
Guide Dog Scotland
Road Haulage Association
RAC
MACS
Institute of Advanced Motorists
Highway Term Maintenance Association
Confederation for Passenger Transport
Strathclyde Passenger Transport
Paths for All/Living Streets
Transport Focus
Scottish Futures Trust
Cycling Scotland
CIHT
Digital Scotland (personal response from Robert Young)