

Keeping Edinburgh Moving

The City of Edinburgh Council

18 December 2008

1 Purpose of report

- 1.1 To advise Council of the issues and pressures associated with road works in the city and outline the proposals to ensure they are managed and co-ordinated in such a way as to minimise disruption to the public.

2 Summary

- 2.1 The management and co-ordination of road works is a statutory responsibility of the Council and undertaken according to national procedures and practices. The Council has formed the Edinburgh Road Works Ahead Agreement partnership (summary in Appendix 1) with the main Public Utility companies to aid in the coordination of the control of road occupation.
- 2.2 Roads and pavements are occupied for a number of reasons, such as maintenance of infrastructure by public utilities, works associated with the Edinburgh Tram project, the Council's own road maintenance schemes and other third parties undertaking building and development projects.
- 2.3 The management and co-ordination of all these works is being strengthened: new processes have been put in place and a complete review of all non essential work in the City Centre has been carried out. Work is currently underway to provide a Control Centre to conduct traffic management surveillance and response city wide to enable the active management of Edinburgh's road network and quickly respond to emergency situations which cause unforeseeable disruption.
- 2.4 A new strategy of communicating information to the public is being developed to ensure early warning of delays are publicised and the public are kept informed regarding disruption that could occur during unforeseen or emergency incidents.

3 Background

- 3.1 Roads and pavements across the city are dug up or coned off for a variety of reasons associated with maintenance of infrastructure by public utilities, the Council's own road maintenance schemes, development led construction projects and the Edinburgh Tram project. The Council has a duty to manage,

permit and co-ordinate all of these works and this is presenting a significant challenge due to the sheer number and scale of works to be accommodated, particularly in the city centre and arterial routes. Whilst this intensity of work presents a challenge in the short-term, the city will benefit in the longer term from better quality public utility and transport infrastructure.

- 3.2 The Edinburgh Tram is the biggest construction project in Scotland affecting the public realm and the requirements to alter underground utility apparatus and then build the infrastructure, means that certain city streets will be dug up on a continual and rolling programme until the opening in 2011. These works are planned and co-ordinated by stakeholders including tram managers, contractors, police, bus operators and council representatives. Financial and timing pressures mean that several work sites have to be opened at the same time and roads are entirely closed to traffic to allow safe working.

4 Minimising obstructions to traffic flow

- 4.1 The Public Utilities have a statutory right to place and maintain their apparatus in roads and pavements although they are required to inform the Council of any such work in advance (other than emergencies). These works range from minor service connections in residential streets to the major mains installation work on busy roads and they are the most significant disruptive factors in the road network, forming 85% of all roadworks in the city.
- 4.2 The Council programme of Capital maintenance works is delivering significant improvements currently at the rate of £20M this year, a 500% increase from the level invested four years ago. It is recognised that the undertaking of the capital maintenance programme of works in the city centre, in the vicinity of the tram works and on the main arterial roads would put unacceptable disruption and delays on the travelling public.
- 4.3 Builders and developers often have to occupy roads to carry out tasks such as erecting scaffolds, deploying cranes and placing skips. In each case written permission is required from the Council and conditions are applied to ensure the works are carried out safely, with minimal traffic impact if possible. Staff dealing with these applications will robustly challenge the need for the works and insist on contingency arrangements being implemented by the developer and in extreme cases refuse consent. It is however acknowledged that in some cases there is no alternative if the development is to proceed and a balance has to be found.
- 4.4 Traffic can also be disrupted by other unforeseen events often outwith the Council's control and these include building fires, vehicle accidents, breakdowns and traffic signal failure. These situations are managed by the police in the first instance with the Council assisting should longer term arrangements be required.

5 Short term actions

- 5.1 **Governance Changes** – A new governance structure proposes a City Wide Traffic Management Board, chaired by the Head of Transport, to assess and oversee works which may have a major impact on Edinburgh's transport

network. The terms of reference, composition and escalation procedures for this group, and those reporting to it, are being formalised. The Board will consist of senior Council Officers, Lothian and Borders Police, Lothian Buses (and other companies where appropriate), tie and other key stakeholders by invitation. It is proposed that major issues arising from the Board be referred to a Member Sounding Board where appropriate.

- 5.2 **Review of all non-essential works** – The Council programme of Capital maintenance works has been re-profiled to defer the commencement of 25 projects in the city centre and main arterial routes in 2008/09, and further schemes in 2009/10 and 2010/11, until after the completion of the tram construction. The Neighbourhood Partnerships have been consulted and will be kept informed of these developments. The condition of the roads and pavements where schemes are deferred will continue to be monitored and appropriate intervention will be made if necessary. These revisions to the programme were approved by the Transport, Infrastructure and Environment Committee on 25 November where it was noted that a small number of these schemes may still proceed if an acceptable work method (eg. night time) can be found.
- 5.3 All major utilities have been asked to review their programmes for the next three years to avoid aggravating the situation. Any utility works proposed in these sensitive locations is now challenged rigorously and permission will only be granted where there is justification e.g. a significant safety factor such as the replacement of a leaking gas main.
- 5.4 **Co-ordination of utilities and other third parties** - Officers consider proposals for projects and all stakeholders meet to agree the best way to carry out the works. The Council has the ability to impose reasonable conditions on the works and this often includes the most appropriate timing of the scheme.
- 5.5 The Council is in partnership with the major utility companies through the Edinburgh Road Works Ahead Agreement, working together to coordinate the planning of works, cleanliness and safety of sites and signage and to ensure that the public is sufficiently informed of the purpose of the works and the start and finish times of the project.
- 5.6 Sites will be audited by representatives of the Neighbourhood Partnerships and the community, along with Council officers to ensure compliance. Failure to comply with the agreement is taken up with the utility and will be the subject of a £120 Fixed Penalty Notice. The Utilities have been informed the Council will use all the powers available to issue Fixed Penalty Notices as a way of improving the performance of undertakers.
- 5.7 **Interim Traffic Control Centre** - A Centre will be established using existing facilities, such as CCTV, to monitor and control traffic through the computerised signalling and information systems in conjunction with the key stakeholders. The Centre will hold the information of all road works and have an overview of the whole city and be able to identify conflicting works, before they start and react to emergencies that may occur. Appendix 2 "Control Centre (Short term)" represents the principals of the Centre showing the way information will be

received and be communicated to the public as well as shared with other stakeholders.

- 5.8 **Communications Strategy** – New tools and processes are being implemented as part of the revised communications strategy to address the need for accurate and timely information to the travelling public and business community. Information about closures, diversions, alternative routes and travel issues will be tailored to the audience and will be timely enough to enable decisions about travel or business arrangements to be made well in advance. City companies and organisations will be included in the process to cascade information, tailored to the needs of their own customers and staff. Additional media partners may be sought to assist in this.

6 Longer term actions

- 6.1 In the longer term a more robust strategy for planning and co-ordinating works will be developed by introducing:
- 6.2 **Dynamic traffic model** – A model of traffic patterns will be developed for the whole city to include key junctions, arterial routes and the interaction with adjacent trunk roads. This will be used to determine, with greater confidence, the capacity of roads when temporary traffic arrangements are required.
- 6.3 **Additional traffic counters** – These will be installed at key locations to measure and understand the changing patterns of traffic.
- 6.4 **Permanent Control Centre** – The location for a centre will be identified in consultation with other stakeholders including the police, bus operators and tram operators.
- 6.5 **Traffic Reduction Strategy** – The amount of traffic crossing the city centre will be reduced by identifying and signing alternative routes and this will be developed in consultation with other stakeholders.

7 Financial Implications

- 7.1 The interim control centre will require funding both for set up and operation and is estimated at £100k. These costs will be borne by existing Services for Communities and City Development budgets in the current year as it is planned to set up the centre prior to the Princes Street tramwork. Discussions will also be held with tie to consider a potential contribution to the costs.
- 7.2 The collection of traffic flow information will require a budget of £50,000, which will be met by existing Services for Communities and City Development budgets. The cost of a dynamic model of Edinburgh's traffic will be investigated and identified in a future report.
- 7.3 A permanent Control Centre requires further scoping and design. Set-up costs in existing buildings are expected to be around £200,000 and annual operational costs will be around £250,000. This will be the subject of a separate report.

8 Environmental Impact

- 8.1 Any type of road works has an impact on the community and the Council uses powers available to reduce or eliminate the disturbance. Road works can be speeded up with round-the-clock working and night shift but in many locations this is not possible because of the noise impact near residential properties. However, where night time works are possible without disturbing communities, these will be considered in discussion with the Neighbourhood Partnerships.
- 8.2 A proportion of this work supports the delivery of the tram project which will make a significant contribution to reducing harmful emissions in the city centre.

9 Conclusions

- 9.1 The amount of road works and occupations have increased considerably in the city and will continue and grow in the foreseeable future. There are competing reasons and differing justifications and priorities for these works and a fair and balanced approach is required to satisfy the aspirations of all the stakeholders.
- 9.2 A fundamental change is proposed in the governance of all road works to ensure that disruptions and delays to the public are minimised. Clear lines of communication are being established along with a demarcation of responsibilities and powers. This will include a process of escalation to a senior level if conflicts are not easily resolved. A stricter control of public utility works is already in place and there is a continual review of Council, Utility and third party proposals in an attempt to delay them during the tram construction.
- 9.3 Information on traffic patterns will be gathered to inform those designing temporary arrangements, in the future, so that they can be confident that their proposals will succeed.
- 9.4 An interim and then permanent Control Centre will be established as a focus for all works in the city and this will be the forum to gather details, make decisions and intervene when issues arise and communicate information to customers and liaise with other stakeholders.

10 Recommendations

It is recommended that Council;

- 10.1 Notes the content of the report:
- 10.2 Notes that the revenue costs for the set up and operation of the interim control centre and for the collection of traffic flow information will be met from existing Services for Communities and City Development budgets.
- 10.3 Approves the arrangements for improved governance of all road works.
- 10.4 Notes that a further report will be presented on options for a permanent control centre co-located with the tram operator, bus operator, police and other stakeholders, along with associated set up and running costs.

10.5 Instructs the Directors of Services for Communities and City Development to report further on a project to develop a city wide traffic model.



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Director of Services for Communities

10/12/08



Dave Anderson
Director of City Development

Appendices	1. Edinburgh Road Works Ahead Agreement 2. Control Centre – Short Term
Contact/tel/Email	Sandy Wallace 0131 529 3436/Euan Kennedy 0131 529 3732/Alistair Malcolm 0131 469 3641
Wards affected	All
Single Outcome Agreement	
Background Papers	

EDINBURGH ROAD WORKS AHEAD AGREEMENT

The City of Edinburgh Council and Public Utility Companies recognise the special status of the city as the Capital of Scotland, a major tourist destination and a World Heritage Site.

In recent years the City has been at the forefront of commercial development linked with a thriving business environment.

This is also associated with a demand for housing and retail support facilities, which has resulted in a need for an upgraded, reliable Utility infrastructure.

It is recognised that without the availability of secure networks of electricity, gas, telecommunications, water & drainage, major developments will not be readily attracted to the City of Edinburgh.

However it is equally important the road network is managed in an effective and efficient manner and the way in which Utility and other road works are co-ordinated with the City of Edinburgh Council's own works programmes, is a major element in achieving this aim.

Despite improvements in materials and installation technology, there is a recognition that most Utility installations are carried out by open track excavation.

The requirement to manage and co-ordinate road works, to reflect the special conditions in the City of Edinburgh and at the same time balance the needs of the public, customers and the future development of the city in a sustainable manner is essential.

The partners shall review the implemented procedures to ensure the impact on the public and other road users has been minimised through better planning and execution of road works.

Accordingly, the following commitments have been made by the signatories:-

(A) TO MINIMISE TRAFFIC CONGESTION AND THE IMPACT OF ROAD WORKS TO THE PUBLIC BY IMPROVING COMMUNICATION AND CO-ORDINATION THROUGH :-

1. Improving communications and co-ordination between the Agreement Partners through regular meetings with individual Utility Companies, and improving procedures for informing the public where they may be affected by road works operations, and ensure there is sufficient information boards provided on site.
2. The implementation of the Improved Communications Strategy.

3. Demonstrating that all staff involved in road works operations have receive adequate training in the management and maintenance of road works sites to acceptable standards.
4. An undertaking to supervise and monitor road works operations to ensure that all statutory and local requirements are being met and, to minimise the impact on road users by taking steps to maximise the productive hours available while traffic management is in place.
5. Ensuring roads are not occupied unnecessarily when works are not being undertaken and if there is a delay to completing the works then the road is returned to traffic temporarily whenever practical and safe to do so.

(B) TO IMPROVE THE QUALITY OF REINSTATEMENTS AND GENERAL WORKMANSHIP BY STRENGTHENING QUALITY ASSURANCE SYSTEMS, SUPERVISION ARRANGEMENTS AND MATERIAL QUALITY THROUGH:-

1. An undertaking to apply a Quality Assurance System that demonstrates a consistent approach of planning and execution of works which ensures the quality of materials and workmanship meet the required standards. Regular audits are carried out and that the records are available to the review team.
2. Ensuring that adequate supervision is provided for reinstatement works and staff are sufficiently trained and hold the appropriate level of recognised qualification.
3. Encouraging the use of new materials, products and processes that may provide a number of benefits being:
 - Reduced construction costs;
 - Reduced construction times;
 - Reduced disruption to traffic;
 - Reduced environmental impact;
 - Improved quality of reinstatements.
4. Ensuring traffic management, materials, workmanship and communications used in reinstatement works are of adequate quality, within specification and fit for purpose.
5. Ensuring all reported defects are dealt with appropriately and registered on the Street Works Register.

(C) TO IMPROVE SERVICE PERFORMANCE THROUGH THE INTRODUCTION AND MONITORING OF THE FOLLOWING PERFORMANCE INDICATORS:-

1. The percentage of cores sampled and tested that fully comply with the requirements of the current Specification.
2. The percentage of materials sampled and tested that fully comply with the relevant specification.
3. The percentage of sample inspections that fully comply with the requirements of the relevant Codes of Practice.
4. The percentage of correct notices issued.
5. The percentage of sites where the traffic management fully complies with the requirements of the Safety of Street Works and Road Works Code of Practice.
6. The percentage of defects rectified within the specified timescale.
7. The percentage of works that exceed the planned duration.

(D) TO IMPROVE SAFETY AT ROAD WORKS THROUGH THE IMPLEMENTATION OF A HEALTH & SAFETY PROTOCOL BY:-

1. Establishing closer working relationships between Health and Safety Managers / Professionals of the Agreement Partners.
2. Ensuring adequate supervision is provided at road works and that staff are sufficiently trained in this discipline and hold the appropriate recognised qualification.
3. Demonstrating that improvements to road safety are being achieved through effective planning and execution of road works operations.

(E) TO IMPROVE THE ARRANGEMENTS FOR THE EFFECTIVE CO-ORDINATION AND MANAGEMENT OF ROAD WORKS THROUGHOUT THE CITY OF EDINBURGH AREA BY:-

1. Clearly defining the administrative and operational procedures for the exchange of accurate and reliable information.
2. Providing specific training for Operators of the SRWR electronic system, designers and works planners within the Agreement Partnership organisations, highlighting the importance and necessity for improving the quality, and accuracy of information provided on notices.
3. Identifying best and worst practice and disseminating information within the partnership to facilitate best practice.

4. Fully complying with the requirements of the relevant legislation and Codes of Practice with regards to notices.
5. Encouraging better co-operation to enable the Road-Works Authority to properly co-ordinate road works within the City of Edinburgh area and to ensure information is provided to achieve this.
6. An undertaking from the partners to notify each other promptly of changes to management structures or key staff, including operational responsibilities, names and contact phone numbers.
7. These structures will be reviewed, updated and distributed to the Agreement Partnership organisations at the local RAUC meetings.

(F) ESTABLISH A REVIEW TEAM TO PROVIDE REPORTS ON PROGRESS TOWARDS THE PARTNERSHIP'S STATED OBJECTIVE THROUGH:-

1. The development and implementation of a monthly team monitoring programme.
2. Providing data on performance, workmanship and quality required for Performance Indicators and test results and the sharing of information will greatly assist with progress towards achieving the Agreement objectives and will be used as a measure of the effectiveness of the Agreement partnership.
3. The working relationship between the Road Works Authority and the Public Utility Companies is underpinned by the various documents listed below that encompass the current statutory requirements for all organisations involved in road and street works.
 - New Roads and Street Works Act 1991.
 - Transport (Scotland) Act 2005.
 - Code of Practice for the Co-ordination of Street Works and Works for Road Purposes and Related Matters.
 - Safety at Street Works and Road Works – A Code of Practice.
 - Specification for the Reinstatement of openings in Highways – A Code of Practice.
 - Code of Practice for Inspections.
 - Measures Necessary Where Apparatus is affected by Major Works (Diversionary Works).
 - Best Practice in Street Works and Highway Works.

EDINBURGH ROAD WORKS AHEAD

ROADWORKS CUSTOMER CHARTER

1. The Agreement Partners' aim is to achieve Best Practice by means of a collective approach towards minimising the impact of road works on the general public and reducing delays and disruption.
2. The Agreement Partners' will aim to provide work of the highest quality at all times and will monitor the performance actually achieved.
3. Any planned road works, which are considered will cause significant delay and disruption or environmental impact on the community, will be given appropriate advanced publicity.
4. A Communications Strategy will be implemented to improve the information available to those both directly and indirectly affected by road works.
5. Any comments or complaints from the public will be fully investigated and responded to.
6. On major works a representative of the undertaker, or their agent or contractor, will be available to deal with all enquiries.
7. The Agreement Partners will monitor performance and publish an Annual Report.

EDINBURGH ROAD WORKS AHEAD AGREEMENT

IMPROVED COMMUNICATIONS STRATEGY

The Edinburgh Road Works Ahead Agreement stipulates that all partners are required to develop improved procedures for communicating with the members of the public that may be affected by their planned road works operations.

The level and extent of communication will be dependent on the size, extent and duration of the works and the impact they will have on road users, residents and frontages.

The attached matrix gives direction on the appropriate communications strategy to be adopted. These measures are based on the following two criteria, road hierarchy and significance of operation.

These criteria are defined as follows:-

1.0 ROAD HIERARCHY.

- 1.1 Traffic Sensitive Streets.
- 1.2 Traffic Sensitive Streets out with peak hours.
- 1.3 Non-Traffic Sensitive Streets.
- 1.3 Cycle ways.
- 1.4 Foot ways – Prestige streets e.g. Princes Street.
- 1.5 Footways – Primary walking routes, busy shopping centres and main routes linking interchanges between modes of transport.
- 1.6 Footways – Secondary walking routes.

2.0 SIGNIFICANCE OF OPERATIONS.

- 2.1 Significant Operations will be regarded as significant if:-
 - 2.1.1 Any road closure.
 - 2.1.2 Two-way traffic cannot be maintained, with the exception of one-way streets, and/or the numbers of lanes have been reduced.
 - 2.1.3 Vehicle access to frontages or driveways cannot be maintained out with site working hours.
 - 2.1.4 Pedestrian movements are disrupted such that access cannot be maintained to the frontages of properties or free passage is hindered out with site working hours.

INFORMATION TO BE PROVIDED

1. The organisation responsible for the works.
2. The reason for works.
3. A contact telephone number.
4. The estimated length of time of operation / restrictions.

COMMUNICATIONS MATRIX

SIGNIFICANT IMPACT	Media	Letter drop to frontages and residents directly and/or house to house where affected by works	Advanced Notice of Works Signs	Roadside Information Boards
Traffic sensitive streets: <i>Within prescribed hours</i>	X	X	X	X
Traffic sensitive streets: <i>Out-with prescribed hours</i>		X	X	X
Non-traffic sensitive streets		X	X	X
Cycle ways			X	X
Footways: <i>Prestige streets</i>	X	X	X	X
Footways: <i>Primary walking routes</i>		X	X	X
Footways: <i>Secondary walking routes</i>		X		X

COMMUNICATIONS MATRIX

NON-SIGNIFICANT IMPACT	Media	Letter drop to frontages and residents directly and/or house to house where affected by works	Advanced Notice of Works Signs	Roadside Information Boards
Traffic sensitive streets: <i>Within prescribed hours</i>				X
Traffic sensitive streets: <i>Out-with prescribed hours</i>				X
Non-traffic sensitive streets				X
Cycle ways				X
Footways: <i>Prestige streets</i>				X
Footways: <i>Primary walking routes</i>				X
Footways: <i>Secondary walking routes</i>				X

EDINBURGH ROAD WORKS AHEAD AGREEMENT

PROCEDURES FOR MANAGING REQUIREMENTS

(A) A REDUCTION IN TRAFFIC CONGESTION CAUSED BY ROAD WORKS OPERATIONS.

Prior to any road works operation regarded as “significant”, commencing on site, a pre-start meeting must be held, within an agreed timescale to which Lothian and Borders Police Traffic Management Division and all affected Bus Operating Companies will be invited. The meeting will discuss and agree the temporary traffic management arrangements which will be designed to minimise disruption and congestion.

All Partners will comply with the Improved Communications Strategy.

The Road Works Authority will be notified of the following information in advance:

- The type of work being carried out; and
- Details of traffic management proposals for the work being carried out; and
- The proposed start date of the works; and
- The expected duration of the works and completion date is to be agreed with the Roads Authority.

All Partners agree to share advanced details of the location and timing of their planned works with each other in an agreed format to allow notification and discussion at the local co-ordination meetings.

(B) IMPROVED QUALITY OF REINSTATEMENT AND GENERAL WORKMANSHIP.

All Partners will undertake to operate a Quality Assurance System.

Regular audits will be carried out and reported upon to ensure compliance with Quality System requirements.

Site personnel will be trained and qualified to the required standards.

Site records will be completed to log all activities for road works defined as “significant”.

Site diaries may include comments on the following:

- Plant, labour & materials on site

- Traffic management evaluation
- Site safety evaluation
- Site cleanliness
- Damage to services

Quality Systems adopted will state the frequencies for sampling and testing, including coring, for all road works operations defined as “significant” to ensure that materials used in reinstatements are of adequate quality, within specification and fit for purpose.

(C) IMPROVEMENT OF SERVICE PERFORMANCE.

The Partners will ensure that the agreed Performance Indicators are measured and reported for all elements and stages of their road works operations.

The Partners will abide by the Road works Customer Charter and agree to attend regular meetings to discuss improved methods of working, material specifications, material testing results, report on quality audit results and the way forward for achieving continuous improvement.

They also agree to share information, and other relevant data, to enable the Performance Indicators to be kept up to date.

(D) IMPROVEMENT IN HEALTH AND SAFETY AT ROADWORKS.

The Partners agree to hold meetings between Health and Safety Managers or other responsible persons, when appropriate, to discuss site safety issues and staff training and qualification requirements.

The Partners agree to adopt procedures for the rapid resolution of issues of Health and Safety identified at road works sites. This will include recording of all incidents involving damage to persons or property caused either directly or indirectly by the road works operations.

(E) IMPROVEMENT OF OPERATIONAL PROCEDURES.

The Partners will ensure that the information provided on all notices, and responses to notices, is correct and accurate, is provided timeously and in accordance with the requirements of current legislation and relevant Codes of Practice.

The Partners will co-operate to enable road works within the City of Edinburgh area to be co-ordinated and agree to the disclosure of all information to achieve this.

The Partners will provide details to each other of their management structures, and associated responsibilities and will advise timeously of any key staff changes to ensure that these key individuals can be contacted and consulted when necessary.

In addition to the above, the Partners will provide each other with details of their operational staff structures with contact names and telephone numbers. The information provided will be updated at the local RAUC meetings.

The Partners also agree, where appropriate, to encourage the use of new materials, processes and products, that may result in cost savings, the reduction in construction times, environmental impact and disruption.

(F) THE REVIEW TEAM.

A team will be formed from the partners on one full day a month to inspect and audit individual road works sites. The team will comprise of one road works authority representative and three Utility representatives and an invited member of the community. 'Live' sites will be randomly chosen from the 'Street Works Register' and visited by the team who will complete a 'Performance Monitor Form' which will address issues such as signing, safety, tidiness, quality of work and disruption to the public. Each site will be scored and these will be taken forward to overall scores for each road undertaker.

GIS maps of capital programme, utility works



Parking attendants are eyes and ears on the ground

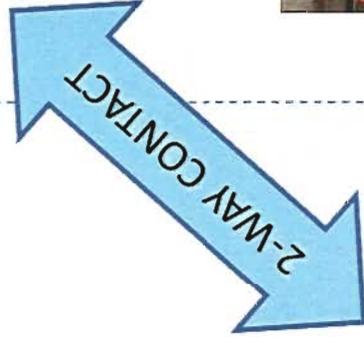


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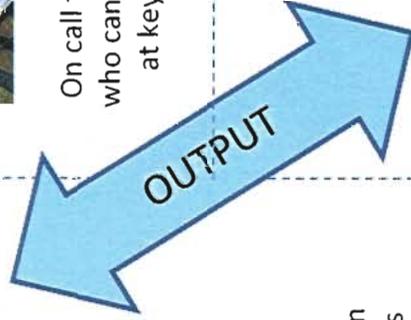
CCTV control room in the city chambers



Bus drivers feedback



Control Centre (Short term)



Decision maker on site



Third party senior person – tie, utility, developer, etc who is in control of the works



Parking attendants to check for illegal parking and unloading



DON3 – can respond with signs, cones and barriers



On call traffic police who can direct traffic at key junctions



SCOOT officer who can make remote changes to traffic signals



Communication with the travelling public