

**Wirral Council  
Environment and Regulation Service**

**Traffic Signal Maintenance Contract Options Appraisal**

**1.0 Background**

- 1.1 The current five year traffic signal maintenance contract is due to expire on 31 March 2014. The contract does have the option to be extended subject to satisfactory contract performance by the contractor and value for money being demonstrated.
- 1.2 The Local Partnerships methodology for options appraisal has been used to evaluate a range of options for the maintenance of traffic signal operations in Wirral. Local Partnerships is a body jointly owned by the HM Treasury and the Local Government Association.

**2.0 Options Appraisal**

- 2.1 An options appraisal is used to assist authorities in decision making on key policy, programmes or projects. The process involves the assessment and evaluation of different ways to achieve project objectives, consider whether the use of resources could be improved and the best option for achieving required outcomes.

**3.0 Options Appraisal Team**

- 3.1 An options appraisal team was established for the traffic signal maintenance contract options and consisted of :-
- Head of Service Environment and Regulation
  - Service Manager Traffic and Transportation
  - Service Manager Highway Management
  - Traffic Network Manager
  - Principal Engineer Traffic Signals
  - Business Analyst Change Team

**4.0 Options Appraisal Process**

- 4.1 The process for options appraisal consists of :-
- Setting the objectives for the project to be assessed and evaluated;
  - Assessing those objectives and establishing weights to reflect the importance and significance to the Council;
  - Setting out options that have the potential to achieve the stated objectives; and
  - Using criteria to assess the ability of each option to achieve the required objectives.

**5.0 Objectives**

- 5.1 The team set out the following objectives for traffic signal maintenance :
- Meet the statutory obligations for traffic signals maintenance;

- Reduce the on-going cost to undertake traffic signal maintenance and reduce the revenue burden on the Council;
- Deliverability of the project to the Council's savings timetable (2015/16 onwards);
- Flexibility to adapt to emerging issues and opportunities and changes in statutory framework or policy context;
- Ability to embrace innovation and advances in traffic signal technology;
- Council retains robust accountability and performance management arrangements;
- Well maintained infrastructure of traffic signal assets and the best use of capital investment; and
- Service operational on 1 April 2014.

## 6.0 Objective Description

6.1 Table 1 below provides a description of each option appraisal objective.

**Table 1 : Objective Description**

<b>Objective</b>	<b>Description</b>
Meet the statutory obligations for traffic signals maintenance	This includes the need to provide a safe network; the need to ensure electrical safety; the need to manage congestion as part of the Traffic Management Act; and a requirement to maintain the traffic signals network.
Reduce the on-going cost to undertake traffic signal maintenance and reduce the revenue burden on the Council	This sets out the requirement to reduce the revenue cost of traffic signal operations and help to reduce the revenue burden on the Council.
Deliverability of the project to the savings timetable (2015/16 onwards)	This objective considers the opportunity to contribute to the savings timetable in 2015/16 and beyond.
Flexibility to adapt to emerging issues and opportunities and changes in statutory framework or policy context	This objective considers the opportunity to adapt to emerging issues such as shared services.
Ability to embrace innovation and advances in traffic signal technology	This considers the ability to adapt to changes in technology for traffic signal operations including energy and communication costs.
Council retains robust accountability and performance management arrangements	This objective sets out the requirements for the Council to maintain strong control over performance and have robust accountability.
Well maintained infrastructure of traffic signal assets and the best use of capital investment	An ageing traffic signal asset can increase maintenance costs and requires reactive maintenance responses. Investment in the network will contribute to reducing the age of the network.
Service operational on 1 April 2014	It is imperative for a variety of safety related issues that a traffic signals contract is in place on 1 April 2014.

## 7.0 Weighting of Objectives

7.1 Three levels of weighting were used to consider the importance of the objective to the Council. The options appraisal used weightings of high (3), medium (2) and low (1).

## 8.0 Contract Options

8.1 The team considered the following options for traffic signal maintenance :

- Contract extension for 1 year;
- Contract extension for 3 years;
- Traditional contract operating over four year term with the potential for contract extension for two years;
- Innovative contract operating over a longer term (10 years) and securing investment in the traffic signal assets;
- New scope of contract;
- Joint / collaborative contract; and
- In-house delivery.

## 9.0 Contract Option Description

9.1 Table 2 below describes each contract option.

**Table 2 : Option Description**

<b>Contract Option</b>	<b>Description</b>
Contract extension for 1 year	An extension of the existing contract for one year.
Contract extension for 3 years	An extension of the existing contract for a three year term.
Traditional contract operating over four year term with the potential for contract extension for two years	This would see the implementation of a four year contract based on a similar specification and contract approach to the existing contract.
Innovative contract operating over a longer term (10 years) and utilising significant investment in the traffic signal assets	This would involve a longer term relationship with a contractor and having a facility to obtain investment in the network to reduce the age of the asset.
New scope of contract	This would consist of a specification fundamentally different than the existing arrangement.
Joint / collaborative contract	This would involve the development of a shared service or a joint contract with one lead authority.
In-house delivery	This would involve the development of a workforce directly employed by the Council to undertake maintenance.

## 10.0 Objectives and Weightings

10.1 The team agreed the weights for each objective. Table 3 below indicates the option appraisal objective with the weighting for each objective.

**Table 3 : Objectives and Weightings**

<b>Objective</b>	<b>Weight</b>
Meet the statutory obligations for traffic signals maintenance	H (3)
Reduce the on-going to undertake traffic signal maintenance and reduce the revenue burden on the Council	H (3)
Deliverability of the project to the savings timetable (2015/16 onwards)	M (2)
Flexibility to adapt to emerging issues and opportunities and changes in statutory framework or policy context	M (2)
Ability to embrace innovation and advances in traffic signal technology	L (1)
Council retains robust accountability and performance management arrangements	M (2)
Well maintained infrastructure of traffic signal assets and the best use of capital investment	H (3)
Service operational on 1 April 2014	H (3)

**11.0 Criteria**

11.1 Criteria were used to assess each option and consider the ability to achieve the stated objective. Scores were used to determine whether the option would achieve the option or not and a scale of scores was used in the assessment process. Table 4 lists the criteria score and the relevance to meeting the objective.

**Table 4 : Criteria Score**

Criteria Value	Description
0	Not meet objective
1	Not likely to meet
2	Partially meet objective
3	Meet objective
4	Exceeds objective

**12.0 Options Appraisal Evaluation**

12.1 Table 5 below shows the assessment of each option against the required objectives for a traffic signal maintenance contract.

**Table 5 : Option Appraisal Evaluation**

	Option						
	0	1	2	3	4	5	6
<b>Objective</b>	Contract extension for 1 year	Contract extension for 3 years	Traditional contract operating over four year & extension for two years	Innovative contract (longer term & investment in traffic signal assets	New Scope of contract	Joint / collaborative contract	In-house delivery
Meet the statutory obligations for traffic signals maintenance	(3x3) 9	(3x3) 9	(3x3) 9	(3x3) 9	(3x3) 9	(3x3) 9	(3x1) 3
Reduce the on-going to undertake traffic signal maintenance and reduce the revenue burden on the Council	(3x2) 6	(3x3) 9	(3x3) 9	(3x3) 9	(3x3) 9	(3x3) 9	(3x0) 0
Deliverability of the project to the savings timetable (2015/16 onwards)	(2x0) 0	(2x2) 4	(2x3) 6	(2x2) 4	(2x2) 4	(2x2) 4	(2x0) 0
Flexibility to adapt to emerging issues and opportunities and changes in statutory framework or policy context	(2x1) 2	(2x1) 2	(2x2) 4	(2x3) 6	(2x3) 6	(2x2) 4	(2x3) 6
Ability to embrace innovation and advances in traffic signal technology	(1x1) 1	(1x2) 2	(1x2) 2	(1x3) 3	(1x3) 3	(1x2) 2	(1x1) 1
Council retains robust accountability and performance management arrangements	(2x3) 6	(2x3) 6	(2x3) 6	(2x2) 4	(2x2) 4	(2x2) 4	(2x2) 4
Well maintained infrastructure of traffic signal assets and the best use of capital investment	(3x2) 6	(3x2) 6	(3x3) 9	(3x3) 9	(3x3) 9	(3x3) 9	(3x1) 3
Service operational on 1 April 2014	(3x3) 9	(3x3) 9	(3x3) 9	(3x3) 9	(3x2) 6	(3x1) 3	(3x2) 6
<b>Total</b>	<b>39</b>	<b>47</b>	<b>54</b>	<b>53</b>	<b>50</b>	<b>44</b>	<b>23</b>

Note : the table shows the **weight score** multiplied by the **criteria score**.

- 12.2 The table above indicates that two options are quite closely scored :-
- Option 2 - traditional contract for four year term with extension for two years; and
  - Option 3 - innovative contract operating for a long term.

### **13.0 Discussion of Option Appraisal Evaluation**

- 13.1 Four of the options would require longer lead-in time and would not be in place by 1 April 2014 (innovative; new scope; joint / collaborative; in-house delivery). These options would require, as a minimum, the one year contract extension to be put in place from 1 April 2014, which would then enable development work on these options. The one year contract extension is one of the lower scoring options and when considered that each of the four options (innovative, new scope; joint / collaborative; or in house delivery) is not the highest scoring option then this is not an ideal approach to take.
- 13.2 The option with the highest overall score and capable of being in place to the required timetable of 1 April 2014 is the traditional four year contract with two year extension option.