



HILLINGDON

LONDON

RESIDENTS' AND ENVIRONMENTAL SERVICES POLICY OVERVIEW COMMITTEE

2009/2010

REVIEW OF STREET LIGHTING

Members of the Committee

Councillor Michael Markham (Chairman)
Councillor Kay Willmott-Denbeigh
Councillor Lynne Allen
Councillor Paul Buttivant
Councillor Janet Duncan
Councillor Judy Kelly



CONTENTS

Chairman’s Foreword	1
Executive Summary	2
Introduction	3
Committee’s Terms of Reference	4
Background and Context	5
• Committee Work Activity	6
• Methodology	6
• Corporate Context	7
Evidence and Findings	8
• Where we are?	8
• What key issues are we faced with?	14
• Where do we want to be?	15
Conclusions and Recommendations	17

CHAIRMAN'S FOREWARD



Street lighting is one of those Council services that we all take for granted until it goes dark!

With winter approaching, this committee decided that it would be timely to review the policies relating to the provision and maintenance of street lighting, energy efficiency and light pollution issues and the role and impact of new technology in making our streets lighter and safer.

We were encouraged to find that the street lighting service was good and that officers were well aware of the issues involved and highly experienced and knowledgeable in their professional specialisations.

We identified a number of areas that we felt could be improved and these are reflected in our recommendations.

I would like to thank all those who came to give evidence and helped us in this review.

Cllr Michael Markham

EXECUTIVE SUMMARY

This review sought to examine the issue of street lighting from the Hillingdon residents' point of view through their Ward Councillors. We looked at where the Council was now with street lighting, key issues the Council was faced with and where the Council would like to be. The Committee took evidence from officers of the Council as well as from an officer from a neighbouring local authority.

Our conclusions are presented at the end of the report. It must be noted that the Committee was very satisfied with the Council's Street Lighting function, its processes and performance. However, it has made some recommendations for minor improvements in the way in which the public is made aware of the street lighting repair process.

It must be emphasised that these recommendations should be seen in the context in which the investigation was conducted and the framework in which street lighting is carried out. This was not an investigation into a service, but an enquiry set up to help the Committee understand the framework within which street lighting operated and the role the Council could play in improving the experience of residents in the borough in terms of lighting the streets, for example, how quickly repair works is done.

The Committee's recommendations are divided into five areas:

- Networking and information sharing of best practice, use of new technology to improve efficiency
- Notification to Ward Councillors of delays
- Publicity - raising public awareness of the causes of delay in some repair works
- Alerting residents of likely delays in repair work via Ward Councillors
- New technology and improved efficiency

The recommendations are not the result of a comprehensive review of the way in which the Council carries out its functions, but the result of Councillors who have considered street lighting from the Hillingdon residents' points of view.

INTRODUCTION

REASONS FOR THE REVIEW

1. The Committee felt that increasing financial pressures due to energy costs, environmental pressures relating to the use of energy, and emerging technologies which can help us deal with the challenges we face, this seemed a pertinent time to review the Street Lighting Service.
2. This report will firstly outline the methodology for the review and then a summary our findings which we hope would be of use to the Cabinet and officers when deciding how to proceed.

COMMITTEE'S TERMS OF REFERENCE

3. At its meeting on the 28th July 2009, the Committee agreed the following terms of reference for its review of the Street Lighting:
1. **To understand and confirm the Council's statutory duties in relation to street lighting and highway based power supplies;**
 2. **To review how our duties are discharged, including how priorities are arrived at and how resources are allocated;**
 3. **To review recent performance and the methods of performance measurement that are applied to this area;**
 4. **To review what service improvements are being implemented and what improvements could be implemented, to improve performance still further.**
 5. **To review whether the Council's own processes and response rate in dealing with street lighting is timely, effective and cost-efficient, and what effect the responsiveness of the utility companies can have on the service;**
 6. **To seek out views on this subject from residents, using a variety of existing and also contemporary consultation mechanisms;**
 7. **To better understand and contrast the community /road safety and light pollution implications of street lighting;**
 8. **To examine new technologies, e.g. solar power and best practice elsewhere through case studies, policy ideas, witness sessions and site visits and;**
 9. **After due consideration of the above, to bring forward strategic, innovative and also practical policy recommendations to the Cabinet in relation to street lighting in Hillingdon.**

BACKGROUND, CONTEXT AND METHODOLOGY

BACKGROUND, CONTEXT

4. The Council's duty as Highway Authority under the Highways Act 1980, is to maintain highways maintainable at public expense and to take such care as is reasonably required to secure the safety of the highway for all types of traffic using the Highway. The Highways Act does not require the Highway Authority to provide lighting; although section 97 states that a Highway Authority may provide lighting. Street Lighting on the Highway is considered to be part of the Highway and therefore the Highway Authority is required to maintain it under section 41 of the Act.
5. The Council also has a duty under the Crime and Disorder Act 1998 "to exercise its various functions with due regard to the likely effect of the exercise of those functions on, and the need to do all that it reasonably can to prevent, crime and disorder in its area." This could be interpreted that where street lighting could help to prevent crime and disorder the local authority has a duty to provide, maintain and improve street lighting.
6. As those responsible for maintaining of the Street Lighting, the Public Lighting Section serves all the residents of the Borough, any visitor to the Borough and anyone travelling through or over it. It also serves local businesses, partners and key external organisations. In addition the Public Lighting Section works closely with other groups within the Council, maintaining lighting in public car parks, roads and footpaths owned by Hillingdon Homes and some Housing Associations.
7. In 2008/09 1,428 lights out or day burners were reported by residents, road users and lighting section staff, these were attended to in an average of 1.4 calendar days. The regular night patrols detected 2,153 lights needing attention; these were attended to in an average of 1.3 calendar days. Requests for lighting improvements in 24 areas that had not previously been identified were also received. There were 176 lights affect by electricity supply failures and these were repaired by the Electricity Boards in an average of 45.10 calendar days.
8. The Public Lighting Section is responsible for the installation and maintenance of lighting and is also responsible for the installation and maintenance of road signs and road markings. It carries out:
 - Routine and Responsive Maintenance of lighting installations
 - Lighting Improvements in the "public realm"
 - Road markings & signs for Parking Schemes
 - Implementation of works for road improvements and safety schemes
 - Services to other Groups (generally lighting services)
9. It is responsible for the maintenance of:
 - 22,750 Street Lights (constantly changes as maintenance work is completed)
 - 205 School and Zebra Crossing Beacons
 - 1805 Illuminated Bollards and centre island columns
 - 3020 Illuminated Signs
 - 11 Subways

COMMITTEE WORK ACTIVITY

10. At its meeting on 28 July 2009, the Committee selected Street lighting as a topic for review. A scoping report and briefing paper was then submitted to the meeting on 8 September 2009.
11. A witness session was also held at this meeting and Members focused on the present street lighting provision and sought the views from a neighbouring local authority. The witnesses included the Council's Street Lighting Officer, the Street Maintenance Officer, the Procurement Officer and a Street Lighting officer from London Borough of Harrow.
12. The Committee then took evidence on the review from the witnesses and came up with a number of recommendations.

METHODOLOGY

13. The Committee began the review with a background report from officers to explain the Street Lighting Service. Then Committee then held one witness session on 8th September 2009 with the following witnesses:
 - Tim Edwards – Lighting Officer, London Borough of Hillingdon
 - Jonathan Westell – Highways Maintenance, London Borough of Hillingdon
 - John Bowdrey – Street Lighting Officer, London Borough of Harrow
 - Bob Alabaster – Procurement Officer, London Borough of Hillingdon

The Committee made use of views of the Councillors on the Committee (as Ward representatives), to gauge public views on this matter.

CORPORATE CONTEXT

14. Energy Policy

The Council is preparing for the forth coming Carbon Reduction Commitment by ensuring that our energy usage level is based lined, monitored and that consumption is reduced in line with the Carbon Management Plan.

15. Carbon Management Reduction Plan

Street lighting will contribute toward the Council' Carbon Management Plan (agreed by Cabinet in April 2009). The plan sets out our aspirations for how, across all operation, we can reduce carbon emissions and our carbon footprint by 40% by 2015. Specifically on street lighting we will:

- ensure that we use the most efficient and reliable light sources
- provide lighting to the recommended lighting levels without over lighting
- Investigate and where applicable implement developments in new technology

However, where there is demand to provide new lighting to unlit areas or to improve existing lighting; this may lead to an increase in Carbon Emissions.

EVIDENCE AND FINDINGS

16. The Committee's report, evidence and findings are set out in three areas: Where we are now, what key issues we are faced with and where do we want to be?

**RECOMMENDATION 1 - NETWORKING AND INFORMATION SHARING:
Officers should continue with the practice of meeting regularly with other London Boroughs to share information and best practice.**

From the report and at the witness session on 8 September 2009, officers outlined the policy and statutory framework (set out below) that Street Lighting department was required to work within. The witness from a neighbouring authority echoed the common issues often encountered and confirmed supported officers' evidence of how useful current networking with Street Lighting officers from other local authorities was. The Committee supported the continuation of this arranged and set it as one of their recommendations.

WHERE WE ARE NOW

Current Street Lighting Policy

17. There is currently no formal Street Lighting policy document. The Institution of Lighting Engineers is shortly due to publish a guidance document for producing a Street Lighting Policy. Once this is available the Council will be able to produce a formal policy document.

Codes of Practice and Standards

18. Current practices in Hillingdon are based upon published British Standards, European standards, codes of practice and industry technical reports.

Maintenance Regimes

19. All lighting and electrical items have a routine maintenance regime. The time interval is determined by the light source. "Low pressure Sodium" is a high efficiency light source that is generally found in older lanterns it produces orange light; over the last few years these have been replacing them with "High Pressure Sodium" lights which give a more golden yellow light, with better colour rendering.

Light source or equipment type	Lamp change and visual inspection	Clean optical and electrical parts	Electrical test
Low Pressure Sodium	3 years	With lamp change and 18 months after	6 years (at alternate lamp changes)
High pressure sodium 50w & 70w	4 years	With lamp change	With lamp change
High Pressure Sodium 100w and above	5 years	With lamp change	With lamp change
Keep left bollards	1 year	With lamp change and extra in the winter months as determined by inspection	5 years
Illuminated Sign	1 year	With lamp change	5 years
Subways	1 year	With lamp change	5 years
Feeder Pillars	N/a	With electrical test	5 years includes visual inspection

- 20 In 2008 a regime of structural inspection and testing of steel lighting columns was started for columns that are over 12 years old. The result of the testing determines subsequent test intervals. Typically the columns in good condition are guaranteed for 5 or 6 years and an insurance certificate issued to this effect. All concrete columns are visually inspected for defects on an annual basis.

Statutory Duties

The Provision of Street Lighting

21. **Highways Act 1980** - Section 97 states that a Local Highway Authority may provide lighting for any Highway or proposed Highway. Section 41 places a duty on the Highway Authorities to maintain highways maintainable at public expense. This implies that whilst a Highway Authority does not have to provide lighting on the Highway, where it does it is required to maintain it.
22. **Crime & Disorder Act 1998** - Section 17 Duty to consider crime and disorder implications. This section applies to a local authority, a joint authority, a police authority, a National Park authority and the Broads Authority and states:
- (1) "Without prejudice to any other obligation imposed on it, it shall be the duty of each authority to which this section applies to exercise its various functions with due regard to the likely effect of the exercise of those functions on, and the need to do all that it reasonably can to prevent, crime and disorder in its area".*
23. This could be interpreted that where the provision of street lighting could help to prevent crime and disorder the local authority has a duty to provide and maintain lighting. This could be expanded further to indicate that the local authority has the duty to improve street lighting if it could reduce crime and disorder.

The Maintenance of Street Lighting

24. There are a number of Acts of Parliament and Statutory Instruments that apply to the installation and maintenance of street lighting and effect the way things are done and they are as follows:

Statutory Instruments

25. 1989 No 635 The Electricity at Work Regulations 1989.
This is a legal requirement to ensure that we comply with the wiring regulations, integrity of the insulation and safe management of the electrical circuit including the environmental protection of the installation.
26. 1992 No 2793 Manual Handling Operations Regulations 1992
This is a legal requirement that states that the Employer will as far as reasonably practicable introduce measures to reduce the risk of injury.
27. 2001 No 3263 The Electricity (Un-metered Supply) Regulations 2001
These regulations relate to the Electricity Act 1989 and set criteria for the provision of un-metered supplies by the District Network Operator (DNO).
28. 2002 No 2665 The Electricity Safety, Quality and Continuity Regulations 2002
These regulations state that the user and providers of electrical infrastructure use materials, working methods and reporting procedures that comply with Electrical safety, Quality and continuity regulations.
29. 2002 No 3113 The Traffic Signs Regulations and General Directions 2002
Traffic signs and regulations on the highway shall comply with these general directions 2002.
30. 2005 No 735 The Work at Height Regulations 2005
This regulation in conjunction with the Health and Safety at Work act 1974 and the Construction and Health and Safety regulations 1996. The employer shall introduce measures where working at height is safe.
31. 2006 No 3289 The Waste Electrical and Electronic Equipment Regulations
Aim is to reduce the amount of electrical / electronic equipment being produced and to encourage all parties to reduce, reuse, and recycle equipment.
32. 2007 No 320 The Construction (Design and Management) regulations 2007
This regulation states that all parties in the construction Industry have the right people for the right job at the right time. These regulations also ensure that designs consider how future maintenance will be undertaken to ensure that this can be done safely. This will enable better management of risk and works can be coordinated which will lead to efficient and affective work practices.

Acts of Parliament

33. Health and Safety at Work Act 1974 - The Health and Safety at Work etc Act 1974, also referred to as HASAW or HSW, is the primary piece of legislation covering occupational health and safety in the United Kingdom

34. Traffic Management Act 2004 - The Traffic Management Act was introduced in 2004 to tackle congestion and disruption on the road network. The Act places a duty on local traffic authorities to ensure the expeditious movement of traffic on their road network and those networks of surrounding authorities. The Act gives authorities additional tools to better manage parking policies, moving traffic enforcement and the coordination of street works. This means that a notice has to be issued before any excavation can take place on the Highway.

European Parliament

35. *Directive 2005/32/EC Eco-design Energy using Products Regulation No 245/2009 eco-design requirements for Fluorescent and High Intensity Discharge Lamps.*

Numbers

36. The total number of lighting columns is 22,800; the other lighting installations are listed below:

Highway footpaths	Roads	Car Parks	EY&L	Housing	Property	Recreation	Floodlights
1,198	21,071	163	39	275	5	50	
	218						
	14						
	373						
	1,543						
	1,874						
131							
15	10	2		18			20
3	151	17	6	4		6	1
1337	25,144	172	45	287	5	56	21

Age Profile of Lighting Columns in Hillingdon

37. This information is taken from the detailed GIS lighting inventory system that was implemented in 1996. There is limited data before this date regarding the age of the columns.

Column material	Age in years							Total columns
		5m (or less)	6m	8m	10m	12m	Over 12m	
Steel & cast iron	0 – 20	2505	1275	414	1157	60		5411
	21 – 30	616	53	301	264	21	6	1261
	31 – 40	138	16	2	127	0		283
	Over 40 or unknown	10989	787	932	2251	58		15017
	Total	14248	2131	1649	3799	139	6	21972
Concrete	0 – 20							0
	21 – 30							0
	31 – 40							0
	Over 40 or unknown	824						824
	Total	824	0	0	0	0	0	824
All	Total	15072	2131	1649	3799	139	6	22796

Service Delivery

RECOMMENDATION 2 - NOTIFICATION OF WARD COUNCILLORS: The Street Lighting department should ensure that local Ward Councillors are kept informed as to the placing of new lighting. In particular where new lighting is being installed, following requests from the Police.

An outcome of the witness session was that officers already worked closely with the Police when deciding where lighting improvements would be undertaken. They also took into consideration list sent in by Ward Councillors and complaints received from residents.

Whilst the Committee welcomed this form of communication, they felt that residents should also be notified through their Ward Councillors and this is reflected in recommendation 2.

The Public Lighting Section

38. The Section consists of a Manager, a Lighting Engineer, a Lighting Technician, a Sign Engineer, a Road Markings Engineer and a part time Costing Assistant. The manager is also responsible for the Operational Team currently based at Harlington Road Depot this consists of a Supervisor, an administrator, a charge-hand and 9 lamp attendants. Two apprentices were appointed in October one as a Lamp Attendant and one as a Lighting Technician.

Electricity Suppliers

39. The regional electricity suppliers for Hillingdon are EDF Energy and Scottish Southern Electric (SSE), known as District Network Operators (DNOs). They are responsible for the transfer of power either from adjacent columns or the provision of a new supply from the Low Voltage Main.
40. EDF are the more expensive of the two providers and they are on a typical 3-6 week programme to complete their works from the date that the lamp column is certified as for connection ready.
41. SSE is the provider for the 60% of the Borough and they are on a 3-8 week programme to complete their works from the date we certify the lamp column is certified as for connection ready.

Works Contractors

RECOMMENDATION 3 – PUBLICITY IN RAISING PUBLIC AWARENESS: The Council should raise awareness of some of the causes in the delay in repairs, and highlight some of the improvements that have been implemented. One such improvement is attaching a sticker on faulty lamp posts, which indicates that the fault had been notified to the Council and alerts members of the public that it was being followed-up. Communication with members of the public could be improved further by:

- i) Placing an article in the Council's free monthly magazine (Hillingdon People), which is distributed to all homes of residents.
- ii) Setting up a frequently asked questions section on the Councils website in answer to common concerns and problems encountered or raised by members of the public.

RECOMMENDATION 4 - ALERTING RESIDENTS OF LIKELY DELAYS IN REPAIR WORK: Where there are likely to be delays in repair works, Ward Councillors should be notified with reasons for the delay, so they can inform residents.

From the witness session, the committee established that the installation and replacement of columns required a number of different specialist skills and machinery in order to complete some tasks. In addition, there were a number of problems that they may encounter such as, problem of physical access, network conditions and volumes.

The Committee felt that the public should be made aware of these issues and indicated that Ward Councillors should be alerted to any delays in repair so that they could then notify residents.

Column installations are done in-house if the columns being replaced are 5m or 6m in height. If the lamp columns being replaced are 8m, 10m, 12m, then these are installed by our external contractor Enterprise Mouchel.

Before columns can be installed we need to ensure we have the columns and lanterns in stock or place orders as required.

42. Revenue Budgets 09/10

Lighting Maintenance	£614,610
Signs Maintenance (inc non illuminated)	£258,570
Lighting Energy	£709,330
Signs Energy	£65,670
Recharge for 3 rd party damage	Income £31,500

Capital Budget 09/10

43. The Capital allocation for 2009/10 is £300,000. £60,000 of this is reserved for the capitalisation of revenue, typically for the replacement of brackets and lanterns on existing columns. The remainder will be split between replacing structurally defective columns, structural testing and lighting improvements. Prioritising requests for new and replacement streetlights throughout the borough is by an agreed mechanism, based on problems relating to community safety, crime or road safety.

WHAT KEY ISSUES ARE WE FACED WITH?

Budget

44. In real terms costs increase above inflation and the service is growing. Over the past two years the number of lighting columns has increased by an average of 0.75% PA, Contractors cost by 4.7% PA. In April 2008 EDF Energy's charge for a new connection rose by 23.6%, although there has been no increase this year.

Increasing Energy Costs

45. Over the past five years there have been very large increases in energy costs. Until this year Hillingdon's street lighting has been fortunate to avoid most of these increases. This has been due to the timing of when the fixed price energy contracts were renewed, see table below, in both the 2005 and the 2007 contracts the two year fixed rate was cheaper than the one year rate.

Supply period	Date agreed	Southern Area rate	EDF area rate
April 04 to March 05	26/02/04	4.454p	4.196p
April 05 to March 07	28/01/05	5.457p	5.241p
April 07 to March 09	4/12/06	6.028p	5.911p
April 09 to September 09		7.457p	7.017p

46. During the past two years the unit rates for some contracts elsewhere in the country have been as high as 13p.

In June 2007 the Pan Government Energy Project was launched, it has developed best practice for energy procurement. The recommendation is that all public sector organisations adopt aggregated, flexible and risk-managed procurement.

47. The Council has adopted these recommendations and energy is now procured by flexible contract. The price for the first period of the current financial year is shown above. The price for the second half is projected to be 8.3p per unit, currently about 80% of the electricity for this period has been purchased.

Increased Demand for Lighting in New Locations for Enhanced Security

49. There is more demand for lighting solutions based on security issues. Without good quality lighting the fear of crime cannot be lifted and any investments in CCTV solutions are not utilised to their full potential without good quality lighting.

Need to Reduce Light Pollution

50. The Department is mindful of the increases in lighting for residential, main road, security. As such it tries to utilise the best value modern lanterns that keep the lighting pollution to a minimum. The aim of a good lighting installation is to provide illumination on the highway just where it is needed and to reduce to a minimum wasted upward light, typically to less than 3%.

WHERE DO WE WANT TO BE?

51. We want to get to the point where we are able to increase the number of reliable, energy-efficient, adaptable, less polluting and brighter lighting units at lower cost by 2015. The Committee noted that this will be achieved by continually introducing new technology such as :

Technology

52. Technology is moving at a fast pace and careful consideration is given to the trial and introduction of developments that can reduce costs, improve efficiency and improve the service.

The use of “White light” sources

53. “White Light” refers to a light source with a colour-rendering index of 60 or more. The British Standard BS5489 part 1 2003 recommends that where a “White light” source is for lighting of subsidiary roads the standard of lighting can be lowered by one lighting class. This is due to the shift in the colour sensitivity of the eye at low light levels. This can lead to savings in Energy and CO₂.

High-output Light Emitting Diodes (LEDs)

54. This is the latest in lighting technology and is still in the early stages of development for street lighting. LEDs offer low energy and long life; typical values being claimed are lamp lives of up to 50,000 hours which is equal to about 12 years with energy savings of up to 40%. A few manufacturers are producing lanterns and a trial of 60 lanterns has been installed on a footpath and in residential roads in the Borough. There are a number exaggerated claims and therefore a number of factors have to be verified and to be taken into account when considering the use of LEDs in public lighting. For example the reduction in light output and a change in colour as the LEDs age.

Remote monitoring:

55. This is a feature that can be used to identify and in some cases predict lighting faults remotely. It is expensive to implement, as a monitoring unit needs to be installed in every piece of equipment and connected to a communication network. The units need to communicate with a central management system which is in the process of being implemented. It is therefore not a viable option until the management system has been implemented.

Variable Lighting Levels (Dimming) on Traffic Routes:

56. The level of lighting on traffic routes is determined by the type of road and the traffic flow. By profiling the traffic flow with the time of day it could be possible for the lighting to be dimmed at times when the traffic flows are low. This could result in energy savings and carbon dioxide emission reductions. To implement this accurate traffic flow data would be needed for each road and the lighting would need to be controlled by a remote monitoring system to allow changes to be made if future traffic flows change.
57. At the witness session, Members focussed on the present street lighting provision within the Borough and sought the views from another local authority.

RECOMMENDATION 5 – NEW TECHNOLOGY AND IMPROVED EFFICIENCY: The Street Lighting department should continue to use new technology to improve efficiency, particularly in the areas of lamp long life and energy reduction.

From the witness session, notwithstanding the other areas set out above, one of the key issues that became apparent was the development of new technology to improve efficiency and improve service. This was therefore included as part of the Committee's recommendation.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

58. Whilst the Committee was very satisfied with the Council's Street Lighting function, its processes and performance. The recommendations make suggestions as to some improvements that could be made in Hillingdon, to the way in which the public is made aware of the street lighting repair process.
59. The Committee felt that that was vital for the Authority to improve the experience of residents in the borough in terms of lighting the streets (how quickly repair works is done) through better communication. This was felt could be enhanced through communicating delays to Ward Councillors.
60. At the Committee's meeting to approve the Street Lighting review, Members wished to add a further recommendation in relation to closer working with Housing Associations on Street Lighting as follows:

RECOMMENDATION 6 - THAT THE COUNCIL WORK CLOSELY WITH HOUSING ASSOCIATIONS: To improve responses to queries relating to Street Lighting in private areas. This could be to ensure that where private lighting is installed, adequate provision is made for its future maintenance; or increasing the areas on new developments that are adopted as public highway.

Committee's recommendations in full to Cabinet

61. The Committee therefore made the following 6 recommendations as set out below and agreed that they be presented to Cabinet for endorsement and subsequently for officers to implement and action:
- a) **Recommendation 1 - Networking and Information Sharing:** Officers should continue with the practice of meeting regularly with other London Boroughs to share information and best practice.
 - b) **Recommendation 2 - Notification of Ward Councillors:** The Street Lighting department should ensure that local Ward Councillors are kept informed as to the placing of new lighting. In particular where new lighting is being installed, following requests from the Police.

- c) **Recommendation 3 – Publicity in Raising Public Awareness:** The Council should raise awareness of some of the causes in the delay in repairs, and highlight some of the improvements that have been implemented. One such improvement is attaching a sticker on faulty lamp posts, which indicates that the fault had been notified to the Council and alerts members of the public that it was being followed-up. Communication with members of the public could be improved further by:
- ii) Placing an article in the Council's free monthly magazine (Hillingdon People), which is distributed to all homes of residents.
 - ii) Setting up a frequently asked questions section on the Council's website in answer to common concerns and problems encountered or raised by members of the public.
- d) **Recommendation 4 - Alerting Residents of Likely Delays in Repair Work:** Where there are likely to be delays in repair works, Ward Councillors to be notified with reasons for the delay, so that residents could be informed.
- e) **Recommendation 5 - New Technology and improved Efficiency:** The Street Lighting department should continue to use new technology to improve efficiency, particularly in the areas of lamp long life and energy reduction.
- f) **Recommendation 6 - That the Council work closely with Housing Associations:** To improve responses to queries relating to Street Lighting in private areas. This could be to ensure that where private lighting is installed, adequate provision is made for its future maintenance; or increasing the areas on new developments that are adopted as public highway.