

# **Subject: Risk Assessment On The Transportation Of Nuclear Waste By Rail Through London**

Report Number: 5

**Report to: Business Management and Appointments Committee**

**Date: 7 September 2005**

**Report of: Executive Director of Secretariat**

## **1. Recommendation**

- 1.1 That the Committee notes this report which sets out further information on the proposal to jointly fund a risk assessment with the Mayor on the transportation of nuclear waste by rail through London.
- 1.2 That, should the Environment Committee have approved this proposal at its meeting on 6 September, this Committee agree the proposed expenditure of up to £17,500 for the Environment Committee to jointly fund a risk assessment with the Mayor on the transportation of nuclear waste by rail through London.

## **2. Background**

- 2.1 On 1 June 2005 the Environment Committee agreed to seek approval from the Business Management and Appointments Committee for the expenditure of up to £17,500 from the Scrutiny Programme Budget to jointly fund a risk assessment with the Mayor on the transportation of nuclear waste by rail through London.
- 2.2 At its meeting on 29 June the Business Management and Appointments Committee agreed that the report be referred back to the Environment Committee for further scoping and information regarding consultation with the functional bodies. At its meeting on 6 September Environment Committee will be asked to approve the proposal for a jointly funded risk assessment which was supported by the additional information requested by Business Management and Appointments Committee.
- 2.3 The paragraphs below set out the additional information requested by this Committee.

## **3. Issues for Consideration**

- 3.1 Details of the original proposal agreed by Environment Committee are detailed on the report to the meeting of the Environment Committee attached as an appendix to this report.

- 3.2 The risk assessment would include establishing the following key objectives:
- The implications of current nuclear train routes for impacts in the event of an incident, in particular allowing for population and employment densities around key routes and sites; and
  - The opportunity, benefits and costs of reducing risk and/or exposure particularly through re-routing transport of nuclear fuel away from London.
- 3.3 Business Management and Appointment Committee requested further details on the proposal under a number of headings. These details are set out in the paragraphs below.

### **Need for the study**

- 3.4 Recent events highlight the terrorist threat that exists within the UK, in particular within London. The rail lines carrying nuclear waste through London could be an attractive target for terrorism. Recognising that trains do also run through other points of Great Britain, the size of London's population further highlights the vulnerability of London and the need for the study.
- 3.5 A London-specific study of risks of the transport of spent nuclear fuel by rail through London was an explicit recommendation of the London Assembly Nuclear Waste Trains Investigative Committee 'Scrutiny of the transportation of nuclear waste by train through London' report in October 2001.
- 3.6 This report also recommended that an assessment of the relevance of nuclear waste package tests to real accidents be included in this risk assessment. In response to this recommendation the Chair of the Environment Committee, GLA officers and the Scrutiny Team have been closely engaged in the development of the study requirements.

### **Responsibility for risk assessments and how a joint study can add value**

- 3.7 The Health Protection Agency (HPA), previously known as the National Radiological Protection Board (NRPB), and private companies such as British Nuclear Fuels Limited (BNFL) operate at a national level, and whilst they consider London within a wider context they do not look at the specific local circumstances of London, in particular the additional risks that are associated with a major capital city such as London.
- 3.8 The HPA do undertake an annual review of 'Radiological Consequences Resulting from Accidents and Incidents Involving the Transport of Radioactive Materials in the UK'. This assesses the radiological impact of such accidents and incidents on both workers and members of the public, listing all accidents and incidents that were reported during the year and assessing the levels of exposure caused.
- 3.9 In 2005 the NRPB published a 'Survey into the Radiological Impact of the Normal Transport of Radioactive Material in the UK by Road and Rail' which assessed the radiation exposure to the public and workers from normal operations. GLA officers engaged with the Department for Transport (DfT) in the course of this work to ascertain whether joint work would be appropriate. However, it was concluded that the scope of any nationwide DfT study would not cover the two key issues that a London-specific risk assessment would seek to address as set out in paragraph 3.2 above.
- 3.10 The last time a London specific study was undertaken was by the then NRPB in 1983; 'The Radiological Impact of Postulated Accidental Releases during the Transportation of Irradiated PWR Fuel through Greater London'. This assessed the radiation impact if a major accidental release were to occur during the transportation of irradiated fuel through Greater London.

- 3.11 A London-specific risk assessment of this nature has never been undertaken and therefore a GLA commissioned study would be unique. The specific requirements of the risk assessment are listed below:
- **Base position** to identify the facts associated with the transport of spent nuclear fuel flasks through London, in particular:
    - How many trains travel through London per month/year;
    - What proportion of trains travel from Dungeness, Bradwell and Sizewell;
    - Assessment of densities of population and activity around the key routes and sites used; and
    - Assessment of the relevance of nuclear waste package tests to real accidents.
  - **Incident and Impact Identification**
    - Identification of the potential incident scenarios that could lead to releases.
  - **Probabilities**
    - Identification of a broad range of probabilities of the above identified potential incident scenarios occurring in London.
  - **Assessment of transport alternatives**
    - Identification of opportunities, costs and benefits of re-routing transport of nuclear waste away from London.
    - Consequences for the local (London or non-London) environment, people and business based upon the identified incident scenarios.
  - **Decommissioning**
    - Investigate the potential impact on the transportation of nuclear waste, in particular through London, of decommissioning of reactors in the South East of England.
  - **Future Energy Policy**
    - Assess the potential impacts on the transportation of nuclear waste, particularly through London, of any additional nuclear reactors in the Southeast and any subsequent impacts on future transportation of nuclear fuel.
- 3.12 It is acknowledged that the study will pose challenges through its coverage of sensitive areas, and where appropriate issues raised will be handled through the Transport Sub-Committee of the London Regional Resilience Forum, of which the Mayor is Deputy Chair and the GLA is a partner, where they can be addressed confidentially, rather than included in the study report which is intended to be a public document.
- 3.13 In summary, the proposed risk assessment would provide a review of the implications of the range and type of shipments by train through London and a consideration of alternative transport options that would reduce risks.

### **Scope for further action**

- 3.14 Following the outcome of the study, the Mayor could take appropriate action, such as using his statutory powers contained within the GLA Act 1999 to promote the improvement of the environment within Greater London and to safeguard the health of persons within Greater London. This could,

for example, include lobbying and advocacy activities by the London Assembly and the Mayor to central Government for re-routing trains away from London.

### **Justification for a joint study**

- 3.15 The Nuclear Waste Trains Investigative Committee, Scrutiny of the transportation of nuclear waste by train through London, October 2001, was set up to examine existing emergency planning in the event of radiological release and to examine the situation regarding trackside contamination. It brought together information for Londoners on the transport of radioactive materials and reviewed the adequacy of safety arrangements.
- 3.16 This report was produced before 9/11 and the London Bombings on 7th and 21st July, therefore it would seem appropriate to undertake a more up to date study to take account of current risks. The Assembly played a key role in the 2001 Scrutiny and support for this study would present a united front in addressing London's security risks. As such, the London Assembly has a key role to play in this study, working jointly with the Mayor.

### **Functional body involvement in this proposal**

- 3.17 The Mayor wrote to the Department for Transport (DfT), MPS, LEFPA, TfL, Health and Safety Commission and the London Ambulance Service (LAS) on 24 February 2005 notifying his intention to undertake a London specific risk assessment on nuclear trains passing through London which would involve consultation with their agencies, and inviting them to engage with officers if they wished to have early input to the study. To date, a supportive response has been received from the DfT, and the LAS has acknowledged the proposal.

### **Joint working with the Mayor**

- 3.18 There was some concern expressed that joint working with the Mayor on this issue would reduce the impact of the Assembly's established position as one of the leading bodies in London concerned with this issue. Since the publication of the Nuclear Waste Trains Investigative Committee 'Scrutiny of the transportation of nuclear waste by train through London' report in October 2001 the Assembly's Media Office has continued to receive regular requests for updates on potential Assembly work on this issue. The Assembly has continued to be seen as a "leading player" by the media, national and local, and other stakeholders.
- 3.19 In April 2003 the report "Access to Primary Care" was published. This was the first scrutiny to be carried out jointly by the Mayor and the London Assembly. It was set up as a separate advisory Committee.
- 3.20 The report brought together a wealth of best practice and data from all over London and beyond, and made recommendations to health services on how they might improve access for Londoners. The Chair of the Health Committee received considerable publicity and media interest from this joint investigation.

## **4. Strategy Implications**

- 4.1 The Mayor has no legal powers over the national rail system in London however the Mayor does have a number of functions set out in the GLA Act 1999 promoting the improvement of the health and environment of Londoners. The outcome of this study may impact upon these strategic functions.

## **5. Legal Implications**

- 5.1 Under s 59(2)(e) of the GLA Act 1999 the committee may investigate and prepare reports on

matters they consider to be of importance to Greater London and make reports to the Mayor and other appropriate bodies. Under s60(1), the Assembly may submit proposals to the Mayor.

- 5.2 The Mayor under s30 GLA Act has the power to do anything which he considers will further any one or more of the principal purposes of the authority, namely, promoting economic development and wealth creation, social development or the improvement of the environment in Greater London
- 5.3 S34 of the Act enables the Authority to do anything which is calculated to facilitate, or is conducive or incidental to, the exercise of any functions of the Authority.

## **6. Financial Implications**

- 6.1 Any costs associated with the completion of this risk assessment will be met from within the existing Scrutiny Programme Budget for 2005/06.

Background Papers: Agenda and minutes of Environment Committee 1 June 2005

<http://www.london.gov.uk/assembly/envmtgs/2005/envjun01/envjun01agenda.jsp#9>

Agenda and minutes of Business Management and Appointments Committee 29 June 2005

<http://www.london.gov.uk/assembly/bmac/2005/bmacjune29/bmacjune29agenda.jsp>

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# **Subject: Risk assessment on the transportation of nuclear waste by rail through London**

Report Number: 9

**Report to:** Environment Committee

**Date:** 1 June 2005

**Report of:** Director of Secretariat

## **1. Recommendations**

- 1.3 That the Committee notes this report and agrees the proposal to jointly fund a risk assessment with the Mayor on the transportation of nuclear waste by rail through London.
- 1.4 That the Committee agrees to seek approval from the Business Management and Appointments Committee for the expenditure of up to £17,500 from the Scrutiny Programme Budget to appoint contractors to conduct the risk assessment.

## **2. Background**

- 2.1 In October 2001 the Nuclear Waste Trains Investigative Committee published its scrutiny of the transportation of nuclear waste by train through London. A copy of the report can be viewed at <http://www.london.gov.uk/assembly/reports/environment.jsp>
- 2.2 The Committee found that the transport of spent nuclear fuel in this country has an excellent safety record. Many millions of miles have been travelled by trains carrying flasks of nuclear material and no accident or incident has taken place involving the release of radioactivity. But the Assembly, and the authorities concerned, concluded that despite this record constant vigilance is essential.
- 2.3 Among other conclusions, the report recommended that there is a need for a London-based accident risk assessment of spent nuclear fuel transport and the examination of alternative routes, bypassing both London and the other major population centres.
- 2.4 The Mayor shares these concerns and has shown support for conducting a risk assessment for London.

## **3. Issues for Consideration**

- 3.21 Members are asked to consider a proposal to jointly fund a risk assessment with the Mayor on the transportation of nuclear waste by train through London.
- 3.22 The risk assessment would include establishing the following key objectives:
  - The implications of current nuclear train routes for impacts in the event of an incident, in particular allowing for population and employment densities around key routes and sites; and

- The opportunity, benefits and costs of reducing risk and/or exposure particularly through re-routing transport of nuclear fuel away from London.

3.23 Discussions were held with the National Radiological Protection Board in January 2005 to discuss options for further research on this issue. It is estimated that a credible risk assessment could be carried out for a budget not exceeding £35,000.

3.24 Opportunities are being explored with GLA Finance and Performance and Policy and Partnerships for allocation of proportions of costs for this proposal. Joint funding of this project could be met 50/50 by the Mayor and Assembly by using up to £17,500 from the Scrutiny Programme Budget to appoint contractors to conduct the risk assessment.

## **4. Strategy Implications**

4.2 The outcome of the joint scrutiny may relate to aspects of the Mayor's Transport Strategy.

## **5. Legal Implications**

5.1 Under s 59(2)(e) of the GLA Act 1999 the committee may investigate and prepare reports on matters they consider to be of importance to Greater London and make reports to the Mayor and other appropriate bodies. Under s60(1), the Assembly may submit proposals to the Mayor.

5.2 The Mayor under s30 GLA Act has the power to do anything which he considers will further any one or more of the principal purposes of the authority, namely, promoting economic development and wealth creation, social development or the improvement of the environment in Greater London

5.3 S34 of the Act enables the Authority to do anything which is calculated to facilitate, or in conducive or incidental to, the exercise of any functions of the Authority.

## **6. Financial Implications**

6.1 Any costs associated with the completion of this risk assessment will be met from within the existing Scrutiny Programme Budget for 2005/06.

Background Papers: Nuclear Waste Trains Investigative Report: Scrutiny of the Transportation Nuclear Waste by Train through London. October 2001

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