BIRMINGHAM CITY COUNCIL
PUBLIC REPORT

Report to:	**CABINET**
Report of:	**CORPORATE DIRECTOR, ECONOMY**
Date of Decision:	**24th October 2017**
SUBJECT:	**CLEAN AIR HYDROGEN BUS PILOT PROCUREMENT STRATEGY AND FULL BUSINESS CASE**
Key Decision: Yes	**Relevant Forward Plan Ref: 003726/2017**
If not in the Forward Plan:	**Chief Executive approved** ☐
(please "X" box)	**O&S Chair approved** ☐
Relevant Cabinet Members:	**Councillor Stewart Stacey –Transport and Roads, Councillor Lisa Trickett –Clean Streets, Recycling and the Environment, Councillor Majid Mahmood –Value for Money and Efficiency**
Relevant O&S Chair:	**Councillor Zafar Iqbal – Economy, Skills and Transport Councillor Mohammed Aikhlaq – Corporate Resources and Governance, Councillor John Cotton - Health and Social Care**
Wards affected:	**ALL**

1. Purpose of report:

1.1 To set out the proposal to implement a Clean Air Hydrogen Bus Pilot (CAHB Pilot) to reduce NO2 (Nitrogen Dioxide) levels on key bus routes in the city, that will support the Council in achieving air quality compliance standards.

1.2 Approve the Full Business Case (FBC) and procurement strategy for the CAHB Pilot at an estimated cost of £13.440m, which will ascertain the commercial viability of re-fuelling and operating hydrogen buses to contribute towards the zero emission impact required for the city to achieve air quality compliance.

2. Decision(s) recommended:

That Cabinet:

2.1 Approves the Full Business Case at Appendix A for the CAHB pilot at an estimated capital cost of up to £13.440m, funded from OLEV grant (£3.814m), FCHJU grant (£4.141m) GBSLEP Local Growth Fund (£2.156m), Bus Operator minimum contribution (£3.289m) and approved Future Council Programme resources of £0.040m, to procure and deploy up to 22 hydrogen fuelled buses for use by a procured Bus Operator and to provide grant aid towards the cost of providing hydrogen refuelling infrastructure.

2.2 Approves the procurement strategy provided in the FBC in this report (Annex A), that proposes firstly to use an ‘open tender’ approach to procure a Bus Operator and secondly, to utilise the Transport For London (TfL) Hydrogen Bus framework to purchase the proposed hydrogen buses.

2.3 Approves the Council acting as Accountable Body for the Office for Low Emission Vehicles (OLEV) grant and accepts their offer of £3.814m capital grant.

2.4 Authorises the Assistant Director – Transport and Connectivity to pass-port with conditions of grant, £1.340m of the OLEV grant funding to TfL, as joint applicant under the OLEV Grant scheme, to enable them to fund their own procurement of hydrogen

buses.

2.5 Authorises the Assistant Director – Transport and Connectivity to make a grant of £1.0m to ITM Power, the hydrogen re-fuelling infrastructure partner, funded from the OLEV capital grant towards the cost for hydrogen re-fuelling infrastructure to be based at Tyseley Energy Park subject to the completion of a funding agreement.

2.6 Accepts grant funding of £4.141m from the Hydrogen Fuel Cell Joint Undertaking (FCHJU) comprising £4.081m for capital and £0.060m for revenue expenditure.

2.7 Approves the Council to act as Accountable Body for Local Growth Fund grant from the Greater Birmingham and Solihull Local Enterprise Partnership (GBSLEP) and accepts their offer of £2.156m capital grant, subject to receipt of a final offer letter.

2.8 Authorises the Corporate Director, Economy, in conjunction with the Interim Chief Finance Officer, the Director of Commissioning and Procurement and the City Solicitor (or their delegates) to award a contract for the manufacture and delivery of up to 22 hydrogen buses subject to the values not exceeding pre-tender estimates.

2.9 Authorises the Corporate Director, Economy, in conjunction with the Interim Chief Finance Officer, the Director of Commissioning and Procurement and the City Solicitor (or their delegates) to enter into a lease agreement for the use of the 22 hydrogen fuelled buses for a period of 7 years on the basis of the procurement process outlined in Annex A.

2.10 Authorises the City Solicitor to negotiate, execute and complete any necessary legal documentation to give effect to the above recommendations

Lead Contact Officer(s): Sylvia Broadley – Air Quality Manager

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3. Consultation

Internal

3.1 Consultation has been undertaken with the Air Quality Members Steering Group (AQMSG) which includes the Cabinet Member for Clean Streets, Recycling and the Environment, Cabinet Member for Transport and Roads, Cabinet Member for Health and Social Care, Chair of Licensing and Public Protection Committee and Chair of Planning Committee, who support the proposals contained within this report.

3.2 Officers from City Finance, Procurement and Legal and Governance have been involved in the preparation of this report.

3.3 The Assistant Director Transportation and Connectivity, Director for Public Health and the Operational Manager for Air Quality and Environmental Services have been consulted and support the proposal.

External

3.4 External consultation has been undertaken with the Department for Environment, Food and Rural Affairs (DEFRA); Hydrogen infrastructure providers, bus manufacturers; Transport for West Midlands (TfWM) as part of the West Midlands Low Emission Bus Delivery Strategy.

3.5 An application to the GBSLEP for Local Growth Fund grant funding has been made and although the independent financial appraisal has not been fully completed, it is anticipated that an offer letter will be received in the near future.

4. Compliance Issues:

4.1 Are the recommended decisions consistent with the Council's policies, plans and strategies?

4.1.1 The Clean Air Hydrogen Bus Pilot performs a key role in supporting the Council's key policies and priorities as set out in The Vision and Forward Plan, West Midlands Strategic Transport Plan, Birmingham Development Plan, and the Birmingham Connected transport strategy which is set to deliver 'Green Travel Districts' to support improved health and well-being, through low and zero emission transport choices and modal shift particularly towards walking and cycling.

4.1.2 Birmingham Business Charter for Social Responsibility (BBC4SR)

Compliance with the BBC4SR is a mandatory requirement that will form part of the conditions of this contract. However, it is anticipated that may only apply in full to the bus operator contract as the bus manufacturer contract will be through the TFL framework, where the Council are not in a position to mandate it. Tenderers will submit an action plan with their tender that will be evaluated in accordance with the procurement strategy as set out in Annex A of the FBC (Appendix A) and the action plan of the successful tenderer will be implemented and monitored during the contract period.

4.2 Financial Implications

4.2.1 The total cost of the project is £13.440m. This is funded from OLEV grant (£3.814m), FCHJU grant (£4.141m) GBSLEP Local Growth Fund (£2.156m), Bus Operator minimum contribution (£3.289m) and approved Future Council Programme resources of £0.040m. Grant conditions for the OLEV and FCHJU funding require the buses to operate for a minimum of 2 years with data analysis on impact of emissions reduction evaluated. This includes monitoring and data collection of mileage, operational costs and hydrogen fuel levels used.

4.2.2 The Council, as Lead Body, will act as Accountable Body for the OLEV grant and the GBSLEP grant. This is not the case for the FCHJU grant as the Council's role is one of being a partner and not the project Lead Body. The Accountable Body role requires the Council to have spent the funding by March 2019, ensuring value for money, and compliance with procurement and State Aid rules. There is no grant claw back after the project funding period which is 2021.

4.2.3 Details of the project expenditure is set out below:

Funding sources for 22 hydrogen buses:

Funding Source	Contribution Per Bus	Total Contribution (x22 Buses)
OLEV Low Emission Bus Funding	£67,000	£1,474,000
Horizon 2020 / Fuel Cell and Hydrogen Joint Undertaking (FCH JU)	£185,490	£4,080,800
Bus Operator minimum lease cost contribution	£149,510	£3,289,200
GBSLEP Local Growth Fund (LGF)	£98,000	£2,156,000
Total	**£500,000**	**£11,000,000**

4.2.4 Until the Bus Operator is procured and all the funding contributions secured the City Council will not start to procure buses. The Bus Operator will be procured by December 2017, through a tender process that sets as a minimum level of £149,510 per bus for the bus operator contribution as a threshold selection criteria. The Bus Operators minimum contribution is based on the cost of a new Euro VI compliant diesel bus. The Bus Operators tendering will need to provide a range of contributions from £149,510, should the final base specification price exceed £500,000 per bus. Bus operators will also need to set out to what level they intend to cover for other costs that potentially exceed the base hydrogen bus specification. This may include bus 'fit-out' such as number of seats, security requirements such as CCTV, specific seat and floor coverings or integrated technology systems such as ticketing and wi-fi capability. With the procurement of the hydrogen buses to commence by January 2018 (with delivery anticipated for March 2019) the procured Bus Operator will be required to work with the Council to develop the 'fit out' specification for the Birmingham hydrogen buses. Any additional cost for 'fit out' in excess of the base specification cost of £500,000 per bus, will be covered by the procured Bus Operator.

4.2.5 It is proposed that the City Council will lease the buses to the procured Bus Operator project partner for a period of 7 years from March 2019, which aligns with the anticipated life of a hydrogen fuel cell engine. The Bus Operator will be required to pay their lease payment for the hydrogen buses on the same terms as the City Council is receiving from the bus supplier i.e. the first 20% at bus ordering stage in January 2018, 30% at mid-term manufacture stage and final 50% after delivery of all 22 hydrogen buses. For accounting treatment, the lease with the Bus Operator will be classed as a finance lease on the basis that there is an expectation that a substantial amount of the economic life of the asset will have been consumed by the end of the lease (the engine technology is innovative and there is expected to be accelerated depreciation) and it is envisaged that ownership of the asset will transfer to the Bus Operator at a peppercorn rate after this period.

4.2.6 The lessee (Bus Operator) will be responsible for all operational costs including hydrogen fuel, drivers, overnight storage and insurance. Servicing, maintenance and parts will be covered by the hydrogen bus manufacturer contract. In the unlikely event that the tenders for the Bus Operator and Bus Manufacturer are not within the pre-tender estimated sums, then the project will not proceed and there is no liability to the City Council.

4.2.7 As Accountable Body for the OLEV grant, £1m will be grant funded to ITM Power for hydrogen re-fuelling facilities subject to completion of a funding agreement. ITM Power are a partner of the wider hydrogen infrastructure development research and development project at Tyseley Energy Park which is separately funded through ITM Power. Passing the OLEV grant to ITM Power, as part of the overall research and development project hydrogen bus and infrastructure development, will lever an additional £4.442m from ITM Power towards the overall cost of £5.442m for the hydrogen re-fuelling infrastructure required to re-fuel the buses.

4.2.8 As joint applicant under the OLEV Grant scheme, £1.340m grant funding will be pass-ported to TfL along with conditions of grant, to enable them to fund their own procurement of 20 hydrogen buses.

4.2. 9 The taxation consequences of the CAHB proposal have been reviewed and confirmed that there will not be any VAT cost implications for the Council, the bus operator or the fuel provider as all input VAT can be reclaimed on expenditure.

4.2.10 There will be no revenue consequences, other than Future Council Programme resources referenced at 4.2.1, to the City Council during the CAHB Pilot or in the future when the project ceases.

4.3 Legal Implications

4.3.1 The EU Air Quality Directive 2008/50/EC sets out the national targets on emission of pollutants, including nitrogen dioxide (NO2). The directive and target emission levels are set out and implemented in England under the Air Quality Standards Regulations 2010 and 2016. Under Section 82 Environment Act 1985 the Council is required to review air quality within its area and to designate Air Quality Management Areas (AQMA) where air quality objectives need to meet Air Quality (England) Regulations 2000 and 2002. Once designated, the Council is required to develop an Action Plan detailing remedial measures to tackle the problem.

4.3.2 Compliance of CAHB Pilot with State Aid regulations has been assessed and cleared by external legal advisors. The proposed funding arrangements set out in this report are in compliance with the powers of general competence as set out in Section 1 of the Localism Act 2011.

4.3.3 A funding agreement and legal charge will be completed for the £1m capital grant to ITM Power towards the cost of providing hydrogen refuelling infrastructure.

4.4 Public Sector Equality Duty

4.4.1 An initial screening for an Equality Assessment (EA) has been undertaken and has concluded that a full EA is not required at this time, with no adverse impacts on protected groups. The initial screening EA002401 is provided as Appendix B to this report.

5. Relevant background/chronology of key events:

5.1.1 The Council is responsible for ambient air quality and cleaner air under the Air Standard Regulations. With road traffic as a primary source of harmful emissions in the city, heavy diesel vehicles, including buses, are key contributors to nitrogen dioxide (NO2) emissions. By enabling the development of ultra-low and zero emission re-fuelling infrastructure using alternative low and zero emission fuels such as hydrogen, the Council is providing leadership in enabling public and private sector fleets to transition to low and zero emission vehicles and realising the ambitions of Birmingham Connected Transport Strategy to deliver Green Travel Districts, health and well-being.

5.1.2 In February 2015, the Council's commissioned 'Birmingham Blueprint' study which identified the type of low and zero emission fuel technologies required by different fleets operated within public and private sector business. The study provided the baseline for the type of low and zero emission fuel technologies and re-fuelling infrastructure that would be required to reduce harmful emissions. This considered both electric recharging and hydrogen fuel and concluded that the 7-hour recharging for electric buses was impractical due to the number of buses and depot facilities. Hydrogen fuel dispenses in 5 to 10 minutes. The next steps required Research and Development studies to understand the renewable energy systems and scale of what was required; testing commercial viability of hydrogen buses and hydrogen as a zero emission fuel technology.

5.1.3 The Government issued the UK Plan for Tackling Roadside Nitrogen Dioxide Concentrations in July 2017 which identified Birmingham as one of the areas experiencing the greatest problem with NOS exceedances. The Plan requires the Council to undertake assessments aimed to deliver the best option to achieve statutory NO2 limit values within the shortest possible time. The plan for tackling NO2 exceedances will need to be finalised by Summer 2018. The plan also requires local authorities to consider innovative options and new technologies to reduce emissions including; public and private uptake of ultra-low emission vehicles (ULEVs) and using innovative retrofitting technologies and new fuels.

5.1.4 The Council has collaborated with TfL and Aberdeen City Council to enable a deployment of 100 hydrogen buses by 2020. Whilst this ensures achieving economies of scale and reduced costs for each city, there are no joint risks with this project, in that through collaboration, with TFL and Aberdeen, their performance does not impact on the Council or project funding. Initially Birmingham will have 22 buses (including 2 spare buses due to piloting refuelling), 20 for London and 20 for Aberdeen, within the first round of procurement, on the basis that 20 buses is the optimal number for running a bus route and the grant funding requires this number to ensure impact on emission reduction on the bus route. To ensure that this development is not just a pilot scheme, work will continue to develop towards establishing a city wide re-fuelling infrastructure with a commercially viable price for hydrogen and vehicles. Plans for deploying future hydrogen re-fuelling infrastructure, bus and other hydrogen vehicle models are being aligned with UK and EU funding sources and with other cities. This will ensure that the economies of scale being developed will drive down costs making hydrogen vehicles and fuel the zero emission choice of the future.

5.1.5 The bus route in Birmingham will be determined from current bus routes, once the Bus Operator is procured and the Council have the air quality evidence to identify which of the routes are of the highest levels of non-compliance. The proposed 22 hydrogen buses will replace a whole fleet of diesel buses that operate on the specific route

identified.

5.1.6 The CAHB Pilot is a ‘first of a kind’ in the UK and Europe, by producing hydrogen fuel for the proposed buses through electrolysing on site using renewable energy from waste, based at Tyseley Energy Park, which is also set to be the first low/zero emission re-fuelling hub. Another key aim of the CAHB Pilot is to create the economies of scale, through joint planning and procurement, and significantly reduce costs of purchasing the hydrogen buses. Detailed research and development analysis of the specifications for hydrogen bus deployment have been undertaken, including the EU funded 2015 Roland Berger- Hydrogen Fuel Cell Bus study and the 2016 EU NewBusFuel research project; both of which identified the need for further analysis to establish how hydrogen buses can achieve commercialisation. The proposed CAHB Pilot addresses this need. TFL have developed and awarded a procurement framework for hydrogen buses. It is proposed that a mini competition will be run in January 2018 whereby the Council, TFL and Aberdeen City Council will jointly award the first contract. The Council will order its own 22 buses under this contract.

5.1.7 The Cabinet Member for Clean Streets, Recycling and the Environment approved the City Council joint submission with TfL, of a draft expression of interest (EOI) to OLEV in October 2015 under the Low Emission Bus Scheme (LEBS). Although the LEBS scheme was not originally set up to provide funds to test the deployment of hydrogen buses, the draft EOI was accepted by the LEBS scheme given the potential of other funding being sourced through the FCHJU and Local Growth resources via GBSLEP as well as the urgent need for 100% zero emission buses to impact on air quality. At the time there was no formal commitment to fund, however, OLEV have since come back and made an offer of capital grant funding, which when matched with FCHJU, GBSLEP grant and a Bus Operator’s contribution to fund the balance, will enable the project to proceed.

5.2 State Aid

5.2.1 The Council has taken external state aid advice from DWF, who are legal experts in the use of UK and EU funding for transport and renewable energy research and development, in relation to the proposed offer from the OLEV LEBS scheme, which will be operated by a private sector bus operator and hydrogen re-fuelling provider. The advice is that the CAHB Pilot does not contravene state aid rules, as it comes under the European Commission’s research and development provisions of the General Block Exemption Regulation or "GBER". The project comes under the definition "experimental development" in Article 2 (86) of the GBER as the project will test the cost modelling and commercial viability of deploying hydrogen buses using renewable energy systems to create low cost electricity for the production of hydrogen as a zero emission fuel.

5.2.2 The Council has also been advised, by DWF, to procure a Bus Operator to lease the buses from the Council. This aligns with the State Aid approach of a research and development pilot scheme, where a Bus Operator partner is sought to operationally test the commercial viability of the hydrogen buses and fuel. The bus operator will lease the buses from the City Council paying what they would have done for 22 new diesel buses, thus contributing a minimum level of £3.289m towards the funding package to cover the overall capital cost of the 22 hydrogen buses. In regard to the hydrogen fuel provider, ITM Power, £1m of the OLEV LEBS grant will be passed to them in order to lever in the required £4.442m to cover the overall cost of the hydrogen re-fuelling infrastructure. The advice from DWF confirms that this does not contravene state aid. ITM Power have been collaborating with the research and development throughout the

project given they were the only UK hydrogen company at the time, and are providing the majority of funding for the hydrogen infrastructure.

5.3 Tyseley Energy Park

5.3.1 The CAHB pilot is set to test the potential of developing a hydrogen market. This will be delivered through producing hydrogen at Tyseley Energy Park (TEP), a private sector development covering a 1 acre site in the Tyseley Environmental District. TEP received full planning permission in November 2016 for a low/zero emission re-fuelling hub for commercial and public sector vehicles from buses and bin wagons to vans and taxis. TEP is set to deliver hydrogen, as well as other alternative fuels including compressed natural gas/CNG, electric charging points, Liquefied Petroleum Gas/LPG and Bio-diesel. The Council has worked with TEP to attract private sector investment to develop the low and zero emission fuel hub, to support the transition of fleets to ultra-low and zero emission vehicles. This development aligns with the economic and regeneration local development plan for Tyseley Environmental Enterprise District, by exploiting the growth in low carbon technologies and brings forward private sector investment, employment and new skills development.

5.3.2 ITM Power, as a private sector hydrogen provider, have worked alongside TEP and the Council in the design and delivery of hydrogen infrastructure appropriate for re-fuelling buses to meet the same operational requirements as for diesel buses. ITM Power are set to deploy funding they have secured through Innovate UK for which they have already signed contracts and to invest their resources in locating the hydrogen fuelling infrastructure and make their own arrangements with TEP to lease the site required. The £1.0m to be passed to ITM under a funding agreement will contractually require ITM Power to provide the facilities that utilise lower cost renewable electricity produced at TEP within the hydrogen production process (electrolysing electricity and water), and for it to be suitably compressed, stored and dispensed. The CAHB pilot will develop the pricing model for commercially viable hydrogen fuel by producing hydrogen on a scale sufficient to service a bus fleet. Mitigation of risk will be managed as part of a robust project management process. The hydrogen infrastructure will be developed over the first year from January 2018 ahead of the buses being delivered in March 2019. The hydrogen plant will be tested in 1 mega-watt ‘stack’ developments up to 3 mega-watts, which is the requirement for 22 buses. This will ensure everything works before the buses are delivered and operationally tested.

5.3.3 TEP will be operational from September 2018 and will kick-start new business development around hydrogen bus servicing and maintenance and associated hydrogen fuel cell technology related qualifications from City and Guilds to Degree level education and apprenticeship training opportunities in collaboration with the University of Birmingham and Aston University.

5.3.4 The project activity milestones are set out in Annex D of the FBC (at Appendix A), however the key measures that will determine whether this project is successful will be the development of an economic alternative to diesel fuel without the emissions. Additionally, the project will deploy 22 hydrogen buses that will provide zero emission transport with the associated development of supply chains for the service, maintenance and re-fuelling.

5.4.1 Procurement Strategy

The procurement strategy for the Bus Operator and the manufacture and delivery of up to 22 hydrogen buses is detailed in Annex A of the FBC.

5.4.2 Duration and Advertising Route

The proposed duration of the contracts will be for a period of 7 years. The tender opportunity for the Bus Operator will be advertised via Contracts Finder, Find It In Birmingham, and the Official Journal of the European Union (OJEU) and for the bus manufacturer it will be advertised to those suppliers awarded to the TFL Framework Agreement.

5.4.3 Procurement Route – Bus Operator

To enable the successful delivery of the project, a procurement exercise will be undertaken, using the open tender route, the details of which are contained within Annex A of the accompanying FBC.

5.4.4 Key procurement milestones;

Please see Annex A (Procurement Strategy) of the FBC.

5.4.5 Procurement Route – Bus Manufacturer

This report proposes the use of the Transport for London framework for Hydrogen Buses. To enable the successful delivery of the project, a mini-competition exercise will be undertaken, the details of which are contained within Annex A of the accompanying FBC.

6. Evaluation of alternative option(s):

6.1. Do not progress the Clean Air Hydrogen Bus Pilot. This option is not recommended as the Council is at risk of not meeting compliance with EU Directive 2008/50/EC and UK air quality regulations through the UK Environment Act 2008.

6.2 Transport for West Midlands leading the project. This option is not recommended as this project is not just focussed on deploying buses. The key focus of the pilot is to ascertain the commercial viability of hydrogen as a zero emission fuel to provide the immediate impact required for the city to contribute towards air quality compliance.

6.3 Undertake the project with fewer than 22 buses. The number of buses is the minimum required to test this energy solution on a major bus route.

6.4 Do not include the hydrogen refuelling facility at the TEP. This would require tankers to refuel the buses, which is currently happening at TfL and Aberdeen. This mode of delivery undermines the green benefits of the project and the opportunity to test new refuelling technology being implemented at the TEP.

7. Reasons for Decision(s):

7.1 To progress the proposal to purchase up to 22 hydrogen buses and setting up the hydrogen re-fuelling infrastructure through the hydrogen provider.

7.2 To enable the Council to comply with EU Directive 2008/50/EC and UK air quality regulations through the UK Environment Act 2008 and Part 2 the Localism Act 2011.

7.3 To provide leadership in actions to fast track the implementation of zero emission fuel technologies to address the improvement of air quality in the shortest time possible as a key requirement for the Council to meet UK air quality compliance by 2020.

Signatures		**Date**
Councillor Stewart Stacey – Cabinet Member for Transport and Roads	……	……
Councillor Lisa Trickett – Cabinet Member for Clean Streets, Recycling and the Environment	……	……
Councillor Majid Mahmood – Cabinet Member for Value for Money and Efficiency	……	……
Waheed Nazir Corporate Director, Economy	……..	……

List of Background Documents used to compile this Report:
A City Blueprint – For Low Carbon Fuel Refuelling Infrastructure
NewBusFuel Report
West Midlands Low Emission Bus Delivery Plan
Birmingham Development Plan
Birmingham Connected

List of Appendices accompanying this Report (if any):
Appendix A - Full Business Case
Appendix B - Equality Analysis

PROTOCOL
PUBLIC SECTOR EQUALITY DUTY

1 The public sector equality duty drives the need for equality assessments (Initial and Full). An initial assessment should, be prepared from the outset based upon available knowledge and information.

2 If there is no adverse impact then that fact should be stated within the Report at section 4.4 and the initial assessment document appended to the Report duly signed and dated. A summary of the statutory duty is annexed to this Protocol and should be referred to in the standard section (4.4) of executive reports for decision and then attached in an appendix; the term 'adverse impact' refers to any decision-making by the Council which can be judged as likely to be contrary in whole or in part to the equality duty.

3 A full assessment should be prepared where necessary and consultation should then take place.

4 Consultation should address any possible adverse impact upon service users, providers and those within the scope of the report; questions need to assist to identify adverse impact which might be contrary to the equality duty and engage all such persons in a dialogue which might identify ways in which any adverse impact might be avoided or, if avoidance is not possible, reduced.

5 Responses to the consultation should be analysed in order to identify:

(a) whether there is adverse impact upon persons within the protected categories

(b) what is the nature of this adverse impact

(c) whether the adverse impact can be avoided and at what cost – and if not –

(d) what mitigating actions can be taken and at what cost

6 The impact assessment carried out at the outset will need to be amended to have due regard to the matters in (4) above.

7 Where there is adverse impact the final Report should contain:

- a summary of the adverse impact and any possible mitigating actions (in section 4.4 or an appendix if necessary)
- the full equality impact assessment (as an appendix)
- the equality duty – see page 9 (as an appendix).

Equality Act 2010

The Executive must have due regard to the public sector equality duty when considering Council reports for decision.

The public sector equality duty is as follows:

1 The Council must, in the exercise of its functions, have due regard to the need to:

(a) eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by the Equality Act;

(b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;

(c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

2 Having due regard to the need to advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it involves having due regard, in particular, to the need to:

(a) remove or minimise disadvantages suffered by persons who share a relevant protected characteristic that are connected to that characteristic;

(b) take steps to meet the needs of persons who share a relevant protected characteristic that are different from the needs of persons who do not share it;

(c) encourage persons who share a relevant protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionately low.

3 The steps involved in meeting the needs of disabled persons that are different from the needs of persons who are not disabled include, in particular, steps to take account of disabled persons' disabilities.

4 Having due regard to the need to foster good relations between persons who share a relevant protected characteristic and persons who do not share it involves having due regard, in particular, to the need to:

(a) tackle prejudice, and

(b) promote understanding.

5 The relevant protected characteristics are:

(a) Marriage & civil partnership
(b) Age
(c) Disability
(d) Gender reassignment
(e) Pregnancy and maternity
(f) Race
(g) Religion or belief
(h) Sex
(i) Sexual orientation