

GREATER LONDON AUTHORITY

REQUEST FOR MAYORAL DECISION – MD3217

Breathe London network continuation

Executive summary:

The Mayor has identified improving air quality as one of his priorities. Critical to this is a comprehensive understanding of air quality in London; and enhancing our monitoring and modelling capabilities.

The Breathe London network helps make air-quality monitoring, and reliable air-quality data, accessible by providing a lower-cost alternative for monitoring air quality in London, one that is easy to install and maintain. This supplements the existing reference-monitoring network used for formal air-quality reporting. The network enables a wider special coverage of monitors providing hyper-local, accurate and reliable data to Londoners; and the opportunity for communities and businesses to choose where to monitor pollution.

The network has been of enormous value – particularly to the schools, hospitals and community groups that have hosted sensors. This decision therefore seeks approval for ongoing funding and procurement authority to maintain and expand the Breathe London network, providing real-time air-pollution data to some of the most vulnerable Londoners; and deepening our understanding of air pollution across the city.

Decision:

That the Mayor approves:

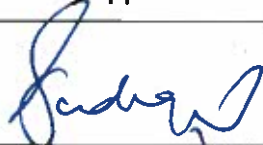
- GLA expenditure of up to £800,000 revenue over four years (financial years 2024-25 to 2027-28) and £600,000 capital over three years (financial years 2024-25 – 2026-27) so that the Breathe London network can keep providing hyper-local air-quality monitoring across London
- the procurement of a service provider to help grow and operate the Breathe London network
- a delegation to the GLA's Executive Director for Good Growth to approve the allocation of any additional funding that may become available to Breathe London, e.g. contributions from external bodies, other projects or further agreed capital funding via future budget setting rounds.

Mayor of London

I confirm that I do not have any disclosable pecuniary interests in the proposed decision and take the decision in compliance with the Code of Conduct for elected Members of the Authority.

The above request has my approval.

Signature:



Date:

26/2/24

PART I – NON-CONFIDENTIAL FACTS AND ADVICE TO THE MAYOR

Decision required – supporting report

1. Introduction and background

- 1.1. Improving air quality is a public health priority. Long-term exposure to air pollution in London contributes to thousands of premature deaths every year. There is also strong scientific evidence of the acute health effects of short-term exposure to very high levels of pollution – like those experienced during an air-pollution episode. It is essential that coordinated action is taken to reduce exposure, especially amongst those most at risk such as school children, the sick and the elderly. Critical to this is a comprehensive understanding of air quality in the city, along with continuing enhancement of monitoring and modelling capabilities.
- 1.2. In 2020 the Mayor approved the expenditure of £757,000 over four years (2020-21 to 2023-24) to develop the Breathe London network; and to provide hyper-local air-quality monitoring across London (MD2587). After a competitive tender, Imperial College London was awarded the contract to develop the Breathe London network.
- 1.3. The objectives of this contract were: to build on the pilot phase of the project to maintain a robust, open access, real-time, hyperlocal dataset for data collected; and to incorporate lower-cost hyper-local monitoring with London's existing reference quality network.
- 1.4. The GLA directly funded the first 136 sensors to provide hyper-local air quality data for vulnerable groups – such as school children, the sick and the elderly – across London in 2021. The Breathe London network has since grown rapidly, to over 400 in two years. The breadth of partner organisations makes the network unique, including schools, hospitals, boroughs, cultural institutions, and community groups.
- 1.5. The Mayor and Bloomberg Philanthropies, through Imperial College London, have provided 60 free Breathe London sensors to diverse community groups to tackle air pollution in their local areas through the Breathe London Community Programme. The programme is aimed at vulnerable communities and areas that have poor air quality, limited green space and/or high deprivation.
- 1.6. The Breathe London network is playing an important role in empowering communities to measure air pollution in their local areas and campaign for action. Each of the successful community groups has pledged to measure air pollution, raise awareness or make interventions within their own local community.
- 1.7. Through the Breathe London network, London is the first major city to have a combined reference and sensor network that empowers communities to monitor air pollution in their neighbourhoods and use the data to lobby for change. The success of Breathe London, as well as its scalability and replicability, has also led to the establishment of the Breathe Cities initiative – a \$30m clean air initiative to break down barriers to action, and ensure communities around the world have access to clean air.
- 1.8. The contract with the existing service provider ends in December 2024. The network has been of enormous value to a wide range of users, including the most vulnerable Londoners; and has had additional social value through the engagement with local communities.
- 1.9. The Mayor is requested to approve expenditure of up to £1,400,000 over four years (2024-25 to 2027-28) to procure a service provider to grow and operate the Breathe London network in order to provide hyper-local air-quality monitoring across London.

2. Objectives and expected outcomes

2.1. The objectives of this work programme are to:

- maintain and grow the existing Breathe London network, so that it can continue to provide a robust, open-access, real-time, hyper-local dataset. In addition to displaying the real time data from these hyper-local sensors, the Breathe London website also displays data from boroughs' existing reference quality network (including the Automatic Urban and Rural Network, Air Quality England, and the London Air Quality Network), showing an unprecedented level of detail about London's air quality, in one place, and accessible to all
- maintain and improve the existing Breathe London website to deliver increased functionality and useability for a range of users, through improvements in data visualisation and innovative improvements incorporating health impacts and source apportionment
- measure the impact of various air quality interventions
- provide an additional round of funding for community groups to allow expansion of the hyper-local air quality data including for vulnerable groups in the most deprived areas.

2.2. The expected outcomes of the work programme are as follows:

- an enhanced and advanced air quality network, which can be replicated globally through Breathe Cities to reduce air pollution, cut carbon emissions, and improve public health in cities around the world
- effective monitoring and assessment of the impact of the London-wide ULEZ expansion, and other Mayoral air-quality initiatives, resulting from the continued collection of air-quality data from the 400+ locations
- an improved user-friendly data platform will enhance public awareness, increase the reach and usage of the data and support world class research including into the health effects of short-term exposure to air pollution
- increased citizen engagement with the air-quality sensor programme, by rolling out to more communities and continuing to support the Breathe London Community Programme
- increased citizen engagement and awareness, and engagement with schools and hospitals where sensors are located
- empowerment of community groups to harness their data to influence behaviours at a local level, and reduce exposure to poor air pollution
- better information for NHS staff at participating hospitals about air pollution and associated health risks, helping them to provide vulnerable patients with appropriate advice
- opportunities for researchers to review onsite air-pollution concentrations alongside patient records to better understand the relationship between air pollution and health effects
- improvements in the ability of schools and hospitals to measure the impacts of measures they take to improve air quality.

3. Equality comments

3.1. The GLA and other public authorities must have 'due regard' to the need to eliminate unlawful discrimination, harassment and victimisation; and to advance equality of opportunity, and foster

good relations, between people who share a protected characteristic and those who do not, under section 149 of the Equality Act 2010. This involves having due regard to the need to remove or minimise any disadvantage suffered by those who share a relevant protected characteristic; taking steps to meet the different needs of such people; and encouraging them to participate in public life or in any other activity where their participation is disproportionately low.

- 3.2. The “protected” characteristics and groups are: age, disability, gender reassignment, pregnancy and maternity, race, sex, religion or belief, sexual orientation and marriage/civil partnership status. Compliance with the Equality Act 2010 may involve treating people with a protected characteristic more favourably than those without one. The duty must be exercised with an open mind, and at the time a decision is taken in the exercise of the GLA’s functions. Conscientious regard must be had that is appropriate in all of the circumstances.
- 3.3. In June 2023 the GLA published analysis on exposure to air pollution showing that not only are there huge health impacts of pollution, but the way they fall on the most vulnerable means that improving air quality is fundamentally about tackling social injustice and health inequalities.
- 3.4. The report, building on research carried out between 2013 and 2021, provides a comprehensive look at how air quality improved between 2013 and 2019. It breaks the data down further to show that location, ethnicity, community and deprivation all play a part in the way Londoners are affected by toxic air – with those from Black communities, diaspora immigrant communities and those in the most deprived areas of the city being the worst affected. Through the research described in the report, City Hall is seeking to understand inequalities in access to clean air in London; and to consider how this will be improved by planned air pollution controls.
- 3.5. The research shows that, between 2013 and 2019, the Mayor’s policies helped narrow the gap in NO₂ exposure between the most and least deprived areas by up to 43 per cent. This shows that inequalities have reduced. However, the most deprived communities in London are still most likely to live in the most polluted areas of the city. In 2019, the average NO₂ concentration in the most deprived areas was 4.4 µg/m³ higher than in the least deprived areas.
- 3.6. The data highlights the need to take further action to tackle toxic air in London. While progress has been made to reduce some of the inequalities, without further action the differences in the quality of air Londoners from different backgrounds, ethnicities and communities breathe will continue to be stark.
- 3.7. The programme of work set out in this MD will benefit all Londoners. However, due to the unequal impacts of pollution on the most vulnerable Londoners, this programme of activity is likely to have a positive effect in tackling social and health inequality. Having a better understanding of air pollution, particularly at a community level, will also create new opportunities to take targeted and effective action.

4. Other considerations

Key risks and issues

- 4.1. The key risks and issues are outlined in the table below:

	Risk description (cause, risk, event, potential impacts)	Probability (1-5)	Impact (1-5)	RAG	Mitigation/risk response (state if the response is done or pending)
1	No project partner can be found after a competitive procurement process	1	5	G	We expect there to be at least one bidder, as the incumbent provider has already expressed interest, and we will continue to

					seek other potential providers through pre-procurement engagement and an open tender process.
2	Not enough funding is available to maintain the whole of the existing network	2	3	G	Breathe London is a scalable network. Some reductions in functionality and scope could be delivered and remaining sensors focused on the highest-priority areas.
3	Complications arise in the handover process from incumbent and result in the network being offline for a short period	4	1	G	London already has a good air-quality monitoring network, which would ensure some monitoring continues. If the network is briefly offline, sites such as schools and hospitals should be prioritised.
4	Data collected is of a poor quality	2	3	G	The initial Breathe London contract has proved that with sufficient network calibration, low-cost sensors can produce reliable data. London's extensive reference networks provides a sense check and opportunity to co-locate sensors.

Impact assessment

- 4.2. A comprehensive Integrated Impact Assessment (IIA) was undertaken to support the London Environment Strategy (LES) which covered air quality, including proposed action at schools and nurseries. The IIA found that the GLA had considered aspects for improving London's air quality based on four policy options. This was recognised in the LES IIA as the most effective approach for addressing human health impacts. The LES includes targets for some of the pollutants identified in the IIA recommendations. The GLA agreed that it would look to include specific interventions to improve air quality around schools, hospitals and care homes.

Links to Mayoral Strategies

- 4.3. This work programme will contribute to the following LES objectives:
- Objective 4.1 – Support and empower London and its communities, particularly the most disadvantaged and those in priority locations, to reduce their exposure to poor air quality.
 - Objective 4.2 – Achieve legal compliance with UK and EU limits as soon as possible, including by mobilising action from London boroughs, Government and other partners.
 - Objective 4.3 – Establish and achieve new, tighter air quality targets for a cleaner London by transitioning to a zero emission London by 2050, meeting World Health Organization health-cased guidelines for air quality.
- 4.4. Policy 4.1.2 of the LES (Improve the understanding of air quality health impacts to better target policies and action) includes Proposal 4.1.2.b:

"The Mayor will work with boroughs to safeguard the existing air quality monitoring network, and enhance it by exploiting new technologies and approaches such as personal and localised monitoring."

- 4.5. The strategy explicitly recognises the importance of both the sensor project and advancing understanding of how and when to use personal monitors:

"The Mayor will work with boroughs and other partners to encourage innovation in monitoring, starting with a new sensor monitoring trial in partnership with the C40 Cities Climate Leadership Group. This is a network of the world's megacities committed to addressing climate change and air pollution."

"It is getting easier for people and groups to buy personal and relatively low cost monitoring systems. These can be valuable tools but knowing how best to use and locate the monitors is vital if the results are to provide meaningful information. It is also important to understand the limitations of monitoring equipment, and how best to interpret and publish results. The Mayor will offer guidance and advice on how air quality is monitored in London, and help people understand what type of equipment is available."

- 4.6. This programme is consistent with and takes forward the commitment set down in the LES.

Conflicts of interest

- 4.7. There are no conflicts of interest to note for any of the officers involved in the drafting or clearance of this decision form.

5. Financial comments

- 5.1. Approval is requested for:

- expenditure of up to £200,000 revenue expenditure per year, for four years, to maintain and grow the Breathe London network.
- expenditure of up to £200,000 capital expenditure per year, for three years, to support the replacement and ongoing delivery of additional Breathe London sensors
- procuring a service provider to help grow and operate the Breathe London network
- a delegation to the GLA's Executive Director for Good Growth to approve the allocation of any additional funding that may become available to Breathe London, e.g. contributions from external bodies, other projects or further agreed capital funding.

- 5.2. The indicative profile will be as follows and may be subject to change:

	2024-25	2025-26	2026-27	2027-28	Total
Revenue	£200,000	£200,000	£200,000	£200,000	£800,000
Capital	£200,000	£200,000	£200,000		£600,000

- 5.3. This expenditure will be funded from the Air Quality budget within the Connectivity, Air Quality, Transport and Infrastructure Unit's budget. There is sufficient budget within the draft 2024-25 budget to cover the expenditure on both the capital and revenue side, as well as within the indicative plan set for 2025-26 and 2026-27. This is subject to formal approval as part of the Mayor's budget-setting process; therefore, break clauses will need to be included within any contracts for each year to mitigate the risk of there being insufficient resources to meet the commitments.

- 5.4. The budget is only set on a three-year basis. Therefore, budget for 2027-28 will need to be added to the budget plan when planning is done for 2025-26. In any case, however, it will only be approved when the formal process is undertaken for 2027-28; and, as such, will need to be subject to the break clauses mentioned above.
- 5.5. The capital budget will be used to support the replacement and ongoing delivery of additional Breathe London sensors. Currently there are over 130 GLA-funded Breathe London sensors which will need to be replaced over the lifetime of the budget. The capital funding may also be used to fulfil the GLA's statutory obligation to ensure legal compliance by 2025 by supporting targeted interventions at hotspots including through the Mayor's Air Quality Fund.
- 5.6. There is scope to enhance this network further, which will subsequently require additional funding. In this instance supplementary approval will need to be sought via the Authority's decision-making process.

6. Legal comments

- 6.1. The foregoing sections of this report indicate that the decisions requested of the Mayor concern the exercise of the GLA's general powers and fall within the GLA's statutory power to do such things considered to further or which are facilitative of, conducive or incidental to the promotion of the improvement of the environment in Greater London and in formulating the proposals in respect of which a decision is sought officers have complied with the GLA's related statutory duties to:
- pay due regard to the principle that there should be equality of opportunity for all people
 - consider how the proposals will promote the improvement of health of persons, health inequalities between persons and to contribute towards the achievement of sustainable development in the United Kingdom
 - consult with appropriate bodies.
- 6.2. In taking the decisions requested, the Mayor must have due regard to the Public Sector Equality Duty – namely, the need to eliminate discrimination, harassment, victimisation and any other conduct prohibited by the Equality Act 2010; and advance equality of opportunity, and foster good relations, between persons who share a relevant protected characteristic (age; disability; gender reassignment; marriage and civil partnership; pregnancy and maternity; race; religion or belief; sex; sexual orientation) and persons who do not share it (section 149 of the Equality Act 2010). To this end, the Mayor should have particular regard to section 3 (above) of this report.
- 6.3. This MD seeks approval for expenditure of up to £1,400,000 to continue the Breathe London network, including the procurement of a service provider to grow and operate the network. Officers are reminded to comply with the requirements of the Contracts and Funding Code when they procure other services or supplies; or award grant funding in furtherance of the project. Furthermore, officers are reminded to put in place appropriate contracts and grant agreements between the GLA and the relevant service providers and/or recipients.
- 6.4. Any function exercisable by the Mayor on behalf of the GLA may also be exercised by, inter alia, a member of the GLA's staff albeit subject to any conditions, which the Mayor sees fit to impose. To this end, the Mayor may make the requested delegation to the Executive Director for Good Growth if he so chooses.

7. Planned delivery approach and next steps

- 7.1. The project will be delivered according to the following timetable:

Activity	Timeline
Procurement process for next contract partner begins	May 2024
Successful project partner announced	August 2024
GLA control of the Breathe London network, to be managed by newly appointed project partner	December 2024

Appendices and supporting papers:

None.

Public access to information

Information in this form (Part 1) is subject to the Freedom of Information Act 2000 (FoIA) and will be made available on the GLA website within one working day of approval.

If immediate publication risks compromising the implementation of the decision (for example, to complete a procurement process), it can be deferred until a specific date. Deferral periods should be kept to the shortest length strictly necessary. **Note:** This form (Part 1) will be published either within one working day after it has been approved or on the defer date.

Part 1 - Deferral**Is the publication of Part 1 of this approval to be deferred? YES**

If YES, for what reason: If the authority is to achieve best value, it is essential that potential bidders are not aware of the total available budget or other sensitive information. Therefore, publication should be deferred until completion of the competitive procurement process.

Until what date: 1 October 2024

Part 2 – Sensitive information

Only the facts or advice that would be exempt from disclosure under the FoIA should be included in the separate Part 2 form, together with the legal rationale for non-publication.

Is there a part 2 form – NO**ORIGINATING OFFICER DECLARATION:**

Drafting officer
to confirm the
following (✓)

Drafting officer:

Matthew Browning has drafted this report in accordance with GLA procedures and confirms the following:

✓

Sponsoring Director:

Niran Mothada has reviewed the request and is satisfied it is correct and consistent with the Mayor's plans and priorities.

✓

Mayoral Adviser:

Shirley Rodrigues has been consulted about the proposal and agrees the recommendations.

✓

Advice:

The Finance and Legal teams have commented on this proposal.

✓

Corporate Investment Board

This decision was agreed by the Corporate Investment Board on 19 February 2024.

✓

INTERIM CHIEF FINANCE OFFICER:

I confirm that financial and legal implications have been appropriately considered in the preparation of this report.

Signature:



Date:

21/02/2024

CHIEF OF STAFF:

I am satisfied that this is an appropriate request to be submitted to the Mayor.

Signature:



Date:

19/02/2024

