



Department  
for Transport

# Zero Emission Bus Regional Areas Scheme – 2021 to 2022 Application Form

## Call for Expressions of Interest

### Applicant Information

**Local transport authority:** Southampton City Council

**(For joint bids only) Which local transport authority is the lead bidder:** N/A

**Area within authority covered by bid:** Southampton

**Bid Manager Name and position:** Iain Steane, Transport Policy Team Leader

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**Postal address:** One Guildhall Square, Southampton, SO14 7LS

### Submission of proposals:

Applications to the Scheme will be assessed against the criteria set out here and in the guidance document. Please adhere to word limits. We will not accept any additional information unless specifically requested.

Proposals must be received no later than 17:00 on the following days.

- **Fast track process** - 5pm on 21<sup>st</sup> May 2021
- **Standard process** – 5pm on 25<sup>th</sup> June 2021.

You will receive confirmation that we have received your proposal within 1 working day.

An electronic copy only of the bid including any supporting material should be submitted to [buses@dft.gov.uk](mailto:buses@dft.gov.uk).

Please include “**ZEBRA (Fast track Process) Local Transport Authority name**” in the subject line of the email if you are applying under the fast track process.

Please include “**ZEBRA (Standard Process) Local Transport Authority name**” in the subject line of the email if you are applying under the standard process.

Enquiries about the Fund may be directed to [buses@dft.gov.uk](mailto:buses@dft.gov.uk).

### **Transparency and privacy**

Please refer to the guidance for this scheme before completing the application form to understand how DfT will manage your data.

## SECTION A: Mandatory Questions

Areas must satisfactorily answer all of the questions in this section to be eligible to progress to Phase 2 of the scheme. If you would like further information, please contact the Department for Transport at [buses@dft.gov.uk](mailto:buses@dft.gov.uk).

Areas must provide the information requested in questions A1-A5.

### A1. In total, how many new zero emission buses will your proposal deliver?

The proposal will deliver **32** new double deck electric buses to operate on the UniLink services between Southampton City Centre, the University of Southampton, University Hospital Southampton, Southampton Airport, and areas of Portswood and Swaythling.

### A2. Total DfT funding sought (£m)

*While there is no minimum or maximum size for bids the department is interested in supporting at least three areas across the ZEBRA scheme as a whole, so we expect to see schemes that are approximately £25m – £35m. This is designed to encourage a wide range of bidding areas to come forward and to ensure DfT are able to fund at least three areas across the whole scheme.*

Total DfT Ask - £6.247m

### A3. Third party funding contributions (£m)

Third Party	Contribution	Towards
Southampton City Council	£1m	Charging infrastructure, promotion, back office
University of Southampton	£0.7m	Vehicles
Go South Coast	£8m	Base% cost of buses plus additional contribution towards 25% match funding towards infrastructure & vehicles
Total	£9.7m	

Table 1 – Third Party Contributions

Total third party – £9.7m

### 4. Funding from other government schemes (£m)

*Please set out any funding from other government schemes that is intended to be used alongside funding from the ZEBRA scheme.*

**Transforming Cities Fund - £0.382m to support smart ticketing and upgrades along the Portswood Road corridor**

## A5. Total cost of the proposal (£m):

*This should include DfT funding as specified in A2, any third party contributions as specified in A3 and any funding from other government schemes as specified in A4.*

The total cost of the proposal is £16.329m

Element	Description	DfT Ask	Match	Total purchase cost
Vehicles	32 new double deck electric buses	£5.208m	£9.736m	£14.944m
Infrastructure	16 in depot SWARCO chargers	£1.039m	£0.346m	£1.385m
	<b>Totals</b>	<b>£6.247m</b>	<b>£10.082m</b>	<b>£16.329m</b>

Table 2 – Southampton ZEBRA Proposal

**Areas must be able to answer yes to question A6-A12 to be able to progress to Phase 2.**

## A6, If your bid is successful, are you able to invest DfT funding within the time outlined by your scheme?

Yes, the proposal would be implemented during 2022/23 and if funding as set out in DfT call for bids we would plan to commence operation of the buses for the start of the 2022/23 academic year for the University.

## A7. If your bid is successful, are you able to capitalise DfT grant funding?

Yes

## A8. Have you considered whether additional zero emission buses are needed to replace existing buses?

*Evidence suggests that replacing diesel buses with zero emission buses can require additional zero emission buses to provide the same level service as provided by diesel buses. Areas should set out how many additional zero emission buses are needed to replace existing buses. If areas are of the view that additional zero emission buses are not required please set out why.*

Yes – The Proposal allows for several “spares” to deliver the service on the routes provided. Significant analysis by the bus manufacturer, BYD, has modelled all routes and running boards to ensure that the buses procured through this process can undertake the work needed. This has concluded that they are fit for purpose as well as having enough battery capacity to undertake the work and recharge in time for the next day. Clean Diesel Euro VI buses replaced by this bid will be cascaded within the sister “Bluestar” fleet in Southampton with older vehicles leaving operational service.

**A9. Have you provided a breakdown of infrastructure costs for your proposal?**

*Infrastructure costs could include (but are not limited to): cost of charging unit or refuelling stations electrical or other power components; civil engineering works, labour costs (for installation); hardware costs; capital costs of developing associated software systems; surveys at the point of procuring the infrastructure provided they can be capitalised; upgrades to the energy grid to cater for increased energy demand.*

Yes. Cost estimate for the chargers that would be used by the supplier specifically for this project; electrical connection charge assessed through the All Electric Bus Towns Bid' with 25% risk assumption; full on site connection and installation costs from SSE specifically for this project inclusive of costs of Vehicle Chargers, Off site connection, On Site Electrical Connection including design of site and infrastructure specifications, Construction of appropriate frames/mounting posts and weather shields, install of SWARCO chargers for DC charging and installation of CAT6 data cabling/communication cabling from each charger to server room. Also including install and commissioning, concrete bases and GRPs of LV Panels and Transformers, LV supply distribution as well as supply and install of cabling terminations for Transformers, LV Panel and Chargers, Armco barrier supply and install to protect equipment, and set up/on site facilities such as welfare and storage.

Further information on the connection costs is in Appendix 2.

Connection	£Ms
In Depot Chargers	£0.650m
Off-Site Electrical Connection	£0.095m
On-Site Electrical Connection	£0.640m
	<b>£1.385m</b>

**Table 3 – Electrical Connection Costs**

**A10. Does your proposal have the support of bus operator(s) in the area?**

*The proposal requires the support of at least one bus operator operating in the area who will operate the zero emission buses. The bid does not, however, need the support of all bus operators operating in the area. If local transport authorities are not able to provide this evidence of support from operators they **must** explain why.*

There are two principle bus operators in Southampton. A joint letter from the Managing Director of Bluestar, Part of Go South Coast, and the Go Ahead Group Chief Executive is attached to the bid which includes a commitment to funding the base cost of buses procured through the project. Bluestar operates Unilink under contract to the University of Southampton.

First Bus operate in the city under the City Red brand and are currently not part of the bid.

**A11. Have you spoken with any energy companies when preparing your proposal?**

*Energy companies could include Distribution Network Operators, Independent Distribution Network Operators, energy supplier, energy storage companies, smart charging providers or hydrogen fuel providers.*

Yes. We have a quote for on-site electrical connection including design of site and infrastructure specifications, cabling and barrier supply under an IDNO agreement in terms of a partnership between Southampton City Council, Go South Coast, SSE, BYD and

SWARCO in April/May 2021 within well-developed partnerships which enables early mobilisation to deliver. We do not have an electrical connection as the bid timescale does not allow statutory turnaround for DNO supply. We have based the cost based on connection to another depot within Go South Coast and have applied a 25% risk cost.

## **A12. Does your proposal comply with the accessibility requirements set out in the scheme guidance?**

*The scheme guidance sets out a number of accessibility requirements including: requiring buses to incorporate equipment to identify the route, each upcoming stop, and the beginning and end of diversions: providing an induction loop to aid direct communication between drivers and passengers who use a hearing aid and providing an additional flexible space in addition to the mandatory wheelchair space, suitable for a second wheelchair user and/or at least two unfolded pushchairs or prams.*

Yes. The buses supplied will be to Go South Coast's enhanced specification which includes Next Stop Announcements in both audio and visual format and induction loop, as well as meeting all accessibility requirements including mandatory wheelchair space, suitable for a second wheelchair user and/or at least two unfolded pushchairs or prams. All vehicles will be low floor with dual door access for faster boarding and alighting. Fitted with Tap On, Tap Off (TOTO) readers to further speed up journey times and will benefit from enhanced cleaning regimes.

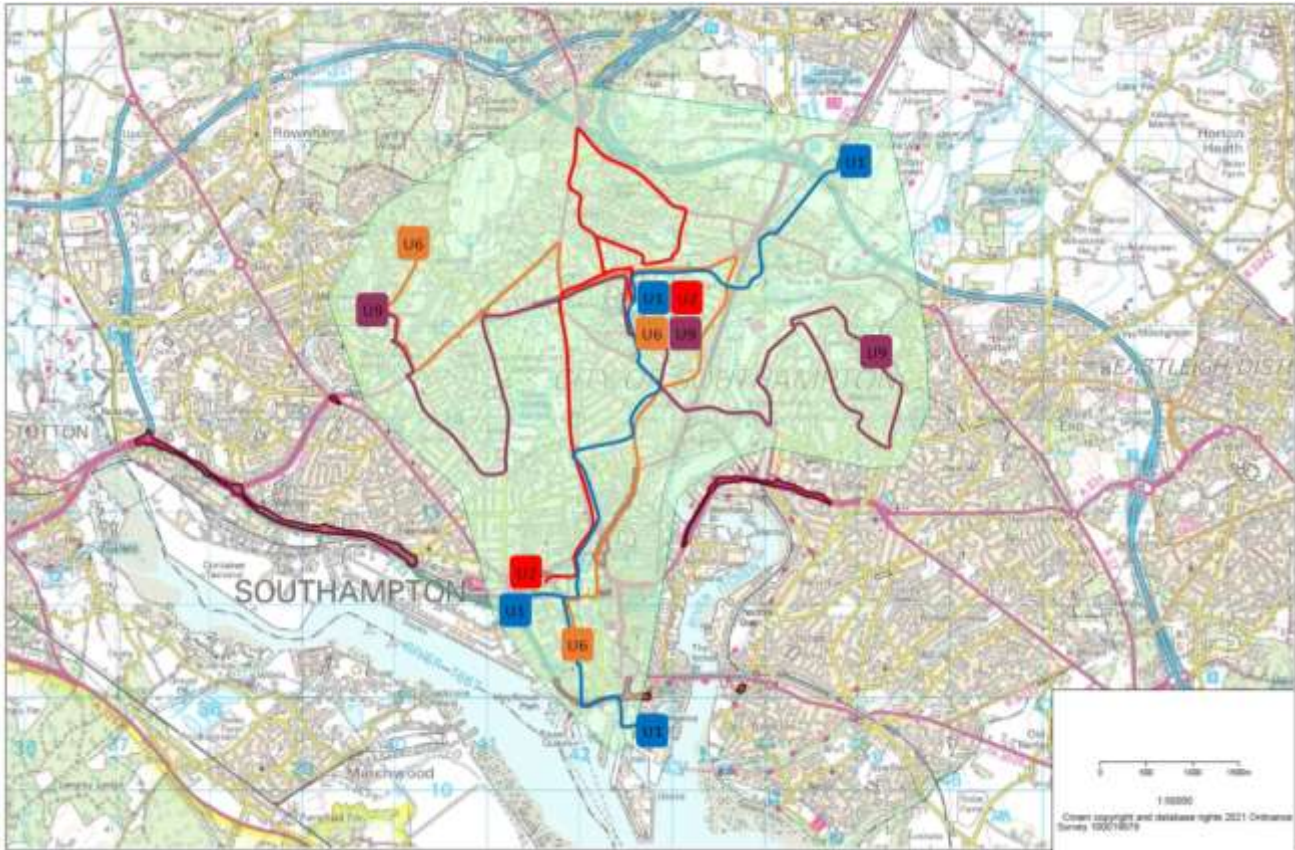
## **SECTION B. Defining the place**

This section will seek a definition of the area to be covered by the Zero Emission Bus Regional Area. Areas should:

- Include information setting out the extent of the area to be covered by the proposal – the **defined area**. If the defined area is different to the area covered by the local transport authority please make this clear. Please provide maps if required.
- Provide details on the bus sector including naming **all** operators who operate services in the defined area, their market share and fleet sizes. This should include both operators who are supporting your proposal and will be operating the zero emission buses and other bus operators in the defined b area.
- Clarify what proportion of bus services in the defined area will be operated using zero emission buses.

*Please limit your response to 500 words. Please provide maps as annex documents if required.*

The area covered by the Southampton ZEBRA project is focused on the UniLink network in Southampton. It covers a roughly triangular area of central Southampton between the River Itchen and A3057 Shirley Road, extending to city boundary close to the M27. The UniLink network connects University of Southampton with the City Centre, Central Station, National Oceanographic Centre, University Hospital Southampton, Southampton Airport, and residential areas of Bassett, Swaythling, Portswood and Townhill Park.



*Map 1 – Southampton ZEBRA Proposal*

This is all within the Southampton local transport authority boundary, there is a 400m section of a service to Southampton Airport which is in Hampshire LTA.

With a population of 260,000, Southampton is home to the Port of Southampton, the UK's busiest export and cruise port that forms part of the Solent Freeport. Has two major universities (Southampton and Solent) catering for over 40,000 students, with the University of Southampton is one of UK's leading research-intensive institutions centred on the Highfield Campus and the National Oceanography Centre. Solent is a fast growing city centre university focused on creative industries. University Hospital Southampton is the major regional hospital for central south England, specialising in cancer research, providing care for 1.3m people and strong teaching connections with the University.

There are approximately 230 buses operating in Southampton carrying 20.3m passengers in 2019/20. Bus patronage has been steadily growing with 2019/20 set to match 2018/19 but curtailed by Covid pandemic. In 2019/20 there were 80.5 bus journeys made per head of population, placing Southampton 7<sup>th</sup> highest in England.

The two main bus operators in Southampton are:

- GoSouthCoast – who operate 167 buses as Bluestar and UniLink (32 buses under contract to UoS) across city and wider region into Hampshire, carry 71% of patronage. GSC are the partner in this bid and will operate the zero emission buses on the UniLink operation. UniLink services are tendered by the University of Southampton primarily to provide transport for student, but services are open to everyone; and
- First Southampton – operate 60 buses in city and into Hampshire, carry 28% of patronage.

They are supplemented by

- Xelabus – small operator who run 4 services (commercial, school & tendered) in Southampton often in areas not served by the main operators, and carry >1% patronage.

All vehicles are at currently least Euro 6 compliant, either new buses or retrofitted. Operator investment over past decade has seen fleet age reduce with initiatives like Wi-Fi, USB charging, next stop announcements, level boarding introduced in advance of many other areas of England. With the ZEBRA proposal 14% of the fleet, carrying 20% of the patronage in Southampton, will be zero emission.

The ZEBRA is show on Map 1 with the UniLink bus routes and Air Quality Management Areas (AQMA) identified. Services within this bid are on the UniLink network (that are accessible to the public and enable strategic links across the city).

Service	Route	Frequency	AQMA
U1	National Oceanography Centre-City Centre-Central Station-Portswood-University-Airport	6-7	Town Quay
U2	Mayflower Halls-City Centre-The Avenue-University-Bassett	6	Commercial Road, Burgess Road
U6	City Centre-Bevois Valley-Portswood-Swaythling-University-Hospital	3	New Road, Bevois Valley, Burgess Road, Winchester Road
U9	Townhill Park-St Denys-University-Upper Shirley-Hospital	2/day	Burgess Road, Winchester Road

Table 4 – Bus Services within ZEBRA Proposal

Map of the Southampton public transport network is included in Appendix 3.

## SECTION C: Ambition

This section will seek evidence of the level of ambition from the local transport authority to decarbonise their bus fleets, support bus services and decarbonise transport.

### C1. Public transport ambitions

Areas should:

- Provide clear explanation of your ambition to decarbonise the bus fleet in the defined area and how this proposal will support this ambition. If the defined area is different to the local transport authority area please explain your ambitions to decarbonise the bus fleet in your local transport authority area and how this proposal will support this ambition.
- Provide evidence of existing plans to support the provision and operation of local bus services in the area. This could include existing partnership working between the local transport authority and bus operators, bus priority measures, improvements to information about bus services.
- Include complementary policies to decarbonise transport in the area.
- Explain how the proposal supports wider ambitions to increase public transport use and active travel in the area.

*Please limit your response to 500 words.*

[Connected Southampton 2040](#) and the [Green City Plan 2030](#) set out Southampton's bold ambitions to reduce the impact of transport on the environment, while helping support sustainable green economic growth. Connected Southampton 2040 (LTP4) is the city's current long-term transport strategy that sets the ambition and direction of travel for transport over the next 20 years. Over that period Southampton will be transforming with 24,000 new jobs created leading to a requirement for 19,500 new homes. To support this an efficient and innovative transport system is required to keep the city moving. As well as the economic growth, Southampton faces challenges around social inequalities, ageing population, geography and pollution.

Connected Southampton sets out these ambitions to support reducing carbon, improving air quality and generate modal shift to sustainable travel:

- Ambition is for 10% of journeys in Southampton to be by bike, and increase bus mode share by 11% by 2027,
- Southampton Mass Transit System (SMTS) is envisaged as a step change in public transport provision across Southampton bring all elements of public transport together, including bus, to form a coherent integrated customer focused system. Seeking to provide priority where possible and a 'metro' level of service that is low, and then zero, emission by 2030,
- Walking & Cycling - the ten-year [Cycling Strategy](#) sets out the Southampton Cycle Network (SCN) to look for a step-change in cycling infrastructure and modal shift,
- The [Southampton Transforming Cities](#) programme that looks to kick start the SMTS Rapid Bus Corridors, including Portswood serving the University,
- Southampton already has a Quality Bus Partnership in operation since 2012 with the operators and this has driven partnership investment in fleet, lower emission vehicles, WiFi etc. Southampton is committed to progressing with an Enhanced Partnership with operators for March 2022.

The ambition for public transport is to develop the SMTS using the Enhanced Partnership and TCF as the starting point. Having a zero emission network forms part of the ambition for the network. The first elements of the SMTS are being delivered through TCF and objective is to see a 5% decrease in bus journey times on the Portswood corridor. It is estimated that annually a bus emits 79t of CO<sup>2</sup>, across the UniLink fleet this is 2,500t – equating to approximately 20% of the University's CO<sup>2</sup> footprint. The new zero emission buses will provide an immediate reduction in local CO<sup>2</sup> emissions.

The Council and University are both signatories of the city's [Green City Charter](#) which sets a target of 2030 for members to achieve a net zero carbon footprint.

SCC is embarking on the decarbonisation the transport network with its own fleet and supporting public uptake of EVs:

- 45 electric vans in operation, with 27 charge points in 7 depots and others in pipeline,
- 50 public charging points in SCC car parks, and
- 2 rapid chargers for taxis and more to come.

To support decarbonisation and active travel the Southampton Cycle Network has been developed to create a high quality safe and coherent cycle network. SCC has the aspiration to increase cycling's mode share by 10%. The first phases of the SCN have been delivered through TCF and CAZ projects and seen a 20% increase in cycling on one route. TCF is seeking to deliver over 11 miles of new cycle routes along with four new Active Travel Zones close to AQMAs.

## C2. Community benefits

Please highlight any community benefits from your proposal. This could include economic development in the area or the creation and/or retention of jobs and apprenticeships related to the maintenance of zero emission vehicles, including batteries and fuel cells, and supporting infrastructure.

*Please limit your response to 500 words.*

As part of the project Bluestar and UniLink will enable further education and training including for engineers to transfer skills from mechanical to electrical as well as several apprenticeships focussed on electric bus technology.

The University of Southampton have active research projects assessing the impacts of electrification which would be applied to the monitoring & evaluation of the project, utilising expertise from their Transport Research Group and Faculty Centre of Excellence on Reengineering for Electric Mobility. Associated collaborative projects are already underway at the University to study decarbonising transport, battery storage, air quality and environmental impact, which would benefit greatly from data generated by this project as a demonstration of real-world application of electric vehicle operations. The project would also open opportunities for additional undergraduate and postgraduate research. These links to academic activity could in turn inform improvements to technology, systems and applications, increasing confidence in the vehicles and charging infrastructure and supporting wider adoption of electric vehicles.

## C3. Support for your proposal and wider vision

Provide evidence of support for your proposal and wider vision, such as letters of support or evidence of engagement, from partners.

This **must** include evidence of support from the bus operator(s) who will operate the zero emission buses. You **do not** need to include evidence of support from all bus operators within the area, only the operator(s) who will be operating the zero emission buses. This evidence must be a signed letter by both the CEO/equivalent level of the company and the local MD, committing to investing in the buses and operating them in the defined area for a minimum of 5 years.

Local transport authorities that have not included this evidence must clearly set out the reasons for this.

You **must** also include evidence of engagement with an energy company. Energy companies could include Distribution Network Operators, Independent Distribution Network Operators, energy supplier, energy storage companies, smart charging providers or hydrogen fuel providers.

Areas may also wish to include evidence of support from other relevant bodies, depending on the proposal, for example:

- Other tiers of local government
- Local Enterprise Partnerships
- Local Energy Hub
- Leasing companies

- Finance companies

*Please limit your response to 1000 words. Evidence of support, such as letter of support, can be included as annex.*

The Southampton ZEBRA proposal has support from a range of organisations, including local bus operators. Letters of Support are in Appendix 1.

Go South Coast (GSC), part of the Go-Ahead Group, are the local bus operator (Bluestar) and are partners in the bid as the current operators of the UniLink services. GSC have developed the finances for the bid and will operate the buses once delivered. A letter of support co-signed by the local Managing Director, Andrew Wickham, and the Group Chief Executive, David Brown, is attached. This sets out GSCs support for the bid and the level of investment that they are putting into the proposal. GSC are also committing to operate the buses on the UniLink services/in Southampton for minimum of 5 years.

University of Southampton – as the owner of the UniLink brand and tenderer of the services. The University is one of the leading research institutions in the country and is putting forward an ambitious plan to reduce carbon emissions from operations. The University has already started to decarbonise its own fleet with a fleet of vans operated by the Estates Department. A letter of support is included from the University stating their support and the level of match funding from them.

Hampshire County Council (HCC) – neighbouring highway authority location for the Bluestar depot in Eastleigh.

Eastleigh Borough Council (EBC) – neighbouring authority where the Bluestar depot is located. Have own air quality issues along A335 Southampton Road between the depot and Southampton. This will benefit from new electric vehicles running along it.

SSE Energy Solutions – as a local Energy Supplier they have done initial investigative works with GSC to understand the scale and feasibility of the proposal. These include illustrative costs, based on typical development of a bus depot for charging capability, and investigation into the grid connection.

Southampton Airport – destination for the U1 service and ambitions to grow the proportion of people, both staff and travellers, travelling to the airport by public transport including bus.

## **SECTION D: Air Quality**

This section will seek evidence of the air quality challenges in the area and how your plans tackle air quality in the area. Areas should:

- Set out the air quality challenge in the area, such as whether the area is identified in the national assessment as exceeding statutory limits.
- Set out how the proposal would address the local air problem.
- Provide evidence of existing transport plans to tackle air quality and greenhouse gas emissions.

*Please limit your response to 500 words.*

**We will not accept bids covering places that cannot show that they have air quality issues.**

Air quality remains a key health risk in Southampton. Estimates suggest that 5.8% of deaths in Southampton in 2017 were attributable to long term exposure to particulate pollution alone. The city now has 10 AQMAs since the first were implemented in 2008, and more recently was one of the first five cities required by central government to assess the need for a charging Clean Air Zone due to exceedances of the EU Ambient Air Quality Directive. While a charging Clean Air Zone was not found to be necessary, a series of non-charging measures were suggested and are now committed under a ministerial direction.



**Map 2 – AQMAs in Southampton**

Road transport remains the greatest contributor to poor air quality and non-compliance in Southampton. All 10 AQMAs are established as a result of heavy traffic flows and queuing at junctions. Buses alone have been estimated to contribute between 3.5-8.5% of NO<sub>2</sub> concentrations at monitored sites, rising to as high as 42% on two monitored corridors with high bus activity. The highest concentration monitored in the city in 2020 was at a location on an otherwise quiet roads lined by bus stops, largely believed to be a result of buses idling when waiting.

Buses were targeted for improvement in the Local NO<sub>2</sub> Plan as the business case was able to demonstrate that improvements could be effective in quickly improving air quality

and relatively easily achieved. Bus measures include the requirement to ensure that the bus fleet meets a minimum emission standard of Euro VI minimum. The clean bus retrofit programme was implemented as an early measure to The Local Plan and was successful in retrofitting over 140 buses to Euro VI compliance.

As a result of the recent infraction ruling from the EU Court of Justice and uncertainties around a recovery from the pandemic, SCC is under pressure from central government to provide assurances that the EU Ambient Air Quality Directive will be achieved in the shortest possible time. Electrification of buses in the fleet presents a significant opportunity to for improving local air quality by effectively removing tailpipe emissions. 6 of the 10 AQMAs are serviced by buses which are covered by the Southampton ZEBRA proposal. The ~200 Euro VI buses in Southampton have been estimated (using conservative assumptions) as emitting 9,910 kg of NO<sub>2</sub> a year. Upgrading 32 of these buses to electrics would result in savings of about 1,530 kg of NO<sub>2</sub> a year as a result of effectively removing tailpipe emissions from these vehicles.

Electric buses and other aspects of the bus back strategy are also likely to mitigate the expected increase in private vehicle use as a result of COVID19 and public transport reluctance, further improving local air quality.

SCC recognise that any improvements to air quality can only serve to improve public health. The Council led Green City Charter aspires for continual improvement in local air quality to reduce the discrepancy in the public health burden pollution creates between Southampton and other areas.

## SECTION E: Value for Money

This section will seek evidence how you meet the Value for Money criteria, as set out in the guidance. Areas are also required to submit a separate value for money proforma that has been published alongside the application form. This spreadsheet requests basic information about the proposed investment to enable the value for money to be assessed using the Department's "**Greener bus model**".

The information in a completed pro forma, enables the model to estimate the greenhouse gases (GHG) emissions savings, other environmental & social impacts such as reduction in particulate matter (PM) and nitrogen oxide (NoX) emissions and savings & costs in the public and private sectors. By quantifying the key impacts of a proposed investment, this model helps provide decision-makers with as full a view as possible, about impacts on the environment, society, transport operators and the government finances.

The model provides a measure of the 'Value for Money', in the form of a benefit cost ratio (BCR) alongside other metrics such as the total estimated GHG savings and a cost effectiveness indicator estimating the net cost per tonne of carbon saved. These outputs will be used to score bids based on value for money.

The model does not capture every possible impact from a proposed investment, such as impacts from any resulting increases in patronage, improvement to the quality of journeys, or increased reliability. Where wider impacts (positive or negative) from investment are expected these should be stated, in the pro forma, as non-monetised impacts. These will be considered when making a value for money judgement, as set out in the Department value for money framework.

## SECTION F: Deliverability

This section will seek evidence of how the Zero Emission Bus Regional Area will be delivered, and demonstrate that plans are credible and deliverable.

### F1. Method of delivery and timescale for implementation

Establish the method of delivery, to cover:

- How you will work with local bus operators and other partners to deliver the proposal
- Any public consultation or third-party permission that will be required (e.g. for infrastructure)
- Explain any mitigations put in place for SMEs.
- Timescales for implementation, including when orders will be placed for zero emission buses and when supporting infrastructure will be delivered.
- Please demonstrate how your plans are credible and deliverable in the time proposed, and that any risks have been understood and mitigated

*Please limit your response to 1,000 words.*

#### *Working with Bus Operators*

Southampton City Council (SCC) is working in partnership with local bus operator GSC (run the UniLink and Bluestar brands in Southampton). GSC are partners in the proposal and have developed the costs and early investigative work with SSE and the University. The University of Southampton, as the owner of the UniLink brand, are also partners in the proposal.

Over the past 9 years there has been a significant amount of partnership working between the bus operators, SCC and the University through projects such as Better Bus Fund, Local Sustainable Transport Fund, Access Fund, Clean Bus Technology Fund, and the current TCF programme.

- Better Bus Fund and LSTF – delivered WiFi, next bus stop announcements, USB charging, and the Solent Go multi operator smartcard;
- LSTF & Access Fund – University has acted as monitoring & evaluation agency through the Centre for Sustainable Travel Choice, and are active participants in the Southampton Workplace Travel Fund;
- Clean Bus Technology Fund (CBTF) – delivered Euro VI compliant buses for all operators in 2019; and
- TCF - £57m joint programme between Southampton and Hampshire on four corridors between City Centre and Hampshire. Includes Portswood-Eastleigh corridor that includes the University's main Highfield campus.

Existing arrangements and those being developed for a Southampton Enhanced Partnership would be used for the governance of delivery. SCC already has a funding

arrangement in place for CBTF, this would be replicated for the ZEBRA proposal. This would include an assurance process to ensure that funds are spent in a correct, transparent and effective way. The assurance process will require funding claims by the operator including quotes for works, claims for new vehicles, invoices, demonstration that buses will continue to operate in Southampton for at least 5 years – including redistributed Euro VI buses.

### *Project Management*

The project will be managed by Southampton City Council through the Sustainable City team, which is led by Neil Tuck. The Senior Responsible Officer (SRO) is Pete Boustred Head of Green City & Infrastructure. To ensure that the Southampton ZEBRA proposal is delivered to budget it will report to the existing Southampton Transforming Cities Steering Board, chaired by SCC Cabinet Member for Growth.

### *Implementation*

As the buses will support students, staff and visitors to the University of Southampton, as well as residents, the implementation timeframe is driven by the academic year. With orders placed in April 2022, GSC are programming that the buses will be delivered in late Summer 2022. This will enable the buses to start entering service for the start of the 2022/23 academic year in September 2022. The delivery programme is set out in Table 5 below.

	2022								
	Feb	March	April	May	June	July	August	Sept	Oct->
DfT Decision on Funding									
Orders for buses & infrastructure									
Legal agreement									
Delivery of buses									
Upgrades to Eastleigh Depot									
Buses enter service									

Table 5 – Southampton ZEBRA Programme

Appendix 2 sets out the work carried out by SSE to date for power consumption of the buses and charging requirements. Ongoing work into further investigation is being carried out with SSE regarding the electrical connection to the Eastleigh Depot. Options are being discussed with SSE to ensure that a suitable solution is deliverable

### *Permissions and Risks*

No third party permission is required for the scheme. Permission has been sought from the land owner of the Eastleigh Depot.

The main risks that have been identified and set out in Table 6 include:

Main Risks	Risk Mitigation
Delay announcement and place of order	GSC have carried out early engagement and identified a UK based manufacturer to limit delays. Aiming for start of academic year 22/23, if delayed can enter operation during term.
Delays to project	SCC, operators and suppliers will provide an experienced project management team to mitigate impact
Loss of key staff members	SCC, operators and suppliers can provide other staff to ensure trained and knowledgeable staff are on hand
Poor relationship with operators and University	SCC, operators and University to meet regularly
Business failure of installation partners	The supplier can provide several installation options
Unforeseen issues with the electrical connections	Investigation works by SSE being carried out

Table 6 – Risks & Mitigation

## F2. Monitoring and evaluation

Please provide indicative details of how monitoring and evaluation will be used to ensure learning about the project and inform future schemes. A detailed monitoring and evaluation plan is not required at this stage but should explain how the approach to delivering services will ensure that future learning is maximised.

*Please limit your response to 500 words.*

SCC would work with the appointed DfT consultant for wider assessment of the ZEBRA programme.

At a local level the impact on the level of carbon emissions, bus reliability, real-time emissions assessment, bus journey quality, punctuality and passenger experience are areas that would be investigated. This would be led by the Transport Research Group, along with the Environmental Services department, at the University of Southampton.

Reporting from this proposal would enable an assessment of the learning for further roll out of electric, and other alternative fuels, buses in an urban setting. This would provide real world experience of impact on reliability and range with heavy passenger loadings. The popularity of the UniLink services means that during academic term times buses operate at higher loadings, during non-term times it provides an assessment of the impact of lower levels of loadings. This would provide a different analysis compared to peak and off-peak loadings for commuter based bus travel.

The assessment is also likely include:

- Impact on University's carbon emissions,
- Impact on Southampton's city wide carbon and NO2 emissions,
- Impact on the bus passenger experience and patronage, and
- Wider public and user perceptions about electric buses.

### F3. Procurement, State Aid and subsidy rules

Please confirm you have received advice on legal requirements in relation to procurement, subsidy control and state aid.

Please also demonstrate how you will abide by legal requirements in relation to procurement, subsidy control and state aid, including an explanation, together with supporting evidence, of how you will comply with the principles under the UK-EU Trade and Cooperation Agreement.

*Please limit your response to 500 words.*

SCC would be the funder and GSC would lead on the procurement of the vehicles and charging infrastructure.

We have received the following advice regarding Subsidy Control/State Aid:

Any funding awarded must be spent in accordance with Subsidy Control / State Aid rules. Subsidy Control / State Aid arises where:

- I. funding is provided from state resources (including grants from central or local government etc or subsidised services), AND
- II. the funding / measures favour certain undertakings or operators etc, AND
- III. the measure / funding has the potential to distort competition, AND
- IV. the measure / funding could affect trade between member States.

All four elements must be in place for unlawful financial Aid to be present. In order to mitigate against Aid arising there are a number of measures that can be relied upon, including use of competition to award funding and use of De Minimus provisions where appropriate.

To remove the subsidy control risks, the introduction of an element of competition with the bidding process for funds is required, in a way that ensures all undertakings have equal access to funding (regardless of whether they are local, national or international undertakings or part of the initial bidding consortium). This will remove II) and III) above. Competition and bidding arrangements must be fair, transparent and genuine.

There is the power to provide funding that would otherwise amount to Aid through the De-Minimus process, which can assist in relation to supporting some smaller, locally based undertakings. This applies where an operator has received aid in the current year and previous two financial years that amounts to no more than €200,000 (the limit for transport related undertakings). That must encompass ALL state funding from ANY source over the three year rolling period so any company that receives subsidies or other grant funding from other state sources will need to be carefully audited to ensure they meet De-Minimus levels and the limits apply to the whole registered company (not just the locally based arm of it). However, given the level of annual BSOG payments, it is unlikely this will apply locally, other than for the very smallest operators.

Any mechanisms for awarding funding to operators will need to be designed and implemented to meet the above restrictions in relation to any funding that is used to enhance third party / private sector commercial or subsidised vehicles in any way.

## **Appendix 1 – Letters of Support**

A1-1 Go South Coast

A1-2 University of Southampton

A1-3 Hampshire County Council

A1-4 Eastleigh Borough Council

A1-5 SSE Energy Solutions

A1-6 Southampton Airport

## **Appendix 2 – Connection Costs**

A2-1 SWARCO Charge Costings

A2-2 SWARCO Chargers UniLink

# Appendix 3 – Southampton Public Transport Map

