

GREATER LONDON AUTHORITY

REQUEST FOR DIRECTOR DECISION – DD1346

Title: Agile Urban Logistics Category 2 and 3 grant round: Gnewt Cargo proposal

Executive Summary:

The Agile Urban logistics projects are being delivered under the Mayor's Smart London Demonstrator programme. The aim is to trial innovative solutions for the light freight sector that allow it to adapt to changing regulatory and market conditions, mitigating congestion and emissions impacts. 3 main Agile categories were identified as part of the feasibility study undertaken by WRAP to shortlist potential projects. In 2014, the GLA invited grant funding proposals across all 3 Categories. 2 bids were subsequently funded under Category 1 in partnership with Gnewt Cargo and DHL.

Following a competitive grant funding second round (April 2015) for Agile, Categories 2 & 3, 2 bids were received from Gnewt Cargo (one in each category) to operate demonstrator projects in London. Both bids are recommended for funding (up to £753,602).

- Category 2 - test different IT solutions and cross-carrier routing systems and to provide data on the most efficient vehicle allocation, routing and tour planning in Central London.
- Category 3 – proposal is to run a 12 month multi-carrier consolidation demonstrator with final mile deliveries using low carbon vehicles.

Lessons learnt will be published so that other logistics providers can learn from the demonstrators.

Decision:

The Executive Director approves:

- Expenditure of up to £399,304 by way of the award of grant funding to Gnewt Cargo as a contribution towards their Category 2 demonstrator project.
- Expenditure of up to £354,298 by way of the award of grant funding to Gnewt Cargo as a contribution towards their Category 3 demonstrator project.

AUTHORISING DIRECTOR

I have reviewed the request and am satisfied it is correct and consistent with the Mayor's plans and priorities.

It has my approval.

Name: Fiona Fletcher Smith

Position: Executive Director-Development,
Enterprise & Environment

Signature:



Date: 22.6.2015

PART I - NON-CONFIDENTIAL FACTS AND ADVICE

Decision required – supporting report

1. Introduction and background

- 1.1 The Smart London Demonstrator programme is supported financially by Innovate UK (formerly the Technology Strategy Board's [TSB] Future Cities programme). It aims to bring together emerging concepts and opportunities in Smart and Sustainable Cities to demonstrate the economic, social and environmental value that can be created through the application of digital (data-driven) solutions, systemic approaches to city infrastructure and services, and collaborative models. The Agile Urban Logistics projects are being taken forward under the Smart London Demonstrator programme.
- 1.2 Just over £1million of the TSB funding has been earmarked to grant fund Agile demonstrator projects in London. Mayoral Decision (MD) 1247 formalised this approval and delegated consequent decisions to the Executive Director of Development, Enterprise and Environment, including the procurement of goods and services. Subsequently Directors Decision (DD) 1160 and 1259 approved further TSB expenditure in the form of consultancy costs and grant funding as part of the Agile Urban Logistics demonstrator projects (Category 1).

Context

- 1.3 The aim of the Agile demonstrator is to trial innovative solutions for the light freight sector that allows it to adapt to changing regulatory and market conditions, mitigating congestion and emission impacts, whilst improving business efficiency and customer experience. Subsequent to research and stakeholder engagement conducted earlier in Stage 1 of the project (See DD1160), the GLA/TFL chose to focus on the following three categories as they best matched the project criteria;
- 1) Multi-carrier central London micro-consolidation and final delivery via low carbon vehicles
 - 2) Technology-based solution to deliver efficient parcel allocation and cross-carrier routing
 - 3) Single carrier consolidation centre targeting poor air quality zones enabling manual delivery methods
- 1.4 In 2014/15 the GLA invited grant funding proposals under the categories above. Following a competitive grant funding exercise, 2 bids were subsequently funded under Category 1 in partnership with Gnewt Cargo and DHL Supply Chain Limited. Both projects are scheduled to be completed in June 2015.
- 1.5 A subsequent competitive call for grant funding proposal under Category 2 and 3 was recently run in April 2015. Bids were invited from all of the main logistics and freight providers across London (includes UPS, DHL, DPD, TNT, Parcelforce, Gnewt Cargo etc.). The prospectus was also published on the TFL Eurodynamics eTendering portal to ensure the call was publicised amongst all freight and Logistics providers.
- 1.6 2 bids were received from Gnewt Cargo (one in each category) to operate demonstrator projects in London. No other bids were received. Both projects have been evaluated by a panel comprised of the GLA's Environment Unit and TFL freight and fleet team and are proposed for funding (up to £753,602).
- 1.7 No further bids were received.
- 1.8 All bids were evaluated against the following criteria and weighting:

Assessment Criteria	Percentage Weighting
Business Case - Rationale for intervention	10%
Congestion & Business + consumer impact	10%
Value for money/Match funding	10%
Environmental impact - Net positive CO ₂ benefit/air quality	20%
Project Legacy/Long-term impact	20%
Project viability and Deliverability	30%

- 1.9 Both projects scored well against the criteria above and are now being put forward for decision. If approved, projects will run from mid-June 2015 to mid-June 2016.

2. Objectives and expected outcomes

- 2.1 *Category 2 demonstrator - Technology-based solution to deliver efficient parcel allocation and cross-carrier routing*
- 2.2 The main objective of this project is to test different IT solutions and cross-carrier routing systems to provide data on the most efficient vehicle allocation, routing and tour planning in Central London, in order to maximise the use of the fleet, diminish the emissions, the travel distance and the road space occupancy in London.
- 2.3 The main IT solutions to be tested are all market leaders in their field:
- Fleetcarma software for electric vans fleet management
 - Emakers software for home delivery management for SME clients
 - PTV Smartour software for tour planning and scheduling
 - PTV Map and Guide software for on board routing
 - Isotrack, for a combined on board routing, communication and tour planning
 - Paragon, for a combined on board routing, communication and tour planning
 - Routemonkey, a software for route planning
 - Opttrak, a software for load consolidation, tour planning and routing
- 2.4 *Why do it?*
- 2.5 There is currently no publicly available market study on the existing IT solutions for the urban freight delivery business. Data collated a part of this demonstrator is crucially needed for current and future growth of operations with electric freight vehicles and cargo bikes in Central London. Data collected will inform TFL freight and fleet policies and projects.
- 2.6 *Expected outcome*
- re-timing of ecommerce B2C activity, away from peak hours
 - re-routing of journeys away from the most congested roads and pollution hot spots
 - consolidation and a reduction in the number of pick-ups/drop-offs
 - utilisation of low emission vehicles
 - Reduction in emissions (CO₂, diesel particulates, NO_x)
- 2.7 *Project Target*
- 57% reduction in the number of vehicle trips.
 - 69% less kilometres travelled.

- Reduction in NO_x (71%), reduction in PM (87%).
- Reduction in CO₂ (67%) emissions.
- 30% reduction in running empty vehicles.

2.8 *Funding*

£107,000 will be used to purchase hardware + licences of Fleetcarma + Emakers software improvement and adaptation + 6 licenses of tour planning and routing software for 10-15 vehicles to be tested each in a 2-3 month period.

2.9 A further £292,304 revenue funding is requested as a contribution towards staff cost and for producing the project deliverables and milestones set out in Section 7.

2.10 *Value for money*

2.11 Gnewt Cargo will provide 30% of match-funding indicating a good commitment to the project primarily through staff time.

2.12 Project demonstrates value for money as negotiations with software providers have already taken place and some companies are providing their software for free as part of the demonstrator. The project also has the potential to continue post GLA funding as part of Gnewt Cargo core business and to produce evidence on how to replicate the operation in other areas and cities.

2.13 *Outputs*

- Business Plan
- Implementation Plan
- Risk Register
- Case studies
- Monitoring report which includes
 - Baseline data for collections without IT application and smart routing e.g. number of vehicle trips, kms travelled, CO₂, NO_x and PM₁₀ etc.
 - Monitoring data report - Post trial data for each IT system against baseline and KPI's/target
 - A comparative analysis of trips with and without IT application. This will help to best determine the benefits of the innovative IT solution being tested.
- Final report which:
 - **identifies the most relevant IT solutions** in the fields of computerised routing and scheduling, vehicle telematics positioning and data communication, efficient supply chain and transport performance, energy and CO₂ management.
 - Identify features that are needed the most and have the highest potential impact on business
 - Investigate the success factors and business benefits of using such systems?
 - Analyse the potential to decrease running costs as a result of efficient routing and reduced mileage
 - Analyse the potential for savings in management time since schedules can be produced consistently and quickly whilst delivering ever increasing volume.
 - Analyse project impacts against KPI's and project target i.e. CO₂, NO_x etc.
 - Summarises lessons learnt (i.e. what worked well and what didn't) recommendations on how the project could be improved and how if any it could be replicated. This shall include an executive summary with key findings in non-technical language.

- Legacy Strategy – summaries what worked well, what didn't, how the project could be improved and replicated, indicative costs etc.

2.14 *Category 3: Single carrier consolidation centre targeting poor air quality zones enabling manual delivery methods*

2.15 *Objective*

The main objective of this project is to run a 12 month demonstrator using a single low carbon vehicle to deliver supplies from retail, SME and logistics service providers consolidated into one low carbon electric van via central London consolidation centres.

2.16 *Why do it?*

Consolidation with major carriers has been attempted and proven to be very hard to implement, however a major business case and proof of concept could be achieved by consolidating the smaller retailers. This demonstrator aims to test this. The data that can be potentially demonstrated in this case would prove to be a great lever to the bigger carriers to embrace a style of logistics that is absolutely vital to the sustained productivity in Central London.

2.17 This trial will build on the lessons learnt from Category 1 demonstrators (Multi-carrier central London micro-consolidation and final delivery via low carbon vehicles) over an extended time frame. Combined with the initial demonstrator this should provide annualised data which provide broader, more robust data to help de-risk the business case for electric parcel deliveries, fleet and depot management in central London for other logistics operators. This is particularly true for SME's. Future companies similar to Gnewt Cargo, will be able to understand the validity of these ideas, their successes (and failures), and providing the tools and knowledge to the next generation of logistics operators, whereby environmental considerations are not just a 'need to have' but a 'must have'.

2.18 *Expected outcome*

- re-timing of ecommerce B2C activity, away from peak hours
- re-routing of journeys away from the most congested roads and pollution hot spots
- consolidation and a reduction in the number of pick-ups/drop-offs
- utilisation of low emission vehicles
- Reduction in emissions (CO₂, diesel particulates, NO_x)

2.19 *Project Target*

- 57% reduction in the number of vehicle trips.
- 69% less kilometres travelled.
- Reduction in NO_x (71%), reduction in PM (87%).
- Reduction in CO₂ (67%) emissions.
- 30% reduction in running empty vehicles.

2.20 *Funding*

2.21 £354,298 revenue funding is requested as a contribution towards staff cost and for producing the project deliverables and milestones set out in Section 7.

2.22 *Value for money*

Gnewt Cargo will provide 30% of match-funding indicating a good commitment to the project primarily through staff time. There is no requirement for capital costs and this project will utilise vehicles purchased in Stage 1.

2.23 The project demonstrates value for money and has the potential to continue post GLA funding and to produce evidence on how to replicate the operation in other areas and cities.

2.24 *Outputs*

- Business Plan
- Implementation Plan
- Risk Register
- Case studies
- Monitoring report which includes
 - Baseline data for collections pre-trial e.g. number of vehicle trips, kms travelled, CO₂, NO_x and PM₁₀ etc.
 - Monitoring data report - Post trial data against baseline and KPI's/target
- Final report which:
 - Analyse project impacts impact against KPI's and project target i.e. CO₂, NO_x etc.
 - Summarises lessons learnt (i.e. what worked well and what didn't) recommendations on how the project could be improved and how if any if could be replicated. This shall include an executive summary with key findings in non-technical language.
- Legacy Strategy – summary of what worked well, what didn't, how the project could be improved and replicated, indicative costs etc.

3. **Equality comments**

3.1 The GLA and TfL are subject to public sector equality duties, and any grant funding agreements that would be awarded, will be consistent with these duties, and with the Mayor's strategies and plans, including those identified in section 4 below with associated equality impact assessments.

3.2 No adverse impacts are identified for the proposed programme of works described. Meeting the objectives of this proposal is expected to bring positive contributions to equality arising through improving air quality and reducing congestion for diverse groups of Londoners across the city.

4. **Other considerations**

Key risks

Category 2

Risk	Impact	Mitigation strategy
Insufficient business volume for a valid IT trial.	low	Work with existing clients to ensure business volume. Growth in client operations expected in the peak period.
Difficulty in getting pre-trial baseline data for clients.	low	Good business contact with client will allow Gnewt Cargo to obtain good data and estimates on previous operations.
Trial data on costs could be skewed due to the relatively short trial period.	high	12 month trials will provide for more robust estimates accounting for peaks and troughs in data.
The total costs of IT solution may be too high, making it difficult to achieve the business case.	low	Good experience and 5 years of operation allow Gnewt Cargo to implement a new IT solution at low risk and costs.

Category 3

Risk	Impact	Mitigation strategy
Insufficient business volume for a valid trial	low	Work with existing clients to ensure business volume. Growth in client operations expected in the peak period
Difficulty in getting pre-trial baseline data for clients.	low	Good business contact with client will allow Gnewt Cargo to obtain good data and estimates on previous operations
Trial data on costs could become biased due to the experimental short-term situation	high	Estimates of the probable costs in a longer term perspective will be made
New depot rental may not be secured post trial.	medium	Work with depot manager to try and secure buy in to secure rental post trial.
The total costs of switching to electric vehicles and running a new central depot and an electric fleet may remain high, if so it is may be difficult to achieve the business case	low	Good experience and 5 years of operation allow Gnewt Cargo to develop a new urban consolidation centre and to run an electric fleet at low risk and cost.

Links to Mayoral Strategies and Priorities

The relevant Mayoral Strategies and Priorities against which this project aims to deliver are:

- Mayor's Economic Development Strategy
- Mayor's Air Quality Strategy
- Mayor's Climate Change Mitigation and Energy Strategy which aims to reduce London's CO₂ emissions by 60% below 1990 levels by 2025.

Impact Assessment and Consultation

The project team will continue to consult and engage with key stakeholders including Transport for London Freight Team and GLA Transport team.

Impact assessments and evaluation of the project has been carried out to determine the effectiveness of the project in meeting the required outcomes.

5. Financial comments

- 5.1 MD1247 approved £3m of spend on the three-year Smart London Demonstrator Programme, funded from a grant award of £3m from the Technology Strategy Board (TSB) under its Future Cities Demonstrator programme. Further to this, DD1160 approved Stage 1 and DD 1259 approved stage 2 of the Agile Urban Logistics project as category 1 of the Future Cities Demonstrator programmes.
- 5.2 The Executive Director's approval is now sought for expenditure of up to £399,304 by way of the award of grant funding to Gnewt Cargo as a contribution towards Category 2 demonstrator project and up to £354,298 funding as a contribution towards Category 3 demonstrator project.
- 5.3 The profile spend of £753,602 is shown in the table below and is to be funded from the TSB programme budget allocated for 2015-16 and 2016-17.

Agile Urban logistics project	2015-16 (£000s)	2016-17 (£000s)	Total (£000s)
Category 2	329	71	400
Category 3	238	116	354
Total	567	187	754

- 5.4 Below is a summary of spend to date of the £3m TSB funding received at the end of 2012-13 and forecast spend for 2015-16 and 2016-17.

Spend	2013-14 (£000s)	2014-15 (£000s)	Forecast 2015-16 (£000s)	Forecast 2016-17 (£000)	Total (£000s)
Team London (Micro-volunteering and staffing*)	23	440	52		515
Agile Staffing and expenses	31	57	60	38	186
Agile Urban logistics category 1 (including £99,000 capital spend in 2014-15 DD1160 and DD1259)	30	275	124		429
Agile Urban logistics category 2 and 3- approval being requested in this DD			567	187	754
Network utilities		110			110
Bunhill (approval to be sought)			240	240	480
Total	84	882	1,043	465	2,474**

*–Team London (part of Communities and Intelligence Directorate) has been allocated £750,000 of the £3m funding as per DD1160 for Work and Volunteering Platform.

**The remaining £526,000 of the £3m funding from TSB is unallocated expenditure for 2015-16 and 2016-17 (£235,000 towards Team London spend £291,000 towards Environment spend).

- 5.5 As this decision relates to funding grants to external organisations, officers should ensure that the requirements of the Authority's Contracts and Funding Code are adhered to
- 5.6 Any changes to this proposal must be subject to further approval via the Authority's decision-making process.
- 5.7 All requisite budget adjustments will be made.
- 5.8 The Environment team within the Development, Enterprise & Environment will be responsible for managing this project

6 Legal comments

- 6.1 The foregoing sections of this report indicate that:
- 6.1.1 the decisions requested of the Director (in accordance with their delegated authority granted pursuant to MD1247) falls within the GLA's statutory powers 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
- 6.1.2 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 (further details on equalities are set out in section 3 above) and to the duty under section 149 of the 2010 Act to have due regard to the need to eliminate unlawful discrimination, harassment and victimisation as well as to advance equality of opportunity and foster good relations between people who share a protected characteristic and those who do not¹;
- 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; and
- consult with appropriate bodies.

6.2 Section 1 above indicates that the contribution to Gnewt Cargo amounts to the provision of grant funding and not payment for services. Officers must ensure that the funding is distributed fairly, transparently in accordance with the GLA's equalities and in a manner which affords value for money in accordance with the GLA's Contracts and Funding Code.

6.3 Officers must ensure that an appropriate funding agreement is put in place between and executed by the GLA and Gnewt Cargo for both projects before any commitment to fund is made.

7. Planned delivery approach and next steps

Category 2 & 3 milestones

Milestone	Milestone description	Deliverable date
Purchase of capital equipment (Category 2 only)	The estimated total capital cost contribution of £107,000 corresponds to the purchase price of hardware + licences of Fleetcarma + Emakers software improvement and adaptation + 6 licenses of tour planning and routing software for 10-15 vehicles to be tested each in a 2-3 months period.	19.06.15
Business Plan	The Business plan shall include project scope, background, objective and goals and should describe how the trial works. It shall describe areas served by the project, set out budget and resourcing details. It shall also set out details of how the performance of the project will be measured and shall set out a marketing and stakeholder engagement plan. Includes investments and finance details, risk register etc. Shall include an executive summary.	19.07.15
Project Plan updates	The update will report on progress against milestone and agreed timescales with reasons for delays and action for ensuring project gets back on track. It should also include proposed amendments for approval.	19.07.15, 30.10.15, 30.11.15
Summary progress reports	Summary progress reports against project milestones, budgets and KPI's.	19.07.15, 30.11.15 22.01.16

¹ The protected characteristics and groups are: age, disability, gender reassignment, pregnancy and maternity, race, gender, religion or belief, sexual orientation and marriage/ civil partnership status.

Milestone	Milestone description	Deliverable date
Monthly issues log & Updated risk register every 3 months	Monthly updated issues log with list of issues and actions to rectify and decisions required. Updated Risk register with risk rating, risk owner and mitigation measures.	30.07.15, 06.11.15, 22.02.16, 22.04.16
Implementation plans	This shall include details on how the project will be implemented. At a minimum it should: Identify key stages throughout the project Phasing plan and timescales – start and end dates for each activity/deliverable. Tasks - It should detail what tasks fall within each of those stages phases and in what order, it should what input if any is needed from the GLA at key stages. Staff resourcing - It should identify and name team members and describe their roles and responsibility. Risks - Identify risks and risk owner and detail mitigation measures. It should identify a backup plan or alternative should things not go plan. Detail progress against implementation	30.07.15
Case Study intermediate report 1	Case studies benchmarking project results with similar initiatives. Choice of case studies shall be discussed and agreed with the GLA project manager prior to completion. Any relevant permission to share data for case studies used shall be obtained prior to producing finalised case studies.	30.07.15
Baseline data & Monitoring data report	This shall detail the baseline data and shall provide an update on the trial performance to date against KPI's and project targets. It shall include details of monitoring methodology, assumptions made and shall provide data references.	22.11.15, 30.11.15
Case Study intermediate report 2	Case studies benchmarking project results with similar initiatives. Choice of case studies shall be discussed and agreed with the GLA project manager prior to completion. Any relevant permission to share data for case studies used shall be obtained prior to producing finalised case studies.	30.11.15
General Market Study	The project will test at least 10 different software packages relevant for urban freight efficiency and sustainability.	30.11.15
Case Study intermediate report 3	Case studies benchmarking project results with similar initiatives. Choice of case studies shall be discussed and agreed with the GLA project manager prior to completion. Any relevant permission to share data for case studies used shall be obtained prior to producing finalised case	22.01.16

Milestone	Milestone description	Deliverable date
	studies.	
Legacy strategy	This shall summarise benefits post grant funding, outline the company's commitment to adopting the trial as business as usual once complete. It shall outline what is required to make project self-financing, detail lessons learnt and summarise how the project could be replicated including costs.	22.01.16
DRAFT Final Report including Case Studies final report	Draft final report incorporating GLA/TFL comments. The final report shall summarise the demonstrator trial, project methodology, results how the project performed against original proposal and project milestones and key performance indicators (KPI's). This shall include lessons learnt (i.e. what worked well and what didn't) recommendations on how the project could be improved and how if any if could be replicated. This shall include an executive summary with key findings in non-technical language.	22.04.16
Final Report including Case Studies final report	Final report incorporating GLA/TFL comments. The final report shall summarise the demonstrator trial, project methodology, results how the project performed against project milestones and key performance indicators (KPI's). This shall include lessons learnt (i.e. what worked well and what didn't) recommendations on how the project could be improved and how if any if could be replicated. This shall include an executive summary with key findings in non-technical language.	22.04.16
Presentation to stakeholders to disseminate information on project	Provides overview of trial methodology and objectives, summary of progress against KPI's, targets and spend. Describes what worked well, what doesn't work well etc. Overview of legacy.	22.04.16
Fortnightly project summaries	On page project summary update against project milestone and budgets	22.05.15 - 22.04.16
3 project meetings with GLA/TFL Project manager/steering group	Project meetings to discuss project progress against project milestone and budgets, discuss problems, risks, AOB etc. Dates to be set by GLA Project Manager	22.05.15 - 22.04.16

Milestone	Milestone description	Deliverable date
Fortnightly telephone conference with GLA project manager	Telephone catch ups with Gnewt and GLA Project Manager. Dates to be set by GLA Project Manager	22.05.15 - 22.04.16

Appendices and supporting papers: None

Public access to information

Information in this form (Part 1) is subject to the Freedom of Information Act 2000 (FOI Act) 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 either be published within one working day after approval or on the defer date.

Part 1 Deferral:

Is the publication of Part 1 of this approval to be deferred? NO

If YES, for what reason:

Until what date: (a date is required if deferring)

Part 2 Confidentiality: Only the facts or advice considered to be exempt from disclosure under the FOI Act should be 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:

Kizzian Owen has drafted this report in accordance with GLA procedures and confirms that:

✓

Assistant Director/Head of Service:

Patrick Feehily has reviewed the documentation and is satisfied for it to be referred to the Sponsoring Director for approval.

✓

Financial and Legal advice:

The Finance and Legal teams have commented on this proposal, and this decision reflects their comments.

✓

EXECUTIVE DIRECTOR, RESOURCES:

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

Signature

M. J. Allen

Date

22.6.15

