RAF Centenary Project

Provision of ANPR System

1. Introduction

The Royal Air Force Museum has recently undertaken a site redevelopment as part of its programme for the Centenary of the RAF (celebrated in 2018). The Museum wishes to source an Automatic Number Plate Recognition system to control parking on its site.

2. General Information

The Royal Air Force Museum is the National Museum telling the story of the RAF through its people and collections.

It receives Grant-in-Aid from the Ministry of Defence to support the National Collection and is a non-departmental public body audited by the National Audit Office. The RAF Museum is constituted as a charity which employs the Museum staff. It is regulated by the Charities Commission and is governed by a Board of Trustees.

It operates a trading arm, the RAF Museum Enterprises Ltd, through which it raises funds from its commercial operations – principally retail and catering functions.

New activities and capital projects are funded through traditional philanthropic sources, such as the Heritage Lottery Fund, trusts & foundations, grant-making bodies, corporate sponsorship and private individuals.

The Royal Air Force Museum has two sites in the United Kingdom that are open to the public; one in Colindale in North London and one just outside Wolverhampton located next to RAF Cosford.

Both Museum sites are free to enter and contain a world-class collection and display of aircraft, integrated with special exhibitions, films, interactives, artwork, engines, missiles, photographs, medals and uniforms. With research and education facilities, the Museum takes an innovative approach to telling these stories through new exhibitions and interpretation.

The ambition of the Museum is to ensure that the Royal Air Force's story endures and enriches future generations.

The vision of the RAF Museum is to be a world-leading museum that engages, inspires and connects everyone with the RAF story through the exploration of its people and its collections.

The Royal Air Force has shaped our nation and our society. It has influenced how we live our lives today through its impact on world events, society and technology.

The Museum's Purpose is to tell the story of the Royal Air Force through its people and collections.

- For our visitors, we make our collections and the RAF story relevant and stimulating
- For current and former RAF personnel and their families, we preserve, honour and share the stories of their service
- For our nation, we help people to understand the impact of the RAF in the world.

3. The Car Parks

The Museum currently has three car parks. This includes a large main car park for visitors, a car park that it leases to the local authority (north car park) and a staff car park (east car park). See Appendix 16.1 for the location of each car park. At the time of writing, the north and east car parks are under redevelopment.

4. Users

4.1 Main Car Park

The main car park will be used by the Museum's visitors and guests attending events. Further information on the Museum's visitors can be found in the Travel Plan (Appendix 16.4).

4.2 North Car Park

The north car park will be used by recognised local authority personnel.

4.3 East Car Park

The east car park will be used by Museum staff and volunteers. The route to the east car park is also a route used by recognised contractors and suppliers to the rear of the site which includes the Museum's restaurant and waste disposal areas.

5. Objectives

- Install a method of paying for parking that is convenient and easy to use for our visitors and offers flexibility on the length of their stay
- Prevent visitors from avoiding parking charges
- Provide a barrier to entry to certain parts of our site for unfamiliar vehicles
- Install a system that discerns between different types of recognised staff and contractors, allowing access through some barriers but not others
- Allow the Museum to record which vehicles have been present on site at what times (this data should be kept for around four weeks and should be GDPR compliant)
- To use digital systems effectively for financial and administrative efficiency.

6. Requirements

6.1 Physical controls

- The recognition system will need to cover two entry/exit points to the site
- The system will include up to 3 barriers (arm barrier or equivalent) to prevent entry and/or exit from different areas. (see Appendix 16.1). The Museum would like to explore the possibility of having no barriers at its main gate.
- There may be need for a flexible and removable means of preventing vehicles from leaving via 'entry' routes, i.e. some sort of one-way control. This must not slow the progress of vehicles entering from the correct direction. Should the option of having no barriers at the main gate be suitable, this control may be unnecessary
- The system must not delay traffic coming onto the site due to the busy road that both entrances are on
- Any barriers should be easily removable so that vehicles can pass through should there be any kind of malfunction in the system
- A means of remotely and/or locally raising barriers to allow passage of the Museum's vehicles that do not have number plates (e.g. forklift)
- Some means of preventing tailgating to avoid ANPR cameras.

6.2 User interface

- The public interface of the system must be intuitive for non-English speakers
- The system must be able to recognise international vehicles.
- The system must have recognised categories of users that can be adjusted easily by Museum office staff and local authority staff at their site
- A web based application to manage recognised users
- Some means of allowing for free parking for corporate clients, promotions etc. through pre-booking, but also without having pre-booked
- A number of onsite pay stations, quantity and locations to be confirmed in development
- A means of paying at the point of the exit barrier, should a driver forget to use a pay station on their way out
- A communication unit where barriers are located so that drivers can speak to Museum staff through the phone system
- Allows for integration with the Museum's CRM in the near future
- A means of pre-booking parking (essential), with control and flexibility on pricing at different times of the day (desirable)
- A device at the north and main gate that displays parking availability / instructions on how to proceed for drivers (desirable)
- A means of contacting those that have parked at the site, while remaining GDPR compliant (desirable)
- Allow for short periods of stay without charge (drop off and pickup).

7. Scenarios

There are a number of potentially difficult scenarios that the system would have to cope with. Contractors should address these in the tender submission:

- What if a visitor tries to pay directly after entering?
- What if a visitor waits too long after paying to leave the site?
- What if a driver has forgotten to pay on their way out and has no means of paying at the barrier and cars are backing up behind them?
- What happens to the system if there is a power failure?
- If there is a security incident, how will the museum use the system to investigate/ evidence this?
- How would the Museum change its pre-booking pricing so that it is cheaper than on the day pricing on a particular day?
- A user pre-books a parking space, how is the length of their stay determined?
- At quiet times the museum will pre-let 100 spaces to an external organisation, how would it achieve this?
- How would the Museum follow up on non-payment?

8. Location

The system will be located at the RAF Museum's London site, in Colindale.

9. Access

- The museum is open to the public 7 days a week; 10am-6pm March - October, and 10am-5pm November – February. Deliveries will be outside those hours
- Construction will take place during museum opening hours. Suitable risk management measures will need to be put in place by the contractor
- Any works that disrupt visitor traffic flow will need to be negotiated with the Museum and may need to be undertaken outside of opening hours.

10. Constraints

- Limited space in main server room. The contractor will indicate space requirement and level of integration of associated IT equipment in tender submission.
- The Museum's opening hours (as mentioned in section 9.)
- The low capacity for vehicles in 'waiting areas' directly before barriers
- Presence of underground services (see Appendix 16.3 for details).

11. Contractor Deliverables

The final output of the brief will be the supply, installation and configuration of an ANPR system and associated hardware. This is to be delivered through:

- Appropriate surveys of the site and taking detailed dimensions
- Implementation of appropriate risk management measures
- Concept and detailed scheme for the system to be discussed with and approved by Museum team
- Onsite installation with some activity restrictions during public opening hours
- The contractor will provide a 12 months defect liability period and a five-year warranty.
- A service level agreement whereby the provider maintains and updates the system and associated equipment (detailed in section B of the tender submission).

12.   Responsibilities

The appointed individual or company will at all times ensure:

- Compliance with Health & Safety at Work Act (including risk assessments, method statements, and relevant certification) and be able to show proof if required
- Adherence to all legislation and best practice for the construction of car parking and associated equipment
- Compliance to GDPR regulations.

The appointed contractor will also:

- Provide all equipment necessary to carry out the agreed contract
- Be mindful of the Museum's visitors and local residents
- Show a willingness to reduce impact on the environment.

13.   Not in Scope

- Any surfacing, road marking, or signage. However, the RAF Museum will seek the advice of the contractor regarding associated signage and markings in terms of what is most effective
- Power and data provision, though the contractor will specify what is required
- Provision of concrete barriers (in place, moveable by forklift)
- Though the system will need to include up to 3 arm barriers (or equivalent), the provision of gates or fencing falls outside of the scope

14.   Programme

Installation to be completed in March 2019

15.   Tender Deliverables

The tender submission should consist of:

A.   Quality Submission
A maximum of 12 sides A4 featuring:

- Details of experience of successful delivery of two similar projects and references
- Proposed methodology, programme and timescales
- Proposed outline solution

B. Cost plan

Please refer to Annex C of the Invitation to Tender for full details of the process.

16. Appendices

The following items are attached separately with the tender information pack.

16.1 Site Plan
16.2 Car Park Construction Drawing
16.3 K1947-800--AS BUILT Drains and cable runs car park
16.4 Travel Plan RAF Museum Centenary