

# **DRAFT SPECIFICATION OF REQUIREMENTS**

## **EU Intelligent Transport Systems Directive – National Access Point and Assessment of Compliance**

**File Reference:**

**Contract No: TBC**

### **1. Background to the requirement**

The European Commission has been granted powers to adopt delegated acts in accordance with Article 290 of the Treaty for Functioning of the European Union. The general aim being to introduce technical specifications to implement delegated regulations to harmonise the approach to the deployment of Intelligent Transport Systems (ITS) across the European Union. The European Commission and others have carried out much research in this area to realise the benefits ITS can offer in terms of delivery a number of policy objectives at local, regional and pan-European level to deal with issues associated with road safety, congestion and the effects of congestion on the environment.

The Commission enacted the EU ITS Directive in 2010, which sets the framework for accelerating the development, deployment and interoperability of ITS across the European Member States. The Directive identified six priority actions to apply technical specifications, which were adopted as delegated regulations by the Commission. These delegated regulations form key obligations on all Member States.

The six priority areas are:

- a: the provision of EU-wide multimodal travel information services
- b: the provision of EU-wide real-time traffic information services
- c: data and procedures for the provision, where possible, of road safety related minimum universal traffic information free of charge to users
- d: the harmonised provision for an interoperable EU-wide eCall
- e: the provision of information services for safe and secure parking places for trucks and commercial vehicles
- f: the provision of reservation services for safe and secure parking places for trucks and commercial vehicles (Freight Strategy).

The delegated regulations require the setting up of a single national access point for priority action (b), (c) and (e), and its associated "discovery/search and browse" functionality, by each Member State. This will enable those interested in accessing the data to find it all in one place.

Member States are also required to designate an impartial and independent national body competent to assess whether the requirements set out in the relevant delegated regulations are fulfilled by public and private road operators and service providers and broadcasters dedicated to traffic information.

### ***EU ITS Directive***

The EU ITS Directive establishes a legal framework from the EU Commission to develop specifications to make ITS interoperable across borders. The Directive was accompanied by an Action Plan setting out 24 areas for specifications (which are legally binding) to be developed. Six of these actions were identified as priority actions in the directive itself and

the key obligation on Member States is to apply technical specifications for 6 priority action areas. Delegated regulations in priority action (b), (c), (d) and (e) have been enacted by the Commission, informed by input from expert working groups.

The delegated regulations require the setting up of a single national access point for priority action (b), (c) and (e), and its associated "discovery/search and browse" functionality, by each Member State. This will enable those interested in accessing the data to find it all in one place. Data owners in the public and private sector will be requested to make their data accessible via the national access point. Obligations upon data owners will differ depending on the types of data and stakeholders in the value chain, i.e. road authorities, road operators, service providers.

Each national access point will offer a single window of access to the road and traffic data of a given territory/network (and their corresponding description), which are available for re-use by any potential user. Through the discovery services any user will be able to effectively access the data and find out what data is available (in relation to a specific topic or purpose), where it is stored (and possibly who owns it), how to use it (possible terms and conditions of re-use under specific contractual agreements).

The commission is keen for public and/or private operators and/or service providers to share the data they collect within each Member State in pursuant of the requirements dictated in the relevant delegated regulation on priority action (b), (c) and (e).

The delegated acts mainly apply to the comprehensive trans- European road network, as well as motorways not included in the network, which includes most of the motorway network managed by Highways England, including A299 in Kent, and priority zones identified by national authorities where they consider this to be relevant.

## **2. Objectives**

This specification sets out the requirements to capture relevant data associated with the requirements of the EU ITS Directive delegated regulations on priority action b, c and e. The contractor will be responsible for identifying organisations in the public/private sector which hold relevant data/traffic information service creators and /or providers concerning service level requirements outlined in the delegated regulations.

### **Specific requirements of the delegated regulations**

#### ***List of service level requirements***

The following extracts from the delegated regulations highlight some of the service level requirements relating to priority action (c), (b) and (e). For more detailed information, reference should be made to the relevant sections of the delegated regulations for each of the priority action areas.

The delegated acts only apply to existing/planned services, i.e. where a member state deploys any one or more of the ITS services depicted in the delegated acts. This is without prejudice to the right of each Member State to decide on its deployment of such applications and services on its territory.

Public and/or private road operators and/or service providers are required to share and exchange the data (dynamic/static) they collect and they shall make these data available in the DATEX II (CEN/TS 16157) format or any fully compatible and interoperable with DATEX II machine-readable format through an access point.

## **Priority action (C)**

### **List of road safety-related events or conditions**

The events or conditions covered by the road safety-related minimum universal traffic information service shall consist of at least one of the following categories:

- (a) temporary slippery road;
- (b) animal, people, obstacles, debris on the road;
- (c) unprotected accident area;
- (d) short-term road works;
- (e) reduced visibility;
- (f) wrong-way driver;
- (g) unmanaged blockage of a road;
- (h) exceptional weather conditions.

### **Information content**

1. The information provided on the road safety-related events or conditions shall include the following items:

- (a) location of the event or the condition;
- (b) the category of event or condition as referred to in Article 3 of the delegated regulation and, where appropriate, short description of it;
- (c) driving behaviour advice, where appropriate.

## **Priority action (b)**

### **Dynamic and Static Data**

#### **Data updates**

Real-time traffic information services shall be based on updates of static road data, dynamic road status data and traffic data, or any combination thereof. All data shall be regularly updated by the road authorities, road operators, service providers in accordance with the requirements set out in the delegated regulation on priority action (b). Road authorities, road operators, service providers shall in a timely manner correct any inaccuracies detected by them in their data or signalled to them by any user and end users.

#### **Updating static road data**

The updates of the static road data shall concern as a minimum the following parameters:

- (a) the type of static road data as set out in point 1 of the Annex (attached) concerned by the update;
- (b) the location of the condition concerned by the update;
- (c) the type of update (modification, insertion or deletion);
- (d) the description of the update;
- (e) the date on which the data has been updated;

(f) the date and time when the change in a given condition has occurred or is planned to occur;

(g) the quality of the data update.

The location of the condition concerned by the update shall be determined using a standardised or any other generally accepted dynamic location referencing method that enables unambiguous decoding and interpretation of this location.

Road authorities and road operators shall ensure the timely update of static road data and, where known and possible, provide these updates to users in advance.

When digital map producers and service providers use static road data updates, they shall ensure that these updates are processed in a timely manner in order to make the information accessible to end users without delay.

### **Updating dynamic road status data**

The updates of the dynamic road status data shall concern as a minimum the following parameters:

(a) the type of dynamic road status data as set out in point 2 of the attached Annex concerned by the update and, where appropriate, a short description of it;

(b) the location of the event or condition concerned by the update;

(c) the period of occurrence of the event or condition concerned by the update;

(d) the quality of the data update.

The location of the event or condition concerned by the update shall be determined using a standardised or any other generally accepted dynamic location referencing method that enables unambiguous decoding and interpretation of this location.

Road authorities and road operators shall ensure the timely update of dynamic road status data and, where known and possible, provide these updates in advance.

The real-time traffic information shall be modified accordingly or withdrawn as soon as possible after the status of the dynamic road status data concerned has changed.

When service providers use dynamic road status data updates, they shall ensure that these are processed in a timely manner in order to make the information accessible to end users without delay.

### **Updating traffic data**

The updates of the traffic data shall include as a minimum the following parameters:

(a) the type of traffic data as set out in point 3 of the Annex concerned by the update and, where appropriate, a short description of it;

(b) the location of the event or condition concerned by the update;

(c) the quality of the data update.

The location of the event or condition concerned by the update shall be determined using a standardised or any other generally accepted dynamic location referencing method that enables unambiguous decoding and interpretation of this location.

The real-time traffic information shall be modified accordingly or withdrawn by road operators and service providers as soon as possible after the status of traffic data concerned has changed.

When service providers use traffic data updates, they shall ensure that these are processed in a timely manner in order to make the information accessible to end users without delay.

### **Priority action (e)**

#### **Requirements for the provision of information services**

Member States shall designate areas where traffic and security conditions require the deployment of information services on the safe and secure parking places.

They shall also define priority zones where dynamic information will be provided.

The provision of information services shall fulfil the requirements set out in Articles 4 to 7 of the delegated regulation.

#### **Data collection**

The data to be collected shall be the following:

Static data related to the parking areas, including (where applicable)

- Identification information of parking area (name and address of the truck parking area (limited to 200 characters))
- Location information of the entry point in the parking area (latitude/longitude) (20 + 20 characters)
- Primary road identifier1/direction (20 characters/20 characters), and Primary road identifier2/direction (20 characters/20 characters) if same parking accessible from two different roads
- If needed, the indication of the Exit to be taken (limited to 100 characters)/Distance from primary road (integer 3) km or miles
- Total number of free parking places for trucks (integer 3)
- Price and currency of parking places (300 characters)

Information on safety and equipment of the parking area

- Description of security, safety and service equipment of the parking including national classification if one is applied (500 characters)
- Number of parking places for refrigerated goods vehicles (numerical 4 digits)
- Information on specific equipment or services for specific goods vehicles and other (300 characters)

Contact information of the parking operator:

- Name and surname (up to 100 characters)
- Telephone number (up to 20 characters)
- E-mail address (up to 50 characters)
- Consent of the operator to make his contact information public (Yes/No)

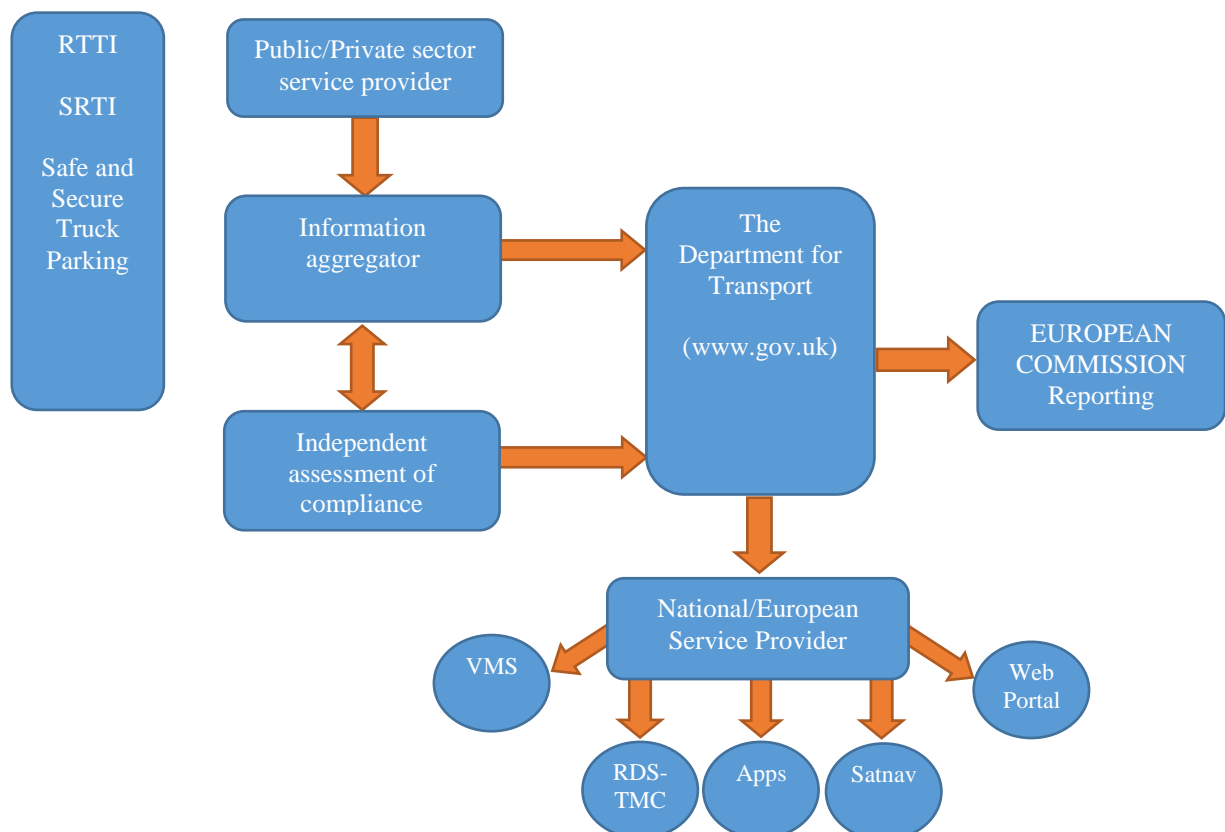
Dynamic data on availability of parking places including whether a parking is: full, closed or number of free places which are available.

### 3. Requirements

The contractor will develop a catalogue of the services available including list of service providers in the value chain, data types location maps, channels/URLS of DATEX II, etc. This information will be used by an independent assessment of compliance body (yet to be appointed) to carry out independent assessment of compliance against the service provider's self-declaration of conformity, quality criteria and assessment methodology.

The independent body will be responsible for validating the technical compliance file (TCP). The endorsed TCP file will be sent to DfT (copied to contractor) for uploading to the national access point. The contractor will also be required to maintain a suitable database comprising records of the accredited service providers. The figure below depicts the process and information flow.

#### ***National Assessment of Compliance proposed structure***



It is essential for the contractor to have prior knowledge of the ITS sector and work closely with them to establish a process and agreement for accessing the information.

The contractor will be required to undertake, manage and make suitable arrangements to deliver the requirements of the Directive in an efficient manner and provide a “best value” approach for carrying out the requirements.

The contractor will broker agreements with various public/private sector stakeholders to access static and dynamic real time traffic and travel information defined in the relevant delegated regulations. The DfT will however assist with facilitating further discussions, as appropriate with the national road administrators in the UK.

The contractor will be required to demonstrate sound knowledge of the ITS sector and the governing European legislative framework in their tender submission.

#### **4. Project Management**

The DfT Project Manager will manage the project for the Department for Transport and will be the key contact for all decisions relating to the project. Any direct communication with any of the organisations outside the DfT centre by the contractor must be copied to the project officer.

It is essential that the contractor works closely with the Project Manager and any other parties nominated by him. Where needed, the Project manager will provide policy and technical support on issues relating to the EU ITS Directive and the delegated regulations.

The contractor shall provide a Task Manager to oversee and coordinate the delivery of the contractor services to the DfT. The Task Manager shall act as the single point of contact for the DfT Project Manager and shall coordinate resources to ensure the requirements of the DfT are met.

The Task Manager shall hold project management meetings every 4 weeks where the contractor shall discuss with the DfT, the following:

- Progress/programme
- Costs/finances
- Risks/issues
- Outputs/reports
- Next steps

A clear project plan shall be produced for the delivery of work packages once priorities have been identified. Other output requirements will be agreed with the contractor at the regular project management meetings.

The contractor will be responsible for managing the project with appropriate administrative support. This will involve the production and proactive monitoring of a project plan, preparation of progress meeting minutes, reports, and finance papers – invoicing, spend monitoring/profiling which should be undertaken to a high quality with minimal supervision as a matter of routine within agreed time parameters. There will be a need to attend meetings as required by the Project Manager.

An initial inception meeting will be held with the DfT Project Manager. The Project Manager may also request ad-hoc progress meetings, only if considered necessary. Minutes of all meetings are to be provided by the contractor within the week following the meetings. The contractor will be responsible for providing suitable venues for client and other stakeholders meetings.

## **5. Skills/Experience**

### *Essential Skills*

The contractor needs to have an in-depth knowledge of data capture techniques and data management including real time and static road data and other related Intelligent Transport Systems applications. In addition, it should be able to demonstrate its knowledge of the ITS public/private sector and be able to demonstrate proven previous experience in this area.

The appointed contractor will also need to demonstrate a range of further competences and experience to meet the technical requirements to undertake this commission as set out below:

#### Essential skills

- Specialist negotiating and communications skills.
- Proven ability in analysing, processing and communicating real-time dynamic and static road data
- Extensive knowledge of the UK/European ITS sector and regulatory framework
- Close working relationship with the ITS public/private sector
- Programme and project management of ITS related projects.
- Capability to provide innovative solutions.
- Proven ability to meet deadlines.

#### Experience

- Knowledge of the ITS public and private sector regulatory framework.
- Working with the ITS public and private sector.
- Data capture and assimilation
- Prior experience demonstrating technical skills and knowledge on similar projects
- Road traffic data verification and validation

## **6. TIMINGS, OUTPUTS AND MONITORING**

### **6.1 Timings**

The following table represents an indicative timetable however, tenders should include a timetable based on the work actually proposed.

- |                     |                              |
|---------------------|------------------------------|
| • Project start     | 24 August 2015               |
| • Inception meeting | within 2 weeks               |
| • Commence delivery | 14 September 2015            |
| • Conclude Project  | 31 December 2017(indicative) |



## **7. PUBLICATION**

The contractor shall:

- supply to the DfT project manager 2 copies of interim reports at completion of each stage, and 5 copies of the draft final report on dates to be agreed.
- supply to the DfT project manager 5 copies of the final report agreed with the contract manager as suitable for publication by the DfT
- deliver the draft final report in electronic form in a format compatible with the DfT software (currently Word 2013 and Excel 2013), and as a hard copy, together with original artwork and traffic sign designs. The format will comprise uniformly word-processed, proof-read text and engineering layouts.
- allow a minimum of 10 working days for the project manager to consider the draft final report.
- be responsible for proof-reading the final report prior to publication.
- The format and content (the latter insofar as it relates to the presentation of the results of the research and interpretation of relevant policy) of all working papers, reports and papers shall be subject to the agreement of the DfT contract manager.
- Reports and working papers shall be in A4 printed in black on white on recycled paper.
- Final reports shall include an abstract of no more than 250 words and an executive summary of no more than 3 pages.

## **8. FINANCE**

### **Costs**

The project will be commissioned on a Fixed Lump Sum basis.

## **9. Project Plan**

Tenderers should include a project plan and time schedule for the work that identifies the main tasks and key milestones that will be used to monitor progress, indicating clearly where the Department (usually the Project Manager, but wider technical team support is appropriate in this contract) is expected to contribute. The plan should also be accompanied by a breakdown of the resources in person days allocated to each task (a resource profile).

A Gantt Chart detailing each project task shall be provided by the Contractor at the inception meeting covering the entire duration of the project and preferably in Microsoft Project to assist with monitoring and review.

## **10. Invoices**

Draft invoices will be submitted to the project manager for consideration prior to being formally submitted. Each invoice will include the Purchase Order and Contract numbers allocated by the client, a brief description of the work done and the time period it covers. Invoices must be submitted monthly to:

Shared Services arvato

## **11. Requirements for the tender proposal**

The tenderer must demonstrate a full understanding of the Department's requirements in their proposal. This is not simply just repeating statements from the specification but should reflect the tenderer's knowledge and expertise by stating why they feel the outputs are significant and how they will ensure that they can be utilised in the overall context of the project and the wider application of Intelligent Transport Systems and the European legislative framework. The tenderer should also highlight potential difficulties that might arise.

Tenderers should supply 4 copies of their proposal which must be as follows:

- Details of organisation. Not more than 4 sides of A4 to include a description of the organisation and relevant expertise. Details of sub-contractors and collaborating organisations should also be included.
- Key Personnel. Description of the proposed team, including the identified project manager. A CV for the project manager, together with one page CVs for supporting staff of the contractor, its sub-contractor and any external contractor to be supplied. This should not be more than 10 pages and should be linked to a work programme, indicating where possible the grade of staff and the number of days allocated to the four work stages identified in this brief.
- Appreciation of the brief. This should be not more than five pages.
- Proposed methodology. Not more than 30 pages. This should provide a detailed description of the proposed approach to meet the requirements of the research.
- Financial proposal. This should include a firm price tender with daily charge rates and expected resource breakdown.
- A cost profile, showing anticipated costs accrued on monthly basis
- An outline of previous / current relevant work
- The point of contact for the Department

## **12. BEFORE INVITATION OF TENDERS**

It is Government policy to treat all contractors fairly and impartially. The project manager will be happy to answer questions about the work specification and any relevant information to do with the project will be shared with interested parties. Indeed, tenderers are encouraged to ask questions and so ensure full understanding of the requirement. The contract officer will be happy to answer questions about the tendering process and contractual details.

## **13. Evaluation Criteria**

This requirement has been allocated under the terms of the DfT contract (route TBC). It is likely that there will be limited competition with other suppliers on the framework and your proposal will be considered by the evaluation team who may wish to discuss the content with you prior to making a final decision on the award of this work.

The evaluation team will consider the following areas when carrying out the evaluation so you should ensure that they are covered in your proposal:

- **Experience of team allocated to project:** Evidence of the relevant experience and knowledge of team members who will be undertaking the substantive work on the project.
- **Quality of proposed approach:** How well the proposed approach demonstrates an understanding of the requirement and sets out a deliverable plan to achieve it.
- **Ability to deliver to timescale:** Does the project plan meet the timescales required, and does the proposal show evidence of how this timetable will be met, including identification and mitigation of risks to the timetable?
- **Quality assurance:** Evidence of a structured quality assurance process undertaken by suitably experienced staff in line with the quality assurance requirements section above

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10/07/2015