



12 April 2019

Dear ,

Request for Information – ATISN 13076

I wrote to you on 28 March regarding your request for information. As indicated in my letter, I am responding in relation to questions 3, 4 and 5 of your request as they relate to transport matters. You will receive separate correspondence regarding your remaining questions under ATISN 13075. Your questions are appended at Annex A.

The Freedom of Information Act (FoI) provides a right to ask for recorded information held at the time a request is made and does not require an authority such as the Welsh Government to provide information where that information is not already recorded. This is confirmed by the Information Commissioner's guidance 'The Guide to Freedom of Information', page 7:

“The Act does not cover information that is in someone’s head. If a member of the public asks for information, you only have to provide information you already have in recorded form. You do not have to create new information or find the answer to a question from staff who may happen to know it.”

On this basis, the FOI Act does not oblige us to provide you with information except insofar as such information is held in recorded form at the time the request was made.

I can confirm that the Welsh Government does not hold on record information in relation to questions 3, 4 and 5 or any of their respective sub-questions, with the possible exception of questions 3.3 and 4.3.

In my letter of 28 March, I explained that asking for a broad amount of information, such as in question 4.3, would likely to be very time consuming to deal with. I can confirm that this is the case for both questions 3.3 and 4.3. I have therefore concluded



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Rydym yn croesawu derbyn gohebiaeth yn Gymraeg. Byddwn yn ateb gohebiaeth a dderbynnir yn Gymraeg yn Gymraeg ac ni fydd gohebu yn Gymraeg yn arwain at oedi.

We welcome receiving correspondence in Welsh. Any correspondence received in Welsh will be answered in Welsh and corresponding in Welsh will not lead to a delay in responding .

that it will cost more than the appropriate limit set out in the Freedom of Information and Data Protection (Appropriate Limit and Fees) Regulations 2004 to deal with those parts of your request and the search for information will not, therefore, be undertaken. The appropriate limit specified for central government is £600. This represents the estimated cost of it taking over 24 hours of time to determine whether we hold the information and to thereafter locate, retrieve and extract it.

As indicated in my letter, an initial search was undertaken on our electronic filing system for information which may be relevant to question 4.3 in relation to smart roads and smart signage. This search returned over 2,500 objects. It would be necessary to open each individual object to check whether or not it was caught by question 4.3. It would take, on average, 1 minute per object, meaning the time it would take to open the 2,500+ objects would be at least 2,500 minutes, or at least 41 hours. A narrowed request, such as a specific search time frame, or for particular types of information, may have reduced the amount of information caught. That said, searches would also need to be undertaken on individual e-mail accounts of relevant officials for information which had not yet been saved to our electronic filing system. Similar searches and exercises would need to be undertaken for question 3.3.

Consequently, for the reasons outlined above, searches will not be undertaken for the information you have requested under questions 3.3 and 3.4. That said, in order to be helpful to you, I have provided some explanations below which may be of assistance to you.

The Welsh Government has not been in talks with any experts, companies or entities about autonomous vehicles for public transport and/or private use on Public Highways.

In respect of fixed traffic signs, the Welsh Government does not have a “smart signage strategy”. Our use of variable message signs is to ensure the safety of the travelling public by displaying relevant messages on electronic signs. This includes dealing with any incidents and informing the motorist of any necessary actions.

The Welsh Government has rolled out LED street lighting. The Welsh Government operates the Telensa PLANet CMS to manage and monitor street lighting. The Welsh Government Trunk Road Agents administer the contract with Telensa and through that have access to documentation for PLANet CMS system. There is no training manual. The Welsh Ministers are responsible for the safety standards for the CMS and LED streetlight system. Street lighting designs and installations (including lanterns) are in accordance with the Design Manual for Roads and Bridges (DMRB) – TD34/07 – Design of Road Lighting for the Strategic Motorway and Trunk Road Network. This document outlines the relevant BS and EU standards.

If you have any queries about this request, please do not hesitate to contact me at the address below. Please remember to quote the reference number above in any future correspondence.

The request you sent me contains personal information about you - for example, your name and address. The Welsh Government will be the data processor for this information and, in accordance with the General Data Protection Regulation, it will be processed in order to fulfil our public task and meet our legal obligations under the Act to provide you with a response. We will only use this personal information to deal with

your request and any matters which arise as a result of it. We will keep your personal information and all other information relating to your request for three years from the date on which your request is finally closed. Your personal information will then be disposed of securely.

Under data protection legislation, you have the right:

- to be informed of the personal data we hold about you and to access it
- require us to rectify inaccuracies in that data
- to (in certain circumstances) object to or restrict processing
- for (in certain circumstances) your data to be 'erased'
- to (in certain circumstances) data portability
- to lodge a complaint with the Information Commissioner's Office (ICO) who is our independent regulator for data protection

For further information about the information which the Welsh Government holds and its use, or if you wish to exercise your rights under the GDPR, please see contact details below:

Data Protection Officer, Welsh Government, Cathays Park, CARDIFF, CF10 3NQ
Email: DataProtectionOfficer@gov.wales

The contact details for the Information Commissioner's Office are:

Wycliffe House, Water Lane, Wilmslow, Cheshire, SK9 5AF

Telephone: 01625 545 745 or 0303 123 1113

Website: www.ico.gov.uk

Any information released under the Freedom of Information Act 2000 or Environmental Information Regulations 2004 will be listed in the Welsh Government's Disclosure Log (at <http://wales.gov.uk/about/foi/responses/?lang=en>).

Yours sincerely

3. Are you in talks with any experts, companies or entities about autonomous vehicles (AV) for public transport and/or private use on Public Highways?

3.1 If yes, I request to see the complete strategy, its ambitions and its objectives in PPTX, Word, PDF or picture format.

3.2 I also request a supplementary document that includes all levels of detail on:

(a) Companies and entities involved and the names of the company/entity officers?

(b) Specification sheets of all technology.

(c) What type of communication system will the WAG be utilising to control the vehicles?

(d) What UK, EU and International safety standards does your AV strategy and rollout comply with?

(e) I request proof e.g. a certificate from the Welsh Government that confirms that UK, EU and International safety standards for workers and the public have been met.

3.3 If no, I request all documentation, memos, emails and communication on companies and entities you're in talks with regarding the formulations of an autonomous public and private vehicle technology strategy.

4. Do you have a strategy for smart roads and smart signage on Public Highways and Public spaces?

4.1 If yes, I request to see the complete strategy, its ambitions and its objectives in PPTX, Word, PDF or picture format.

4.2 I also request a supplementary document that includes all levels of detail on:

(a) Companies and entities involved and the names of the company/entity officers?

(b) Specification sheets of all technology.

(c) What technology e.g. units and arrays will not be 5G, but can be 5G enabled e.g. with current software, future software, hardware upgrades or retrofitting etc (you must be specific on anything here)?

(d) What UK, EU and International safety standards does your 5G strategy and rollout comply with?

(e) I request proof e.g. a certificate from WAG (Welsh Government) that confirms that UK, EU and International safety standards for workers and the public have been met.

4.3 If no, I request all documentation, memos, emails and communication on companies and entities you're in talks with regarding smart roads and smart signage.

5. Are you planning to rollout or have rolled out LED street lighting?

5.1 If yes, please answer these questions:

(a) What is the CMS and specification of the software and hardware of the LED street light system?

- (b) What type of waveform is the LED? e.g. Square wave?
 - (c) Can you control the Pulse Width Modulation (PWM) of the streetlight system using the CMS?
 - (d) Can you control the PWM of each streetlight that's connected to the system?
 - (e) What restrictions do you have in place for the control of the PWM?
 - (f) What is the UK, EU and International safety limit (low and high) for the amount of 'flicker' (Hz) the Human Body and eyes can be exposed to and for how long?
 - (g) I request to see the training manual and safety operation manual for the CMS and the LED streetlight system.
 - (h) Who is the company who is or has installed the CMS LED streetlight system?
 - (i) What company maintains and repairs the CMS and LED streetlight system?
 - (j) What entity and Officer is responsible for the safety standards for the CMS and LED streetlight system?
 - (k) I request proof e.g. a certificate from WAG confirming UK, EU and International safety standards for workers and the public have been meet.
 - (l) What is the amount of Blue Light leakage that's safe for the public and workers during the LED streetlights operation?
 - (m) What level of LED streetlight exposure is safe for the public at daytime and night time?
 - (n) Is there a legal requirement for diffusers to be fitted to LED streetlights?
 - (o) How have you have addressed the amount of Oxidative Stress on Human and Animal cells that's produced from LED?
- 5.2 If no, then I request a declaration from WAG that you will not be installing LED streetlights in the future. If you cannot provide a declaration, I would like the following answered in the future tense:
- (a) What is the CMS and specification of the software and hardware of the LED street light system?
 - (b) What type of waveform is the LED? e.g. Square wave?
 - (c) Can you control the Pulse Width Modulation (PWM) of the streetlight system using the CMS?
 - (d) Can you control the PWM of each streetlight that's connected to the system?
 - (e) What restrictions do you have in place for the control of the PWM?
 - (f) What is the UK, EU and International safety limit (low and high) for the amount of 'flicker' (Hz) the Human Body and eyes can be exposed to and for how long?
 - (g) I request to see the training manual and safety operation manual for the CMS and the LED streetlight system.
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 - (i) What company maintains and repairs the CMS and LED streetlight system?
 - (j) What entity and Officer is responsible for the safety standards for the CMS and LED streetlight system?
 - (k) I request proof e.g. a certificate from Welsh Government confirming UK, EU and International safety standards for workers and the public have been meet.

- (l) What is the amount of Blue Light leakage that's safe for the public and workers during the LED streetlights operation?
- (m) What level of LED streetlight exposure is safe for the public at daytime and night time?
- (n) Is there a legal requirement for diffusers to be fitted to LED streetlights?
- (o) How have you have addressed the amount of Oxidative Stress on Human and Animal cells that's produced from LED?