

18 February 2020



Dear Sir/Madam

Local Government Official Information and Meetings Act 1987 (LGOIMA) Request

I refer to you re-mail of 29 November 2019 requesting information under LGOIMA. I advised on 20 January 2020 that the council would be providing the information requested, where possible.

As a general comment I advise that the Council has not had any discussion on the introduction of 5G, therefore we are unable to respond to the majority of your questions about this.

1. Do you have a 5G strategy?

No

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

Not applicable

1.2 If yes, has the public had the opportunity to read and understand Dunedin City Council 5G strategy? Where was this information published?

Not applicable

1.3 I also request a supplementary document that includes the highest level of detail on all 5G technology that's planned to be used and current in use in public spaces within Dunedin City Council:

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

(b) Specification sheets of 5G technology.

(c) What technology e.g. units and arrays are not currently 5G, but can be 5G enabled e.g. with current software, future software, hardware upgrades or retrofitting?

(d) What NZ and International safety standards is Dunedin City Council complying with for the 5G strategy and existing 5G technology.

(e) I request proof e.g. a certificate from Dunedin City Council that confirms that NZ and International safety standards for workers and the public have been meet.

The questions in 1.3 are not applicable

1.4 If no, I request to know when you will be chairing a 5G strategy?

Not applicable

2. I request the name/s of the Officer/s in charge of the 5G strategy and roll out for 5G and Smart Cities; and who their subject area expert or consultancy is, their CV and qualifications on 5G and Smart Cities.

Not applicable

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?

The Council has not had any discussion regarding autonomous vehicles.

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

Not applicable

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 Dunedin City Council be utilising to control the vehicles?

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

(e) I request proof e.g. a certificate from Dunedin City Council that confirms that NZ and International safety standards for workers and the public have been meet.

The questions in 3.2 are not applicable.

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

No

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

Not applicable

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 NZ and International safety standards does your 5G strategy and rollout comply with?
- (e) I request proof e.g. a certificate from Dunedin City Council that confirms that NZ and International safety standards for workers and the public have been met.

The questions in 4.2 are not applicable.

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

Yes

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?

The CMS is a central management system that allows for remote control of the lighting network. It includes a telecall on each streetlight that connects to base stations strategically placed around the city. The system has been developed by Telensa and their software is called PLANet. Connectivity is via 3G/4G cellular network.

- (b) What type of waveform is the LED? e.g. Square wave?

Not known

- (c) Can you control the Pulse Width Modulation (PWM) of the streetlight system using the CMS?

Power output is used to control dimming.

- (d) Can you control the PWM of each streetlight that's connected to the system?

Not applicable

- (e) What restrictions do you have in place for the control of the PWM?

Not applicable

- (f) What is the NZ 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?

This information is not held.

(g) I request to see the training manual and safety operation manual for the CMS and the LED streetlight system.

This information is currently not held. A manual will be produced at the completion of the project.

(h) Who is the company who is or has installed the CMS LED streetlight system?

Broadspectrum has been contracted to design and build the LED streetlight renewal project, which includes the design and deployment of the CMS system. They have subcontracted the CMS to Telensa.

(i) What company maintains and repairs the CMS and LED streetlight system?

Broadspectrum has a 7 year contract to provide streetlight maintenance services, which includes the CMS.

(j) What entity and Officer is responsible for the safety standards for the CMS and LED streetlight system?

Dunedin City Council.

(k) I request proof e.g. a certificate from Dunedin City Council that confirms that NZ and International safety standards for workers and the public have been met.

This information is not held

(l) What is the amount of Blue Light leakage that's safe for the public and workers during the LED streetlights operation?

This is not a request for information as defined by LGOIMA

(m) What level of LED streetlight exposure is safe for the public at daytime and night time?

This is not a request for information as defined by LGOIMA

(n) Is there a legal requirement for diffusers to be fitted to LED streetlights?

This is not a request for information as defined by LGOIMA

(o) How have you have addressed the amount of Oxidative Stress on Human and Animal cells that's produced from LED?

This is not a request for information as defined by LGOIMA.

5.2 If no, then I request a declaration from Dunedin City Council 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:

The following questions have been answered above.

- (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 NZ 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 Dunedin City Council that confirms that NZ and International safety standards for workers and the public have been met.
- (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?

While we have been unable to provide answers to all your questions the Council has made a number of media releases and provided information on the website regarding the installation of LED Lights. Below is a link to the media release and the information on the website which you may find informative.

- <https://www.odt.co.nz/news/dunedin/dcc/nzta-says-3000k-lights-possibility>
- <https://www.odt.co.nz/opinion/science-can-inform-better-lighting-decisions>
- <https://www.odt.co.nz/news/dunedin/dcc-trials-new-streetlights>
- <https://www.odt.co.nz/news/world/light-pollution-rises-global-scale>
- <https://www.odt.co.nz/news/dunedin/low-glare-street-lights-likely>
- <https://www.odt.co.nz/news/dunedin/dcc/residents-say-leds-better>
- <https://www.odt.co.nz/opinion/editorial/let-there-be-less-light>
- <https://www.odt.co.nz/news/dunedin/light-plans-progress-amid-concerns>
- <https://www.odt.co.nz/opinion/bright-lights-hiding-problems>

DCC Webpage: <https://www.dunedin.govt.nz/services/roads-and-footpaths/projects/led-streetlights>

6. Where do you have 3G and 4G systems in public spaces and public roads?

[This is used for SMART signs and for the LED network, which is currently being implemented.](#)

We have declined to provide some information pursuant to section 17(e) of LGOIMA in that the document alleged to contain the information requested does not exist or despite reasonable efforts to locate it, cannot be found.

As we have declined to provide information you are advised that you have the right to seek a review by the Office of the Ombudsman at 0800 802 602 or info@ombudsman.parliament.nz

Yours faithfully

A handwritten signature in black ink, appearing to read 'J. Lapham', written in a cursive style.

Jennifer Lapham
Governance Support Officer