

PUBLIC ENGLISH READING TRANSLATION

Municipal response to council questions on the digital twin

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To Mr Jacobs
Heerlen

Heerlen, 21 October 2025

Document number: 539307

Subject: Response to questions under Article 33 of the Rules of Procedure

Dear Mr Jacobs,

In response to your questions of 23 September 2025 concerning the "digital twin", we inform you as follows.

Question 1

Is the Executive Board familiar with the concept of a five-minute city, and how does it view the possible implications of this concept for residents' freedom and freedom of choice?

Answer

A five-minute city, or the more common fifteen-minute city, is an urban-planning concept in which important amenities are accessible within walking or cycling distance. In our view, greater proximity of amenities actually increases residents' freedom and freedom of choice. We furthermore see no relationship between the five-minute city and our project to develop a digital twin.

Question 2

Can you explain the legal basis, including the applicable GDPR provisions and other legislation, on which the Municipality collects and processes residents' personal data within the Social Digital Twin project?

Answer

We process personal data only where a legal basis exists. The legal bases for collecting personal data are listed in Article 6 of the General Data Protection Regulation. Processing of personal data is lawful where it is:

1. Based on the data subject's consent for one or more specific purposes.
2. Necessary for the performance of a contract, for example in order to provide a service.
3. Necessary for compliance with a legal obligation.
4. Necessary to protect the vital interests of the data subject or another natural person.

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5. Necessary for the performance of a task carried out in the public interest or in the exercise of official authority.
6. Necessary for the legitimate interests pursued by the controller or a third party.

No personal data are currently being processed for the Social Digital Twin project. When building the Social Digital Twin, we pay particular attention to legal, privacy and ethical aspects. All technological products will be assessed using the ELSA method developed for this purpose. This method analyses the ethical, legal and societal impact of new technology. For this work, we cooperate with the ELSA Lab of Maastricht University's Brightlands Institute for Smart Society, which is a project partner.

Question 3

What measures are being taken to ensure that these data are used exclusively for the purposes of liveability and safety and not to steer residents, unintentionally, in their patterns of residence, work or movement?

Answer

We may use data only for the purpose for which they were collected, in accordance with the principle of purpose limitation. In our answer to Question 9, we explain in more detail how unintended effects will be prevented.

Question 4

What technical and organisational measures have been taken to protect residents' data against unauthorised access or data breaches?

Answer

We will first carry out a risk analysis based on the ELSA method. We will then implement technical and organisational measures, as we do for all data processing by the Municipality of Heerlen, in accordance with the Government Information Security Baseline (Baseline Informatiebeveiliging Overheid, BIO).

Question 5

Who within the Municipality and its partner organisations has access to the data, and how is that access monitored and accounted for?

Answer

The starting point is to work with aggregated information that cannot be traced back to individuals. Data access will be organised in accordance with the GDPR and other applicable legislation. This means that only necessary data will be processed and that an authorisation matrix will be used to restrict access rights. In general, only those who need the data for their work will have access, and only to the extent required for their specific role.

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Question 6

How are residents informed about which of their data are collected, how those data are used and how long they are retained?

Answer

Where applicable, people will be informed about the data we process unless one of the exceptions under Article 23 of the GDPR applies. The pilot project will have to determine whether an exception, such as public order and safety, applies in particular situations. The information used will primarily consist of aggregated data, such as numbers, percentages, indices and statistics, which cannot be traced back to individuals.

Question 7

What options do residents have to access, correct or have their data erased?

Answer

In view of the above, because the data cannot be traced back to individuals, this will probably not be relevant. This will nevertheless have to be established during development and assessment under the ELSA method. In general, where personal data are collected, residents have rights under Articles 15 through 21 of the GDPR. They may submit a request to access, rectify or have their data erased, among other things, via www.heerlen.nl/verzoek-over-persoonsgegevens-op-basis-van-de-avg-indienen.

Question 8

Has a cost-benefit analysis been carried out for this project? If so, can you share the results?

Answer

The amount awarded to all project partners together is EUR 5 million for a period of more than three years. Cofinancing amounts to approximately EUR 1.2 million and must be provided jointly by all partners. In practice, partners provide this cofinancing through regular working hours that professionals would already spend on their work in those neighbourhoods or by making buildings available. This also applies to us. It entails no financial risk and therefore has no impact on the budget.

The total amount of EUR 6.2 million benefits liveability and safety in the selected neighbourhoods of Heerlen, as well as the innovative capacity of the Municipality of Heerlen and its partners in the field of safety, while requiring only a limited number of cofinanced working hours in return.

Question 9

How is it measured whether the Social Digital Twin project actually contributes to liveability and safety without causing undesirable influence on residents' behaviour?

Answer

We measure and monitor 25 indicators relating to the intended effects, such as residents' sense of safety, willingness to report and recognition of signals of organised crime. One of the project's aims is to determine whether the pilot has a positive effect on these indicators.

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In addition, the Municipality of Heerlen's Data Protection Officer, acting as an independent supervisory officer, oversees the processing operations within this project. The Data Protection Officer also uses the outcome of the risk analysis and the mitigating measures referred to in the answer to Question 4.

Question 10

Is the project periodically evaluated by an independent party?

Answer

An independent evaluation is not part of the project conditions. A Lead Expert funded by the European Commission is involved. The Lead Expert provides substantive guidance to EUI projects, supports the monitoring of progress and results, and helps cities achieve their innovative objectives. The expert also contributes to evaluation, knowledge-sharing and the transferability of lessons learned within Europe.

In addition, a monitoring working group will be formed from the parties involved. It will focus on measuring, quantifying and evaluating the results produced by the technological solutions in the Hoensbroek and Vrieheide pilot neighbourhoods. Lessons learned from the project will be summarised in fact sheets containing recommendations for consolidating and scaling up any wider roll-out. This will be supplemented by a cost-benefit analysis comparing the financial and social aspects of the technological solutions, including their effects on safety, liveability and crime. These findings will be brought together in a final report.

Question 11

How will the Municipal Council be informed about progress, results and possible risks within the framework of Smart City innovation, with particular attention to restrictions on freedom and privacy?

Answer

We will inform the Council about the results and risks of our work through the planning and control cycle. Where circumstances warrant, we will provide the Council with an information letter.

Yours faithfully,

The Mayor and Aldermen of Heerlen,

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The Mayor,
R. Wever

The Acting Municipal Secretary,
R. van Wuijtswinkel