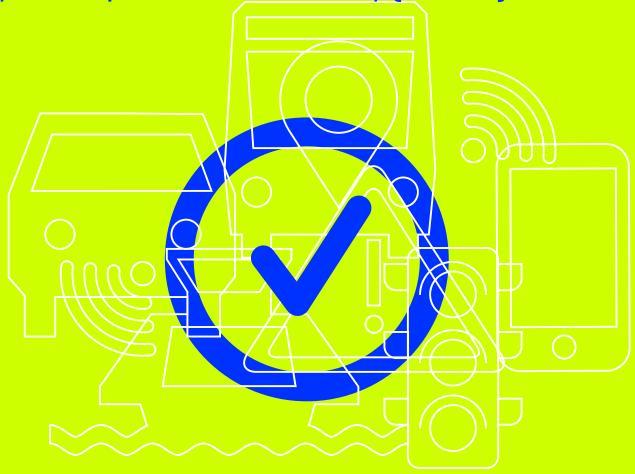
# MANUAL SECURE EXCHANGE OF DATA SHARED MOBILITY

City Data Specification-Mobility (CDS-M)





# **ETHICAL FRAMEWORK CDS-M**

Read more about the ethical considerations underlying CDS-M. This framework can also be used for new projects.

# ETHICAL FRAMEWORK CDS-M

The CDS-M team participated in an ethical workshop to determine the values that should be taken into account in the development of the project.

The six 'tada values' were compared to the project. Relevant values are the values that are promoted by individual members of the team themselves, have been embraced by the organization and/or values that follow from frameworks and regulations that the team must adhere to.

Because the exact context and the weighting of values can vary considerably per project, this document serves to make clear to third parties which values count, how they are weighted and which decisions this has led to.

## THE VALUES THAT ARE WEIGHTED IN THIS PROJECT

THE VALUES OF THE TADA MANIFESTO:

- 1 INCLUSIVE
- 2 CONTROL
- 3 TAILORED TO THE PEOPLE
- 4 LEGITIMATE AND MONITORED
- 5 OPEN AND TRANSPARENT
- 6 FROM EVERYONE FOR EVERYONE

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Our digital city is inclusive. We take into account the differences between individuals and groups, without losing sight of equality.

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#### **EXPLANATION OF THE VALUE AS UNDERSTOOD BY THE TEAM**

The service or product being created must not discriminate in any way. Nor should it contribute to segregation. And it should not be used to give a company an advantage over other companies. There must be a level playing field for everyone (including companies).

#### THIS VALUE IS RELEVANT FOR THIS PROJECT BECAUSE

Mobility providers and data processing parties are driven to set up a good business case. The collection of data has become relevant. It is important that the commissioning party sets ethical standards in the field of data exchange, cooperation and inclusiveness so that the interests of the citizen and the city are central. CDS-M can help with this.

#### **SCORE**

The team scored itself on the value including: insufficient/moderate.

#### THIS COULD BE BETTER

At the moment, only data is collected about the use of partial mobility, such as data about origin and destination. In cities, only a small group of inhabitants make use of shared mobility. The data obtained with CDS-M is not to generalize for all residents. It is expected that in the future mobility data will be about a more diverse group of passengers, because then data will also be accessed from other modalities, such as public transport or taxis. If, on the basis of the current data, city policy choices are made about mobility, you indirectly exclude the use of other modalities in this decision-making process. This means that you lack knowledge and insights about the mobility use of passengers who do not currently travel with shared mobility.

#### WE ALREADY DO THIS AND IT IS GOOD

We provide frameworks to data suppliers and processors, so that the wishes, rights and interests of users are taken into account during data processing. In this way, the CDS-M focuses on the interests of the citizen and the city.

#### THE TEAM TAKES THE FOLLOWING ACTIONS TO IMPROVE THIS SCORE

The team wants to investigate whether the general terms and conditions of the mobility providers include that aggregated data is used for municipal research. If this is insufficiently described, the request is made to the mobility provider to tighten this up.

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## 2 CONTROL

Data and technology should contribute to the freedom of people.

Data are meant to serve the people. To be used as seen fit by people to benefit their lives, to gather information, develop knowledge, find room to organize themselves. People stay in control over their data.

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#### EXPLANATION OF THE VALUE AS UNDERSTOOD BY THE TEAM

Everyone involved in the project has something to say about it. As a contributor to the CDS-M, you have an influence on the further development of the standard.

#### THIS VALUE IS RELEVANT FOR THIS PROJECT BECAUSE

Legitimate and controlled actions are relevant to the CDS-M because personal data is Control is relevant to CDS-M because we want to be a standard that is open source and open to feedback and contributions from others. A challenge is to set up a structure that makes this easy and especially findable.

#### **SCORE**

The team scored itself on the value of control: Sufficient.

#### THIS COULD BE BETTER

In the further development phase, a work process is set up on which the parties involved in CDS-M can provide input.

#### WE ALREADY DO THIS AND IT IS GOOD

CDS-M returns control of data to municipalities. Previously, municipalities had to purchase data. When municipalities collect data themselves, they no longer have to purchase data and therefore they get more control.

#### THE TEAM TAKES THE FOLLOWING ACTIONS TO IMPROVE THIS SCORE

We will have individual discussions with the providers about the first results of the pilots. And not only with the providers who participate in the pilots but with all providers (in the city or the Netherlands).



## 3 TAILORED TO THE PEOPLE

Data and algorithms do not have the final say. Humanity always comes first. We leave room for unpredictability. People have the right to be digitally forgotten, so that there is always an opportunity for a fresh start.

#### **EXPLANATION OF THE VALUE AS UNDERSTOOD BY THE TEAM**

People always have the opportunity to have a correction made on the data and the insights that come from it. The data may not be cast in stone but must also be correctable. We also focus on the rights of the individual as laid down in the GDPR, for example the right to be forgotten.

#### THIS VALUE IS RELEVANT FOR THIS PROJECT BECAUSE

Human scale as value is relevant for this project, because we notice that the matter is often too complicated to explain in a short time to the wider public and other municipalities. Because of this discrepancy in knowledge, some people are not able to think along in the development process and the application of CDS-M. It is a challenge for us to ensure that this goes better and that we can offer stakeholders a say.

#### **SCORE**

The team scored itself on the value human scale: Insufficient.

#### THIS COULD BE BETTER

Giving humanity space through the use of traditional sources such as surveys is not yet part of CDS-M. We might have to compare quantitative and qualitative information to find out. "Being digitally forgotten" is not so easy to realize, because as a municipality we work with aggregated datasets and we cannot trace people back. People are not the starting point of the design process at the moment, but the livability of the city is. Perhaps, in addition to livability, we should also adopt a specific human objective.

#### WE ALREADY DO THIS AND IT IS GOOD

We pass on the message that data is not leading to policymakers. Interviews with users provide input for the design. Users are policy makers, data processors and in the future hopefully the providers and knowledge institutes

#### THE TEAM TAKES THE FOLLOWING ACTIONS TO IMPROVE THIS SCORE

The starting point of CDS-M is data minimization: we only ask for the data that is needed. That is why we stay in touch with the users of the CDS-M data and adjust the course and design of the standard in an interactive way, also called 'Iterative human centred testing throughout the process'. During the pilot that we are currently doing with Felyx, Check,

Cargoroo and Vianova, we will look at which decisions can be made partly by the CDS-M data. During this consideration, we will also examine which decisions cannot be made by the data alone. In other words, we will work to identify the shortcomings of the technique and to add the human aspect and input in the decision-making process. We also want to make a statement through the pilots that data is not necessary for maintaining users of the vehicles; that we have enough human mandate [enforcement] for that.



# **LEGITIMATE AND MONITORED**

Citizens and users have control over the design of our digital city.

The government, civil society organizations and companies facilitate this.

They monitor the development process and the resulting social consequences.

#### EXPLANATION OF THE VALUE AS UNDERSTOOD BY THE TEAM

You clearly state in advance what each data you will use and for what purpose.

#### THIS VALUE IS RELEVANT FOR THIS PROJECT BECAUSE

Legitimate and controlled trading is relevant to the CDS-M. This is because the Commission for Personal Data Amsterdam has indicated that it considers mobility data as personal data. We want to handle this data correctly and carefully, whereby the increase in data use in the future has been taken into account in the design. At all times, action must be taken on the basis of necessity and proportion of necessity. A challenge is the grey area in the GDPR, which makes making agreements and choosing a position sometimes difficult.

#### **SCORE**

The team scores itself on the value legitimate and controlled: moderate/sufficient.

#### THIS COULD BE BETTER

A connection between laws and regulations, technology and policy is complex. For example, it is not always obvious to technicians that you need a legal agreement in addition to a technical tool. And the technical part (the API) is often too technical for policy makers (often the end user) and the agreement too legal. Therefore, a substantive discussion about the security of data exchange in all areas is very difficult. Data processing takes place in a chain. In order for this processing to run in a controlled manner, knowledge is needed throughout the entire chain, which is often still missing.

The CDS-M aims to make the design of data exchange more comprehensible.

As a result, the CDS-M team also focuses on education and explaining what we do. A working method has been designed for this. The working method is designed in such a way that it is easily scalable.

CDS-M is still in its early stages. In the future, policy questions may arise that cannot be answered with the data that comply with privacy legislation. The problems can be further elaborated in the future.

#### WE ALREADY DO THIS AND IT IS GOOD

The CDS-M system follows rules and guidelines that have already been laid down by democratically legitimized parties such as the European Commission.

#### THE TEAM TAKES THE FOLLOWING ACTIONS TO IMPROVE THIS SCORE

A working method & step-by-step plan has been developed so that policy officers, providers and data processors (all stakeholders) can get to work themselves to exchange data. As soon as the level of knowledge throughout the chain increases, more and better legal legitimized work will be done.

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# **OPEN AND TRANSPARENT**

What types of data are collected? For what purpose? And what are the outcomes and results? We are always transparent about those aspects.

#### **EXPLANATION OF THE VALUE AS UNDERSTOOD BY THE TEAM**

That you can explain at all times what you do and why you do it so that everyone can watch what you are doing and give comments and input so that you do not create a black box.

#### THIS VALUE IS RELEVANT FOR THIS PROJECT BECAUSE

The CDS-M provides an open source method that is transparent and visible to everyone.

#### **SCORE**

The team scores itself on the value open and transparent: Sufficient.

#### THIS COULD BE BETTER

In the development phase, only the stakeholders involved were informed. The most relevant information has been placed on Open research. One can actively look for that.

#### WE ALREADY DO THIS AND IT IS GOOD

The goal of CDS-M is to create an open and transparent way of working for the exchange of mobility data. Information about this can be found at Open Research Amsterdam and Polis.

#### THE TEAM TAKES THE FOLLOWING ACTIONS TO IMPROVE THIS SCORE

The Dutch Technology Platform for Transport, Infrastructure and Public Space (CROW) has a public dashboard sharing facility on which availability data is shared. In accordance with the GDPR, in-depth data about, for example, origin and destination data is only available to the cities themselves.

In the further development phase, it will be investigated whether it is possible to make part of the data public by hosting it at an independent 'data warehouse' that aggregates the data into 'open data' and makes it accessible to everyone.



# FROM EVERYONE FOR EVERYONE

Data that governments, companies and other organizations generate from the city and collect about the city are held in common. Everyone can use them. Everyone can benefit from them. We make mutual agreements about this.

#### ADD EXPLANATIONS OF THE VALUE AS UNDERSTOOD BY THE TEAM

Making choices in the interest of everyone and ensuring that everyone has access to the data and the insights that come from it.

#### THIS VALUE IS RELEVANT FOR THIS PROJECT BECAUSE

It is advisable to prevent one party from obtaining a data position at the expense of all other parties. This does not create an 'open level playing field'. The wearth that users of (partial) mobility generate in the form of data, you as a city want to give back to them in the form of knowledge and data. The challenge here is in what form this can best be done. Publishing the data as open data involves issues such as anonymization. Whether anonymization is still possible in this day and age is controversial, in other words, we are

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not sure whether making this data public is safe. You want to prevent data from being traceable to a person.

#### SCORE

The team scores itself on the value of everyone for everyone: enough.

#### THIS COULD BE BETTER

If the data obtained in the project CDS-M belongs to everyone and for everyone, then this means that everyone should have access to the insights obtained by CDS-M and should be able to feel ownership over them.

The insights gained from the use cases are shared in the magazine. Part of the availability data is visible on the CROW site.

In order to create an 'open level playing field', it is important to ensure that no party gains more influence in the project than other parties. That is why the city owns the data. Finally, the value 'of everyone for everyone' in this project is fiction; as a user you never really become the owner of the data you create.

#### WE ALREADY DO THIS AND IT IS GOOD

Everyone is who to participate. In the design, we try to take into account that we do not create a data position with one party.

#### THE TEAM TAKES THE FOLLOWING ACTIONS TO IMPROVE THIS SCORE

The development phase is completed with a product that can be widely shared both within the Netherlands and Europe.