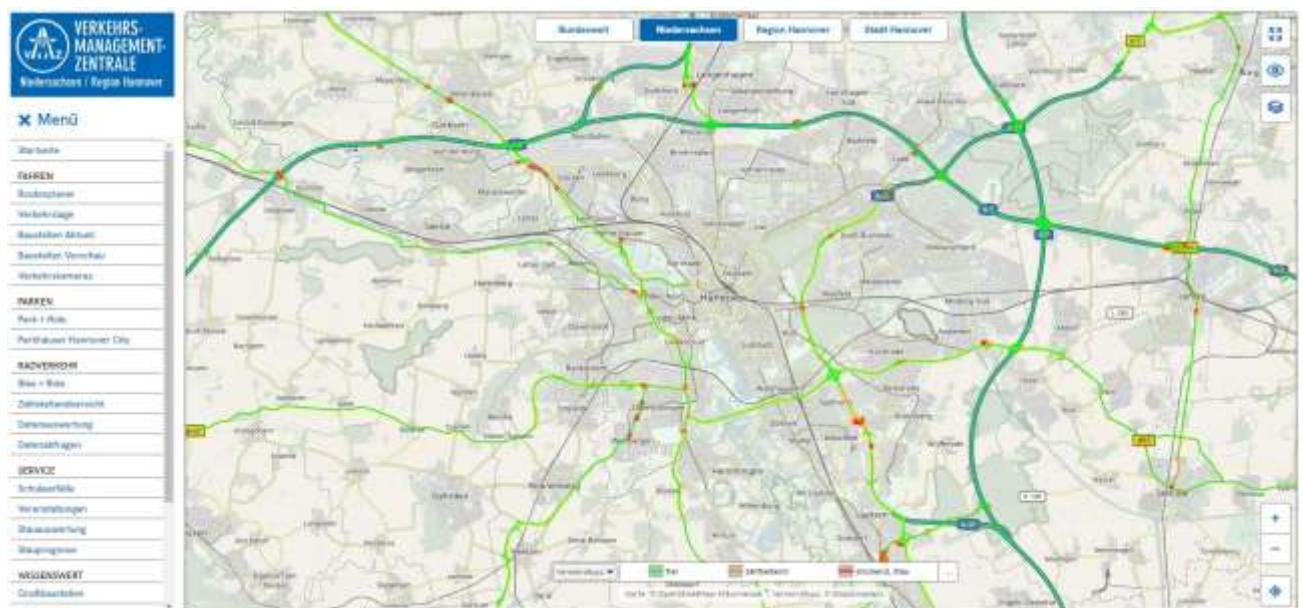


## HAN\_04: Mobility dashboard solution

### Description of the measure and main outcomes expected

Under this measure, the existing mobility dashboard is to be expanded in cooperation with the Lower Saxony / Hannover Region Traffic Management Centre. As the state reporting centre for the traffic warning service in Lower Saxony and as the input point for the Hanover Police Headquarters, the Lower Saxony / Hanover Region Traffic Management Centre (VMZ) is responsible for ensuring that all incoming traffic reports about particularly dangerous situations are forwarded to radio stations without delay.

Information on traffic congestion, roadworks or traffic obstructions can already be viewed on the current mobility dashboard. The occupancy of P+R car parks and the location of B+R stations can also be viewed. However, the focus is more on individual transport and almost not at all on local public transport. Within the UPPER project, this dashboard is now to be supplemented by the PT component.



**Figure 1.** Current dashboard of the VMZ.

The U-TWIN tool developed within the project is planned to be used as an interface for the expansion of the existing mobility dashboard. The idea is to feed the real-time data into the U-TWIN tool and then build an interface to the existing VMZ mobility dashboard. The aim is then to have a dashboard that can be used as a graphical timetable for the PT, especially at special events such as large fairs or concerts. The plan is to integrate real-time data from the PT, i.e. vehicle locations and current capacity utilisation of the respective bus or city tram.

### Preparation of the measure

In order to be able to implement the measure properly, preparatory activities must also take place here. This primarily involves finding links to existing projects and defining use cases for the extended mobility dashboard. This definition took place in close consultation with the VMZ, as they are best placed to



assess the cases in which U-TWIN and real-time data from the PT can provide support. Different scenarios were designed and discussed in the coordination rounds. During these discussions, we also jointly defined the use cases. The result was that the future extension of the VMZ dashboard is to be used for special events after an internal test phase. Links to existing projects were also found. These exist primarily with the projects within the PT funding model region and the 'Harri Intermodal' project. The links will play an important role in the further development of the measure next year/ 2026.

In addition, the collection of potential data is certainly an important preparatory step for the implementation of the measure. To this end, the data requirements were first evaluated and discussed.

Required data includes:

- Real-time data of the PT
- Utilisation data of the individual vehicles
- Road conditions
- It is being investigated whether weather data may be included

Contact persons for requesting data were defined. The next step is to get in touch with them and request the data so that it can then be seamlessly integrated into the U-TWIN tool.

### **Challenges & Mitigations**

Before the internal discussions on setting up the mobility dashboard could begin, the functionality and possibilities of the U-TWIN tool first had to be correctly understood. This included information on the necessary interfaces and questions about data protection. However, these questions were clarified in several coordination meetings with ETRA and Rupprecht Consult.

Another challenge was to clearly define which data should be displayed on the dashboard and for what purpose. To this end, we had internal meetings and developed and discussed scenarios.

The final decision on the technical requirements is still outstanding. We expect this for August or September. This is due to the current holiday period. A delay is therefore possible for this preparatory step. However, a significant delay in the implementation of the measure is not expected.

One of the next steps in preparing the implementation of the measures is to contact the persons responsible for providing the data. It is expected that this data will be made available without any problems, but there may also be delays here. However, these are not yet foreseeable at this stage and will be brought to the attention of the Task Leader as soon as they occur.

### **Next steps towards implementation**

The next step is therefore to define the final technical requirements and approach the contact persons for data provision. Once the data is available, it will then be defined who exactly within the Hannover Region or the VMZ will be responsible for integrating the U-TWIN tool into the VMZ dashboard.