

Evaluation report

Cycle Data Hub
Province of Antwerp

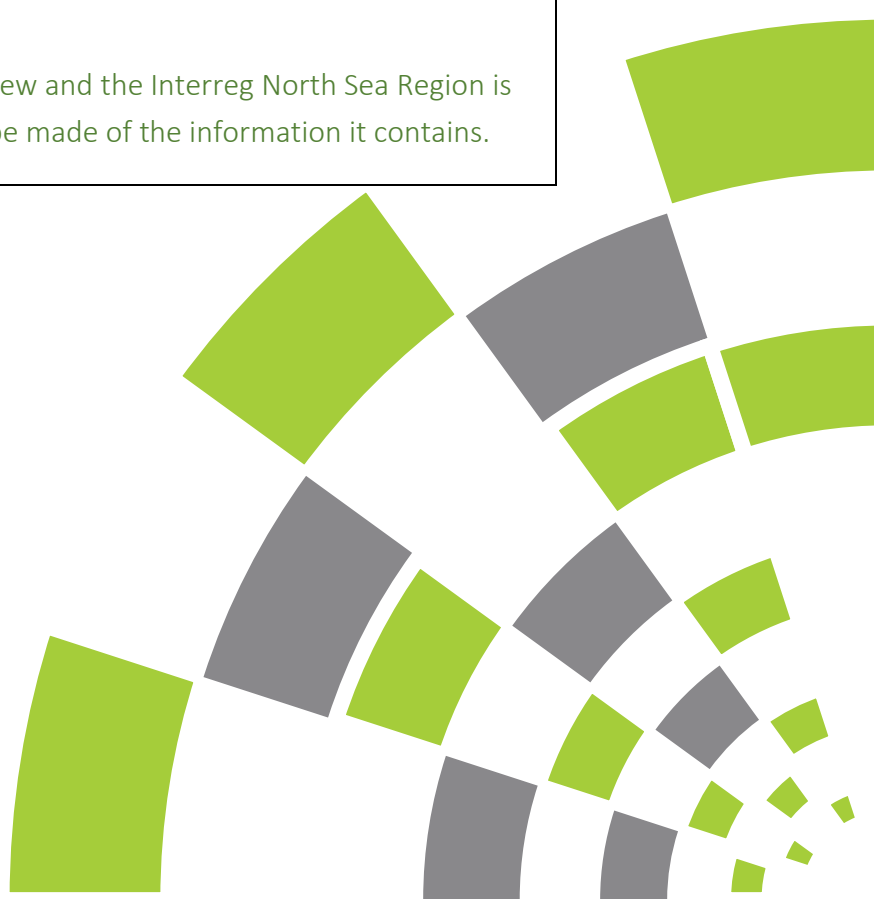
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Description

What?

The Cycle Data Hub (CDH) was developed and launched by the Province of Antwerp, within the scope of the BITS project. The Cycle Data Hub serves as an international platform to share and find bicycle data. The aim is to provide a central hub where a wide range of diverse cycle data collectors at a local, national and international level can collaborate to collect, test, share and compare cycle data sets. The CDH contains data on bicycle use, infrastructure, health, safety, climate impact and bicycle business performance. These data are essential to give the cyclist more visibility in statistics, analyses and policy, with the ultimate goal to increase the take-up of cycling and reduce CO2 emission.

The Cycle Data Hub can be visited via this link: <https://cycledatahub.eu>. On the home page of the CDH a visualization of bicycle data types per EU statistical regions can be found. The location of data collection can be seen at a glance. The pie chart gives an overview of the amount of datalinks for each category (infrastructure, cycle use etc.).

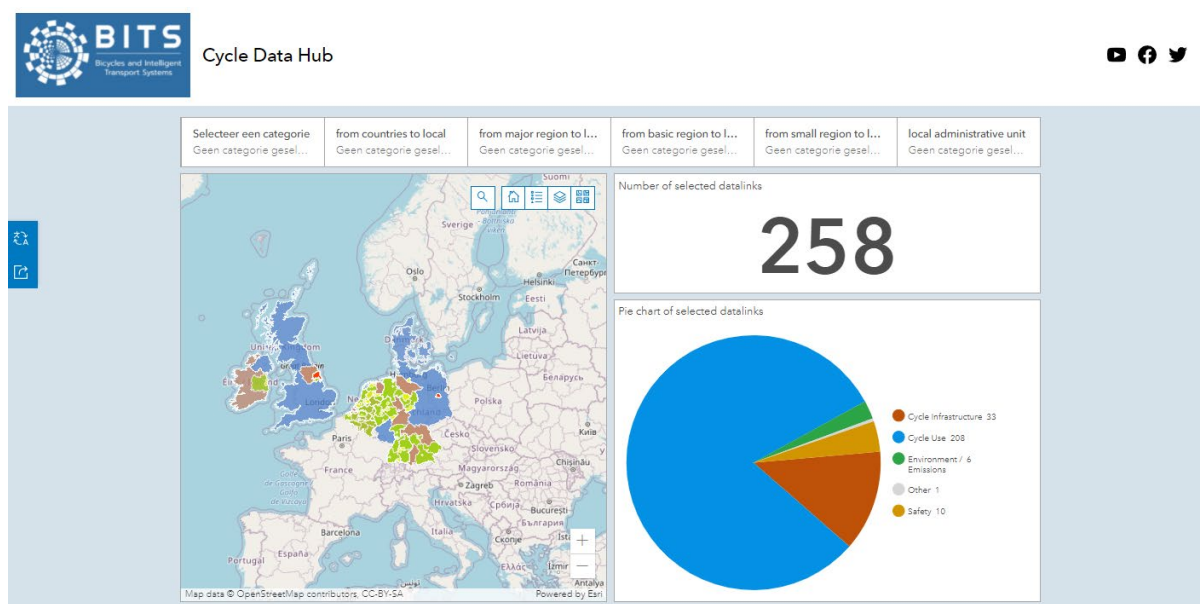


Figure 1: Screen shot of home page of CDH.

The start of the BITS project, in January 2019, was also the start of the development of the CDH. A long process of conceptual thinking, try-outs, discussions with partners and experts and revisions followed. In the beginning of 2021 the first version of the CDH was delivered after two thorough test phases. In November 2021 a revised CDH was launched, with the inclusion of a dashboard visualizing the datalinks per EU statistical regions. Afterwards, in 2022 a promotional campaign was launched in close collaboration with the Cycling Industries Europe (the communication partner of BITS) with the aim to attract more datalinks and more users to the Cycle Data Hub.

In March 2021 the first datalinks were added to the CDH. In the beginning of 2022 the CDH contained 250 data sets.

Added value

A first, and most important, added value was the overall learning process. This learning is situated on different aspects of the pilot: the development of the platform, the data level (ownership, availability, use of data, awareness, detail, quality), cooperation between partners (within and beyond the project), impact on policy and businesses. Also, for the continuity of the platform, the user-friendliness for the platform management was important. The learning that was made here can be integrated in other projects and in discussions at policy level.

A second added value of the CDH is that the platform gives a very clear overview of the collected cycle data. For instance, the data presented on this platform can be viewed and filtered in a dashboard with map and statistics and in a content group with all datalinks as individual assets. All can be filtered on category, country or region.

Thirdly, the CDH is freely accessible for everyone interested in the data. The datalinks will directly or indirectly connect to the data itself and can easily be downloaded.

It is clear that the platform may contribute to cooperation and innovation in and beyond one project such as BITS. The CDH platform is a valuable reference hub for other research projects on cycling in the future. Similarly, the Cycle Data Hub also has an important added value in relation to policy-making. The availability and the collection of a large amount of datalinks offer great opportunities to support or advise policy-making, and this may especially improve for example the positioning of cycling within the multimodal transport system discussions. The knowledge and expertise collected via the CDH in the BITS project is used amongst others by CIE to impact policy discussion at a European level.

Lessons learned

Below, an overview is given of the main lessons learned during the process of developing the Cycle Data Hub.

Firstly, it is important to select a user-friendly and sustainable platform to build upon. After a thorough research process, the choice was made for the **ArcGIS online platform** as tool for the CDH. ArcGIS is a sustainable platform, which is a benefit for the continuation of the CDH after the BITS project. It is also a user friendly platform.

A second, major lesson learned is that, when collecting cycling data, whether it is to start a platform like CDH or not, it is necessary to reflect upon and take into account the **ownership of the data** already from the start. Based on experiences within the BITS project and the CDH the advice is given to take sufficient time to consider what data will be collected, in what format, how many data will be collected and how the data will be analysed afterwards. This reflection process may tackle many time-consuming considerations and frustrations afterwards. These reflections also cover decisions about the interpretation of the GDPR guidelines. What data can and cannot be collected without consent of the cyclists? The advice is to be critical and correct. Overall, a lesson learned is that a thorough debate on GDPR guidelines is still very much desired. To a similar extent, commercial motives may interfere too. How to deal with data that was collected by a company for a client and therefore ownership is defined and not necessarily openly

available? Was the tender by the (public or private) client clear on data ownership? These questions have an indirect impact on the availability of datalinks, on the open format of the data and on data policy. Bicycle data managers, companies and policy makers are generally looking for solutions on this level. When releasing a tender, it is therefore advised that the ownership issues need to be thoroughly considered and clarified in the tender. In the end, the CDH succeeded to overcome some of these ownership issues by sharing links to the data instead of sharing a copy of the data and by disclaimers. Clearly, an important lesson learned, this choice has several advantages. No ownership issues occur, the data behind the datalink can easily be kept up to date and always remains the responsibility of the owner.

A third lesson learned within the scope of the CDH concerns the importance of a continuous investment in stimulating the **data reflex** among (potential) providers and users, such as governments and organisations. Within the automobile sector, the awareness concerning data exists already for a long term. Within the bicycle domain, however, a data awareness was a few years ago nearly non-existent. One of the major goals of the BITS project at the start was to make bicycle data more visible within the mobility data in general. With the CDH successful steps to enlarge this data reflex have been taken, but there is plenty of room for further growth. The concept 'data reflex' as developed within the scope of the BITS project contains a four-step approach¹: (1) availability: the first step implies that data is collected and available; (2) understand: providers and users need to understand the data, both technically and content wise; (3) process: data must be processed correctly, f.e. concerning GDPR; (4) publish: data needs to be shared, so it can inspire others.

Fourthly, the development of the CDH demonstrated that **the initial building of the hub** went relatively smoothly and no technical expertise was needed, although it of course needed a substantial time investment to develop. The further automatization however needs external professional expertise, which went beyond the scope of the BITS project.

A lot is learned about cycle data. Therefore, a fifth lesson learned concerns the **standardization of data**. Currently, cycle data varies enormously in format and type, which makes comparisons difficult. Within the BITS project a plea was given to make cycle data more uniform so much more can be done with the many data sets that are being collected. Bicycle counting in Lisbon cannot be compared with bicycle counting in Antwerp only because different data formats are used. In particular for multimodal systems, or to promote traffic safety, bike sharing data systems, bike parking information systems should be able to communicate with smart city applications, in public transport apps, with other mobility modes and sensors. This not only means a further standardization of the data itself, but also an "INSPIRE" based information exchange standard. The CDH is a first step to create further awareness on this topic on a EU level.

A sixth lesson learned concerns the **promotion and valorisation of such a platform**. While the development of the platform requested almost all the efforts and time of the partners, fewer efforts were undertaken to continuously collect data sets among data providers or to promote the platform among other users. An important lesson learned is to always keep in mind and look ahead to invest in the promotion of the platform while the technical structure is build. In addition, connected to the promotion of the platform, it

¹ Kleine, R. & Jorna, R. (2021). *Implementing BITS. Lessons learnt to support the user requirements analysis, design and procurement of future cycling ITS* (User requirement report). Interreg NSR – BITS project.

is also recommended to take the time to evaluate the accessibility and user-friendliness of the platform. These steps may increase the importance and value of the platform even more.

Conclusion

An innovative platform for sharing and finding bicycle data, the Cycle Data Hub, was developed by the Province of Antwerp within the scope of the BITS project. Within different categories, datalinks of different providers across different EU regions can be found. What the platform is and looks like today is the result of a long and thorough learning and research process with several partners and experts. Several lessons concerning ownership and standardization of the data were learned. One of the major merits of the CDH is that it stimulates the data reflex among providers and users, among businesses and policymakers. The tool contributes a lot to the visibility of the theme of cycling in statistics and policy. Taking into account the BITS objectives, this tool reaches its goals. No direct impact on take-up of cycling or CO2 emissions can be measured. However, the indirect impact via policy-making cannot be underestimated.