

A Passion for Cycling

Experience

Royal HaskoningDHV is one of Europe's leading independent project management, engineering and consultancy service providers.

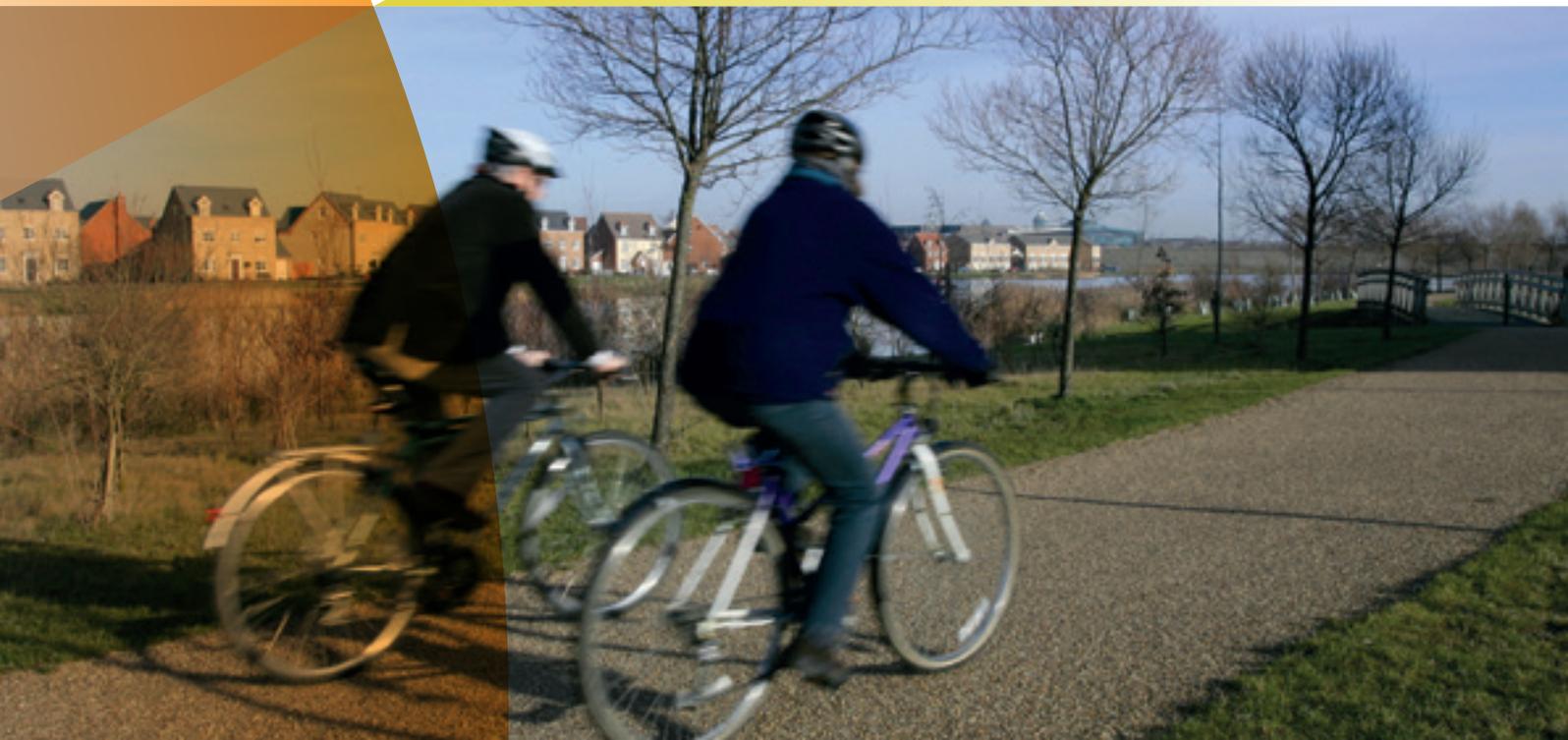
With a worldwide network of professionals and strong industry relationships established over 130 years, its extensive expertise and experience provides a fully integrated 'one-company' approach to projects. Royal HaskoningDHV is renowned for developing, designing and delivering successful, innovative and sustainable solutions that work towards enhancing society together.

Royal HaskoningDHV has been involved in bicycle traffic related consultancy for many decades, providing advice to the Dutch central government, provinces, regions and municipalities. Our advice includes the development of

policies and plans, bicycle network masterplans, design and engineering of parking facilities and dedicated bicycle bridges, tunnels and viaducts.

In the UK, there is growing pressure to improve cycling facilities and reduce the number of accidents involving cyclists. National and local governments are now looking to the Dutch approach for solutions.

Our considerable experience in the design of cycle facilities throughout the Netherlands, alongside our considerable UK experience in transport planning for new development, puts Royal HaskoningDHV in a unique position to provide advice and technical support in the planning and development of infrastructure to support travel by bicycle in the UK.



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Our capabilities

Ensuring Safety

As a cyclist the probability of having a serious accident is lower in the Netherlands than anywhere else in the world. There are two important explanations for this situation: the safe, often separated infrastructure for bicycles and motorised traffic, and the mature place occupied by the bicycle in the urban traffic system. Royal HaskoningDHV always puts safety first, right from the initial project phase, and even in the planning and design phases, we are able to conduct some dynamic junction and network simulations that include simulating bicycle traffic. This enables us to predict how safe cyclists will be and the influence that they will have on the movement of traffic. The data is used when producing feasibility and variant studies and helps us to find the safest possible solution.

Urban embedding

Royal HaskoningDHV has already proven that cycling concepts can be embedded in numerous cities. The use made of bicycles differs greatly from city to city and depends on such factors as the size and composition of the population, geographical location relative to other cities, economic characteristics and the quality of local public transport. The setting down of cycle routes in an area plan is always the result of interaction between traffic, rural, architectural, geotechnical and constructional plans. The interlocking of all these design disciplines creates a spatial embodiment that is safe, sustainable, characteristic and feasible. Royal HaskoningDHV has experience in conducting route studies and producing integral plans for mapping out cycle paths all the way down to the level of specifications. For every cycle path we find the most logical place in the rural or city landscape to optimise transport by bicycle.

Cycle Audit and Review

Within the UK it is important that the needs of cyclists are built into the local transport planning process in order to deliver a level of infrastructure that promotes cycling as a mode of transport in its own right, and in combination with public transport. The Chartered Institution of Highways & Transportation (CIHT) presents a set of guidelines in their publication Cycle Audit and Cycle Review for highway authorities to adopt and facilitate the integration of cycling more fully and effectively into their local transport plans.

Cycle Audits and Cycle Reviews are closely linked but their functions are subject to different sets of procedures. A Cycle Audit provides an unbiased evaluation of a new transport scheme to ensure that conditions for cycling are properly considered and that they are not inadvertently made worse. A Cycle Review applies a systematic process to an existing junction, route or network that assesses the existing situation, identifies any issues and presents ways in which improvements could be developed.

Our capabilities allow us to adapt the Review or Audit process to meet the aspirations of the client in order to provide a bespoke service and/or product. We can provide a range of services from initial advice to a more detailed and comprehensive report with the option of an assessment using TRL's Cycling Environment Review Software (CERS). Using both our UK and Dutch experiences, Royal HaskoningDHV are uniquely placed to provide expert advice as part of the Audit and review process.

Parking

Depending on the function of the destination, there are specific requirements for parking facilities for bicycles. The requirements for a cycle park at a shopping centre differ from those for a railway station, a secondary school or an office building. Some questions that need careful thought when planning parking facilities include the level

of security, usage cost, the need for a roof or the type of cycle clamp or padlocking rack. Additional facilities can also be a key success factor, such as charging stations for electric bicycles, repair shops, showers and changing rooms. Bicycle parking is always a fixed element of proposals and recommendations when preparing integral traffic/transport, cycling and mobility plans.

Chain mobility

Every mobility chain is only as strong as its weakest link. What use are terrific cycle paths that quickly get you to a railway station if the train connection there is poor or if you are unable to park your bike quickly and safely? The company devotes special attention to transfer nodes. It is around these nerve centres of the mobility chain that there is often the greatest likelihood of an unnecessary loss of time. This is precisely where the overarching expertise and working methods of Royal HaskoningDHV come into play, as illustrated by the project examples referred to below.

Real-life examples

1. Parking space for 12,500 bicycles

For the cycle park below the square in front of Utrecht's central railway station – big enough for 12,500 bicycles – Royal HaskoningDHV developed a logistical system that optimises the accessibility of the cycle park and makes it easy for every cyclist to find his/her own bike when they return.



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2. Feasibility study for 'The forgiving cycle path'

The population includes more and more elderly people who are now cycling more and for longer. Unfortunately, they are also the people most prone to road traffic accidents. To tackle this growing problem, the Dutch Ministry of Infrastructure and the Environment commissioned Royal HaskoningDHV to study the feasibility of creating 'the forgiving cycle path'. This cycle path of the future is geared to the physical capabilities and limitations of senior citizens, with the aim of ensuring that incorrect or clumsy behaviour does not immediately result in a fall, collision or injury.

3. Steenwijkerland cycling plan

For the rural municipality of Steenwijkerland, Royal HaskoningDHV prepared a cycle plan that turned the municipal traffic policy on bicycle traffic into concrete plans and projects. A great deal of attention was given to safety and comfort and to influencing behaviour by people-centric campaigns.

4. Arnhem-Nijmegen express cycleway

Royal HaskoningDHV produced the feasibility study, preliminary designs and final plans for the express cycleway between Arnhem and Nijmegen, called the RijnWaalpad. With a concept dubbed 'The Temptation', Royal HaskoningDHV came second in an innovation competition. Based on the marketing plan produced by Royal HaskoningDHV, the client, the Arnhem Nijmegen Metropolitan Area, intends to tempt commuters to swap the everyday traffic jams for a bike ride over the express cycleway.

Our areas of expertise

Royal HaskoningDHV has vast experience in providing technical support and project management services to central, regional and local government in the Netherlands, and this experience is now being applied in the UK.

- Policy & strategy.
- Network planning.
- Cycle audits (existing and proposed provision).
- Feasibility studies.
- Scheme design (preliminary & detailed).
- Infrastructure design (bridges & tunnels).
- Planning applications, negotiation & legal agreements.
- Public realm design.
- Parking strategies and design.
- Cycle and public transport integration.
- Signing & wayfinding.
- Promotion & marketing.
- GIS & 3D visualisation.

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