



### Paul Eijssen talks to **the environmentalist** about digital environmental impact statements and how they could transform assessments

**F**or many years, the environmental impact statement (EIS) has been widely regarded as an obligation rather than a useful tool for decision-making. New developments, including rapid advances in information communication technology (ICT), demand greater public participation and calls for community engagement offer big opportunities to develop the tool in a transparent, accessible and interactive digital form.

A pilot project at consultancy Royal HaskoningDHV has revealed the possibilities of, and enthusiasm for, using a digital EIS. Strategic consultant and associate director of smart urban environment Paul Eijssen says it marks the start of a journey to optimise the use of technology to empower stakeholders across the industry. Here, he explains how the digital EIS came about and where he foresees it will take the industry.

#### **Why change EIA reporting?**

Recently, EIA experts have started to discuss producing more user-friendly statements. However, as an industry, we tend to look inward into existing tools and landscape and have not made any significant inroads into improving this instrument for a long time. There were several reasons why we need to transform the way we approach the reporting of EIAs, but the main factor concerns the role of the project stakeholder and how they portray the reporting process and what image they held of the statement.

These are the people who really need to understand the environmental impacts of the project. They can be government representatives, a local council or a member of the community. We need to take a different, modern approach to creating an EIS that is quick and easy to understand by everyone involved.

From talking to colleagues, clients and stakeholders we discovered that the thick, text-heavy and technical reports were read by few people. They also took the EIA team a long time to write and were expensive to produce.

When you weighed up all these factors the result was clear: the EIS had a poor image, and this had the potential to damage the assessment sector. I realised we needed to innovate and change to ensure that the EIS will continue to have relevance and impact.

The speed at which recent developments in ICT have taken place, coupled with the availability of geographic information system (GIS) technology and the call for greater transparency and accessibility, made the digital EIS a logical next step.

#### **How does digital EIS work?**

The digital EIS offers a new experience for clients and stakeholders, changing the way all data surrounding the impact of a project on the environment is visualised and shared. This is not a pdf version or a digital version of the previous hard copy; this is a new interactive digital platform.

The design has at its core the realisation that must cope with today's world and the increasing demand for digitalisation and transparency. Therefore, it provides information using videos, photos, maps, tables, infographics and even audio, moving away from the traditional text-based statements, yet retaining the fundamental integrity of the EIS. We wanted to deliver a world in which EIA reporting is quicker, more interactive, transparent, concise and accessible; one that makes decision-making more rapid and efficient.

The techniques used in the digital EIS are not entirely new. Telling the story by using a combination of highly visual digital tools while still providing the



must be reinforced at the same time we educate. On the face of it, it might look like a simple solution but we should not underestimate the impact of this new way of working and thinking. The new, interactive format will require new skills from the many stakeholders involved in the EIS process, which will be no mean feat.

### Is there potential to expand the new digital EIS to other industries and areas?

So far, we have developed the one pilot project using the new EIS. This was focused on the Netherlands and has provided a lot of information from which we will continue to learn and fine-tune. In the pilot project, certain choices were made in terms of how the digital platform should look, how technical issues were handled, how it was published. There are many other visualisations and formats possible, and each must be assessed to determine what works best, how we address security concerns and how the review process is completed, for example.

Qualified people will be required, from ICT experts to creative designers, as well as GIS and EIA experts. The need for lifelong learning is key to success and will be an absolute necessity if we are to follow the new path.

We are in the rallying phases. We know the digital EIS works and has tremendous benefits and we want colleagues and authorities in other countries to collaborate with us to shape the future of the platform.

### How has it been received by industry bodies?

Throughout the initial pilot project, we worked closely with various parties involved in the EIA process – government advisers, provinces and municipalities, lawyers, and the independent Netherlands Commission for Environmental Assessment.

The commission assesses the EIS to make sure it contains the necessary information for decision-making and sees this digital development as a positive step. It made several recommendations, including the addition of a search function to help readers quickly find information, as well as the ability to record annotations. It also said that managing and storing digital files would be an important consideration that must meet legal requirements.

### What lies ahead for the digital EIS?

The development of the digital EIS has generated discussion around the world. The speed with which this will be implemented across the industry will depend on a range of factors such as the early interaction between EIS writers and government bodies and their willingness to make resources available to invest in the process.

One thing is certain: through this innovation the digital EIS will put the environment higher on the agenda. I see a lot of potential in the digitalisation of the EIA process, which could also be interesting for a lot of other fields of work. The future has lots of potential and I am eager to aid its progression.

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For more information, including a video explaining Royal HaskoningDHV's approach to digital environmental impact statements, visit [royalhaskoningdhv.com/theneweis](http://royalhaskoningdhv.com/theneweis).

necessary substantiation and explanation to the same level as the 'traditional' EIS – that's new.

### What impact has the digital EIS had on the industry?

We started by examining the opportunities it would present. One of the most important was the increased accessibility a digital EIS provides, helping to encourage greater understanding and engagement from the local community in a project's development. This benefit touches on the principal reason for the existence of the EIA, which ultimately is to help clients gain consent for their projects.

During the pilot project for the digital EIS – the Dutch Ministry of Infrastructure and the Environment – we focused on a platform that promotes collaboration and enhances mutual understanding between stakeholders, such as governments and communities. Connectivity is a huge advantage of the digital EIS. Linking with social media and baseline data through sensor techniques are just two examples. Added to this is the highly visual aspect of the digital EIS, which links to the way future generations will experience the world.

The aim was to make information more accessible to decision-makers and stakeholders so they become more involved and contribute to decision-making, and this is proving to be the case. It is a great opportunity for growth and development in the industry and it is exciting to see such a positive response.

### What challenges have you had to overcome?

As with any pilot project there are always lessons to be learned, both in the project and in the adoption of a new technique. And then there will be a learning curve with the adoption of any new process.

It is important to maintain the integrity of the EIS. The digital platform makes it easier for stakeholders involved with the project to understand, but it is a big step forward and we will need to work together to build trust for the platform. All the information included in the new visual digital EIS is the same and as reliable as previous, so this