

## Re-use & decommissioning interviews

Decommissioning in practice

2019



# Index

Sandor Gaastra .....	3
Interview: the operators.....	5
Interview: the service industry.....	7
Learning together for Nexstep .....	9





### Cost effective without losing a long-term perspective

**As Director General Climate and Energy of the Ministry of Economic Affairs and Climate, Sandor Gaastra is an avid follower of Nexstep. He recognises that major steps have been taken in the past year and also sees a major role for Nexstep in the future. In this interview we ask Gaastra a number of questions about Nexstep's first year.**

#### **What is the added value of Nexstep?**

"At times it is better for the government not to set boundaries," tells Sandor Gaastra. "You have to prevent companies from only doing what they have to do instead of what is wise for the entire sector and society. The added value of Nexstep is reflected in the responsibility that the sector now takes. The initiative is taken together and there is collaboration on innovation. This solidarity and the results thereof ensure greater public confidence that the sector is actually decommissioning and removing the installations and infrastructure."

#### **What is striking about the past year, what goals have been achieved?**

"Three aspects come to mind. Firstly, the publicity that Nexstep has received. Nexstep has promoted itself, and that has been visible. This demonstrates that the Netherlands is serious about decommissioning and, where possible, re-use. Furthermore, I'm glad to see how many lessons learned are being shared by

the different operators. A major development has taken place within a year. It is now common practice to learn from each other via shared learnings and a joint database. This is really necessary to achieve the best results. Finally, I think it is good to see that Nexstep is also a joint effort of all operators with regard to the deployment of people. For that matter, it seems that Nexstep has created a collaborative team. At the same time I see opportunities in broadening the target groups; the next step is to enter into further dialogue with the service industry, with NGOs, the geothermal sector and further effort to bring attention to the general public of decommissioning and re-use. "

#### **In EZK's view, where are the biggest opportunities for Nexstep?**

"The biggest opportunity for me is in the further development of Nexstep. It would be great if Nexstep could become a platform that relieves pressure on the operators. Actually, literally investigating the next steps. I also think about the long term. We'll still be working on gas for two to three decades, but that is definitely finite. Nexstep must also explore the following steps. In short, on the one hand the coming 10 years with decommissioning and on the other hand in the longer term towards 2050 where we need to look at re-use for new energy generation. First be cost effective and achieve the first goal without losing sight of the long-term ambition. "

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**Nexstep’s focus has shifted more to decommissioning than to re-use. A justified choice?**

“Operationally it must be well planned to make it suitable for operators. You first have to persuade the operators and make it cost efficient. In addition, it is of course also a long-term investment. With the gas and oil platforms currently in the North Sea you have beautiful ‘stepping stones’. It is important to keep thinking integrated. Therefore, we have to do both, but in the right order. You naturally look for the right balance.”

## Interview: the operators



### ‘Operators well prepared’

**Many platforms and wells in the North Sea are nearing the end of their economic lives. The sector is faced with a major operation to decommission its infrastructure. Preparations for this have gained momentum since the founding of Nexstep. How are operators dealing with decommissioning?**

All operators will have to deal with decommissioning issues in the coming years, while they also plan and implement new developments and projects. Over the next ten years, Neptune Energy expects to clean up a significant proportion of its platforms, which have an average of 4 wells. “Of course, we’ve been preparing for this for a few years,” explains Aart Geurtsen, who is responsible for decommissioning at Neptune Energy. “The decommissioning will take place on a large scale in a relatively short period of time, which makes it possible to work efficiently. This way, we create continuity and economies of scale.”

#### **Optimising and weighing up**

Decommissioning platforms with wells costs a lot of money, and involves a lot of work, including the removal of fluids, cleaning of pipelines, plugging wells, carrying out preparatory construction work and hiring contractors. Topsides and jackets can be removed using a heavy lift vessel. The operation ends when an installation is scrapped onshore. Due to the scale and the high costs involved, decommissioning is fundamentally about optimising the work. Timing

is crucial for this, says Geurtsen “If you leave a platform standing for a while, the costs will continue. On the other hand, you don’t want to decommission too early, because then you might still miss opportunities to use the infrastructure for the development of nearby gas fields. We always weigh this up carefully.”

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#### **Thorough preparation, flexible timing**

Wintershall also has a major decommissioning task, as decommissioning manager Yvonne van den Berg demonstrates. “Decommissioning and re-using where possible is not new to us. In recent years, Wintershall has already decommissioned and re-used seven installations and completely removed another seven. We are currently working on preparing a broader decommissioning programme. In the coming years, some ten installations with associated wells and subsea installations may become available.”

The company opts for thorough preparation and flexible timing: “Our first priority is to get a platform to lighthouse mode as soon as possible. A stable, safe situation in which the installation and wells are prepared for decommissioning as much as possible. In this passive state, operational costs are significantly lower and safety risks are minimised. That way we are ready for decommissioning at the most favourable time.”

### **Joining forces has an effect**

Both are satisfied with what has already been achieved with regard to Nexstep. "As operators, we are competitors in some areas, but in this context there is a great willingness to share knowledge and work together," explains Aart Geurtsen. "Unlike the construction of a new platform, decommissioning involves less time pressure, and that works in our favour. For example, we learned that it can be beneficial to give a heavy lift contractor a generous time window. So rather than fixing a date, allow time for the removal of a number of platforms within two years, for example. Then they can schedule the use of expensive heavy lift vessels at quieter times, at a considerably lower cost."

In addition to economic benefits, Yvonne van den Berg also sees other effects of the cooperation at Nexstep: "Most of the savings can be made on well plugging, which is also by far the largest cost item. Cooperation can lead to innovation in this area, but also in other areas such as re-use to benefit the energy transition, such as CO<sub>2</sub> storage and hydrogen production. As a result of our joining forces at Nexstep, the urgency is felt and it becomes more visible that we take our responsibility as a sector."

## Interview: the service industry



### **“Decommissioning? The time has come”**

Decommissioning will create a lot of work for the service industry in the coming years. How do service companies see the decommissioning challenge of the coming years? “By combining projects and a flexible time frame, the sector can still reduce many costs.”

Belgium’s DEME is a key player in the offshore industry. In 2018, the company had 5,200 employees, more than 100 vessels and a turnover of 2.4 billion euro. “Decommissioning still accounts for a small proportion of this,” says Niels van Berlaer, Business Unit Manager at DEME Offshore. “But the market is growing. We recently gained some great experience during the removal of Petrogas’ Halfweg platform.”

#### **Intensive preparation**

As a service provider, Van Berlaer sees dismantling projects as an attractive addition to the existing work “It is relatively short-term offshore work, but don’t be mistaken, decommissioning is much more work than people tend to think. Preparations for these projects are more intensive than for new installations, and because each platform is different, they demand a great deal of creativity from our engineers to constantly devise the simplest removal method.” “Because each platform is different, they demand a great deal of creativity from our engineers to constantly devise the simplest removal method.”

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According to Van Berlaer, all this preparatory work is intrinsic to the advanced age of most platforms. “There are many uncertainties. Anything could have changed during the decades that such platforms have been in existence. We often find that installations have changed hands and that important knowledge has been lost. Also, we frequently find that data about platforms is no longer correct due to all kinds of modifications, so engineering work is crucial in order to calculate the exact weight and determine the centre of gravity, which is essential for safe hoisting.”

#### **Joint exercise**

The intensive preparations consequently form a large part of the decommissioning costs. Can cooperation also make a difference in this area? “Of course. It is a joint exercise in solving all the technical issues, both for operators and service companies. We must take an integrated approach to this and be happy to work together.” According to Van Berlaer, profits can also be

made if decom projects are put onto the market much more quickly. This gives the contractors the opportunity to carry out the work in their “quiet” periods. “Nowadays, there is a lot of talk about joint campaigns, in which operators bring several projects to the market simultaneously. However, the division of responsibilities in combined projects is very complex, which means that valuable time and cost saving opportunities are lost.”

As decommissioning increases over the coming years, service companies will also gain more experience. “For the service industry, these projects are very attractive because we can schedule them between the larger projects. There’s no time pressure involved. For example, we are now constructing a number of large wind farms, and if there is a void period between two farms we are happy to fill it with a decom job. A large timeframe for removal is very attractive to us and keeps the costs low.”

### **Nexstep to acceleration**

Van Berlaer is positive about the cooperation in Nexstep: “Thanks to Nexstep, it is becoming clear what the sector stands for over the years to come. The intentions are good and there is already a great deal of cooperation and exchange of knowledge in the various working groups. We wholeheartedly support this initiative and have also appointed someone to think along with us. After the initial period of preparation, acceleration is now necessary. Decommissioning can no longer be postponed. The market is now favourable, given the current oil price. However, I would like to see a little more persuasive power from Nexstep to really convince operators to decommission. It will make a huge difference if we can build a portfolio of platforms in a flexible and generous timeframe. Naturally, DEME Offshore is happy to cooperate, also because it involves cleaning up old industry in the North Sea. It is therefore a sustainable activity, and this aspect is also very valuable to us.”



## Learning together for Nexstep



### Shared Learnings database offers a wealth of insights

Nexstep is convinced that the removal and re-use of onshore and offshore infrastructure can be more sustainable and efficient, especially if we make use of each other's knowledge and experience. The Shared Learnings team is working hard to make this possible, by means of a comprehensive database of learnings, for example, which can benefit all members.

Nexstep regularly organises shared learning events, where specialists exchange their experiences and learn from each other. The Shared Learnings sessions bring colleagues into contact with each other and open up opportunities for discussion and further exploration. Furthermore, they usually provide a wealth of learnings, which are added to the Shared Learnings database.

#### Emphasis on wells

By the end of 2018, the database already contained 152 learnings, with insights into precautionary and safety measures, hoisting, planning work, the advantages and disadvantages of certain procedures and the use of cement in well plugging, for example. "For the time being, the emphasis of the learnings is on well decommissioning," explains Jules Schoenmakers of the Shared Learnings team. "This is logical, because this is the area where most of the activities are taking place at the moment. Only when the wells are safely plugged can we decommission the pipelines and remove the platforms."

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The learnings are of great help in achieving cost reductions and the "Road to 30%" agenda. Jules Schoenmakers explains "We have developed four roadmaps that can contribute to a 30% reduction in the cost of removing offshore infrastructure. One of these is the Joint Campaigns roadmap, which is based on the idea that cooperation can significantly increase the efficiency of decommissioning and improve safety. In 2019, we started working on a business case for the first joint campaign in relation to unused exploration wells. By searching the Shared Learnings database for the well type, among other things, we immediately found ten focus areas which are very useful and can be used for setting up the campaign."

In addition to events about wells, two shared learning events were held in 2018 in relation to the decommissioning of onshore platforms and facilities. A number of events to share and learn from experiences in this area have also planned for 2019.

### **Asking for feedback and using learnings**

Looking back, the Shared Learnings team has exceeded its goals for 2018, concludes Team Lead Radboud Bisschop: "We have a knowledge base that is filled with valuable insights. Of course, we will continue to add new insights, by means of the workshops on relevant themes that will be held in the near future, for example. We are expanding the knowledge base with the ability to monitor which learnings are viewed most frequently and to ask for feedback on the available insights."

It is important that valuable insights do not disappear into a drawer, but are actively and applied in programmes, Bishop emphasizes once more. "In the near future our focus will be on encouraging people to actively use the database. All Nexstep members can benefit from the shared learnings and add increase their value by adding learnings as the activity level grows."