



DOE & DURF

The competition for
young engineers

RULES OF THE GAME

2023 Edition

Nitrogen deposition

Which innovative solution do you have to bring to the table to help loosen the nitrogen deposition gridlock on the short term?

The Competition

Engineers worldwide come up with the most innovative solutions which are of crucial importance to our society. Solutions for the major issues facing us; conceived by innovators who dare to think without limits and actually take the step towards realisation. Doe&Durf is a competition in which you get the chance to think without limits. We offer you a platform to share your ideas with the engineering industry. ... if you dare to.

Doe&Durf (Do&Dare) is an initiative of JongNLIingenieurs, the youth association within Koninklijke NLIingenieurs. Innovation and visibility are what it is all about at Doe&Durf. With this challenge, we want to show that the young engineer is capable of developing creative and innovative solutions that contribute to today's societal challenges. As a Doe&Durf entrepreneur and innovator, we challenge the young engineer to:

- Develop brilliant, innovative solutions which can be utilised to help the market and society.
- Show that these innovative solutions contribute (positively) to society, while also creating support among non-engineers;

From pitch to product: we help you to further develop your innovative idea. We start with a College Tour, during which you will acquaint yourself (further) with the theme. Presenters will inspire you with their insights and context. In the two sequential workshops, you will be supported in defining the business viability of your idea and be given the tools to improve the way you present and pitch your idea.

We challenge you to produce a brilliant idea as a team, in which the theme **'Nitrogen deposition'** with the central question **'Which innovative solution do you have to bring to the table to help loosen the nitrogen deposition gridlock on the short term?'** is your starting point.

In this document you will find the rules of the competition and of course an explanation of the theme. We want to wish you good luck and above all a lot of fun doing and daring it!

See you at the workshop!

Organisers of Doe&Durf JongNLIingenieurs

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The Rules

Theme 2023 – how can you help loosen the nitrogen deposition gridlock?

In this moment (and probably in the next years), the Do&Dare 2023 theme will be prevalent: Nitrogen deposition. It has not been left undiscussed in political and public debate, nor is it absent in the media or day-to-day business. In short, we face an enormous societal challenge. But we, young engineers, do not have to the habit to sit and sulk. No, we enjoy the challenge, and it motivates us to show that we can do our part. Thus, we challenge the teams of this year's Do&Dare with the following objective:

Which innovative solution do you have to bring to the table to help loosen the nitrogen deposition gridlock on the short term?

Of course, the solution to the nitrogen deposition question does not exist (yet), but good ideas are always born small. The current gridlock could be defined by multiple dominant aspects, being **judicial**, **technical**, and **ecological**. An idea may focus on one of these aspects, but you might as well choose an integral approach with your idea. Given the urgency surrounding projects that cannot go ahead, it is important to demonstrate that your idea **can be realized within 2 years** and that it makes an **impact**.

In the Doe&Durf competition, we invite the teams to face this societal challenge with their own in-house expertise, but would also like to give them the liberty to explore another approach. The problem of excess nitrogen deposition could be combatted from different angles. You could focus on reducing nitrogen emissions, for example by developing methods for net zero nitrogen emissions in building projects. Another angle is the implications the gridlock causes on other societal challenges, like the energy transition and the housing crisis, and how to make sure these implications are alleviated or solved in the short term. Also, even though many companies have discovered new, hybrid methods for working, we as a whole still require a lot of traffic to haul ourselves and many goods around; travel and traffic from which nitrogen emissions also originate, thus making mobility a worthwhile approach for your idea. The aforementioned angles focused on emission and spread, but your idea might instead focus on combatting the negative effects of deposition in nature. Many facets mean many possibilities for your ideas!

Participation

By participating in this competition, you as a team get the opportunity to show what we as young, ambitious, and talented engineers (and therefore as the industry) can mean for society. With this you put yourself, your company, and the engineering industry on the map.

As a participant you get the chance to practically apply thinking 'out of the box' and let your creativity run free. The limited number of rules ensure that as a team you can fully use your talents and for once do things completely different. You are your own boss as a team, in which freedom is central.

You will work with your own team on your concept and idea. During a College Tour and two workshops, we will prepare you for the finale, while in between you get the time to sharpen your idea with newly learned skills and insights. The kick-off, being the College Tour, will be led by multiple presenters, giving you insights in the why and how of the current gridlock.

During the first workshop, we will work with you on the business viability of your idea. In the second workshop, we will sharpen your pitch and present skills, such that you can communicate your idea better to potential clients.

English and Dutch will be used in written correspondence, but presentations will be done in Dutch. It is therefore advised to include a person in the team who can understand Dutch.

Individual young engineers who work at a member-office, but who are unable to form a full team, can apply individually. They will form a Doe&Durf team with other individual engineers.

From idea to concept

When you register, you provide a brief description of the idea. This description is only intended for the organisation and gives us an initial picture of the variety of ideas. In addition, we want to challenge you in this way to already get started with the theme. You will further develop this idea with your own team during the competition. We organise workshops that inspire you, enrich your knowledge and/or contribute to your process and/or design of your idea.

After the workshops you submit your concept, and the jury nominates three to five teams for the finals. If you are one of the nominees, you will receive a message from us both by telephone and in written form. There will be no further discussion about the results. Lastly, during the finals, the jury decides who will be the winner of the Doe&Durf competition and who will receive the prize of €1,000.

The jury will judge the finalists on the following points:

- The concept is scored on:
 - the degree of innovativeness and originality;
 - the extent and depth of elaboration;
 - demonstrated feasibility and impact in the short term;
 - possible spin-off;
 - sales potential.
- The concept must be able to be picked up by the (social) media and arouse the interest of politicians and clients. Which team is best at marketing their concept?
- The extent to which the concept provides new insights into the industry.

The enrolment

The following criteria have been drawn up for both the registration and the teams.

The criteria for registration:

- Teams are free to choose their own interpretation of or approach to the theme.
- The registration must be original and innovative.
- The registration must create (potential) media attention.
- Enrol via this [link](#).
- The enrolment closes at **11.59 PM on Friday, September 1, 2023**.
- When registering a team, the (financial) conditions are accepted.
- When participating, one is obliged to pay the registration fee of €400 per team within two weeks after receiving the invoice.
- Finally, commitment and attendance at the workshops (and finals) is a must!

The criteria for the teams:

- **A team consists of a minimum of 3 and a maximum of 5 participants under the age of 36**
We encourage that each team consists of a diverse mix of specialists who can make their own unique contribution to the idea. We also expect enthusiasm and commitment from all team members; registration is not entirely without obligation.
- **Within the team there is a team captain**
The team captain will act as a contact person for the Doe&Durf organisation.
- **The member-office provides a team manager for the team**
To increase the involvement of the member-office, each team appoints a team manager (someone from outside the team). For example, a team manager can be someone who is directly involved within the Board of Directors. The team manager serves as a source of information for the team. The age limit of 36 does not apply to the team manager.
- **At least one member-office of the Koninklijke NIngenieurs should be directly linked to the team**
This implies that at least two team members work for a company that is a member of the Koninklijke NIngenieurs in order to maintain the link with a member-office. Other team members may be relevant specialists who do not work directly at a member-office, but who are enthusiastic to participate, or are partners of the member-office, or possess unique skills, etc.
- **The member-office of Koninklijke NIngenieurs is liable**
When participating, one of the member-offices guarantees the registration fee to be paid and the commitment of the involved team members.
- **A member-office may submit up to three teams**
- **Registration fee for participating teams is €400,-**
Participating teams can partake in the workshops after registration and submission of the idea. For this, we ask a registration fee of €400 to cover organisational costs. By participating, you agree to the terms and conditions as described in this document. The contact person will receive an invoice for the registration fee from Koninklijke NIngenieurs. For the engineers who enrol individually, the registration costs will be shared among the members of the composite team. N.B.: No second fee for finalists will be required, contrary to what was done in previous years.

All amounts stated are exclusive of VAT.

The planning

