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# Partners in safety

## Foreword

We have once again put the clocks ahead by one hour because of summer time. It is a period of progress, nature awakens, daylight extends and temperatures are slowly rising. Unfortunately, progress is not evident everywhere. In the Ukraine, things are rapidly deteriorating. Regressing into a time of terror, fear, sorrow and uncertainty. Our thoughts are with all of the people affected by this war. Along with the geopolitical tensions and the humanitarian disasters currently taking place, our work continues. This newsletter reviews a number of developments. For example, at the end of March TenneT published its [Annual Report 2021](#) with 'responsible growth' as its theme. We are working on a Target Grid 2045 as a means of contribu-

ting to the EU goal of being a CO2-neutral continent by 2050.

The 1,000th SCL certificate was presented this month – a great milestone for the SCL standard. In February, our business unit Large Projects Netherlands – Area North was the first TenneT department to earn a level 4 SCL certificate. This newsletter contains an interview with the parties involved in achieving this awesome milestone.

Safety needs our energy, now more than ever!



Oscar van Aagten



TenneT Safety top



LMRA-campaign

[Read more](#)



Update Fatal accident loading cable ducts

[Read more](#)



An interview with Klaas Bakker

[Read more](#)

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# Latest news

## Available now: digital gate instruction TenneT Germany

An innovation has been recently introduced to improve the safety of your and our employees at TenneT's onshore facilities and construction sites in Germany. TenneT considers it extremely important for everyone to return home safe and sound at the end of the working day. For this to happen, it is essential that everyone is fully aware of important safety regulations, in particular our Life-Saving Rules. A digital gate instruction is now available, as a supplement to the usual location-specific onsite briefings. Such a solution has already been used successfully in the Netherlands for several years.

### Personal certificate

The introduction consists of a short, approximately 8-minute video and a subsequent comprehension test consisting of 10 questions. Successful completion entitles the participant to download a personal certificate, which remains valid for one year. The German TenneT gate instruction will initially be available in German and English, but will be expanded in the coming weeks to include other European languages.

Starting on 1 July this year, all persons accessing our onshore facilities and construction sites will be required to carry such a personal certificate in either PDF

format on a mobile device or printed form. In future, individuals without a valid certificate may be denied access. Click this [link](#) to access the German TenneT gate instruction.



## TenneT Safety Top

The energy transition comes with high ambitions. In 2050 the European Union wants to be the first carbon free continent in the world. In order to realize these ambitions, we need to take the next leap in our growth agenda. TenneT is gearing up to our Target Grid 2045 to support the EU 2050 climate targets. Together with our partners we are responsible for designing, building, maintaining and operating the grid development work in a sustainable way, with innovations and partnerships.

### Offshore partners

Growing safely, Safety is a top priority  
How do we collectively address "growing

safely" in the light of our growth agenda? To discuss this topic TenneT will organize a Safety Top on Friday July 8th in Arnhem. This is the first out of three sessions, starting with our partners working within offshore, followed by Onshore Germany and Onshore the Netherlands later this year. The Safety Top is a meeting where executives and senior leaders from TenneT and her partners will engage in dialogue to set the preconditions for growing safely. All partners will receive a personal invitation.

## Inspectorate SZW changed to Netherlands Labour Authority

Effective from 1 January 2022, the Inspectorate SZW was officially renamed to Netherlands Labour Authority. It is abbreviated as NLA in both Dutch and English. The decision to rename the inspectorate was in part motivated by the creation of the European Labour Authority (ELA). The name of the national labour authority, Netherlands Labour Authority, clearly indicates its connection with the ELA, but also clearly highlights the difference.

Click [here](#) for more information.



Nederlandse Arbeidsinspectie  
Ministerie van Sociale Zaken en  
Werkgelegenheid

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## LMRA Campaign at TenneT work sites

TenneT is conducting a campaign in April at all TenneT work locations in the Netherlands and Germany to draw attention to the Last Minute Risk Analysis (LMRA). The LMRA is a brief assessment that is carried out immediately prior to the start-up of work. The LMRA is used to identify all dangers relating to health, safety and environment at the worksite.

### When to conduct an LMRA

An LMRA is carried out immediately prior to the start-up of work and every time after you resume your work after an extended interruption. In addition, an LMRA is carried out when the work conditions change (for example, the use of a different working method or different equipment), after a failure of operating resources or a system, or other unexpected events.

The campaign materials are available in Dutch, German and English and consist of a toolbox, posters, stickers and a 'credit card' with six questions. If you can answer them all with "Yes", you can start/continue your work. If you answer any of them with "No", then stop, inform your manager and together take all necessary measures to work safely.

### More languages

All campaign materials include a QR code that links to a page on TenneT's website, where the toolbox and the credit card, in

#### Do the LMRA before you start!

**Stop! You know your work has risks.**  
Together we want to reduce those risks. It only takes a minute!

**On the reverse side you will find six questions:**  
Can you answer all six of them with YES?  
Then you are ready to go.

**If not: do not begin your work.**  
Please contact your manager for taking measures and make an incident report if necessary.



#### Can you answer these six questions with YES? Then you're ready to go!

1. Is there a valid Risk Assessment and operating instruction and do you know it?
2. Are all risks at the work site mentioned in the Risk Assessment?
3. Did you and your co-workers discuss the planned work, risks, and the way to reduce those risks?
4. Do you have the correct Personal Protective Equipment (PPE) and are your tools in good condition to work safely?
5. Is the work environment safe and are the escape routes clear of obstacles?
6. In case of emergency, are you prepared?



**Do the LMRA before you start!**



**Reduce risks, do the LMRA!**

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**Do the LMRA, before you start!**

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Credit card (top left and middle), sticker (top right) and posters (bottom)

addition to Dutch, English and German, are also available in French, Spanish, Italian,

Portuguese, Polish, Romanian and Czech. Click [here](#) for more information.



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## Pre-summer Energy Safety Festival energy boost

To continue to inspire each other, a pre-summer event was organised on 6 April 2022 as a follow-up to the Dutch Energy Safety Festivals in 2021. A networking event in which management board members, senior managers and safety specialists took part. The objective of this event was to visibly conduct an open dialogue at this level about how we can increase and embed safety in the energy sector for everyone.

Sammy Lakwijk, Head of Risk at the festival Tomorrowland, shared his risk management world at major dance events and explained the synergies and differences.

As a prelude to the Energy Safety Festival to be held on 6 October 2022, various chain-related and other issues, sector-transcending dilemmas and some good examples were discussed during the pre-summer event. A real energy boost to continue to carry on an open dialogue about safety at all levels within and among organisations.

### Keep 6 October open

On 6 October 2022 the third Energy Safety Festival will be held with a highly varied and energising programme. This will continue what was created during prior festivals: a setting in which people can see, speak with



and inspire each other to proactively and in broad cooperation start working on safety on the shopfloor. It will be a day focused on knowledge sharing and an open dialogue on realising the energy transition, the huge amount of work associated with this and the question of how we can do this all together as safely as possible.

### A movement you will want to be part of

The Energy Safety Festival scheduled for 6 October is part of a movement and a follow-up to the successful festivals held in January and October 2021. View the [photos](#) and read the [review](#) in which Jeroen Grond, Managing Director VGMK/HSEQ Stedin and other executive directors talk about their preferred approach; the mutual lines of communications that were established and how companies in interactive ways demonstrate how they work on creating optimal safety.

If you are interested in receiving an invitation or becoming a partner, just like the other [29 partners](#), send an e-mail to [jeanet@jbace.nl](mailto:jeanet@jbace.nl).

The next newsletter will provide more information about the programme and speakers.



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## DolWin5 celebrated two million man hours without accidents

The TenneT German offshore project DolWin5 recently celebrated the milestone that two million man hours have been made without accidents. This was done at the DolWin5 Singapore work location. The TenneT Offshore Germany team distributed vouchers to all workers who contributed and the contractor KeppelFels provided a special lunch.



## Safety stand down prevention dropped objects

Recently TenneT's DolWin 5 project held a safety stand down in Emden (Germany) on the topic of the prevention of fallen objects.

The risks that might be the result of dropped objects were demonstrated by dropping a 1.4 kilo screw from a height of 11 metres on a melon with and without a helmet. The demonstration was well received by all workers on site.

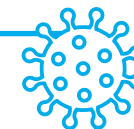
### Securing tools

Following the demonstration, measures for securing tools were shown by contractor Heitkamp, to raise awareness of how to prevent dropping objects as well as on available measures.

Scarfs with the DolWin5 logo "Be a SAFETY Superhero" and lunch was given out to all people on site.



## TenneT corona policy update



TenneT constantly monitors the situation concerning the corona pandemic and where necessary makes adjustments to its corona policy. After having been in the grip of the corona pandemic for two long years, we are seeing that measures are slowly being relaxed throughout the world. TenneT has relaxed its corona policy accordingly.

### The Netherlands

All guidelines and protocols have been dropped within TenneT in the Netherlands and TenneT is now following government measures concerning close contacts.

### Germany

TenneT Germany has not yet drastically relaxed its corona measures, although the corona-related legislation has changed. One of the most important changes is the elimination of the 3G requirement for accessing TenneT locations. The remaining measures, such as the 1.5 metre distance, FFP2 mask requirement, limiting the number of participants to meetings, etc., continue to be in force.

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# Presentation of 1,000<sup>th</sup> SCL certificate

On 10 March 2022 the Safety Culture Ladder (SCL) certificate was presented to the 1,000<sup>th</sup> organisation to qualify for SCL certification. The certificate was presented by Normec Certification to the Contracting and Transportation company Roel van der Stoel B.V.

The objective of SCL is to assess the attitude and behaviour in all layers of an organisation in relation to health and safety. The SCL's assessment methodology for measuring safety awareness and safe working practices in companies consists of five levels. Briefly, level 1 means that a company is reactive in responding when an accident occurs. Achieving level 5 means that people throughout the company and with the industry as a whole proactively work together to create a safer and healthier work environment.

## Growth thanks to GCVB

The SCL was the brainchild of ProRail. When increasingly more companies showed interest in this methodology, ProRail decided to look for an independent organisation to manage the SCL. This was NEN. Since the transfer to NEN, 1,000 companies have been certified.

The largest growth took place in 2021, from 300 to 1,000 organisations. This growth is in part due to the Governance Code for Safety in Construction (GCVB), which embraced the SCL. Effective from 1 January 2022, customers that have signed the GVCB will include safety awareness as mandatory criteria in tenders and contracts. This collective agreement is referred to as ViA (Safety in Tenders). This way thousands of companies in the construction sector will start working more safely by focusing on creating a safety culture and behaviour.

Up until now, the SCL is often used in the Energy, Offshore and Construction sectors in Europe, as well as in increasingly more countries outside Europe.

Click [here](#) for more information on the SCL.





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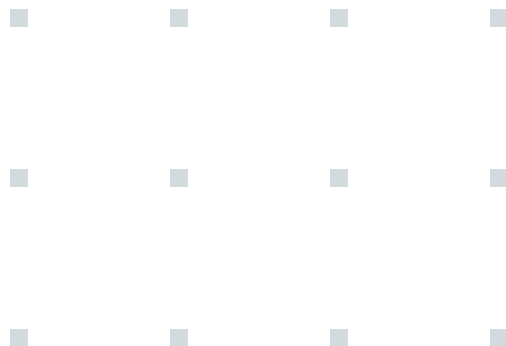
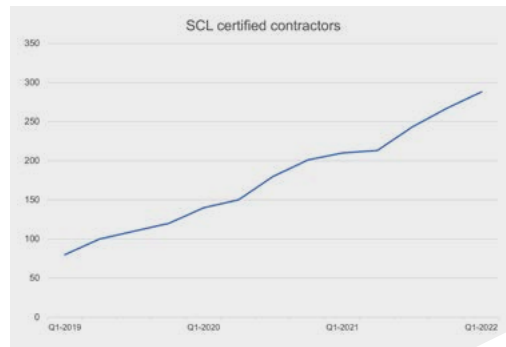
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## Status of TenneT SCL Programme

We are happy to see that increasingly more contractors are participating in our Safety Culture Ladder programme. The number of certified contractors, as well as the number of contractors currently working on the certification process is steadily increasing. We are extremely happy and proud of this. Together we are making safety in the entire chain possible!



## Statements

Is your company certified and would you like to share your experience? We would be happy to hear from you about this through means of a real-life example. Let's inspire each other and so expand our perception of the world we work in! Send your text to [safety@tennet.eu](mailto:safety@tennet.eu).

### Ultimately we all want to come back home safely again

In 2018, following TenneT's example, DNV decided to embrace the Safety Culture Ladder. A logical step, says Wolf Freudenberg, QHSSE Manager at DNV. Occupational safety has long been a key theme for the company. Not only within the work region, but also on the workflow. DNV started off at level 3 of the SCL and has since advanced to level 4. "At DNV we work in accordance with the We Dare. We Care. We Share principle," Wolf explains. "Safety is an important driving force in this respect and SCL certification is perfectly consistent with this. We have noticed a visible cultural shift since the implementation of the Safety Culture Ladder. Safety awareness has grown tremendously. Supported by fun prizes, such as a lunch or a private parking spot, DNV encourages employees to report – and especially share – incidents, without embarrassment."

#### Wellbeing is essential

During the last SCL audit, the auditors were pleasantly surprised to find that DNV actively measures its employees' wellbeing. It

conducts a so-called Pulse Survey (Peakon) for this purpose. Wolf: "Wellbeing is an important foundation for safe behaviour. Stress and 'who takes care of me in this organisation' are topics that are addressed as part of this survey. These topics are subsequently discussed in our teams and where necessary people are actively counselled in these areas." DNV aims to further improve wellbeing within the organisation with a particular focus on the working from home situation and on intrinsic motivation, in other words without management direction. In addition, there will be an even greater focus on communications relating to HSE incidents in order to make further gains in this area.

**Wolf: "SCL is an unending path, whereby the path becomes increasingly more beautiful as we progress. Ultimately we all want to come back home safely again."**



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## Geiger FM Grünservice Nord-West GmbH

The SCL approach is completely different from the recordkeeping, documentation and certificate-heavy approach of the BG at AMS. By implementing a culture, we engage all employees on a different level. Moving away from merely posting operating instructions and providing marathon briefings, we utilise small constantly recurring units to grow a practiced safety culture. The involvement of a consultant in the implementation process is also a highly recommended step. Such a person will support the shifting or changing ways in which things are perceived. The company's safety practice will increase on a daily basis, with employees more willingly engaged in the process. They will look favourably on changes, as the company and/or management will be continuously addressing the issue of occupational safety in small, workable steps, always involving the employees. The challenge lies in changing the mindset from merely filing records and annual one-day briefings to the incremental steps that engage actual practices. The process should also be viewed as ongoing. It is not completed by certification but requires



continuous development. The certification meeting provided us with many helpful tips, recommendations and hints. We will now incorporate them into our day-to-day business in order to generate further continuous process improvement.

## Geo Ingenieurservice Nord-West GmbH & Co. KG



The implementation of SCL means that all company employees are now equally challenged and involved. Occupational Health and Safety is no longer just the responsibility of managers and the people entrusted with it. OHS is now an integral part of our corporate culture and serves the development and continued existence of our company. The increase in the number of health and safety improvement reports over the last three years provides a good indication of the positive change in the awareness of our employees. The measures and findings from these reports have led to many targeted operational changes and improvements. No doubt, the coronavirus pandemic has been the biggest challenge to implementation. However, the excellent operational communication among our employees,

managers and customers, has enabled us to successfully overcome this challenge.

## Intertek

We are delighted to have achieved Safety Culture Ladder level 3, to better service our contracts with TenneT (and other clients) for offshore quality assurance, while also helping ensure safety and sustainability. We have found the process to be very valuable, giving us the opportunity to assess, enhance and re-familiarize colleagues with our HSEQ systems and culture. In particular we found the internal team sessions that we ran in the build up to the audits helped to re-emphasize our commitment to safety, and ensure that all colleagues are aware of the systems we have in place. During these sessions we received valuable feedback on how these systems and distribution of knowledge and awareness can be further enhanced. We are extremely proud of the excellent feedback we received from the auditors and look forward to keeping up the internal dialogue around safety, and retaining our certification for the future.





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# Employee pulled out of line cart

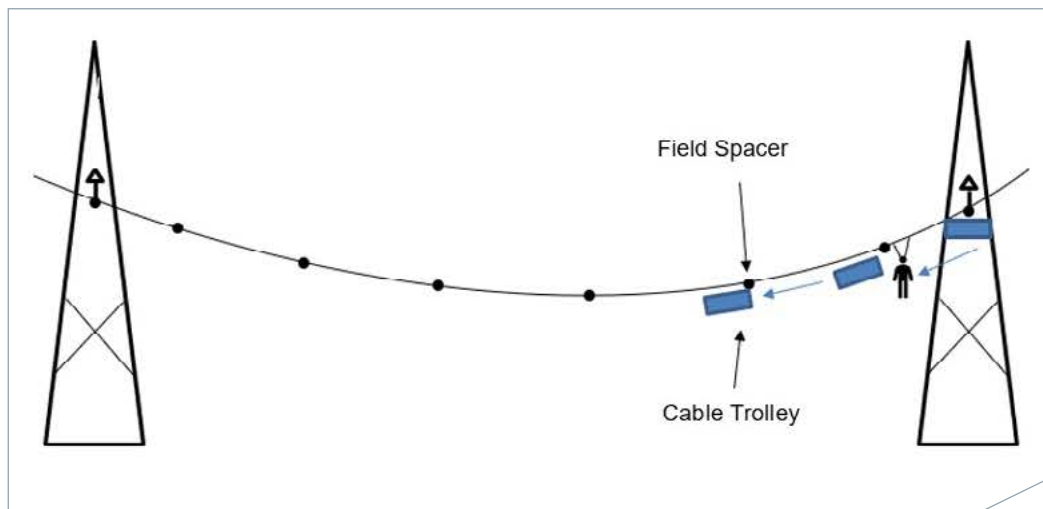
On 10 December 2021 at the project Wahle-Meklar in Germany, a technician, travelling in a line cart, tried to traverse the insulator string of a suspension tower into the next span. During this operation, the line cart in which the technician was travelling slid backwards into the span for reasons that are not yet clear. The cart crashed through the first spacer.

The technician was secured to one of the 4 phases by means of a Y-rope and carabiner and was pulled out of the cart when he ran into the first spacer. The line cart continued to slide and came to a stop at the second spacer. The victim remained suspended from the conductor by means of his PPE (harness, fall stop and Y safety line with carabiner). Conditions on the day of the accident were

damp/foggy. The angle of inclination from the string's clamping point to the span was less than 15 degrees.

Two other technicians working on the neighbouring system halted their work and came to the rescue, pulling the victim onto the quad bundle. At this point, the victim was fully responsive and able to reach the tower

where, with the assistance of his two co-workers, he could climb down. Meanwhile, emergency services were contacted, the fire brigade, height rescue team and paramedics arriving on scene within a few minutes. A helicopter was called to transport the victim to a hospital for precautionary measures. After examination, the victim was released from the hospital.



Schematic representation of the incident (Field spacer - cable trolley)

## The following actions were immediately taken

- Rescue actions were initiated
- Emergency call was made
- Transport of victim to hospital by helicopter
- Report to MOC/SHE hotline and notification of Incident Manager
- Investigation into cause was launched

## Further immediate action and important instructions

- As a precaution, TenneT suspended use of line cart "Inspektionstrolly Modell 034M/4/4" manufactured by TE. M.A. S.r.l. (BERGAMO) on its construction sites.
- Other carts may only be operated in strict compliance with the manufacturer's operating instructions.

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- The plausibility of the operator's risk assessment and operating instructions must be verified.
- Special attention should be paid to the process of traversing towers. Redundant securing measures must be provided to prevent the line cart from rolling backwards or forwards in an uncontrolled manner.
- When operating a line cart, use must be made of the provided anchor points to safeguard against falling.
- The measures specified in the rescue procedures must be followed.

- Care must be taken to ensure that all possible rescue situations are considered during instruction and that appropriate rescue exercises are carried out.
- The operator must contact the line-cart manufacturer regarding the implementation of the BG test principle GS-ET 01 from BG ETEM.

Information on further measures resulting from the ongoing accident investigation will be provided at a later date.



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# Update: Fatal accident during loading of cable ducts

On Wednesday afternoon 13 September 2021, we received the sad news of a serious work accident resulting in the death of one of our contracted workers. The accident occurred during the clearing of a construction site for the Emden - Conneforde grid expansion project in the Municipality of Großefehn.

## Work assignment

During the completion of the 380 kV underground cable section and the associated land restoration measures, the main contractor needed to dispose of surplus cable ducts in the area of joining bay 2 as they were no longer required for the project.

## Geplande procedure

The work to be performed was planned by the site manager, who also acted as coordinator in accordance with German guidelines (DGUV Regulation 1(6)), and verbally communicated instructions to the excavator operator at the daily toolbox meeting. The following activities were planned for the area of the joining bay on the day of the accident:

1. Main activity: Restoration of land surfaces
2. Additional work: Loading a lorry with surplus cable ducts

The excavator operator was supposed to interrupt the main activity (restoration of land surfaces) when a haulage contractor arrived and subsequently load the vehicle with the

cable ducts. The restoration measures were to be continued once the hauler departed. The cable ducts were then to be transported to one of the contractor's storage facilities, where they were to be unloaded and stored.

## Consideration of causes

This Safety Moment will not go into detail about the circumstances of the accident due to the ongoing investigations into the incident by the state prosecutor, the authorities and professional associations. Only obvious findings are presented here.

## Reconstruction of the (possible) circumstances of the accident

Construction management assigned the task of transporting the cable pipes to be moved to a subcontractor who had been working for them for many years and who had been active on the construction site since the start of the project. The transport vehicle went directly to the construction site, as the subcontractor's employee had already been briefed on the project and knew the location.

The lorry driver arrived at the construction site with his low-loader at about 10:00 am. After brief coordination with the excavator operator, the lorry driver prepared his low-loader for loading. In the meantime, the excavator driver refitted his excavator with a pallet fork in order to load the ducts. The lorry driver moved to a position in the danger zone (goose-neck of the low-loader) to monitor the loading process.



Photo of the accident site.



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Approximately 2-3 cable ducts were loaded simultaneously during each loading action.

After loading ducts 8-9, they shifted in an uncontrolled manner and duct 9 impacted the lorry driver. He fell from the load bed on the driver's side of the vehicle, the cable duct also fell.



*Staged photo at the accident site (position of the lorry driver during the loading process).*

### TenneT measures for current and future projects

Due to the tragic incident, TenneT is now preparing a set of duct stacking and transportation instructions. These instructions are expected to be incorporated into the Building and Construction Code in the spring of 2022.

### A preview of a few new instructions are as follows

- In future, the loading of ducts or similar materials (conductor rails, etc.) may only be carried out using pipe grippers, vacuum lifters or similar equipment that prevent unexpected pipe movement during the entire loading process. In future, loading procedures that use round slings will only be approved by TenneT's project management in special cases.
- Only suitable means of transportation may be used for the transport, e.g. vehicle with low loader (low-loader flat-bed) and stanchions.
- No person may remain in the danger zone, as prohibited in the "6 Life-Saving Rules".

### Further measures and lessons learned from this accident

- Extensive work preparation is essential, even for supposedly routine activities. Risk assessment controls have been found to be insufficient in some cases. The controls associated with carrying out this activity must be immediately reworked wherever necessary.
- Employees must be further educated on safe working practises. Conducting an [LMRA \(Last Minute Risk Analysis\)](#) is an important part of improving occupational safety, in addition to the briefings and instructions that have to be carried out.
- Every employee on a TenneT construction site must be familiar with and able to use a STOP signal in unsafe situations. This policy ensures that every employee has the right to interrupt work in unsafe situations without fear of reprisals for him/herself or the company.

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# Punctured low-pressure gas main

A DN150 gas pressure pipeline was pierced by a probe tip during a Cone Penetration Test (CPT) on the SuedLink project in Germany. The work party involved consisted of the equipment operator (MA1) and an assistant (MA2.) A measuring instrument detected an unmarked power line at the surveyed starting point. After verbal consultation with the regional planning office, the drilling company relocated the test site on its own initiative.

Before any further testing was carried out a manual preliminary investigation/pre-excavation exercise was carried out, using an Edelman drill to a depth of 1.20 m. As there was no indication of an obstruction or pipeline at this location, testing was duly executed to the designated depth. On retracting the penetration testing rod, employee MA2 heard a strong hissing noise and a gas smell was detected. He immediately alerted employee MA1 working in the vehicle, who stopped the retracting process.

Both employees moved to a safe distance from where they then initiated all further steps.

## Causes

- Work party relocated the test site without first performing a utility survey and adequate pipeline mapping.
- The drilling company and the regional planning office were not familiar with the utility survey process, which describes the requirements for locating service pipework

when performing ground investigations.

- The specifications for ground investigations and the utility survey process were not followed as described in the relevant documents.
- The required line scan was not requested as prescribed.
- Measures for detecting unmarked pipelines or instructions for action were not written (e.g. in the risk assessment of the drilling company).



Cone Penetration Test (CPT)



Punctured gas pressure main



Exposed pipe

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### Measures

- Ensure that all relevant documentation (e.g. detailed ground investigation procedure) and processes (e.g. utility survey) are provided to all parties involved in performing Cone Penetration Testing.
- Ensure that they documents fully understood and implemented by all members of the work party.
- Synchronize and update all important detailed ground investigation procedures, including their associated processes, so that they are correctly described and can be unambiguously located.
- Include the required action when an unmarked obstacles/main pipeline is detected in the drilling contractor's risk assessment (incl. adjustment of the detailed design/process), stating that the work has to be stopped and further advise has to be sought before proceeding.
- Changes or deviating from approved procedures may must not be done via verbal agreement, they but must be formally approved and documented through proper channels.





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# Update: Fatal electrical accident at Borken substation

On 2 December 2021, a SHE incident occurred during the dismantling of 30 kV medium-voltage switchgear panel in the Borken substation fatally injuring the employee of one of our contractors.

## Work assignment

The contracted company was hired to dismantle the cables in Cells H01 and H02 (see figure below) of the 30 kV system during the period from 29 November to 2 December 2021.

## Circumstances of the accident

The TenneT site manager briefed the contractor's work supervisor (casualty) and provided him with written authorization to carry out the work on 29 November 2021.

At 10:45am on 2 December 2021, the employee in Cell H04 was fatally injured by electrocution. His fellow employee was working in Cell H02 and therefore not in visual contact with him at the time of the accident.

The dismantled partition walls of Cells H03 and H04 and the tools found there indicate that the victim gained lateral access to Cells H03 and H04 from Cell H02, although there was no work authorization to do so.

The doors to Cells H03 (empty cell) and H04 (cell with voltage present) were locked at the

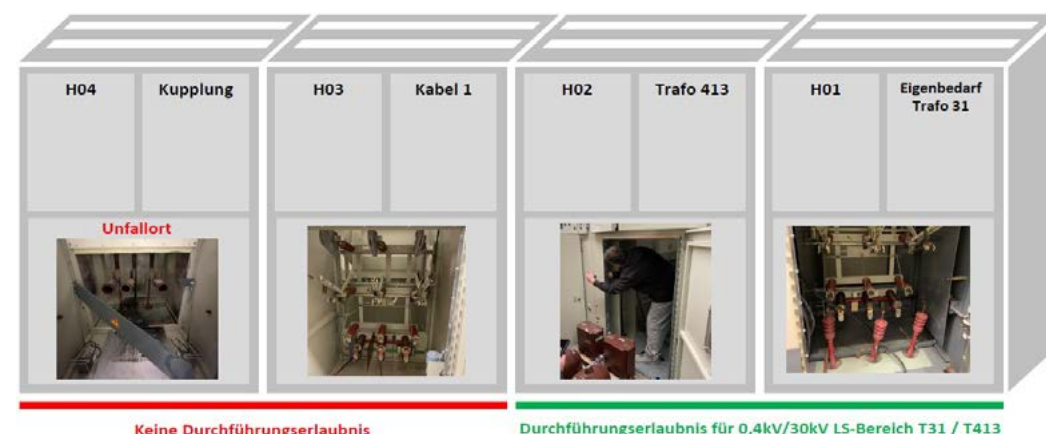
time of the accident. Access to the locked door of Cell H04 was additionally blocked by a mechanical obstacle.

## Key direct and root causes

- Performing unauthorised work outside the agreed area.
- Non-compliance with the life saving rules the appropriate isolations and voltage testing was not carried out in Cell H04.
- The danger of approaching live system

components outside the approved work area was also not mentioned in the LMRA (Last Minute Risk Assessment).

- TenneT and the contractor did not ensure that labelling conformed to the standard.
- The second employee did not intervene when his colleague strayed outside of the agreed work area.
- There is no documentation confirming that the employees understood the contents of the pre-start briefing.



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- No process for producing written documentation or work procedures has been formally established.
- The 30 kV system could only be partially de-energised at the time.

### Essential measures

- Provide consistent instruction for all employees who assume the role of site manager;
  - Always apply the life safety rules.
  - Clearly define the work authorisation area (e.g. by signs and chains) in accordance with the relevant legal requirements.
- Broaden and clarify work authorizations by describing the work to be carried out and the boundaries of the work area.
- Indicate that any any deviations to the agreed work authorisation by work supervisors or their teams (e.g. preparatory work) may only occur upon receipt of approval by the site manager.
- Have the site manager and work supervisor jointly verify the work area demarcation and its detailed verbal definition as part of the pre-start briefing, and subsequently document this communication.
- Before making equipment available for work, the work supervisor must always ensure that earthing and short-circuiting have occurred.
- The safety awareness of all employees and implementation of an LMRA must be promoted by means of additional training, safety takes precedence over financial interests and time deadlines.
- Increase random inspections of work areas to ensure closer monitoring of compliance of the control measures detailed on risk assessments, operating / work instructions and work authorizations.
- Establish an assembly or disassembly procedure jointly with the contractor. The individual assembly or disassembly steps

are to be listed and later assigned their necessary work areas and corresponding de-energized clearances. These assignments must then be clearly identified and documented in the work authorization. TenneT shall be given this information in advance in order to have the opportunity to comment (plausibility check).

- Update risk assessments, procedural instructions and clearance forms and brief both TenneT and contractor employees.
- Take even greater account of safety issues in the design of new installations (e.g. electrical disconnection points).



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# Landscaping worker injured while using chainsaw

An employee of a landscaping company was injured while pruning using a top handle chainsaw. The saw cut into his hand injuring two fingers. He was taken to the hospital and received four stitches. The employee was allowed to go home after this and the next day was able to perform other tasks at the office.

## Activities

The contractor is still performing landscaping work at various TenneT locations consisting of pruning bushes and trees.

## Circumstances surrounding the accident

Het ongeval deed zich voor, net buiten het The accident occurred just beyond TenneT's high voltage substation (ENS 380). While working from a hydraulic platform, the employee was pruning trees using a top handle chainsaw.

He was working above the substation's fencing and wanted to prevent the branch being removed from falling onto the fence. He held onto the branch with one hand in order to let it down in a controlled manner and intended to use his other hand to cut the branch. The branch moved unexpectedly, this movement resulted in him cutting his fingers.

The accident has been reported to the Dutch Labour Inspectorate, which will assess whether it will also investigate the accident.

## Right PPE

The prescribed PPE was used during the work (leg protection, hard hat with face shield, hearing protection, safety shoes and working gloves).

## Planned actions

The accident is currently being investigated by the contractor. Once the cause has been determined, suitable preventive measures will be implemented and tested for effectiveness. If necessary, a Safety Moment will also be issued internally.



Example of a top handle chainsaw\*



Example of how the saw is operated, incl. from a hydraulic platform\*

\*The photos above are only examples and do not reflect the actual situation.



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First TenneT department reaches level 4 of the Safety Culture Ladder

# Make occupational safety personal and realistic

Many companies view level 4 of the Safety Culture Ladder as a dot on the horizon. Something that you want to achieve in order to even further improve safety awareness. It is more about internalising safety and less about following the rules. A proactive attitude, where colleagues talk to each other about unsafe behaviour. TenneT Large Projects Netherlands, Area North, has every reason to celebrate. They are now officially certified at level 4 of the SCL. How do you attain this level? Klaas Bakker, responsible for all large projects in the Northern Netherlands, and Safety Coordinator Lisetta Bouwman can tell you all about this.

## Planting seeds

It all started with a single question: 'Who is interested in participating in a Safety Culture Ladder level 4 pilot?' Because one of the items on Klaas Bakker's list of improvement initiatives was to step up from level 3 to level 4. Klaas: "If you are not careful, safety will be seen as a canned concept. But it needs to be internalised, it must become personal and you must feel it. And that starts with yourself." When asked if they wanted to participate in the pilot, employees immediately responded positively. "Of course we were very happy with this," Lisetta continues enthusiastically. Lisetta has been working on psychological safety for some time. "This means that people feel confident about speaking up when there is an unsafe situation. And that they are not put down because of this. It is all about having an open culture in

which you feel secure. This is a key prerequisite for achieving level 4."

## Level 4: thinking ahead

The biggest difference between level 3 and 4 is that much more is expected from employees. Level 3 is primarily concerned about effectively organising processes, procedures and documentation. And properly following the rules. Level 4 goes beyond this. Klaas: "It's about thinking ahead in everything you do. Safety must become part of your DNA. Not only for yourself, but for your colleagues as well. It is much more about 'caring for each other to protect one another', than it is about knowing what the rules are. Talking to colleagues about unsafe behaviour is therefore very important. Our aim is for everyone to arrive safely at work and also to come back home again safely.



Klaas Bakker, LPN Area North

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It starts with spotting an unsafe situation and then, without any judgment, asking about the reasons why someone ended up in that situation. This way you grow your safety awareness together.

### Personal stories

This requires a cultural shift. The big question then becomes, how do you achieve this? Klaas: "This happened very naturally in our case. During our first meeting I told a very

*Safety Coordinator  
Lisetta Bouwman*



personal story about my own experience with a number of incidents. What that meant to me. This touches people, and the stories started flowing by themselves after this. Almost everyone has a similar story." Lisetta: "When, as management, you have the courage to make yourself vulnerable, you always get something positive in return. Nowadays it is more acceptable to be vulnerable than to act tough."

### Realistic goal

This was followed by a benchmark to determine the starting point. Lisetta: "The benchmark identified a number of topics, such as safety leadership and safety awareness, and we formulated working groups to start working on these topics. The improvement initiatives enabled us to move a step further ahead each time to prepare ourselves for the level 4 audit by NCI. According to Bakker the common thread is to make safety personal and realistic: "Sometimes an accident is just waiting to happen and it is not always possible to prevent it. The key thing is to always think about what you are going to do ahead of time and how you can do this as safely as possible. Should something nevertheless go wrong you then put it up for discussion with the objective of learning from it."

### Power of repetition

Another success factor in this story is to make safety a continuous topic for discussion. "We expect everyone to play an active

"Health and safety are topics that everyone considers important and are therefore considered self-evident. Attention for social safety within teams, but also for home-based work situations, is strictly monitored."

Auditor NCI

role," Lisetta continues. "Asking structural attention for safety is very important. For example, by contributing safety items to work meetings. Or by sharing successes. This way you keep repeating the message." Rewards in the form of appreciation is also an important component. Attention is not only devoted to employees, but to contractors and subcontractors as well. Lisetta: "We put the spotlight on people through fun actions. For example, by bringing in a food truck serving French fries, a high-visibility shirt (reflecting work T-shirt) or presenting a golden helmet for an idea to improve safety even further."

### Talking to each other

Management also regularly makes itself visible on the workfloor, for example through

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High-visibility shirt

Safety Walks. Klaas: “We expect managers to translate and document all good and practical ideas from the field into rules and policy. This way employees responsible for execution have a direct impact on working safely. This encourages employees to contribute ideas and to make these ideas known, which in turn increases safety awareness. Naturally we are happy to have achieved level 4. But I would like to go a step further. We work together with contractors on the basis of equality and I therefore expect them to talk to us when they believe we are creating an unsafe situation.”

In hindsight, both say that achieving level 4 was a ‘piece of cake’. Today Area North is the first department with a level 4 certificate. It is now up to other departments to follow their example. Lisetta will continue to be active within TenneT in her role as Safety Coach. Klaas: “A coach who is entirely focused on safety is a ‘must’ in order to keep people’s attention focused on safety at this level.”

“There is excellent cooperation with contractors, whereby a great deal of energy is invested in ownership and the environment, especially in the preliminary stages during the tendering process. This cooperation results in an open culture where incidents or hazardous situations can be freely discussed.”

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### Life-Saving Rules

[www.tennet.eu/company/safety-at-tennet/life-saving-rules](http://www.tennet.eu/company/safety-at-tennet/life-saving-rules)

### Safety Culture Ladder

<https://www.tennet.eu/company/safety-at-tennet/safety-culture-ladder/>

### Safety at TenneT

[www.tennet.eu/company/safety-at-tennet/safety-at-tennet](http://www.tennet.eu/company/safety-at-tennet/safety-at-tennet)

### Contractor Management

[www.tennet.eu/company/safety-at-tennet/contractor-management/](http://www.tennet.eu/company/safety-at-tennet/contractor-management/)

