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9. november 2022 Kit Lærke Knudsen klk@vd.dk +45 7244 3127 22/07718-2 1/4

# Minutes of meeting

Subject	Nortek meeting Copenhagen 2022
Date and time	15. September 9:30 – 16:30
Place	Vejdirektoratet, Carsten Nieburhs Gade 43, 1577 København V.
Participants	Hilde Mari Hvidsten – Vegvesen Roy Helge Hundere – Vegvesen Jan Backman – Trafikverket Elisabeth Lunman – Trafikverket Fredrik C. Nilsson – Trafikverket Jukka Hopeavuori – Väylävirasto Risto Lappalainen - Väylävirasto Josephine Schøller Rasmussen – Vejdirektoratet Kit Lærke Knudsen – Vejdirektoratet

Absents Matteo Stefano Pezzucchi – Vegvesen

Minutes of meeting

#### 1. Good morning and welcome

#### 2. News from each country

Sweden:

Working on regulation and starts the preparation of user guides that meet new regulations. The responsibility for implementation will be placed on the users. There is a new Swedish standard for fences along bike path and footpath for height etc. like barriers (can show it on next meeting).

A report is currently being prepared on traffic accidents in work zones, the cause is an increasing number of accidents with "flag man". There are too many threats/violence against flagmen and therefor it is considered to replace flagmen with lifting barrier.

Allow new TMAs tested according to new CEN standard. A TMA driver was recently killed when working. Investigations are not done yet, but Sweden will share the results (to the extent permitted) when the report is complete.

Finland:

Major challenges in ensuring compliance with the regulations for traffic management and unnecessary queuing when contractors using temporary traffic light.

Norway:

Challenges in securing "Flag man" in case of emergency incidents on the roads - especially in tunnels. One "Flag man" had been killed and it is expected that it will have an impact on regulations and better guidelines. An accident report has been prepared, and it shows an increasing number of accidents with pedestrians and cyclists as well. Real speed in work zones when passing flagmen, must somehow be handled.

vejdirektoratet.dk

SF 60729018 EAN 5798000893450



Contractors push for permission to use new technology e.g., manually controlled traffic light. Authority will have tests and evaluations of experiments before it can be incorporated into regulations and decrees.

### Denmark:

A worker was killed on a main road when doing maintaining works (cutting grass) – the accident is been investing.

A new plan for the infrastructure in Denmark has been presented and the Road Directorate expects many new projects (64 mia. Kr. From 2022 to 2035).

New rules for TMA and vehicle are expected soon, so that TMAs are checked (weight, brakes, approval letter and installation on vehicle) and registered at the inspection halls.

Upcoming experiments testing red cross when "acute contractor" blocks a motorway. Expect to start very soon.

New regulation about marking acute works was brought into force in May as well as new regulations for TMAs in work zones.

There is a great focus on worker safety and how to avoid competition at work conditions. Ongoing work on new decree and regulations/ guidelines in accordance.

### 3. Finland – *Presentation about* Student exam publication from Häme University of Applied Sciences

Master's degree one year, How Road work zone are in practice compared with regulations and guidelines. In general, good. Still there are things which could be much better. Especially lack of ending on barriers is thought to stand for 80% failure in Sweden and 90 % in Norway.

Finland will upload the report with an English summary on Nortek side.

# 4. Finland - *Question to discuss* "How could we make temporary bypass roads better on quality of geometry, markings and collision safety"

Problems with geometry e.g. to small radius on curves and wrong use of traffic signs.

### 6. Finland – *Presentation about* Road safety courses in Finland

Road safety 1 and road safety 2 (for those responsible) is open for everyone and free (know expenses). 27000 passed road course 1 (for workers and those responsible) in 2021. Finland will send the link to the courses, for trying it.

# 5. Denmark – *Question to discuss* "How to handle small roadworks of short duration, e.g., mowing the lawn and small maintenance work zones (driftsarbejder)."

How to do different maintain works, how can someone work e.g., tightening a bolt on a traffic sign whiteout establish a large work zone? Can they take care of themselves, can they have focus on traffic while they work?

Different definitions of short-term work, permanent work zone, short maintain work and movable work zone.

Plan and risk assessment must be the key focus.

### 8. Sweden - *Question to discuss* "Risk analysis; is it possible for the entrepreneur to use them to reduce measures for the working environment (not reduce traffic safety)?

Hard balance between describe minimum requirements and risk assessment or describe protection in detail. What is a risk analysis, and is it based on facts or guess?



### 7. Norway - Question to discuss "Criteria for speed limit choices in work zones".

30, 50 or 70 km/h is typical used in work zones. It differs if the speed limit is a guideline or mandatory.

9. Denmark – *Question to discuss* "Ensuring own supervision, what equipment do they have with them, where should they stand etc.?"

In Sweden and Finland; always work in shelter a TMA or other energy absorbing protection, very low speed or distance to workers.

Norway; on roads with speed limit from 60 km/h or higher; TMA or other energy absorbing protection between traffic and worker shall be used.

### 10. Denmark – Question to discuss "TMA Nordic approval, how do we proceed?"

Max. weight in traffic area without TMA?

There are not completely identical rules, for example S and DK do not approve TMA for use at 50 km/h, Therefore it must of course always be possible to have national regulations.

Denmark describes a procedure and sends it around for comment.

# 11. Sweden - *Question to discuss* Yielding materials and unyielding materials based on speed and where it's placed. For example, different roadsign carrier.

Discussion about the rules for unyielding objects, when is it an unyielding object and when must it be protected. Are they rules or guidelines?

N og DK – permanent regulations act as guidelines for temporary ones. Permanent is set as decree (bekendtgørelse). In FL even signposts must be protected when they are placed nearer than 1 m to traffic.

Please send regulations and guidelines.

#### 12. Next meetings

<u>Virtual meetings</u> 13/12 – host Sweden 9/3 – host Denmark

Next physical meeting the 9.-10. May 2023 in Finland; maybe visit a work zone where "fellow me car" (lodsbil) is used.

Topics:

- "Flag man" report about accidents (Sweden)
- new Swedish standard about fences
- monitoring of real speed in work zones,
- how can we build up a scientific investigation reports in a Nordic database (Denmark Ulrik Blindum might know)
- TMA accident where driver was killed (Sweden)
- audit and follow up on road works
- the group should upload all material to: <u>NORTEK Afmærkning NMF Nordisk Møde for</u> <u>Forbedret Vejudstyr (nmfv.dk)</u> – klick to visit page.



### 13. Optionally

DK is about to make new guidelines about work carried out from a lift. In S (ore N?), securing with TMA or other energy-absorbing barrier is a requirement regardless of speed when AADT is above 2000 vehicles. In S, a similar safeguard is required on roads with speeds of 60 km/h and above.

Discussions in Denmark about using sings instead of stoplines at temporary traffic signals. Is it against any conventions? In N and S, a stop-line-sign is allowed and used. Please send decree or regulations about this.

In S there are discussions about whether it is permitted to have a countdown on signals. In DK it is allowed on temporary traffic signals, which appears in decree.

Structure in the individual countries – S and F only have the same requirements for their own roads, municipalities can use them.

N and DK a little more similar (however, not a formal collaboration with the sector/ organizations in N, it is more adhoc groups appointed by the road authority).

### 14. Thank you for this time and come home safely