



# Traffic system Yellow line



An aerial photograph of a city, likely Stockholm, Sweden, showing a large body of water, a bridge, and various buildings. The image is overlaid with a dark blue semi-transparent background. In the center, there is a bright blue rectangular box containing the word "Introduction" in white, bold, sans-serif font.

# Introduction

# General overview of the project



**6**  
stations

**8**  
kilometres of track

**6-10**  
vehicles

**1**  
depot

**5**

minutes revenue  
service headway

Approximately

**2**

minutes travelling time  
Fridhemsplan–Liljeholmen

Approximately

**10**

minutes travelling time  
Fridhemsplan–Älvsjö

Construction start

**2025**

if all the permits  
are in place

# Status – decisions

- Line and station placements
- High capacity elevators will be used
- Platform length will be 75 meters
- The tunnels will be made using a tunnel boring machine
- Grade of automation 4 (GoA4) - a fully automated metro system



# Tunnel design

- Two single track tunnels
- Cross tunnels between the main tunnels every 300 meter for technical equipment and evacuation
- Scissors cross over in each end of the line and one in the middle
- New depot both for passenger vehicles and maintenance vehicles





# Scope



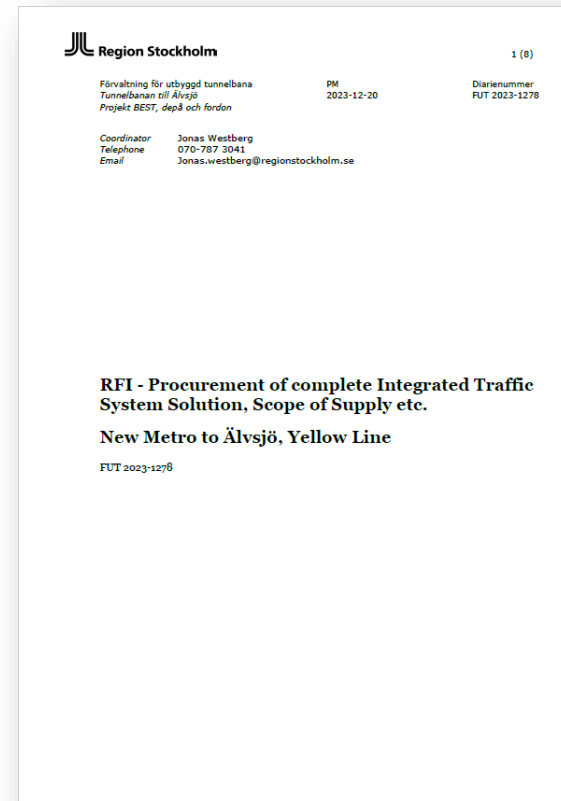
# Ongoing RFI Complete integrated traffic system solution

**Ongoing RFI** (Request for Information) regarding defining the ultimate scope of the procurement

## Main subsystems

- Vehicles
- Signalling
- Power supply
- Tracks and Depot facility

## Preferred contract



# Vehicles

## Characteristics

- Vehicle maximum length – 70 m
- Vehicle maximum width – 2915 mm
- Track gauge – 1435 mm
- Planned top speed – 90 km/h
- Curvature capability – 80 meters radius
- GoA-4 (Fully automated system)



# Traffic management system with signalling

## Characteristics

- Time tabling and automatic routing
- Management of temporary changes to the track
- Decision support during disturbances and degraded mode operations
- Monitoring/management of other equipment in the system
- Simulator capability for training
- Management of working areas and maintenance vehicles



# Power supply

## Characteristics

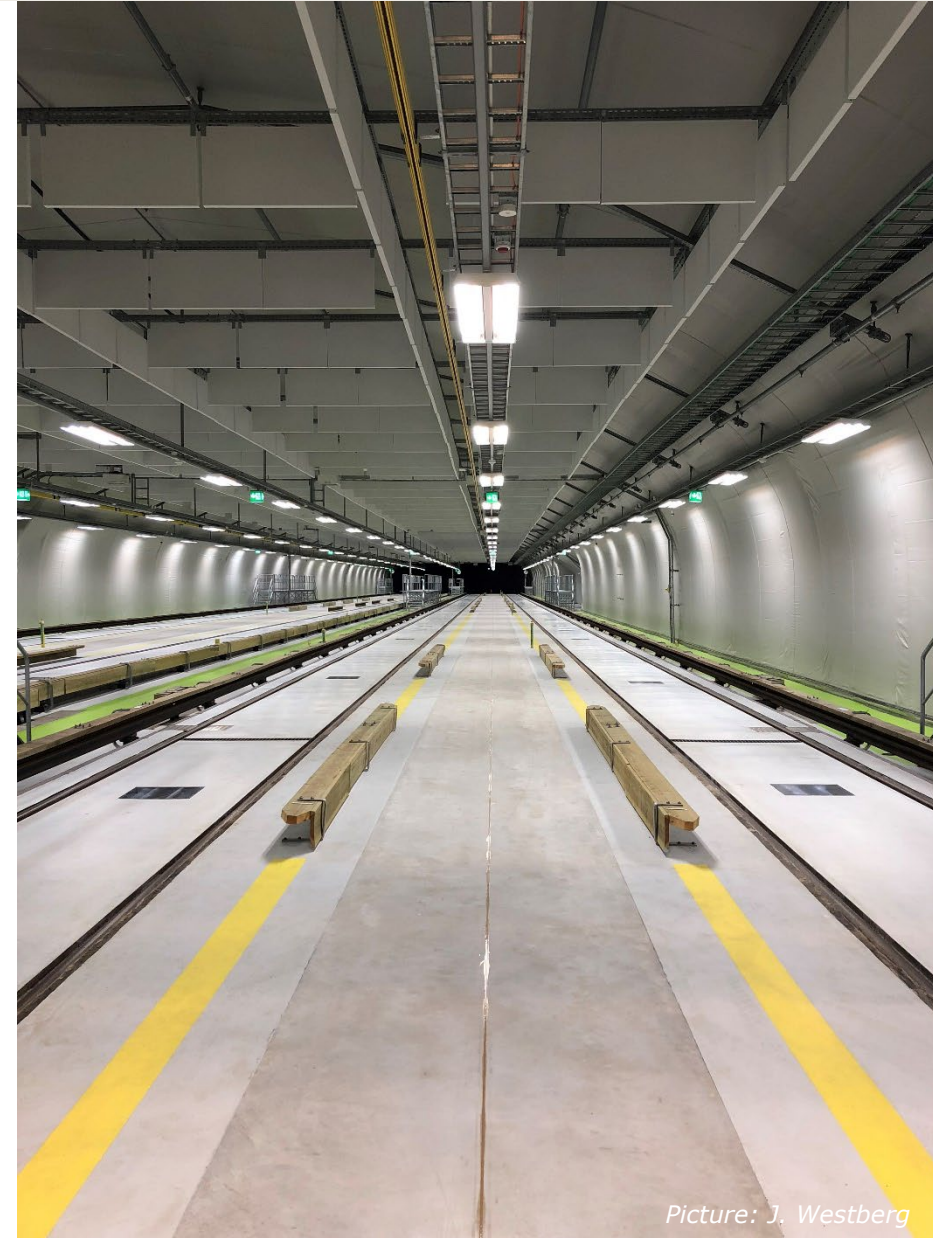
- Connection to 33kV network
- Approximately 6 - 7 rectifier stations
- Train traction power and 400V facility power
- No SF6 gas allowed



# Depot facility

## Characteristics

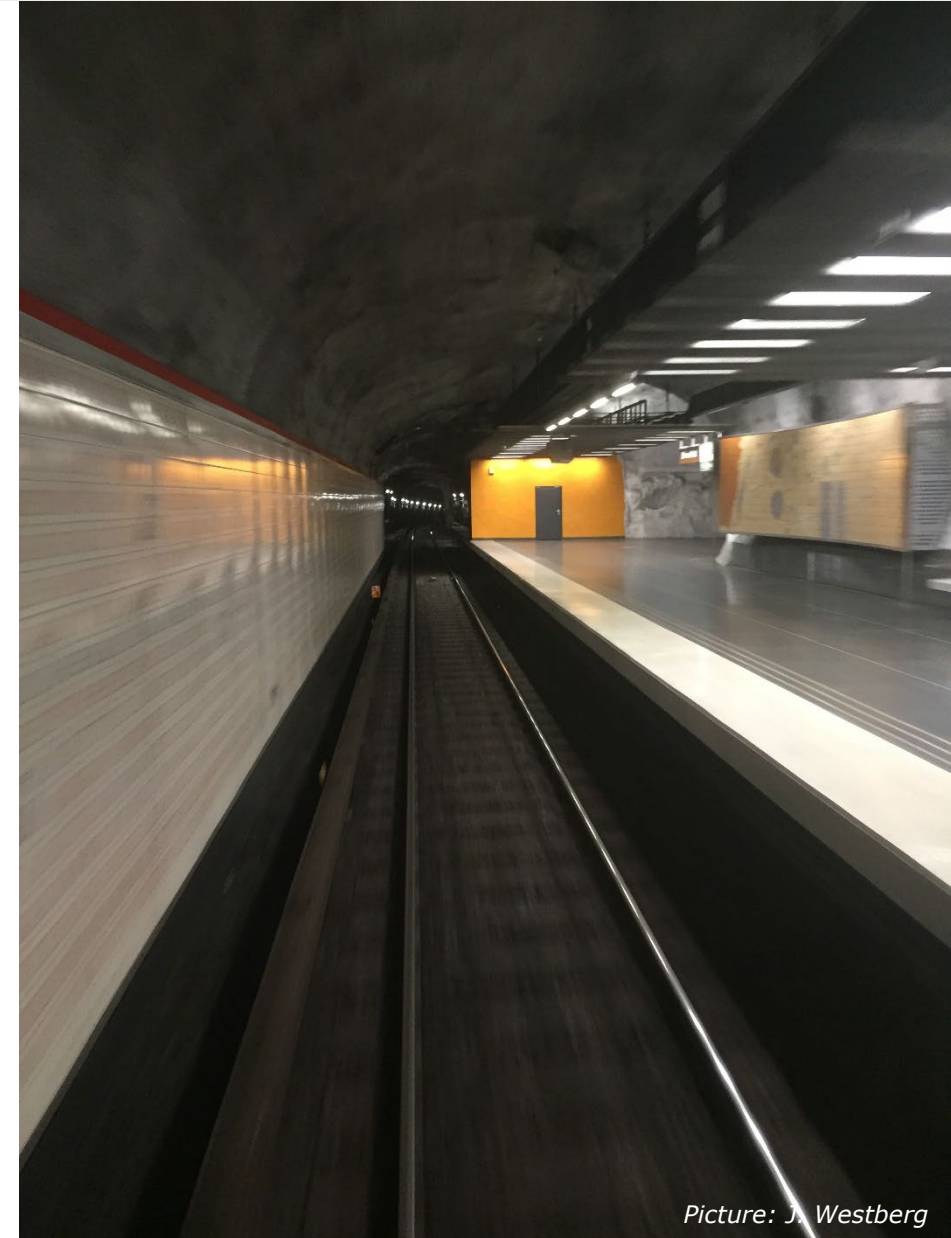
- Stabling capability
- Preventive and corrective maintenance capabilities
- Graffiti removal facility
- Train wash and interior cleaning capability
- Infrastructure maintenance base and stabling for maintenance vehicles



# Other systems or services

A complete integrated traffic system solution may also include

- Telecommunication and radio systems
- Passenger information
- Tunnel ventilation system
- Tunnel lighting system
- CCTV
- Possible option - Maintenance for XX years
- Possible option - Operation for XX years





# Procurement strategy

# Two upcoming procurements

- Engineering organisation for requirement development
- Complete traffic system solution



Förvaltning för utbyggd tunnelbana

Datum	2023-11-08	Projektskede	Planering
Status	Utbart 5	Info/konferens	-
Rev. beteckning	-	Diarenummer	-
Rev. Datum	-	Författare	Pelle Wahlgren

**Upphandlingsstrategi - Trafiksystem**

Tunnelbanan till Älvsjö  
Gul linje

Bilaga: Analys och förslag med avseende på lämpligt standardavtal vid upphandling av komplett trafiksystem, Tunnelbanan till Älvsjö (Gul linje)  
<https://secure.webforum.com/fut/doc/getdoc.ashx?refID=26340838>

Filnamn:-

REVIDERINGSHISTORIK

Rev.	Revidering avser	Reviderat av	Godkänd/ Fastställt av	Rev. datum

Granskas / Godkänns av: Johan Brantmark, AC  
Fastställes av: Niklas Bergman, FC



# Engineering organisation for requirement development

- High level requirements
- Interface specifications
- Legislation
- Engineering/technical support
- One or more contracts



# Complete traffic system solution

- One large procurement
- The supplier will have full system integration responsibility
- Contract
- Procurement via dialogue



# Complete traffic system solution


Vehicles	Traffic management	Power supply	Track system	Prevention of unauthorized track access
Transmission system (IT)	Passenger information	Radio	Depot installations	Options for operations and maintenance
Safety and surveillance track area	Blue light stations	Power (400V)	Tunnel ventilation	Etc...

Green = Most likely to be included

Yellow = Likely to be included

Orange = Maybe included

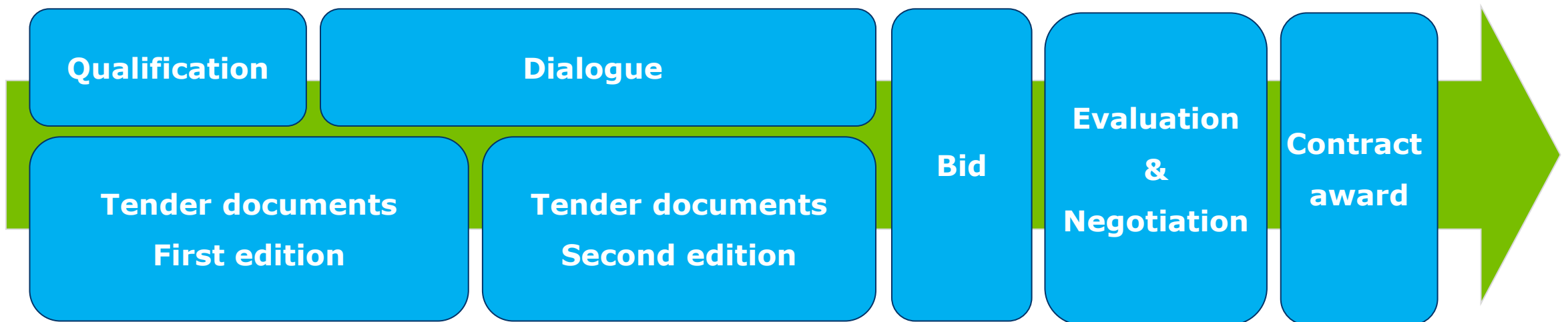
Grey = uncertain



# Procurement process

# Procurement process

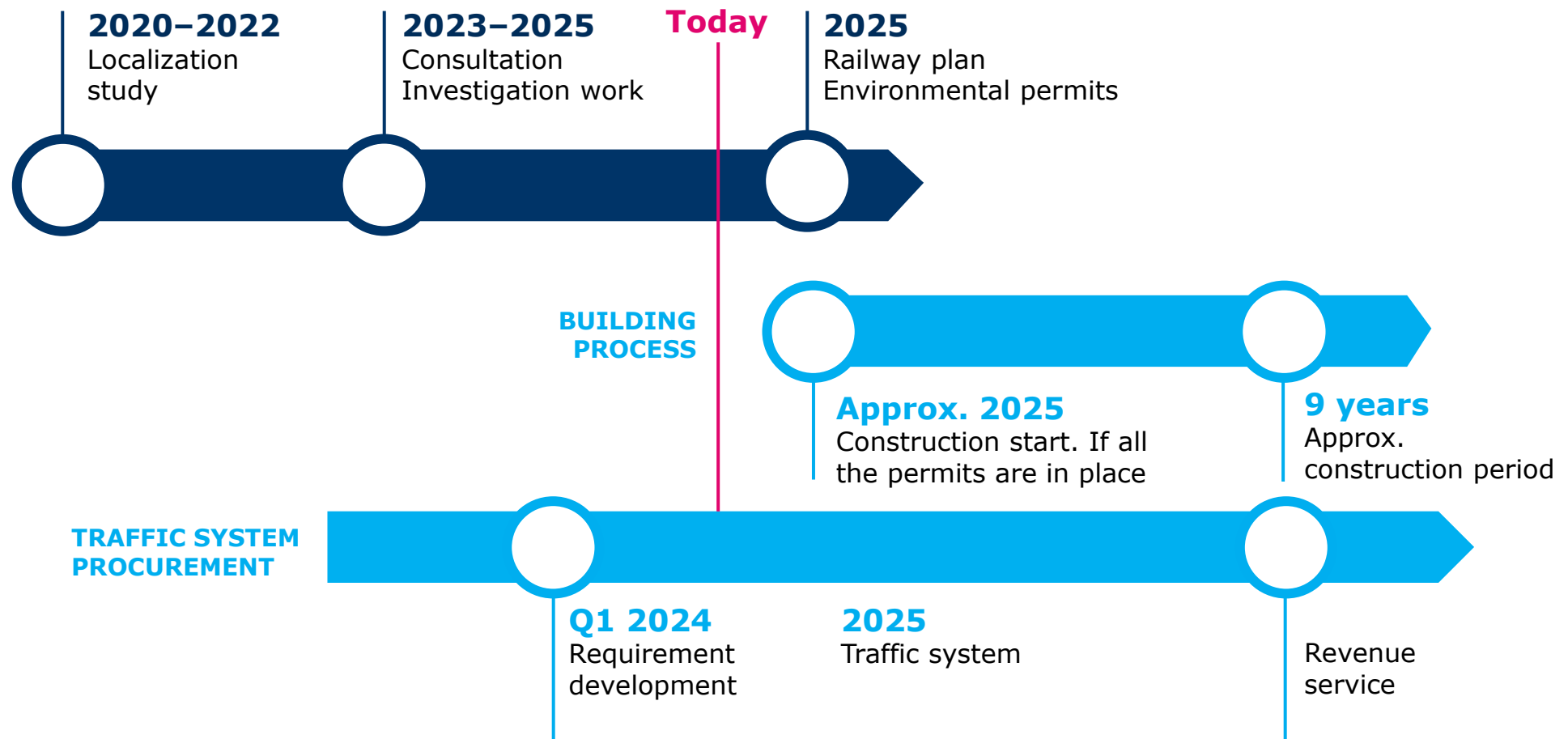
High level summery



An aerial photograph of a city, likely Stockholm, Sweden, featuring a large body of water, a bridge, and numerous buildings. The image is overlaid with a dark blue semi-transparent background. In the center, there is a bright blue rectangular box containing the text "Time plan" in white, bold, sans-serif font.

# Time plan

# Yellow line to Älvsjö



An aerial photograph of a city waterfront, likely Stockholm, Sweden, showing a large body of water, a bridge, and various buildings. The image is overlaid with a semi-transparent blue rectangle in the center, which contains white text. The text is centered and reads "Our RFI and procurements in short".

**Our RFI and  
procurements  
in short**



# RFI and upcoming procurements

RFI related to the ultimate scope and preferred contract for an integrated traffic system solution

- Ongoing until March 15<sup>th</sup> 2024
- Would you like to participate in our dialogue with the market?  
Contact us after this presentation

<b>MARCH 2024</b>						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24

# Procurement 1

Engineering organisation for requirement development

## Scope

Organisation to help us write high level requirements for a complete traffic system solution.

Organisation with technical support during evaluation and negotiation.

## Facts



### Economic scope

15 to 25 MSEK



### Way of procurement

Public procurement or via Magnit portal



### Contract

Depends on way of procurement



### Compensation

Hourly

## Time plan



### Start of procurement:

Q1 2024



### Start

As soon as possible

# Procurement 2

Complete Traffic System Solution

## Scope

A complete traffic system solution with full system integration responsibility.

## Facts



**Economic scope**  
1000 to 2000 MSEK



**Way of procurement**  
Public procurement with dialog and added-value evaluation



**Contract**  
Could be a standard form of contract, but not decided.



**Compensation**  
Neutral compensation plan

## Time plan



**Start of procurement:**  
Q4 2025



**Contract award**  
2027



**Start**  
2027



# Concluding remarks

# Further dialogue

- **If you have any questions:**  
[upphandling.fut@regionstockholm.se](mailto:upphandling.fut@regionstockholm.se)
- **Mentimeter**  
Many questions during this event.  
Answers will be published on our website.
- **RFI – Request for information**  
Keep an eye on our website to participate in these dialogues.

# A reminder...

- Register in TransQ
- Read our procurement document carefully
- Submit tender exactly according to our instructions
- We are very strict during our evaluation. It would be sad to have to exclude you due to a simple mistake!
- Keep up the good dialogue!



**Everyone has the right to return home injury-free after a working day. Every day.**

