

# AI Videoanalyse in der Logistikindustrie

IKT Sicherheitskonferenz Wien

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# About Kuehne+Nagel

**400,000**

customers entrust us to  
manage their logistics

**No. 1**

sea and air freight forwarder  
worldwide

**109**

countries connected  
by our network

**1,300**

offices worldwide,  
so that we are close  
to our customers

**2030**

our target year for reducing  
our CO2e emissions by 33%,  
aligned with the Science  
Based Targets (SBTi)

**> 78,000**

logistics and supply chain  
professionals who give  
their all every day

# Transportation services

The one-stop-shop for all  
your transportation needs

**Air Logistics**

**Sea Logistics**

**Road Logistics**

**Rail Freight**

**Project Logistics**

**Customs Clearance**

**Insurance**

# Supply chain services

Actively manage your supply chain by making it more efficient and reliable

**Order Management**

**Supply Chain Consulting**

**Supply Chain Management 4PL**

**Warehouse, Storage and**

**Distribution**

**Expo and Events**

**Hotel and Hospitality**

# Industry solutions

Your specific solution –  
tailored for  
your industry

**Aerospace**

**Automotive**

**Consumer**

**High-Tech**

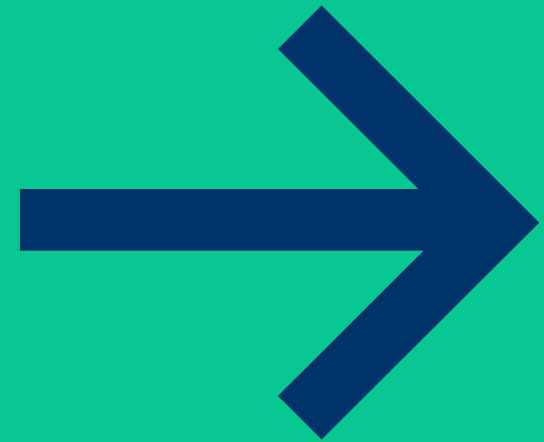
**Industrial**

**Perishables**

**Pharma & Healthcare**

# 01

**Outlook and  
contributing factors**



# Outlook and contributing factors

1

Shortage of personnel

2

Increasing social spread  
within societies

3

Increasing inflation and  
rising costs of living  
(energy etc)

4

Potential loss of jobs due  
to current crisis

5

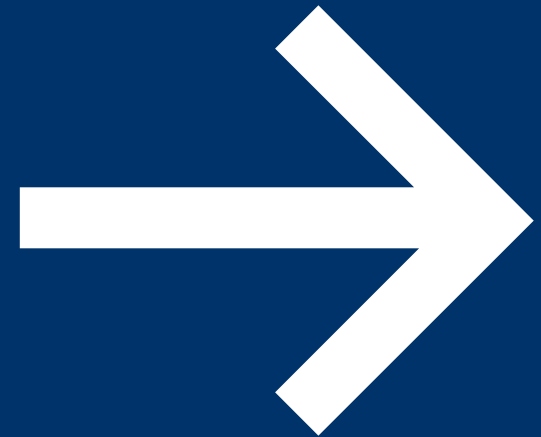
COVID 19 confinement  
measures and relaxation  
thereof

6

Increasing level of  
corruption

# 02

**The challenge**





**Freight at rest is  
freight at risk**



# Our daily security challenges

## How do offenders operate?



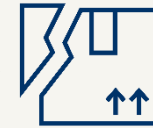
### Armed hijacking

High level of violence against drivers & security guards  
Theft of full truckloads of merchandises



### Theft from premises

Forced entry into vehicles, containers, swap bodies staged in shipping yards or theft & pilferage (inside warehouse)



### Trafficking

Introduction of illicit drugs, weapons etc into legitimate supply chains



### Fake carriers

Theft by deception. Mostly associated with fake carriers offering transport services through web-platforms.



### Warehouse heists

Generate high financial losses for customers. Weak warehouse security layout increases likelihood of warehouse heists

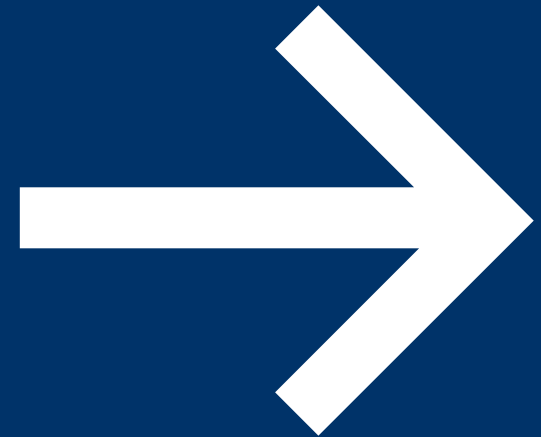


### Theft of load from vehicle

Mostly used modus operandi, in particular affecting vehicles staged in unsecure parking locations or company yards.

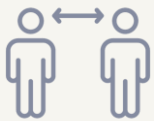
# 03

**Risk mitigation by AI-  
supported CCTV  
systems**



# Available standard task use cases

## Safety & security



Distance between persons



Grouping of persons



Vehicles moving into wrong direction



Person lying on the ground



Person slipping



Person running



PPE compliance



Compliance with hygiene rules



Detection of hazards



Fire & smoke detection



Detection of misplaced equipment



Detection of vandalism

# Security task use cases and fields of application



## Vehicle / person entering into virtual clear zone

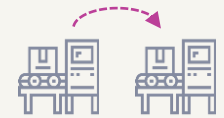
- Virtual perimeter intrusion detection system
- Surveillance of trailers and containers staged in loading and unloading yard\*
- Supplementary warehouse intrusion detection system
- Surveillance of vehicles by means of on-board cameras while being parked for overnight rests\*

\* In combination with detection of suspicious behaviours



## Detection of firearms

- Detection of active shooters incidents, armed assaults and acts of terrorism
- Armed warehouse robberies
- Armed hijacking of vehicles (usage of concealed on-board cameras)



## \*\*Detection of suspicious behaviours (persons/vehicles)

- Detection of forced entries (usages of power tools/handtools)\*
- Detection of internal thefts, introduction of articles, tampering
- Enhanced access control In combination with number plate recognition

\*\* under development

# Security task use cases and fields of application



## Detection of violence

- Detection of workplace violence
- Detection of warehouse robberies involving violence
- Hijacking of vehicles by means of violence by on-board cameras



## \*\*Detection of items left behind by a person

- Detection of internal thefts
- Detection of assaults / acts of terrorism



## \*\*Detection of tailgating

- Detection of unauthorised access to sensitive areas by means of tailgating

\*\* under development



# Q&A



Inspire. Empower. Deliver.

