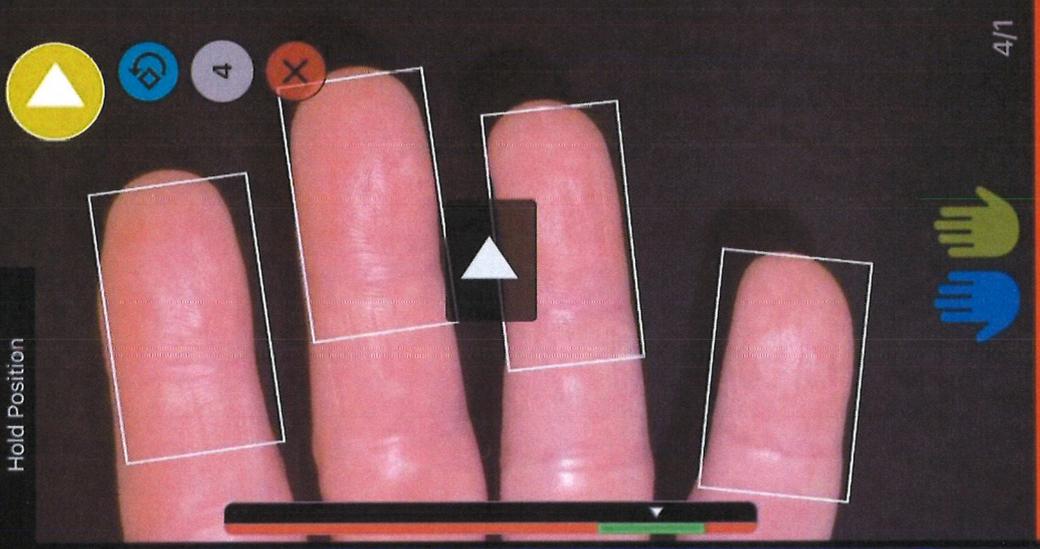




# Smartphone only

Capture Left Hand  
Hold Position

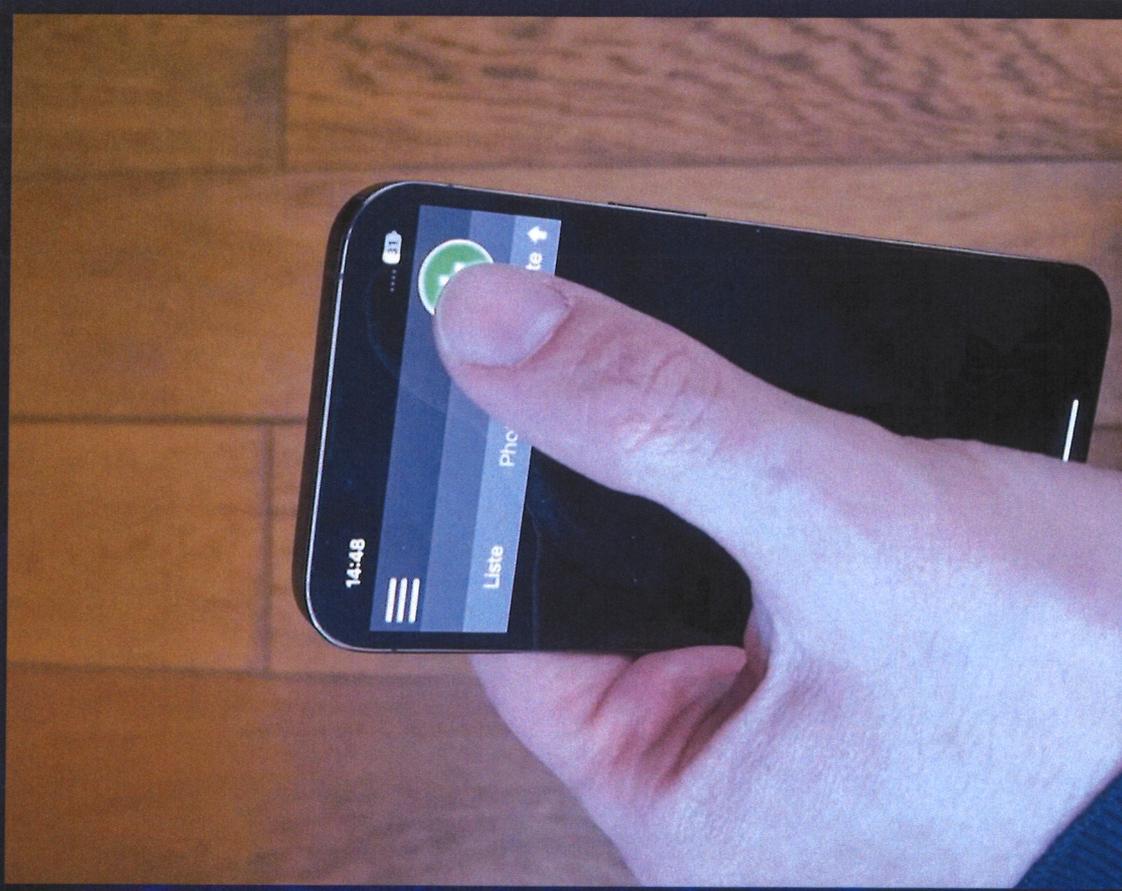




# Smartphone only

Live demo

NO Fingerprintes please



# FRONT<sub>EX</sub>



## Thank you

CONFERENCE  
ON INNOVATIVE  
SOLUTIONS FOR STRENGTHENING  
28 MARCH 2025

FRONT<sub>EX</sub> CONFERENCE  
IDEMIA  
ELIUP-POL



# FRONTEX I-DAYS

## PerIS – Person Identification System OptoPrecision GmbH



28<sup>th</sup> March 2023

FRONTEX



EUROPEAN BORDER AND COAST GUARD AGENCY

1

Personal Data

**FRONTEX I-DAYS**

# **OptoPrecision**

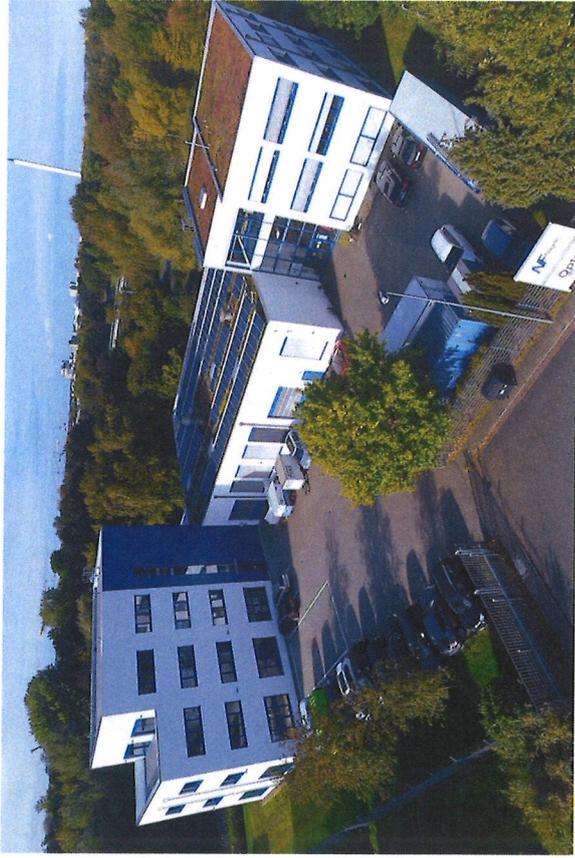


**FRONTEX**



**EUROPEAN BORDER AND COAST GUARD AGENCY**

# FRONTEX I-DAYS



More than 20 years of experience in system design



Hot zone camera – OMS



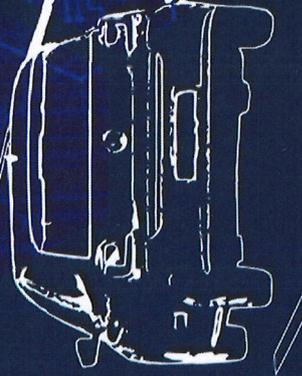
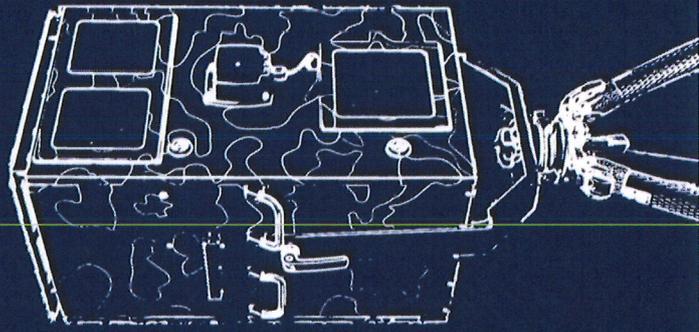
Multi sensor platform – MODAR-BC  
VTOL UAV – ROCHEN VT-4



# FRONTEX I-DAYS

## Perls

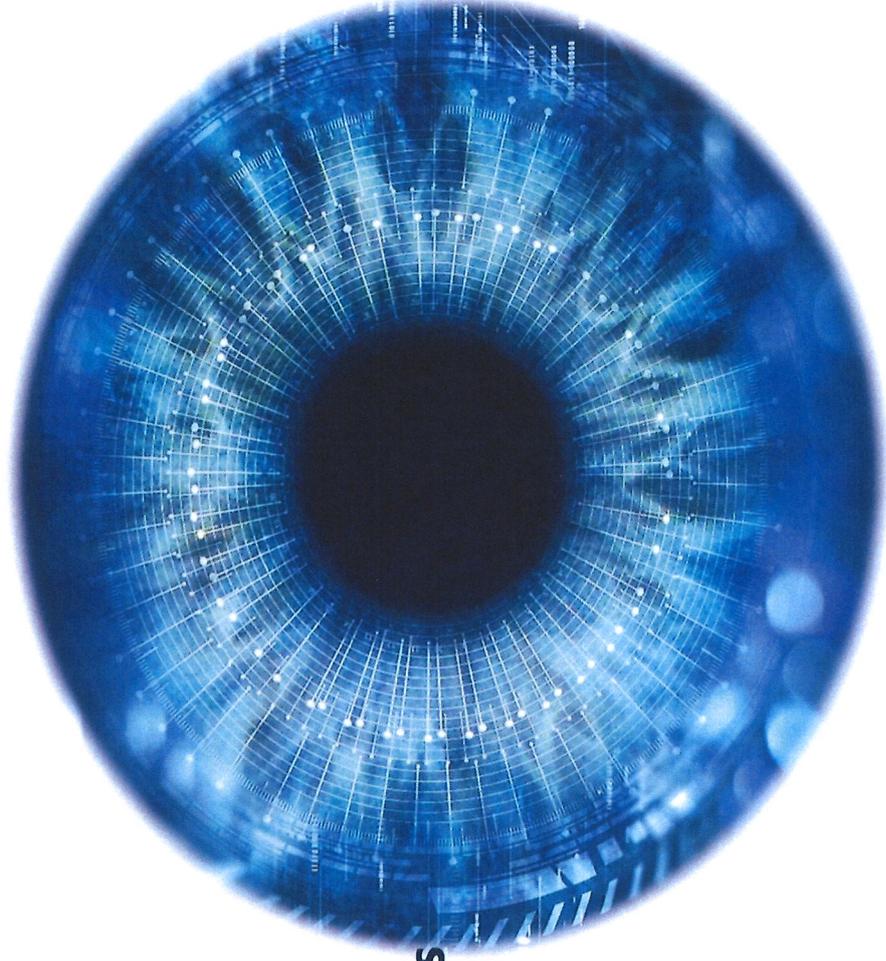
A short introduction



## Issues to solve

**Current issues with standard camera systems**

- No usable images of car occupants over 24 hours a day
- Video analysis of longer recording periods takes a lot of time and ties up personal to this task → high effort and decreasing quality
- Data has to be prepared manually to forward it to other departments



## The PerIS-Solution

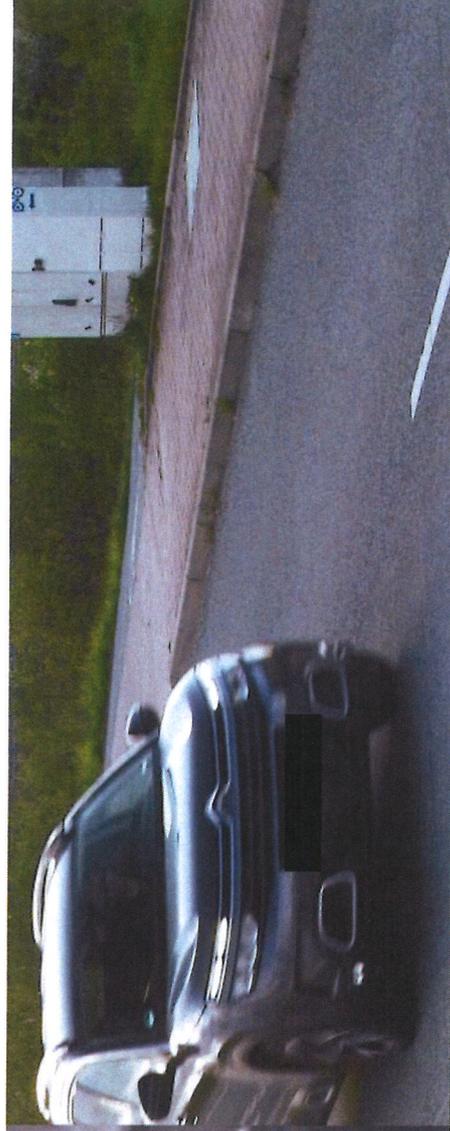
### Tailor Made System

- **24/7 – recording of car occupants and license plates in video sequences**
- **Automatic video analysis and structured data storage**
- **All data is available for easy investigation**
- **Investigation of protected data only case-based**
- **Analysis results are condensed to a case file**
- **Creation of correlations between persons, license plates, vehicles, locations, date and time**
- **Export of case data in common file formats**

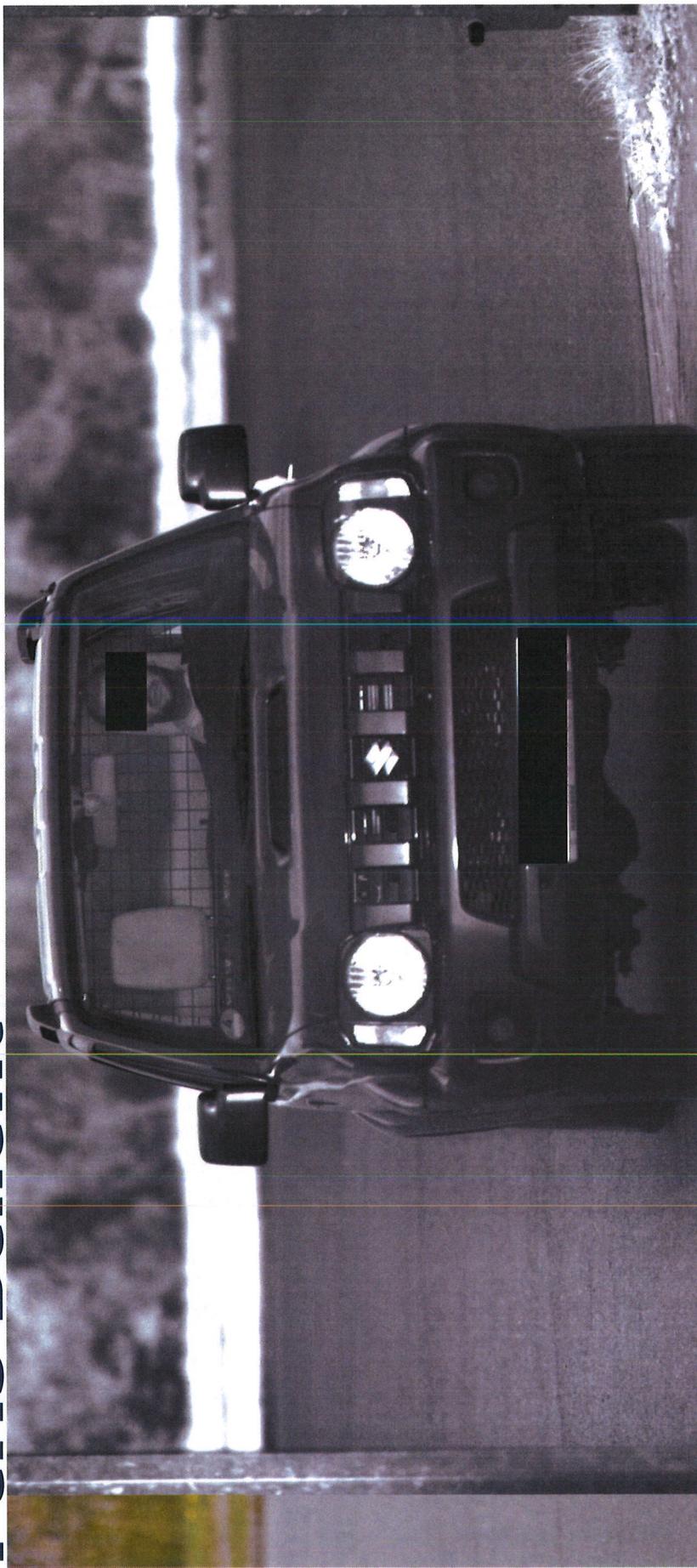


## Technological Basis

- **Optimal results by combination of high-quality components and a near infrared illumination**
- **Control of illumination, image acquisition, transmission, storage, analysis and presentation in one hand**



# PerIS Benefit



DSLR Camera

PerIS

# PerIS Benefit

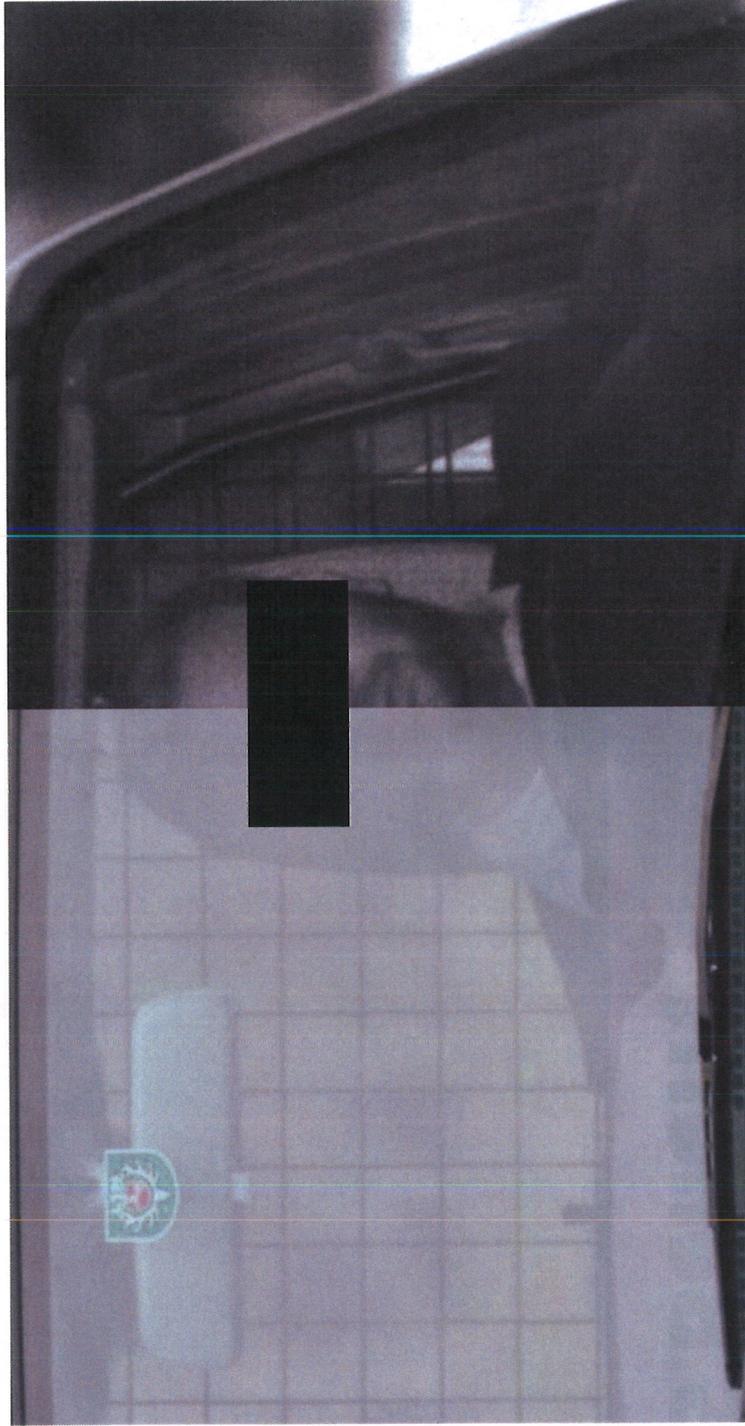
DSLR Camera



PerIS

# PerIS Benefits

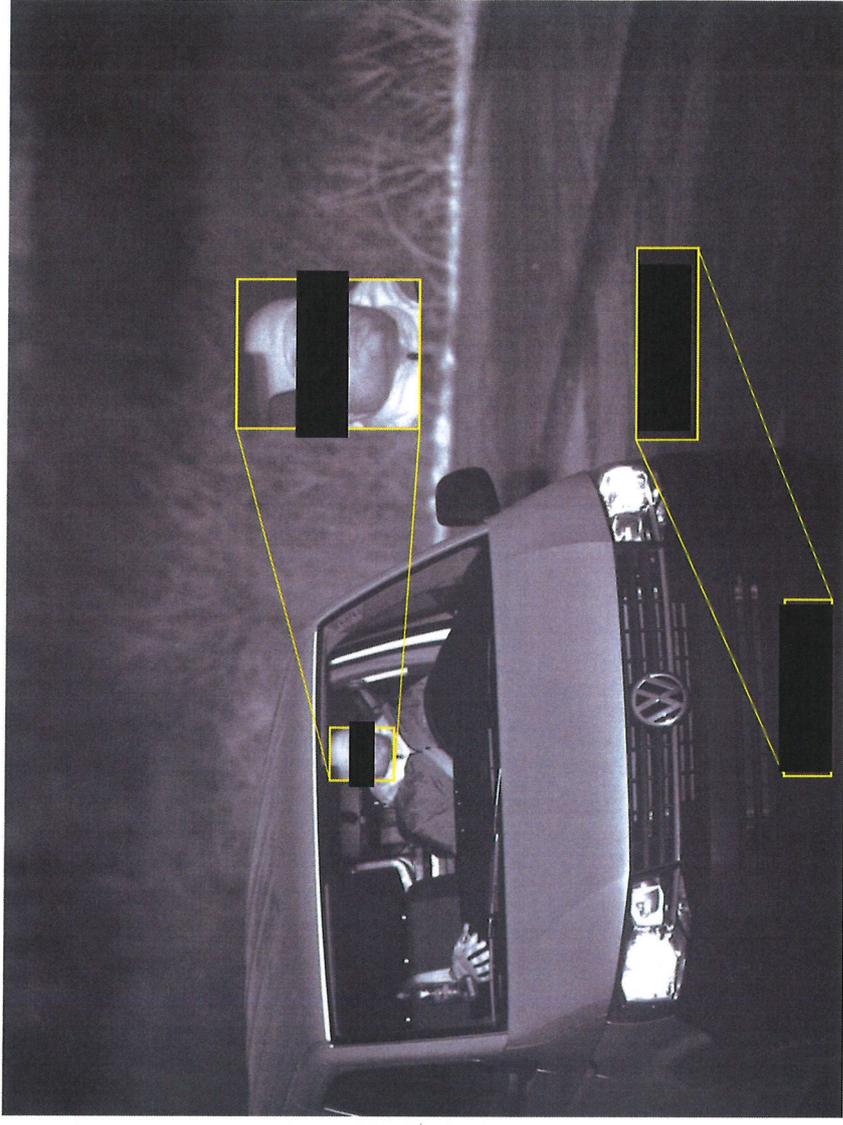
DSLR Camera



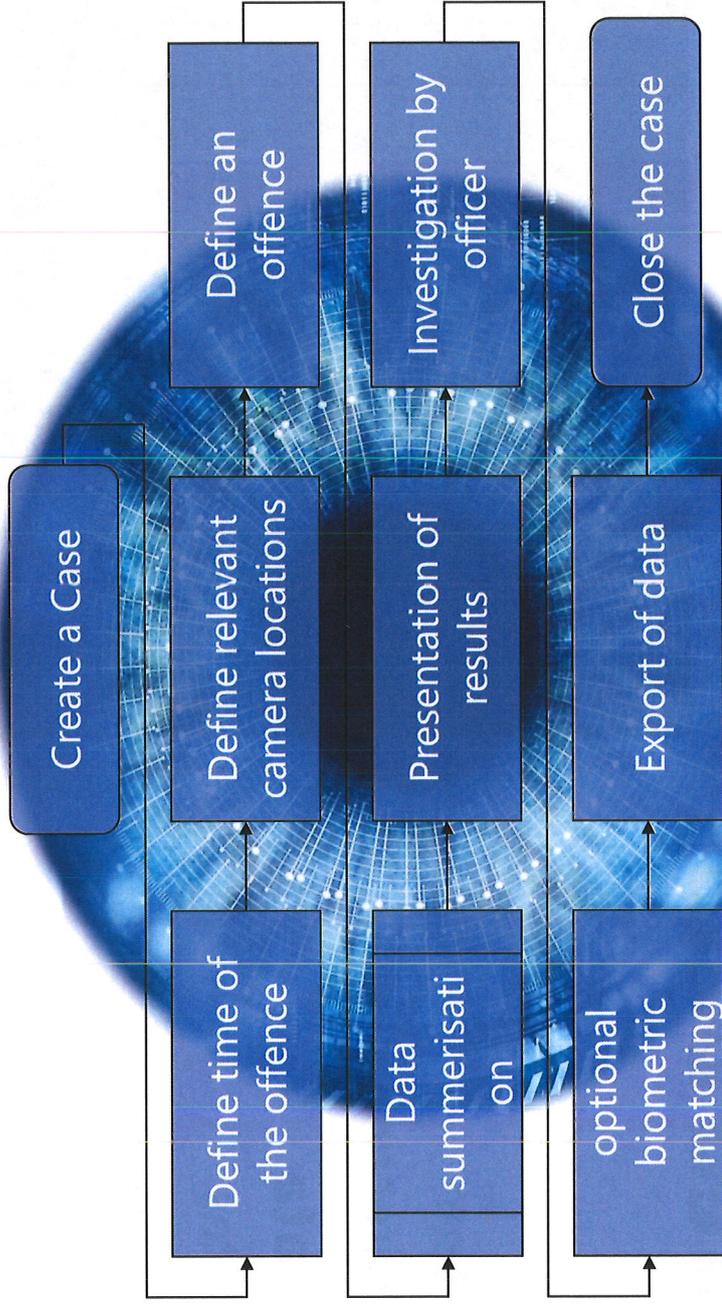
PerIS

## Acquired Data

- **Basic Data**
  - Video data
  - Date and time
  - Location/Direction
- **Extracted data**
  - License plates
  - Face positions
- **Optional**
  - Biometric face data



# Case-based investigation



# Presentation of results within a case

## Faces

- Synopsis of all detected faces in this case
- Presentation of thumbnail faces
- Context information to every face (location, time, video, other faces, license plates)

The screenshot displays the 'Detailsansicht Vorgang' (Details view Case) interface. At the top, it shows 'Vorgang 1' (Case 1) with 'Erstellung 69' (Creation 69) and 'Delikt' (Offense) '212 Totschlag' (212 Murder). The user 'admin' is listed with a creation time of '28.06.2022 14:49'. Below this, a grid of 103 thumbnails is shown, each with a 'STD0' label and a timestamp. The interface includes a 'Standorte Filter' (Location Filter) set to 'STD0', 'Volltextsuche' (Full-text search) options, and a 'Datum/Zeichelfilter' (Date/Character filter) for '28.06.2022' from '12:48' to '13:48'. The bottom navigation bar contains tabs for 'PERSONEN' (Persons), 'FAHRZEUGE' (Vehicles), 'CLIPS OHNE DATEN' (Clips without data), 'PERSONEN-KANDIDATEN' (Person candidates), and 'KENNZEICHEN-KANDIDATEN' (License plate candidates). A 'FAVORITEN EXPORTIEREN' (Export favorites) button is visible in the top right corner.

# Presentation of results within a case

- License plates
- Synopsis of all license plates in this case
  - Context information to every license plate (location, time, video, faces, other license plates)

Vorgang 1		Detailsicht: Vorgang		Delikt		FAVORITEN EXPORTIEREN	
111111/22/999999	28.06.2022 12:48	admin	28.06.2022 14:49	212	Totschlag	240	240
Erstellung 69						Kommentar	
Kennzeichen: 92 vor 92	13:30	28.06.2022	13:30	28.06.2022	13:30	28.06.2022	13:30
6	STD0	296	86	86	86	86	86
16	STD0	186	329	329	329	329	329
196	STD0	329	329	329	329	329	329
86	STD0	329	329	329	329	329	329
129	STD0	47	47	47	47	47	47
129	STD0	47	47	47	47	47	47
129	STD0	47	47	47	47	47	47
15	STD0	215	215	215	215	215	215
15	STD0	247	247	247	247	247	247
47	STD0	247	247	247	247	247	247
47	STD0	329	329	329	329	329	329
129	STD0	47	47	47	47	47	47

# Presentation of results within a case

**Vehicles**

- Synopsis of all vehicles with detected license plate in this case
- Context information to every vehicle (location, time, video, faces, license plates)

The screenshot displays the 'Vehicles' section of the FRONTEX I-DAYS interface. It features a search bar at the top with the text 'FAVORITEN EXPORTIEREN' and 'Kommentar'. Below the search bar, there are several filter options: 'Standardfilter' (checked), 'Textfilter', 'VOLLTEXTSUCHE', 'LAND', 'ORT', 'KAMERA STANDORT', 'STANDORT', 'Datum/Zeit-Filter', 'Von Datum', 'Bis Datum', 'Von Uhrzeit', and 'Bis Uhrzeit'. The main area shows a grid of video thumbnails, each with a timestamp and a 'STDO' label. The thumbnails are arranged in a 4x4 grid. The bottom navigation bar includes 'PERSONEN', 'KENNZEICHEN', 'FAHRZEUGE', 'CLIPS OHNE DATEN', 'PERSONENKANDIDATEN', 'KENNZEICHENKANDIDATEN', and 'CLOSE'.

