



Traffic monitoring system for Pardubice city with Hanwha ANPR camera and NumberOk

Hanwha Techwin Europe, FF Group and Telmo teamed up for the development and implementation of **Traffic Monitoring System** for **Pardubice** town.

Traffic monitoring and traffic management are both critical for successful urban traffic, municipal authorities and police. Pardubice, Czech Republic, such Traffic Monitoring System was implemented as a part of urban CCTV system.

WHO IS THE CUSTOMER?



- Pardubice town Municipal Authority
- Pardubice Municipal Police
- Ministry of the Interior of the Czech Republic

THE CUSTOMER'S TASKS FULFILLED:



1. The Municipality needs measure traffic flow in the city; careful real-time car count at critical points should be implemented based on the system they have 24/7, including transit cars moving through the city.



2. Municipal Police are interested in advanced car search, those suspected in activity or traffic violations. Data evidence based on number plates (photos) are basis for criminal detention or fines issuance.



3. The Ministry of the Interior is has a tool to compare all the detected plates in the town with the central (Criminal Police) database of stolen vehicles in Czech Republic and once a stolen car is matched, local police forces get an alert and command to act.

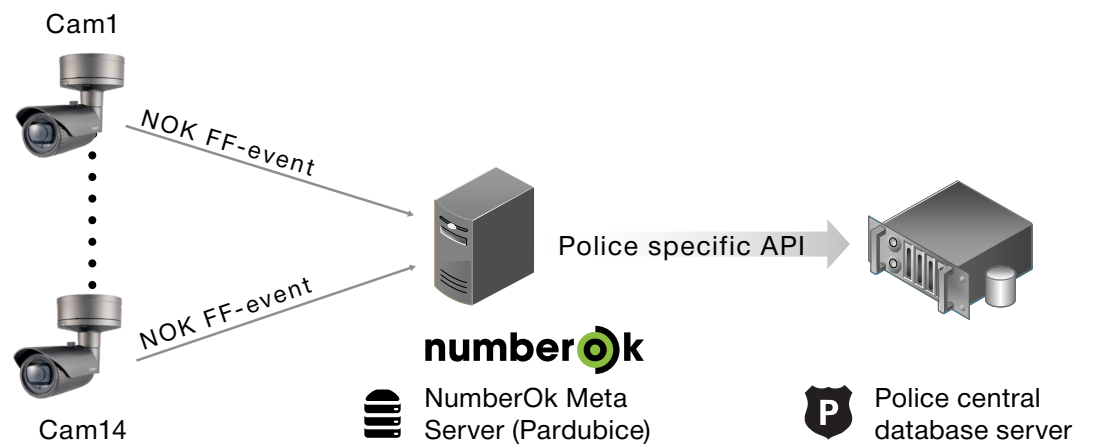


Czech Republic

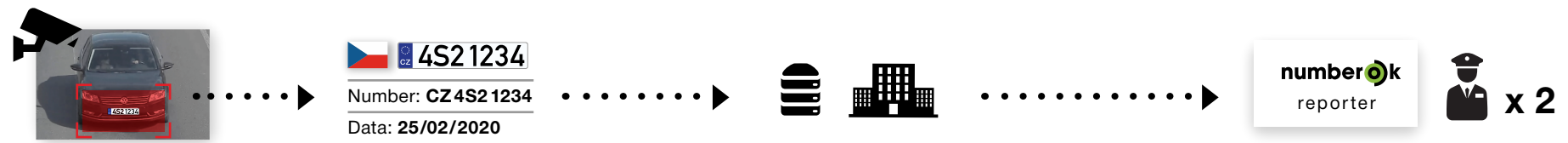
DESCRIPTION

- 14 smart cameras with embedded analytics allowing automated number plate recognition onboard the camera. ANPR algorithm also provides country-of-a-vehicle recognition. All recognized vehicle data is sent to the central database also with date and time of detection and full-size photo of the vehicle.
- Centralized software for ANPR data collection is installed at the police server. All the data is further sent to the central database of stolen vehicles located in the Ministry of Interior of Czech Republic.
- 3 remote client software pieces for remote connection to the database for local operators of the Municipal and State Police accordingly.

Pardubice. Technical status. Solution. General scheme

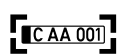


ROAD SAFETY DATA MAINTENANCE



- 1 Each smart camera captures number plates
- 2 Road safety data (number plate and its screenshot) are sent to the police server to a common central database of the town
- 3 Road safety data from Pardubice town database is automatically sent to the central database of the Ministry of Interior and matched with the data in the State (Criminal Police) database
- 4 All road safety data is available through the NumberOK Reporter remote client to for the Pardubice Police Chief and 2 Pardubice municipality representatives

SOLUTION ARCHITECTURE



Number Plate Recognition



Max. vehicle speed: up to 160 km/h

>95%

Accuracy: above 95%



Blacklist check



Reports are available «per period»



Traffic statistics collection and analysis

PROFESSIONAL COMMENTS:

“Such projects allow the police forces to prevent criminal activity legally, to fulfill the tasks according to the law and to protect public safety.

Collected information can help police in investigation of missing or wanted persons, criminals or stolen vehicles, which also means also fulfilling the tasks of the Department of Inner Order and Safety of the State Police”

Jan Ptáček,
Director of Regional Police Department,
City Surveillance System in Pardubice

“One of the key factors for the city is that it is not a random car counting, but a whole-year continuous data collection, which we are doing 24/7. Therefore, we are able to decipher, from where and where to the cars are moving in the city, in at which time periods of the day, we are also very interested in transit transport flows or how many cars are entering and exiting the city every day. Moreover, it also helps us to understand why there are traffic jams in some parts of the city, and based on these statistics we can easily find out how to solve these problems”

Petr Kvaš,
Deputy Chief of the Municipal Police
for Transport Department, Pardubice town

“The particular data is saved in the central storage, so the collected gathered information is secured against abuse. We are not able to connect the number license plate with the owner of the car - neither we are competent to do it, nor it is not our goal. For us it is most important to know what is the traffic dynamics, and number license plates are and for us only the source of the statistical information”

