
UNIVERSAL MOBILE COMMUNICATION AND INFORMATION NETWORK WORKSTATION

UniMoCom Network®

BASIC DESCRIPTION AND SPECIAL APPLICATIONS

OVERALL DISCRIPTION OF UNIMOCOM NETWORK®

The product of UniMoCom Network® are communication and informative systems, primarily assigned for users who are working with real-time information, receiving and evaluating data streams, with need of taking immediate decisions and for the purpose of further analysis and a possible statistic processing.

UniMoCom Network® is the complex software and hardware system, which is solving dynamic creativity and communication control of a net and net key points.

Net key points are movable working sites (cars,..) and stationary working points (desk computers and laptops).

Any net point is able to work independently, or can be controlled by a crew.

All net key points are able of real-time processed records of visual, audio and telemetric or others digital information, from all connected installations.

Any configuration of all net points is flexible (cars included) and modular, one usually consist of a very competent computer, high capacity memory blocks, touch display of a visual record unit, digital cameras, communications technique act.

Data transmissions among system net points are done inside the virtual private net (VPN) by specifically created software.

Data relays are done in real-time mode. The system is optimizing the data speed transfer and amount of information, dependably on the net capacity.

The UniMoCom Network® system is using for communication all accessible communication technologies, as for example HSUPA, HSDPA, WIFI, LAN,...., the system VPN can consist of various net combinations. For exact positioning there is used GPS or dGPS.

The UniMoCom Network® system is avoiding network congestion by optimizations of the data transfers, so the delay of transferred data is not larger as it defined in the technical guarantee announcement.

The UniMoCom Network® system is able to find a different data rout in a case of a temporally any data line black-outs.

BASIC ATTRIBUTES OF UNIMOCOM NETWORK® SYSTEM

In the UniMoCom Network® system is **allocated** to every point a unique identifier, exact characteristics and exclusivity.

In such way is possible to define any **group of network points**, with similar characterization.

Any system point can **receive, display and put in memory** any information from any one or from others net points in the same time.

For a crowd of any net point is possible to adjust their own **access settings** for any information, in local settings or data streams from other net points.

It is also possible to **review** in any net points locally recorded data or to download any data from memory space of other net points, if the speed of net data transfer is allowing it.

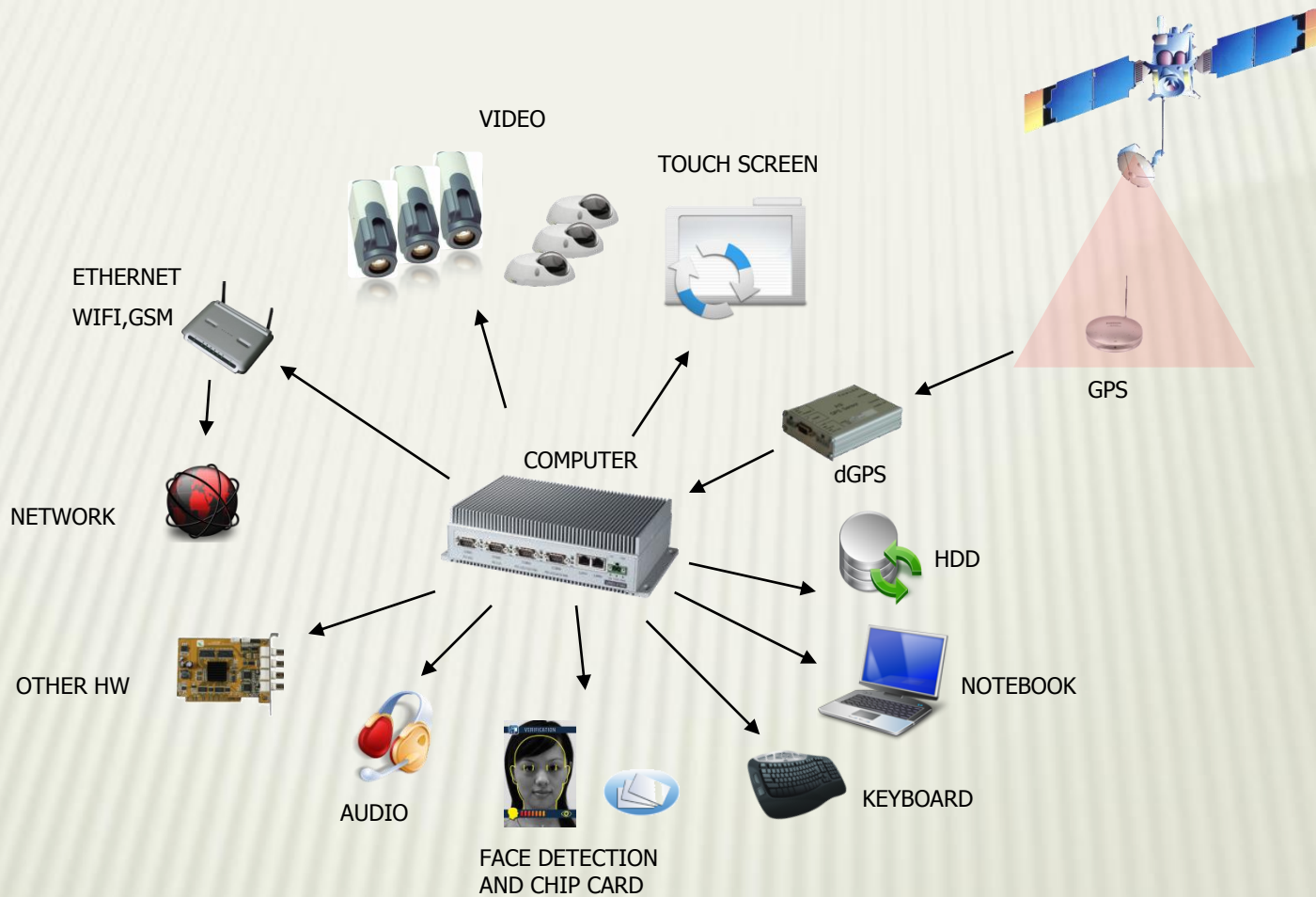
Any review and processing of download data is possible **only and only** with UniMoCom Network® software. Because of **security** reasons it is not possible to review or to process data with any other software.

Any information are downloaded in **special data format** of UniMoCom Network®. For any data format are set, included downloaded information, also names of net points, which were recording this information, plus dates and hours. If the recorded net point is a car, there is also additional information of the position and speed of the recorded vehicle.

Such data is possible to keep in a memory for **a time of ... days** (for how many days is stated by competent offices responsible for the net supervision). The system automatically deletes any dates older then is allowed to have for safekeeping.

The UniMoCom Network® system is created as a **Windows®** operational system, this allows to open any windows based programs.

EXAMPLES OF POSSIBLE SETTINGS FOR MOVABLE KEY POINT – CAR



Windows®



UniMoCom Network® SW



User software



APPLICATION – PUBLIC TRANSPORT AND OTHER TRANSPORTATION SYSTEMS

Application of UniMoCom Network® for public transport is using in whole scale all abilities of the UniMoCom Network® system, mainly a visual display of inside of vehicles by already installed cameras, downloading of camera records and other record of other information directly from any transport vehicle, relay of this information in video and audio form directly to central control rooms and to control vehicles, also offer information of exact positioning and speed of any vehicle or any telemetric information in real-time mode and in all direction at the same time. The transmission is realized by all available, at the time and the place of transmission, data nets.

The system of UniMoCom Network® is can be installed in busses, trolleys, trams, trains, control vehicles, atd...

The system of UniMoCom Network® is used for public transportation is able to :

- ❑ Increase safety for passengers.
- ❑ Increase safety for drivers.
- ❑ Increases drivers comfort during driving. This is done by monitoring the surroundings of vehicles, inside of doors during getting on and off of passengers, reporting of critical situations to operational room, to security department, police,..., for such reports is inside any vehicle installed push button PANIC.
- ❑ Monitoring of any vehicle from the operation room, monitoring of the inside of several vehicles at the same time (full loudness,...), monitoring of the traffic density by vehicle cameras, from dispatch vehicle, control of the traffic situation during road repairs and traffic incidents.
- ❑ On-line connection to police operations rooms and hospitals, full data information to both operational rooms.
- ❑ Evaluation of data records for criminal solutions – cooperation with police (conflict among passengers).
- ❑ Evaluation of data records for solution of commercial crime, (destruction of transport facilities).
- ❑ Data record evaluation in case to traffic and non traffic accidents.
- ❑ Decreasing of a destruction of a transport company property, delinquency and crime prevention.
- ❑ Direct check of traffic company employees.
- ❑ Search for individuals by Face Detection method, on-line transmit ion with police operations room or any other.

DRIVER WORKING PLACE

UniMoCom Network® 22.07.10 [p]

X

Cam0 @ e7917 (Zoom 100%) 01 0-07-22 08:38:49

Cam3 @ e7917 (Zoom 10)

Cam4 @ e7917 (Zoom 10)

Cam5 @ e7917 (Zoom 10)

t6606

t6606 [37 km/h]

Ready

PANIC

LOGOUT

RECORD

PLAY

LAYOUT

PHONE / CHAT

ARCHIVE – ANALYSIS AND EVALUATION

UniPlayer - Archive from 05.06.2010 07:58:00.000 to 05.06.2010 08:05:01.000

Pohľad z voz. 4 a 2C1D 36 06 07:58:00C

Dvere z 2E10 06 0C 07:58:00

Miestor c. 20 C C6 05 C7 53:30

Dvere z 2310 0C C6 07:58:00

Miestor c. 2 30 C C6 05 C7 53:30

Dvere z 4E10 06 0C 07:58:00

t6606

t6606 (20 km/h)

05.06.2010 07:58:30.343

07:58 07:59 08:00 08:01 08:02 08:03 08:04 08:05

05.06.2010 07:58:00.000

Prev Int Next Int

05.06.2010 08:05:01.000

Ready

APPLICATION – POLICE

Application of UniMoCom Network® for police forces is using in the whole scale all UniMoCom Network® system properties, mainly transmission of video and audio information, plus additional information about any car position and speed, all in the real-time mode and also among all vehicles and all defined directions at the same time. Such connection is used by accessible communications channels available in time of communication.

The UniMoCom Network® system is giving to police forces following possibilities:

For Police Headquarters :

- Direct check-up and control of subordinates units.
- Protection of citizens and police members.
- Reduction of corruption.
- Economical evaluations and use of - service vehicles, working time ,... .

Executive functions for police control:

- Central and decentralize supervision and control, in definition of rights and priorities of responsible persons.
- The dynamic centralized control of the whole system structure.
- On-line transmission of video and audio dates, information of location and vehicle speed,..., in real-time regime, between all vehicles, system operators and other responsible officials (Police Headquarters, Mr. minister,..).
- During any police action it is possible for any car crew, which is coming as a reinforcement or not, to look at video information about the situation thru any cameras of any vehicle already participating the deployment. It is also possible to control deployment of vehicles, their positioning and the best way of further action.
- Permissions and priorities for any responsible person is set in accordance for already existed protocols (the commander of the police intervention, the police president,...).
- Dispatching centers and other rightful operational centers of all levels (district, county, ministry...), are able to communicate on-line.
- Dispatching centers are able to control cameras in any vehicle (if the camera hardware permitting such function).
- Dispatching centers and other rightful operational centers are able to download all information of their choice (to every workplace can be allocated different information).
- The system is able to recognize car plates, face reorganization, speed detections (all this information for 2 traffic lane in front and behind any police car at the same time),... .
- Memory system in a car is downloading all information around the vehicle.
- Download of information is possible to process in time synchronizing reconstitution, for future need of data evaluation-quality of police action, low aspects, insurance issue act...
- System is able to do synchronized deployment, in case of a priority escalation, act...
- System allows parallel usage by all elements, for example by fire brigade, rescue system, sport areal, early warning system, not movable city cameras..., and their dynamics connections into unified information and control system, in accordance of immediate need.

POLICE OPERATION CENTER

UniMoCom Network® 06.09.10 [p]

Cam0 @ a2363 (Zoom 100%)

Cam0 @ hax56 (Zoom 100%)

Cam0 @ a2361 (Zoom 100%)

Cam0 @ t6606 (Zoom 100%)

Cam0 @ a2359 (Zoom 100%)

No car selected

PANIC

LOGOUT

RECORD

PLAY

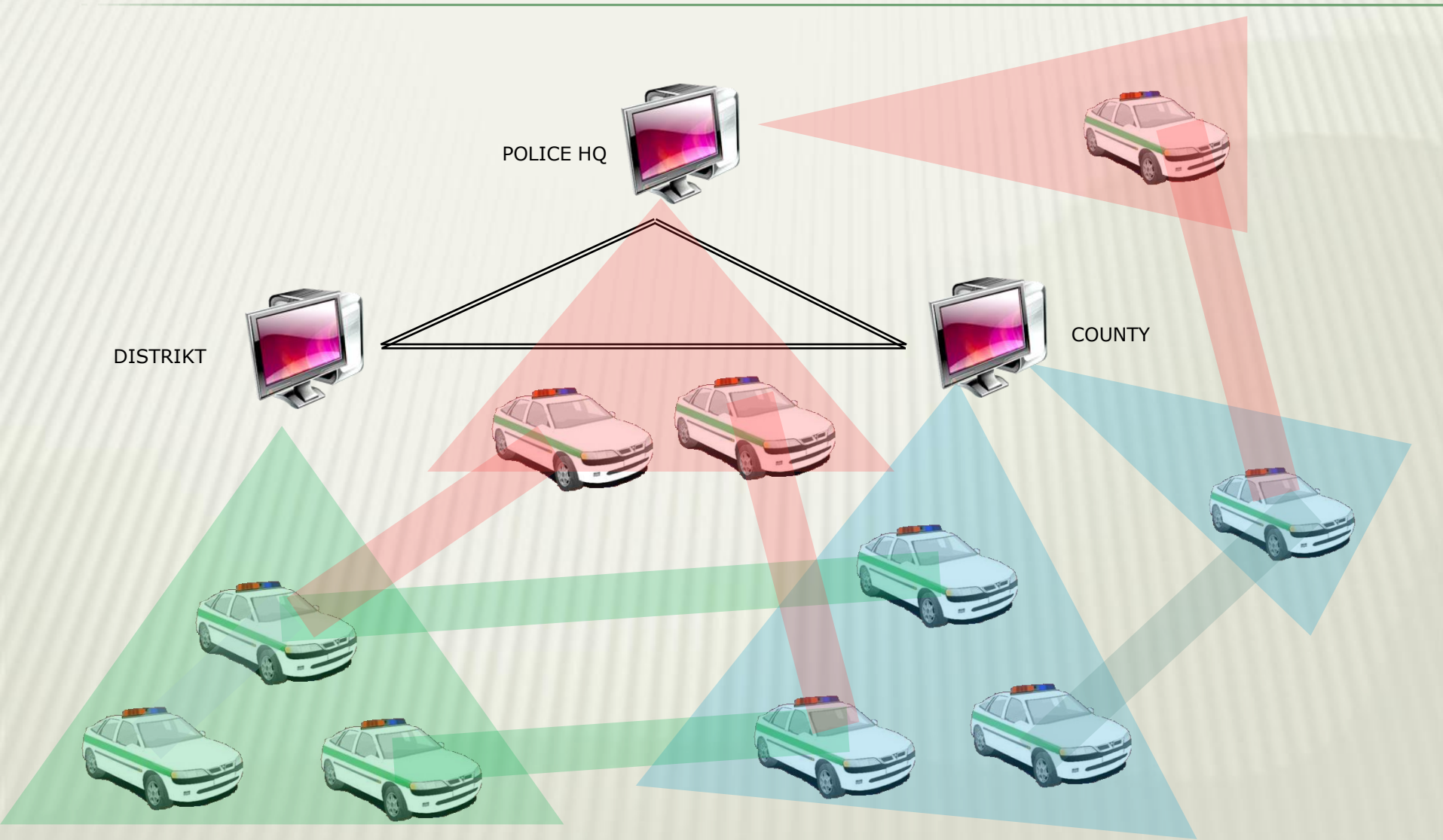
LAYOUT

PHONE / CHAT



R

INTERACTIVE COMMUNICATION AMONG CARS AND OTHER CENTERS



APPLICATION FOR FIGHT AGAINST TERRORISM, SEARCH AND MONITORING OF INDIVIDUALS

A further application of UniMoCom Network® for search of individuals and fight against terrorism is using the basic function of UniMoCom Network®, and that is transfer of visual information in real-time among all net points : movable working places (vehicles), working autonomously and stationary a fix working places of various level of servicing and supervisions.

Applications are using implemented interface system for UniMoCom Network®, software for face detection.

The Face Detection software can be in used together with any other system on any available computer as a part of UniMoCom Network® system, that mean in all vehicles, Dispatching centers, control center and supervising systems, automat sided working places without crew and act.

Every workplace with installed Face Detection software can have its own database of suspicious (or looked for) persons, completely independent to other databases.

All workplaces can dynamically defined they own resources of visual information from the wholly layout of UniMoCom Network® net points , and in such way allocated cameras (that mean no necessity of its own cameras for the working place with running Face Detection).

Example no. 1. Airport :

Efficient, autonomously working net point of UniMoCom Network® system is able to provide face detection in open areas of airfields (halls, parking places,..), the reaction forces of the airport can be monitoring only several places of choices, (or they can be different in various timetable) for primary visual information, (cameras in airport busses, next to frame detectors,..) act.

Example no.2.-monitoring of hooligans at football matches:

Dispatching centers of police where are using software of the Face detection will choose as the information source, cameras of net points working in UniMoCom Network® system, for example at a railway station, in city streets, in public transport system, in police cars and in any football stadium. In such way is possible continuously follow movements and activities of fans, or to identify individuals with forbidden access at the football stadium or other troublemakers. With the software of the Face Detection can be such procedure followed up by all crowd of police all participated vehicles. At the same time is face detection used by security services responsible for the football stadium and also for monitoring in the football stadium auditorium.

Example no.3.-monitoring of individuals by police cars monitoring system during increase danger of terroristic attacks:

Police vehicles equipped with computers and cameras of UniMoCom Network® system can be dispatched on strategic locations in set areas (even different cities). At the same time is at the Dispatching center running the Face Detection software. Visual information sources are cameras installed in this positioned cars. The Face Detection software can be used at the same time in all police cars, in such way is increased the success of the whole search operation.

The Face Detection software can also work with archived visual information downloaded by UniMoCom Network® system.



The Face Detection software can be enlarged for further detections – search for potentially dangerous object such as put away hand packs, parcels,..., or in public transport systems act...

DETECTION OF INDIVIDUALS IN PUBLIC TRANSPORT SYSTEM

UniMoCom Network® 18.10.10 [p]

Face Recognition

Time	Host/Cam	Name	Score
14.10.2010 14:43:38.342	unimocom1 Ca...	Peter	0.974735
14.10.2010 14:43:40.321	unimocom1 Ca...	Peter	0.729938
14.10.2010 14:43:41.332	unimocom1 Ca...	Peter	0.639125
14.10.2010 14:44:35.852	unimocom1 Ca...	Milan	0.502108
14.10.2010 14:46:26.936	a4842 Cam#4	Milan	0.513187
14.10.2010 14:47:46.457	unimocom1 Ca...	Milan	0.580977

Probe:  Match Reference: 

Name: Not recognized
Score:

UniMoCom UniMoCom UniMoCom

Powered by Cognitec

APPLICATION – INTEGRAL RESCUE SYSTEM

Application of UniMoCom Network® in context of the integral rescue system made possible united and bring into effect real-time communication among all integral parts of any rescue system. That is between fire brigade vehicles, police, hospitals and appropriate operational centers, government crises management operation centers included.

Vehicles (ambulances, fire brigade, police), equipped with UniMoCom Network® system are able of data transmission and recording of video and audio information, information of positioning and other digital data from any equipment installed in vehicles.

All transmitted data are in real time mode and are received not only by all vehicles, but also appropriate operational centers and is possible to watch it at the same time from any other working place with appropriate access privileges, as it is very important in case of mass accidents.

For example in a hospital department they can made all necessary preparations for a new patient, data can send to consulting doctors, act...

During the deployment it is possible for any car crew to observe the situation in the place of their future deployment from cameras of already deployed vehicles and prepare for new eventualities.

Access privilege and access priority of any person is set by the authorization protocol in accordance of the time such person started to control the deployment.

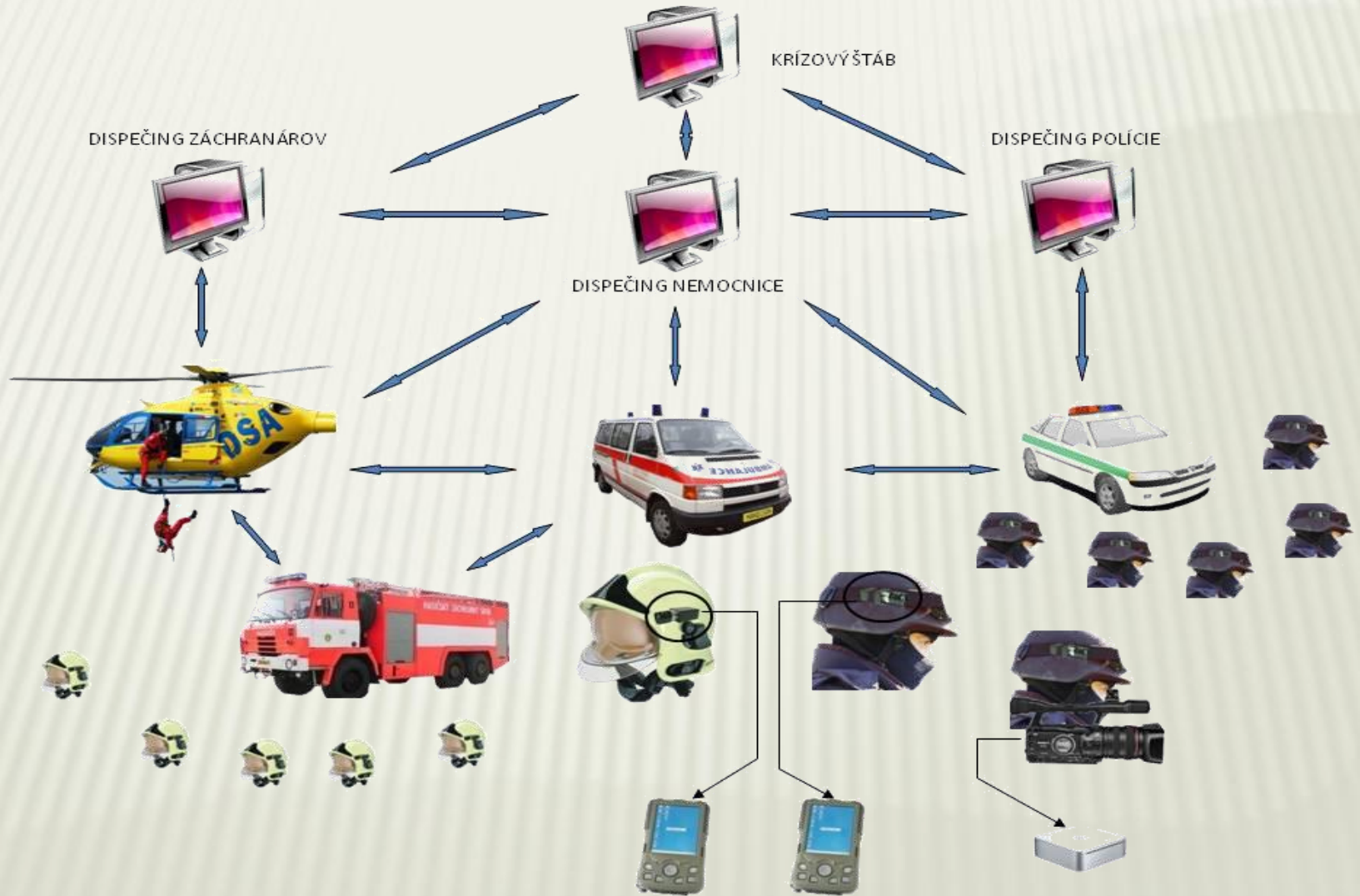
Dispatching centers and other authorized centers of all levels (district, county, ministry,..), can communicate on-line.

Dispatching center can control cameras in vehicles (if there is installed appropriate hardware).

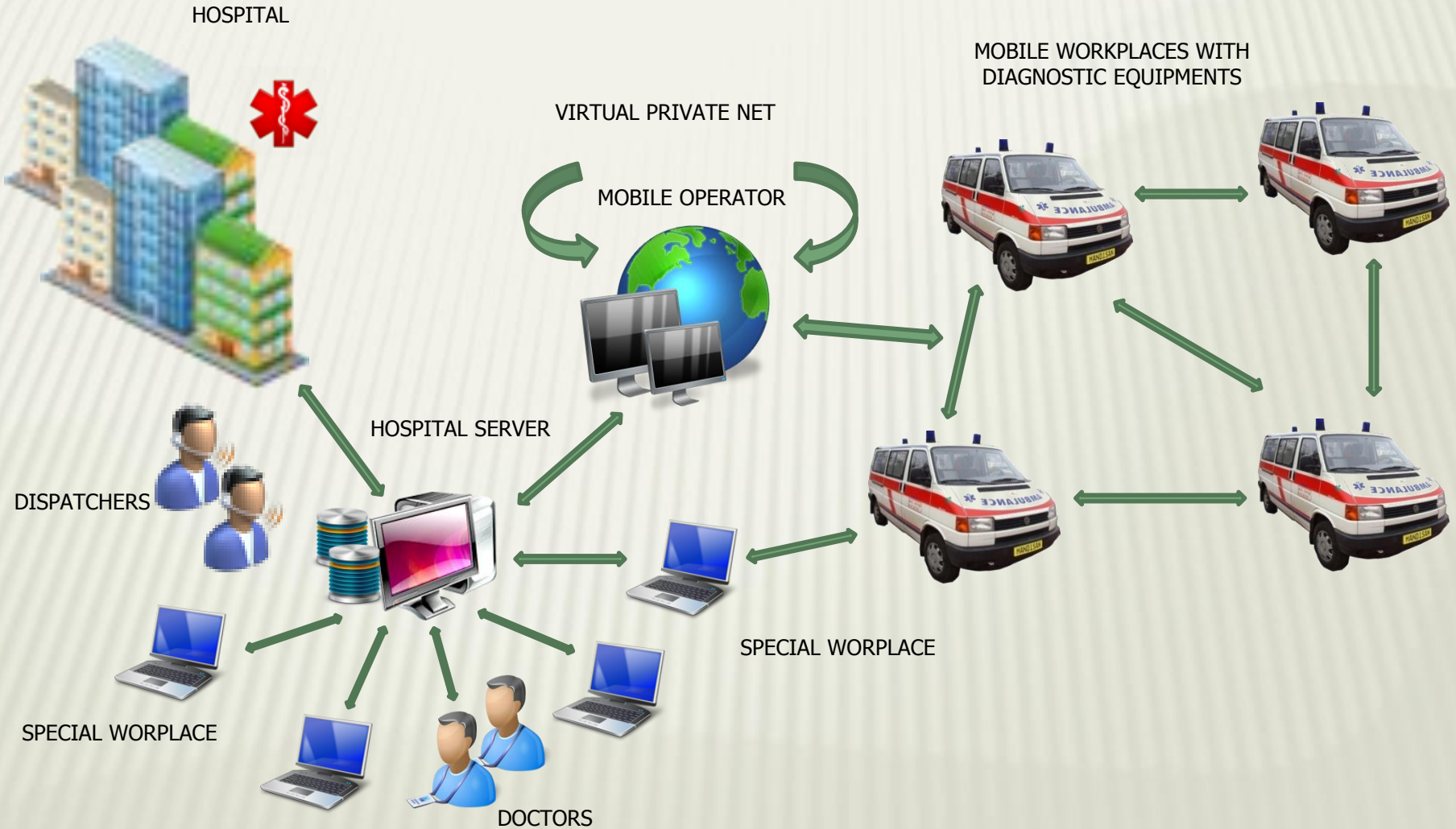
In this way is possible for operational centers to download all information of their choice, (every working place can download different data).

From archived data is possible to made time synchronized assessment, for evaluation of deployment quality, law aspects, preparation of legal grounds, act...

RESCUERS



HOSPITAL



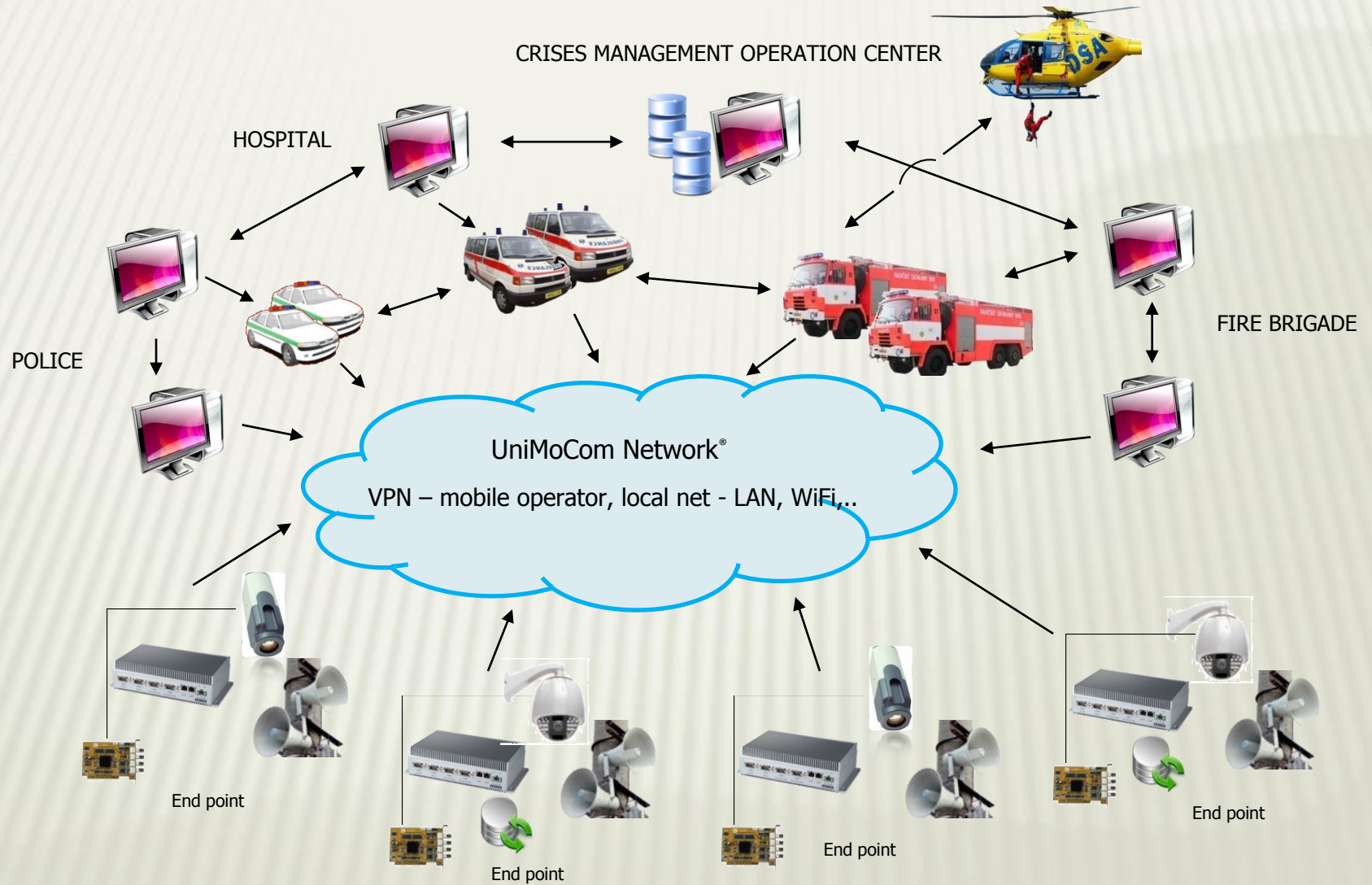
APPLICATION – SYSTEM OF EARLY WARNING

Application of UniMoCom Network® system for Early Warning is putting together all benefits of UniMoCom Network® - allowing transfer of data flows, visual and audio information in real time in all defined directions at the same time through all available transmission channels in set time and set places of physically sited intelligent end equipment.

System of Early Warning of UniMoCom Network® is able:

- ❑ Centralized and decentralized control of already existed system, in accordance of definition for settings to every user and other priorities
- ❑ Dynamical settings of priorities structure and distant control of terminal devices or of the whole system.
- ❑ Ability to use all available transmitting channels without necessity of their creations, (network of mobile operators, local data networks,...).
- ❑ Initiation of forwardly prepared acoustic warning signals, switch off/on of other warnings systems (alert sirens, oscillation beacons,...).
- ❑ Direct transmission of vices messages in real-time mode from control workplaces, in accordance of priority (crises management of the state, control district places, county, police, rescue workers, act...).
- ❑ Reading of digital information from all attached peripheral terminal equipments (sensors, sensing devices,..), as is transmission of video and audio information in accordance of the demand of any user, of course such access depend on the user authorization.
- ❑ Send off of defined messages (SMS, e-mail,..).
- ❑ Multiple use of the system, primarily for Early warning system and also for non crises situations, as security and safety monitoring system and recording system with possibility of direct voice warning in case of wrong-doing, offences or criminal activities.
- ❑ System is able set for differentiation, priority reaction in areas of increased exposure of danger or the highest criminal activities, act...
- ❑ System is possible to use in parallel way by all users, police, fire brigade, rescue teams and it is able of dynamic connection of all existing systems in one informational and control system.
- ❑ Possibility of overall use of video and audio devices from all reaction vehicles with installed UniMoCom Network® system (police, rescuers,..).
- ❑ Timely coordinated processing of already archived information downloaded from all connected devices -such device had to had settings for downloading of processed information (end system points, centers of crisis management, rescue operations centers,..., all dynamic downloads of different authorized workplaces), for needful evaluation of work quality and quantity, law aspects of crises situations and creating support information for insurance, act...

SYSTEM OF EARLY WARNING – POSSIBLE CONNECTIONS



APPLICATION - COMPLEX AIRFIELD PROTECTION

Application of UniMoCom Network® for complex airfield protection is using in the whole scale all UniMoCom Network® system properties.

Mainly it is displaying, evaluation and archiving of records from airfield cameras, transmission of video and audio information from all airfield vehicles to the competent control room and process in real-time mode further information from other security points to all authorized sites at the same time (included police, rapid reaction forces,..) through accessible transmissions channels at the same place and time.

The project of UniMoCom Network® for airfield protection is ensuring connection of security points to one system.

This system is hardware and software system with high level of modularity, with further possibility of system enlargement.

Hardware base of the UniMoCom Network® system consist of various computers connected in a virtual private network (VPN).

It is possible to use any powerful computers systems, or autonomous industry computers of standard computers operational rooms (desktops, notebooks, ...)

To every computer are connected exactly defined airfield security elements.

Hardware elements of the UniMoCom Network® system are usually put in a central dispatching center and other operational rooms for specify activities – building control centers, rescue units, the custom and passport checking control, fast reaction units, airfield HQ...

Hardware elements can be placed also in any airfield vehicles, for example in busses, plane trailers, fire protectors vehicles, ambulances...

UniMoCom Network® system allows to create a archive of all entering information, every workplace can set what information should be put in the archive.

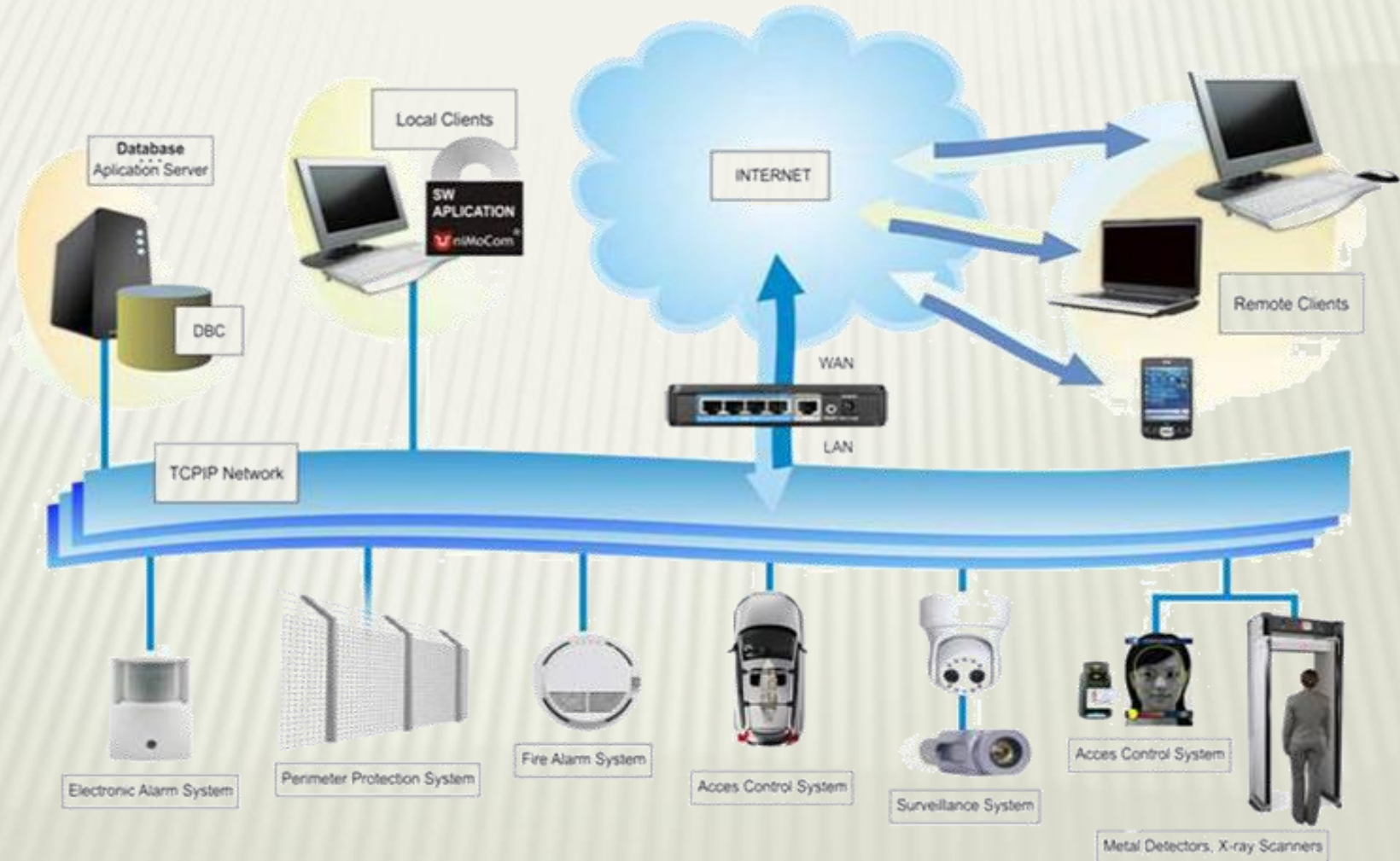
APPLICATION - COMPLEX AIRFIEL PROTECTION

The use of the UniMoCom Network® system for the complex strategic object protection is providing this services:

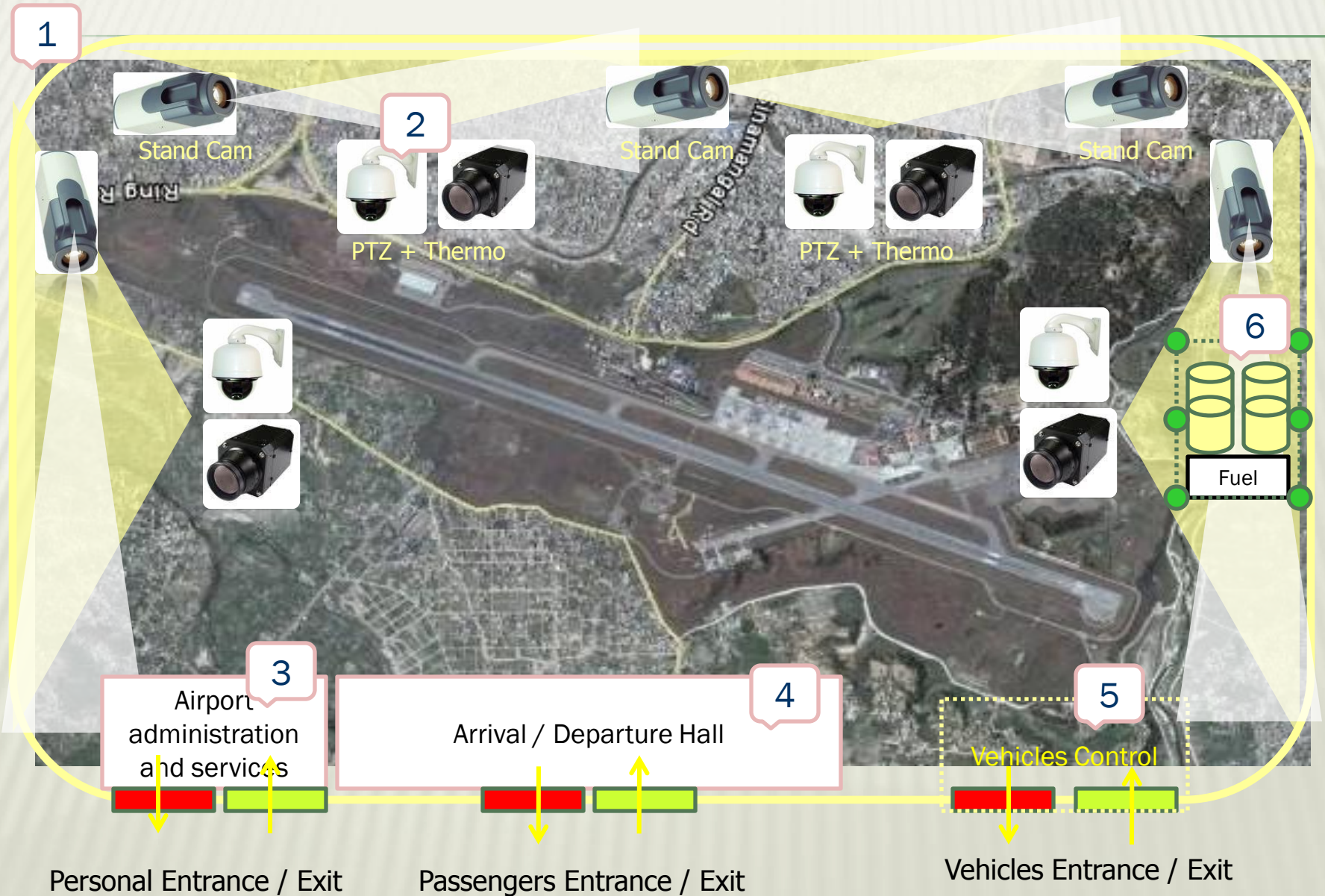
- ❑ Cameras system for displaying the outside and the inside premises of the strategic object, combined with movement detectors and night vision.
- ❑ Full video record from all cameras, creation of a video archive with the possibility of synchrony outplay.
- ❑ Detection of individuals in a large crowd with possibility of monitoring different individuals with predefined system reactions.
- ❑ Personal identification of individuals is possible to make in different computers connected in the UniMoCom Network® system at the same time, with possibility to compare such person with available databases of wanted persons with dynamically changeable view from various points in the object from all available cameras with no differences to the computer where is done the monitoring.
- ❑ To the computer UniMoCom Network® system are connected all security systems of the strategic object , for example scanners, frame passengers detectors, luggage detectors, ...
- ❑ To the system it is possible to connect additional security electronics components of the airfield area, for example safety fences, traffic control car plate recognize included with adding of a barrier opening, fire protection systems,...
- ❑ All information from this components are recorded and send to all competent working places in real-time mode.
- ❑ Control of movement and immediate positioning of all employees, access control of doors by biometric face detection or other biometric setting, dynamic access policy for restricted areas, an evaluation of employees performance from archived information, ...
- ❑ The UniMoCom Network® system is giving to the strategic object management direct possibility of a employees check, that is dynamic creation of control structures for crises management.

- ❑ Application of the UniMoCom Network® system in vehicles (fire brigade, trucks, technological vehicles...), make possible also further activities for increasing of control effectiveness of traffic control with video and audio transmission between vehicles and control rooms in reel-time mode.

COMPONENT SETTINGS FOR AIRFIELD PROTECTION

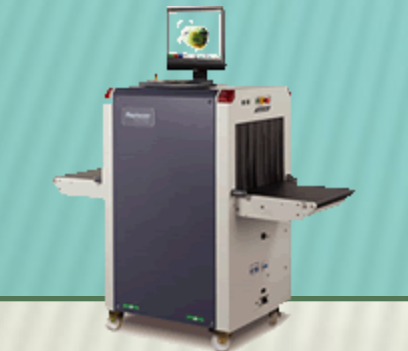
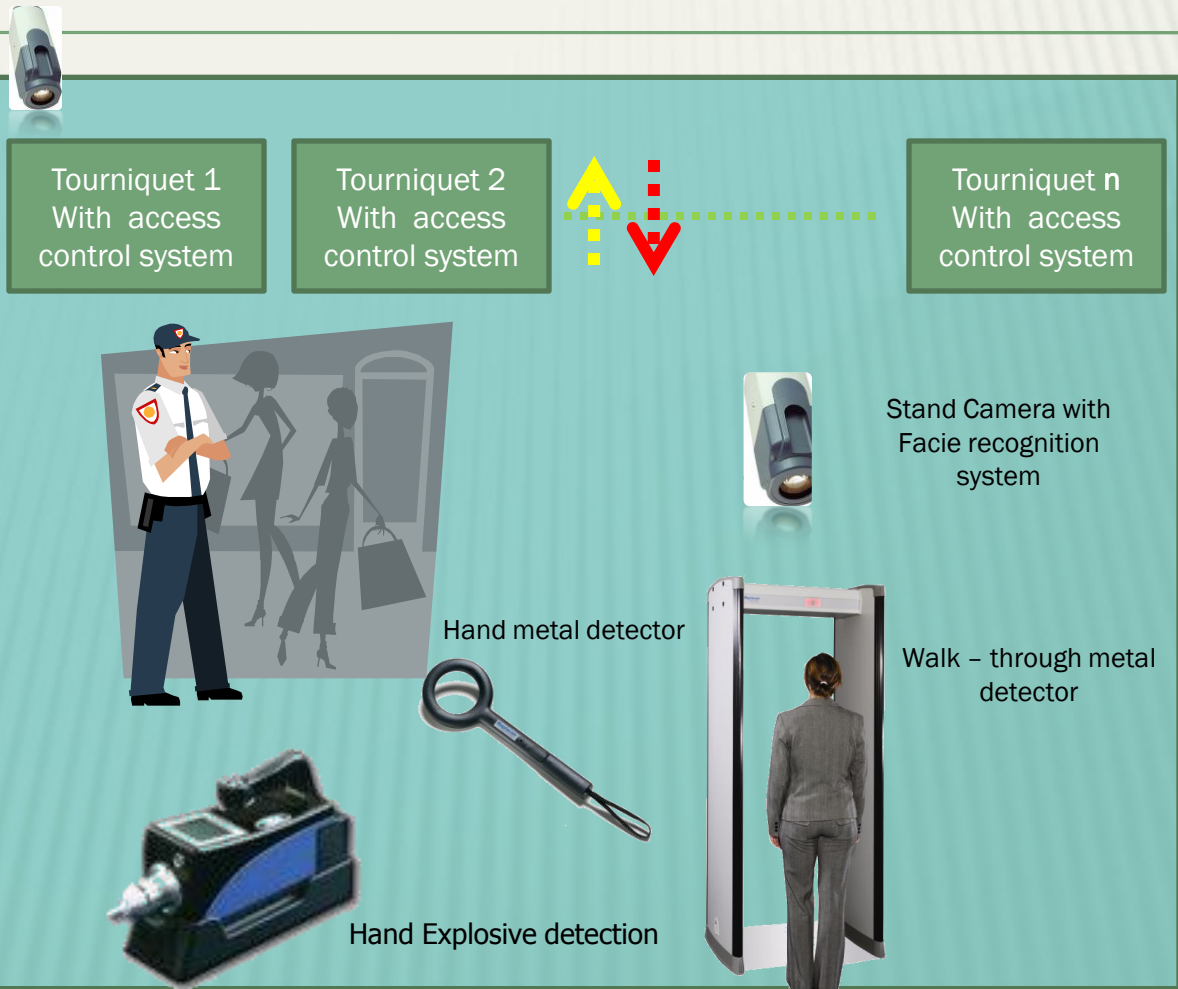
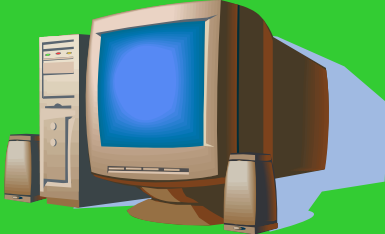


INTEGRAL AIRFIELD SECURITY SYSTEM



PASSENGERS AND LUGGAGE CHECK

Airport guard and visitors evidence



Checkpoint X-RAY screening



Personal Entrance / Exit with automatic lock door

APPLICATION - COMPLEX PROTECTION OF STRATEGIC OBJECTS

Application of UniMoCom Network® for complex protection of strategic object (power plants, government buildings,...) is using in the whole scale all UniMoCom Network® system properties.

Mainly it is displaying, evaluation and archiving of records from buildings cameras, transmission of video and audio information to the competent control room and process in reel-time mode further information from other security points to all authorized sites at the same time (included police, rapid reaction forces,..) through all accessible data channels at the same place and time.

The project of UniMoCom Network® for strategic object is ensuring connection of security points to one system.

This system is hardware and software system with high level of modularity, with further possibility of system enlargement.

Hardware base of the UniMoCom Network® system consist of various computers connected in a virtual private network (VPN).

It is possible to use any powerful computers systems, or autonomous industry computers of standard computers operational rooms (desktops, notebooks, ...)

To every computer are connected exactly defined security elements.

UniMoCom Network® system allows to create a archive of all entering information, every workplace can set what information should be put in the archive.

Hardware elements of the UniMoCom Network® system are usually put in a central dispatching center and other operational rooms for specify activities – building control centers, fast reaction units, buildings directorate ...

Hardware elements can be placed also in any strategic object vehicles, for example in fire protectors vehicles, tracks, technological vehicles...

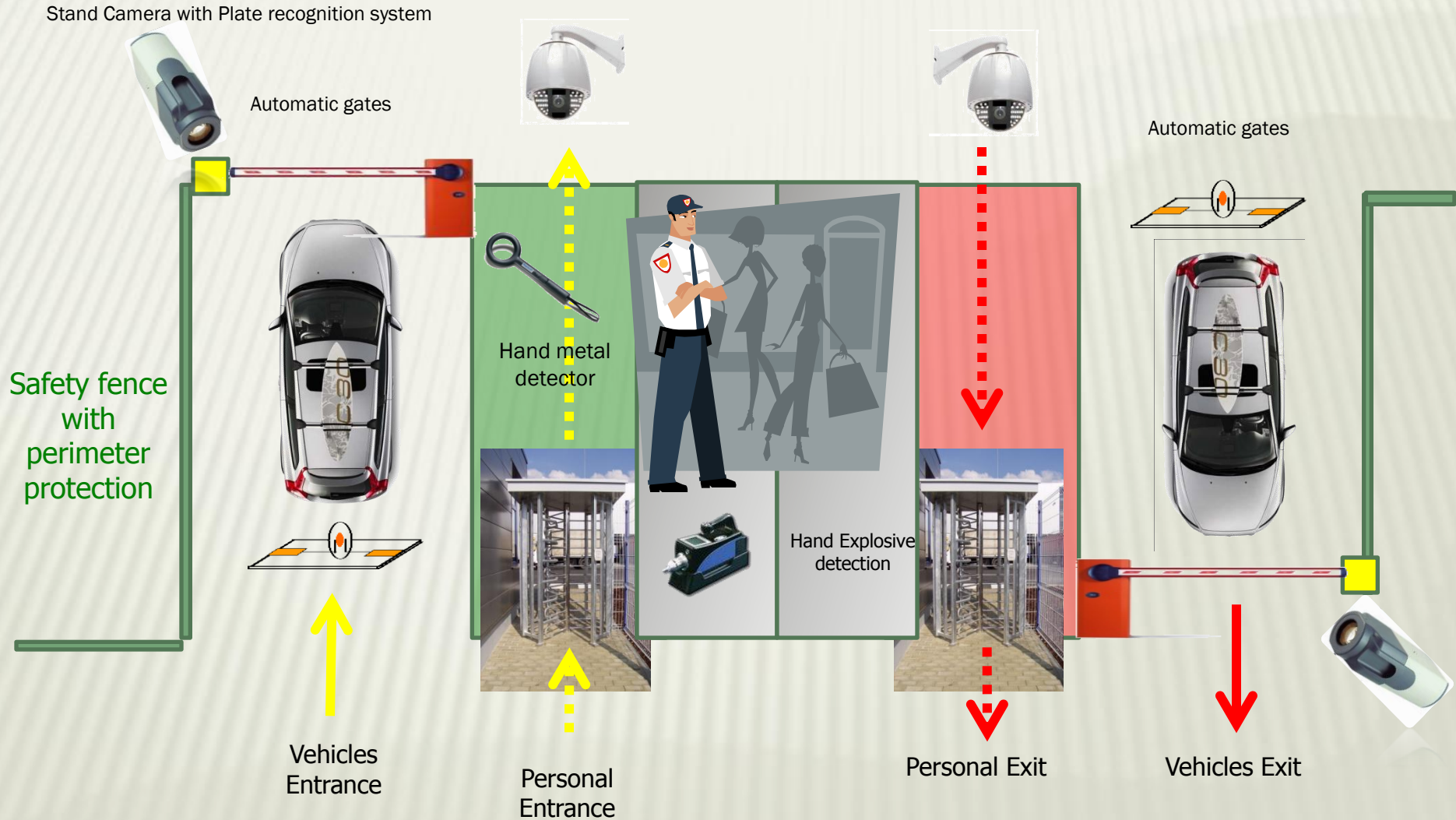
APPLICATION - COMPLEX PROTECTION OF STRATEGIC OBJECTS

The use of the UniMoCom Network® system for the complex strategic object protection is providing this services:

- ❑ Camera systems for displaying the outside and the inside premises of the strategic object, combined with movement detectors and night vision.
- ❑ Full video record from all cameras, creation of a video archive with the possibility of synchrony outplay.
- ❑ Detection of individuals in a large crowd with possibility of monitoring different individuals with predefined system reactions.
- ❑ Personal identification of individuals is possible to make in different computers connected in the UniMoCom Network® system at the same time, with possibility to compare such person with available databases of wanted persons with dynamically changeable view from various points in the object from all available cameras with no differences to the computer where is done the monitoring.
- ❑ To the computer UniMoCom Network® system are connected all security systems of the strategic object , for example scanners, frame passengers detectors, luggage detectors, ..,
- ❑ To the system it is possible to connect additional security electronics components of the airfield area, for example safety fences, traffic control car plate recognize included with adding of a barrier opening, fire protection systems,...
- ❑ All information from this components are recorded and send to all competent working places in real-time mode.
- ❑ Control of movement and immediate positioning of all employees, access control of doors by biometric face detection or other biometric setting, dynamic access policy for restricted areas, an evaluation of employees performance from archived information, ...
- ❑ The UniMoCom Network® system is giving to the strategic object management direct possibility of a employees check, that is dynamic creation of control structures for crises management.

- ❑ Application of the UniMoCom Network® system in vehicles (fire brigade, trucks, technological vehicles...), make possible also further activities for Increasing of control effectiveness for traffic control with video and audio transmission between vehicles and control rooms in reel-time mode.

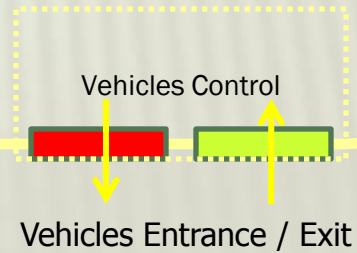
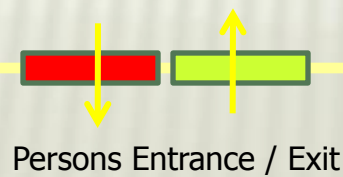
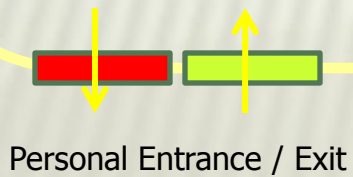
ENTRANCE AND EXITS OF VEHICLES AND EMPLOYEES CHECKING



PROTECTION OF OUTSIDE AREAS



Safety fence with concrete plate against get under
Guard extensions with razor or barbed wire



APPLICATION – SECURITY AGENCY, TRANSPORTATION OF MONEYS AND VALUABELS

Application of UniMoCom Network® for transportation of valuables and other specify goods is using in full scale all possibilities of the UniMoCom Network® system, mainly visualizing of camera records in vehicles and outside of vehicles to drivers, archived camera records and other date directly in vehicles, transmit ion of video and audio information, to any operation room and control vehicles, providing positioning information, information of the vehicles speed or other telemetric information, all in real-time and in all define directions at once by any channels accessible in time and place of transmit ions.

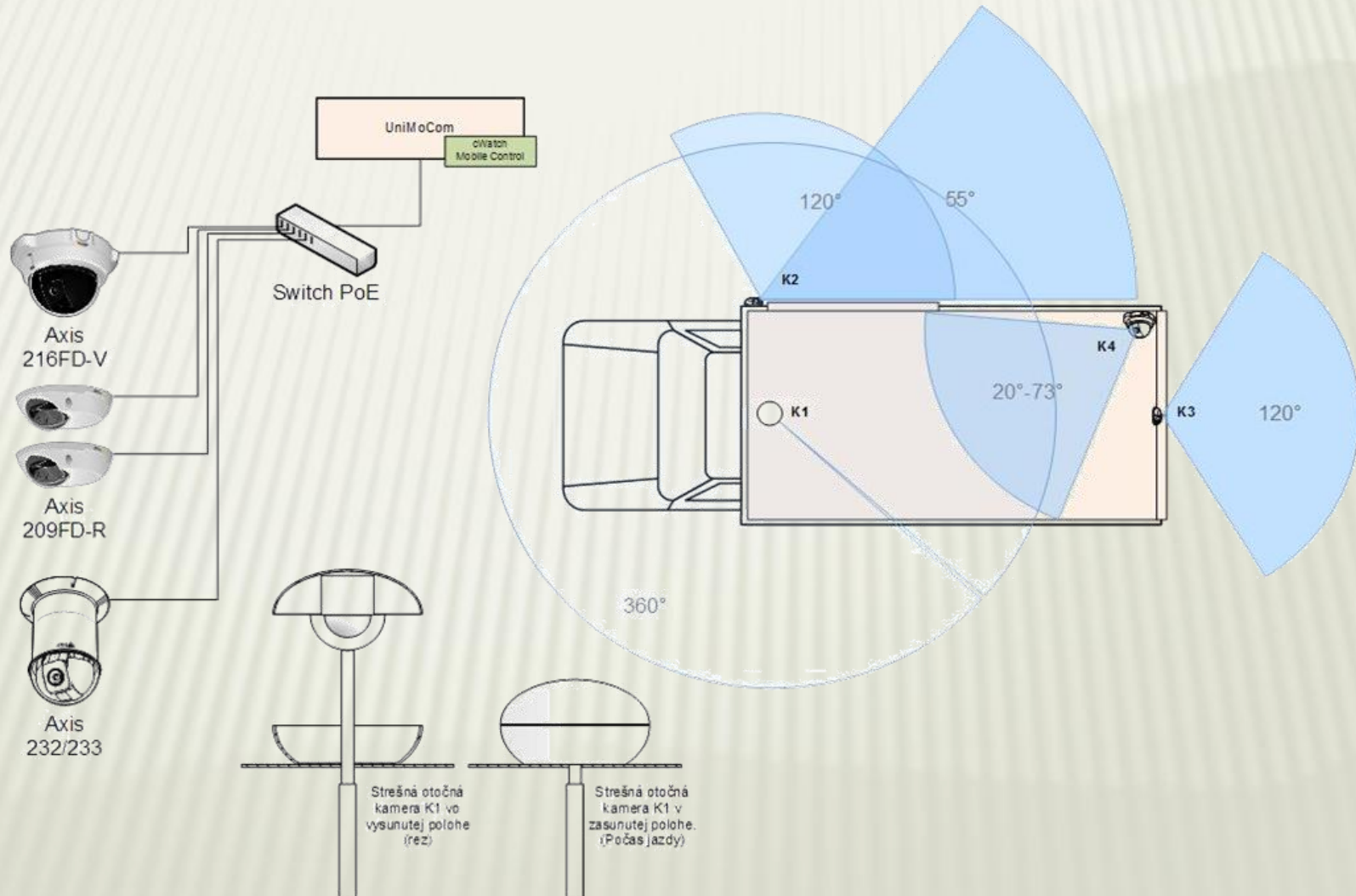
To the UniMoCom Network® system is possible add various electronic components from the vehicle, which are able to:

- ❑ Check all active and passive vehicle components.
- ❑ Alert the operational room and other vehicles in case of the vehicle status change, during any go-offs or the engine switching-off, during supplying or unlocking / locking, act...
- ❑ Alert the operational room and other vehicles in case of accident, if the driver is not able to send the alert report.
- ❑ Alert in a forward defined situation the vehicle vicinity by other technical means (loud horn, lights, act...)
- ❑ All this information will be recorded by the UniMoCom Network® system.

In a case of any critical situation there exist for the crow possibility to use the PANIC pushbutton. By pushing this button there is started security mode. That mean all vide and audio information will be send, or other data, to all competent authorities (operation room, police, rescue team...)

All archive information can be used for needful evaluation of crisis situations, law aspects of crises situations and creating support information for insurance, act...

SECURITY AGENCY VEHICLE



APPLICATION - PROTECTION OF SPORT FACILITIES

Deployment of the UniMoCom Network® system for sport events is providing to security forces complex information of fans movement and structure in the time of they stadium entries and it make possible to monitor and archive everything what happened at the stadium.

The UniMoCom Network® system make possible mutual coordination of security forces responsible for organization of sport events, police, rescue teams, public transportation atc...

For finding of hooligans in a crowd of fans is this application able to use an implemented subsystem of the UniMoCom Network® system, the Face Detection system.

The Face Detection system can be run on any computer connected in UniMoCom Network®, that is also in police vehicles, police dispatching, operational rooms of security service responsible for organizing of the sport event, check points at the stadium entrances, act...

Every workplace with functioning face recognition can have independent database of wonted person, or there can exist central database, situated outside of the network.

Every workplace can dynamically set its own parameters for displaying video information from all net points of the UniMoCom Network® system, non directly accessible cameras – so this workplace doesn't need its own cameras.

Police dispatching room can choose as a primary information source for Face Detection all net points cameras from UniMoCom Network®, for example from train stations, streets, public transport, police vehicles and football stadiums.

With this system is possible continuously monitor activities of fans, or identify individuals banned entrances at stadiums and at the same time look for wonted person...

The UniMoCom Network® providing for organizing security forces possibility to check of every visitor at he entrances to sport areas with help of Face Detection, to monitor activities of fans in the area of stands and record all what is happening in the stadium.

The UniMoCom Network® system is able to provide information for evaluations of any event not only in the stadium, but also from outside areas, before-during and after any sport event.

SPORT ZONE



APPLICATION - STRIP MINES AND OTHER TECHNOLOGICAL COMPLEXES

Complex deployment of the UniMoCom Network® system for strip mines consists of:

Creation of digital map mine supports :

- ❑ Orthophoto map.
- ❑ Surface contour map.
- ❑ Mapping of traffic infrastructure, buildings and other structures.

Covering of the mining area by exact grids :

- ❑ Construction of the base point station for GPS.
- ❑ Construction of GPS transmitter.

Covering the mine by communication network:

- ❑ Construction of a transmitter wireless network of (WiMAX, WIFI) technology.

Construction of communication and camera systems in vehicles and machines :

- ❑ Installation of a computer system into vehicles and machines.
- ❑ Installation of cameras and dGPS receivers, communication modules and software.
- ❑ Installations of computers and software for dispatching room (or other control rooms).

Eventuality of system enlargement:

- ❑ Bonding of different technological components
- ❑ Connection of different technological components in vehicles and machines.
- ❑ Creation of application software for users.

APPLICATION - STRIP MINES AND OTHER TECHNOLOGICAL COMPLEXES

In every vehicle, or any technological device, is installed professional and very overfull industrialized computer, able to work in very demanding conditions. Part of such computer are memory units, touch display units, a dGPS receiver and a receiver/transmitter WIR.

In vehicles or other technological devices are installed cameras (as many as it be needed), connected to higher computer. Drivers or any crew are able to use local cameras as they see fit, for vehicle reversing or complicating work with machinery.

The crew of any vehicle or other machinery pieces can continuously watch at the area map where are the other vehicles, plus there is possibility to use a look out of any other cameras from different vehicles and any machinery, including possibility of a voice communication.

All video information, telemetric or other information are recorded in local workplaces, that is in vehicles or other machinery.

At the central control room or others dispatching centers and other working places are placed standard computers (desktops and laptops). Also this places have the same possibility, there can observe the maps of the area with positions of vehicles, machinery and it is possible to use any camera as the source of video signal including voice communication.

Such workplaces are able to download all data, to review them back and processed in further applications.

The UniMoCom Network® system is very flexible and allow to add further technological components, which are:

- ❑ Adding of control components in vehicles and machinery
- ❑ Full up build of a camera system for protection of buildings and open areas.
- ❑ Adding of protective fences and other security elements.
- ❑ Adding of entrance / exits tourniquets for movement control of employees.
- ❑ Clock in electronic control, or a face recognition system.

The UniMoCom Network® system is open operational system build up as a Windows operation system, what make possible for further implementation of already existed software, as it is processing of economical information, statistic of usage of vehicles, machinery, an economical mining evaluation or creation of further settings of applicative software.

COMMUNICATION AND CONNECTION OF OPEN CAST MINE



WIFI
WIMAX

WIFI
WIMAX



WIFI
WIMAX

TECHNOLOGICAL MACHINERY AND EQUIPMENTS



CLOSURE

UniMoCom Network® system is able to **dynamically connect** independent nets in regard of existing situations, for example police forces to public transportations systems, trains, rescue teams, or sport grounds act. In principle is possible to connect all components and independent nets of the UniMoCom Network® system, without their primary settings for any individual private net.

UniMoCom Network® system is very universal system and is created of the top computers components, very specialized software, implemented to the operational **Windows®** system and is programmed in optimization of the system size. In such way can the user employed open applications settings, what is open for further use of large additional applications Visual C++, with emphasis on software.

Any user of UniMoCom Network® system can **define** additional system requirements and in such way set further use for priority areas, which are for him important.

PROTECTIVE TRADEMARK OF UNIMOCOM NETWORK® A UNIMOCOM®

ORGANISATION MONDIALE
DE LA PROPRIÉTÉ INTELLECTUELLE



ARRANGEMENT ET PROTOCOLE
DE MADRID

34, chemin des Colombettes, case postale 18, CH-1211 Genève 20 (Suisse)
Tél.: (41-22) 338 9111 - Télécopieur (marques internationales): (41-22) 740 1429 -
Messagerie électronique: inreg.mail@wipo.int - Internet: http://www.OMPI.int

CERTIFICAT D'ENREGISTREMENT

Le Bureau international de l'Organisation Mondiale de la Propriété Intellectuelle (OMPI) certifie que les indications figurant dans le présent certificat sont conformes aux inscriptions portées au registre international tenu en vertu de l'Arrangement et du Protocole de Madrid.

Juan Antonio Toledo
Directeur principal
Service d'enregistrement international
de Madrid et de Lisbonne

Genève, le 12 août 2010

1 045 307

Date d'enregistrement: 7 juin 2010
Date d'échéance: 7 juin 2020

UniMoCom Development, s.r.o.
J. Jesenského 68/8
SK-957 01 Bánovce nad Bebravou
(Slovaquie).

Nom et adresse du mandataire: JUDr. Zuzana Čížová Ad-
vokátska kancelária, J. Jesenského 69, SK-957 01 Bánovce nad
Bebravou (Slovaquie).



Classification des éléments figuratifs:
27.3; 29.1.

Indication relative à la nature de la marque ou au type de
marque: les termes contenus dans la marque n'ont pas de signi-
fication.

Liste des produits et services - NCL(9):

9 Appareils pour l'enregistrement de temps; lecteurs (infor-
matique); supports de données magnétiques; instruments
de mesure; mesureurs; souris (informatique); appareils et

instruments optiques; appareils et instruments nautiques;
ordinateurs; machines à calculer; programmes d'ordina-
teurs enregistrés; programmes d'ordinateurs (logiciels té-
léchargeables); logiciels (programmes enregistrés);
explorateurs (scanneurs informatique); appareils d'ensei-
gnement; dispositifs de sauvetage; appareils pour le traite-
ment de l'information; appareils et instruments
géodésiques; appareils pour l'enregistrement du son; ap-
pareils pour la reproduction du son.

38 Communication par terminaux d'ordinateurs; raccorde-
ment par télécommunications à un réseau informatique
mondial; location de temps d'accès à des réseaux informa-
tiques mondiaux; transmission de messages et d'images
assistée par ordinateur; service d'affichage électronique
(télécommunications); services d'acheminement et de
jonction pour télécommunications.

Enregistrement de base: Slovaquie, 12.02.2010, 227079.

Désignations selon le Protocole de Madrid: Union eu-
ropéenne.

Désignations selon le Protocole de Madrid en vertu de l'article
9sexies: Chine, République islamique d'Iran.

Date de notification: 12.08.2010

Langue de la demande internationale: Français

Le procédé d'impression employé ne permet pas dans tous les
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ORGANISATION MONDIALE
DE LA PROPRIÉTÉ INTELLECTUELLE



ARRANGEMENT ET PROTOCOLE
DE MADRID

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Juan Antonio Toledo
Directeur principal
Service d'enregistrement international
de Madrid et de Lisbonne

Genève, le 5 août 2010

1 044 488

Date d'enregistrement: 7 juin 2010
Date d'échéance: 7 juin 2020

UniMoCom Development, s.r.o.
J. Jesenského 68/8
SK-957 01 Bánovce nad Bebravou
(Slovaquie).

Nom et adresse du mandataire: JUDr. Zuzana Čížová Ad-
vokátska kancelária, J. Jesenského 69, SK-957 01 Bánovce nad
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assistée par ordinateur; service d'affichage électronique
(télécommunications); services d'acheminement et de
jonction pour télécommunications.

Enregistrement de base: Slovaquie, 12.02.2010, 227078.

Désignations selon le Protocole de Madrid: Union eu-
ropéenne.

Désignations selon le Protocole de Madrid en vertu de l'article
9sexies: Chine, République islamique d'Iran.

Date de notification: 05.08.2010

Langue de la demande internationale: Français

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CERTIFICATES OF NETPOINT FIRM – DISTRIBUTING UNIMOCOM NETWORK® SYSTEM



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Clearance Certificate
For EU
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