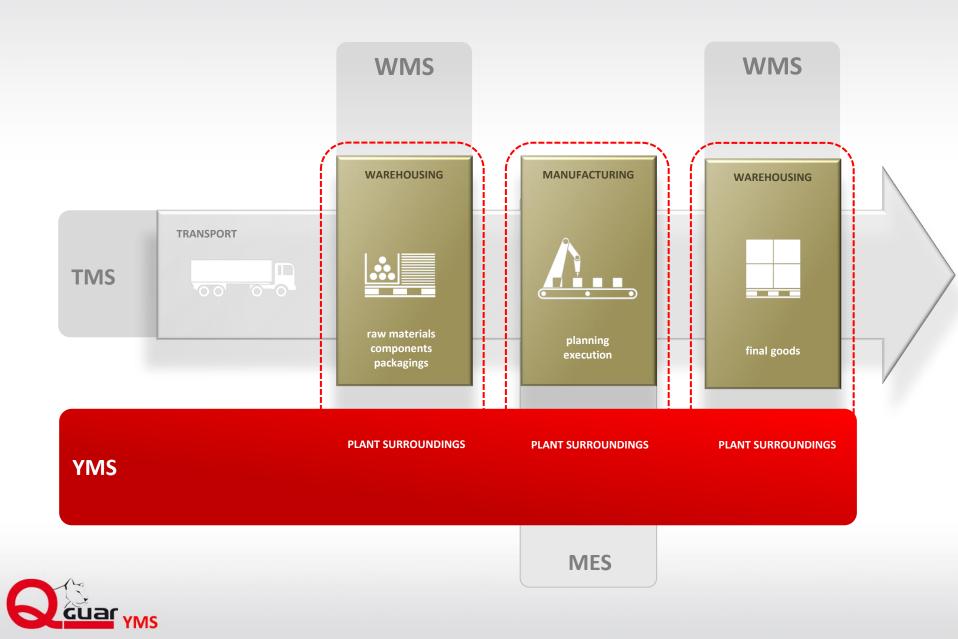


Quantum Qguar Sp. z o.o.

#### **QGUAR YMS** – one of our many SCE solutions



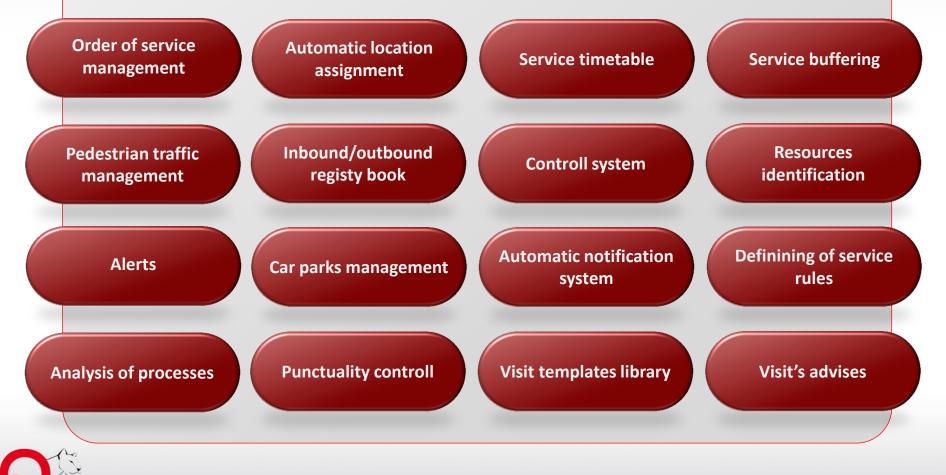




#### **Processes in QGUAR YMS**

### YMS

- ✓ manages the movement of transport means, vistitors and loading
- ✓ controlls the occupancy of parking places, the queue of trucks and sends calls to enter the facility
- ✓ ensures controll over work in the yard in one or more locations



#### **Basic objects in QGUAR YMS**

#### Yard topology:

- ✓ locations
- ✓ yards
- ✓ areas (eg. warehouses)
- ✓ places (eg. dock)

#### Master data:

- ✓ companies
- ✓ means of transport
- ✓ drivers/guests
- ✓ identifiers



#### **Process objects in QGUAR YMS**

#### Yard topology:

#### ✓ Visit

(type, time, place, guests, plan - task list)

 ✓ Task (type, time, place, quests)

#### ✓ Traffic

(guests, from location - to location)



#### **Qguar YMS – supported technologies**

#### **Scales**

Weight during arrival and departure, control over weight difference



**Monitors** 

Collective data about visit queues And assigned places

#### Barriers

Automatic control over barriers during arrival and departure



**RFID Registering of current location** and status



. . . . . .

Information boards Calls, places, mass, etc.

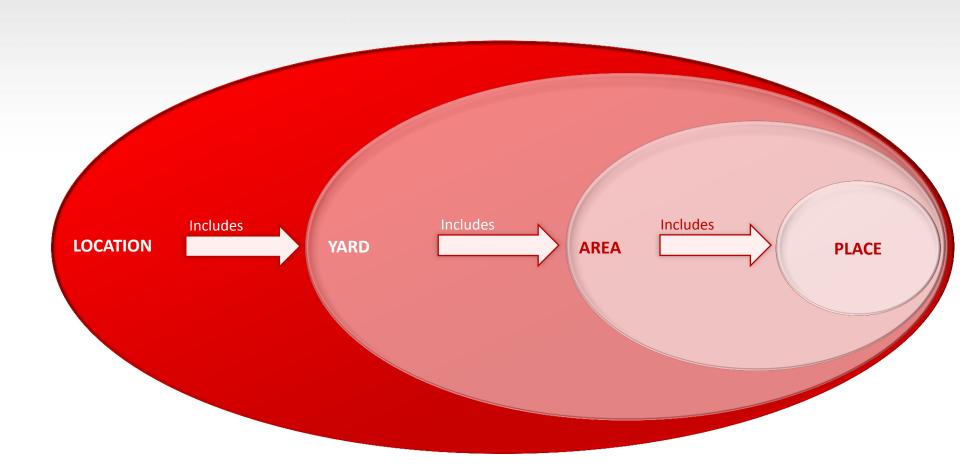


Barcodes **Registering of current location** and status

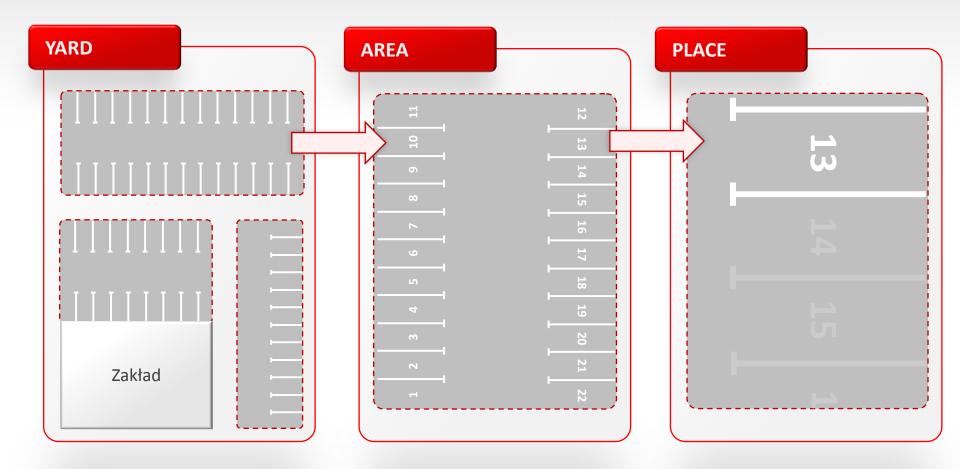
# SMS, E-mail

Notification for drivers about calls and places



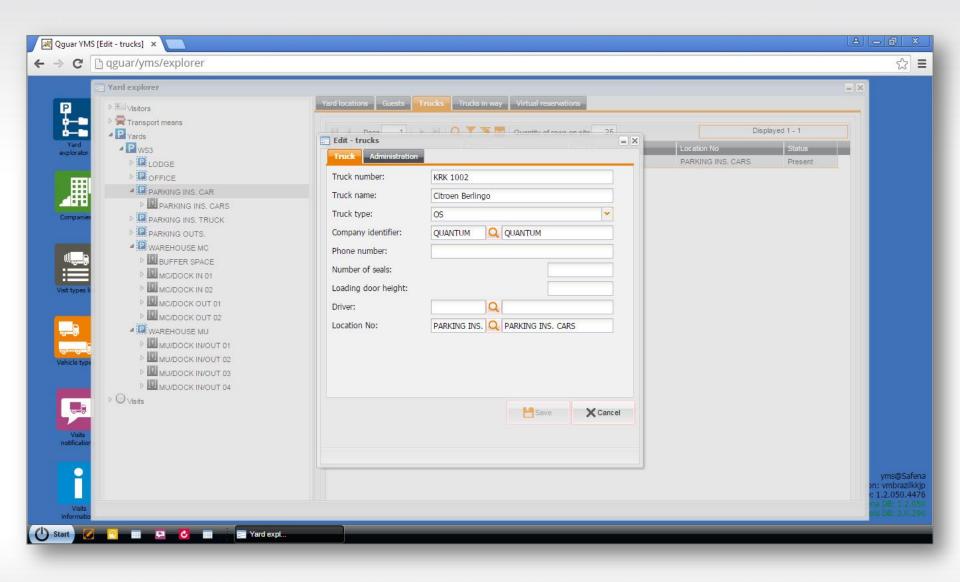








#### Yard explorer





#### Block diagram of parking places management

**Trucks arrival** 



Searching for available places

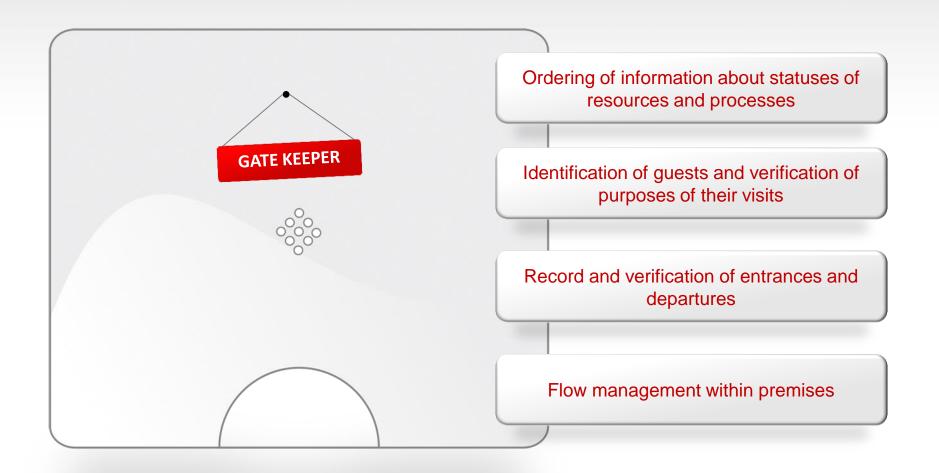
Turning the truck toward adequate place (based on strategies of places assignment)

- Turning the truckt to the parking with the most available places
- ✓ Turning the truct to the internal parking
- ✓ Turning the truck to the external parking

## Management of queue of trucks

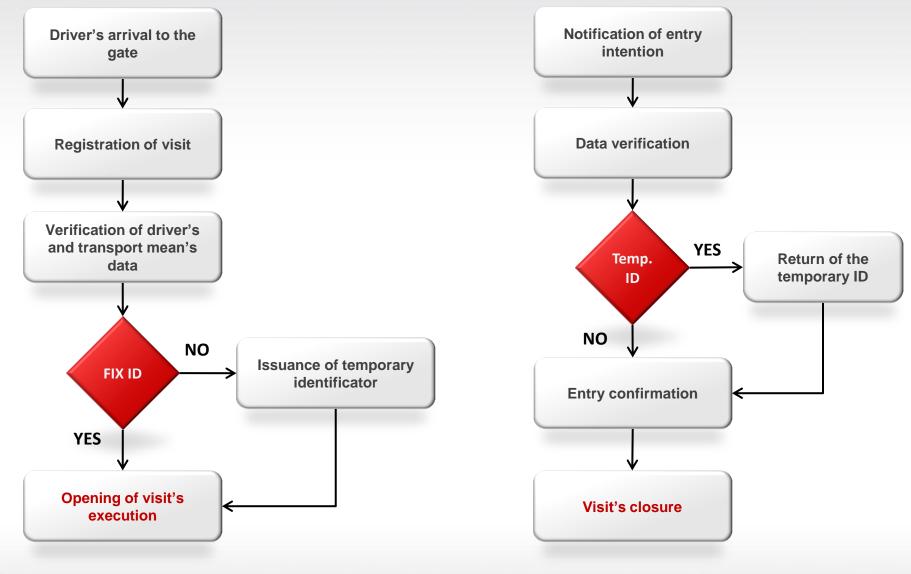
- ✓ Calls to enter the facility
- ✓ Calls to entry to defined place







#### Block diagram about gate keeper management

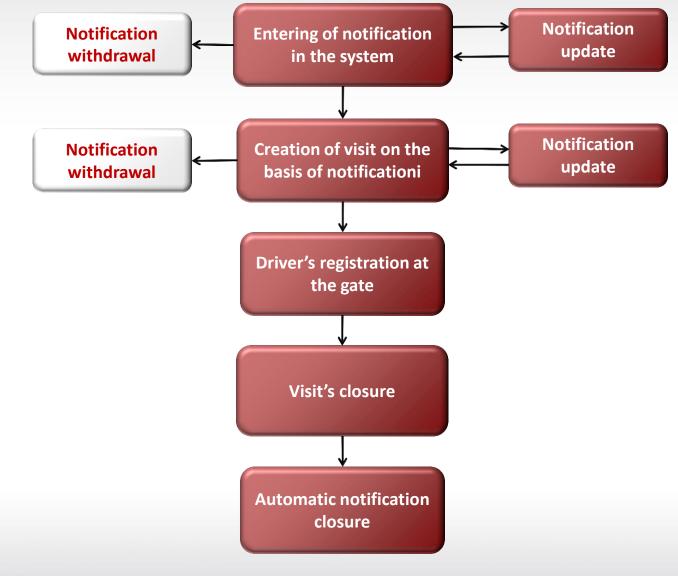




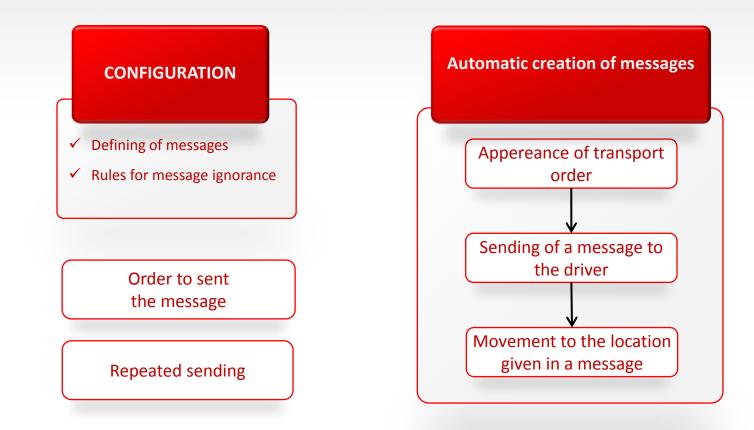
#### Gate keeper management – inbound and outbound registry book

🛃 Qguar YMS [Boo	ok of entra 🗙 📃								<u> </u>
← → C 🗋 0	qguar/yms/book_c	of_entrance_de	partures						☆ =
Book of entrance	Book of entrances a	nd departures						_ ×	
Filters	Entrance/Departure								*
Creation date from:	Pick a visit			Identifier	entifier			surname:	
	Serching code:	Serching code: VISIT-0000001/15							
License plate:	Gate:	L/IN-OUT	Q Lodge IN-OUT						
					Temporary absence	Tru Tru	ick passing		
14 4 Page 1	Truck No:	LUDIC 4 COD	Toroba Nev	Porter notes		Visitor pho	to		sd 1 - 24
Creation date		KRK 1002	Tractor No:			visitor pite			
2014-10-31 13:18	Driver code:	AC							Status DK. •
2014-10-31 13:15	Cell No.:	23132132131	Guest position:						рк.
2014-10-31 13:00	Visit No:	VISIT-0000001	/1! 🔍 Commodity movement						рк.
2014-10-31 12:54	Operation No:								ЭК.
2014-10-06 13:20	Information:								DK.
2014-10-06 13:17 2014-10-06 13:12									pk.
2014-10-06 13:04	Contact person:								DK.
2014-09-18 15:08	Visit line type	Area	ation No Planned date of start Ope	eration No	Status				þĸ.
2014-09-18 15:05	Loading	WAREHOU	2015-04-10 00:23		Active				рК.
2014-09-18 14:49									рк.
2014-09-18 14:45									þK.
2014-09-18 14:41									DK.
2014-09-18 14:36 2014-09-18 09:51	- System messages								pK.
2014-09-18 09:50	Waiting on place	ePARKING INS.	CARS						рк. рк.
2014-09-18 09:47									DK.
2014-09-18 09:34									DK.
2014-09-17 10:24									рк.
2014-09-17 10:20	-								эк. 🖕
	Edit visit	New ∀isit	Finishing visit task Edit - ending visit	tasks Open visit realization	Entrance Departure	Visit card	XCan	cei	Add
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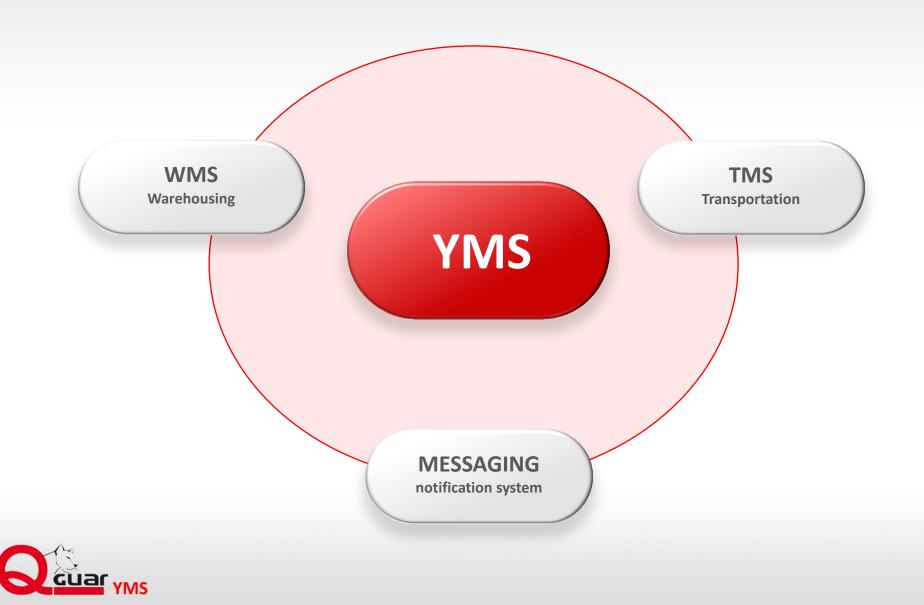




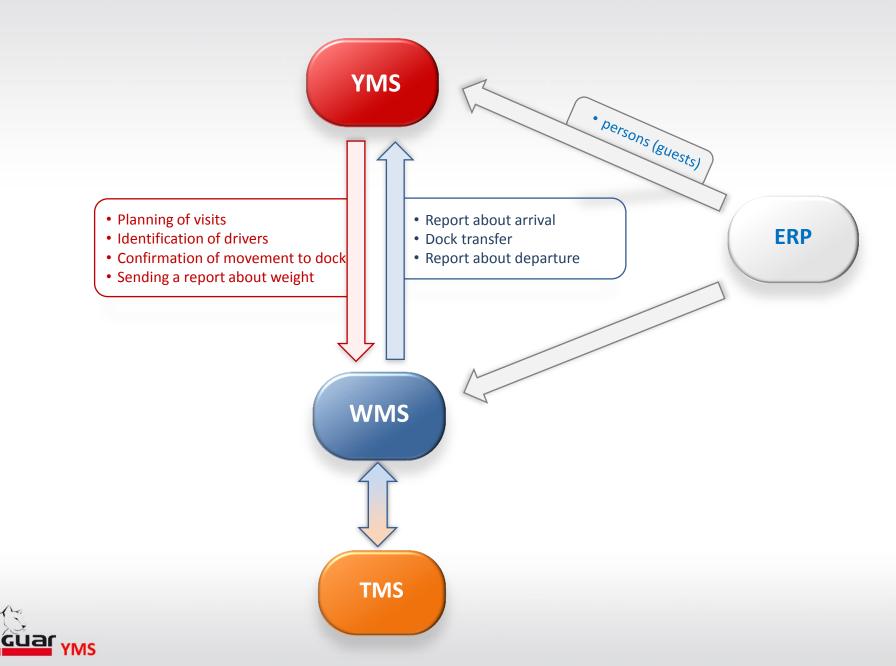








#### Information exchange between Qguar YMS and other solutions

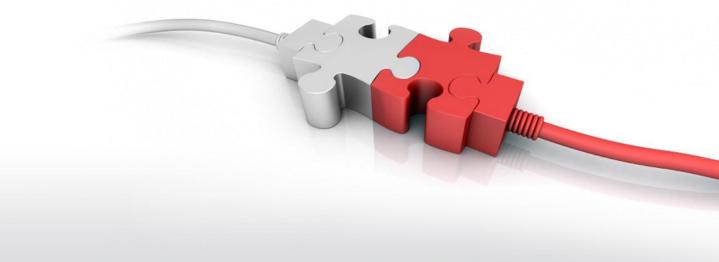


#### ✓ Standard interface:

- ASCII text files
- XML text files
- Direct database link
- 7 standard communicates for information exchange with ERP

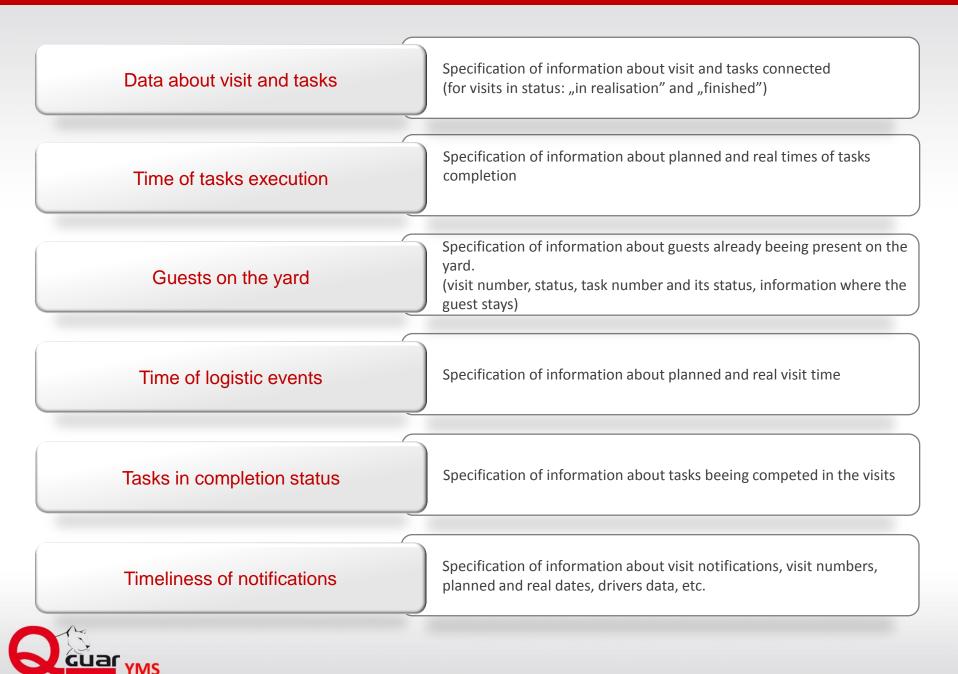
#### ✓ Dedicated interfaces:

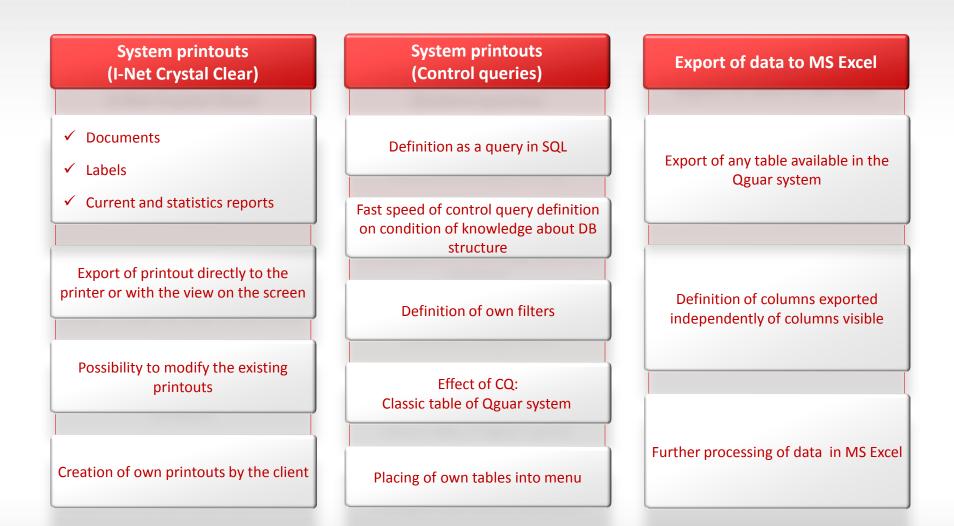
- Utilization of application capability (eg. remote procedure call)
- Electronic telegrams (winsocket, rs232)
- Number and contents of communicates depends on client





#### **Qguar YMS – reporting**







#### **Chosen KPIs in the yard logistics**

- ✓ Average time of transport mean service
- ✓ Average time of loading/unloading
- ✓ Average time of waiting at the parking place, on the premises
- Level of utilisation of availble places ( eg. docks )
- Offences committed on the premises
- Timeliness of driver's appearance in relation to notifications



- Lowering the time and number of people involved into planning the time, place and queue of services
- ✓ Improvement of service smoothness
- ✓ Improvement of warehouse efficiency
- Increase of resources utility (eg. docks, parking places, loading/unloading gates)
- Improvement of gate keepers quality of work due to lowering the number of mistakes
- ✓ Shorter time of tasks completion by drivers (automatic drivers messaging)



#### **Benefits from implementation of QGUAR YMS**



- Ordering of information about statuses of resources and logistic processes.
- Support of gate-keepers in the process of drivers/guests identification
- Evidence and verification of arrivals and departures
- Management of movement on the premises
- Support of gate-keepers in managing of order of service
- Management of dock assignment
- ✓ Integration of logistic processes in the company
- Lowering number of contacts between gate-keeper and warehouse
- ✓ Improvement of warehouse performance
- Possibility of full visits history reconstruction
- Complete administrative and managing information about logistic processes.

#### **QGUAR YMS** as one of the wide range of Quantum products

	PRODUCTION LOGISTICS	WAREHOUSING LOGISTICS	TRANSPORTATION LOGISTICS	FACILITY ENVIRONMENT LOGISTICS					
Analytic layer	BI - Business	s Intelligence							
	DASHBOARD								
IT layer	MESSAGING								
Internet layer		4WEB - Internet Access							
	MES - Manufacturing Execution System	WMS - Warehouse Management System	TMS - Transport Management System	YMS - Yard Management System					
	APS - Advanced Planning & Scheduling		TOS - Terminal Operating System						
		Packages System							
Operational layer									
	LSA - Logistics Services Accounting								
			PILOT						
			OTM - Object Tracking & Monitoring						
Data exchange layer									
	QUARYSER								
Tools layer	DAS - Database Archive System								
	SBS - Standby Server								
	IDT - Internet Data Transporter								
		PBL - Pick by Light							
		FLM - Forklift Management							
Technological solutions		WCS - Warehouse Control System							
	RFID - Radio Frequency Idenryfication								
		VPM - Voice Picking Manager							





Thank you for your time

