# MIPv6 Parking System Control

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## **MIPv6 Parkings: Introduction**

- We usually need to leave our car in a public parking...
- ... but frequently they usually don not have a free place and we must wait until one place will be available...
- ... however, when we are able to enter to the parking, not all is as easy as enter and park...
- ... because in big parkings we have to spend a lot of time until we find the right place being prepared to be taken by whatever user...
- ... and sometimes when we find it, we can not park because other user has incorrectly parked its car before us and he/she has taken more than one place.

#### **MIPv6 Parkings: Solutions**

- All of that can be avoid by the system.
- The parking control system will be able to assign a free place number to the user in order to he/she parks its car there.
- The parking control system will control that user park in the right place.
- The parking control system will control that only one place will be taken by the user's car.
- If user wrongly parks, he/she will be penalize with a bigger billing.

## MIPv6 Parkings: Requirements

- Cars will have to be able to have a global IPv6 address that identifies themselves.
- Furthermore, cars will have to have mobility support so that the IPv6 address can be used by them in foreign networks.
- Lastly, cars will have to have a wireless-communication system in order to be able to communicate to other systems. Technologies as Bluetooth, IRDA, Wireless-LAN or 3GPP can be used.
- Parkings will have an internal IPv6 network for supporting the required infrastructure and a wireless-system to communicate to cars.
- Furthermore, parkings will have system being able to know if a car has rightly parked, both in the right place and taking only one place.

# MIPv6 Parkings: Working

- Firstly, parking asks to car its IPv6 addres in order to be identified. Then, parking assigns a number place to the car to be taken.
- Car will have to go the right place and it will be watched over in order to check if it is rightly parked.
- If so, all will be OK. Otherwise, system control will bill a bigger invoice when user will try to leave the parking.