

HERE Platform for Business

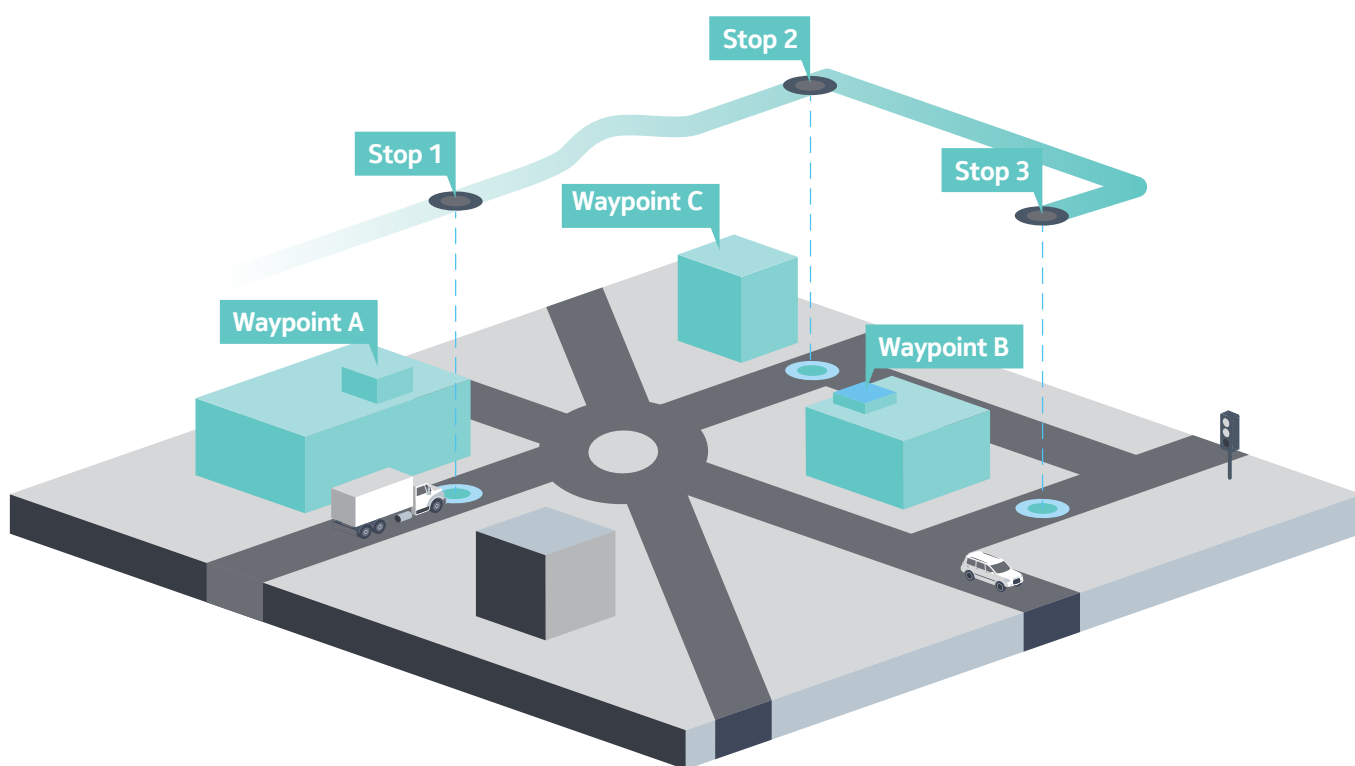
# Waypoints Sequence Extension (WSE)

Calculate the optimum sequence of stops along your route

Optimum sequence of waypoints along a route

Algorithms considering road restrictions and historical traffic

Algorithms considering mode of travel and route preference



The **HERE Waypoints Sequence Extension** calculates the optimal sequence of any given waypoints along a route, while minimizing the time or distance traveled. Often referred as the “Travelling Salesman Problem”, the service takes into account the HERE road network restrictions as well as historical traffic data to provide accurate travel times and distances between subsequent waypoints. Mode of travel, by car or truck, as well as route preference like fastest or shortest, can also be considered when customizing for specific uses cases.

**WSE** allows for planning of more efficient routes which take into account up to 50 different waypoints. Even though the service does not return details of a route, it considers routing parameters (e.g. vehicle type, truck attributes, trip start time and location, fastest or shortest route) when calculating the most optimal sequence of waypoints along a particular route. Additionally, and to allow for even more customization, it can take into account resource-specific parameters for trucks such as height, weight, trailer weight, hazardous goods and more. **WSE** returns a list of sequence optimized waypoints to be used as input when requesting a route from the HERE Enterprise Routing service of the **HERE Platform for Business**.

## Input parameters

### List of waypoints <50

### Start and end point

### Route mode

- Fastest
- Shortest

### Departure time for considering historical traffic

### Category/mode

- Car
- Truck

### Truck parameters

- Weight
- Height
- Width
- Length
- Hazardous type  
(e.g. explosive, flammable, poison)

### Number of axles per vehicle

### Vehicle trailer weight

### Avoidances

### Links/roads

- areas

## Output response

### List of sequence optimized waypoints

- Latitude and longitude
- id value
- Sequence
- Estimated departure

### List of times and distances between waypoints

### Distance for overall trip considering sequence of waypoints

### Time for overall trip considering sequence of waypoints

### Description of sequence of waypoints

Only the **HERE Platform for Business** delivers powerful, flexible and global location cloud services built on enterprise-grade map data. Discover how HERE can help your business run smarter, faster and more efficiently. Today, leading enterprise organizations around the world use the **HERE Platform** in hundreds of customer applications and support core business processes such as fleet management, telematics, geomarketing, business intelligence, field force optimization and more.