

Nedap and ATKI improve the parking experience in Denmark's youngest and oldest city

What do the youngest city and the oldest city in Denmark have in common? Well, aside from permanent Danish fixtures like Danish pastry and open face rye bread sandwiches? Digitalized parking management. ATKI and Nedap were selected to optimize the utilization of the urban capacity in Denmark's youngest city Esbjerg and oldest city Ribe. Hundreds of Nedap's smart parking sensors SENSIT were implemented to monitor, control and provide real-time, accurate parking data on the occupancy of parking spaces. Information on free urban parking bays is available for drivers to easily find an available parking space. In both cities, the Invipo platform was installed by ATKI, allowing on-street parking facilities to be monitored in real-time via a dashboard.



Youngest city Esbjerg

Esbjerg is the youngest city in Denmark. When you arrive in the city, you will be amazed at what has taken place in the space of just 150 years. It all began with a harbor for the exporting of agricultural goods, then the mushrooming fishing industry came, with more than 600 vessels, and now Esbjerg is the country's energy metropolis. Apart from being a base for oil and gas in the North Sea, the city boasts the largest wind turbine park in the world. Esbjerg is a real port city that has now developed into an attractive city.

Oldest city Ribe

Ribe is Denmark's oldest town. The atmosphere in the medieval city center of Denmark's oldest city is something indescribable. The cobbled narrow streets, the well-preserved houses and plaques each tell their share of its proud history dating back to around 710 AD. Today, there is a peaceful, cozy ambience in the pedestrian street, the art museum, the abbey and the old eateries.

Need for a digitalized parking solution

The attractiveness of both cities ensures that many vehicles drive through the urban areas every day, causing multiple challenges. One of those challenges is traffic congestion caused by search traffic. Motorists drive through the city center looking for a free parking space, but because they do not know in advance where to find it, they are on the road longer or they park the vehicle in a place where this is not allowed. Furthermore, this search traffic causes CO2 and noise emissions, which do not contribute to an attractive city.

Therefore, a solution was needed for the cities of Esbjerg and Ribe to manage the traffic congestion by using the existing

capacity of all on-street parking spaces in the cities in the most optimal way.

ATKI and Invipo Platform

The municipality governing the cities of Esbjerg and Ribe selected [ATKI](#) to apply the [Invipo Smart City Platform](#) in both cities. ATKI has been working with traffic registration for over 17 years and is a system integrator with extensive knowledge of the market and solutions. The Invipo platform connects urban technologies, systems and services and generates a comprehensive view of the urban big data. It provides cities with complex tools for observing both historical data, as well as the current situation and trends. The Invipo platform is fully implemented with Nedap's smart parking system by ATKI.

Optimize parking capacity with real-time parking data

[Nedap's SENSIT](#) delivered a parking bay occupancy detection platform that utilizes robust, accurate and cost-effective IoT based in-ground parking sensors. The SENSIT system is based on double detection technology to ensure the highest detection accuracy. Due to unique redundancy units, the SENSIT system offers high reliability and the industry's longest battery life. The authorities in Ribe and Esbjerg recognized the superior SENSIT system which is based on a LP-WAN Mesh network, specifically developed for Smart Parking applications.

The combination of SENSIT and Invipo allows parking and traffic authorities to make optimal decisions based on real-time and analytical occupancy data. With this solution, cities get insight into the utilization of parking bays and can

easily guide drivers to available parking spaces, saving time and frustrations. Nedap's business partner ATKI installed the smart parking sensors in the city centers of both Esbjerg and Ribe.

Improved parking guidance in Esbjerg and Ribe

Digitalized parking management with single space detection in on-street parking facilities allows cities to efficiently manage their limited available parking space. Collecting valuable data about parking behavior contributes to the sustainability goals of Esbjerg and Ribe and ensures less search traffic and more efficient parking guidance and parking enforcement. The result: more attractive and safe cities for visitors, residents and shopkeepers.

"For many of the parking spaces in these cities, we determined quickly that the optimal solution for single-space detection had to be Nedap's magnetic SENSIT sensors as they are extremely reliable. Also, ATKI already had great experience using Nedap as a collaborator."

Benny Nissen, Business Developer / Founder at ATKI

"These cities prove that Digitalized Parking Management is relevant for young and old, large and small cities with sustainability ambitions that want to keep the city attractive for both inhabitants as well as visitors by reducing search traffic." **Jan Hofman, Business Development Manager SENSIT (smart parking & mobility) at Nedap**

