



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 769086



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CITY OF DUBROVNIK



RESPECT  
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POŠTUJMO  
GRAD

# Mikromobilnost i Urbana logistika

Marko Stančec,  
CIVINET mreža Slo-Cro-SEE

# O projektu "City Changer Cargo Bike"

- Program: HORIZON 2020
- Ukupna vrijednost projekta: 28.564.842,23 HRK
- Bespovratna sredstva za Grad Dubrovnik: 983.671,875 HRK
- Vrijeme provedbe: 01.09.2018. - 28.02.2022.
- Glavni cilj: Poticanje održive mobilnosti kroz upotrebu inovativnih rješenja u tzv. cargo prometu
- Sve informacije o projektu možete pronaći na web stranici Grada Dubrovnika: <https://www.dubrovnik.hr/>



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# Mikromobilnost







1. Mikromobilnost -  
primjeri dobrih mjera

2. Last-mile dostava

3. Održivi urbani  
logistički plan



## TYPES OF POWERED MICROMOBILITY VEHICLES<sup>1</sup>

	Powered Bicycle	Powered Standing Scooter	Powered Seated Scooter	Powered Self-Balancing Board	Powered Non-Self-Balancing Board	Powered Skates
						
Center column	Y	Y	Y	Possible	N	N
Seat	Y	N	Y	N	N	N
Operable pedals	Y	N	N	N	N	N
Floorboard / foot pegs	Possible	Y	Y	Y	Y	Y
Self-balancing <sup>2</sup>	N	N	N	Y	N	Possible

<sup>1</sup>All vehicles typically designed for one person, except for those specifically designed to accommodate additional passenger(s)

<sup>2</sup>Self-balancing refers to dynamic stabilization achieved via a combination of sensors and gyroscopes contained in/on the vehicle

Source: SAE International from SAE J3194™ Standard - Taxonomy & Classification of Powered Micromobility Vehicles.

[https://www.sae.org/standards/content/j3194\\_201911/](https://www.sae.org/standards/content/j3194_201911/)

## WHAT IS MICROMOBILITY?

Micromobility refers to a range of small, lightweight devices operating at speeds typically below 25 km/h (15 mph) and is ideal for trips up to 10 km.

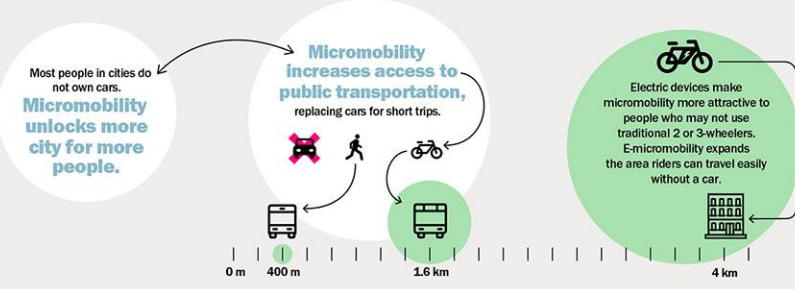
### Micromobility can be:

- Human-powered or electric
- Privately owned or shared
- Most commonly low speed (25km/h top speed) or sometimes moderate speed (45km/h top speed)



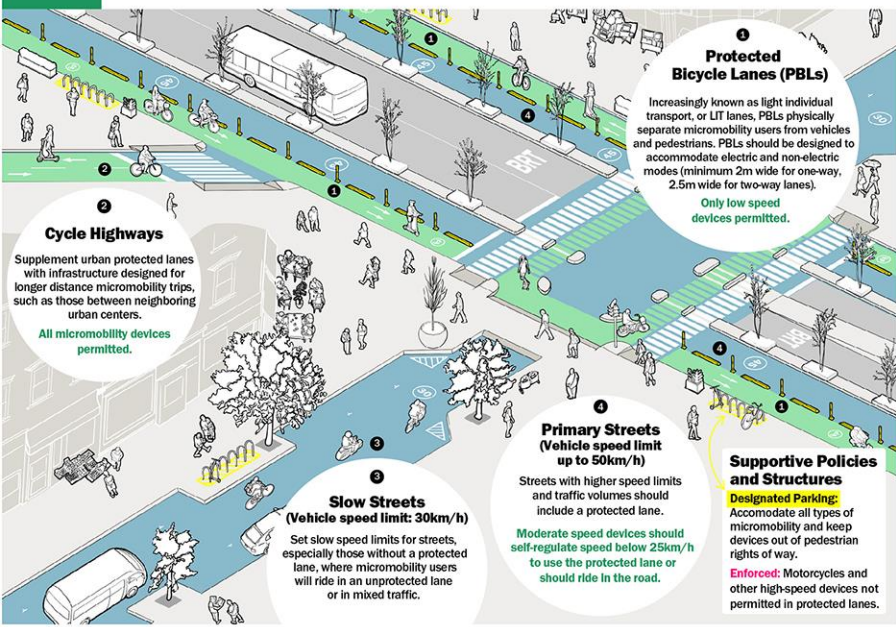
### Micromobility cannot be:

- Internal combustion engine powered
- High speed (exceeds 45km/h top speed)



## WHERE CAN MICROMOBILITY GO?

Safe "micromobility corridors" provide equitable access to more places for more people.



# Što je mikromobilnost i tko su glavni ponuditelji javnih sustava

<b>Corporate</b> 	
<b>Mixed Mode</b> 	
<b>Scooters</b> 	<b>Manufacturer</b> 
<b>Bicycles</b> 	<b>Manufacturer</b> 
<b>Mopeds</b> 	<b>Manufacturer</b> 
<b>Software</b> 	<b>+ Hardware</b> 
<b>Aggregators</b> 	<b>City Management</b> 
	<b>Ecosystem</b> 



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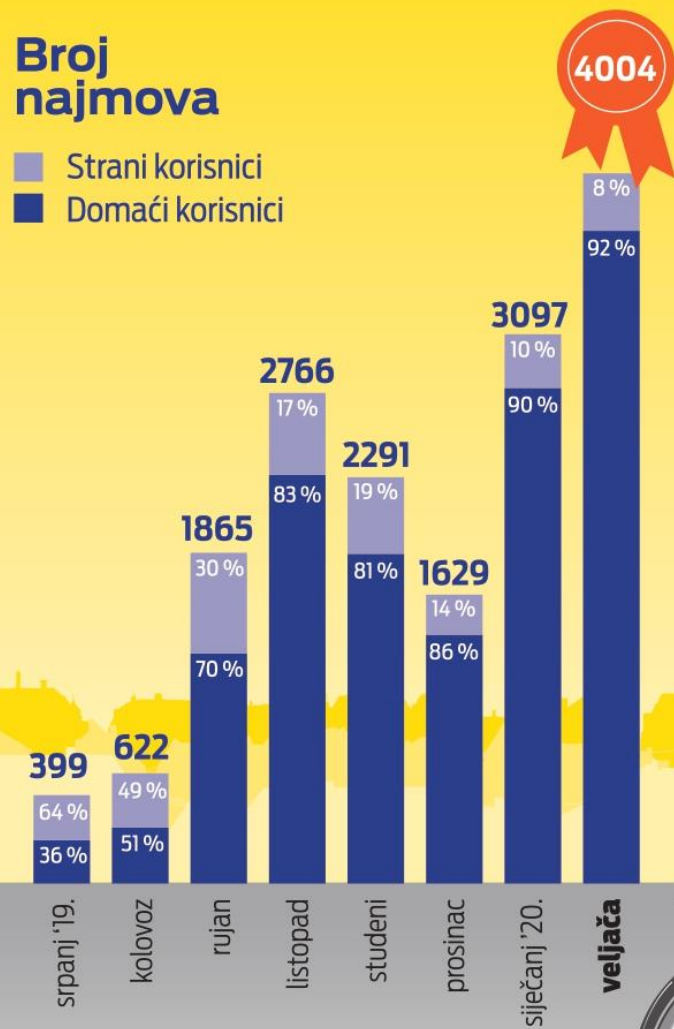


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# Sustav javnih bicikala u Splitu - srpanj\* 2019. - veljača 2020.

## Broj najmova

- Strani korisnici
- Domaći korisnici

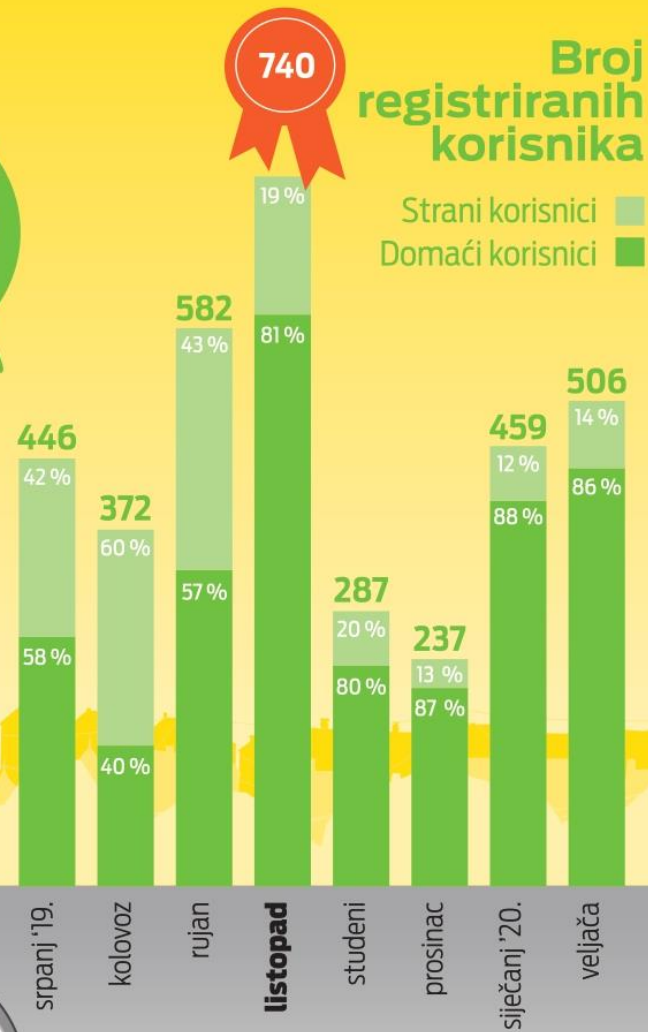


**UKUPNO NAJAM**  
**16.673**

**UKUPNO REGISTRIRANI**  
**3629**

## Broj registriranih korisnika

- Strani korisnici
- Domaći korisnici



Project co-financed by the European Regional Development Fund

\* sustav je počeo s radom od 11. srpnja 2019.

# Dash platforma za održivu mikromobilnost

## Sustav

Proizvodi i montira opremu na javnim površinama i/ili lokacijama B2B partnera.

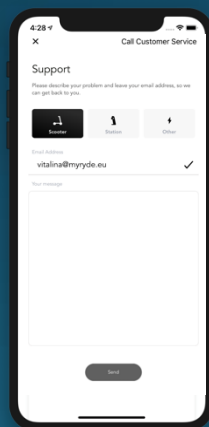


## Mobilna aplikacija

Besplatna mobilna aplikacija za iOS i Android uz plaćanje putem kreditne kartice po sistemu Pay As You Go.

## Korisnička podrška

Korisnička podrška dostupna putem pozivnog centra i mobilne aplikacije.



## Lokalna tehnička podrška

Partneri gradovima u kreiranju održive mreže javnog prijevoza uz red na javnim površinama

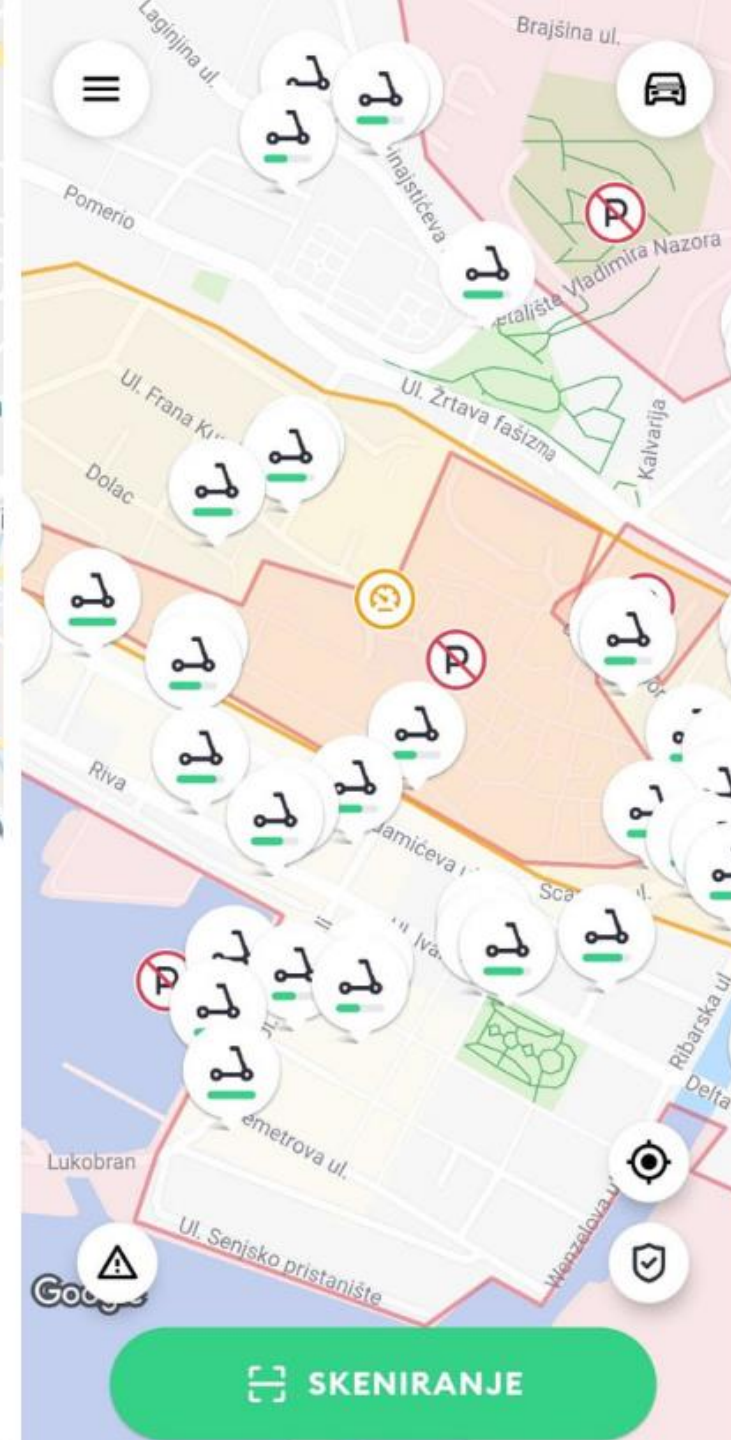
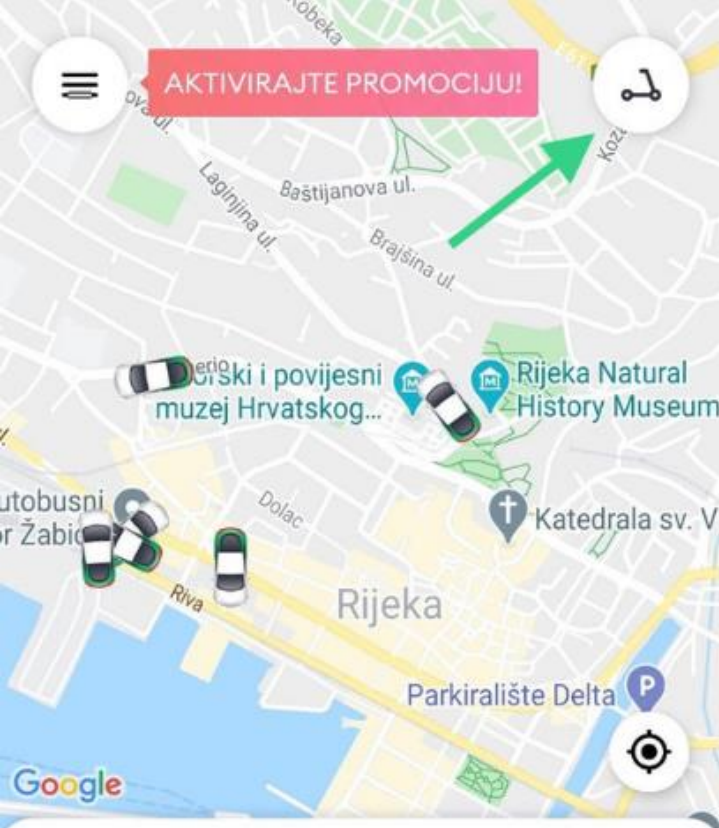


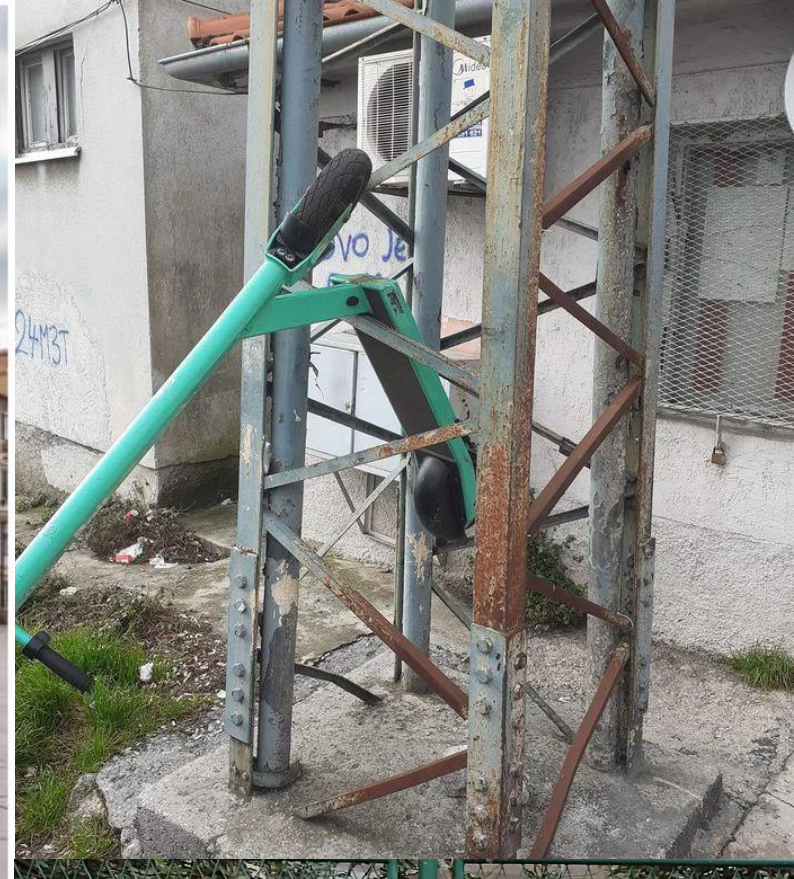


# Hrvatska 2021.

- ✓ Crikvenica
- ✓ Zadar
- ✓ Šibenik
- ✓ Biograd na Moru
- ✓ Rab
- ✓ Brač







# Urbana logistika

- Razvoj i primjena plana održive urbane logistike (SULP)
- Primjeri dobre prakse
  - Budimpešta
  - Torino
  - San Sebastijan
  - Solun



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# Logistika i last-mile dostava



- [EU SUMP 2.0. smjernice + tematske smjernice po mjerama](#)
- Bijela knjiga o prometu (2011)
- [Nova Europska strategija za održivi i pametni promet \(2021.\)](#)

Izvor: [https://www.polisnetwork.eu/wp-content/uploads/2020/07/COVID-19-SUMPPractionersBriefing\\_Final.pdf](https://www.polisnetwork.eu/wp-content/uploads/2020/07/COVID-19-SUMPPractionersBriefing_Final.pdf)

# Primjeri i literatura o Održivim prometnim planovima

CIVITAS PROSPERITY | [sump-network.eu](http://sump-network.eu)

ADVANCE | [eu-advance.eu](http://eu-advance.eu)

CH<sub>4</sub>ALLENGE | [sump-challenges.eu](http://sump-challenges.eu)

ENDURANCE | [epomm.eu/endurance](http://epomm.eu/endurance)

European Platform on SUMP | [eltis.org/mobility-plans](http://eltis.org/mobility-plans)

EVIDENCE | [evidence-project.eu](http://evidence-project.eu)

Poly-SUMP | [poly-sump.eu](http://poly-sump.eu)

Urban Transport Roadmaps | [urban-transport-roadmaps.eu](http://urban-transport-roadmaps.eu)

Turistički kontekst – Interreg Motivate, CIVITAS Destinations



**CIVITAS**  
Cleaner and better transport in cities  
PROSPERITY

**ADVANCE**

**CHALLENGE**

**ENDURANCE**  
European SUMP-network

**European Platform  
on Sustainable Urban  
Mobility Plans**

**Evidence**

**Poly-SUMP**  
Planning sustainable mobility together

**Urban Transport  
Roadmaps**

# Last Mile Delivery Transportation Market 2019-2030



## Market by Region, 2019



## Key Market Findings

**~3% CAGR**  
(2019-2030)

**Market Value 2030**  
~US\$ **390Bn**



*Logistics Companies Pin Hope on New Final Mile Delivery Models to Save Costs and Optimize Transportation*



*Booming E-commerce Sector Expected to Provide Abundant Opportunities for Market Growth*

### Vehicle Type



- Light Duty Vehicle
- Medium Duty Vehicle
- Heavy Duty Vehicle

### Cargo Type

- Postal Goods
- Liquid Good
- Dry Good



modo.coop



onomotion.com



nuviel.com



bionhybrid.com



ikebike.schwarz



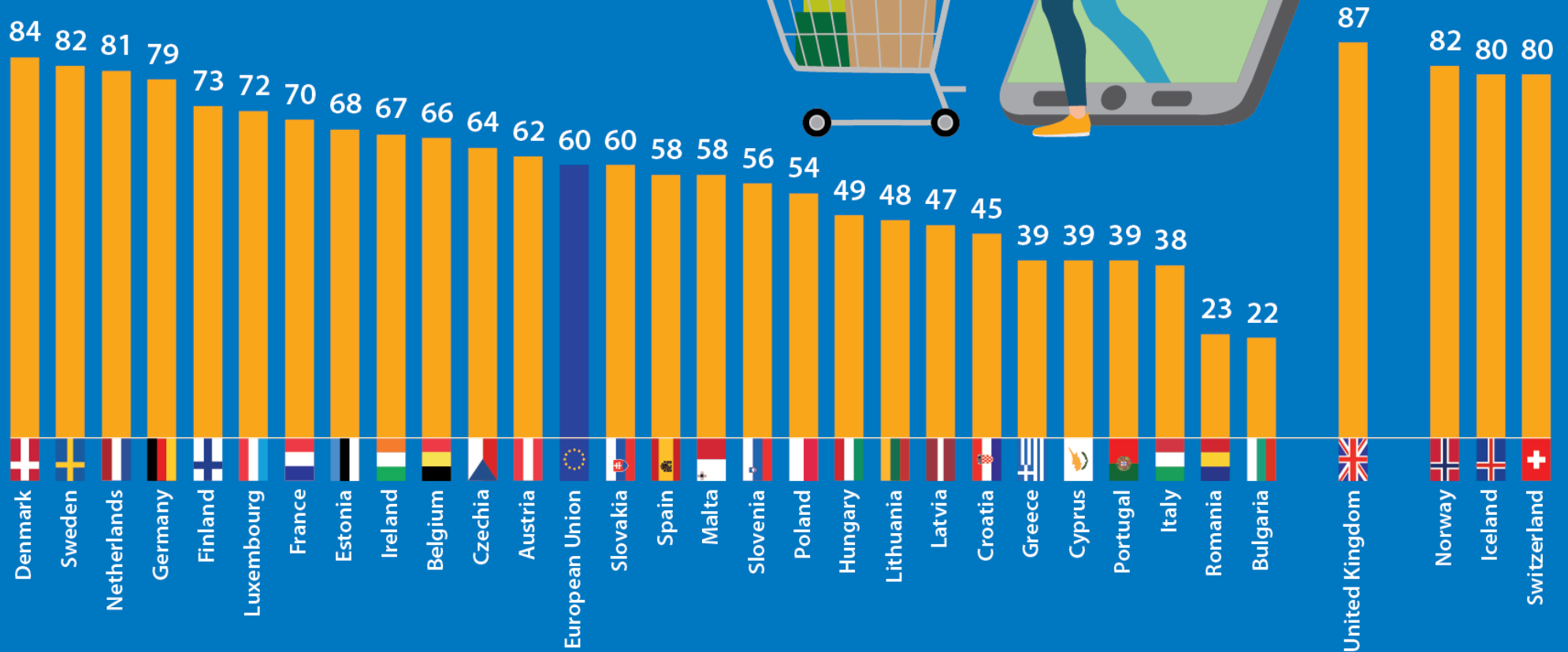
withbond.com





# Share of population that shopped online during the last 12 months, 2019

(% of population aged 16 to 74)









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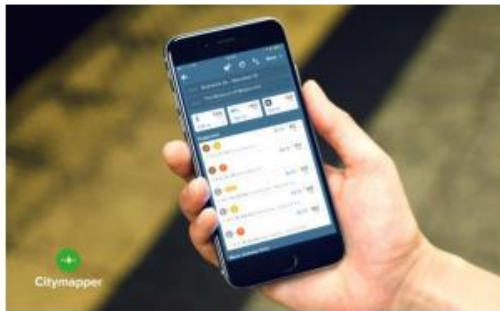
# Kontekst turističkih destinacije

- Sezonalost koja utječe na promet i pritisak na prostor
- Mediteranski tip urbanizma i gradnje
- Prednost mikromobilnosti u prometovanju i dostavi
- Brendiranje Grada
- Sustavi javnih bicikala, romobila - utječu na kvalitetu turističke ponude

# Digitalizacija dijeljene mobilnosti - mobilnost kao usluga (MaaS) - primjeri dobre prakse

## A revolution in Mobility Services

smartphone, the new transport mode



# Vijesti

- Mobility as a service:  
[https://www.youtube.com/watch?v=5jejbfpKWQ&ab\\_channel=LindholmenSciencePark](https://www.youtube.com/watch?v=5jejbfpKWQ&ab_channel=LindholmenSciencePark)
- CIVINET Slo-Cro-SEE: <https://civinet-slohr.eu/>



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# Hvala na pažnji!

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