

Behaviour change in response to COVID-19 pandemic - Inter-Connect PLUS Interreg ADRION project



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European Regional Development Fund - Instrument for Pre-Accession II Fund

Inter-Connect PLUS



Inter-Connect (PLUS): aiming to support sustainable mobility



Inter-Connect PLUS & e-smartec

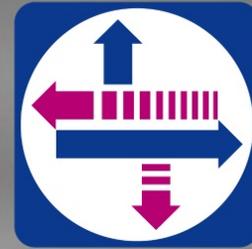


Interreg Europe Policy Learning Platform
Behaviour change and participatory processes for sustainable mobility
28 June 2022, Thessaloniki

 **Interreg Europe** 
European Union | European Regional Development Fund



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Dipl. Civil Engineer
M.Sc. Transport Engineer
Ph.D. Urban Transport Dynamics
Team Member of Laboratory D1:
Sustainable Urban Mobility
Head of Laboratory D2:
Technologies and Tools for
Touristic Development



HELLENIC INSTITUTE
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CERTH / HIT



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Head of the Sustainable Urban
Mobility Lab
Dep. Head of Sector D
'Transport & Tourism'

Behaviour change in response to COVID-19 pandemic - **Inter-Connect PLUS** Interreg ADRION project

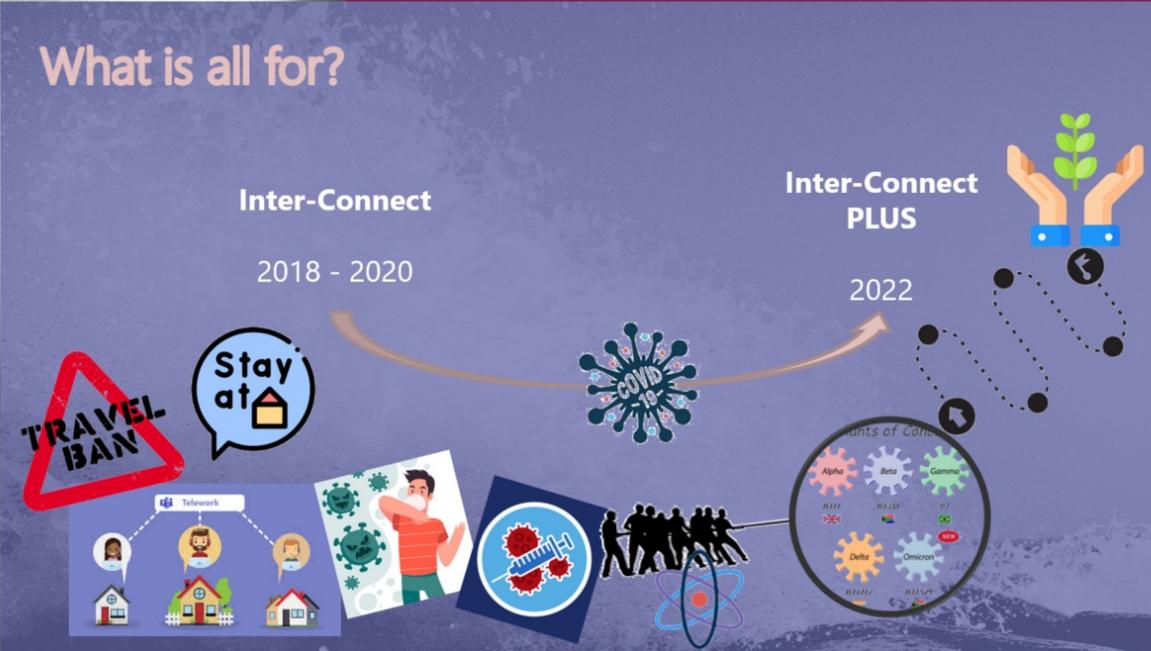


Inter-Connect (PLUS): aiming to support sustainable mobility



Inter-Connect PLUS & e-smartec

From Inter-Connect to Inter-Connect PLUS



Inter-Connect

Inter-Connect PLUS

Associated Partners

Asocijacija rukovodilaca transporta i logistike
TransportLog

START
ROMAGNA

ΔΗΜΟΣ ΙΩΑΝΝΙΝΩΝ

REGIONE AUTONOMA FRIULI VENEZIA GIUUA

Autoriteti Portual Durrës
DURRËS PORT AUTHORITY

Municipality of Igoumenitsa (Greece)
Lead partner

CERTH
Centre for Research and Technology Hellas (Greece)

ITL
INSTITUTE FOR TRANSPORT & LOGISTICA
Institute for Transport and Logistics Foundation (Italy)

Regione Emilia-Romagna
Emilia-Romagna Region General Directorate for Territorial and Environmental safeguard (Italy)

CEI
CENTRAL EUROPEAN INITIATIVE
Central European Initiative Executive Secretariat (Italy)

RRA LUR
Regional Development Agency of the Ljubljana Urban Region (Slovenia)

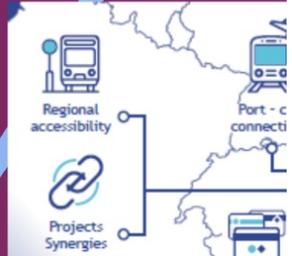
HŽPP
HZ Passenger Transport Ltd. (Croatia)

PORT OF BAR
Port of Bar Holding company (Montenegro)

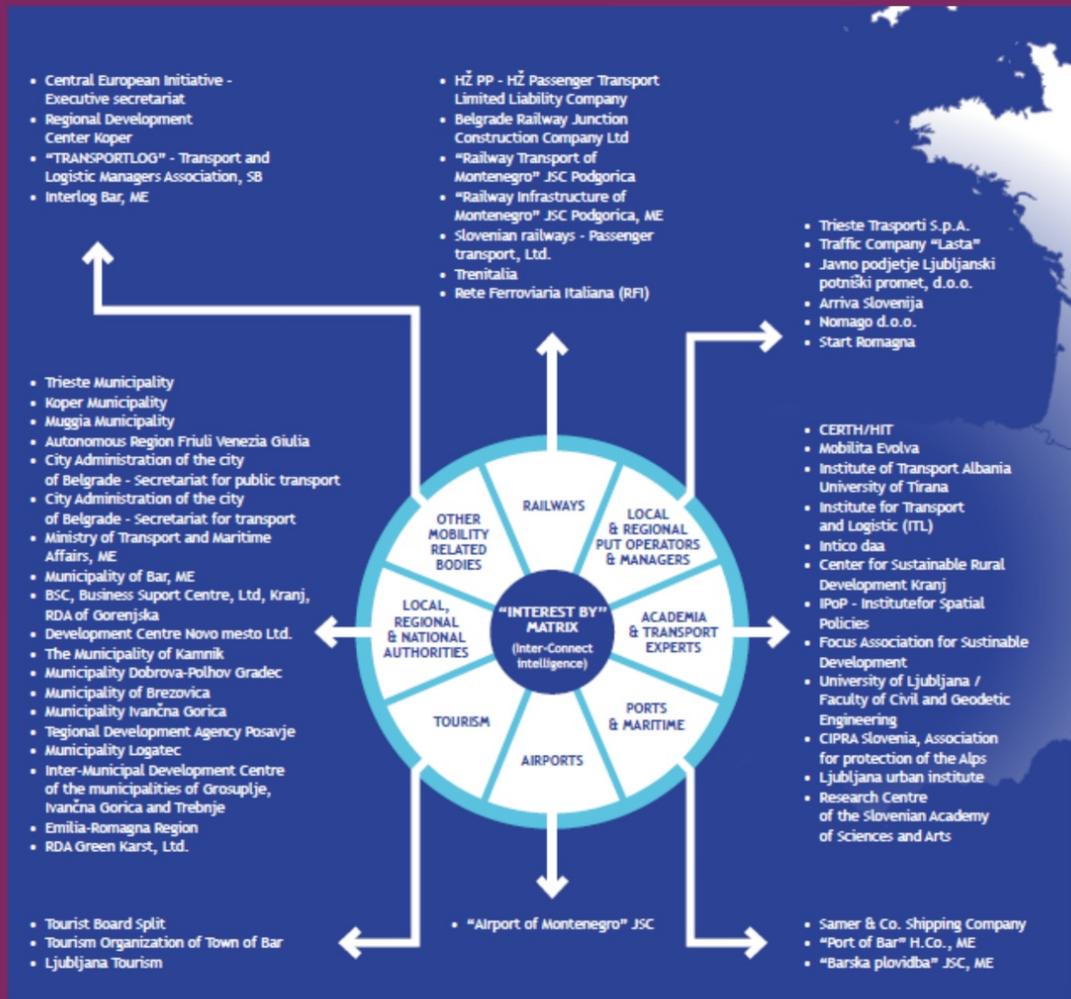
Ministry of Infrastructure and Energy (Albania)

CHAMBER OF COMMERCE AND INDUSTRY OF SERBIA
Chamber of Commerce and Industry of Serbia
Chamber of Commerce and Industry of Belgrade (Serbia)

- Executive secretariat
- Regional Development Center Koper
 - "TRANSPORTLOG" - Transport and Logistic Managers Association, SB
 - Interlog Bar, ME
- ↑
- Trieste Municipality
 - Koper Municipality
 - Muggia Municipality
 - Autonomous Region Friuli Venezia Giulia
 - City Administration of the city of Belgrade - Secretariat for public transport
 - City Administration of the city of Belgrade - Secretariat for transport
 - Ministry of Transport and Maritime Affairs, ME
 - Municipality of Bar, ME
 - BSC, Business Support Centre, Ltd, Kra
 - RDA of Gorenjska
 - Development Centre Novo mesto Ltd.
 - The Municipality of Kamnik
 - Municipality Dobrova-Polhov Gradec
 - Municipality Brezovica
 - Municipality Ivančna Gorica
 - Regional Development Agency Posavje
 - Municipality Logatec
 - Inter-Municipal Development Centre of the municipalities of Grosuplje, Ivančna Gorica and Trebnje
 - Emilia-Romagna Region
 - RDA Green Karst, Ltd.
- ↑
- Tourist Board Split
 - Tourism Organization of Town of Bar
 - Ljubljana Tourism





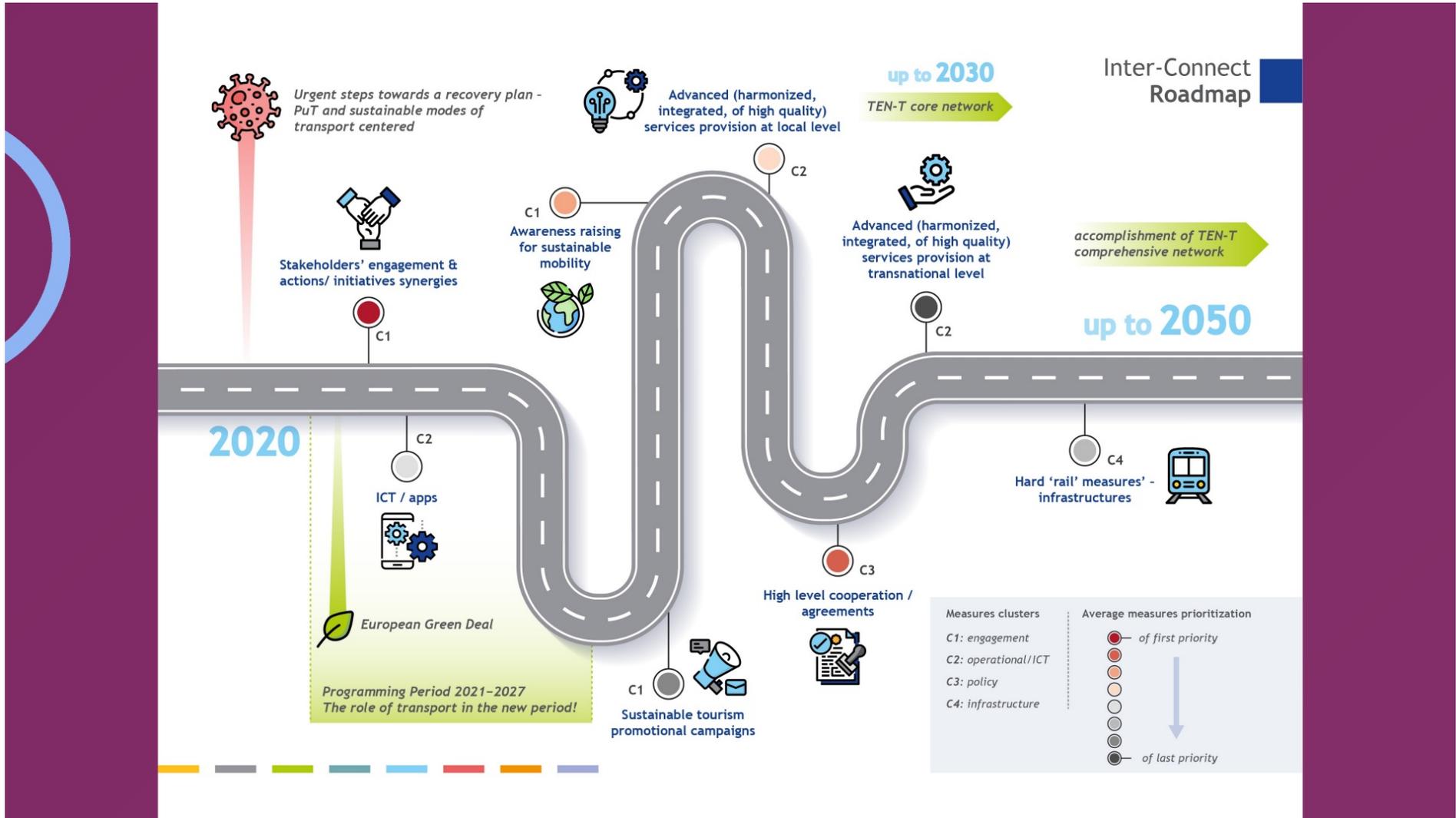


Port of Bar Holding
company
(Montenegro)

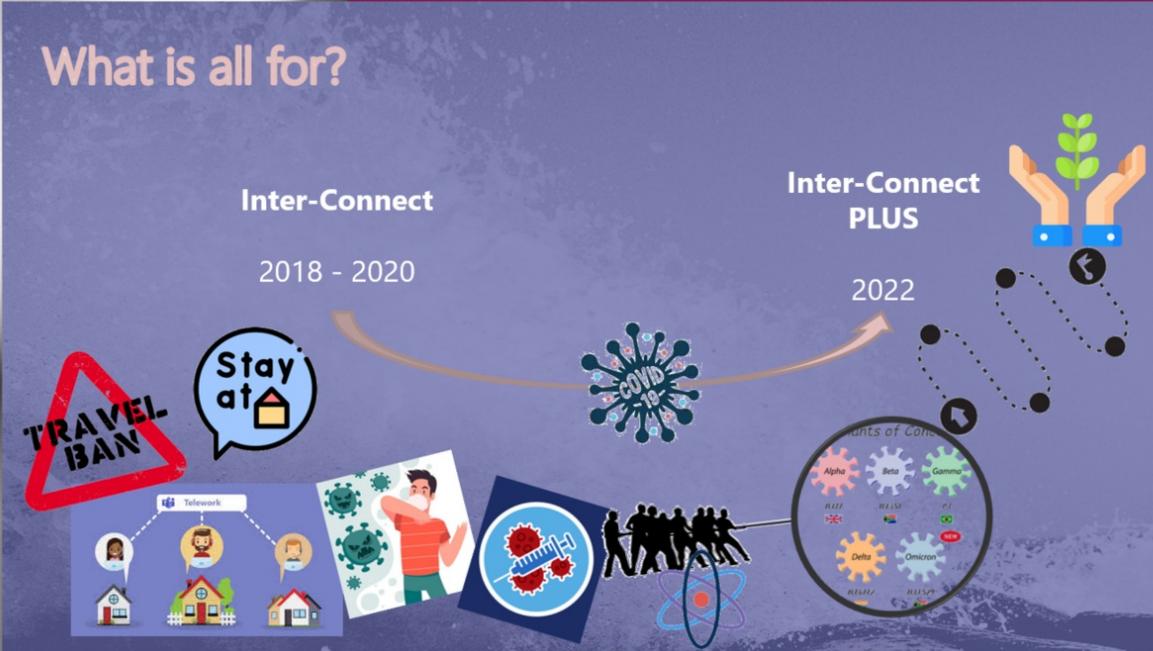


Chamber of Commerce
and Industry of Serbia
Chamber of Commerce and
Industry of Belgrade
(Serbia)





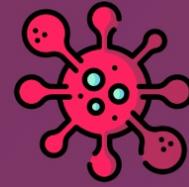
From Inter-Connect to Inter-Connect PLUS



Inter-Connect

Inter-Connect PLUS

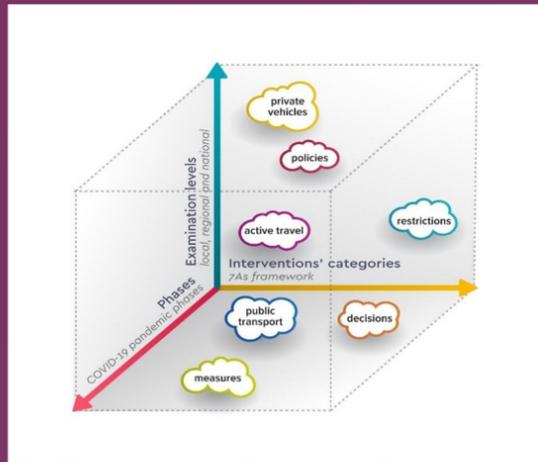
Inter-Connect PLUS



COVID-19 effect on mobility and tourism

SEARCH

Citizens' survey
+
Tourism stakeholders survey
+
Mobility stakeholders survey
+
Additional information from partners (policies/interventions/good practices)



CHALLENGES

What were the main challenges in mobility faced during the the pandemic? (1: fully disagree, 2 = disagree, 3= undecided / no opinion, 4 = agree, 5 = fully agree)

	Phase A - Complete Lockdown	Phase B - Release of measures after the lockdown	Phase C - off mass	Insignificant	Somewhat insignificant	Significant
Closure of businesses operating in tourism and related sectors (e.g. hotels, restaurants, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
International and domestic travel restrictions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Decreased purchasing power of tourists	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feeling of distrust in travelling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Giving up long trips/destinations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What was the effect of covid-19 on your job the last two years (from covid to outbreak peak) - up or down?

	job loss	shift to teleworking	working changed	starting a new job / changing job	other
Covid-19 Phase A - Complete Lockdown	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Covid-19 Phase B - Release of measures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Covid-19 Phase C - Light Lockdown on off measures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Which was your main mode of transport the last two years (before covid to outbreak peak) - up or down?

	Public Transport	Car	Motorcycle	Taxi	Walking	Bicycle
Before covid-19 outbreak	<input type="radio"/>					
Covid-19 Phase A - Complete Lockdown	<input type="radio"/>					
Covid-19 Phase B - Release of measures	<input type="radio"/>					
Covid-19 Phase C - off mass	<input type="radio"/>					

How was passengers' transport affected?
Pop up mobility measures that could support sustainability?
New mobility patterns?
Behavioral issues linked to mobility?
New mobility and travel related policies?
Engagement in sustainable mobility planning survived?
Back to normality risks?
Capacity building further needs revealed?

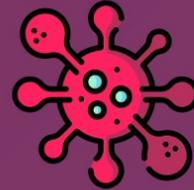


(policies/interventions/good practices)

-
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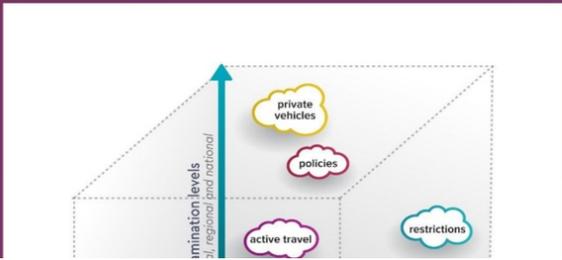
Inter-Connect PLUS



COVID-19 effect on mobility and tourism

SEARCH

Citizens' survey
+
Tourism stakeholders survey
+
Mobility stakeholders survey
+
Additional information from partners (policies/interventions/good practices)



CHALLENGES

What were the main challenges in mobility faced during the the pandemic? (1 = fully disagree, 2 = disagree, 3= undecided / no agree)

	Phase A - Complete Lockdown	Phase B - Release of measures after the 1st lockdown	Phase C - 2nd lockdown
of the government mechanism			
bicycles			
pedestrians			
for outdoor activities			
Last of date collection systems			
Not enough digitalisation			
Down fear to use Public Transport			
Increased congestion on the roads among lockdowns due to high car use			
Economic fallout on transport sector			

Please comment on the selections above or add any additional challenges identified

POSITIVE IMPACTS on mobility

What were the main challenges in mobility faced during the the pandemic? (1 = fully disagree, agree)

	Phase A - Complete Lockdown	Phase B - Release of measures after lockdown	Covid 19 Phase A - Complete Lockdown	Covid 19 Phase B - Release of measures	Covid 19 Phase C - Light lockdown (partial measures)
Increase of walking					
Increase of cycling					
Increase of non-motorability					
Decrease of air pollution					
Decrease of noise					
Increase of teleworking					

What were the main challenges in tourism/mobility faced during the pandemic? (You can tick more than one options.)

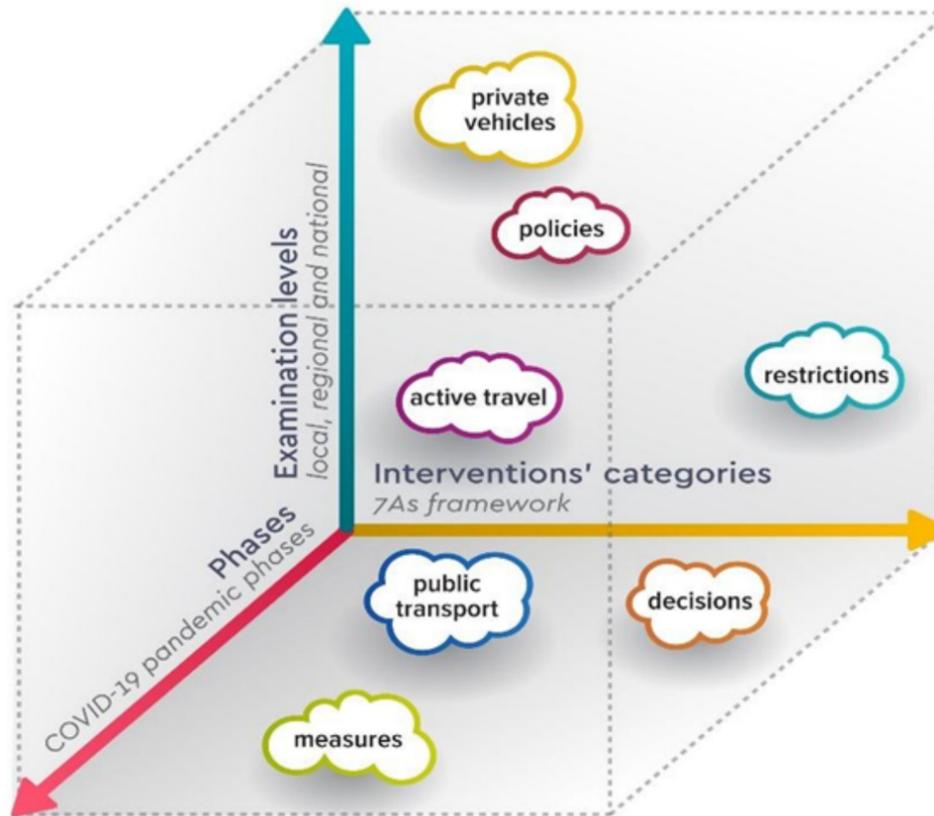
	Insignificant	Somewhat insignificant	Neutral	Somewhat significant	Significant
Closure of businesses operating in tourism and related sectors (e.g. hotels, restaurants, etc).					
International and domestic travel restrictions					
Decreased purchasing power of tourists					
Feeling of untrust in travelling					
Giving up long trips/destinations					

What was the effect of covid-19 in your job the last two years (from covid-19 outbreak post - up to now)?

	job loss	shift to teleworking	nothing changed	starting a new job / changing job	other
Covid 19 Phase A - Complete Lockdown					
Covid 19 Phase B - Release of measures					
Covid 19 Phase C - Light lockdown (partial measures)					

How was passengers transport affected?
Pop up mobility measures that could support sustainability?
New mobility patterns?
Behavioral issues linked to mobility?
New mobility and travel related policies?
Back to normality risks?
Engagement in sustainable mobility planning survived?
Capacity building further revealed?





• Economic fallout on transport sec

Please comment on the selections a

POSITIVE IMPACTS on t

What were the main challenges in r agree)

	Phase / Lockdo
• Increase of walking	
• Increase of cycling	
• Increase of micromobility	
• Decrease of air pollution	
• Decrease of noise	
• Increase of teleworking	
• Rapid digitalization	



1. Awareness

2. Avoidance

3. Act & Shift

4. Anticipation of new technologies

5. Actor Involvement

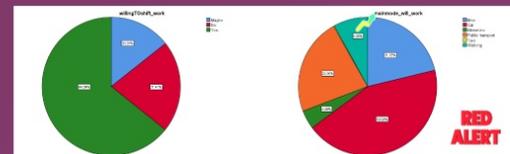
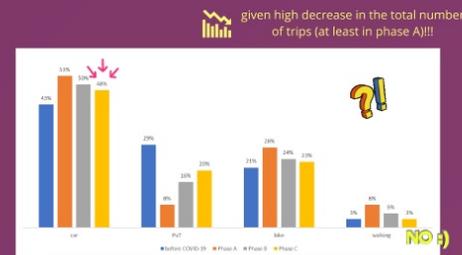
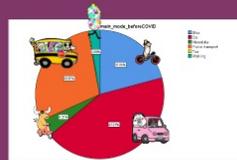
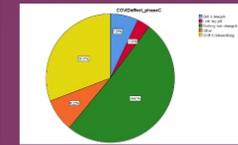
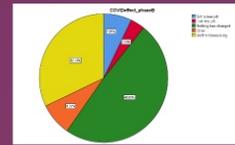
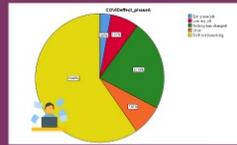
6. Acceleration

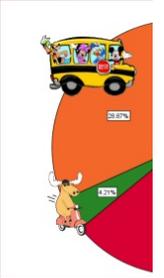
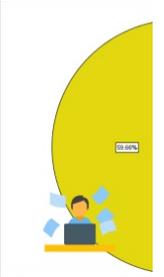
7. Adaptation of behavior

Main findings from the citizens survey!

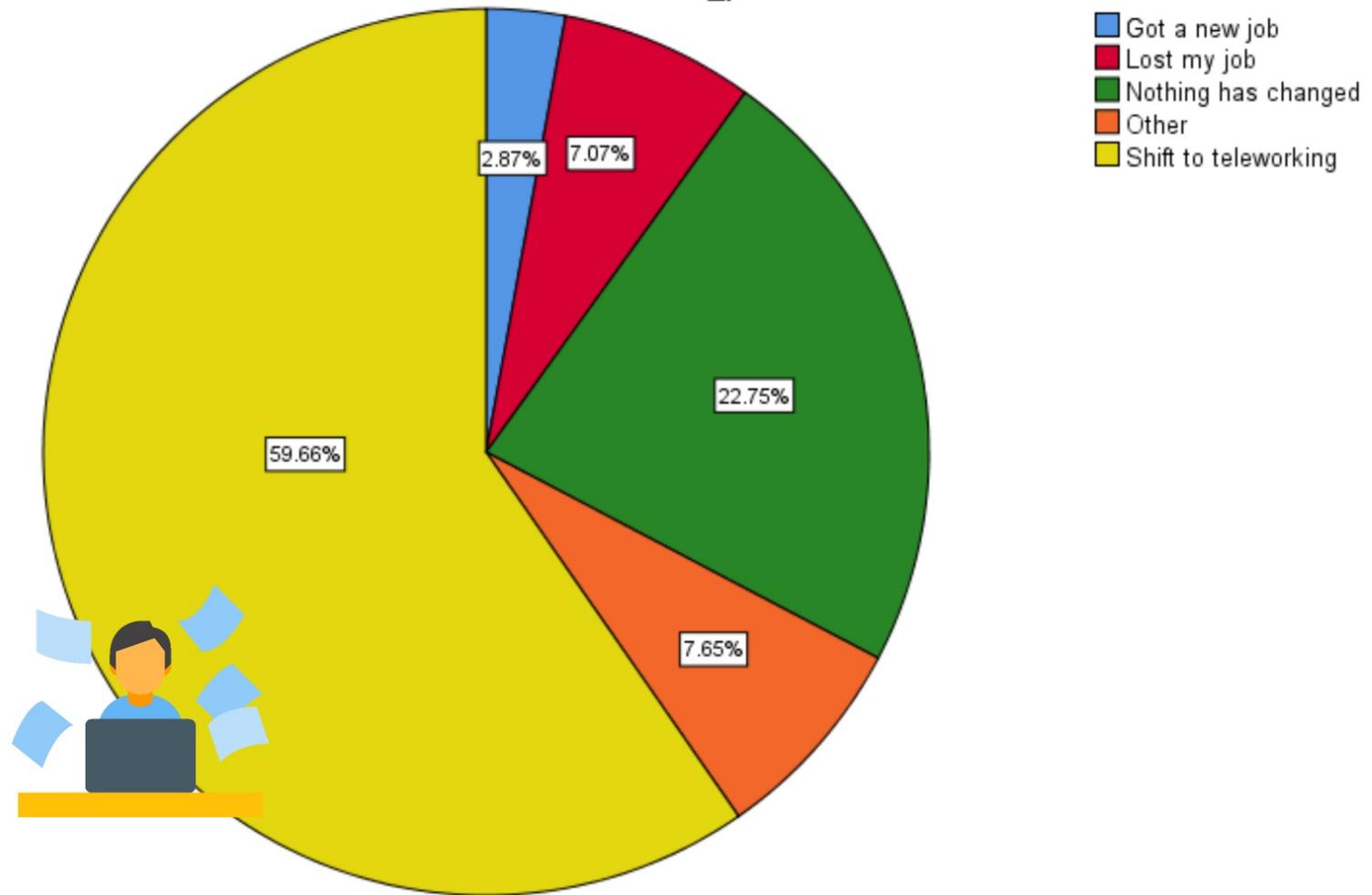


is there a real interest for changing car-dependent lifestyle?

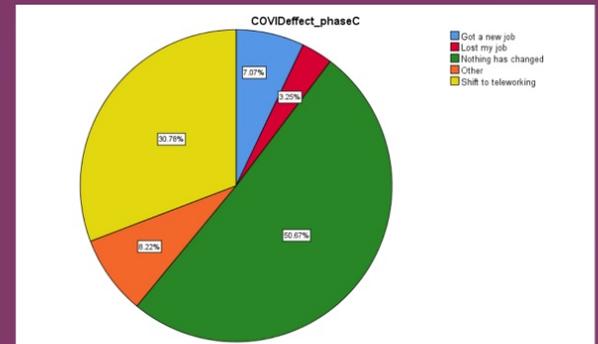
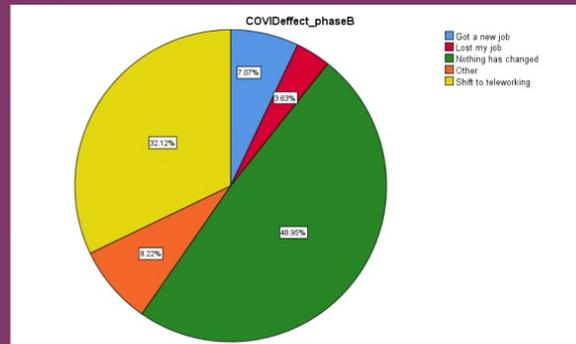
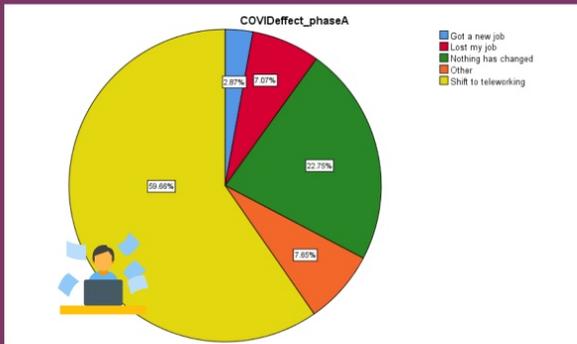




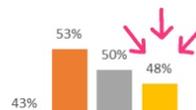
COVIDeffect_phaseA

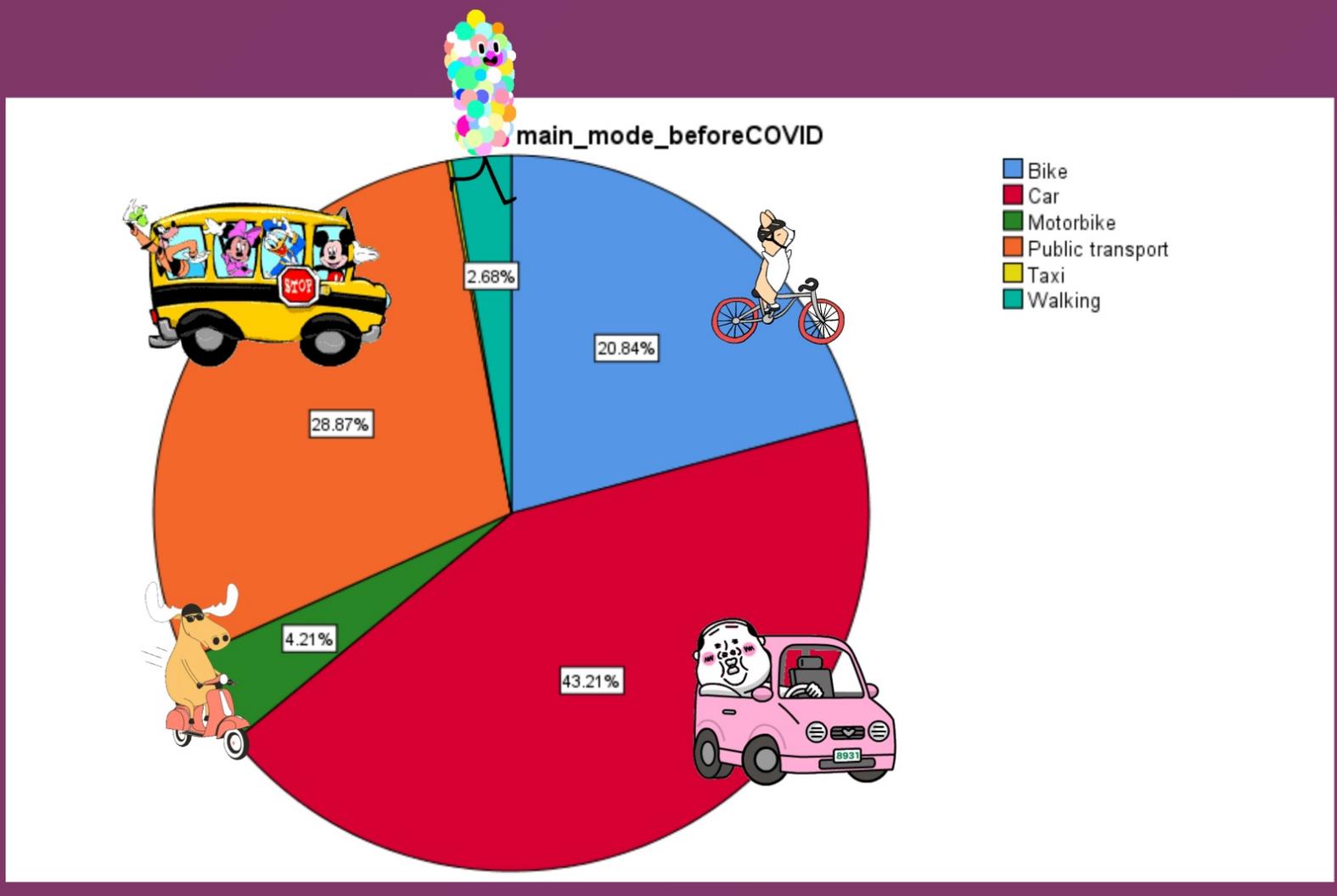


Is there a real interest for changing car-dependent lifestyle?



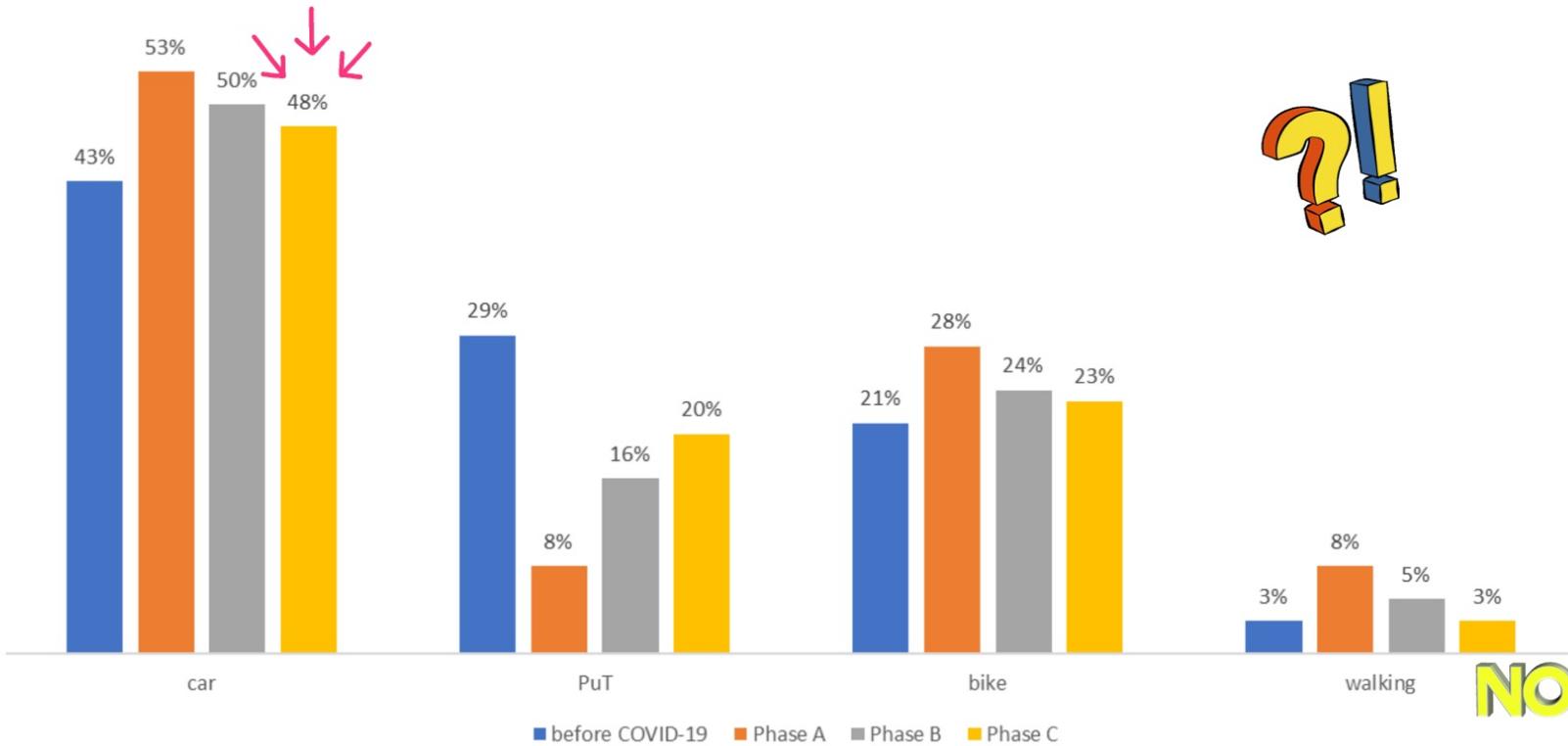
given high decrease in the total number of trips (at least in phase A)!!!



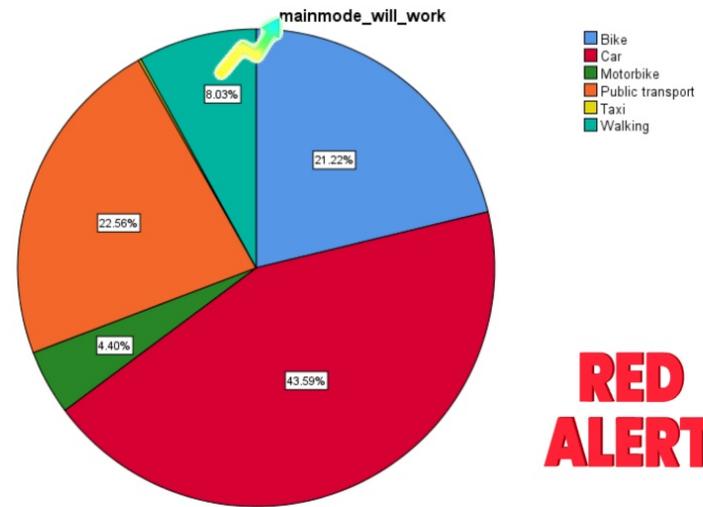
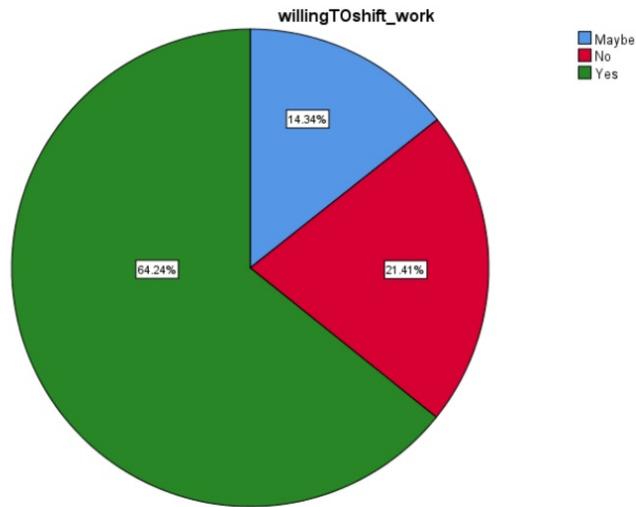




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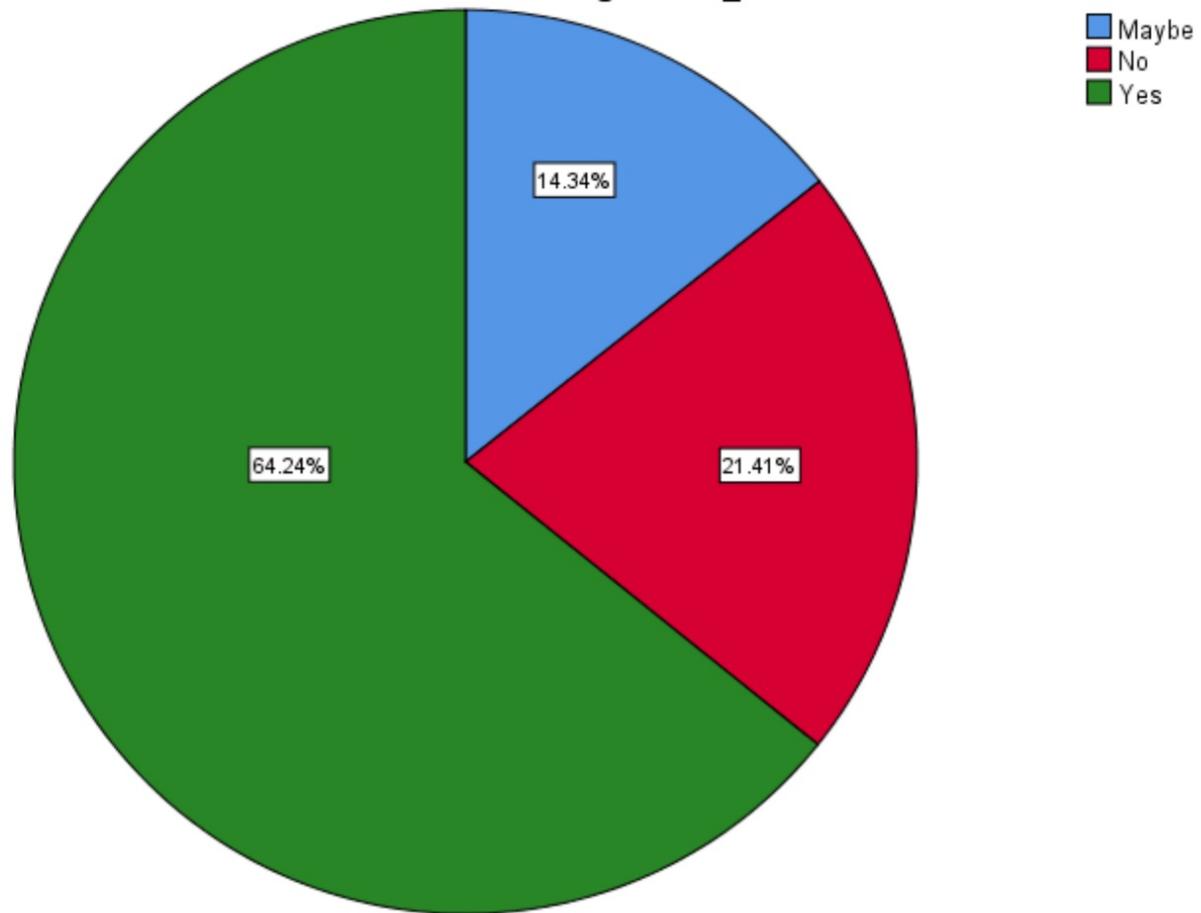


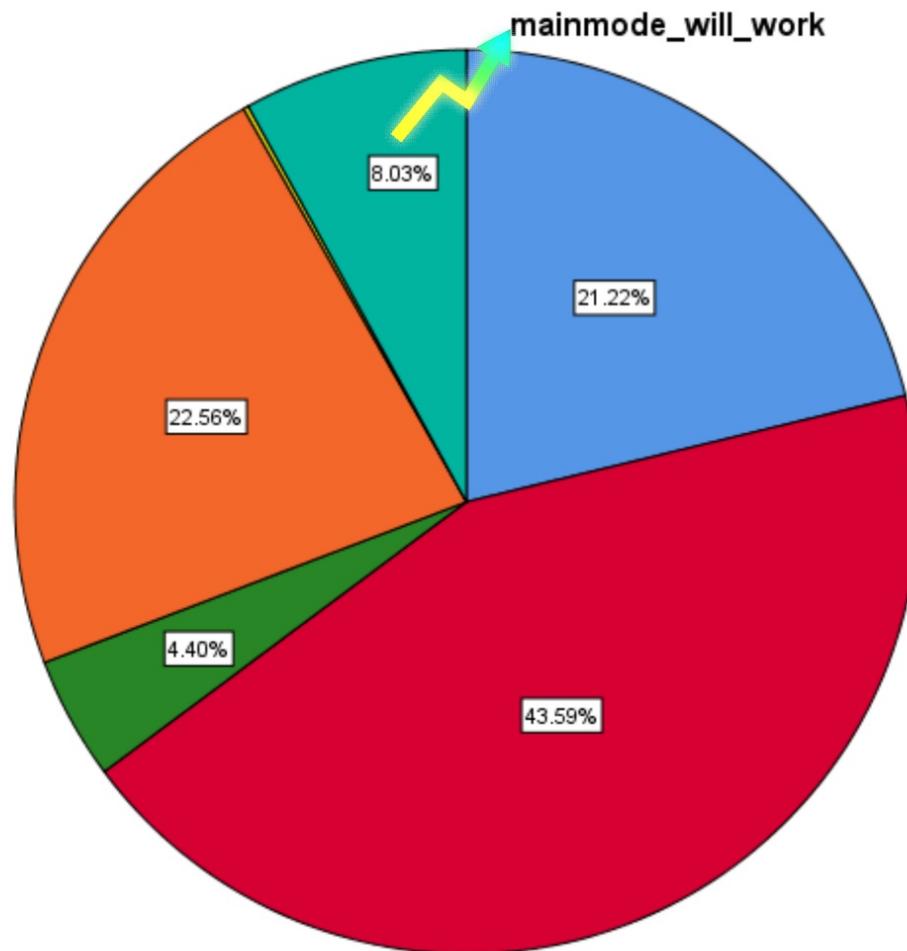
NO :)



**RED
ALERT**

willingTOshift_work





**RED
ALERT**

Insight from stakeholders

The 5 first As

Awareness

A broad range of measures to limit physical contacts to prevent and slow down the COVID-19 pandemic were introduced and communicated through awareness campaigns

Avoidance

- travel restrictions
- people working from home expansion* of e-commerce and e-services
- recommendations to avoid any unnecessary travel, targeting public transit with special intensity
- policy regarding the maximum number of passengers in the same vehicle
- imposed reduced capacities and modified timetables in the public transport modes aiming to serve the users mostly during the peak hours

Act and Shift

- speed limits were reduced by 10 to 20 km / h depending on the road category
- establishing new protocols for frequent and comprehensive cleaning of transit vehicles and facilities
- promoting or requiring the use of face masks inside public transport
- automating doors to prevent passengers from pressing buttons
- built pilot (temporary) lanes for pedestrians and bicycles on major boulevards to promote safe travel

Anticipation of New Technologies

- establishment of many parking and electric charging stations
- introducing apps and / or smart ways (color indication) to inform users regarding the occupancy levels of the vehicles, thus their risk of exposure
- recording and analyzing mobility data, supported decisions on adapting temporary measures like where are the most suitable corridors for pedestrians and cyclists

Actor involvement

- Governments/authorities created platforms where citizens could send suggestions for temporary measures they would like to see
- telephone lines were open to respond to questions regarding what is allowed

How to move on

With the actual shift towards individual mobility, there is a need to ensure that ridership lost by public transit transfers towards micromobility options instead of private cars

The availability of large data sets (big data) will play an important role in future research on COVID-19 in general and on transport in particular

Need for a deep change in Public Transport

Reclaiming public space and sustainable mobility promotion

Active mobility and shared solutions should win the private car

The needed integration between public transit and micromobility options offers a unique opportunity to accelerate the rollout of MaaS, to enhance the flexibility and efficiency of the transport system

With the modal shift towards individual mobility, walking and cycling are the clear winners so far with an increase in car appeal too

The COVID-19 crisis offers a unique window of opportunity for authorities and operators to significantly reshape mobility systems.

The shift towards individual mobility options will be highly dependent on the presence of subsidies or incentives for the purchase of cars

COVID-19 is an opportunity to change the current tourism model towards a more sustainable and environmentally friendly model

The last 2 As / recommendations

The 5 first As

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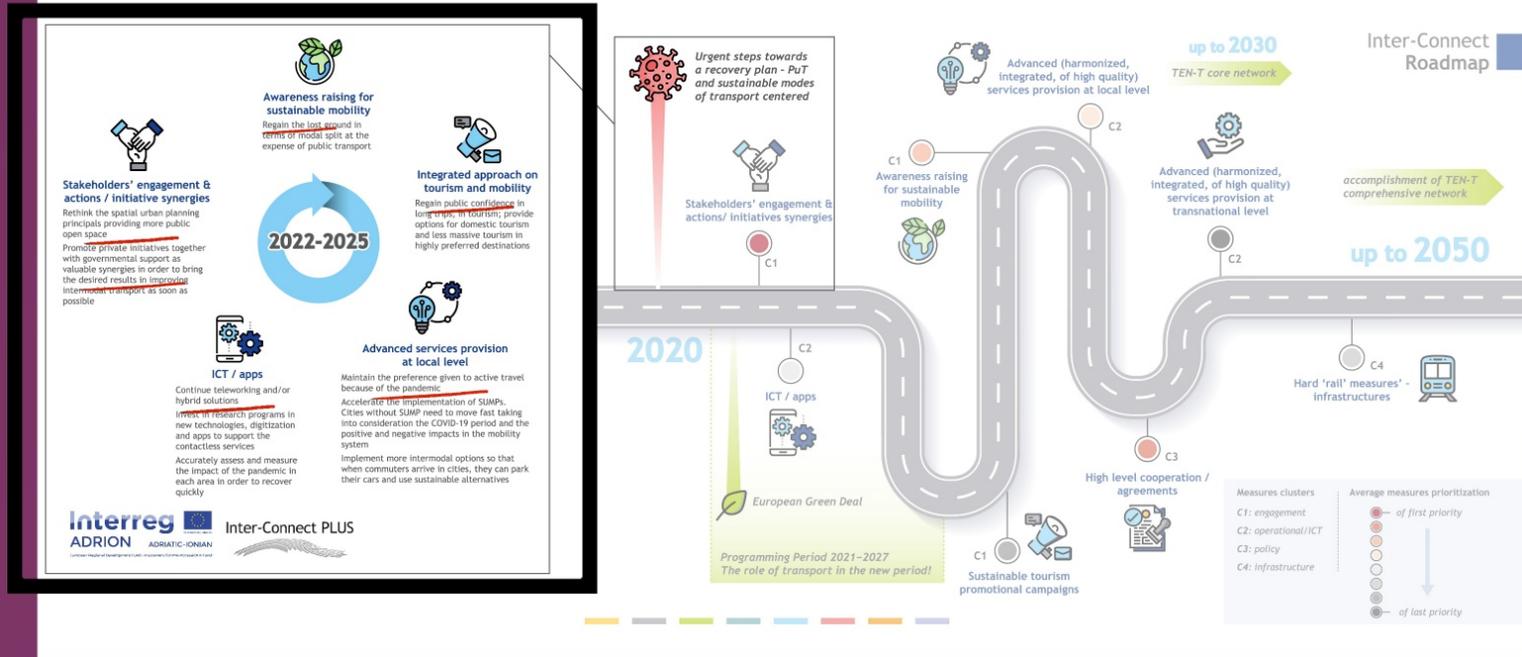
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The last 2 As / recommendations

Inter-Connect PLUS 'add on'





Awareness raising for sustainable mobility

Regain the lost ground in terms of modal split at the expense of public transport

Stakeholders' engagement & actions / initiative synergies

Rethink the spatial urban planning principals providing more public open space

Promote private initiatives together with governmental support as valuable synergies in order to bring the desired results in improving intermodal transport as soon as possible

Integrated approach on tourism and mobility

Regain public confidence in long trips, in tourism; provide options for domestic tourism and less massive tourism in highly preferred destinations

Advanced services provision at local level

Maintain the preference given to active travel because of the pandemic

Accelerate the implementation of SUMP. Cities without SUMP need to move fast taking into consideration the COVID-19 period and the positive and negative impacts in the mobility system

Implement more intermodal options so that when commuters arrive in cities, they can park their cars and use sustainable alternatives

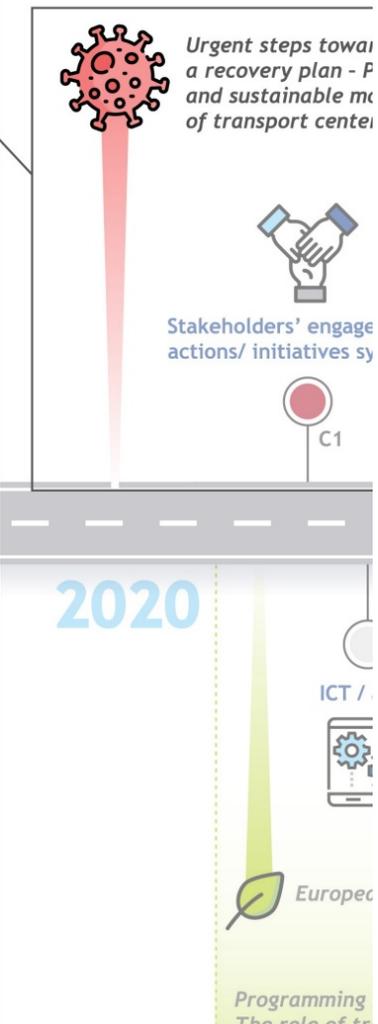
ICT / apps

Continue teleworking and/or hybrid solutions

Invest in research programs in new technologies, digitization and apps to support the contactless services

Accurately assess and measure the impact of the pandemic in each area in order to recover quickly

Inter-Connect PLUS



Urgent steps toward a recovery plan - P and sustainable mobility of transport centers

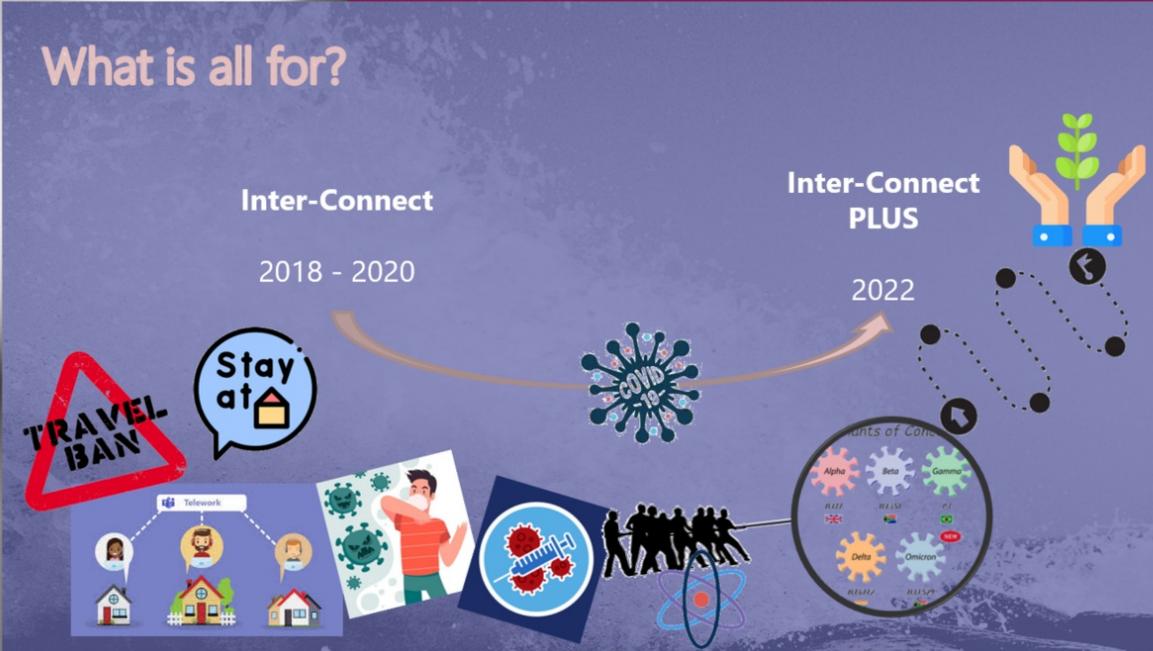
Stakeholders' engagement actions/ initiatives system

C1

2020

Programming The role of transport

From Inter-Connect to Inter-Connect PLUS



Inter-Connect

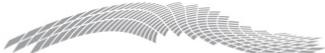
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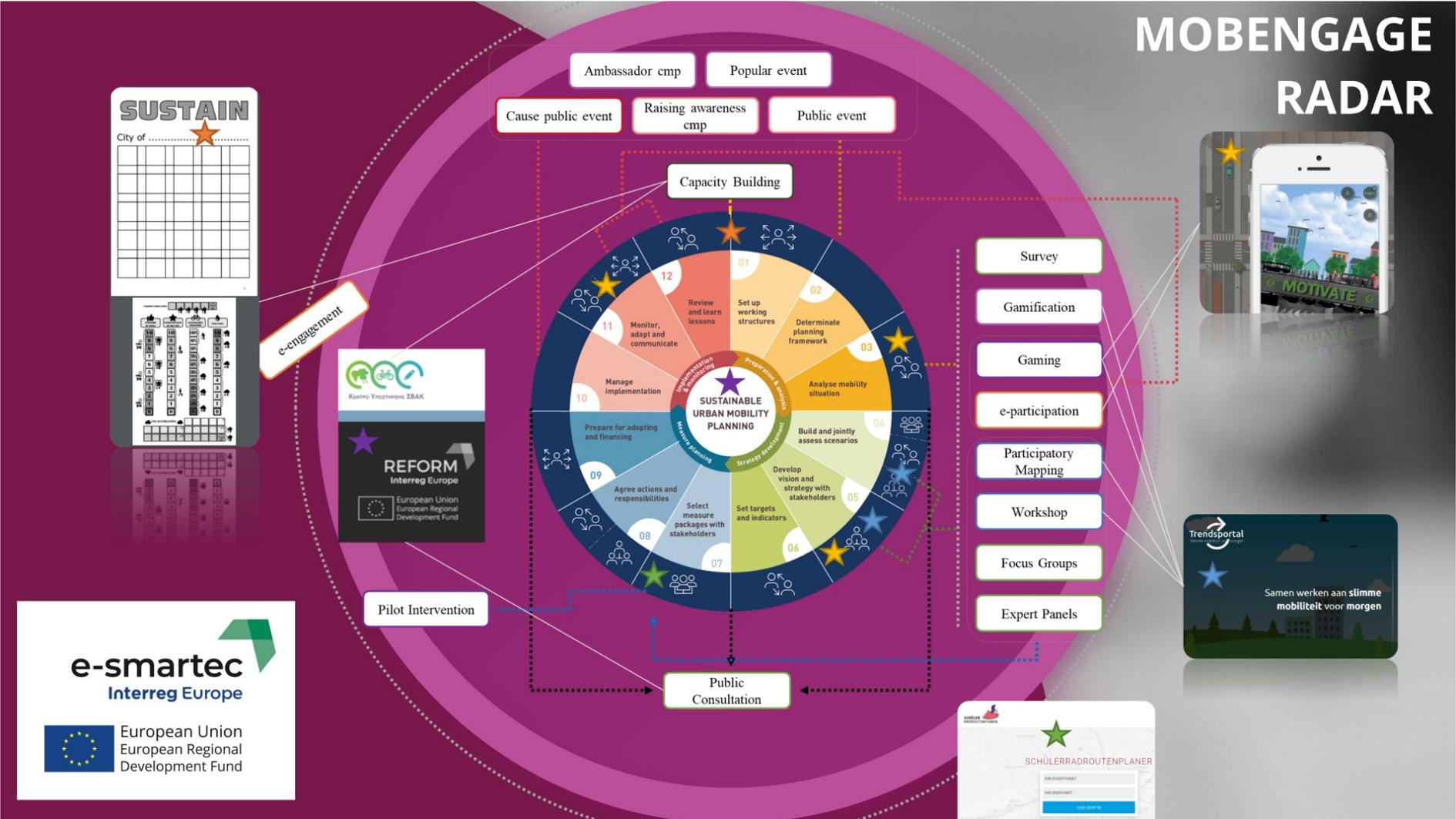
e-smartec



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**Photo source:
Tyrinopoulos I., Morfoulaki M., Myrovali G. (2022) Planning
sustainable urban mobility systems (Hellenic Academic E-
books, Kallipos)*

MOBENGAGE RADAR



e-smartec



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