# Title: Innovative Public Transit Models Reshaping Cities

Subject: Future Mobility

* Mobility

Abstract:

Longer periods travelling to and from work have become an accepted part of many people's daily routine. Yet some studies stress that they have a devastating impact. Thus, giving commuters useful up-to-the-minute information on transport options is crucial. Sensors, real-time data and integrated platforms have come to the rescue, but there are still some challenges. How can city leaders improve this information so that commuting gets bearable?

Speakers:

#### Álvaro Nicolás-Loscos

#### Dionisio Gonzalez García

#### Wang Jingliang

#### David Beeton

#### Alvaro Urech

#### Nico Anten

Conference:

and welcome to these afternoon sessions

for them from the first day

we are in the panel that it's taking the

name of innovative public transport

models reshaping cities that means that

we will be looking at where are the

public transportation systems in our

cities thinking to have better service

to to the citizens in Barcelona for

instance I work for the municipality of

Barcelona we are completely reshaping

the the bus transport system to become a

more more efficiency a more efficient

system that is able to transport more

people with with the same buses and the

way we do that it's why reshaping

completely the lines and making them

more legible and more easy to understand

and and also we have developed a system

in which by just one interchange you can

you can access the whole the whole every

every corner of the city just with one

interchange the same that normally

happened with with a metro with a metro

system so that that would be one example

on when on what Barcelona is working on

the on that regard and we have a very

good panelists today we have people

coming from everywhere in the world we

have people when one speaker coming from

from China we have people coming from

from international organizations people

coming also from cities and from from

companies trying to offer from the

different point of view what is these

these challenges that that public

transport settings are facing in the

different cities to try to make more

efficient and more to transport more

people with with with the public

transport system which is very very

important to the sustainability of our

cities so please I will welcome that the

panelists now if they can have a seat

say what

this is a translator translator

so our first panelist in this afternoon

will be mr. Dionisio Gonzalez he comes

from the UI TP international

organization for the for the public for

the public transport and he will he's an

expert on transport infrastructures and

services and he also has work as a

director of advocacy and outreach for

the internet for the UI TP an

organization that has 1,400 members

companies working to promote and support

sustainable public transport in cities

so please welcome Ganesha

[Applause]

thank you very much

it's a real pleasure for you ATP being

here and for me personally of course

being here with you to share the results

the outcome of this you me pro yet urban

mobility innovation index let me very

briefly introduce you to you ITP you ITP

is the global worldwide Association of

public transport of sustainable urban

mobility where all the different public

transport actors are present from cities

to authorities operators industry etc

and all the different public transport

modes take part also in our association

we have 16 offices as you can see there

1,400 company members 16,000 experts or

contact persons and we are present in 96

countries through our members the

project that I am presenting here to you

today is a parade that as you can in

mine has been developed with a lot of

collaboration with different

institutions mainly by you ITP and

future cities catapult under the

sponsorship of how Transport Authority

in Dubai so it's my pressure to present

it to you on behalf of our team

you ATP is an active stakeholder and is

the voice of public transport

stakeholders on on a wider

and I would say a strategic point of

view so we are aware of the challenges

that cities are facing every day in

their single mobility but not only in in

relation to mobility but also in

relation to social inclusion

accessibility competitiveness etc and

for that reason we have been working

with cities because they recognize

really innovation as one of the main

tools to achieve sustainability and to

achieve livability so the objective of

this project of this yoomi index is to

provide a framework to assess the

maturity of ecosystems regarding

innovation in urban mobility this

project that has been developed as I

mentioned before with Rita see this

catapult under the sponsorship of Road

Transport Authority of Dubai by the UAT

Billy Intl association of public

transport what's the framework well we

have identified three dimensions and

nine levers these three dimensions are

readiness deployment and livability

readiness means whether the city have

really a vision has has a comprehensive

approach regarding mobility and

regarding in a novel innovation in in

mobility deployment means how effective

how effectively does the city really

enable for the introduction of

innovative mobility systems and

livability means how well is the city

prepared how well is the city performing

in terms of quality of life

it's of these three dimensions split or

break down into other three different

chapters that are the nine levels

liver's sorry as I mentioned before the

first one is a strategy that the city

has really any strategy not only the I

would say mobility strategy but the

wider urban strategy this is something

that we have evaluated the second one is

does the city have the capability

internally or through partnerships to

develop this another innovative approach

to mobility and the third one is the

soundness

the way

of using the data I mean we are getting

a lot of data a lot of different sources

of data are available but we are not

always combining and getting them to

achieve some information and afterwards

some knowledge yeah

in this sense we have work with

different cities and we have identified

as good examples in relation to a

strategy Los Angeles and Sydney in

relation to capability Amsterdam and

Barcelona and in relation to sonís

London and Singapore

the second dimension is deployment and

here we deal with regulation investment

and engagement regulation means whether

we are really prepared to facilitate

innovation or whether there are a lot of

different barriers that are in danger

the evolution and the development of

this innovation the second one is

investment not only owned investment by

the city but also the way and the

ability to mobilize external investment

and the third one is engagement whole

deep we do take into account the needs

of the citizens and the needs of the the

points of view of the different

stakeholders in this area we have

identified as kind of Champions of kind

of good very good examples in regulation

Dubai and Helsinki in investments Hong

Kong and Singapore and engagement Sydney

and London the third one is livability

yeah and here we have identified

connectivity will been an environment

connectivity means the possibility to

travel around the system with with what

we called seamless journeys yeah in an

integrated manner not only with public

transport system but also embracing

other actors or the mobility players

that are here wellbeing is how easy is

to travel or to move through this city

in what we call healthy travel more so

active modes and the third one is

environment it's how well the city

performs in terms of high quality energy

efficiency etc and here again some good

examples are Vienna and Helsinki for the

case of

activity and mobility as a service for

instance well-being where Amsterdam and

Geneva has scored very well and inviting

environment Lisbon and Montreal

well we have been working with 30

different cities holographs

all across the globe with different

economic context different political

situations different stages of

development and I mean we recognize that

innovation is really contextual also but

there are some trends that could be

identified at global level that are

really important to highlight most of

the data we are collected through

qualitative assessment through

interviews through meetings with the

different responsibles in all these 30

cities but also we structured the

information through quantitative data

through online and online online survey

and from this research to complete the

information that we get from this survey

main findings there is a lot to do still

in terms of strategy soundness and

regulation I mean technology is there

companies are there but it's at it's at

the level of strategy and mainly at the

level of calculation where we have still

a lot of work to do on the contrary

those cities that are performing better

a store that have developed the

capabilities both internally and through

partnerships and also that have their

own investment or they have they have

been able to attract the external

funding for the development of these

innovative solutions the main outcomes

of yummy-yummy forum which is a platform

where these 30 cities can't interchange

and can benchmark their activities in

relation to urban mobility the second

one is an urban mobility report that was

just released last Friday so I invite

you all to have a look today to the new

ITP website and to find this document we

are also working on position paper to

engage with decision-makers to pass the

message to the main decision makers and

we are also working on future steps that

are mainly

the improvement of the methodology and

the enlargement of the number of cities

that are taking part in this Yemi forum

I'm already out of time so I thank you

very much for your time and for your

attention thank you thank you very much

and if you're for stitching so perfectly

to the timing it was very interesting

and it's very profitable to have this

kind of studies in which indicators help

those companies and City to have a

better vision on what

they can develop our next speaker it's

his he's coming from from China his name

is mr. Wang jag Liang and he's the

deputy director of the Asian Industry

and Information Committee please

[Applause]

so NGO no cojes yeah be a Chicago human

tah-dah

Chavo freidank a co-host on yachts tect

a path alone at Rancho chakra tongue sir

wallah say Kochi delusion we don't wanna

go son verdict on Soto part alone are

super Chun soo hola hey Yong Chun Kuen

LUN tha

cheerful Alameda de andar en coup d'etat

a Susie Susie Swanson Letran so see ya

Jana zhongsan record Zoda transia

Chilean de jeugd true away Joshua trans

reference uno de una de ciencia Trenor

initial T bikini o / da da da da song

sua Swanson Ezrin sir

co-come oo-on Walter de Joe low vision

Scioscia Syria Bashar Assad candidate

rancher EDTA note sendin a supercharger

gentle semenchenko

en el teatro ha beep um po-pi-po to

Mombasa pencil say some Harvard

researcher Ho Chi Minh Truong sir Huang

Bo hey teacher

Cindy Johnson son Gaussian en todo en

parte de - Cody resent a since France in

Rio Rancho cargo - a sessions son go yo

son Kazuyo yelburton seein ya ha see

Ryan ichi-chan subpoena duces piano

Sensa saludo de girar la luna mo en un

jurado

ETA ETA Hoobler our java sido condenado

de árbol de siiva

tundra Valley rapist Adagio our de Luna

p.m. hands under Ta'ala

Yoseob o th e ba ba da rosaldo

Eva - Eva leader Chihuahua certain

stretches of amia service se tiene

circuito chainsaw to know who Mia Ronco

an Honda Civic engine usually dodging

uchiha say Joshua trans-regional Fuji

primo estamos aqui to be trans Rajendra

a homozygote answer solar panels Rapinoe

Horton alida colleges Oh soo kzo kzo

osoo decision queer ha see ha ha no ha

no es ahora como parte de Pio cholo

Congress credo tiene una Sola father

Samia Samia transcendence watch o en el

sur votre dalla Chiesa rural churches

agua en el agua transer chasin a Zanussi

ha

Tony Salida Transylvania true Doc Ock we

donor chandra sudha chandran HH o virgin

jo jo tu te

swanson Ettinger kangen water what we

offer is a shot Kenyon's a sin ranchito

channel total education Teatro function

tanto Pamela Tina's oppa Solaris in un

sitio para seguir a son Goku Jacopo

Volusia favo colita de segunda credenza

pawpaw salon-quality sanguine Danza

qui-gon young un a sanguine Danza the

Angels from generation granules are this

is Seungyeon seducer son Landon's are

three so yoga Danza idiot only the enter

de San Juan de

presidents are

Silencio to confirm a puja tienes una

mentira para la gente no wanna say de

l'homme de creer que no tengo una

ensalada Agency moi je de la escena yo

ya tiene sentido criminal to me and okra

gonna see improvisational gyrotron her

chocha ibis Terraria

Kouta vuvuzela toronto services law

whoever Tanya we gonna yank em baba de

la da da da da ya tiene sentido tree

Gong Cheng hua Sundy trans Alamein

Saddam dr. Tozer

con otra gente como Cho tae-yong Tranter

volio yo dong quai de la musica techno

musica Kwan way show hey Zhu Li di vaar

Metro free come da da de da de CES

central Tampa da la nuit Sunday

preeminence in Ranchi da de da Mucha

tequila Venus de la gente ha ha se

siente to you Nancy reserva Mia yo

fugato soy yo Trisha see Bhuvan todo lo

Fogerty go see Santa

yo yo yo Jimmy Sochi children's hands Oh

psh Angela seceded sungazer Java Fujin

ha formation Ezra

say sube sunday sunday navy tow our

listeners oh yeah

shenzhen lock-on consonances lobizon

Sandow yo Java ladies Indian continent

Lanka Valerie Joe Joe Joe come on son

control isn't a dollar

Luo Cheng Baba looey Java zero we're

Sundra

Long John Silver's our Baga 100 Suzy a

ebay sorry you go

Mucha gente joven que lo cuido heart le

da Booma Eden's on Sunday shows Dupree

dr. Montero Vickers Oh Naruto la da

Tijuca ha muji de la línea children

forget forget Hongzhi de tienda de su

Navarro generation and heated add some

candy

tienes la moneda coalition control Togo

cheese random chicamahonee yeah scissor

banda wama who young Caesar

yet canon de tigre tangent Oh Gerard

want wah-wah some tremendous imagine

Tony deterrent a Jia Li gonadal Adagio

tandem diva teruya pergolas Oh Kaena

wake ribbon male yo holla Vargas Llosa

muy bueno y como uno de nuevo to Lucy

Joe Raposo

co-co-co true sir Yvonne Lo Nuestro Toya

half wolf answer teams juan de teatro en

todas in dodger

tosser saturation Rajendra de chenonceau

to nahi Jana Lyra pass Yugi foo-foo

Nunziata male yo don't misunderstand

oquana renae virgin mantra no way Jose

he translated on Sugie Sugie Hoover

Chico Chico mission in Sudan de TOI a

hot song version on tremendous Evo see

ya Joe gallo Pyong hey santosh auditor

Raja

rencontre no buzu eso es Juan de Letran

co-catalyst on risotto panacea gelatine

en avaiable

sun goddess Angela away Satan in Doha

generally ranchito TN z OG Tokido Sango

you know where Sasha's Colin Serio

seguro zhanka tomorrow hopefully

I know Lassiter tiene cosas que tengo

una vez esta la sidney-ando yochi 30th

the ocean to ocean survey de la cosa

nostra producer solution ruko Pampanga

canoe yoshiya Scalia

Saddam Cody rugosa modo que ha sido una

don't take a trip out to the Sunni Pune

Surat al the janitor to sue eternal Tony

Danza

now you see eloquentia Tigger Tigger

Suhana today we are gonna go see Rachel

on da way that Kenny Estrella rock where

the Comanche on latrine on Cody

chillin codec Romeo parada en el corazon

de Lucia Trillin choi jung jong hoon Jae

dong xiang yingdong sir ahora si una

muchacha de Chardin - aah - aah - aah

knock on door closer come yo too low

[Applause]

thank you very much mr. jinglun for also

stitching to the to the timings and I

was we mind that there is a on the app

of the Congress the Smart City Expo app

there is a place that it's called

a scam boat that is used to make

questions to the panel so whatever you

think you might we be willing to to know

further of what it's been explained you

can put your question there and then

through a system of boarding you can

promote that question if you think that

it's also interesting for you Thank You

mr. the exam for explaining such a

complete presentation and on the strata

and this very ambitious strategy for the

polling and a smart series we told it it

company it was burnt arresting to listen

our next speaker he comes from the

United Kingdom he's been here many times

already well Joe is interesting to

listen him again he's the founder and

managing director from urban foresight

and he's an expert in power in policy

technology and business models for

smarter emission series and this David

good afternoon I won't be talking in

Mandarin today so yeah I think half the

room will be happy about that perhaps

half the room right

I CEO of a company called omen foresight

we are a strategy and innovation

consultancy focused on future cities as

you can imagine with a name like urban

foresight we spend a lot of our time

thinking about the future but I'm

actually going to start looking

backwards today and thinking about the

past and tell you the story of what's

happened since I spoke at the first

edition of the Smart City Expo back in

2011 to the present day where in

September of this year the First

Minister of Scotland announced the

intention to phase out petrol and diesel

fuel vehicles from Scotland by 2030 -

that's eight years ahead of the rest of

the UK so I'll give you the the kind of

background in the story to how we got to

that point and talk to you about our

emerging thinking in a space and how

we're hoping to take things forward in

in Scotland so back in 2011 we were kind

of a fever pitch in terms of excitement

we were waiting for the vehicles to

arrive we there was a perception that

demand seemed to outstrip supply and

people were willing to pay whatever it

took to get the hands on electric

vehicle and in 2012 when we could

finally buy one we started to realize

that all the challenges that were

involved in in creating these

opportunities for mass adoption of

electric vehicles so we traveled the

world looking for best practice in

cities trying to understand what the

leading evie cities around the world

were doing and we published a report

called the V City case book which is a

sort of Lonely Planet guide to leading e

V cities and what we learned from this

was the complexities of preparing for

mass adoption of electric vehicles the

complex systems of hard and soft

infrastructure that needs to be

implemented in cities to create

opportunities for widespread use of v's

and we took this learning into the

production of a road map for Scotland's

National Transport Agency Transport

Scotland and tried to take a sort of

system's level view of what was required

to create these ecosystems for mass

adoption of electric vehicles

importantly what we're trying to do here

is to explain that it really wasn't just

about recharging infrastructure or

incentives it was about creating an

entire system to support widespread

adoption of electric vehicles but we

recognized that we were at the very foot

of the s-curve for mass adoption so we

were very much focused on what we could

do to launch and then grow markets for

electric vehicles and of course you

can't take it for granted that you will

reach the point where you have mass

adoption of electric vehicles so the

challenge for us was really to try and

work out how we could cross the chasm to

the point where we had technology

enthusiasts or committed

environmentalists that are driving

electric vehicles to the point where we

had mainstream adopters driving around

in ultra low emission vehicles so we

went back on our travels again and

traveled the world looking for more what

we call big ideas and for us these were

the technologies that policies the

business models that were going to help

us bridge that gap between today in that

future electric vehicle adoption

and a big learning point from that was

understanding the role of cities and

local incentives to create these

ecosystems for mass adoption and and

their various assets and powers that

local governments have to support

adoption of electric vehicles and partly

as a result of deploying these

incentives we started to see things

picking up in 2016 so this is global

adoption of electric vehicles you'll see

that we reached the 2 million point

worldwide terms of numbers of cars on

the road and pleasingly you start to see

the start of that s-curve terms of take

off so when we sat down again in 2017 to

work out how to take forward or roadmap

into its second phase we start to think

about that that challenge of growing

markets for electric vehicles and then

exactly what we needed to do and this is

what we came up with so to talk through

this in in in its entirety the the

starting point for us was realizing the

outcomes that we were trying to achieve

the sort of test that we wanted to see

demonstrated when we were trying to make

a decision on whether we would do

something or not and this came down to

three key things three key outcomes that

we were looking to achieve we're looking

to decrease the cost of using electric

vehicles we're looking to enhance the

convenience of electric vehicles and

importantly we were trying to engineer

that cultural change that behavior

change required to make the switch to

ultra-low emission vehicles the second

thing was realizing that a lot of the

work that we've been doing had been

around establishing the enabling

conditions for electric vehicles making

it possible for people to use electric

vehicles in Scotland but actually the

challenge that we faced was to move

beyond that to a point where people

enjoyed using electric vehicles or it

was desirable or super convenient to use

electric vehicles so we started thinking

about that in terms of a product

development stack or a hierarchy of

needs and recognized that we had to move

from enabling infrastructure up to a

mobility services and a platform

services type approach and the objective

beyond that is to go from those services

to specific applications of electric

vehicles where we can start

demonstrating and realizing tangible

benefits to individuals to organizations

and communities across Scotland

we identified a series of actions to

focus our investments and activity and

the one that I want is specifically

single out is this concept of Evie

charging helps because I think it really

embodies this approach and this this way

of thinking about electric mobility so

an Evie charging hub is many different

things to many different people but

essentially is a place where you can

charge multiple electric vehicles at

once and it typically integrates a range

of different facilities and services and

infrastructure be that for car sharing

for cycling be that for integration with

public transport maybe even some retail

or leisure facilities as part of that

premises as well 11:4 site has spent

quite a lot of time over the last 18

months undertaking commercial strategies

and feasibility studies for Evie

charging helps across the UK and I don't

have time to go through that in too much

detail but just to single out a few

different pointers to take into account

first is to recognize the the

opportunity to provide more than just

Evie charging infrastructure and range

of facilities and the challenges that

exist around forecasting demand and

developing long term commercial business

models ahead of the vehicles being on

the road and the other thing that we're

doing is we run a living lab in a city

in Scotland called Dundee so we're

currently building three of these hubs

in the city but we're also looking to

innovate and we have a call for

innovative proposals where we're looking

for smart mobility solutions that we can

help you to test and demonstrate in the

city to have a million pounds to invest

in these projects so please do come talk

to me if you have any good ideas so in

terms of three closing thoughts first is

around cost so electric vehicles as

you'll see from this graph are becoming

cheaper the important message here is

not only a battery cost decreasing an

energy density increasing but the

technologies that are in the R&D; stage

are getting cheaper and more effective

however we also need to consider the

cost to the public purse and the capital

asset write-off required to create

viable of operating models for EB

infrastructure the second is around

convenience and the objective to make it

enjoyable fun

desirable to use electric vehicles in

the cities and have have a more service

provision approach to to electric

vehicle infrastructure operation and the

final big one is around culture change

recognizing that ultimately what we're

trying to do is encourage people to make

different and better decisions about how

they move around cities that may be

personal transport but it may be other

ways and the electric vehicle is merely

an enabler of that change and we have to

think about how we can bring it about

thank you very much for your time

amazing

he made the clock at zero zero eight

minutes so that's very good thank you

very much for your presentation again

his he's combining a little bit that

topics we were seeing in the two

previous presentation so we were saying

indicators in the first one a city

deployment of us money status in the

Sangha in the second one here he's

focusing under on the deployment of the

electric vehicle in in the what is

necessary to have a successful strategy

to really have more electric vehicles

circulating in our streets and he puts

the the highlight in the in the costs

and the infrastructure in the service

and the convenient announcing that

necessary cultural changes that need to

occur that that's very it's it's very

challenging and something's difficult

from the urban administrations to help

and to to foster that cultural change

okay our next speaker and he comes from

Alstom he's the innovation manager there

at Alstom he will be he's dealing at the

Aston digital mobility within the open

innovation ecosystem which means that he

deals with the multimodal transport

solutions that estimate its developing

and he will be actually

mobility if we talk about mobility we

need to think about the passenger

mobility is passenger centric and if we

move to the new paradigms like mobility

as a service and of course multimodal

there's something missing now and what

is we believe that coordination among

all these solution these possibilities

is what we're missing so that's why we

brought about mass tria mafia is our

multimodal Orchestrator mobility overlay

for coordination in in a city or in a

region I can give you an example with an

orchestra you can think of an orchestra

playing a symphony and of course every

musician knows very well how to play

their instrument knows their score this

in front of them

but they're missing something they're

missing for once what's happening on the

other side of the orchestra is something

wrong there they're missing also the

general beat and that's the mission of

the conductor the conductor is not

playing the instrument that they the

musicians know very well how to play

their instruments but it gives the

general beat it coordinates everything

so now I'm going to show you if it works

hopefully a video with some use cases of

of mastiha see somewhere here should be

the play here

[Music]

Central Station 912 a.m. something

unexpected is happening on line 5 the

Metro has come to a standstill at the

Metro Control Center the security post

has triggered the alarm a camera has

detected people on the tracks the power

is immediately cut the traffic will be

stopped for at least an hour five

streets away at the master e'er

Operations Center people already know

about it indeed when the Metro agent

stopped line five the alert was

automatically triggered and this message

is blinking in red on the screen here

they keep an eye on all the city's

transport networks coordinating them

like a conductor in less than a minute

masked areas algorithms had already

devised steps to prevent bottlenecks

adapting the city's traffic reorganizing

it and managing the incident itself the

masked area operator receives the

procedure to be followed he just has to

choose from among several options he

selects bus commuter trains passenger

information maintenance for any damage

to the rails police and the fire

department

each of these players receives an alert

in real time through their operation

center connected to maestria bus

frequency is increased and the commuter

trains get ready for a massive influx of

passengers at the station the agents

provide passengers with updates and

alternatives maintenance is already on

site in just one hour

thanks to mass tria Metro is finally

able to get going again 10:30 a.m. on

another day masked area receives a

message from the city's weather service

heavy snow is expected in three days

time with temperatures down to minus ten

degrees Celsius based on the data it

collects every day master er knows that

commuters will be reluctant to drive

their cars so the algorithms prepare a

crisis plan this process involves

increasing transport capacity the bus

Metro and train companies are alerted

and Mastry Alette s-- them know how much

they must each increase their traffic

mass tria prevents a disruption even

before it happens

it can also plan in the longer term for

a concert scheduled in the city or a

major sporting event thanks to mass tria

to the bus metro and tram services we'll

be forewarned that they'll need to

provide extra capacity Mastry also

alerts private ride-sharing and city

bike services so that all contributes a

smooth traffic more than a simple tool

mastiha is becoming a real partner for

cities it guarantees all of us smooth

traffic in the city now and in the

future okay with this you see more or

less what we're trying to focus with

Master I'll try to go a little bit in

detail you have very little time on how

we do that we've built what we call

value layers because of course every

city is different every region is

different so we can't need to adapt the

first layer is information of course we

can show every piece of data that we can

gather how the transport is moving

what's happening incidents everything so

you can actually see what's happening on

top of that we can do analytics to see

to understand actually why those things

are happening this is an example of a

city we did with some regulation but we

can do diagnostics and predictive

analytics also and of course once you

know what's happening and why it's

happening you need to act it's not only

in the long term but you would like to

act in the short term trying to provide

solutions as the as the video explained

this of course is a very very quick snap

of what Messiah is is doing I have no

time to go in detail but I wanted to

tell you that tomorrow at the press room

which is right by by the entrance at the

South door we will be holding a demo

session to the whole morning of our

digital mobility

which of course include mastiha you can

go there see touch and and ask questions

but also orb a map or our security

digital solutions like iconic security

or video analytics and that's all for me

I think it was even closer okay thank

you thank you very much Alberto our and

that was burnt arresting to see also how

I mean if this has happened from many

years already that automotive industry

have already changed their disk use and

they are not providing only cars but

they are providing mobility services or

they are at least trying to to explain

that that is what they are doing it and

it is good to see also that the main

public transport infrastructure

companies are also seeing themselves as

part of a mobility system that have that

has a more much more complex well it's

in here or a trip for everyone that it's

not just composed by just one minam's

transferred but it's part of a trip that

combines a part of Icicle private

vehicle and public transport some part

that you can be working and they try of

course to to be part of that of that way

of making your trips around the city and

also keeping your your industry and your

well that the public transportation

working at all times so thanks for that

explanation our last speaker for for

this panel this this afternoon it's Nico

Anton he comes he's the managing

director from connect I TS Netherlands

which is a his long-term strategy

managing director that that that company

he's he's in charge of linking more than

400 private and public organs

organizations

mobility and transport so thank you for

for coming and for your explanation well

good afternoon it is a pleasure to be in

Barcelona outside the sun is shining and

always when I'm here in Barcelona the

sun is shining and if you live in the

Netherlands that is something you really

can value so I'm happy to be to be here

if you have been in the Netherlands and

you travel there one of our writers once

said traveling in the Netherlands is

very peculiar if you want to drive

you're standing still in a traffic jam

but on the other hand if you want to

stand still if you want to park your car

you just keep on drawing directing to

find a parking spot so I think that is a

challenge we have how can we make sure

that our mobility will become smooth and

sustainable and making that way our city

is very liveable well by the

introduction connections already

introduced so I will skip this slide

these are images from cities today and

today cities people are living there

they want to work there if they go to

their jobs they want to travel fast they

want to travel safe they don't want to

get struck in a traffic jam but also

they want to entertain themselves but on

the other hand they also want that the

air in the city is clean and they also

want that when they order something fire

the internet that is delivered fast and

when they go to a shop that everything

is there and they don't have to wait or

when things are out of order and in a

way all those modern demands of people

living in a city are competing with each

other and I think our challenge is how

can we make the system that smooth that

it will in the end can address all the

needs of modern people and one way monk

eristic in the Netherlands about

traveling is the following already for

more than 60 years people are willing to

travel about well let's say 70 to 90

minutes a day and since traveling became

faster and smoother it meant that people

do not live in cities anymore but also

the spread around increasing more and

more demand for mobility and we have to

address this challenge and one thing I

did not mention on the previous slides

is well the fact that we need clean air

since two weeks there's a new government

in the Netherlands and the government

will make a climate law and they will

say we will put a low everything we

agree to in Paris two years ago and it

means for the Netherlands that the

pollution produced by vehicles by

lorries by trucks by fence has to be

reduced by a factor of six if you really

want to comply to these goals this is a

huge challenge and the only thing we can

meet this challenge and right with it is

when we really change the way we think

we change the way we organize and

needed to make a lot of use of

technology and one concept I'd like to

talk about his mobility as a service it

was already mentioned by the previous

speaker and would it be great that all

the different ways you can travel

whether it's you were the better it's an

public transport company whether it is a

bicycle where it is your own car or a

bus that it would be organized in a

fairly easy way for you so that you

don't have to figure it out all for

yourself because if it's too complex you

just you will just keep to continue to

use the thing you are happy with so if

you use to drive a car and you it is

easy for you not to change when the

change is made complex for you but if

you can make this change easy that would

be a solution and that is the aim of

mobility as a service how can we

organize our mobility in a different way

there are several levels of the way you

can organize mobility as a surface and

already quite some companies and in

quite some country with countries there

has been a lot of experience how you can

influence the way people think about

mobility and if they want to make a

shift and it is interesting that by

experience in Finland that is proved

that when you offer the better surface

to people and you charge them a fair

price that people change their behavior

not only for the test period but they

continued in changing their behavior it

shows if you organize things in a better

way people you can really change the

behavior of people and we don't know

what the future of mobility as a service

will be there are three different models

on the left-hand side you see the winner

takes it all that is the way now how

Facebook or Alibaba

or Amazon or Apple is working if you're

the first one and if you are the best

one

there's hardly any competition the other

model which could be the one is that the

public transport companies will take

their responsibility and the table start

to organize mobility as a service but

personally to my humble opinion I don't

think that will be the future because it

really means that you as a public

transport company you have to rethink

the way you organize everything so the

third model and I think from a consumer

point of perspective that will be the

best one is when there will be multiple

service providers meaning that like all

like your own telephone that if you

travel from one city to another city

your technology your app on your

telephone just change from one provider

to another one you don't have to think

about it it is all organized for your

for yourself for your and more surface

profiles also means that there will be

competition so as a consumer it will

offer us the best price but for this we

need to change the way we think there is

a bit of a downside if we improve

mobility and one down side was tested in

in lissabon by one of our members PTV

and if you organize mobility in a better

way and you make it more seamless then

the downside is that people are going to

travel more so it does not mean that

organizing things in a better way will

reduce trifle so that you have to keep

that also in mind but on the other hand

a better used modes of transport also

means that you need less of them so we

also will get our streets back what we

need in the end is if you want to make a

success of mobility as a service we need

three shifts the changing role of

collaboration public and private

authorities needs to collaborate

together companies needs to collaborate

together what we also need is a changing

role to commuters we need to get

rid of the idea that we need to own our

own car no we have to make a shift from

owning to make use of and the third

shift you have to make is another way of

how we make use of systems and

technology technology should be

everywhere it should be based on open

standards we need a lot of security and

we also have to make the technology

simple in a way that it will stimulate

in the end innovation but that was in

brief my ideas about mobility as a

service thank you for your attention

[Applause]

it's the Sunnis Buddhist

and now and we will have em well thank

you very much for your presentation that

was very interesting to to see how these

mobility the services can can help us

all and to have a more convenient

transport and mobility in cities through

collaboration between public and private

partners through sharing the means of

transfers and through the technology

that you have to facilitate all these

all these systems now we will have

questions and answers first well there

are two microphones one microphone here

so if anyone has a question please just

stand up and come here and and make your

questions and I also have gathered some

some well we have gathers through these

AB system some questions that I will be

now it's asking to the panelists so the

first one that got more votes it's

asking regarding and the battery battery

lives in electric vehicles will battery

life ever be great enough to allow

vehicles especially those involved in

public transport to be able to do a full

day's work so maybe both for I guess we

can ask this referring to taxis or to or

to buses but whoever in the panelist

field that can answer this it's it's

microphone yeah so yeah well electric

vehicles are suitable for many

applications today including taxis and

logistics vehicles so the range is

achievable batteries can be as big as

you want them to be you just have to pay

more for bigger batteries so there is no

perceivable difficulty we also know how

far people travel so we understand that

most journeys that are made are within

the traveling distance of the vast

majorities of journeys that are made

today in terms of degradation so how the

battery performance decreases over time

we've had electric vehicles driving in

the world for a long time now and we on

the whole haven't seen much appreciable

degradation of batteries so it's not

something we're concerned about most

vehicle manufacturers offer warranties

to a company batteries of up to nine

years or so so yeah electric vehicle

battery degradation isn't it isn't a big

problem at the moment another point of

view may be well and we have another

question what is the most demanding area

for innovation in in public transport it

is a it is payment it is a passenger

information it is a accessibility trip

planning may be something else

well III think that they all but one one

very important thing is skills of the

people that is working now in public

transport I mean on mobility yeah this

is something that we have to work a lot

because at the end technology is

somewhere there more or less advanced in

the different countries in the different

places but one thing that we are working

now very deeply with the different

operators and authorities is to develop

this talent and these skills that are

needed to really achieve the new

challenges of digitalization the use of

data etc on public transport thank you

now Alberto from Alstom yes yeah I would

say that for me at least the most

important innovation way now is the

changing paradigms we need to change

everything we shouldn't do what we we've

been doing for many years in a different

way we should try because digital and

other things enable us to do things

different like mobility as a service for

instance so I think the the most

interesting and challenging thing is how

to change really the paradigms of of

ability and now when one question coming

from from myself we have many of us in

our presentations have talked about the

necessity of fostering the cultural

change what do you think that this

cultural change made might come from I

mean it is a how which collaboration it

is needed between public and private

organizations what what is the role of

citizenship in this cultural change then

that can happen what from your point and

from your organization's can help in

this necessary cultural change that we

need to have a more sustainable

or the mobility paradigm I mean if we

have if we want people to take to share

more of their vehicles if we want them

to use more public transport and and

maybe to use more electric vehicles a

day what they are that they are using it

is something that we can explain it is

something that we can enforce through

regulation it is something that we can

put a congestion or emission tax what do

you think are there are the necessary

things to develop to have this cultural

necessary necessary cultural change

I think telling and showing so just so

that it just showed that it works so I

think it is good that the government

should invest in a new ways of mobility

and that the industry then also should

take the responsibility and if it works

that they will foster this these new

solutions and but I think what also is

very helpful the way mobility is now

organized is from a broader point of

view just done by for financial reasons

so if you would really change the way

the you pay taxes then you could also

foster the change of behavior so given

in financial impulse that makes us also

from a financial point of view seamless

interesting point of view yes well we

have to just one more minute

no just quickly I think someone said

that people don't hate change

people hate being changed so actually I

think what we need is to make things

easy for people so they really want to

become part of the change if we make

them it it may work for a time but we

need to find a way to convince people

that this is a the right way and it's

easier and better for them okay thank

you very much that where time is up for

this afternoon just to highlight what

we've been talking and through this

session we've talked about indicators

the strategy infrastructures and

services

we've talked about cultural change and

the complexity of linking public and

private stakeholders in in the city to

make a more sustainable sitting which

the public transport is better and more

use the means of transport are share and

we have a greater degree of utilization

of the electrical vehicle of this is

very complex we know all of us are

working close to cities and we see year

by year what are the model splits that

we get in our cities and their taste

change livery very slowly while the

alarms of the of the climate change and

and and and the effects that the

emissions of the of the current mobility

amines are having in our health are

showing us that we don't have that much

time to actually make make this change

happen so thank you for your work in all

in in changing our our cities and

improving them in the way we use them

and to make them less polluting and more

sustainable thank you for them for your

work and thank them give a hand to the

panelists