INDTECH2018
Innovative industries for smart growth

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PILLAR 1

Session 1.3

How to reduce pollution in cities using a stand-alone traffic system based on modular construction kits made of UHP Concrete

(Smart mobility in livable cities of the future)

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Innovative Industries for Smart Growth need a well organized and unhindered mobility of all citizens

QuickMotion resolves the transport problem of large Smart Cities - generally, effective, holistic and sustainable

1. Construction of a high performance traffic net in the form of QuickWay - elevated express highway network

2. Use of eco-friendly autonomous vehicles - preferably e-powered

3. Application of an intelligent traffic control system Navigation System (QNS) & Logistic System (QLS)

4. Generation of clean energy by means of translucent photovoltaics

The "QuickMotion" Mobility System is a package of eco-friendly measures Improving the traffic performance and safety in cities many times over.

This fact avoids traffic jam and reduces pollution.

For 2 Mio residents: The capacity equates to one large nuclear power plant.
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SUSTAINABLE UHPC INFRASTRUCTURE

Ultra High Performance Fibre Reinforced Composite: the construction material of the 21st century

Innovative production and construction progress: ~1000 meter driveway per day!

service life: > 200 years
lifecycle costs ~50%

curve

ramp

segmental construction method modular construction kit

0.12 m

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TRAFFIC ROUTING INSIDE THE TRAFFIC CALMED MESSES

example:
atrium city blocks

pedestrian traffic best possible seperated from 4-wheeler- and 2-wheeler-traffic

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LIVABLE CITY OF THE FUTURE = JOYFUL GREEN-LIFESTYLE CITY

Districts in a “Green-lifestyle City” are “Islands of stone in a sea of green”

The green belt brings nature to the citizens and a better air quality to the district

FORMAL PRINCIPLE

- largely undisturbed nature (meadows, forests, wildlife animals) and agricultural used areas
- human established districts
- water expanses (lakes, ponds, rivers)
- recreational areas and sports grounds (hiking, jogging, swimming, tennis, golf, horse-sports, rugby, football, soccer etc.)

Experience QuickMotion. Thank you. lutz@sparowitz.at