

# Technology and Innovation for Developing Land Transport in the Arab Region

## ESCWA Focus Group Meeting

Tuesday 1 December 2020, from 1.30 to 5 PM Beirut Time

Economic and Social Commission for Western Asia



UNITED NATIONS

الأمم المتحدة

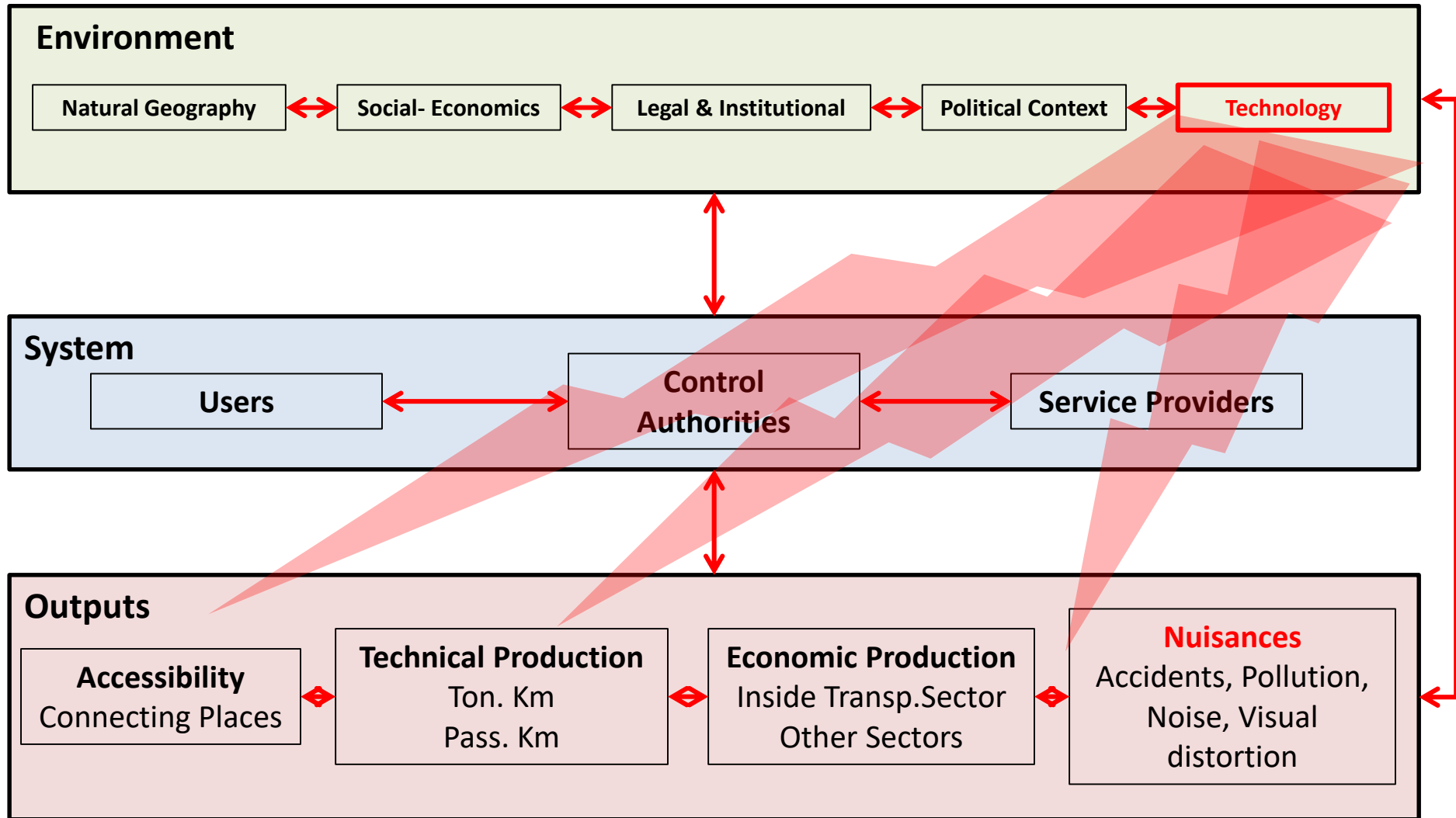
ESCWA

## Technology & Transport: Past, Present and Future

### Dr. Yarob Badr

Regional Advisor on Transport and Logistics  
Shared Economic Prosperity Cluster

# Conceptual Framework of the Transport System\*



\*Reichman- Les Transports: Servitude ou Liberté

[For more](#)

# 12 technological inventions that revolutionized past transport

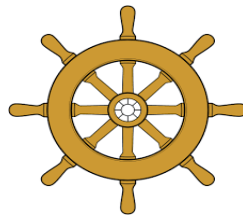
Wheel



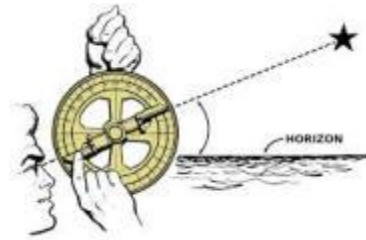
Sail



Rudder



Steering Wheel



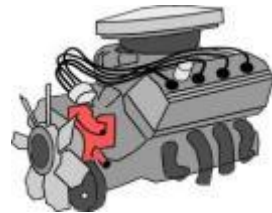
Astrolabe



Compass



Steam Engine



Combustion Engine



Mass Production



Auto. Manufacturing



Airplane



Container

# Confirmed/Current Applications in Land Transport

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**Information Systems** : GIS, ITS, MIS.

**GPS Applications**: Onboard Navigation, Vehicle Tracking.

**Mobile Apps**: UBER, e- Booking.

**Paperless/ Contactless Solutions**: ASSYCUDA, e TIR, e CMR, etc.

**E Governments Services**: Vehicle registrations, Driving Licenses, etc.

# 4<sup>th</sup> Revolution: 10 Drivers of Change

Internet of Things



Automation and Robots



Big Data



Telecommunications



Cloud Computing

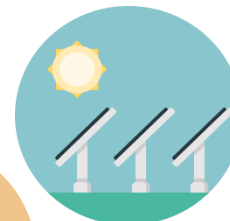


Mobile Applications

Artificial Intelligence



Solar Energy



Blockchain



3D Printing



To Be Continued.....

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**THANK  
YOU!**