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

Technology & Transport: Past, Present and Future

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Shared Economic Prosperity Cluster
Conceptual Framework of the Transport System*

Environment
- Natural Geography
- Social-Economics
- Legal & Institutional
- Political Context
- Technology

System
- Users
- Control Authorities
- Service Providers

Outputs
- Accessibility: Connecting Places
- Technical Production: Ton. Km, Pass. Km
- Economic Production: Inside Transp. Sector, Other Sectors
- Nuisances: Accidents, Pollution, Noise, Visual distortion

*Reichman- Les Transports: Servitude ou Liberté
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

**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.
4th Revolution: 10 Drivers of Change

- Internet of Things
- Automation and Robots
- Cloud Computing
- Mobile Applications
- Artificial Intelligence
- Solar Energy
- Big Data
- 3D Printing
- Telecommunications
- Blockchain
To Be Continued……

THANK YOU!