

# **Regional Awareness Workshop on Main UN Road Transport Legal Instruments and on Intelligent Transport System (ITS)**

**Crown Plaza Hotel- Le Palace, Brussels, 4-5 July 2017**

**Economic and Social Commission for Western Asia**

## **Smart Transport Challenges in ESCWA Region**

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# Overview of Transport Activities

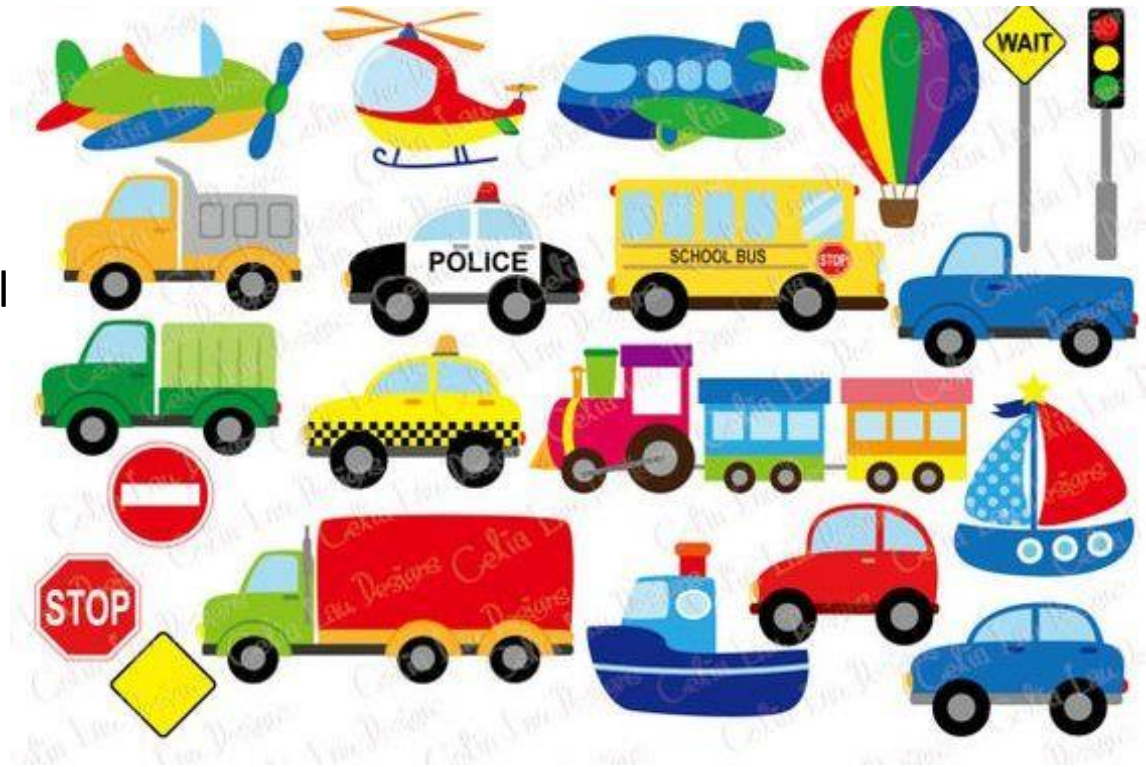
**Around all human activities**

**Multiplicity of Modes, Levels:**

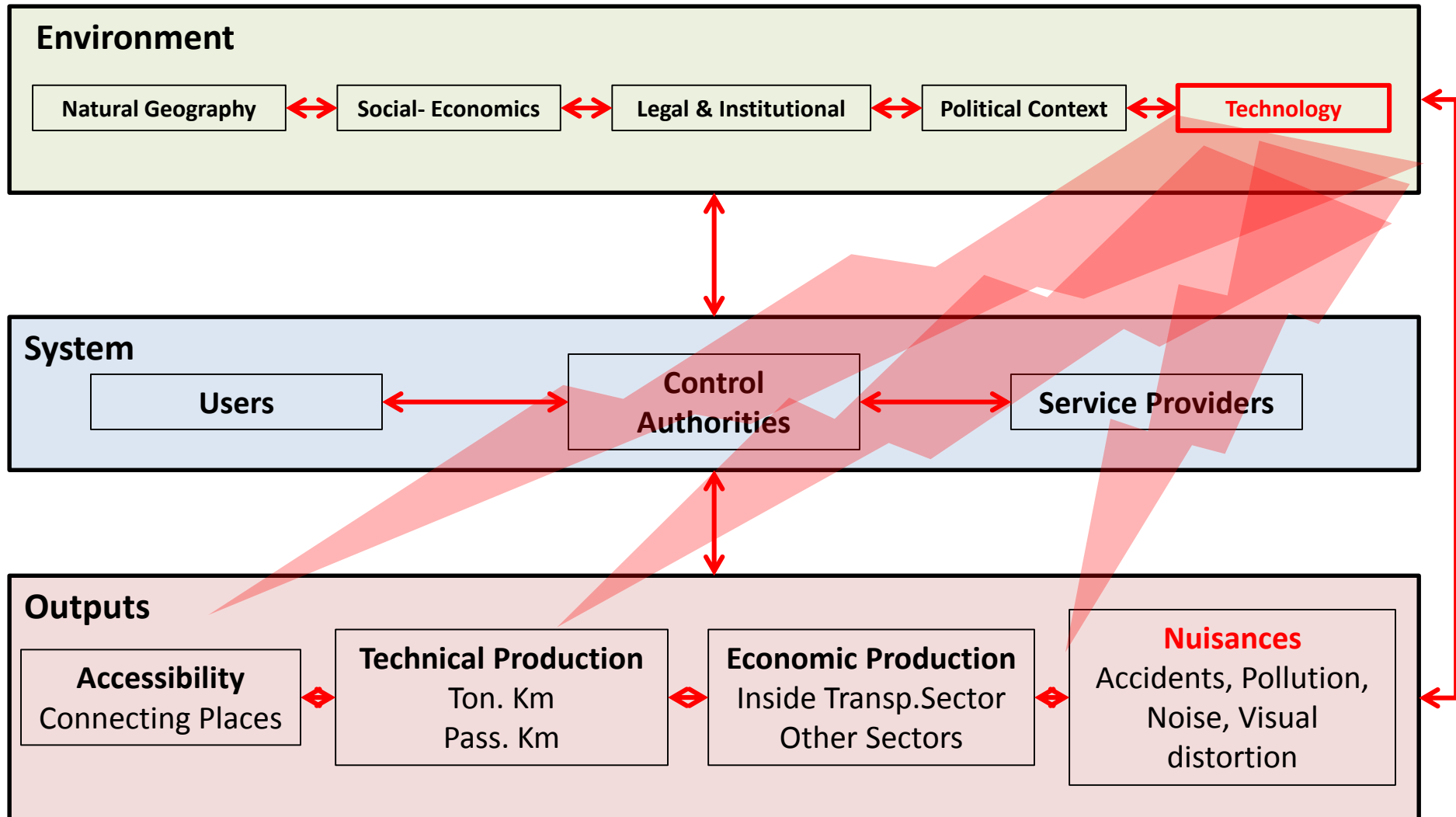
- Air, Land, Fluvial
- Urban, Regional, International
- Individual, Collective
- Public, Private

**Complex Interrelationships**

**Difficulty of Management & Planning**



# Conceptual Framework of the Transport System\*



\*Reichman- Les Transports: Servitude ou Liberté



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# 12 technological inventions that revolutionized transport



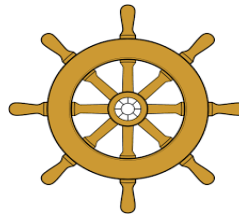
**Wheel**



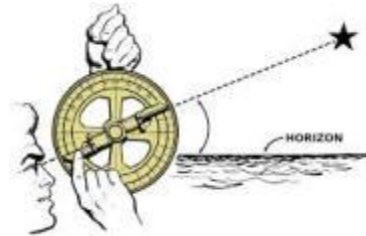
**Sail**



**Rudder**



**Steering Wheel**



**Astrolabe**



**Compass**



**Steam Engine**



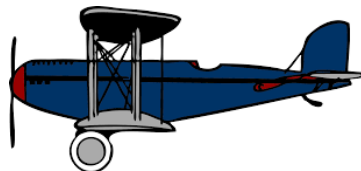
**Combustion Engine**



**Mass Production**



**Auto. Manufacturing**



**Airplane**



**Container**



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# Drivers of Change in Modern Transport

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## **Increasing demand to:**

- Reduce energy consumption (Specially fossil based)
- Reduce fatalities due to traffic crashes
- Reduce air pollution and noise
- Increase efficiency and effectiveness of transport services
- Enhance sustainable development in general

## **Transport reactions:**

- All dimensions of system environment (With variability)
- Strong interrelationships (Endogenous and Exogenous)
- Importance of Smart Technological Advancements



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# Technological (Digital) Revolution



**Massive Computing**



**Advanced Telecommunication**



**Mobile Apps**



**GPS**



**Internet**





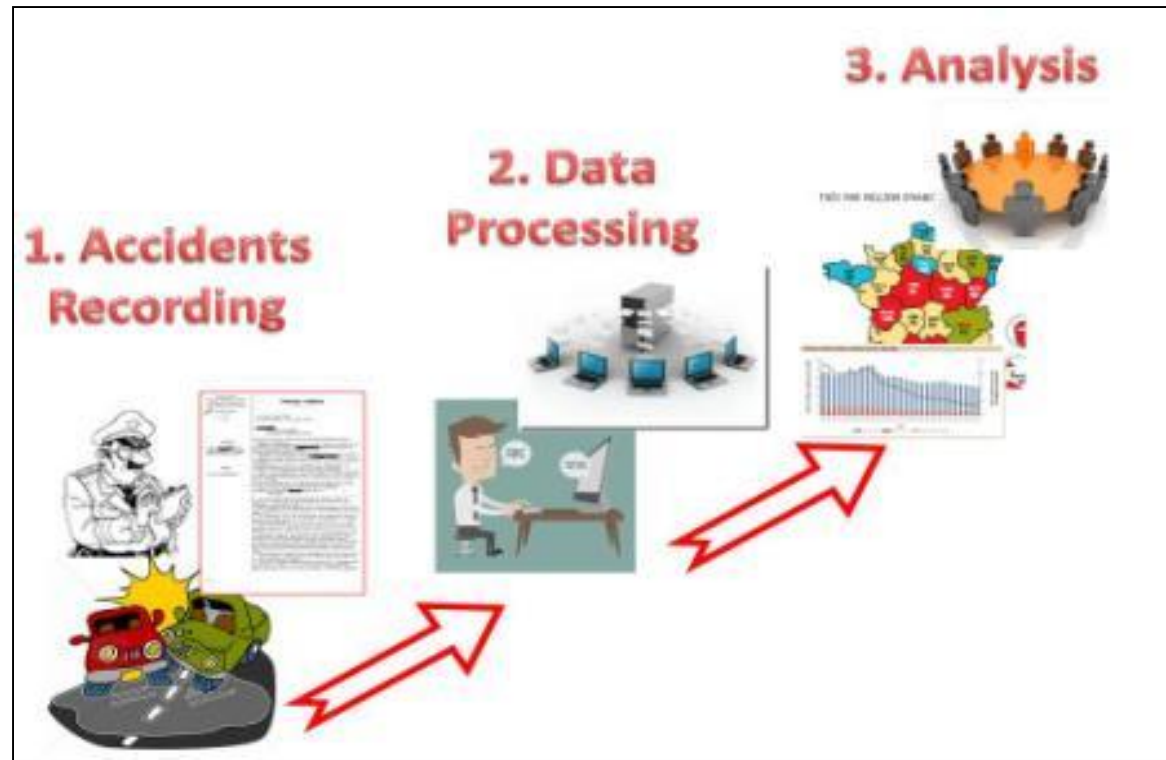
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# Feature of Transformation in Transport

## Information Systems

Decision Making based on Data

- Comprehensive
- Accurate
- Reliable
- Updated







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# Feature of Transformation in Transport

## Intelligent Transport Systems (ITS)

- Enhanced Management
- online Tracking



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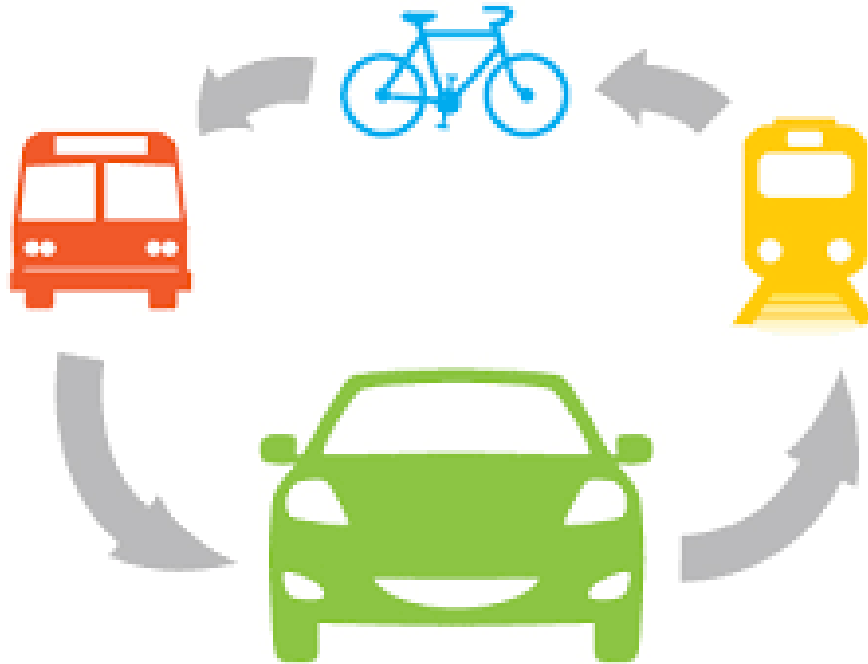




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# Feature of Transformation in Transport

## Multimodal Transit & Big Data





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# Feature of Transformation in Transport

## Collaborative Consumption:





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# Feature of Transformation in Transport

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## Driverless Vehicles

Almost there

- Comfort
- Safer
- Question the basic concept of Private Property





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# Requirements to prepare the future

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**ICT Infrastructure**



**Human Capital**



**Smart Regulatory Framework**



**Participatory Approach**







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# ESCWA Role and Mandate related to Smart Transport

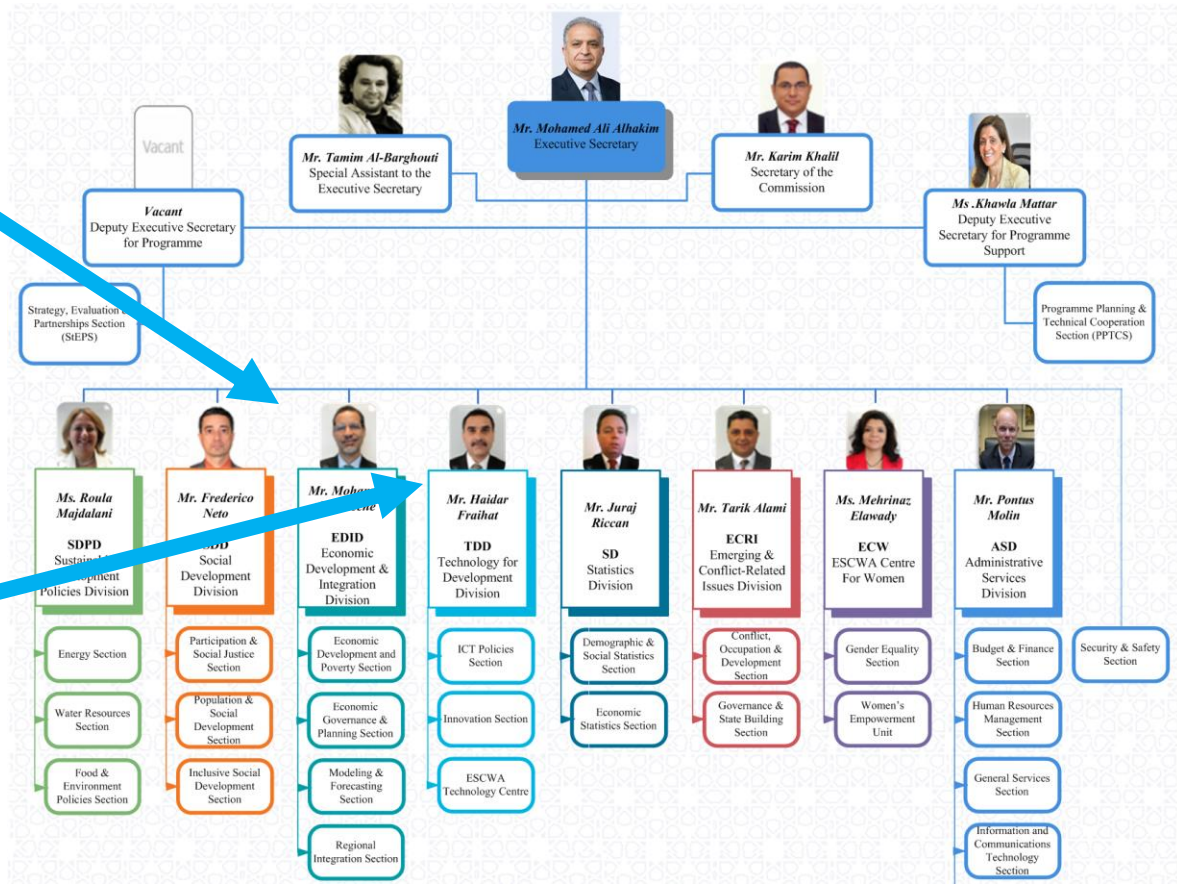
## Cooperation between 2 Divisions:

### EDID :

Transport & Logistics  
Road Safety  
Regional Integration

### TDD :

ICT Policies  
Innovation



# Some ESCWA recent activities

## Related to smart transport and ITS

### Cooperation EDID and TDD

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#### **17<sup>th</sup> IGM on Transports and Logistics, Cairo, 23-24 January 2017:**

Item 5-d on “The role of road transport within multimodal logistic chains”

- The challenges to formulate policies and adopt standards and specifications on ITS.

<https://www.unescwa.org/events/committee-transport-logistics-17th-session>

#### **EDID Technical Workshop on “Strategic Planning for Sustainable Transport Sector in Palestine”. Beirut, UN House, 24-25 April 2017:**

- Session on “Technological Perspectives for Advanced Transport Sector”, by TDD

#### **TDD Conference on “Digital Technologies for Sustainable Development Goals”. Beirut, 10-12 May 2017.**

Conf.9-b: Digital Technologies in the Health, Water and Transport Sectors

- Session on “Transformation Towards Smart Transport Sector”, by EDID



