For the UNECE, the **Euro-Asian Transport Links Project (EATL)** is one of our flagship activities the context of transport infrastructure. It is a long-term endeavour (which started over 15 years ago) and brings together more than 40 Landlocked Developing Countries (LLDCs) and transit countries in Europe and Asia. It is supported by international organizations and the transport business community in an aim to improve conditions for trade and socio-economic development on the Eurasian continent. The EATL Project, Phase I (2002–2007), Phase II (2008–2012) and Phase III (2013–2017) made transport between Europe and Asia a reality. The identification of routes, the prioritization of infrastructure investment projects, the development of a Geographical Information System (GIS) database, the analysis of non-physical obstacles to transport, the comparison study between maritime and inland transport, the organization of numerous national capacity-building workshops on transport facilitation as well as the efforts to operationalize those corridors by preparing common time schedules and tariffs, have all helped to lay the foundation for a more operational Euro-Asian transport network.

Identified **9 rail & 9 road**, 17 water transport links, 52 inland river ports and 70 maritime ports. The mandate of the UNECE Group of Experts on EATL in phase III has now been concluded, a final conference with a significant private sector participation focusing on operationalisation of EATL links was held early September in Geneva (as part of the WP.5), and a comprehensive report has been finalised and adopted and will be officially published in the course of this week.

Some of the key findings of EATL Phase III include:

- **Economic growth and growth of international trade is not driving the increase in freight flows as before** (we are in an increasingly competitive environment where on-
time delivery plays a crucial role (in order for instance to keep storage costs in check). Without meeting these requirements put forward by modern supply chains market share will be lost.

- The EATL phase III has also shown that road and rail transportation along Euro-Asian corridors is supplementing rather than competing with maritime transport, providing alternative delivery options, especially for high value and time-sensitive cargo, including in the context of growing e-commerce.

- The EATL project’s principal value to the market is that it paved the way for the operation of container “block trains”. This has brought a significant increase in the number of services and freight volumes along EATL routes, in particular for the IT and car manufacturing/ machinery industries. Companies including Audi, BMW, General Motors, HP Volkswagen and Samsung have begun operating regular block trains on different EATL routes. Indeed, the rail share of cargo on Eurasian transport corridors is growing, there has for instance been a 140 per cent increase during the first half of 2017 as compared to the same period in 2016. There are studies that estimate that China-Europe rail services could double their share of trade by volume over the next decade.

- The role of road transport is emphasized to complement long distance rail.

- In general, the EATL phase III called for integration, intermodality and flexibility in order for EATL routes to become attractive.

**Need for: competitiveness, integration, intermodality and flexibility**

**SLIDE 7**

- Important to note in this regard is that just 10 years ago, regular freight train services from China to Europe did not exist. Today, they connect roughly 35 Chinese cities with 34 European cities.
- Over the past 10 years trade volumes between China and Europe have increased by 7.65 per cent.
- Back in 2006, rail was not only more expensive but also slower than maritime shipping. In 2006 a journey from Shangai, China to Hamburg took 36 days by rail. It now takes just 16 days. On top of that maritime transport has become slower as ships slow steam a technique to save fuel.
- The big advantage of rail freight is that it is considerably cheaper than air and faster than sea. It could thus provide a compelling middle option for more goods in the coming years. Indeed, the rail share of cargo on Eurasian transport corridors is growing, there has for instance been a 140 per cent increase during the first half of 2017 as compared to the same period in 2016. There are studies that estimate that China-Europe rail services could double their share of trade by volume over the next decade.

**SLIDE 8**

- Yet, and this is a bit of a reality check, in 2016 (and this number has not changed significantly) rail carried less than 1 per cent of trade between China and Europe by
volume and just over 2 per cent by value. Maritime sector remains dominant, carrying 94 per cent by weight or volume and 64 per cent by value. Compared to rail, air transport carried twice as much cargo by weight and more than 13 times by value.

- Service frequency is increasing, with in 2016 an estimated 1777 direct freight services from China to Europe and an estimated 730 services from Europe to China. In China the most active railway hubs are further inland, away from the congested coast line.

SLIDE 9
- Basic challenge remains that China-Europe trains carry a smaller amount of cargo compared to today’s ships. As this figure illustrates, a single block train can carry 12 times more than a single aircraft, but only 0.45 percent as much as today’s largest ship. Obviously, taking on a significantly greater amount of trade will require many more train trips. Meeting the International Union of Railways study’s scenario of 636 TEU by 2027 will require sending roughly 22-24 trains a day, a four-fold increase over the 2016 level of 5 trains per day.

SLIDE 10-11 – As discussed at the conference in September

Yet, what are the constraints to further development?

- **Eastbound cargo traffic < Westbound** (Westbound railway traffic subsidized – and the subsidies are running out, what then) – differentiation of trade flows is needed. In 2016 the EU imported over 190 billion USD more goods from China than it exported to China. Roughly 60-70 per cent of railway shipments are Westbound. And only 30-40 percent Westbound, with often empty containers returning (same is happening in the maritime sector). It should be noted that these statistics refer to trade between Europe and China and do not include trade flows to India, Pakistan, Bangladesh, South Korea etc.

- There is scope for improvement if the Chinese domestic consumption would rise and lead to higher demand for European imports. What we currently see is that many of these trade flows are going to China directly transiting through Central Asia but not delivering any goods there. This is something to be investigated.

- **What is also needed is a further reform of the railway sector, both in terms of streamlining administrative requirements as well as encouraging harmonization of infrastructure, equipment and facilities along the routes to enhance technical and operational interoperability.**

- **Operating standards** (railway gauge, signaling and radio systems, train length and weight standards, block train intervals etc.) also require further improvement. Container trains require transshipment on at least 2 occasions. Other technical, administrative, linguistic and cultural barriers.

- **Need for corridor-specific work plans**, multi-stakeholder coordination efforts, common goals and performance indicators. multi-stakeholder coordination efforts (public & private sector), common goals and KPIs → example of CCTT
• Coordinating Council for the Trans-Siberian Transport (CCTT) as well as the well-established platform of Working Party 5 in cooperation with other ITC working bodies could be used as a platform for coordination, monitoring and discussions.

SLIDE 12
• Cumbersome **border crossing, customs and transit procedures** [lack of access to & implementation of UN legal instruments]
• **Missing or outdated road & railway** and inter-modal/transshipment infrastructure links in some segments, outdated border crossing infrastructure and equipment in some places
• **Poor ICT connectivity and ICT interoperability on EATL corridors** [as a result insufficient attention paid to impact of intelligent transport systems, digitalization of transport documents, computerization of BCPs, satellite track and trace services, introduction of autonomous vehicles on EATL routes efficiency]
• Need to **unify railway regimes along EATL railway routes** – absence of one contract of carriage, one liability and one consignment note decreases reliability of the services

SLIDE 13
• China – Mongolia – Kazakhstan – Russian Federation – Belarus – Poland
• Specifics:
  i. Highest concentration of block trains on EATL routes, mostly operated by large freight forwarders
  ii. Average travel time of 14 days (China-Duisburg)
• Needs:
  i. Difficult climatic conditions
  ii. Modernization of border crossing procedures required, e.g. lack of an agreed transit tariff
  iii. Increase in container platforms fleet and requirement to increase length of block trains

SLIDE 14
• China – Central Asia Republics – Turkey – Romania – Ukraine
• Needs:
  i. Missing infrastructure links, maintenance required
  ii. Border crossing facilitation measures required
iii. Increased cooperation among railway undertakings in order to perform block trains operations (common tariffs / time schedules) required

iv. Political sensitivities along certain segments

SLIDE 15

• North-South corridors

• Specifics:
  i. Multi-stakeholder cooperation mechanisms established and operational
  ii. Designated working group meetings held regularly

• Needs:
  i. Missing links – infrastructure investments are requested
  ii. Border crossing facilitation required

SLIDE 16 - 17

One of the key challenges towards sustainable infrastructure development in the Euro-Asian region remains the lack of funding. In response to this, under the auspices of the UNECE an International Transport Infrastructure Observatory\(^2\) is being developed with funding support of the Islamic Development Bank. The observatory will be an innovative example of how government data on new transport infrastructure projects is presented to financial institutions and other donors in a transparent, comprehensive and ‘bankable’ way.

It is devised as an online platform where (a) governments find the data to prepare, benchmark and present their transport infrastructure projects and (b) financial institutions can consider, analyse and compare projects from a regional/international perspective and identify those they wish to finance.

The Observatory will be an electronic space developed on a GIS environment, which would permit to all users (Governments, International Financial institutions (IFI)) to retrieve and analyse:

(a) data about all transport networks and modes (road, rail, inland waterways, ports, airports, intermodal terminals, logistics centres and border crossing points);
(b) data on transport corridors (length, services, missing links, time schedules, tariffs);
(c) data about new transport infrastructure projects;
(d) data about traffic and cargo / goods flows;
(e) results of different regional studies etc.

Bearing in mind that along European and Asian corridors there are currently eleven different regional initiatives all having transport as their main objective such as BSEC, TRACECA,

CAREC, ECO, European Commission, UNECE EATL, ESCAP Transport Networks etc. there is a clear need for increased coordination.

Because even though all these initiatives are working for the same region, on specific projects (transport corridors development, border crossings facilitation etc.), cooperation among them is often limited if at all existing. Therefore, the International Observatory also will enhance cooperation among those different initiatives, create economies of scale, maximize efficiency and provide concrete and tangible inputs to Governments.

The UNECE secretariat, thanks to the generous contributions of the Islamic Development Bank, has already bought the software and has hired the consultants to collect the relevant data. Based on the initial project plan, the first phase of the observatory will be ready and operational in September 2018. In the medium run we are considering to extent the project towards the Mediterranean region. The project is generally very well received, other development banks and United Nations regional commissions and agencies have already shown interest in participating in this observatory.

**SLIDE 18**

Other applications include, real time tracking of container block trains.

**SLIDE 19**

The Group of Experts on Climate Change Impacts and Adaptation for Transport Networks and Nodes focuses its work on creating a hotspots map in a GIS environment which aspires to bring together the transport infrastructure (road, railways, inland waterways, ports, intermodal terminals) and the projections of the different climatic factors (temperature, precipitation, floods, sea level rising etc data provided by World Meteorological Organization) in order to illustrate possible infrastructure spots that might have catastrophic impacts by climate change and provide adaptation measures in order to adapt to those impacts.

**SLIDE 20**

Thank you!