

Benchmarking Transport Infrastructure Construction Costs

Group of experts

Meeting in November 2016, Geneva

Structuring discussion...

1. Scope of the project
2. Way of work
3. Outline of the structure of the report
4. Action Plan

1. Scope of the project

WHY?

1. Scope of the project

Why? (aspirations)

- To improve productivity
- Common understanding of terminology
- To easier cost-benefit analyses
- To easier LCCA
- Financial feasibility studies
- Control of projects costs
- Cost estimates
- To easier comparing data between countries
- To gather data to better estimate budget for following years
- For better budget allocations
- Data for privatisation
- Better use of materials
- Impact of transportation on environment, and climate change on transportation
- To gather data for construction costs in order to adapt infrastructure to Climate Change impacts
- For whom: transportation administration; ministries of transportation, of finance; general public, media, consultants; private companies, PPP; banks, financial institutions; companies working on the infrastructural market; decision makers

1. Scope of the project

WHAT?

1. Scope of the project

What?

- Agree on common basis for comparison based on best practices on calculating costs (6)
- Identification of common terminology (e.g. distinguish different types of infrastructure within mode of transport) (3)
- Data from completed construction projects (KPR)
- Decide what kind of data we are going to use (4)
- To develop unique methodology based on some existing statistical tool(s) or to use existing methodology which fits to our scope (4)
- Identification of the units (4)
- SWOT and sensitivity analyses (5)
- Differentiation between construction works costs and maintenance works costs (KPR)
- Definitions, models, terminology used by others (e.g.: ITF, World Bank) (2)
- National definitions, models, terminology (1)
- To decide whether to put some other factors (5)

1. Scope of the project

What? (*conclusions*)

- To prepare database of costs of construction and maintenance of transport infrastructure (roads, rails, IWW, ports, intermodal terminals and logistic centers).
- Database will be based on agreed list of elements and units of transport infrastructure.
- Preparing database experts will take into account also other factors (e.g. GDP) which are important to make data comparable.

1. Scope of the project

What? (*chronologically*)

- To gather national standards for terminology on transport infrastructure e.g. elements, units
 - To gather national standards for counting costs (methodology)
 - To gather international experience in fields mentioned above
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- To make a comparison of collected information
 - To propose common terminology (e.g. elements, units)
 - To propose common methodology
 - To accept on that in April 2017

1. Scope of the project

WHEN?

1. Scope of the project

When? (*general timetable*)

- Agreed timetable from documents from Secretariat

2. Way of work

WHO?

2. Way of work

Who? (main actors)

- Governments
 - Sub-groups
 - Roads: Leader: Turkey (Team: 8 – Finland, Cyprus, Lithuania, Latvia, Slovakia, Austria, Sweden, Czech Republic, Norway)
 - Rails: Leader: tbd (Team: 6 – Finland, Czech Republic, Sweden, TER, Latvia, Turkey)
 - IWW: Leader: tbd (Team: tbd)
 - Intermodal terminal/Logistics centers: Leader: tbd (Team: tbd, for now only Turkey)
 - Ports: Leader: tbd (Team: - Cyprus)
- Secretariat
- Other organizations (after april 2017)
- Islamic Bank of Development consultant
- Working Parties and groups of experts within UNECE

3. Way of work

HOW?

2. Way of work

How?

- Sub-groups work via Internet, unless they decide to meet
- Secretariat will facilitate that cooperation
- Leader is responsible for monitoring works in team countries
- Leader sends information to the Secretariat
- Secretariat and Leader prepare draft documents
- Countries should establish focal points – at least one for a country but may have also for each group

Outline of the structure of the report

- Introduction
- Overview of challenges
- International and national experience and best practices
 - E.g. models/methodologies stock
- Agreed glossary for each mode, construction, maintenance, operation
- Purpose of the project
- Database
- Names of the chapters
- Concepts of costs, importance and transportation cost
- Construction , maintenance and operation costs
- Content of the study
- Methodologies stock
- Used data
- Analyses
- Conclusions
- International and national literature survey

Action Plan

- Until April 2017:
 - Collect national standards, best practices, terminology, models/methodologies and others - Nations
 - Collect international experience (e.g. ITF, WB, EIM, NetLipse, PIARC, CEDR) – Nations and Secretariat
 - Send to the leader of sub-group – Nations and Secretariat
 - Compare sent information – Sub-group
 - Proposals of common terminology and methodology
- In parallel for sub-groups which are not established or without leader:
 - Secretariat will try to arrange leaders and team members within governments not present at the first session or within different UNECE bodies
 - Web platform – delivered by UNECE
 - Proposal on structure of the report – Secretariat
 - Remarks on that proposal – by Nations

Benchmarking Transport Infrastructure Construction Costs

Group of experts

Meeting in April 2017, Geneva

Benchmarking of construction and maintenance costs – group of experts meeting April 2017

- What we decided is the goal of the project?
- What we decided is the scope of the project?
- What we decided should be done till April 2017?
- What have been done?
- What are next steps?



Do we fulfil what we decided?

Do we fulfil what we were asked for?

What is the goal?

- To improve productivity
- Common understanding of terminology
- To easier cost-benefit analyses
- To easier LCCA
- Financial feasibility studies
- Control of projects costs
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- To gather national standards for terminology on transport infrastructure e.g. elements, units
- To gather national standards for counting costs (methodology)
- To gather international experience in fields mentioned above

- To make a comparison of collected information
- To propose common terminology (e.g. elements, units)
- To propose common methodology
- To accept on that in April 2017

What is the scope? What should be done?

- Until April 2017:
 - Collect national standards, best practices, terminology, models/methodologies and others - Nations
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What have been done?

Roads - achievements

- Business perspective:
 - National and international experience in the field of terminology has been gathered
 - National and international experience in the field of methodology has been gathered
 - Cost and benchmarking parameters have been presented and discussed
 - Proposal for terminology and methodology has been proposed by Sub-group
 - These proposals have been discussed by the whole group
 - Proposals need to be updated by risk issues, time frame influence and CEDR report
 - It has been decided to keep report as simple as possible
 - It has been decided to have 3 levels classification of roads and 3 levels classification of project size
 - Swedish perspective has been presented to the group

- Organizational perspective:
 - Sub-group works properly

What are next steps?

Roads - challenges

- Business perspective:
 - By the end of April Nations will send to the Secretariat and to Sub-group leader proposals of detailed glossary for roads (1st May is the deadline for UN)
 - Sub-group leader and Secretariat will prepare draft final terminology, methodology and description of used terms
 - Sub-group leader and Secretariat will prepare final draft of table with decided items (e.g. GDP, Resurfacing, new construction, enlarged types of tunnels)
 - Sub-group leader and Secretariat will send these documents to the Secretariat by the end of April 2017 to make it possible to prepare formal document for July meeting of the group
 - In July the group will finally consider prepared documentation to enable start of the benchmarking

What are next steps?

Rails - challenges

- **Business perspective:**

- On the basis of PRIME and TER MC elaboration of draft glossary with the Secretariat
- As a formal document for July meeting

- **Organizational perspective:**

- TER becomes key stakeholder in the rail sector

What are next steps?

Other modes - challenges

- Business and organizational perspective:
- Ports:
 - To find a specific port to enable the work (proposals from Nations)
 - To bring information about ports authorities to the Secretariat
 - To have team organized in July
 - Continue talks with Netherlands by the Secretariat
- IWW:
 - To continue talks with River Commissions represented to WP.3
 - To disseminate them work has been done in the road sector (by the Secretariat)
 - Try to have them in July's meeting
- Multimodal terminals:
 - To consider up to July who can be a key stakeholder? (Nations)
 - Secretariat and CETMO will cooperate

General considerations

- Business and organizational perspective:
 - For the glossary and terminology we can additionally use:
 - FIDIC
 - PIARC
 - CEDR
 - TEM Report
 - CETMO
 - AGR
 - GIS Project:
 - There will be consultant hired by Islamic Bank of Development
 - They will gather information about construction costs
 - Operational costs:
 - CEDR is starting to prepare benchmarking study on that issue
 - ITF benchmarking study:
 - 31st May-2nd June ITF meeting in Leipzig also on benchmarking study on construction costs