

BALTIC - TO - BALKAN NETWORK FOR LOGISTICS COMPETENCE

1st B2B LOCO Workshop in Vilnius – brainstorm group 1:

## INNOVATIVE TECHNOLOGIES

## **Moderators:**

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The SME jointly represent the most important part in our economy. On the other hand their influence does not correspond to their overall size as a group. They should hold together to insist on innovation in the intermodal business. A lack of modernization is particularly evident in the railway system. This system as a mega system cannot easily be influenced by a single SME or even a common effort.

As not only SMEs but also railways nowadays act as enterprises, their entrepreneurial parameters are of microeconomic nature. They would not invest without chances of economic success (= profit). The actual cost elements do not really allow the assumption of a profit in return of a heavy investment. Consequence: the burden for the environment through greenhouse gases will grow.

If the society does not want to continue this deterioration, the decision makers have to change the parameters: the use of environment has to be charged as pricing is the only instrument to influence economic behavior.

The political decisions have to be taken in order to introduce the right factors allowing building the true transport price. In other words: the external costs have to be included in the transport price. The situation of railways will then be more competitive and innovation will pay.

A lot of inventions and techniques are ready to be introduced, particularly those which have been planned since long time: automatic coupling, longer trains, heavier axle load, automatic vehicle identification, electronic bill of lading, satellite tracking and tracing, intelligent procedures for single wagons, efficient transfer techniques between modes (especially road-rail), combination of passenger and freight trains, automatic change of axle width (like Talgo and other patents), fuel cell locomotives (not needing electric wire = catenary) and so on.



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One important condition for the development of rail transport is the railway infrastructure: here the innovation is not of technical, but of political character: whereas the road network has been enormously developed in Europe after World War II (millions of km of new roads and highways have been built), the railway network however has considerably been cut down in nearly all countries. The modal shift has been considered as one of the possible and necessary ways to develop a sustainable transport system. But without the adequate infrastructure which gives the freight transport the same attention as the passenger transport this will not happen. But the market forces do not insist on developing this infrastructure under the above-mentioned conditions. It needs therefore political will. (Example China: approximated 10.000 km new lines per year).

## RECOMMENDATIONS

- More active support for innovations in the field of intermodal transport (new ideas, feasibility studies, prototypes, pilot projects, implementation..) is recommended.
- New solutions for transport of small quantities of cargo on short distances (equal running priorities with passenger trains) are needed. (Feeder lines, city logistics, sidings...etc).
- 3. Innovative solutions should be developed as a consistent system, consisting of innovative: vehicles, trans-shipment technologies, organizational solutions dynamic access to the vacant rail infrastructure dynamic time table setting and unified and short (time limited) licensing processes, which would enable the use of the innovative solutions all over the EU.
- 4. The innovative solutions should be evaluated from all crucial points of view: feasibility, profitability, environmental protection etc.
- In comparison to the old member states relative abundant rail infrastructure is still available in the new member states. Support of new solutions is vital for recovery and in some cases for survival of the railway systems in the new member states.
- Networking of SMEs, railways, logistics services providers and users, research institutions, universities etc. in the new member states is highly recommended.