BOSNIA AND HERZEGOVINA

(a) Environmental questions related to railway operations

1. Out of a total of 1,030 km of railroad tracks, 264 km are not electrified. Electrification of the railway line Doboj–Tuzla–Živinice-Zvornik (110 kilometres) is currently ongoing, and this would reverse the negative impact on environment caused by diesel engine traction. Negative electromagnetic impact on environment is considered insignificant in regard to diesel engine traction. Also, an electric traction remote control centre is planned to become operational, and that would significantly improve use of electric traction.

* The UNECE Transport Division has submitted the present document after the official document deadline due to resource constraints.
2. Electric batteries from passenger cars, locomotives, relay premises and other are disposed of in special premises where recycling is undertaken, i.e. selling them to authorized companies which recycle secondary raw materials.

3. All environment protection laws are passed on the level of entities in Bosnia and Herzegovina, and railway companies respecting these laws gather, store and dispose of all kind of waste materials produced during the process.

(b) Safety in railway transport

4. The law on railways in Bosnia and Herzegovina as well as the laws on railways passed in entities specify duties of Railways Regulatory Board of Bosnia and Herzegovina, infrastructure manager, railway operators and railway companies in order to take care of safety in railway transport.

5. Based on these laws and the Law on public companies, certain regulations were passed specifying in detail supervision and control of safety in railway transport. In addition to this regulations ex-Yugoslav railways safety regulations from 1991 are also applied. Railway companies pass their Instructions on control of safety in railway transport, each for its respective network based on specific regulations.

6. Depending on the way the operations are set up, railway companies have organized control of procedures on all levels, as well as through internal control system at the top of management.

7. Basic parameters for establishing safety level in railway transport are analysis of extraordinary events, condition of signalling and safety devices by number of disturbances and duration, condition of tracks by authorized speed, axle load and length, limited speed, slow driving, condition of communication devices, condition of transportation and traction capacities etc.

8. This leads to conclusion that safety in railway transport in Bosnia and Herzegovina is at satisfactory level, but connection to Western Europe railways have not yet been established.

(c) New transport technologies

9. Transportation and traction equipment in possession of railway operators in Bosnia and Herzegovina is over 20 years old. Great efforts are devoted in solving this problem because existing capacities cannot be used in international traffic.

10. Plans for procurement of new capacities are made for this purpose as follows:

   - locomotive for speed to 160 km/h
   - passenger car for speed to 160 km/h with slope technique
   - freight car for speed to 120 km/h.
CROATIA

11. The Ro-La terminal in Spačva (near border toward Bosnia and Herzegovina and Serbia) is under construction and will be open by the end of September 2006, and integrated into the transport system. The operation of the trains on the line Spačva – Vinkovci – Ljubljana freight station is expected to start from 1 October 2006, that is one pair of trains daily, six days in week.

CANADA

(a) Environmental questions related to railway operations

12. The Canadian Federal Government continues to work with the rail industry on a cooperative basis to monitor and control air emissions. In accordance with the policies of continental harmonization and “Smart Regulation” (seeking the most efficient and effective way of regulating), current objectives are to move to harmonization with the U.S. EPA locomotive emissions standards, and to introduce targets and plans for the reduction of GHG emissions. This work is supported by practical emissions testing of in-service locomotives. The Government also has a programme which provides funding for environmentally-beneficial technologies at developmental and near-commercial stages, in order to speed their introduction into the general marketplace.

13. The recently elected Canadian Government has declared its intention to introduce a comprehensive “Clean Air Act”. It is expected that this Act will include provisions affecting railways.

(b) Safety in railway transport

14. The Canadian Railway Safety Act (RSA) provides a variety of regulatory tools to promote safe rail operations, ranging from voluntary compliance to the use of standards, rules and regulations. The RSA requires the development and implementation of a “Safety Management System” regime, which obliges railway operators to take primary responsibility for safety, and to develop strategies, plans and implementation measures for the inclusion of safety into their corporate culture. Transport Canada Rail Safety is instituting universal risk based planning which, in conjunction with enhanced internal quality control measures and an updated information and data system, is aimed at promoting consistent nationwide safety standards, and helping to optimize resource allocation by identifying trends and highlighting critical areas for intervention.

15. Examples of focused programmes are “Direction 2006” which is an education and awareness campaign against trespassing on railways, and the Grade Crossing Improvement programme, which provides funds for the upgrading and/or elimination of railway grade crossings.

(c) New transport technologies

16. Transport Canada Rail Safety is examining the implications of longer train in critical areas, such as train inspection, signalling and track maintenance standards. It is also considering
enhanced event recorder capability on locomotives to improve survivability as well as record more safety related operating parameters. The Federal Government has provided funds and support for development of hybrid switcher locomotives, steerable trucks on railway cars, rail and wheel flange lubrication, prediction of rail bed disturbances, engine heating and anti-idling systems, bio-fuel tests and investigation of fuel cell power units.

GERMANY

17. The development in the German railway sector is mainly characterized by the activities undertaken at European Community level. The stated aim of European transport policy is the creation of a common railway area. For this purpose, the technical requirements in the individual Member States are gradually harmonized into "Technical Specifications for Interoperability (TSI)" in order to ensure the unimpeded operation of rolling stock, if possible, on the infrastructures of all Member States. In this connection, the limits for noise emissions of the rolling stock were also laid down.

18. In all Member States of the European Community, railway safety has already reached a high level. A high share of the comparably low number of accidents occurs at railway crossings and is mainly caused by road users. Despite the already high safety level, efforts made at European level are aimed at a further improvement of this level by the harmonization of safety requirements and safety-related procedures.

19. The new and further development of transport technology is primarily incumbent on the railway undertakings.