



**MINISTERIAL DECLARATION  
ON GLOBAL ENVIRONMENT AND ENERGY  
IN TRANSPORT**

1. We, the Ministers and relevant Representatives responsible for environment and energy in the transport sector, together with distinguished Representatives of International Organizations, met in Rome, Italy, on November 8-9, 2010 to discuss policies and consider measures aimed at reducing greenhouse gas (GHG) and air pollutant emissions from the transport sector while ensuring adequate development to society through innovations and enhanced international cooperation.
2. We recognize that transport is a fundamental factor of economic and social development, with a great potential for increasing productivity and substantially improving living conditions. At the same time, we are aware that transport is a significant contributor of GHG emissions<sup>1</sup>, which have an important negative impact on global climate, and for other air pollutants, which impact public health and the environment of many areas. We believe that actions are required to address GHG and other pollutant emissions from the transport sector with the aim of identifying more efficient transport solutions while ensuring sustainable development in a balanced way.
3. We regard climate change as one of the great global challenges of our time, and are committed to combatting it under the United Nations Framework Convention on Climate Change (UNFCCC), and its Kyoto Protocol, for those countries who are signatory States, and take note in particular of the recent Copenhagen Accord.
4. We share a long-term global vision of realizing low-carbon and low-pollution transport systems, and we commit ourselves to working effectively and collaboratively with International Organizations and individual countries in order to fulfill this vision. Discussions both at the International Transport Forum in Leipzig in 2008, where questions of climate change and energy-saving in the context of transport policy were for the first time discussed at an international level under the heading of “Transport and Energy: the Challenge of Climate Change”, and at the Ministerial Conference on Global Environment and Energy in Transport (MEET) in Tokyo in 2009 have clearly shown that the transport sector can and, in fact, must make a substantial and essential contribution to the protection of both climate and environment. In this light, we welcome the ongoing

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<sup>1</sup> According to the IEA estimates, the transport sector accounts for 22% of the world's carbon dioxide (CO<sub>2</sub>) emissions in 2008. CO<sub>2</sub> is one of the most significant GHGs.

efforts by international organizations such as the International Civil Aviation Organization (ICAO), the International Maritime Organization (IMO), the World Forum for Harmonization of Vehicle Regulations of the United Nations Economic Commission for Europe (UNECE/WP.29), and the International Energy Agency (IEA), as well as international initiatives such as the United Nations Partnership for Clean Fuels and Vehicles, and the International Conference on Environmentally Friendly Vehicles. We also acknowledge and support the shared goals of the International Transport Forum (ITF).

5. We recognize that developing solutions in the transport sector may also involve the responsibility of national agencies other than those dealing strictly with transport matters. In this respect, we encourage transportation agencies to work with other appropriate national partners to develop effective domestic policies and with appropriate international organizations to develop effective regional and international policies. MEET can also be useful in exchanging experiences, discussing best practices, sharing assessments among governments and implementing relevant projects as they will deem it appropriate to employ it.
6. While convinced that sustainable and updated transport policies are a condition for economic and social development and that meaningful efforts should be made to mitigate the impact of domestic transport policies on local, regional and global environment, we are aware that social and economic circumstances vary substantially from country to country and that it is governments' responsibility, consistent with their international obligations, to implement those policies and deploy those efforts bearing in mind their national conditions and capabilities.
7. We have appreciated contributions given by industry to MEET 2's agenda, in particular at the Round Table on Automotive industry held on June 22, 2010 in Rome, and have studied them carefully. We look at industry as an appropriate interlocutor with a view of coordinating more effectively private endeavors and public responsibilities. We will consider the idea of associating the whole transport industry to our endeavors as we will deem it appropriate, while recognizing that private and public environmental stakeholders should have a voice as well.
8. We recognize the global nature of the international aviation and shipping sectors, and their importance to global economic growth and sustainable as well as the necessity to address emissions from these sectors with regards to climate change. We express our support and expectation to ICAO and IMO as the competent UN bodies on aviation and maritime issues, respectively, and encourage them to continue to lead in developing globally effective measures to address GHG emissions from international aviation and shipping. We will also work collaboratively through ICAO and IMO to foster

frameworks of action to appropriately address emissions from their respective industries. We note the progress achieved both at the 37<sup>th</sup> ICAO General Assembly in Montreal (September 28-October 8, 2010) where an historic agreement was achieved and at IMO MEPC 61 in London (September 27- October 1, 2010)<sup>2</sup>.

9. Concerning inland transport<sup>3</sup> - road, rail and urban and intermodal transport - we recognize that strategies to control GHG emissions and air pollutants should allow for each nation's flexibility to implement strategies that are felt most appropriate to their conditions. We also share the view, however, that while it is not for MEET to set international standards for reductions, substantial improvements can be achieved at national and/or regional level by adopting a) an integrated domestic approach to national transport strategies, addressing all modes of transport, fuels and vehicles, and using a variety of policy measures and instruments; b) more efficient "intelligent" transport systems that result in improved energy efficiency; c) transport demand management and behavioral change inducement, through an appropriate mixture of cost-effective measures including legislation, regulations, economic incentives and consumer information to the extent that it will be considered feasible and opportune by parties; d) best practices sharing among countries and enhanced capacity building and e) strengthening international cooperation to develop and harmonize procedures for testing fuel efficiency or measuring GHG emissions through the UNECE/WP.29 and other regional or international fora;
10. We support the following measures, to be considered along the lines of the discussion paper attached hereby.
  1. Recognizing that some countries may not possess the required expertise or financial means to adequately assess their transport needs, we have agreed to consider ways and means to make our national expertise, both public and private, available to facilitate countries implementing sustainable transport policies in line with the present Declaration.
  2. Bearing in mind the importance of road safety and its connections to traffic management systems aimed at controlling/reducing congestion, increasing energy efficiency, reducing GHG and other pollutant, we believe that special focus should be given to introducing all countries to the basic concepts and

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<sup>2</sup> *The following countries South Africa, Egypt, Nigeria, Ghana, Angola have reserved their position on par. 8 in view of their conviction that the development of global effective measures to address GHG emissions from international aviation and shipping must be considered by the IMO and ICAO in accordance with the provisions and principles of UNFCCC and its Kyoto Protocol.*

<sup>3</sup> "inland transport" refers to transport activities excluding international aviation and shipping

options in this area; we therefore suggest that countries which have already enacted road safety systems or practices continue to share their experience in order to increase harmonization of methods and approaches both at technological and regulatory level.

3. With a view to associating industry closer to the governmental debate, we are ready to explore, in particular, how automotive industry's priorities and needs could be better represented to governments with reference to an integrated approach, technology neutral policies and joint fuels and vehicles evaluation.
4. Considering that the goal of optimal integration of energy and environmental objectives between infrastructure development and transport policies can be assisted by appropriate application of Intelligent Transport Systems, interoperability and technological innovation, we believe each country should consider the development and use of ITS and ICT systems increasingly where such systems further energy and environmental goals and are cost-effective tools<sup>4</sup>.
5. Noting that some countries felt it opportune to develop studies with a view of adopting air routes and procedures aimed at increasing energy efficiency, including the application of satellite technologies and the reduction of legal and economic barriers as well as other institutional boundaries, to enable the application of new ATM operational concepts, we welcome the offer by the EU Commission to convene a meeting during which it will illustrate the « Single European Sky » initiative based on Functional Airspace Blocks and invite all other countries to present initiatives that they are pursuing in that field, as examples of achieving greater environmental efficiency in air transport.
6. Being aware that the draft of text to amend MARPOL Annex VI is to be circulated among parties as the result of discussions in the IMO over a number of years we urge all relevant countries and stakeholders to tackle these issues in MEPC in order to establish the international framework.
7. Considering the relevance of ensuring an efficient and sustainable mobility of goods, and keeping in mind the wide variety of local situations in each country, we encourage the sharing of successful and specific experiences gathered by some countries.

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<sup>4</sup> *ITS and ICT systems can provide, for example, real-time and multimodal travel information, real-time monitoring of traffic of passengers and goods and related optimal management of flows.*

11. We express gratitude and appreciation to the Governments of France, Germany, Italy, Japan and Spain for having coordinated global intergovernmental consultations to prepare for ministerial discussions at this meeting.

The above mentioned Declaration has been drafted on November 8, 2010 and is being released by the Representatives of the following Parties:

*Albania, Algeria, Angola, Australia, Belgium (EU Presidency), Bosnia and Herzegovina, Bulgaria, Egypt, France, Germany, Ghana, Indonesia, Italy, Japan, Montenegro, Morocco, Nigeria, Russian Federation, Serbia, South Africa, Spain, Ukraine, United Kingdom of Great Britain and Northern Ireland, United States of America, Vietnam and the European Commission.*



## **DISCUSSION PAPER**

## **AIR TRANSPORT**

1. The States, recognizing the principles of non-discrimination and equal opportunities aimed at developing international aviation provided for in the Chicago Convention of December 7, 1944, emphasize the vital role of civil aviation in economic and social development, and thus the need to focus on suitable options to reduce emissions in order to ensure the sustainable development of aviation. <sup>(1)</sup>
2. The States agree that the global goals defined at the 37<sup>th</sup> ICAO Assembly would not attribute specific obligations to individual States, and the different circumstances, respective capabilities and contribution of developing and developed States to the concentration of aviation GHG emissions in the atmosphere will determine how each State may voluntarily contribute to achieving the global aspirational goals.
3. The States call on ICAO to continue the development of a comprehensive implementation framework for emissions reduction, through a basket of measures including technology, standards, operational improvements and market-based measures as was resolved at the 37<sup>th</sup> ICAO Assembly.
4. The States also agree to encourage investments in technological research and development, both for the development of aircraft with greater fuel efficiency, and to develop policy actions to accelerate the appropriate development, deployment and use of sustainable alternative fuels for aviation. In this regard, the States acknowledge the outcome of the 37<sup>th</sup> ICAO Assembly, where ICAO has envisaged an implementation process, with medium and long term targets for reducing emissions of CO<sub>2</sub>, in terms of improvement, on a global annual average fuel efficiency consumption of 2% per year until 2020 and an aspirational global fuel efficiency improvement rate of 2% per year over the period 2021-2050.
5. The States also agree on the development of studies for achieving the adoption of routes and procedures aimed at increasing energy efficiency, including the application of satellite technologies and the reduction of legal and economic barriers, as well as other institutional boundaries, to enable the application of the new ATM operational concepts for a greater environmental efficiency.
6. The States acknowledge that civil aviation is in a unique position to transport passengers over medium and long distances (as well as some specific goods), and that the possibility of maintaining airborne links must be preserved, in particular to serve the global market. Likewise, the States maintain that the establishment of an



aircraft CO<sub>2</sub> emissions standard must take into account the interdependencies with other environmental impacts , including the issue of civil aircraft noise, the improvement of which is essential for residents neighbouring airports.

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*(1) According to the evaluations of IPCC (Intergovernmental Panel on Climate Change) dated 2007), the CO<sub>2</sub> emissions produced from aviation were about 2% of the global emissions.*

## MARITIME TRANSPORT

1. To limit or reduce GHG emissions from international maritime transport, reaffirming the importance of expeditious discussions in the IMO, we in particular:
  - a. Recognize the IMO as the relevant organization for appropriate measures to improve the energy efficiency of ships;
  - b. Support current initiatives by the IMO and call on the organization to deliver a package of appropriate measures for reducing emissions;
  - c. Welcome progress achieved in MEPC61 toward a package of emission reduction measures with the Energy Efficiency Design Index (EEDI) for new ships so that they are designed and built for maximum energy efficiency and an Ship Energy Efficiency Management Plan (SEEMP) comprising an Operational Index and Guidance on best practices for fuel-efficient operation of all ships;
  - d. Support IMO's efforts to gather and publish data on GHG emissions from international maritime transport and;
  - e. Pursue, as appropriate, further improvements in the energy efficiency of international maritime transport and encourage RD&D of new technologies to that end;
  - f. Encourage IMO to pursue discussions on a global, internationally approved framework aimed at reducing the total global GHG emissions in the most cost-effective way, and look forward to further progress to be achieved.
  
2. To limit or reduce air pollutant emissions from international maritime transport, we in particular:
  - a. Welcome the amendments to MARPOL Annex VI and the NO<sub>x</sub> Technical Code to significantly reduce air pollutant emissions from ships;
  - b. Encourage RD&D of new technologies for ships to meet the more stringent IMO regulations;
  - c. Encourage studies and pilot projects on the feasibility and implementation of systems that supply onshore power to ships, with emphasis on cost-effectiveness, net environmental impacts and the formulation of international standards between grids and ship and;
  - d. Encourage the use of marine fuels with lower environmental impacts to reduce sulphur oxide and nitrogen oxide emissions from ships.
  
3. To manage waste from ships and ship dismantling, we in particular:

- a. Welcome the adoption of the “Hong Kong International Convention, for the Safe and Environmental Sound Recycling of Ships” which intends to enhance the the safety and health of the workers and to protect the environment in ship yards and to foster related industries;
  - b. Encourage the IMO to work towards finalizing the “Guidelines for Safe and Environmentally Sound Ship Recycling”, the “Guidelines for the Development of the Ship Recycling Plan” and the “Guidelines for the Authorization of Ship Recycling Facilities” and;
  - c. Support all efforts in the IMO aimed at implementing the ~~Ship Recycling~~ Hong Kong Convention.
4. To improve the environmental quality of marine waters fighting against the ~~presence~~ transfer of harmful aquatic organisms and pathogens which cause damage or injury to human health and aquatic ecosystem, we in particular:
- a. Encourage IMO to accelerate works to be done for the smooth ratification before the implementation of the International Convention for the Control and Management of Ships’ Ballast Waters and Sediments (BWMC) adopted in 2004.
  - b. Encourage also the ratification of the BWM Convention
5. To promote more environmentally friendly transport systems, we in particular:
- a. Welcome initiatives to encourage modal shifts of freight traffic from road transport to maritime shipping including inland waterway transport.
6. To promote and take actions aimed at enhancing the role of the human factor on board ships, we in particular:
- a. Foster the culture of marine pollution prevention and environmental protection through the identification of criteria for personnel training and management which take into account the work performance on board ships equipped with increasingly sophisticated technologies.
7. To enhance Research and Innovation in the maritime transport sector, we in particular:
- a. Recognise the importance of research, development and deployment of innovative technologies and;

- b. Encourage countries to promote introduction and adoption of such technologies to address environmental issues including GHG emissions, ballast water, ship recycling and air pollutants.

## **ROAD TRANSPORT**

1. We recognise the need for the adoption of an integrated approach which takes into account vehicles, infrastructure and road users.
2. We agree particularly on the following:
  - a. when defining national targets and standards concerning CO<sub>2</sub> emission reduction it would be desirable to provide for sufficient lead time allowing vehicle manufacturers to make the necessary research technology investments and develop appropriate products;
  - b. standards should be based on performance requirements leaving manufacturers to choose the technological solution which is the most appropriate for a certain market;
  - c. the environmental and energy efficiency of conventional vehicles will continue to improve with the increasing use of sustainable alternative fuels and the availability of high quality fuels in close relation with the vehicle technologies present on the markets; in the meantime, it is necessary to promote the conditions to ease the entry on the markets of new technologies such as electric powered vehicles (pure electric and hybrid) and hydrogen vehicles and to make them acceptable for consumers in terms of performance, safety, charging infrastructure standards and interoperability, electric consumption and purchase price;
  - d. a globalised automotive sector may benefit, wherever possible, from international regulations, which can generate scale economies and accelerate technology transfer and the spreading of innovative vehicles speeding up the mitigation of transport impact on climate change; in this respect, we reaffirm the importance of the work carried out by the “World forum for harmonisation of vehicle regulations - UNECE WP. 29” and we encourage Countries to actively participate in its activities and to become Contracting parties to the 1958 and 1998 Agreements dealing with the development of regulations on the certifications of vehicle components and with the development of global technical regulations (GTR);
  - e. measures should be implemented in order to promote eco driving behaviours

of professional and non professional drivers, also through focused school education programs, and to increase users' awareness of the importance of keeping vehicles in good conditions throughout their lifetime;

- f. improving traffic flow management by implementing intelligent technologies (ITS) which provide real time traffic and multimodal travel information, would optimise road infrastructure use with tangible fuel consumption and CO2 emission reduction and increase level of safety on the roads.

## URBAN TRANSPORT

1. Emphasizing that cities, conurbations and metropolitan areas are the essential nucleus of territorial organisation, and that they concentrate about 70% of the world population, large amount of jobs, economic decision-making centres, social services and innovation, and generate the majority of the gross domestic product.
2. The States acknowledge:
  - a. the impacts of uncontrolled growth of cities and of urban sprawl processes: congestion, atmospheric and noise pollution, road accidents and fatalities, deterioration of the urban landscape, high cost of living, etc., having negative effects on human health and reducing the quality of life in cities;
  - b. the increasing sensitivity of citizens to the environment, security, health and social cohesion, which means that urban mobility must be sustainable, safe and accessible;
  - c. the benefits of a shift towards a resource-efficient, low-carbon economy by inter alia promoting innovation and research programmes as well as initiatives to further develop clean, energy-efficient and safe vehicles.
3. The States encourage the competent authorities — national, regional and/or local — to define a long-term mobility strategy for their cities, to adopt an integrated policy approach with an appropriate combination of measures to improve urban mobility and to promote the exchange of best practices.
4. The States call for actions to reduce the negative impacts of transport in urban and metropolitan areas, inter alia:
  - a. Encourage the coordination of transport infrastructure with town and country planning, including land use planning, through cooperation among competent public bodies and integrating public participation processes. *Ex multis*:

- i. improving the management of transport demand as a key factor of urban territorial planning;
  - ii. designing urban areas and human settlements for safe walking and cycling;
  - iii. developing and promoting a better quality public transport system through technological improvements, and improved infrastructures that foster integration and interconnection of transport modes, such as interchanges and park-and-ride car parks;
  - iv. building up the public transport system accessible to all groups in society, by means of appropriate infrastructures and services adapted for persons with reduced mobility, specific information systems and personal assistance services;
- b. Support the adoption of sustainable urban mobility plans for cities and metropolitan areas, and large centres of activity. Such plans should be designed as projects of the mobility system that contain policies and measures, i.e.:
- i. supporting development of traffic management tools, technological interfaces between private and public mobility, real time traffic information services, and travel planning and information services including the integration of tariff systems;
  - ii. promoting the rational use of private vehicles, for example through carpooling, car-sharing and park and ride facilities;
  - iii. developing an urban road policy, based on information campaigns, education, life-long training, ITS applications and town and transport planning initiatives and supported by eco-driving education, information and awareness-raising campaigns.
  - iv. developing the logistics and the space-time planning for the urban freight transport to encourage efficient 'last mile' deliveries.

## INTERMODAL TRANSPORT - LOGISTICS

1. Intermodal forms of transport, that enable all carriers to add their very special strength to the chain of transport as a whole, offer a relevant contribution to ecologically as well as economically sustainable transport management. Inland vessels present the best efficiency per unit of load transported, whilst sea going ships are crucial for international and intercontinental transports. However both contribute to environmental burdening by producing fine particles, sulphur and nitrogen oxides. Although contributing to the overall burden on the environment with the noise emissions, road transport can offer flexibility whilst rail transport shows its highest efficiency on medium and long distance especially for bulk cargo as well as for intermodal cargo featuring low specific CO<sub>2</sub> emissions. Even if still marginal in absolute terms, aircrafts play an increasing role in intercontinental transport, especially in carrying perishable goods or high valued cargo.
2. Considering the increasingly international character of transport, multimodality should play a stronger role than it did until today. Therefore it is worth trying to identify in a first move those areas where international co-operation in the field of multimodal transport issues could be enhanced and intensified and in a second move where long distance transport between countries has the potential for developing new multimodal transport chains crossing borders – in addition to those already existing.
3. Participants acknowledge:
  - a. the crucial role of road transport, but the equal importance of encouraging co – modality - the use of shipping, rail, inland waterways as alternative, but also as cooperative, modes of transport;
  - b. the useful contribution that intelligent transport systems, interoperability and technological innovation can make to the realisation of an efficient and sustainable transport system,
  - c. the possible contribution of multimodal transport solutions to the aim of reducing CO<sub>2</sub> and other emissions in a fast and effective way,
  - d. the particular potential from the development of multi-modal long-distance cross-border transport routes,
  - e. the need to establish an international exchange of best practice solutions in multimodal transport operations,

- f. the potential of offering links between the different modes of transports to enable operators to plan their way of delivering cargo considering efficiency aspects as well as ecological aspects,
  - g. the potential importance of multimodal transport hubs in order to organise transport in a way that reconciles *just in time* deliveries with the need for CO2-reduction,
  - h. the challenges surrounding “last mile” distribution of goods, particularly in urban areas, characterized by high costs and high environmental impact, and the desire to improve efficiency by a rational reorganisation of collection and delivery of goods through positive regulatory interventions.
4. They encourage, where justified on the basis of appropriate cost benefit analysis:
- a. governments and states to support multimodal transport as part of an integrated transport system (including through consideration of incentives for a shift of traffic, subsidies for innovations and grants for building and extension of cargo handling terminals, etc.),
  - b. the development of infrastructure with special attention to junctions and intermodal connections to stimulate the use of modal alternatives to road transport, to optimize the transport chain (thereby reducing bottlenecks) and to reduce emissions,
  - c. governments and companies to set up multimodal transport hubs to enable operators to make a reasonable choice of transport mode,
  - d. transport companies to take into account possible ecological advantages of intermodal transport chains offered especially when it comes to long distance transport links.