On the development of recommendations on safety of long-distance oil and gas pipelines within UNECE WP 6

In October 2005 the working party on regulatory cooperation and standardization policies (WP 6) considered a proposal from the Russian Union of oil and gas constructors (document TRADE/WP. 6/2005/5/Add. 1) to prepare recommendations on pipeline safety, including the safety issues and other obligatory requirements of regulatory measures for the design, construction, testing, use of materials, operation, maintenance, conservation and utilization of pipelines for the transport of the products of the oil and gas industry. The Working part confirmed that this project will contribute to the development of regional business activity and integration, and invited potential partners to inform the Secretariat of their interest in the project. (document TRADE/WP. 6/15/2005)

In January 2006 the project was presented at a meeting of another expert working of UN/ECE (Working Party on gas), which has also expressed interest in the issue and its delegates were requested to inform the Secretariat of their interest to join the project. (document CP TEIA/2005/2 MP.WAT/WG/1/2005/2).

In the March 2006 the project presented at the meeting of the expert group WP 6 the draft «START» which suggested that a project on the security of oil and gas pipelines will be considered at the sixteenth session of WP 6 in June 2006 for the mandate of the working group.

In April-June 2006 from discussion on the safety of pipelines between WP 6 and the Federal service for ecological, technological and nuclear control of Russia the Russian side make proposals on this subject for consideration at the sixteenth session of WP 6.

The proposals were discussed at the sixteenth session of the WP June 6, 2006 as well as at a number of meetings and conferences in the framework of the CIS and other regions. Following these discussions the Working party requested the Secretariat to organize work on pipeline safety in the sector.
The Working party decided to begin work on a new project in this area (document TRADE/C/WP. 6/2006/13).

**In November 2006** interest in the dialogue on pipeline safety have been shown by a number of oil and gas companies of the CIS and Europe (Belarus, Croatia, Moldova, the former Yugoslav Republic of Macedonia, Russia, Kazakhstan, Ukraine), as well as the ISO (International Organization for Standardization) Secretariat and the Inter-Parliamentary Assembly of the CIS.

**In July 2007** the results of the discussion were prepared by the Secretariat of the Working Party in the form of a special document, and sent to the participating countries.

**In November 2007** a paper by the Secretariat on the draft oil and gas pipeline safety was presented at the seventeenth session. The document stated that realization in technical regulation in Russia and abroad make it difficult to execute the projects entail a lot of unjustified technical approvals, increasing the time and cost of such international projects.

A characteristic feature of the oil and gas market in Russia is the broad participation of construction companies and organizations in large-scale international projects such as Yamal-Western Europe, Caspian pipeline system, gas pipeline Russia-Sakhalin Projects, Turkey, etc.

Considerable technical complexity of these projects, their international character, high capital intensity and the risks are very serious requirements of normative documents, management of quality, environment and occupational safety.

Currently operating in Russia rules and standards for pipelines were designed before 1985 and since then have not been revised. Over the decades they have become obsolete in organizational, technical and legal aspects. Many regulations do not correspond to the level of development of science, technology and modern practice, on the other hand the ability of the national economy is often contradictory and in addition is not harmonized with international standards. Economic reforms in Russia on further development of fuel and energy complex, the influx of additional investments in oil and gas production, as well as in the development of pipeline
transportation were done. In the near future implementation of such projects as the construction of the North European gas pipeline, the development of the oil and gas pipeline construction, Peninsula Yamalskiy East to China, etc become difficult.

Taking place in Europe and in the all-around the world processes also are a good example for the development of a regulatory framework in Russia through pipelines. The globalization of trade and economic integration in the European Union have demanded the development of uniform standards. In Europe, these objectives are implemented in the form of European Union directives that are approved by the members of the European Union.

This same situation has emerged in Russia and the CIS countries, where it is necessary to develop new legislation in the sphere of regulation of the mandatory technical requirements of safety to trunk, fishing and distribution pipelines. The creation in Russia of a new technical Committee for Standardization TC 23 seeks to resolve these problems, but the standardization process in such a huge industry cannot recover in one to two years at the current level.

Development of common UN/ECE recommendations «On the safety of pipelines», taking into account the provisions of the «international model», will allow Russia jointly with other interested countries to participate in UN/ECE activities in the field of international technical harmonization and modify national standards for the safety of pipelines, in full compliance with such recommendations, taking into account national peculiarities of Russia.

Harmonization of national and international norms does not imply tighter requirements only, as it was the first investment pipeline projects. Harmonization means establishing new rules with requirements based on sound scientific and technical provisions aimed at reducing the risk and safety during construction and operation of pipeline facilities.

Given that the UNECE has experience in developing of model of technical regulations and recommendations in the area of telecommunications and road-building machines, we believe that it would be appropriate to run the project on the development of regional rules on pipeline safety, so the WP 6 decided to establish a
task force for the project and invited interested States members of UN/ECE and participants from industries to contribute to further discussion on the development of a regulatory framework to ensure the safety of pipelines.

**In November 2008** during the eighteenth session of the WP 6 the working party was informed by the Russian side about the discussion of the project on pipeline safety at a meeting of the Interstate Council on industrial safety of CIS, which was held in August 2008, the Russian delegation proposed that a questionnaire on this topic and to transmit it to the Secretariat for further distribution.

The Working Group supported the proposal to prepare a questionnaire about the different methods of regulation in this area, existing in different countries (document ECE/TRADE/C/WP6/200.8/18)

**In December 2008** the questionnaire on regulatory practices was prepared by the experts of the task force and sent by the Secretariat of WP 6 UN/ECE.

In accordance with the decision of the WP 6 **in May 2009**, in parallel with the «START» team meeting in Stockholm were discussed the regulatory responses to questions on methods for the regulation of oil and gas pipelines. Replies were received from 5 countries - Belarus, Brazil, Canada, Kazakhstan, Turkey.

Decision: the secretariat will contact the interested parties to obtain information; the analysis of the replies received will be submitted to the task force at the nineteenth session of WP.6 in November 6, 2009.

For a further discussion with the member organizations of the Interdisciplinary Council on standardization and technical regulation in the oil and gas industry have replied 5 countries and the UN/ECE WP 6 decided: the secretariat will contact the interested parties for more information.

**In November 2009** the analysis of the received replies was submitted to the experts of the task force. At its nineteenth session, the WG 6. considered results as an example of cooperation of specialists in Russia and Norway within the framework of the project «Barents 2020».
For further discussion with the member organizations UNECE WP 6 invited countries to send experts to participate in the task force for the Sectoral project Safety and oil and Gas Pipelines.

In November 2010 at a meeting of the twentieth session of the WG 6 the Russian side confirmed the interest of further participation in the sectoral initiative on pipeline safety and experts of the task force on the basis of the results of the analysis of the documents previously submitted by participating countries in the context of questionnaire on this initiative, WP 6 confirmed that the initiative aims to define a set of security requirements for transboundary pipelines based on standards that are to be used for establishing a presumption of conformity to those requirements. These requirements should detail the different geographical and climatic conditions and terrain order to ensure optimum protection against risk, while avoiding excessive costs.

The Working party requested the Secretariat to continue reporting on an annual basis, updated information on the work of all sectoral initiatives.

In addition, the WP 6 Secretariat asked the Russian side to submit a candidate for the post of Coordinator at the next Bureau meeting in June 2011 for approval at the 20th session of the WP 6.

In November 2011 the twenty-first session of the WG 6 took note about the information on the project on pipeline safety and the development of technical regulations on pipeline safety in the framework of the Customs Union.

The issue of the appointment of the head of the task force on the United Nations recommendations on the security of transboundary pipeline systems and facilities remained open.