



# Sectoral Initiative on Trunk Pipeline Safety (SIPS)

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# About the Initiative



The main objective of the industry initiative on trunk pipelines is to define a set of safety requirements for cross-border pipelines based on standards that will be used to establish a presumption of compliance with these requirements. In addition, pipeline systems must ensure the necessary continuity of operation, regardless of geopolitical situations or changes



The requirements for the pipeline should be detailed taking into account different geographical and climatic conditions and terrain in order to provide optimal protection against risks, while avoiding excessive costs



The industry initiative is aimed at developing and developing a common regulatory framework for the construction and design of trunk pipelines



The initiative is based on 177 international standards developed by ISO TC 67 and related to various aspects of the safety of trunk pipelines

# Companies that took part in the survey

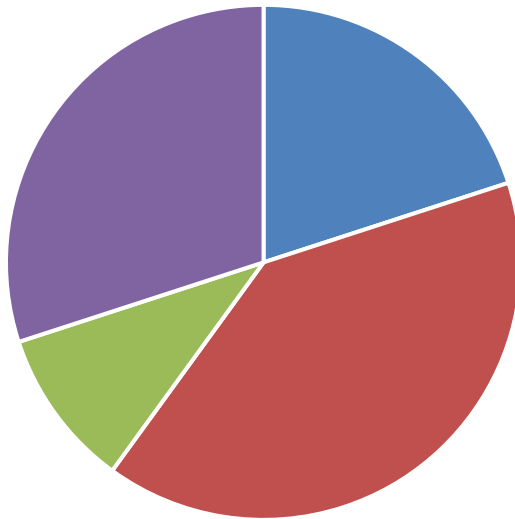
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Ministry of Electricity and Renewable Energy  
New and Renewable Energy Authority

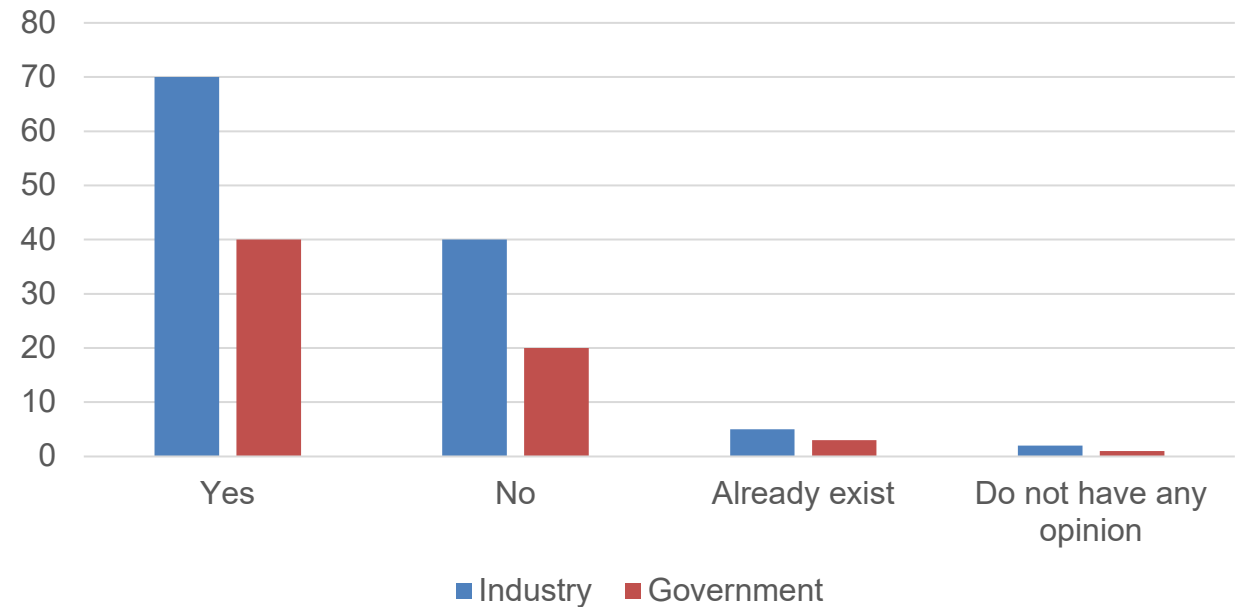
# Survey results

1. Are you ready to take part in the Initiative?



■ Yes ■ Yes, but no information how to begin ■ No ■ Not sure

2. Do you support the development of Recommendations on Common Requirements for Pipelines at the global level?

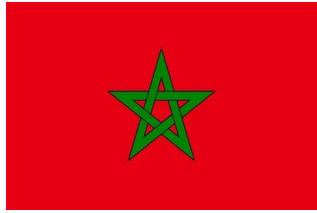


# Establishing interaction with the authorities

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Brunei



Morocco



Egypt



Malaysia



Laos



Myanmar



Philippines



Australia



Singapore



Vietnam

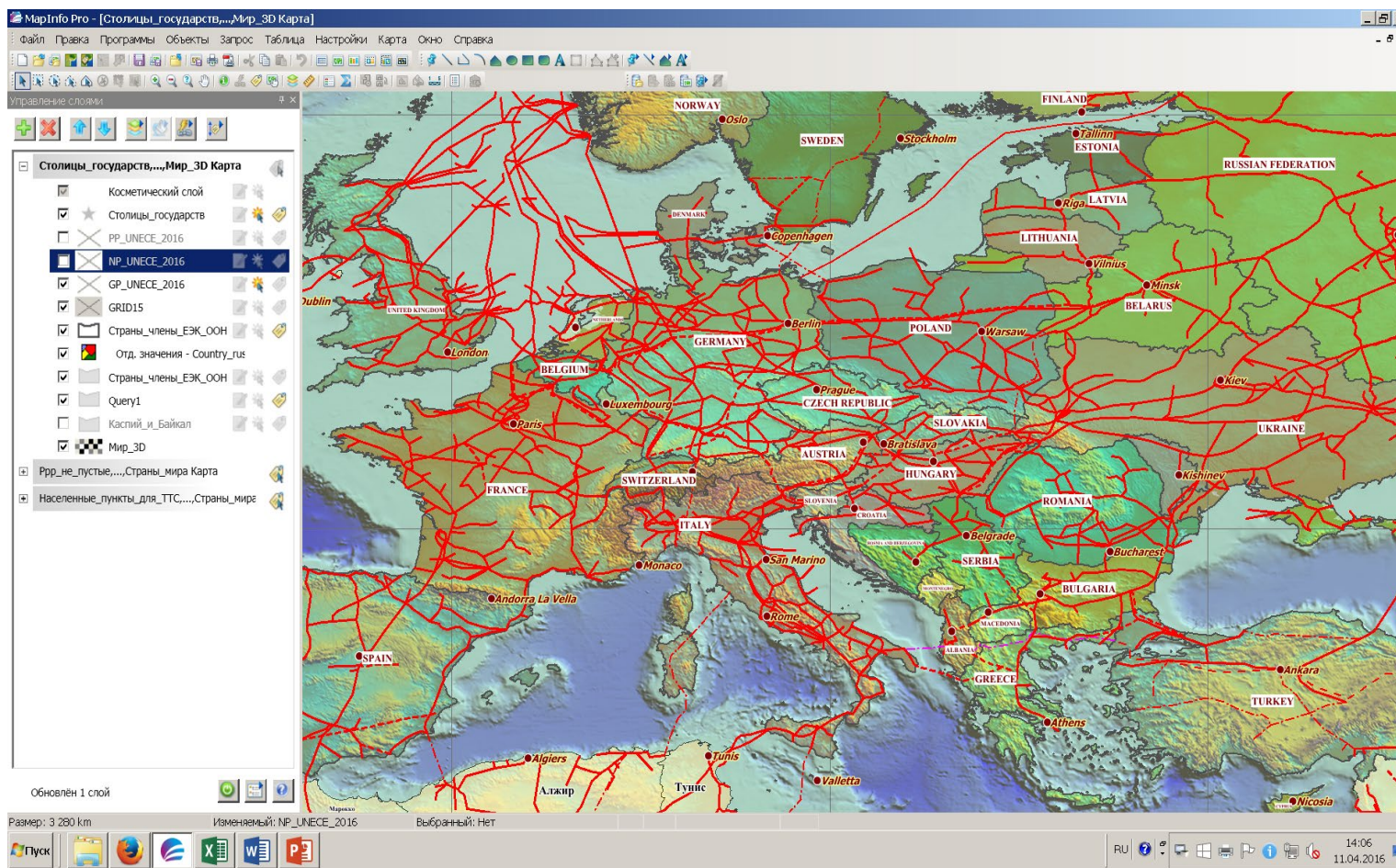


India



Tajikistan





## GIS SIPS –

Today, thanks to the participation of various experts and a survey on legislative regulation in the field of ensuring the safety of trunk pipelines, we managed to build a prototype of an interactive map of the location of pipelines on the world map with a mark of their characteristics (under the code name GIS SIPS).

**The implementation of geolocation of all information makes it easy to conduct spatial-temporal analysis and identify cause-and-effect relationships**

# Reflection of the ideas of the initiative in various legislative documents

## PIPELINE SAFETY MANAGEMENT SYSTEMS

Pipeline SMS



www.PipelineSMS.org



## Hydrogen Strategy

#EUGreenDeal



3.6.2022

EN

Official Journal of the European Union

L 152/45

### REGULATION (EU) 2022/869 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 30 May 2022

on guidelines for trans-European energy infrastructure, amending Regulations (EC) No 715/2009, (EU) 2019/942 and (EU) 2019/943 and Directives 2009/73/EC and (EU) 2019/944, and repealing Regulation (EU) No 347/2013

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 172 thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Ideas about the need for general regulation have appeared in a number of policy documents that affect the safety policy of facilities such as trunk pipelines.



# Common Terminology

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Today, there is an acute issue of the need to develop a unified terminology in the field of trunk pipelines. The discussion of this problem is taking place within the framework of the initiative.

Pipeline transport "is essentially the circulatory system of any state", since the development of both national and global energy supply systems (meeting energy needs both within the state and other states where energy resources are exported) largely depends on its functioning.



# The need for legislative regulation of cross-border pipelines

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There are no uniform substantive rules on the movement of energy by cross-border pipeline transport.

There are no common approaches defining the international legal regime of cross-border pipelines.

The need for the states to develop an interstate agreement on a single legal regime for cross-border pipelines is noted.





# ISO standards

The initiative is based on **177 international standards** developed by ISO TC 67 “Materials, Equipment and Offshore Structures for the Oil, Petrochemical and gas industries”

Country	Type of adopted standards		
	Identical (IDT)	Modified (MOD)	Nonequivalent (NEQ)
Europe	+		
China and Kazakhstan	+	+	• +
Persian Gulf region	+	+	
USA	+	+	
Russia	+		

ISO TC 67  
Member-  
Countries



# UN web-site on Sustainable Development Goals

- ✓ Launched in 2022.
  - ✓ Contains studies of countries, cities and regions on a specific topic, educational materials, standards.
- For the goal of SDG "Energy security" there are 2663 documents on the web-site.







## Creation of the expert community

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A small expert group is interested in this Initiative, bringing together representatives **of 13 countries:** Russia, Kazakhstan, Belarus, Poland, Canada, Italy, China and others.

These experts propose activities which include:

- Collection and analysis of information on the development of the trunk pipeline system in the world
- Implementation of Goal 7 of the Sustainable Development Goals and the New Climate Agenda.

The UNECE Standards for SDGs of WP.6 contains regulatory and technical documentation in this area.

# Proposed objectives for the initiative on Pipeline Safety

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Development of recommendations for harmonization of requirements for cross-border pipelines



Development of a common terminology in the field of ensuring the safety of trunk pipelines



Refinement and expansion of the map of the location of pipelines on the world map with a mark of their characteristics.

# Work plans of the Initiative

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The main thing is to start forming the structure of a recommendation on the safety of main pipelines for the transportation of hydrogen, which should take into account all the features and be guided by the risk management system previously developed and adopted by the UNECE and recommendations L "International model for the harmonization of technical legislation based on good regulatory practice for the preparation, adoption and application of technical regulations using international standards".

The recommendations are planned to be written in 2023-2024.

The analysis of terminology

The analysis of the legislative  
framework

An analysis of the various  
recommendations of the UNECE  
WP.6

# Factors that hinder the promotion of work

1. Lack of experts.
2. Heterogeneity of legislation and requirements for pipelines (the background shows the importance of work on harmonization of requirements).
3. The lack of a single center for providing consulting support to government and industry.
4. The need to develop a unified policy to ensure the safety of pipelines.





# Results of background research related to the Initiative in 2023

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The change in the political landscape of European countries, largely related to the desire to create political and regulatory norms to guarantee the safety of pipeline supply in general, forces us to completely rethink the priorities of the working group of our sectoral initiative.

Millions of kilometers of gas pipelines stretch around the world. These pipelines transport gas between regions, cities or between different countries. Gas pipelines usually have a large diameter and use steel alloys (in the case of high pressure) or, in the case of distribution pipelines, materials such as cast iron, copper, steel or plastic (PVC or PE).

With the growth of sustainable development goals, the use of natural gas is under pressure. Therefore, pipeline manufacturers, gas producers and governments are raising the question of whether the existing infrastructure can be used for natural gas and for a more environmentally friendly gas — green hydrogen. The existing natural gas infrastructure, as it is, may be unsuitable for the transportation and distribution of hydrogen due to the use of insufficiently high-quality metal in these systems.

The proposed recommendations proposed for the initiative on a System for Ensuring the Safety of Transboundary Pipeline Systems, including Pipelines for the transportation of hydrogen, may provide the participating countries with a basis for the development of appropriate national legislation, relevant technical standards and standards for assessing the conformity of pipelines with safety requirements.

# Conclusion

The Pipeline Safety Initiative like other initiatives developed within the START Group. **It provides a link between industry, academia and legislators in terms of harmonization of standards and requirements.**

At the same time, other UNECE WP.6 projects (Education, Market Surveillance, Risk Management, Gender-Responsive Standards) deal with issues related to various aspects of quality infrastructure rather than standardization.

Therefore, the implementation of initiatives in the **START group**, by our opinion, is most consistent with the raison d'être of UNECE WP.6 **as a group dealing with regulatory policy in the field of standardization.**



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**THANK YOU  
FOR THE  
ATTENTION!**