

Interconnection of the National Gas Transmission System with the international gas transmission pipeline T1 and reverse flow Isaccea

A NATIONAL DEVELOPMENT PROJECT



NON-TECHNICAL SUMMARY

for the Project

“Interconnection of the national transmission system with the international gas transmission pipelines and reverse flow at Isaccea (RO)”

(Reference number in the third EU list of PCIs: 6.24.10 - 1)

(Reference number in the second list of PCIs: 6.15)



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1. A PROJECT OF COMMON INTEREST

Regulation (EU) No. 347/2013 of the European Parliament and Council of 17 April 2013 on the guidelines for trans-European energy infrastructure and repealing Decision No. 1364/2006/CE and amending Regulation (EC) No.713/2009, Regulation (EC) No. 714/2009 and Regulation (EC) No. 715/2009" (hereinafter referred to as the Regulation (EU) no. 347/2013) intends to facilitate and implement energy projects of strategic importance. The Regulation introduces, among others, a new status for projects, namely the Project of Common Interest (PCI) status, a status granted to projects that have a significant contribution to energy market integration, sustainability, security of supply, and that are necessary for energy infrastructure corridors with cross-border impact.

The Project is on the second list of PCIs adopted by the European Commission in November 2015 at the position:

- ✓ **6.15 "Interconnection of the national transmission system with the international gas transmission pipelines and reverse flow at Isaccea (RO)"**

At the same time it is included in the third List of Projects of Common Interest adopted by the European Commission in November 2017 at the position:

- ✓ **6.24.10 - 1 "Enhancement of the Romanian transmission system between Onești - Isaccea and reverse-flow at Isaccea"**



Additional information on projects of common interest are available on the official webpage of the European Commission:

<https://ec.europa.eu/energy/en/topics/infrastructure/projects-common-interest>

and the interactive map of the projects from the second list may be found at:

http://ec.europa.eu/energy/infrastructure/transparency_platform/map-viewer/

According to the Regulation (EU) no. 347/2013 the projects of common interest are subject to a specific authorization procedure and they may benefit of grants by Connecting Europe Facility.

Updates as at October 2018 (version 2)

The project is included on the third list of Projects of Common Interest adopted by the European Commission in November 2017, at position

- ✓ **6.24.10 – 1 “Enhancement of the Romanian transmission system between Onești - Isaccea and reverse flow at Isaccea”**

2. WHO ARE WE?

The National Gas Transmission Company TRANSGA S.A. (TRANSGAZ) is the sole operator of the Romanian national gas transmission system. The gas transmission system is owned by the Romanian state, and TRANSGAZ is the system operator under a long-term concession agreement.



The main object of activity of the company is transmission through pipelines, but additionally the company may also perform other activities, compliant with the applicable laws and the company's bylaws. The main target of the company is to give effect to the national strategy goals for gas transmission, transit, dispatching, research and design, under efficient, transparent, secure, non-discriminatory access and competitive conditions, complying with the European and national quality, performance, environment and sustainable development laws and standards.

TRANSGAZ is a joint-stock company established under the Romanian laws, and the controlling shareholder is the Romanian state. The company was listed on the Bucharest Stock Exchange in 2007.

3. WHAT IS THE INTERCONNECTION OF THE NATIONAL TRANSMISSION SYSTEM WITH THE INTERNATIONAL PIPELINE T1 AND REVERSE FLOW AT ISACCEA PROJECT?

Project name	6.15 "Interconnection of the national transmission system with the international gas transmission pipelines and reverse flow at Isaccea (RO)" <u><i>Updates as at July 2019 (version 3)</i></u> In the third list of PCIs: 6.24.10 – 1 "Enhancement of the Romanian transmission system between Onești - Isaccea and reverse-flow at Isaccea"
Priority corridor	North-South gas interconnections in Central Eastern and South Eastern Europe («NSI East Gas»),
Country	Romania
Project promoter	SNTGN TRANSGAZ SA
Project location	Over the territory of the Tulcea, Galați, Brăila, Vrancea and Bacău counties

Project Description

By the implementation of the project "Extension of the Romanian National Transmission system between Onești and Isaccea and reverse flow at Isaccea" (hereinafter referred to as the Project) a transmission route is created between the markets in Greece, Bulgaria, Romania and Ukraine provided that the new interconnection between Greece and Bulgaria is achieved as well. At the same time reverse physical flows may be ensured at the Negru Voda 1 point, according to the requirements of Regulation (EU) No. 994/2010 of the European Parliament and of the Council dated 20 October 2010 on the measures to safeguard security of gas supply and repelling Council Directive 2004/67/EC.

The project becomes necessary also in the context of taking over the recently discovered Black Sea gas in the Romanian gas transmission system for their capitalization on the Romanian and regional markets.

If gas supplied from the Russian Federation is stopped for various reasons at the Isaccea point, gas supply to Bulgaria and Romania will be affected.

By implementing the Project, gas supply to Bulgaria may be ensured from the NTS on the NTS - Onești - Șendreni - Isaccea - Transit 1 - Negru Voda route. At the same time, if Black Sea gas is taken over into the Transit 1 pipeline, gas could be supplied to Bulgaria and to the NTS deficient areas, and a quantity of gas could to be directed to Podișor - Mosu, or a quantity of natural gas could be exported to the Republic of Moldova at the same time.

The project will be implemented in two phases:

Phase 1 – category of energy infrastructure "Gas and biogas transmission pipelines which are part of a network mainly comprising mainly high-pressure pipelines, with the exception of high-pressure pipelines used for upstream or downstream gas distribution", with the following investment objectives:

- ✓ *The Isaccea Interconnection* – interconnection of the National Gas Transmission System with the T1 pipeline in the Isaccea Gas Metering Station, located over the territory of the Tulcea territorial administrative unit, the Tulcea County;
- ✓ *The Dn 800 mm Onești – Cosmești pipeline repair works*, following the smart PIG inspection, with specific repair works related to the pipeline located in Bacău, Vrancea, Galați counties.

Phase 2 – category of energy infrastructure "Any equipment or installations essential to the secure, efficient and safe operation of the system or to provide bidirectional capacity, including compressor stations", with the following investment objectives:

- ✓ *Upgrading the Siliștea Gas Compressor Station* and the Siliștea Technological Node

(TN), located within the Siliștea territorial administrative unit, Brăila County;

- ✓ *Works within the Șendreni Technological Node*, located within the Vădeni territorial administrative unit, Brăila County;
- ✓ *Upgrading the Onești Gas Compressor Station and the Onești Technological Node*, located within the Onești territorial administrative unit, Bacău County.

The achievement of the Project enables the capitalization of the potential of the Transit 1 and Onești - Șendreni - Isaccea - Transit 1 pipelines to circulate the Black Sea gas, if gas import from the Russian Federation is stopped and the gas from the NTS to new or old consumer destinations the established sources of which are no longer feasible.

Scenarios under analysis

Three gas transmission scenarios were analysed in the Feasibility Study:

Scenario 1 and Scenario 2 propose the export of natural gas from Romania to Bulgaria, from the National Transmission System on the Onești - Șendreni - Isaccea - Negru Vodă corridor, using the Onești and Șendreni gas compressor stations in Scenario 1, and the Onești and Siliștea gas compressor stations in Scenario 2.

Scenario 3 proposes the taking over of the Black Sea gas into the National Transmission System, the circulation of the gas to the Central Corridor along the Transit 1 - Isaccea - Șendreni - Onești pipeline route, and ensuring the export capacity to Bulgaria, on the Transit 1 pipeline.

The endorsed version of the Feasibility Study (Scenario 2) includes the construction of the Isaccea Interconnection for ensuring the reverse flow between the National Transmission System and the Transit 1 pipeline, the upgrading of the existing gas compressor stations – Onești CS and Siliștea CS - and the Onești, Șendreni and Siliștea technological nodes works.

The following were taken into account for the optimization and selection of the final option:

- minimum impact on agricultural lands;
- avoidance of landslide areas;
- necessity of minimum land improvement as compared to other possible alternatives;
- technical, economical and construction related considerations, and the possibilities to monitor the stations and the pipeline during operation;

- minimum impact on the environment (and on all environmental aspects);
- assurance of conditions for mechanical digging and construction-mounting works;
- safety of operation;
- observance of safety distances to nearby objectives;
- minimum social impact.

Pipeline Route

Several options were considered and taken into account for establishing the Project implementation solution. The final decision considered the option which ensures an optimal balance between the benefits to be gained from the economic and social point of view, the national energy security, the national consumption needs and the minimum impact on the environment and the communities.

The designed or upgraded objectives are located in the South Eastern area of the country, on the territory of the Tulcea, Galați, Brăila, Vrancea and Bacău counties.

The project consists in the construction of the Isaccea interconnection, the upgrading of two gas compressor stations, works in three technological nodes and repair works to some sections of the Dn 800 Onesti - Cosmești pipeline.

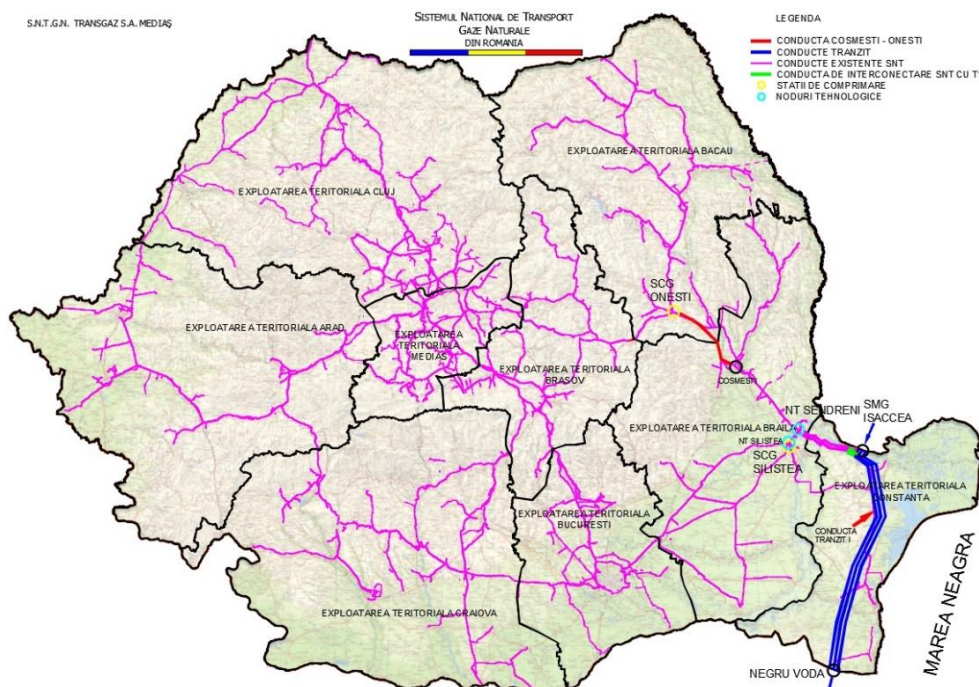


Figure 1 – Presentation of the objectives related to the Project *Interconnection of the national transmission system with the international gas transmission pipelines and reverse flow at Isaccea (RO)*

The route of the Onești – Cosmești gas transmission pipeline follows the general direction from SE to NW, the repaired sections of the pipelines being located on the territory of the Galați, Vrancea and Bacău counties.

The Dn 800 Onești - Cosmești pipeline route, located over the territory of the three counties, crosses access ways (national roads, county roads, rural roads, railways), cadastered or noncadastered waters, valleys and channels, oil, gas and water pipelines, telecommunication networks (optical fibre) and forest areas, part of such crossings being pipeline repair works intervention areas.

4. WHY THE INTERCONNECTION OF THE NATIONAL GAS TRANSMISSION SYSTEM WITH THE INTERNATIONAL GAS TRANSMISSION PIPELINE T1 AND REVERSE FLOW AT ISACCEA PROJECT?

The gas infrastructures in the region currently lack the appropriate interconnectivity and flexibility, which has a significant negative impact on the gas markets in Bulgaria, Romania, Hungary and Austria, leading to higher gas prices and security of supply vulnerability. Moreover, some of these countries still depend, at a high extent, on the gas supplied by the Russian Federation.

What does the Project bring forth?

- **Market integration** as a result of decreasing energy infrastructure congestion of the and increasing of system interoperability and flexibility;
- **Security of supply** and **competition** by ensuring the proper interconnections, the diversification of supply sources, transmission routes and stakeholders, thus reducing market concentration;
- **Sustainability** by reducing emissions due to the replacement of pollutant fuels with natural gas issuing less carbon dioxide per delivered energy unit.

Moreover, project implementation assures:

- ✓ an alternative gas supply option to Bulgaria, different from the one using Russian Federation gas, meaning supply from the National Transmission System;

- ✓ bi-directional gas flows on the Onești - Șendreni - Isaccea - Negru Vodă route and the delivery parameters requested by Bulgaria at the Negru Voda point;
- ✓ possibility to take over Black Sea gas in the NTS by the Transit 1 pipeline, ensuring the diversification of gas supply sources;
- ✓ improving gas supply to various areas of the NTS especially in winter time when consumption (consumed flows) increases and pressure in the system decreases due to the low temperatures;
- ✓ NTS operation flexibility from the point of view of the gas supply possibilities:
 - by supplying gas from the domestic production in the centre of the country to Bulgaria, or
 - by supplying the Central or Eastern area of the country with import gas from the Isaccea direction or, in the future, with Black Sea gas;
- ✓ increasing operational safety of existing pipelines and installations;
- ✓ decreasing the dependency on gas imports from a single source, by covering the constant and predictable increasing consumption trends in the European countries against a constant medium- and long-term decrease of gas deliveries from the Russian Federation area.

Through its objectives the Project complies with the guidelines on trans-European energy infrastructures as formulated by the European Parliament, European Council and European Commission.

Within the area of the territorial administrative units Cobadin and Grădina located along the Dn 1000 Transit 1 pipeline route, the Transit 1 pipeline will be interconnected with the designed pipeline, gas from the Black Sea following to be taken over into the National Transmission System through the interconnection.

National and local benefits

The implementation of the Project will enhance energy security in Romania by enabling access to diversified gas supply sources and routes. This new infrastructure will also open way for new opportunities favouring the suppliers of energy equipment and services in Romania and the rest of Europe, and will assure new jobs which are necessary for the execution and development works in Romania.

To this end, from national and local perspective, the following potential benefits were identified as a result of Project implementation:

- Security of gas supply to Romania by access to new gas supply corridors;
- Incentives to competition on the internal gas market, diversification of market structure and determination of import gas prices under competitive conditions;
- Development of the national gas transmission system;
- Major investments in Romania;
- A positive social-economic impact by:
 - new jobs both during construction and during operation;
 - increased commodity demand with a positive effect on economy as a result of the new jobs;
 - additional income to the state budget and to the local budget;
 - a positive impact on local tourism operators (accommodation) and therefore an increased tax contribution as income to the local administration (during Project implementation) by contracting accommodation services in the works area for the teams responsible with Project implementation and Project execution;
 - incentives for other investments and ancillary undertakings (manufacturers/suppliers of raw materials, materials, devices/equipment and services necessary for Project implementation);
 - incentives for development of local economy due to a higher land value in the vicinity of the new pipeline;
 - a higher living standard and a better life due to the increased number of households/economic agents which might connect to the gas network.

5. RESPECT FOR ENVIRONMENT AND FOR PEOPLE

TRANSGAZ believes that the use of the business practices responsible to the society and to the employees is vital for the success of the Project. As such, the company applies the following key principles:

- observance of strict standards on pipeline systems construction;
- mitigation to the minimum possible of the negative impact of the construction activities on the environment and on the inhabitants;
- mitigation to the minimum possible of the short-term and long-term inconveniences caused to land owners and land users;
- TRANSGAZ is responsible for the recovery of land and structures (drains, ditches,

irrigations and roads) necessary during the construction;

- mitigation to the minimum possible of Project footprint (including on the land subject to the easement or right of way, on temporary facilities, on access roads);
- mitigation to the minimum possible of emissions;
- mitigation to the minimum possible of energy and resources consumption;
- mitigation to the minimum possible of waste resulted from construction and use activities;
- maximum reuse of displaced materials.



During construction



After construction

6. PROJECT PRELIMINARY SCHEDULE

Development and implementation stages	Period
Prefeasibility study	Completed
Feasibility study	Completed
Environmental Impact Assessment	2017 – 2018
FEED and permitting documentation for the construction permit	2017 – 2018

Development and implementation stages	Period
Construction Phase 1	2018
Construction Phase 2	2018 – 2019
Technological tests and commissioning Phase 1	2018
Technological tests and commissioning Phase 2	2018 – 2019
Start of operation Phase 1	2018
Start of operation Phase 2	2019

Note: The schedule is indicative and may be changed.

Updates as at July 2019 (version 3)

Development and implementation stages	Period
Prefeasibility study	Completed
Feasibility study	Completed
Environmental Impact Assessment	Completed
FEED and permitting documentation for the construction permit	2017 – 2020
Construction Phase 1	Completed
Construction Phase 2	2019 – 2020
Technological tests and commissioning Phase 1	2018
Technological tests and commissioning Phase 2	2020
Start of operation Phase 1	2018
Start of operation Phase 2	2020

7. PROJECT STATUS

Permitting according to the applicable legislation

The feasibility study related to “The NTS Interconnection with the International System and reverse flow at Isaccea” and the DALI for “DN 800 mm Onești- Cosmești pipeline repair works” were completed. The technical solution was selected by these document. The

following specialized studies were prepared: topographical studies, geotechnical studies and hydrological studies.

The activity related to the identification of the land owners affected by the Project execution works and the construction works permitting procedure is in progress. All town planning certificates were obtain. Thus:

- Town Planning Certificate No. 562/05.12.2017 issued by the Bacău County Council
- Town Planning Certificate No. 347/20.11.2017 issued by the Vrancea County Council
- Town Planning Certificate No. 209/21.11.2017 issued by the Galați County Council
- Town Planning Certificate No. 90/22.11.2017 issued by the Tulcea County Council
- Town Planning Certificate No. 277/16.11.2017 issued by the Brăila County Council
- Town Planning Certificate No. 276/16.11.2017 issued by the Brăila County Council
- Town Planning Certificate No. 264/28.11.2017 issued by the Bacău Municipality.

Updates as of October 2018 (version 2)

Construction Permit No. 6/07.06.2018 was issued regarding Phase 1 of the Project according to Law 185/2016 on measures required for the implementation of national gas projects.

Government Resolution 638/23.08.2018 for the approval of the list of agricultural lands located outside the built-up areas related to PCI "Enhancement of the Romanian transmission system between Onesti-Isaccea and reverse flow at Isaccea" – Phase 1.

All **permits/endorsements/licences** required under the Town Planning Certificates were obtained as far as the Phase 1 of the Project is concerned.

The procedure for **the assessment of the environmental impact** was conducted pursuant to GD 445/2009 on the assessment of the environmental impact of private and public projects, as amended, and MO 135/2010 on the approval of the methodology for the application of the environmental impact assessment for public and private projects.

Environmental wise, as far as the Phase 1 of the Project is concerned, two regulatory documents were obtained, as follows:

- a) Isaccea Interconnection – Screening Decision No. 2619/07.03.2018, issued by the Tulcea Environmental Protection Agency;

- b) DN 800 Onești - Cosmești pipeline repair works (3 counties) - Screening Decision No. 27/16.05.2018 issued by the National Agency for Environmental Protection.

It was prepared **Final Report** no 241016/03.09.2018 of the Working Group responsible for reviewing the documentation and preparing the proposal to issue the construction permit for Phase 1 of the Project, establishing that all applicable legal requirements related to permitting were duly fulfilled for Phase 1 of the Project.

Updates as at July 2019 (version 3)

The following **town planning certificates** were issued after the reconfiguration of the land temporarily occupied for the execution of the works and the decreasing of the land surface allocated to the site arrangement for the *Upgrading the Siliștea Gas Compressor Station and the Siliștea Technological Node (TN) and the Works within the Șendreni Technological Node*:

- Town Planning Certificate No. 119/21.05.2019 (amendment to Town Planning Certificate No. 277/16.11.2017) issued by the Brăila County Council;

- Town Planning Certificate No. 125/23.05.2019 (amendment to Town Planning Certificate No. 276/16.11.2017) issued by the Brăila County Council.

Construction Permit No. 7/04.07.2019 was issued for Phase 2 of the Project, according to Law 185/2016 on measures required for the implementation of national gas projects.

Government Resolution No. 230/18.04.2019 on the approval of the taking out of the agricultural lands located outside the built-up areas for the project of common interest in the domain of gas *Enhancement of the Romanian transmission system between Onești - Isaccea and reverse-flow at Isaccea* – Phase 2.

All **approvals/agreements/permits/authorizations** requested by the town planning certificates were obtained for Phase 2 of the Project.

Regarding the environment documents for Phase 2 of the Project three regulatory documents were issued:

- a) Works within the (existing) Șendreni Technological Node – Screening Decision No. 2907/09.03.2018, issued by the Brăila Environmental Protection Agency;
- b) Upgrading the existing Siliștea Gas Compressor Station and the existing Siliștea Technological Node – Screening Decision No. 5031/01.04.2019, issued by the Brăila Environmental Protection Agency;

- c) Upgrading the (existing) Onești Gas Compressor Station and the Onești Technological Node – Screening Decision No. 20/28.01.2019, issued by the Bacău Environmental Protection Agency.

The design and execution contract for the upgrading of the two stations was signed.

The authorization procedure applicable to Projects of Common Interest based on the provisions of Regulation (EU) No. 347/2013

Considering the magnitude and regional implications of the projects of common interest (PCIs), Regulation (EU) No. 347/2013 established a new formula and a new set of guidelines applicable to the PCIs authorization procedures. The scope of the new guidelines is mainly to lead the way for an effective administrative processing of application files for PCIs, by concentrating the activities with one dedicated entity, namely: the competent authority which responsible for facilitating and coordinating the permit granting process for projects of common interest and the application of Regulation 347/2013 - in Romania, the Ministry of Energy.

TRANSGAZ will submit to the Competent Authority for PCIs (A.C.P.I.C) the **Notification for the initiation of the procedure prior to the submission of the application for the Project "Interconnection of the national transmission system with the international gas transmission pipelines and reverse flow at Isaccea (RO)";**

According to Regulation (EU) No. 347/2013, the **web page of the project** was created on the company's website, where an information leaflet is available providing briefly and clearly information on the Project and contact details.

Updates as of October 2018 (version 2)

The **Notification of the initiation of the procedure previously to the application** was submitted to the Competent Authority for Projects of Common Interest (ACPIC) on 20.12.2017 and was approved on 17 January 2018 by Approval Letter no. 110047/17.01.2018.

The **Public Consultation Concept** for the Project of Common Interest was submitted to ACPIC on 21.03.2018 and was approved by the Ministry of Energy by Letter no. 110638/04.04.2018. Between 07-11.05.2018, **public consultations** were held according to Regulation (EU) No. 347/2013 in the following locations: Onești, Buciumi (Bacău county), Mărășești (Vrancea county), Cosmești (Galați county), Isaccea (Tulcea county), Siliștea, Vădeni (Brăila county).

The **Final Synthetic Report regarding the results of the public consultations** was issued and sent to ACPIE as part of the application process and was published on Transgaz's website.

The **application documentation** for obtaining the Comprehensive Decision for Phase 1 of the Project was submitted to ACPIE on 20.07.2018 and was accepted by the Ministry of Energy and Letter No. 111476/03.08.2018 on the acceptance of the application documentation.

Comprehensive Decision No. 2/11.09.2018 was issued based on the Final Report on the permitting process and on the public consultation submitted to ACPIE on 05.09.2018. This document certifies the conclusion of the permitting procedure according to Regulation (EU) 347/2013 regarding Phase 1 of the Project.

Updates as of July 2019 (version 3)

The **application documentation** for obtaining the comprehensive decision for Phase 2 of the project was sent to A.C.P.I.C. on 04.07.2019 and was accepted by the Ministry of Energy by the issuing of Letter No. 110908/18.07.2019 on the acceptance of the application documentation.

8. ADDITIONAL INFORMATION SOURCES

Information on the company:

<http://www.transgaz.ro/>

Information on the Project and on the public consultation procedure:

<http://www.transgaz.ro/ro/consultarea-publicului-interconectare-snt-t1-si-reverse-flow-isaccea>

The official webpage of the European Commission:

<https://ec.europa.eu/energy/en/topics/infrastructure/projects-common-interest>

The interactive map of the European PCIs in the 2nd List:

http://ec.europa.eu/energy/infrastructure/transparency_platform/map-viewer/

Updates as of July 2019 (version 3)

http://ec.europa.eu/energy/infrastructure/transparency_platform/map-viewer/main.html

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