



List of Small Projects¹

Version number: 15/ 15.10.2019

This version is published due to the:

- Addition of project(s)
- Removal of project(s)
- Other

Update due to the approval of Development Plan 2017-2026 from RAE (RAE Decision 236/2019). The Small Projects in this version are depicted as in the approved Development Plan 2017-2026. Further to that the projects 2-3 of Table B have been added to the existing version of the list.

¹ As per article 95 of NNGS Administration Code.

Table A. Projects included in Development Plan 2017-2026 and their implementation is ongoing

No.	Title of the project	Technical Description	Estimated cost (in €)	Time schedule
1	Upgrade of LNG Loading Arms at Revithoussa LNG Terminal	The project scope is replacement of electrical and mechanical equipment of the LNG loading arms at Revithoussa LNG Terminal in order the LNG loading to be effected with equipment of modern technology. Latest technology electro pneumatic equipment shall be installed as well.	1.200.000	Under maturity Final Investment Decision: 6/2018 Start of operation/ Inclusion in the system: 3/2020
2	Upgrading of electrical and electronic equipment, billing system and equipment SCADA field in stations M/R of 1st generation (1995-2000)	Replacement of the existing equipment for metering, invoicing and signaling of 16 stations due to unavailability of replacement parts and compatibility issues.	3.500.000	Under construction. Start of operation / Inclusion in the system: 12/2019
3	Integrated Information System for Natural Gas	The IISNG consists of: a. The Electronic Information System which allows any interested party to find all the necessary information about the operation and use of the NNGS b. the Electronic trading system, through which the TSO will manage the secondary market for Transmission Capacity to NNGS or Gasification Capacity of LNG Facility and the	380.000	Under construction. Start of operation / Inclusion in the system: 03/2019

		secondary gas market in terms of Users or NNGS Customers.		
4	Upgrade of SCADA in dispatching centers	It includes the supply, installation and operation of new management tools, images, graphics, database and alarm system.	1.900.000	Under maturity Final Investment Decision: 1/2019 Start of operation: 12/2020 Inclusion in the system: 03/2021
5	Design, supply and installation of a system design daily gas flow	The establishment of a system for forecasting, planning and control of daily gas flow will provide DESFA the ability to estimate the load of gas that will be transmitted, and increase the level of accuracy forecast. Furthermore it will incorporate a regular review of the progress of the daily planning of gas and will adjust the levels of unexpected consumption or shortages in supply.	197.000	Under maturity Final Investment Decision: 07/2019 Start of operation / Inclusion in the system: 05/2021
6	Upgrade of the system for the corrosion protection of the NNGS	The project refers to the installation of diffusers for induced voltages, metering sensors of the corrosion speed and extension of the existing telemetry system for recording of relevant measurements.	280.000	Under construction Start of operation /Inclusion in the system: 12/2019

7	Installation of M/R Kavala	Installation of a M/R 70/19 in line valve Kavala for the supply of the city of Kavala and nearby areas.	2.010.000	Under maturity Final Investment Decision: 10/2019 Start of operation: 3/2022 Inclusion in the system: 6/2022
8	M station at SALFA Anthousa	The project refers to the installation of a metering station according to the provisions of art. 5 par. 7 of Tariff Regulation (RAE decision 871/2017) as well as the relevant agreement of Public Gas Corporation “DEPA SA”.	450.000	Under construction Start of operation: 05/2018 Inclusion in the system: 11/2018
9	M station at SALFA A. Liossia	The project refers to the installation of a metering station according to the provisions of art. 5 par. 7 of Tariff Regulation (RAE decision 871/2017) as well as the relevant agreement of Public Gas Corporation “DEPA SA”.	680.000	Under construction Start of operation: 10/2019 Inclusion in the system: 12/2019

10	Procurement and installation of Pipeline Integrity Management System	In order to prevent the potential risks of the facilities (Risk Management), the company will proceed with the development of a system for the integrity of the NNGTS transport network by supplying a Pipeline Integrity Management System (PIMS) based on the need and the requirements of DESFA and the possibility of updates and extensions.	400.000	Under maturity Final Investment Decision: 05/2018 Start of operation / Inclusion in the system: 03/2019
11	Upgrade of electrical switches for medium voltage and internal lighting in the control room of LNG facility	It concerns the supply and replacement of medium voltage (6 kV) electrical switches at the LNG facility (60 pcs.) aiming at the smooth operation of the automation in the distribution of electricity and supply of medium voltage loads (motors and pumps).	1.000.000	Under maturity Final Investment Decision: 11/2018 Start of operation / Inclusion in the system: 12/2020
12	Procurement of special equipment for detecting corrosion and irregularities in natural gas pipeline	It concerns the procurement of special Portable Non - Destructive Testing (NDT) equipment for field - specific detection and assessment of corrosion and discontinuities such as cracks, stress corrosion cracking (SSC), lamination, inclusions, etc. in the pipelines and containers of the NNGTS, which will contribute to the upgrading of the NNGTS integrity inspection and evaluation services	40.000	Under maturity Final Investment Decision: 10/2018 Start of operation / Inclusion in the system: 12/2018

13	Upgrade of Geographical Information System (GIS) system	The project will further develop DESFA's geographic database in order to fully integrate assets and their efficient performance through gis-web applications to the end users.	100.000	Under maturity Final Investment Decision: 9/2019 Start of operation / Inclusion in the system: 7/2020
14	Upgrade of physical protection of DESFA facilities - Physical Safety Control Center	<p>NNGS facilities are considered as European critical infrastructure. Possible shutdown or destruction would have a significant impact on the country and Europe-wide.</p> <p>The aim of the project is to upgrade the physical security of all DESFA infrastructure due to the rapid development of the technological applications in the sector and the establishment of a Physical Security Control Center covering the requirements of the Directive 2008/114/EC concerning critical infrastructure security, which was incorporated into the Greek law with Presidential Decree 39/2011.</p> <p>The aim is to prevent, mitigate and eliminate risk threats (examples include theft, sabotage, terrorism, accidents, and natural phenomena).</p>	1.200.000	Under maturity Final Investment Decision: 8/2019 Start of operation: 10/2020 Inclusion in the system: 12/2020
15	Improvement of metering accuracy in NNGTS stations	The project refers to the replacement of existing turbine meters in seventeen (17) Metering/Regulating stations, with new ones that have improved operational features such as lower Qmin requirement and improved minimum / maximum	200.000	Under construction Final Investment

		flow ratio-from 1:20 to 1:50.		Decision: 5/2019 Start of operation: 2/2020 Inclusion in the system: 3/2020
16	Replacement of Metering and control systems on M/R stations of NNGTS	The proposed project concerns the replacement of the Measurement Management and Supervision / Control Systems in thirty (30) existing Metering (M) and Metering / Regulating (M / R) Stations in order to achieve compatibility with stations already upgraded.	4.500.000	Under maturity Final Investment Decision: 06/2019 Start of operation: 12/2021 Inclusion in the system: 03/2022
Total estimated cost		18.037.000 €		

Table B. projects according to art. 94 par. 5 of NNGS Administration Code (New projects)					
No.	Title of the project	Classification of project (art. 92 par. 4 of NNGS Administration Code)	Technical Description	Estimated cost (in €)	Time schedule

		Projects for the connection of Users	Projects for the Development of NNGS			
1	M/R station in Livadeia		X	<p>The Metering/Regulating station (M/R) at Livadeia, with a capacity of 11.500 Nm³/h and design pressure 80 bar is going to connect the NNGTS to the downstream distribution system as well as with the industrial park in the city of Livadeia.</p> <p>The project was proposed by DEDA, the distribution system operator of rest of Greece, during the public consultation of the draft Development Plan 2017-2026 performed by RAE.</p> <p>The M/R station will be installed in the area of Livadeia, within a plot owned by DESFA where there is a line valve station and a RCC building. The project includes building facilities, roads, vehicle</p>	1.980.000	<p>Under maturity</p> <p>Final Investment Decision: 3/2020</p> <p>Start of operation: 12/2021</p> <p>Inclusion in the system: 3/2022</p>

				maneuvering platform, pipelines, safety valves as well as all the necessary equipment (piping, cathodic protection systems, valves, ventilators, grounding and lightning protection systems etc.).		
2	Metering Station at Agios Nikolaos “AdG IV”	X		Construction of Metering Station with capacity 1.300 MWh/hour, for the new Exit Point at NNGS «ALOUMINION IV», accepting MYTILINEOS SA application to receive 31.200 MWh/day of natural gas.	1.500.000	Under maturity Final Investment Decision: 3/2020 Start of operation: 12/2021 Inclusion in the system: 3/2022
3	Connection to ELVAL	X		Construction of a transmission pipeline of 4,1 km - 6’’ and of a Metering Station for the connection of ELVAL with the NNGTS.	4.000.000	Under maturity Final Investment Decision: 2/2021 Start of operation: 9/2022 Inclusion in the system: 12/2022

	Total estimated cost	7.480.000 €
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