

- **Italy (IT)**

- **Main messages from the Commission assessment of the NPF**

In its original assessment of the Italian NPF, the Commission concluded:

The Italian NPF fully addresses the requirements of Article 3. It contains an extensive discussion of the current state and future scenarios for alternative fuels in the transport sector. However, not for all fuels and modes it establishes hard targets, because the NPF uses scenario dependent projections relying on 'expected trends' or 'evolution' rather than real quantitative targets.

For electric vehicles, the Italian NPF adopts a very conservative approach. For 2020, low shares of new sales (1% - 3%) and of electric vehicles on the road (0.1% - 0.3%) are estimated, and the NPF does not contain any estimates beyond 2020. The Italian NPF has established sufficient 2020 targets for recharging points accessible to the public consistent with the rather low estimates for EV for the same year. The NPF ensures appropriate coverage of the TEN-T Core Network with high power recharging points. Regarding electricity supply for stationary airplanes the Italian NPF refers to ongoing cost-benefit analyses. No concrete targets are established. For shore-side electricity the situation is similar, although there seems to be a general consensus on its decisive role to reduce air pollution.

The Italian NPF puts a lot of emphasis on CNG, for which Italy has already today a dense network of public refuelling points, especially in the northern regions. Nevertheless, on a country level, Italy does not currently nor will in the future meet a level of at least one CNG refuelling point per 600 CNG vehicles on the road. According to the Italian NPF, CNG vehicles can contribute a lot to reduce CO₂ emissions in transport. The aim is to increase the share of the CNG vehicle park on the road from 2% to 3.3% in 2020 and 6% in 2025. Considering the leading position of Italy in relation to CNG vehicles, it could be explored if more ambitious targets could be set for its development beyond 2025.

A number of 5 dual-use LNG refuelling points for heavy-duty trucks are proposed in the NPF along the TEN-T Core Network by 2025. This would not guarantee that the maximum distance requirement for LNG refuelling points along the road TEN-T Core Network would be fulfilled on Italian territory.

The Italian NPF considers the development of a LNG infrastructure for maritime applications as strategic and critical in the context of the implementation of the Directive. Plan for its development, including designing of storage quantities in all 14 maritime TEN-T Core Network ports and beyond is part of the NPF and can be considered exemplary.

A very comprehensive plan has been developed for the deployment of hydrogen technologies (hydrogen production, distribution and fuel cell vehicles). Targets have been set up to 2050 and the amount of public funding needed to achieve the targets has been calculated. However, the Italian NPF states that the financial coverage for this hydrogen roll-out could not be provided, so that the plan has to be considered a 'potential scenario'. In essence, the targets for hydrogen technologies appear too ambitious vis-à-vis the lack of financial coverage considered essential for their achievement. It is therefore expected that the only evolution, which will take place in the near term, will be local, and related to the inter-MS corridor linking Italy with Austria.

The Italian NPF contains a comprehensive list of measures, partially already in place in the case of CNG. Most of them can be considered as having a medium impact on market actor's decisions. Since the Italian NPF is a law, it guarantees long periods of validity which could provide certainty for market actors and hence increase the likelihood that the national targets and objectives of the NPF can be reached. The NPF report identifies additional technical and administrative bottlenecks which need to be eliminated to enable the expected developments. However, in some cases, it is not clear if and which practical measures have been / will be taken to achieve the goal (for example, the facilitations of the present requirement for CNG refuelling point to be at not more than 1,000 meters from the CNG distribution grid, or the mentioned still existing difficulties related to the permitting procedures for LNG in ports).

Regional and local interests have been considered in the evaluation of the measures, as well as industrial and public R&D stakeholders. In fact, regional authorities and municipalities play a critical role in ensuring the implementation of the actions, having jurisdiction on infrastructure for highways, respectively for local infrastructure. A particular attention in the Italian NPF has been dedicated to the island Sardinia, which at the moment is the only region of Italy deprived of a NG distribution infrastructure.

Evidence of collaboration of Italy with other Member States has been found mainly in the frame of EU projects, especially of the TEN-T family.

- ***Overview of requirements' fulfilment from Annex I of the Directive***

Table Error! No text of specified style in document.-1 Checklist Table

Part of the Directive 2014/94/EU	Requirement	Mode of transport / Alternative Fuel (provided in the NIR)		Yes / No
ANNEX I: 1. Legal measures	Information on legal measures, which may consist of legislative, regulatory or administrative measures to support the build-up of alternative fuels infrastructure, such as building permits, parking lot permits, certification of the environmental performance of businesses and fuel stations concessions.	Road, waterborne, rail / electricity, CNG, LNG, hydrogen		Y
ANNEX I: 2. Policy measures supporting the implementation of the national policy framework	Information on those measures shall include the following elements: <ul style="list-style-type: none"> • direct incentives for the purchase of means of transport using alternative fuels or for building the infrastructure, • availability of tax incentives to promote means of transport using alternative fuels and the relevant infrastructure, • use of public procurement in support of alternative fuels, including joint procurement, • demand-side non-financial incentives, for example preferential access to restricted areas, parking policy and dedicated lanes, • technical and administrative procedures and legislation with regard to the authorisation of alternative fuels supply, in order to facilitate the authorisation process. 	Road, waterborne, rail / electricity, CNG, LNG, hydrogen		Y
	• consideration of the need for renewable jet fuel refuelling points in airports within the TEN-T Core Network	Air	Biofuels	N
ANNEX I: 3. Deployment and manufacturing support	• Annual public budget allocated for alternative fuels infrastructure deployment, broken down by alternative fuel and by transport mode (road, rail, water and air).	Road, waterborne / electricity, CNG, LNG, hydrogen		Y
	• Annual public budget allocated to support manufacturing plants for alternative fuels technologies, broken down by alternative fuel and by transport mode.	Road / electricity, CNG, LNG, hydrogen		Y
	• Consideration of any particular needs during the initial phase of the deployment of alternative fuels infrastructures.			N
ANNEX I: 4. Research, technological development and demonstration	• Annual public budget allocated to support alternative fuels RTD&D, broken down by fuel and by transport mode.	Air / biofuels		Y
ANNEX I: 5. Targets and objectives	• Estimation of the number of alternative fuel vehicles expected by 2020, 2025 and 2030	Road / electricity, CNG, LNG, hydrogen, LPG		Y
	• Level of achievement of the national objectives for the deployment of alternative fuels in the different transport modes (road, rail, water and air)			N
	• Level of achievement of the national targets, year by year, for the deployment of alternative fuels infrastructure in the different transport modes			N
	• Information on the methodology applied to take account of the charging efficiency of high power recharging points	Road	Electricity	N
ANNEX I:6 Alternative fuels infrastructure developments	Changes in supply (additional infrastructure capacity) and demand (capacity actually used)			N

The checklist shows the requirements of Annex I from the Directive that are covered in the Italian NIR.

Regarding the combination of AF/AFV/AFI with transport mode, electricity is covered for road transport and partially covered for waterborne transport. CNG, hydrogen and LPG are partially covered for road transport, LNG for road and waterborne transport. All the other combinations are either absent or not applicable.

The Italian NIR reports around 30 measures. Under the policy and deployment & manufacturing sections it was possible to identify seven AF/transport mode clusters of measures, of which five were assessable.

- ***Quantitative assessment: Vehicles and infrastructure***

Disclaimer

The Italian NIR did not follow the requirements of Annex I to the Directive but provided a series of data/information in a different order that was not compatible with the assessment methodology applied to all the other NIRs (and designed according to the structure of Annex I). Nevertheless, the data/information has been treated in order to be evaluated following the same methodology applied to all the other NIRs. It is recommended that the next Italian NIR be structured in accordance with the provisions of the Directive.

In terms of data completeness, the IT NIR did not report vehicle estimates and infrastructure targets for 2020, 2025 and 2030, for several AFs. When this information was available in the IT NPF (and still applicable), it has been considered valid also in the NIR.

Finally, the IT NIR did not report the historical data regarding AF vehicles and infrastructure in 2016, 2017 and 2018, but provided more recent data that were not comparable with the data reported by the large majority of the other MSs. Therefore, the EAFO database was used to source the missing data.

Table **Error! No text of specified style in document.**-2 National AFV estimates and AFI targets established in the NIR at the horizon 2020, 2025 and 2030 and their comparison with the NPF situation

Alternative fuel / Transport mode		2018		2020		2025		2030	
		AFV	AFI public	AFV	AFI public	AFV	AFI public	AFV	AFI public
Electricity / road	NIR	26,160*	3,433*	87,500**	13,720	NA	NA	6,000,000	117,000
	Change NIR vs NPF [%]			0.00%	7.61%				
	Attainment [%]			29.90%	25.02%			0.44%	2.93%
CNG / road	NIR	1,051,316*	1,211*	1,350,000**	1350**	2,050,000**	1,750**	NA	2,400
	Change NIR vs NPF [%]			0.00%	0.00%	0.00%	0.00%		
	Attainment [%]			77.88%	89.70%	51.28%	69.20%		50.46%
LNG / road	NIR	1,111*	28*	2,000	74	NA	113	32,500**	800**
	Change NIR vs NPF [%]				362.50%		41.25%	0.00%	0.00%
	Attainment [%]			55.55%	37.84%		24.78%	3.42%	3.50%
LNG / water (maritime + inland)	NIR	NA	NA	7**	10**	40**	12**	60**	20**
	Change NIR vs NPF [%]				0.00%		0.00%		0.00%
	Attainment [%]								
H2 / road	NIR	24*	3*	1,100**	20***	28,100**	196***	2,903,700**	446***
	Change NIR vs NPF [%]			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	Attainment [%]			2.18%	15.00%	0.09%	1.53%	0.00%	0.67%
LPG / road	NIR	2,414,840*	4120*	NA	NA	2,400,000**	NA	2,500,000**	NA
	Change NIR vs NPF [%]					0.00%		0.00%	
	Attainment [%]					100.62%		96.59%	

Legend:		not applicable
		the value could not be computed
	NA	no value/information provided/available in the NIR

* Values taken from EAFO (absent in both NPF and NIR).

** Values taken from the IT NPF.

*** Values taken from the IT NPF and referred to the total (public + private) hydrogen AFI.

- Road transport
 - Electricity

Vehicles

EAFO reported 26,160 battery-electric and plug-in hybrid electric vehicles in Italy in 2018 (see Table Error! No text of specified style in document.-2), of which 23,157 were passenger cars (12,337 BEV), 2,915 were LCVs (all BEV), 16 HCVs (all BEV) and 72 were buses and coaches (all BEV). Additionally, EAFO reported 3,320 electric PTWs in 2018. Regarding the next decade, the Italian NIR only estimates around 6 million EVs for 2030. On the other hand, the NPF had only provided an estimate for 2020, i.e. a range between 45,000 and 130,000 EVs (in Table Error! No text of specified style in document.-2 the average value has been reported in order to be able to calculate the sufficiency index). There is no estimate for 2025, nor any information regarding the heavy-duty sector.

The 2018 *attainment* of future EV estimates is 29.90% for 2020 and 0.44% for 2030. According to the assessment methodology described in Section 2.1, the 2018 situation corresponds to a *slow progress* towards reaching the envisaged EV estimates. The calculated *average annual growth rate* corresponding to the period 2016-2030 for EV fleet evolution planned by Italy is equal to 55%.

Infrastructure

EAFO reported 3,433 publicly accessible recharging points in Italy in 2018 (Table Error! No text of specified style in document.-2), of which 573 were high power recharging points. The IT NIR reported the presence of 13,720 publicly accessible recharging points in Italy in February 2020. This is already slightly more than the average value of the range provided in the NPF as target for 2020 (i.e. between 6,500 and 19,000). It seems reasonable to assume that by the end of 2020 the number of publicly accessible recharging points will be higher than 13,720. There is no information for 2025, while for 2030 the IT NIR presents a target between 26,000 and 40,000 publicly accessible high power recharging points and between 57,000 and 111,000 normal power recharging points. The value of 117,000 total public recharging points reported in Table Error! No text of specified style in document.-2 is obtained by adding the average values of those two ranges.

The 2018 *attainment* of the future public recharging infrastructure targets is 25.02% for 2020 and 2.93% for 2030. According to the assessment methodology described in Section 2.1, the 2018 situation corresponds to a *slow progress* towards reaching these envisaged targets. The calculated *average annual growth rate* corresponding to the period 2016-2030 for publicly accessible recharging infrastructure evolution planned by Italy is equal to 31%.

Ratio

The following table shows the ratio between vehicles and publicly accessible recharging points (i.e. sufficiency index) for the pair electricity/road. While until 2020 the sufficiency index is adequate, in 2030 the foreseen number of publicly accessible recharging points is largely inadequate.

Sufficiency Index		2016	2017	2018	2020	2025	2030
Road	Electricity	5.29*		7.62*	6.38		51.28

* Calculated from EAFO values.

Information on charging efficiency

Information is not available in the Italian NIR.

○ CNG

Vehicles

In 2018, EAFO reported 1,051,316 CNG vehicles in use in Italy (Table Error! No text of specified style in document.-2), of which 945,184 were passenger cars, 99,351 LCVs, 2,550 HCVs and 4,231 buses and coaches. The IT NIR did not provide any estimate for the next decade, but the NPF had presented an estimate of 1,350,000 CNG vehicles for 2020 and 2,050,000 CNG vehicles for 2025. There is no estimate for 2030, nor any information regarding the heavy-duty sector.

The 2018 **attainment** of future CNG vehicles estimates is 77.88% for 2020 and 51.28% for 2025. According to the assessment methodology described in Section 2.1, the 2018 situation corresponds to a **slow progress** towards reaching the envisaged CNG vehicles estimates. The calculated **average annual growth rate** corresponding to the period 2016-2030 for the CNG vehicle fleet evolution planned by Italy is equal to 8%.

Infrastructure

EAFO reported 1,211 publicly accessible CNG refuelling points in Italy in 2018. Regarding the next decade, the IT NIR provides only a target of 2,400 public CNG refuelling points for 2030. For 2025 the IT NIR has no data, therefore the NPF target of 1,750 CNG refuelling points has been retained. For 2020, the IT NIR reported 1,100 public CNG refuelling points in February, but EAFO shows a number above 1,400 at the end of the year. For this reason, Table Error! No text of specified style in document.-2 reports the NPF targeted value of 1,350 that still seems the most representative.

The 2018 **attainment** of future public CNG refuelling infrastructure targets is 89.70% for 2020 and 50.46% for 2030. According to the assessment methodology described in Section 2.1, the 2018 situation corresponds to a **slow progress** towards reaching these envisaged targets. The calculated **average annual growth rate** corresponding to the period 2016-2020 for publicly accessible CNG refuelling infrastructure evolution planned by Italy is equal to 6%.

Ratio

Based on the available information, the following table shows the ratio between vehicles and publicly accessible refuelling points (i.e. sufficiency index) for the pair CNG/road. It can be seen that the computed sufficiency index is always above the indicative value of 600 (see Section 2.1.5), however in the NPF Italy had declared that they had never experienced any problem of fuel supply to road vehicles and did not see the need to decrease their sufficiency index for the pair CNG/road.

Sufficiency Index		2016	2017	2018	2020	2025	2030
Road	CNG	961.33*		868.14*	1,000.00	1,171.43	

* Calculated from EAFO values.

○ LNG

Vehicles

EAFO reported 1,111 LNG vehicles in Italy in 2018, all HCVs. The Italian NIR only provided an estimate of 2,000 LNG vehicles in 2020. There is no information for 2025, while for 2030 the IT NPF had presented an estimated range between 30,000 and 35,000 (average equal to 32,500) LNG vehicles that is considered still valid in the present assessment.

The 2018 *attainment* of future LNG vehicles estimates is 55.55% for 2020 and 3.42% for 2030. According to the assessment methodology described in Section 2.1, the *progress* obtained by Italy from 2016 until 2018 for LNG vehicles deployment is 3.25% of the overall planned deployment during the period 2016-2030.

Infrastructure

EAFO reported 28 LNG public refuelling points in Italy in 2018. Regarding the next decade, the IT NIR declared that 74 LNG refuelling points/stations were in operation in September 2020 and other 39 points/stations were under construction. This would mean at least 113 LNG refuelling points in 2025. For 2030, the IT NIR does not provide any target, but the NPF had a target of 800 refuelling points, which is considered still valid.

The 2018 *attainment* of future public LNG refuelling infrastructure targets is 37.84% for 2020 and 3.50% for 2030. According to the assessment methodology described in Section 2.1, the *progress* obtained by Italy from 2016 until 2018 for public LNG refuelling infrastructure deployment is 3.14% of the overall planned deployment during the period 2016-2030.

Ratio

Based on the available information, the following table shows the ratio between vehicles and publicly accessible refuelling points (i.e. sufficiency index) for the pair LNG/road.

Sufficiency Index		2016	2017	2018	2020	2025	2030
Road	LNG	18.66*		39.68*	27.03		40.63

* Calculated from EAFO values.

○ Hydrogen

Vehicles

EAFO reported 24 hydrogen vehicles in Italy in 2018, of which 11 passenger cars and 13 buses and coaches. For the next decade, in the absence of any information in the IT NIR, the NPF estimates are reported in Table Error! No text of specified style in document.-2, consisting in 1,100 hydrogen vehicles in 2020 and 28,100 vehicles in 2025. For 2030, the IT NPF had provided an estimate of 2,903,700 vehicles, all passenger cars, with the exception of 3,700 buses and coaches.

The 2018 *attainment* of future hydrogen vehicles estimates is 2.18% for 2020 and less than 0.01% for 2030. According to the assessment methodology described in Section 2.1, the *progress* obtained by Italy from 2016 until 2018 for hydrogen vehicles deployment is less than 0.01% of the overall planned deployment during the period 2016-2030.

Infrastructure

EAFO reported three hydrogen refuelling points in Italy in 2018. For the next decade, in the absence of any information in the IT NIR, the NPF targets are reported in Table Error! *No text of specified style in document.*-2, consisting in 20 hydrogen refuelling points in 2020, 196 refuelling points in 2025 and 446 refuelling points in 2030. The NPF had not specified which was the number of public versus private refuelling points but did provide the type of refuelling pressure. For example, in 2030 the NPF foresaw 96 hydrogen refuelling points at 350 bar, while the remaining 350 points should be at 700 bar.

The 2018 *attainment* of future (public + private) hydrogen refuelling infrastructure targets is 15.00% for 2020 and 0.67% for 2030. According to the assessment methodology described in Section 2.1, the *progress* obtained by Italy from 2016 until 2018 for (public + private) hydrogen refuelling infrastructure deployment is -0.23% of the overall planned deployment during the period 2016-2030.

Ratio

Based on the available information, the following table shows the ratio between vehicles and publicly accessible refuelling points (i.e. sufficiency index) for the pair hydrogen/road.

Sufficiency Index		2016	2017	2018	2020	2025	2030
Road	H2	2.75*		8.00*	55.00	143.37	6,510.54

* Calculated from EAFO values.

- Biofuels

Vehicles

Information is not available in the Italian NIR.

Infrastructure

Information is not available in the Italian NIR.

- LPG

Vehicles

EAFO reported 2,414,840 LPG vehicles in Italy in 2018, of which 2,409,840 passenger cars and 5,000 LCVs. For the next decade, in the absence of any information in the IT NIR, the NPF estimates are reported in Table Error! *No text of specified style in document.*-2, consisting in 2,400,000 LPG vehicles in 2025 and 2,500,000 vehicles in 2030.

The 2018 *attainment* of future LPG vehicles estimates is 96.59% for 2030. According to the assessment methodology described in Section 2.1, the *progress* obtained by Italy from 2016 until 2018 for LPG vehicles deployment is 76.53% of the overall planned deployment during the period 2016-2030.

Infrastructure

The IT NIR did not report any information on LPG refuelling points, similarly to the NPF. The only available information comes from EAFO that reported the presence of 4,120 publicly accessible LPG refuelling points in Italy in 2018.

Because there are no numerical targets for LPG refuelling points in the Italian NIR, the 2018 *attainment* and *progress* could not be computed.

Ratio

Based on the available information, the following table shows the ratio between vehicles and publicly accessible refuelling points (i.e. sufficiency index) for the pair LPG/road.

Sufficiency Index		2016	2017	2018	2020	2025	2030
Road	LPG	567.32*		586.13*			

* Calculated from EAFO values.

- Rail transport
 - Electricity

Vehicles

Information is not available in the Italian NIR.

Infrastructure

The IT NIR listed a series of legislative initiatives aimed at the modernisation and development of the public transport infrastructure (underground, tramways), with special attention to cities with more than 100,000 inhabitants and to smaller cities where there has been an infringement due to poor air quality levels in the past years. The sum of all these initiatives, to be realised between 2017 and 2030 is of almost 7 billion €.

- Hydrogen

Vehicles

The IT NIR highlighted the strategic importance given by Italy to hydrogen in the decarbonisation of the economy. One of the possible applications for the use of hydrogen in transport is to fuel trains on non-electrified railways. There are a few projects and initiatives on this but the IT NIR did not provide information regarding the potential number of locomotives that could become hydrogen-fuelled in the next decade.

Infrastructure

Similarly to the vehicle situation, the IT NIR showed great interest toward the possibility to develop a hydrogen infrastructure to support its use in the rail transport but did not provide any quantitative information.

- Waterborne transport (maritime)
 - Electricity

Vessels

The IT NIR did not provide any direct reference to electrified vessels, however in the infrastructure part it was mentioned the construction of a shore-side electricity supply for an electric ship providing public and goods transport between the ports of Napoli and Ischia.

Because there are no numerical estimates of electric vessels to be deployed in the maritime ports in the Italian NIR, the 2018 **attainment** and **progress** could not be computed.

Infrastructure

The IT NIR listed a series of initiatives regarding shore-side electricity supply, ranging from requests of authorisation, to development projects and actual deployment. In the first group there was the port of Augusta. Instead, for the ports of Bari, Brindisi, Barletta, Manfredonia, Taranto, Trieste, Napoli, Ravenna, Palermo, Trapani and Livorno there were projects being developed for the construction of SSE supply. Finally, the IT NIR reported that the ports of Spezia, Genova and Ancona were already equipped with SSE supply.

Because there are no numerical targets for shore-side electricity supply in the maritime ports in the Italian NIR, the 2018 **attainment** and **progress** could not be computed.

- LNG (maritime & inland)

Vessels

The IT NIR did not report any new information regarding LNG vessels estimates. For this reason, the estimates presented in the NPF for 2020, 2025 and 2030 have been retained here (7, 40 and 60 LNG vessels, respectively). In the IT NPF there was no distinction between maritime and inland transport.

Due to the lack of 2018 data in the Italian NIR, the 2018 **attainment** and **progress** could not be computed.

Infrastructure

The IT NIR reported that there were six concrete projects related to maritime LNG infrastructure. Three of these had been already authorised (and two of them were under construction at the ports of Oristano and Ravenna); three other projects were at an advanced stage in the authorization procedure. Furthermore, two more projects have recently been started. As for the next decade, the IT NIR did not provide numerical targets, thus the targets provided in the NPF have been considered still valid. These were: 10 LNG terminals in 2020, 12 in 2025 and 20 in 2030. It is necessary to clarify that these numbers refer to both maritime and inland waterborne transport.

Due to the lack of 2018 data in the Italian NIR, the 2018 **attainment** and **progress** could not be computed.

- Waterborne transport (inland)
 - Electricity

Specific information on inland waterborne electric vessels and/or SSE supply is not available in the Italian NIR.

- LNG

Specific information on inland waterborne LNG vessels and/or LNG terminals is not available in the Italian NIR.

- Air transport
 - Electricity

The IT NIR did not provide any update to the situation described in the NPF.

- Biofuels

Similarly to the NPF, the IT NIR did not provide any information regarding the use of biofuels in aviation, with the only exception of a RTD&D project for the production of bio-jet fuel from micro-algae (see Section 5.12.4.5).

- *Measures assessment*

Disclaimer

Similarly to the historical data and future objectives regarding vehicles and infrastructure, the Italian NIR did not follow the requirements of Annex I to the Directive to report about Measures but provided a long list of legislative initiatives in a different order. Nevertheless, this information has been processed in order to be evaluated following the same methodology applied to all the other NIRs. Also in this case, it is recommended that the next Italian NIR be structured in accordance with the provisions of the Directive.

On the basis of the provisions of Annex I to the Directive and of the Guidelines provided by the Commission to the Member States, the allocation of all the legislative initiatives, measures and projects presented in the IT NIR to the four Measure categories (i.e. Legal, Policy, Deployment & Manufacturing, RTD&D) has brought to the following outcome:

- Three Legal measures
- Ten Policy measures
- Sixteen AFI Deployment and one Manufacturing support measures
- One RTD&D measure

In general, the IT NIR does not present a change of strategy compared to the NPF. In several cases, measures announced in the NPF have been concretised by legislative initiatives that have followed the main Legal act, namely the Legislative Decree n. 257 of 16 December 2016, by which Italy has adopted the AFI Directive.

- Legal measures

The three Legal measures included in the IT NIR belong to the Legislative and Regulatory sub-category. Overall, they show the same level of ambition presented in the NPF.

- Legislative & Regulatory

The first and most important Legal measure is the Legislative Decree n. 257 of 16 December 2016, by which Italy has adopted the AFI Directive at national level. Due to the Italian administrative system, this Decree has to be implemented at Regional level too. According to the IT NIR, in July 2020, out of the 20 Italian Regions, 6 of them and the Autonomous Province of Bolzano had not yet implemented the Decree.

The second legislative measure is related to setting up the Single National Platform on Alternative Fuels Infrastructure that among other things will provide the necessary information to allow owners of electric vehicles to know the charging fees of the different suppliers.

The third legislative initiative presents the safety rules to be adopted to prevent fires in hydrogen refuelling stations. According to the IT NIR, this represents the actual green light to the deployment of a hydrogen refuelling network in Italy for road vehicles.

- Administrative

There is no measure in the Italian NIR that appears to belong to this sub-category.

- Policy measures

The Policy measures included in the Italian NIR cover four alternative fuels (i.e. electricity, CNG, LNG and hydrogen) and provide financial and non-financial support to both AFV and AFI mostly at national level. As for the transport mode, they are all focussed on road transport, with the exception of one Policy measure for rail transport. The IT NIR does not deviate from the strategy presented in the NPF, but reports the concretisation of a series of measures announced in the NPF. It has to be highlighted though that in most cases the plans are described in a generic way and the budget allocated to each measure is not accompanied by an accurate planning of either the infrastructure or the vehicle deployment, which jeopardises the robustness of the quantitative assessment of these measures.

- Measures to ensure national targets and objectives

Of all the national policy measures described in the Italian NIR, six can be categorised as measures to ensure national targets and objectives. Two of these measures also cover the promotion of AFI for public transport services while another measure also includes incentives for the deployment of domestic recharging points.

Road transport

The first Policy measure included in the IT NIR represents phase 1 of the uptake of a recharging infrastructure in Italy, with a budget of 4.5 million € that has brought to the construction of 700 recharging points until 2017 in more than 100 cities.

The second Policy measure has been presented as the phase 2 of this uptake process (thus from 2018 onward), but has extended both the budget (up to 70 million €) and the scope, to include also public refuelling points and domestic recharging points.

The third measure was under discussion and foresaw the obligation for public administrations to buy at least 30% of AF vehicles by 2022 when procuring new vehicles, at least 50% by 2025 and at least 80% by 2030. Such obligation is foreseen also for public or private entities providing public transportation services.

The fourth measure presents an incentive scheme that has started already in 2015 and should last until at least 2021. This scheme is to provide financial support for the replacement of old HCVs with new ones running with alternative fuels (electricity, CNG or LNG). The sum of money already spent in the past years and foreseen until end of 2021 is around 83 million €, however there is no indication regarding the number of HCVs involved in this scheme.

The fifth Policy measure was not listed in the IT NIT but is quite known and popular, i.e. the so called “Ecobonus”. It is a financial incentive to replace existing ICE vehicles with BEV or PHEV vehicles. In case of scrappage of old vehicles (up to Euro 4 emission limits and older than 10 years) the incentive is higher. The Ecobonus campaign started in 2019 and will last until at least 2021. A total budget of almost 600 million € has been allocated, with a maximum incentive per vehicle (in case of scrappage) of up to €10,000 for BEVs and up to €4,500 for PHEVs.

The sixth measure, like the third one, is also related to public transport and foresees a total budget of around 3.7 billion € until 2033, for the replacement of old-technology buses and coaches with AF vehicles, and the development of the corresponding recharging/refuelling infrastructure. About two thirds of the budget are dedicated to the replacement of buses and coaches, the remaining one third is for the infrastructure.

- Measures that can promote AFI in public transport services

The Italian NIR presented six Policy measures that can be classified as measures to promote AFI in public transport services, either directly or indirectly, either financial or non-financial. Five measures are dedicated to public transport on road (two of them have been presented in the previous section), one to public transport on rail.

Road transport

In addition to the two measures mentioned in the previous section (because they might have an impact also on the achievement of national targets and objectives), the IT NIR presented three indirect measures:

- Incentives (20 million €, for the years 2019 and 2020) for the replacement of old school buses with electric vehicles. This indirect measure to promote AFI in public transport services is for the moment reserved to cities with more than 50,000 inhabitants that have exceeded the air quality standards in the past years.

- Incentives reserved to the northern regions of Piedmont, Lombardy, Veneto and Emilia Romagna for the replacement of old-technology buses and coaches with AF vehicles, and the development of the corresponding recharging/refuelling infrastructure. The total budget is 180 million €, starting from 2020 (end year is not specified).
- Incentives for the scrappage of very old vehicles (up to €1,500) and motorcycles (up to €500) for a total budget of 255 million €, from 2019 until 2024. The incentives are given as credits to buy public transport annual passes.

Rail transport

The IT NIR presented also a measure with a total budget of around 6.8 billion €, to restructure and extend the public transport system based on electrified vehicles (urban trains, underground, tramways) in cities with more than 100,000 inhabitants.

- Measures that can promote the deployment of private electro-mobility infrastructure

One of the measures described as Policy measure to ensure national targets and objectives, in addition to providing support to the uptake of publicly accessible recharging/refuelling points, foresees that part of the total budget of up to 70 million € be dedicated to incentivising the development of domestic recharging points. There is however not detail on how/when/how much is for this part.

- Deployment and manufacturing support
 - AFI deployment

The Italian NIR contains a long list of Deployment projects, of which 13 are related to road transports, 2 focus on waterborne transport and 1 covers both road and waterborne transport. They are all linked to the CEF programme.

The road-related projects are mainly addressing electric recharging points, but CNG, LNG and hydrogen refuelling points are being developed as well. The waterborne-related projects address both shore-side electricity supply and LNG terminals/refuelling points.

Road transport

Regarding electric recharging points, around 2,200 normal power and 115 high power recharging points are being deployed. In parallel to that, around 50 CNG/LNG refuelling points are under construction or the projects have been approved. There is also a project for the construction of a hydrogen refuelling station in Italy, as part of an overall scheme with similar hydrogen refuelling stations in Germany, Netherlands and UK.

Waterborne transport

Regarding shore-side electricity supply, the IT NIR mentioned one big project (called “Cold Ironing”) involving a series of maritime and inland ports (see Section Y.X.3.3.1). There is however no detail about the overall budget, time span and number of SSE supply points, therefore this measure is not assessable.

The IT NIR reported two Deployment projects for the installation of LNG terminals for waterborne transport, one in Oristano (Sardinia), the other in Venice and Leghorn.

- Support of manufacturing plants for AF technologies

The Italian NIR reported a measure that can be classified as support of manufacturing plants for AF technologies. This measure, included in the Law n. 232 of 2016, foresaw an amount of 102 million € to support manufacturers of AF buses and intelligent transport systems in the period 2017 - 2019.

- Consideration of any particular needs during the initial phase of the deployment of alternative fuels infrastructures

Information is not available in the Italian NIR.

- Quantitative assessment of Policy and Deployment & Manufacturing measures

Table *Error! No text of specified style in document.*-3 presents an analysis of all the Policy and Deployment & Manufacturing measures, carried out according to the assessment methodology described in Section 2.2.

As it can be seen, seven clusters of measures have been identified, for as many pairs AF/transport mode (waterborne maritime and inland transport modes have been put together because there was no clear distinction in the IT NIR), of which five were assessable. Despite the general availability of the overall budget for almost all the measures reported in the IT NIR, the lack of the necessary details on the link between the budget and the AFV and/or AFI objectives makes the quantitative assessment poorly substantiated. With this caveat in mind, we report the results of the application of the assessment methodology. The electricity/road, CNG/road, LNG/road and LNG/waterborne (maritime and inland) obtain a medium score; the hydrogen/road pair obtains a low score. Four of the five assessable clusters can be considered to be comprehensive. In terms of the expected impact of these measures to support the realisation of the AFV/AFI objectives as presented in the NPF and revised in the NIR, it can be said that the measures for the pairs electricity/road, CNG/road and LNG/road have a medium impact. LNG/waterborne and hydrogen/road have a low impact.

Compared to the NPF, the level of ambition of the Policy and Deployment & Manufacturing support measures can be considered similar for all the assessable pairs.

Table *Error! No text of specified style in document.*-3 *Quantitative assessment of policy and deployment & manufacturing support measures*

AF	Transport mode	Score	Comprehensiveness	Impact	Ambition (NIR vs NPF)
Electricity	Road	M	C	M	=
CNG	Road	M	C	M	=
LNG	Road	M	C	M	=
	Waterborne (maritime & inland)	M	N	L	=
H2	Road	L	C	L	=
Electricity	Rail	X			
	Waterborne (maritime & inland)	X			

Legend: Score: H = high; M = medium; L = low; X = not assessable. Comprehensiveness: C = comprehensive; N = Not comprehensive. Ambition level: '+' means 'higher'; '=' means 'comparable'; '-' means 'lower'.

- Research, Technological Development & Demonstration

The IT NPF had listed a series of projects (within the CEF programme) which were considered at RTD&D stage. In the IT NIR most of those projects have been presented as Deployment projects, leaving only one RTD&D project on the production of renewable jet fuel from micro-algae, with a budget of 4 million € for the years 2019 and 2020.

- *Additional information on alternative fuels infrastructure developments*

Information is not available in the Italian NIR.

- *Summary of the assessment*

Tabular overview

Table Error! No text of specified style in document.-4 Overview of the NIR assessment

		Indicators	Alternative fuel / transport mode					
			Electricity / road	CNG / road	LNG / road	LNG / water (maritime & inland)	H2 / road	LPG / road
AF Vehicles / Vessels		Past situation (2016)	11,663*	1,057,461*	56*	NA	11*	2,137,078*
		Situation (2018)	26,160*	1,051,316*	1,111*	NA	24*	2,414,840*
		Estimate (2030)	6,000,000	NA	32,500**	60**	2,903,700**	2,500,000**
		Future share (2030) [%]	13.30%		2.96%		6.44%	5.54%
		Estimate attainment (2018 vs 2030) [%]	0.44%		3.42%		0.00%	96.59%
		Progress (2018)	slow	slow	3.25%		0.00%	
Publicly accessible AF Infrastructure		Past situation (2016)	2,205*	1,100*	3*	NA	4*	3,767*
		Situation (2018)	3,433*	1,211*	28*	NA	3*	4,120*
		Target (2030)	117,000	2,400	800**	20**	446***	NA
		Target attainment (2018 vs 2030) [%]	2.93%	50.46%	3.50%			
		Progress (2018)	slow	slow	3.10%		-0.23%	
Sufficiency Index		2016	5.29	961.33	18.66		2.75	567.32
		2018	7.62	868.14	39.68		8.00	8.00
		2020	6.38	1,000.00	27.03		55.00	
		2025		1,171.43			143.37	
		2030	51.28		40.63		6,510.54	
Measures	Legal measures	Ambition (NIR vs NPF)	=	=	=		=	
	Policy measures + Deployment & manufacturing support	Score	M	M	M	M	L	
		Comprehensiveness	C	C	C	N	C	
		Impact	M	M	M	L	L	
		Ambition (NIR vs NPF)	=	=	=	=	=	
	RTD&D	Ambition (NIR vs NPF)						

Legend:

	not applicable
	the value could not be computed
NA	no value/information provided/available in the NIR

* Values taken from EAFO (absent in both NPF and NIR).

** Values taken from the IT NPF.

*** Values taken from the IT NPF and referred to the total (public + private) hydrogen AFI.

The NIR described Italy's efforts carried out to increase the use of alternative fuels in transport since the release of its NPF. However, the implementation report did not fulfil several provisions of Annex I to the Directive. In particular, the IT NIR lacked any information on historical data (2016 - 2018) related to AFV and AFI and provided very limited information regarding AFV estimates and AFI targets for the next decade. In order to provide the most possibly complete assessment of the Italian NIR, the historical data have been retrieved from the EAFO database, while the AFV estimates and AFI targets have been complemented with the information contained in the IT NPF, when we deemed they were still applicable.

The main outcomes of the technical assessment of the Italian NIR on vehicles/vessels estimates and infrastructure targets can be summarised as follows:

Road transport

- **Electricity** – EAFO reported 26,160 battery-electric and plug-in hybrid electric vehicles in Italy in 2018, of which 23,157 were passenger cars (12,337 BEV), 2,915 were LCVs (all BEV), 16 HCVs (all BEV) and 72 were buses and coaches (all BEV). For the next decade, the Italian NIR estimated around 6 million EVs for 2030 (with no detail on the heavy-duty sector). Regarding recharging infrastructure, EAFO reported 3,433 publicly accessible recharging points in Italy in 2018, of which 573 were high power recharging points. For 2030, the IT NIR presented a target between 26,000 and 40,000 publicly accessible high power recharging points and between 57,000 and 111,000 normal power recharging points. The value of 117,000 total public recharging points reported in **Error! Reference source not found.** was obtained by adding the average values of those two ranges. The progress in 2018 resulted to be slow, both in terms of AFV and in terms of AFI deployment, while the sufficiency index appears adequate until after 2020, but for 2030 a strong unbalance between AFV and AFI is foreseen that could jeopardise the uptake of electrification of road transport.
- **CNG** – In 2018, EAFO reported 1,051,316 CNG vehicles in use in Italy, of which 945,184 were passenger cars, 99,351 LCVs, 2,550 HCVs and 4,231 buses and coaches. The IT NIR did not provide any estimate for the next decade, but the NPF had presented an estimate 1,350,000 CNG vehicles for 2020, of 2,050,000 CNG vehicles for 2025 and no estimate for 2030, nor any information regarding the heavy-duty sector. On the CNG refuelling infrastructure, EAFO reported 1,211 publicly accessible refuelling points in Italy in 2018. For the next decade, the IT NPF had presented a target of 1,350 publicly accessible refuelling points for 2020 and of 1,750 refuelling points for 2025. The IT NIR completes this set of targets with 2,400 publicly accessible refuelling points foreseen in 2030. Similarly to the pair electricity/road, the progress in 2018 resulted to be slow for both AFV and AFI, while the sufficiency index is constantly above the indicative threshold of 600, but the Italian authorities do not report any problem with that.
- **LNG** – EAFO reported 1,111 LNG vehicles in Italy in 2018, all HCVs. For the next decade the IT NIR only provided an estimate of 2,000 LNG vehicles for 2020, while for 2030 we have retained the NPF estimated range between 30,000 and 35,000 (average equal to 32,500) LNG vehicles that is considered still valid. Regarding LNG infrastructure, EAFO reported 28 public refuelling points in Italy in 2018. For the next decade, the IT NIR does not provide any target (it only mentions the presence of 74 LNG refuelling points in 2020 and the plan to build other 39 refuelling points in the following years), but the NPF had a target of 800 refuelling points, which has been retained for this assessment.
- **Hydrogen** – EAFO reported 24 hydrogen vehicles in Italy in 2018, of which 11 passenger cars and 13 buses and coaches. For the next decade, the IT NIR did not provide any estimate, therefore the NPF estimates have been considered still valid, consisting in 1,100 hydrogen vehicles in 2020, 28,100 vehicles in 2025 and 2.903.700 vehicles in 2030. EAFO reported three hydrogen refuelling points in Italy in 2018. For the next decade, in the absence of any information in the IT NIR, the NPF targets (that included both public and private refuelling points) have been retained, i.e. 20 refuelling points in 2020, 196 in 2025 and 446 in 2030.
- **Biofuels** – Information is not available in the IT NIR.
- **LPG** – EAFO reported 2,414,840 LPG vehicles in Italy in 2018, of which 2,409,840 passenger cars and 5,000 LCVs. For the next decade, in the absence of any information in the IT NIR, the NPF estimates have been considered still valid, consisting in 2,400,000 LPG vehicles in 2025 and 2,500,000 vehicles in 2030. The IT NIR did not report any information

on LPG refuelling points, similarly to the NPF. The only available information comes again from EAFO that reported the presence of 4,120 publicly accessible LPG refuelling points in Italy in 2018.

Rail transport

- **Electricity** – The IT NIR listed a series of legislative initiatives (with a total budget of almost 7 billion € for the period between 2017 and 2030) aimed at the modernisation and development of the rail infrastructure for public transport (underground, tramways), with priority given to cities with more than 100,000 inhabitants and/or to those with repeated air quality limit infringements.
- **Hydrogen** – The IT NIR highlighted that one of the possible applications for the use of hydrogen in transport is to fuel trains on non-electrified railways. There are a few projects and initiatives on this but the IT NIR did not provide information regarding the potential number of locomotives that could become hydrogen-fuelled in the next decade.

Waterborne transport (maritime & inland)

- **Electricity** – The IT NIR listed a series of initiatives regarding shore-side electricity supply, ranging from requests of authorisation, to development projects and to actual deployment. In the first group there was the port of Augusta. Instead, for the ports of Bari, Brindisi, Barletta, Manfredonia, Taranto, Trieste, Napoli, Ravenna, Palermo, Trapani and Livorno there were projects being developed for the construction of SSE supply. Finally, the IT NIR reported that the ports of Spezia, Genova and Ancona were already equipped with SSE supply.
- **LNG** – The IT NIR did not report any new information regarding LNG vessels estimates. For this reason, the estimates presented in the NPF for 2020, 2025 and 2030 have been retained (7, 40 and 60 LNG vessels, respectively). In the IT NPF there was no distinction between maritime and inland transport. Regarding LNG infrastructure, the IT NIR reported that there were six concrete projects, of which three had been already authorised (and two of them were under construction at the ports of Oristano and Ravenna), three other projects were at an advanced stage in the authorization procedure. As for the next decade, the IT NIR did not provide numerical targets, thus the targets provided in the NPF have been considered still valid. These were: 10 LNG terminals in 2020, 12 in 2025 and 20 in 2030. Again, it is necessary to clarify that these numbers refer to both maritime and inland waterborne transport.

Air transport

The IT NIR did not provide any update to the situation described in the NPF.

The Italian NIR listed a series of Measures under a different categorisation than the one requested in the Annex I to the Directive. Thus, in order to be able to assess them, it has been necessary to reorder them, which has led to counting 3 Legal measures, 10 Policy measures, 16 Deployment and Manufacturing support measures and 1 RTD&D measure. Similarly to the AFV estimates and AFI targets, the measures presented in the IT NIR follow the route indicated in the NPF, with no evident change of ambition, but a substantial confirmation of all the NPF objectives.

With reference to the Policy and Deployment & Manufacturing measures in particular, seven clusters of measures have been identified, of which five were assessable. Despite the general availability of the overall budget for almost all the measures reported in the IT NIR, the lack of the necessary information on the link between the budget and the AFV and/or AFI objectives does not facilitate the task of putting this assessment into perspective. With this caveat in mind, we report the results of the application of the assessment methodology. The electricity/road, CNG/road, LNG/road and LNG/waterborne (maritime and inland) obtain a medium score; the hydrogen/road pair obtains a low score. Four of the five assessable clusters can be considered comprehensive. In terms of the expected impact of these measures to support the realisation of the AFV/AFI objectives as presented in the NPF and confirmed in the NIR, it can be said that the measures for the pairs electricity/road, CNG/road and LNG/road have a medium impact while the ones for LNG/waterborne and hydrogen/road have a low impact.

The IT NIR presented only one RTD&D project on the production of renewable jet fuel from micro-algae, with a budget of 4 million € for the years 2019 and 2020.

▪ *Final remarks*

The collection of data from the Italian NIR, NPF and EAFO allows for the following conclusions: Italy expects the number of electric passenger vehicles, hydrogen fuel cell vehicles, CNG vehicles and heavy-duty LNG vehicles to grow significantly over the current decade. On the other hand, the number of LPG vehicles will remain very high compared to the number of these vehicles in other Member States. The policy measures included in the Italian NIR cover electricity, CNG and hydrogen for road transport as well as LNG for road and maritime transport. Measures to promote the use of electricity in waterborne transport are not reported. The Italian NIR presents also a measure with a total budget of around 6.8 billion € to restructure and extend the public rail transport system (urban trains, underground, tramways) in cities with more than 100,000 inhabitants.

With regard to electricity, the Italian NIR expects up to six million electric vehicles on the roads by 2030, representing around 13.3% of the vehicle fleet by that time. Taking into account the current situation and the expected trend developments, this level of ambition appears to be broadly consistent with the pace of deployment of electric vehicles considered necessary for a full transition to carbon neutrality by 2050. For 2030, 117,000 recharging points are planned, which seem insufficient (one recharging point per 50 vehicles) for the estimated fleet of 6 million of electric vehicles in that year. The ports of La Spezia, Genova and Ancona are already equipped with shore side electricity supply facilities and it is foreseen to also equip the ports of Augusta, Bari, Brindisi, Barletta, Manfredonia, Taranto, Trieste, Napoli, Ravenna, Palermo, Trapani and Livorno. The Italian NIR should provide further information on the electricity supply facilities for stationary aircraft.

Regarding hydrogen, the NIR does not provide updated estimates compared to the NPF, which foresaw a strong ambition for hydrogen: almost three million hydrogen vehicles and 446 hydrogen filling stations are planned for 2030.

Concerning natural gas, there were 1,051,000 CNG vehicles and 1,211 refuelling points by 2018. The NIR does not provide updated estimates compared to the NPF, which foresaw

2,050,000 CNG vehicles by 2025 as well as 1,750 refuelling points by 2025 and 2,400 refuelling points by 2030. Furthermore, the NPF anticipated a major growth of the number of LNG vehicles from 1,128 in 2018 to 32,500 vehicles by 2030 and an increase in the number of LNG refuelling points from 28 in 2018 to 800 by 2030. This figure seems sufficient taking into account the length of Italian TEN-T Core network. Moreover, in the Italian NPF it was estimated that 10 terminal in ports would be in a position of supplying LNG by 2020, 12 by 2025 and 20 by 2030. The Italian NIR should have provided further information on the state of play of the existing and planned LNG infrastructure for ports. Moreover, it should have presented information on inland and maritime ports separately.

There were 2,414,000 LPG vehicles by 2018. Around 2,500,000 LPG vehicles are estimated for the year 2030. The number of LPG refuelling points was 4,200 in 2018. Although no estimates are provided by 2025 and 2030, the existing number of LPG refuelling points seems sufficient for the estimated LPG fleet by 2030.

Future reporting should also inform about efforts to promote the use of renewable fuels in transport, and particularly in aviation.

▪ ***ANNEX - Description of the Member State***

On a surface area of 301,300 km², Italy has a population of 60.484 million people in 2018, which makes up for a population density of 201 inhabitants/km².

Number of main urban agglomerations

- 88 urban agglomerations > 50,000 inhabitants

In 2018, Italy achieves a per capita gross domestic product at market prices of €29,210, which represents a per capita gross domestic product in purchasing power standards of 96 if expressed in relation to the EU-28 average set to equal 100.

Length of the road networks

The length of the road TEN-T Core Network in Italy is 4,145 km. The total road network length is 182,976 km, of which 6,943 km are motorways.

The following lengths of the TEN-T Road Corridor network are present in Italy: 13% (480 km) of the Baltic - Adriatic Corridor, 15% (839 km) of the Mediterranean Corridor, 38% (2,403 km) of the Scandinavian- Mediterranean Corridor, 13% (1,794 km) of the Rhine - Alpine Corridor.

Through the TEN-T Road Corridors, Italy is connected with the following member states:

- Austria (through the Baltic - Adriatic and the Scandinavian - Mediterranean Corridor)
- Slovenia (through the Baltic - Adriatic and the Mediterranean Corridor)
- France (through the Mediterranean Corridor)
- Switzerland (through the Rhine- Alpine Corridor)
- Malta (through the Scandinavian-Mediterranean Corridor)

Number of registered road vehicles

At the end of 2018, Italy accounts for 52,650,365 registered road vehicles of which 39,018,000 are categorized as passenger cars, 3,556,816 as light goods vehicles, 757,207 as heavy goods vehicles and 100,042 as buses and coaches. The motorisation rate is 645 passenger cars per 1,000 inhabitants.

Number of ports in the TEN-T Core Network

- 14 maritime ports in the TEN-T Core Network (Ancona, Augusta, Bari, Cagliari-Porto Foxi, Genova, Gioia Tauro, La Spezia, Livorno, Napoli, Palermo, Ravenna, Taranto, Trieste, Venezia)
- 25 maritime ports in the TEN-T Comprehensive Network
- 5 inland ports in the TEN-T Core Network (Cremona, Mantova, Ravenna, Trieste, Venezia)
- 6 inland ports in the TEN-T Comprehensive Network

The inland waterways TEN-T Core Network in Italy is 916 km long.

Number of airports in the TEN-T Core Network

- 11 airports in the TEN-T Core Network (Bologna, Cagliari, Genova, Milano-Linate, Milano-Malpensa, Milano-Bergamo Orio al Serio, Napoli-Capodichino, Palermo, Roma-Fiumicino, Roma-Torino, Venezia)
- 22 airports in the TEN-T Comprehensive Network