

ENAC
Italian Civil Aviation Authority

Annual Report
and
Social Balance
2018



Annual Report and Social Balance 2018



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My first contribution to the ENAC Annual Report cannot be focused on the activities carried out in 2018, since I became ENAC President in March 2019.

Therefore, I take this opportunity to provide an overview on our sector's evolution together with the analysis of the priority initiatives that, in my view, should be undertaken under ENAC guidance and support in order to face the challenges related to the growth expectations for the next years. In this analysis I will also take into consideration some of findings and outcome from the Air Transport National Conference, promoted last March by the Ministry of Infrastructures and Transports.

The Civil Aviation World is experiencing a period of high ferment and we expect years of growth and important evolutions in several domains, from the technological development areas to the needs of new regulatory frameworks up to the expected air traffic volume increase, which is far higher than the most optimistic estimates from a few years ago.

The national airport system, as in other Countries, has been characterised by a big dynamism which made it one of the sectors with the best performances, despite the crisis of the last years. This data has to be interpreted in a more general context of growth of passengers (and goods) flows at global level: the globalisation and the progressive transition, from a system of Countries to a system of "urban nodes" and transnational regions, led citizens and companies to find in the air transport one of the favourite means of transport, both to move and to manage the economical processes connected to the production and commercialisation of goods.

At European level, in agreement with the Eurocontrol predictions published in 2018, it is expected, in the most realistic scenario, a 53% air traffic growth in 2040 compared to data collected during 2017. Since the above-mentioned flights increase will generate about four million movements more (arrivals and departures) on the European runways, there will be a serious imbalance between the traffic demand and the airport infrastructures capacity, being the twenty biggest Europeans airports currently able to manage about two additional million movements. Thus, without a strong change of pace in the global European airport capacity planning, some 160 million passengers may not be processed in the European airports by year 2040.

Eurocontrol highlights the actions that should be implemented by the Member States to lead the growth outlook, planning investments on infrastructures and system which are required to be both efficient and sustainable. These actions will concern for sure the realisation of new airport infrastructures, but taking into account a better use of the existent ones, a higher rationalisation of the transport network and the implementation of advanced technologies for the air traffic management.

The prevision of 250 million passengers in Italy in 2030 has to be already considered underestimated. Indeed, if we refer to the 2018 traffic growth (5.8%, more than two times higher than the European average), in 2030 we will be abundantly over 300 million passengers per year.

Thus revision and update of the current Airports National Plan becomes a priority because, despite its quite recent adoption (2014) it is not anymore adequate to face the current prevision of air traffic volumes growth. It is necessary to define, together with all the sector strategic players, the new goals, the procedures and the most efficient instruments to seize the opportunity to play a leading role, not only at European level, and to

reap the direct and indirect benefits arising from this sector development, primarily focusing on the existing infrastructures use optimisation, ensuring, in the same time, the necessary safety, quality and environmental protection high standards.

On behalf of the supervising Minister, ENAC already started the activities to review the Airports National Plan, emphasising development strategies which includes macro themes that provide an intermodal characterisation of the whole transport system. Moreover, in its drafting, big consideration will be given to the innovation technology able to ensure ever higher safety and security standards, maintaining the environmental protection and sustainability themes central, together with the public acceptance that will have an always more crucial role in the development of the urban systems strategies.

An important contribution to meet the growing air transport demand cannot overlook the improvement and optimisation of the modal integration between the different transport components (air, rail, road). In this respect, the creation of networks and systems between airports is an opportunity to be seized because it is an element able to ensure a new and better development, above all in term of local territory competitiveness.

The creation of an Integrated System of Air Transport may represent an important perspective where ENAC, together with the other involved institutional entities, will find adequate strategies to develop the backbone of the national transport system in order to ensure the meet of the connectivity demand of the passenger in an integrated vision of the transport.

Another purpose to be followed is the consolidation of the airport networks. The constitution of an airport network ensures the opportunity to develop an integrated planning of the considered airport development, by means of functional specificities which may be granted in the view of a global system optimisation; at the same time, it allows the managing costs efficiency through the application of network fares and a general competitiveness improvement.

Nowadays, the only case of airport network designation is the Apulian one; others can be imagined in Italy, such as the North-East System, the Western Sicily and the Eastern, the airports of Campania. It would be desirable to define a more simplified authorisation iter for the airport network designation starting from the preliminary steps of the procedure. Furthermore, the concept of airport network should be intended as an economical network able to provide a competitive advantage for the final user and not only an operational network related to the transport offer.

Another theme that deserves particular attention is the one related to small and very small airports. If we evaluate them according to the economical sustainability criteria which are applied to the big airport, we condemn them to being on the margins of the national airport system and its development strategies. For this reason, it is needed to consider their social value, the direct and indirect returns they produce for the benefit of the local economical environment and their important role to ensure the mobility right to the citizens, especially in some disadvantaged areas of our Country. For these reasons, in the view of the small airports' valorisation, and without step backwards from the reform processes started in the Nineties, more attention must be paid from both the State and the private players, in order to facilitate the adoption of more appropriate evaluation criteria, to include them in network strategies and to favour a progressive characterisation of each single airport.

To cover the cost of investments required for the airport system evolution planned in the next future, the availability of adequate public and private financial instruments will be crucial. The Italian system, along with other European systems, has been at the center of a progressive privatisation and liberalisation process, in compliance with the European guidelines, which drove, in most cases, a real improvement of the expected investments realisation plan.

Thanks to the concessions and Planning Agreements (Contratti di Programma) system, private investment capital has been found when the government funds were not able to invest into airports modernisation. However, if the role of private players earns always more strategic relevance in the international market, in the capacity to build networks and in the perception to intercept the passengers and companies needs, on the other hands the Public National subject, with all its institutional facets, is a crucial player, not only for its control and general interest protection role, but also as a partner able to define the global development



strategies of a region. Without an effective ecosystem governance that considers both levels involved in the processes of planning and intervention realisation, there could be the risk to start processes characterised by different speeds that would not be able to catch the development opportunities of the regions.

In this abuzz panorama, the cargo transport should not be overlooked, since it is also in a phase of great development. Albeit late compared to other European Countries, such as Germany, that consider the logistic and goods transport sector a strategic asset since a lot of time, in the last years also in Italy there was a new attention coming from both the State and important private stakeholders. We are witnessing a movement from West to East of the centre of gravity at global level, which fully involves also the Italian territory. It is now mandatory to overcome the accumulated delays compared to the main international competitors, not only in terms of planning and simplification of legislation, but also in terms of services offered to all the involved players: companies and couriers. Again, a fundamental role is played by the modal integration with other networks, essential thing in this field. A single leadership providing long term planning, with adequate timescale in order to make the investments sustainable, is probably needed.

In the end, a consideration about the management models of the different European Countries. The Italian system is aligned to the other Countries regulations and best practices. Thanks to ENAC's role and daily commitment, the Italian system is even better than the others in Europe. It is important to continue along that path, aiming at higher integration of the different players involved in the entire system. Today the utilised models seem to meet both the public and the private needs and interests. The assignement of the airports management by means of European open public tenders safeguards the market rules and, at the same time, it preserves the State property of the infrastructures and it ensures the possibility for the State to steer the development according to the Country's needs.



Alessio Quaranta

DIRECTOR GENERAL
ITALIAN CIVIL AVIATION AUTHORITY

ENAC keeps bringing the competence and professionalism of the Italian aviation system in the European and international fora, providing a high contribution to the efficiency, safety, security and sustainability of the global air transport.

ENAC representatives collaborate in several regulatory and standardisation initiatives within the different working groups, committees, certification teams, task forces, panels and other meetings organised by the European and international entities active in the civil aviation field.

The overall aim is to adapt the Italian regulatory framework to complex sector apparatus composed, beyond of the national laws, of ICAO standards and recommendations, ECAC harmonisation measures, EU regulations and directives and EASA and Eurocontrol legislation.

As every other Country that ratified the Chicago Convention of the 7th of April 1944 that setting-up the International Civil Aviation Organisation (ICAO), Italy committed itself to cooperate in ensuring the highest possible level of compliance to the technical annexes to the Convention, known as ICAO Annexes, including Standards and Recommended Practices (SARPs), whose uniform implementation is believed to be necessary and desirable for the application of common and generally accepted rules.

Italy is represented on the Council of ICAO by the Ministry of Foreign Affairs and International Cooperation and ENAC.

In 1951, Italy became part of the Council, composed of 36 Member States divided in three Parts.

Italy has been sitting in Part I of the Council, among the States of chief importance in air transport, since 1962. The last reconfirmation took place in 2016 when, with the great result of 166 on 170 votes, our Country was elected in Part I, together with United States of America, China, Japan, Germany, United Kingdom, France, Russia, Australia, Canada and Brazil.

In November 2019, the 36 Council's members elected during the 40th ICAO Assembly (Montreal, September 24th - October 4th), will elect the ICAO President for the three-year period 2020-2022.

For this role, the Directors General of civil aviation of the 44 Countries participating in the European Civil Aviation Conference, selected on May 14th, 2018, as European candidate, the Italian Eng. Salvatore Sciacchitano. That is a confirmation of the strategic role played by Italy so far, that we hope will bring the desired result in the upcoming 2019 elections.

In performing its institutional mission of regulation, surveillance and control in the aviation field, ENAC develops and implements several International and European Programmes to promote the development of civil aviation, air transport security and safety, passengers' rights, quality of services, fair competition and protection of the environment.

In view of the 40th ICAO General Assembly, ENAC has started in 2018 the discussions about the European strategic priorities and the participation in the ECAC and EU activities aimed at coordinating the European positions to be represented in ICAO, with reference to important issues, like security.

As ECAC Vice President and Focal Point for Security & Facilitation, roles confirmed on the latest 11th of July, during the triennial plenary session of the organisation, I will be responsible, for three more years, for Security,

intended as prevention from acts of unlawful interference in civil aviation, with the purpose of identifying and harmonising shared counter-terrorism measures for ECAC Member States and proposing the adoption of concrete initiatives not yet covered by international legislation.

During the second ICAO high-level Conference on Aviation Security (Montreal, 29th - 30th November 2018), I represented the EU's position related to the implementation of the ICAO Global Aviation Security Plan. The GASeP was issued in 2017 in order to indicate the actions and goals for strengthening global security ensuring full compliance with the Standards and Recommendations of Annex 17 to the Chicago Convention:

- enhance risk awareness and response;
- develop security culture;
- improve technology and foster innovation;
- improve oversight and quality assurance;
- increase cooperation and support activities.

On October 4th, during a workshop organised by ENAC, the GASeP has been presented to the Italian Institutions, associations and aeronautical services providers involved in Security, therefore the prevention from acts of unlawful interference in civil aviation, such as CISA (National Civil Aviation Security Committee), airport managing bodies, the main national air carriers and security devices manufacturers.

In the field of Facilitations, the European priorities are particularly relevant to immigration matters, with the purpose of sharing and developing the best practices for border control procedures, with particular reference to practical implementation, such as automatised control systems and the collection of biometric data, API - Advance Passenger Information and PNR - Passenger Name Record.

In this respect, ENAC has given its contribution to the Ministry of Foreign Affairs and International Cooperation in the Italian accession process to the PKD - Public Key Directory project, that is part of the ICAO programme for passenger identification, particularly addressing passport authentication. The EU priorities in the Facilitation sector, include the coordination of the provisions on the protection of Passengers with Reduced Mobility, as well as the assistance to aircraft accident victims and their families.

On October 16th, during a special session in the margins of the 13th ICAO Air Navigation Conference, ENAC has been invited to disclose the Italian experience on this latter issue and our Country has been indicated as example of good practice.

To that regard, last October 12th, the Italian Civil Aviation Authority released the new edition of the ENAC Advisory Circular GEN 05 "Plan of assistance to victims of air accidents and their families" which also invites us to reflect on how the assistance responsibility of the air carrier, that cannot be based in every airport, needs to be extended to the other subjects involved: airport managing bodies, Institutions and Third parties, such as associations specialised in the psychological support to victims' families, which should be involved in structured emergency first response activities.

The goal is the creation of a responsible system, made up not only of air carriers, but all the actors involved in the assistance action.

The ENAC contribution to the global air traffic management has been highlighted during the 13th ICAO Air Navigation Conference (Montreal, October 9th - 19th 2018), focused on the discussion of the main global safety and air navigation goals, where Italy and Eurocontrol jointly presented a paper whose recommendations have been included in the Conference final report.

In its feedback on the European network performance in 2018, Eurocontrol expressed great satisfaction for the Italian contribution in terms of safety and punctuality. The Italian proportion of the flow management delays fell from 1.1% in 2017 to 0.8% in 2018, even if the overall European network delays increased by 61.3% more than the previous year.

Regarding the route charges billed by Eurocontrol on behalf of Italy, the overall amount of € 744.6 million, is 9.7% higher than 2017 and represents the 9.2% of the total invoiced by Eurocontrol in 2018.

Furthermore, Italy fulfilled the levels of capacity to which it had committed in the Network Operational Plan; none of the Italian control centres contributed significantly to the total en-route delays caused by the lack of capacity of the European network. Moreover, Eurocontrol expressed its appreciation for the EATEO Conference,

it was pleased to host in its Headquarters in Bruxelles on the November 9th, 2018. The European Association of Aviation Training and Education Organizations, which I am honoured to chair, offers aeronautical education and training and it also dealt with the topic of air traffic controllers mobility.

The EATEO Symposium draw attention to the necessary collaboration among all aviation stakeholders - regulators, associations, universities, research centres, air carriers, airports and air navigation service providers - in order to implement shared training policy as essential tool for air transport development, safety and efficiency.

In this field, ENAC has decided to play an important role. As President of JAA-TO - Joint Aviation Authorities-Training Organization and EASTI - European Aviation Security Training Institute, both Europeans entities which aim at harmonizing aviation training among their Member States, I strongly believe in the key role of education and training in carrying out all human activities. That role is even more fundamental, in the aviation sector, where the fast evolution of technology and legislation, combined with the constant traffic growth expected in the next years, require a continuous professional training and the development of new training requirements, in close cooperation with all the players involved at regional and interregional level.

ENAC is involved in aviation training activities through an intense collaboration with foreign civil aviation authorities, in a reciprocal exchange of skill and know-how in order to develop long term strategies and rulemaking activities to accomplish typical Civil Aviation Authorities tasks, e.g. certification, validation and surveillance. In recent years, this form of collaboration has become more formal and systematic thanks to the implementation of Twinning projects funded by EU, capacity building programmes promoted by ECAC and ICAO and bilateral cooperation agreements. Among ENAC initiatives in 2018, I would like to mention the cooperation agreement signed by Italy and Somalia and Italy and Albania.

ENAC activity in the training field has been particularly focused on a challenging future project, the ENAC Academy for Civil Aviation, which will have the objective of developing the aeronautical culture and promoting the civil aviation, as established in ENAC mission. The Academy will be tasked to develop the competences of all the national and international players involved in the civil aviation sector, by providing advanced training courses and creating a network of excellence together with universities and institutional or private players owning an international aeronautic know-how.

The initiatives will be address at satisfying the internal training needs and the external ones coming from the aeronautical stakeholders, in relation to the updates established by the international legislation, as well as the needs of the foreign aeronautical authorities, within the capacity building agreements signed with ENAC. The Academy is not intended to be a competitor of other training players on the market. The offer will be addressed to the staff working in the field of the training of companies, as is already the case, for instance, in the "train the trainer" programme for security instructors.

In the specific field of environmental protection, ENAC has given its own financial contribution to the ICAO ACT-CORSIA - Assistance, Capacity Building, Training - Carbon Offsetting and Reduction Scheme for International Aviation, a Programme which is aimed at supporting the preliminary activities required for the implementation of CORSIA, the international system for the compensation and reduction of the CO₂ produced by the international civil aviation. ENAC also takes part in the ICAO States' Action Plan Buddy Programme, based on a cooperation agreement signed by ENAC and the Civil Aviation Authority of Madagascar to help the Country in the elaboration of its national Action Plan on CO₂ emissions reduction.

I want to reaffirm the Italian commitment to the cooperation and support programmes promoted by ICAO on environmental sustainability, a very important topic for us. Italy, through ENAC, contributes to the development of the sectoral legislation within the ICAO Committee on Aviation Environmental Protection and its subgroups working on some key issues for international air transport: noise and gas emission reduction, supersonic, particulate matter, global market-based measures for CO₂ emissions reduction, alternative fuels, optimisation of routes and air navigation services.

At Community level as well, ENAC made its contribution to the Permanent Representation of Italy to the EU, for several activities concerning the transposition in the Community legislation of the ICAO international regulation regarding CORSIA.

At European level, ENAC participates in the development of the EU Aviation Strategy, launched in December 2015 to generate growth for European companies, foster innovation, let passengers profit from cheaper flights and increase connectivity. The European Aviation Summit organised by the Austrian Presidency of the Council of the European Union on October 3rd- 4th 2018, provided an opportunity to discuss the future of the Strategy and the challenges we will have to face in the negotiations of the new global agreements between EU and Third Countries. Among them: the creation of partnerships able to promote the European aviation competitiveness at a global level, the connectivity growth, the fifth freedom of the air and the liberalisation of foreign investments in European air carriers.

Moreover, some critical issues have emerged, concerning airports lack of capacity and congestion, flight delays, air traffic management, new technologies developments, such as drones which will have to comply with environmental sustainability criteria and contribute to the implementation of a green aviation characterised by low noise and gas pollution.

The 2018 has obviously brought with it all the matters related to the United Kingdom's intention to leave the EU, notified on March 29th, 2017, on which ENAC provided its analysis and evaluation. Particular concern was expressed in relation to a hard Brexit scenario, as the European law that currently regulate the civil aviation sector will no more be applicable in UK, with a negative impact on air connections and the service quality for passengers. In this undesirable circumstance, bilateral agreements, even of a temporary nature, will be needed to allow the continuity of operations, obviously in compliance with the Regulation of the European Parliament and Council on the common rules ensuring basic air connectivity with regard to the withdrawal of the United Kingdom from the Union.

The process of harmonisation of rules, to which ENAC gives its contribution by collaborating through its personnel in the frame of European and international fora and by promoting the ratification of several international Conventions and Protocols, represents a crucial aspect for the development of civil aviation. The priority outcome is to act in an increasingly organic manner with respect to emerging challenges, raise the quality and efficiency level of services for both citizens and stakeholders and confirm the role of civil aviation as essential driver of world economic growth.



Alessandro Cardì

DEPUTY DIRECTOR GENERAL
ITALIAN CIVIL AVIATION AUTHORITY

In line with the recent years, the safety level of air transport remained high and it proved itself to be the safest means of transport. The incident rate per million flights is always lower, 0.83 is the European global in 2018, and there are concrete possibilities to halve it in the next years.

However, it should be pointed out that additional improvements in the safety level can be reached if we are aware of the areas with a higher risk exposure. In order to achieve this goal, it is crucial to measure the air transport safety in an objective and reproducible way. It is possible to remove or mitigate the incidents causes through specific corrective actions only if we identify and evaluate the accident precursors. In 2018, ENAC has been one of the first European aeronautical authorities to be audited by EASA (European Union Aviation Safety Agency) about the reporting system of aeronautical events, made mandatory under the EU Regulation 376/2014. The EASA verification highlighted the elevated degree of maturity achieved by the ENAC reporting system (eE-MOR system), active for many years, which received a formal appreciation by the auditing team that also recognised its usefulness for the inspection planning in the Performance Based Oversight context.

The eE-MOR collects and manages almost all the aeronautical events happening in Italy since, in the last years, it has started to systematically collect the reports from ENAV and Italian Air Force as well. During the last year, ENAC received almost 10,000 mandatory reports and the trend is currently increasing.

Analysing the events, it is possible to identify the operational high-risk areas which are useful to pinpoint the corrective actions to remove or mitigate the causes and to direct the ENAC's oversight activity, increasing its effectiveness. The always more extensive use of objective data, measurements of the organisational performances, maturity and reliability of the safety management systems make the surveillance activities execution more efficient, to the benefit of the air transport industry and the competitiveness levels that needs to be improved more and more. This database has been crucial to develop the first set of Safety Performance Indicators (SPI) that will allow ENAC to objectively measure the safety health of the Italian civil aviation. Moreover, the use of objective data permits the rationalisation of the risk mitigation actions in order to achieve an even higher safety level. The safety indicators will be published in the first half of 2019 and they will be monitored and updated to fit the evolving Italian and international aeronautical scenario. In this context, it may be pointed out the entry into force of the new Regulation (EU) 2018/1139 whose innovations have been adopted by ENAC. For instance, the mandatory implementation of a State Safety Programme integrated with the European one. The Italian State Safety Programme, currently at its third edition and consistent with the European one, becomes complete with the adoption of the Safety Performance Indicators and it is now one of the most advanced in the world, as stated by ICAO in its evaluation published on the iStars website. Simultaneously, the ENAC Safety Plan update (2018-2022 edition recently published) ensures the coherence of the implemented Safety Actions with the EASA requirements of the European Plan for Aviation Safety (EPAS) and includes national needs as well.

For the first time, the 2018-2022 Safety Plan includes the regulatory action that ENAC intends to complete in the next years, gathered in the strategical planning document, in order to consolidate and improve the excellent air

safety levels of the national and European system. The basic Regulation 2018/1139 implementation remoulded the system of powers between the European Institutions and the Member States, resulting in new commitments for ENAC in providing support to EASA. Among the most significant there is the attribution to EASA of new competences about drones, of the cybersecurity (aircraft, operations and Air Traffic Management), of the replacement of the national authorities if non-appropriate to ensure the air safety oversight, of the creation of a team of experts for the international activities and much more. An aspect of the new regulation that I want to highlight is its strong internationalisation: it is a step forward towards the integration of the European system in some of the typical activities of the aeronautical authorities, such as the evaluation of the civil aviation systems of the Non-EU countries and the capacity building activities, i.e. the support activities to the authorities which are not able to ensure an adequate control over the national civil aviation. The innovations introduced by the regulation represent a challenge for ENAC which will be called to a higher participation in the international activities with EASA on its behalf. The new activities development, which are a great value for our system, consolidates and extends the ENAC successful international role in supporting other States. These activities provide an important contribution to the ICAO policies about the growth of the global safety that the UN Agency pursues with the "No Country Left Behind" programme.

In the last years, there has been much discussion about the emerging technologies of innovative sectors in the fields of planning and production and services. The drones and suborbital commercial transport regulation activities have been a constant commitment for ENAC. In 2018, there has been an intense research and experimental activities about the innovative modality of drones use, such as the BVLOS (Beyond Visual Line of Sight) operations remotely controlled or autonomous flights.

These operations are particularly important for the market because only if we have the possibility to use drones for long distances with the automatic flight control systems, we can offer a high added value service to the players of the services and goods field and to the companies that provides social services such as the health and the safety of citizens. In other words, we must define the qualifying factors to move from an artisan-like dimension to the industrial one. In 2018, some best practices have been verified and consolidated, and they will be published in the first semester 2019 to support some typical-case scenarios to start the BVLOS operations. The 2018 activities have also been the base to start new development initiatives to support the very recent directions about urban mobility, concept included in the smart cities' evolution criteria, in coherence with the directions indicated by European commission in the road map aimed at integrating the drones in the commercial civil aviation.

ENAC is at the forefront and it intends to reinforce its sector's leadership maintaining in the strategical priorities the drone regulation activities. In 2018, a similar strong commitment has been dedicated to the activities aimed at creating a regulatory framework for the suborbital commercial operations. The elaboration concerned the technical training activity, the investigation about the normative-juridical aspects of the new business model innovations, the organisation and management of an interinstitutional and interdisciplinary work group open to the sector's industry focused on the elaboration of the future technical-operational rules.

To the present day, ENAC and other stakeholders' commitment has produced important result such as the regulation scheme for the spaceports certification and the first indications for the flight operations regulation.

Furthermore, selection activities to identify locations for the spaceport have been completed and the result is the Minister of Infrastructures and Transports decision on the designation of Taranto Grottaglie as national spaceport and strategic structure to ensure an autonomous access to the space and so to implement the governmental policies about space economy. The decree, dated May 9th, 2018, represents a historic moment for the implementation of the governmental policies about space transport and gives ENAC a role of great responsibility towards the community in such an innovative and full of expectations context under the industrial and services development profile. ENAC has accepted the challenge and it operates with devotion in this new sector that creates a great interest in the European institutions. It is clear how today the space has been reconsidered under the industrial and services profile, also by reason of the continuous transfer of the infrastructures from the Earth's surface to the space.

The constellation of satellites will represent more and more the strategic infrastructures to provide high value services and for the people's safety. Because of that, ENAC will be required to make a strong investment in high qualified human resources to create the conditions to develop the activities and to not disappoint the expectations of the national companies that will have the necessity to plan considerable investments in order to compete with other Countries.



ITALIAN AIR
TRANSPORT IN
2018





Overall domestic and international commercial traffic 2018

Scheduled and non-scheduled flights (arrivals + departures)

AIRPORT	Movements		Passengers		Transits		Cargo	
	Number	Var. % 2018/2017	Number	Var. % 2018/2017	Number	Var. % 2018/2017	Tons	Var. % 2018/2017
1 ALGHERO	10,126	9.2	1,354,371	2.7	9,788	328.5	2	-77.0
2 ANCONA	5,446	-20.6	447,144	-6.4	801	-67.9	6,618	3.0
3 BARI	36,482	4.3	5,014,896	7.4	11,912	-3.7	1,763	12.1
4 BERGAMO	88,120	4.2	12,827,267	4.9	3,039	-9.4	124,111	-1.4
5 BOLOGNA	67,563	0.7	8,489,382	3.8	10,098	22.9	40,540	-3.4
6 BOLZANO	200	47.1	7,885	33.4	-	-	-	-
7 BRESCIA	2,988	2.8	3,422	-57.5	-	-	10,313	-46.9
8 BRINDISI	16,755	5.8	2,470,255	6.7	4,698	53.9	43	-21.1
9 CAGLIARI	31,371	0.1	4,355,357	5.0	9,943	306.3	3,587	26.4
10 CATANIA	71,425	8.0	9,815,313	8.7	24,705	269.6	6,393	-4.4
11 COMISO	2,855	2.1	423,304	-3.1	777	167.0	-	-
12 CROTONE	574	-	83,797	-	-	-	-	-
13 CUNEO	872	12.4	107,346	-7.7	4,128	105.2	-	-
14 FIRENZE	27,608	-5.0	2,706,689	2.3	59	-63.8	64	2.9
15 FOGGIA	2	0.0	-	-100.0	-	-	0	-
16 GENOVA	14,820	15.2	1,448,718	16.7	1,101	-34.7	146	-7.6
17 GROSSETO	144	67.4	7,650	-1.6	-	-	-	-
18 LAMEZIA TERME	19,098	10.4	2,746,399	8.2	8,906	25.5	1,010	2.3
19 LAMPEDUSA	4,107	4.7	268,197	5.7	23	-	15	-5.4
20 MARINA DI CAMPO	71	-91.7	718	-92.2	-	-	-	-
21 MILANO LINATE	93,987	-2.6	9,187,120	-3.3	1,268	28.9	12,571	-9.0
22 MILANO MALPENSA	189,910	8.7	24,561,735	11.5	154,501	25.8	572,775	-2.9
23 NAPOLI	72,538	8.5	9,903,551	15.8	18,038	29.1	9,821	13.6
24 OLBIA	23,015	0.4	2,969,458	6.6	4,827	60.8	152	-19.2
25 PALERMO	48,642	10.5	6,601,472	14.7	20,488	25.4	374	15.3
26 PANTELLERIA	3,550	6.3	151,143	-0.5	-	-	27	6.5
27 PARMA	570	-48.6	75,253	-52.2	396	-39.9	-	-
28 PERUGIA	1,448	-18.3	219,861	-10.8	-	-100.0	-	-
29 PESCARA	5,005	-7.8	657,365	-0.2	308	-40.5	22	38.7
30 PISA	38,512	2.6	5,449,334	4.3	4,006	75.5	11,174	9.5
31 REGGIO CALABRIA	3,507	5.7	357,066	-6.1	-	-	16	-51.6
32 RIMINI	2,033	2.8	304,191	1.1	398	-44.6	34	756.3
33 ROMA CIAMPINO	35,013	-1.1	5,812,451	-0.7	-	-	18,258	7.1
34 ROMA FIUMICINO	304,969	3.5	42,896,831	5.0	94,225	-26.2	205,862	10.9
35 SALERNO	4	-97.1	141	-95.3	-	-	-	-
36 TARANTO	252	-27.2	58	100.0	-	-	6,837	9.7
37 TORINO	38,062	-4.2	4,072,612	-2.2	4,567	55.6	412	-1.2
38 TRAPANI	4,929	-45.2	470,150	-63.6	8,636	2,624.3	18	-49.4
39 TREVISO	19,540	9.4	3,274,286	9.8	189	-66.4	-	-100.0
40 TRIESTE	8,245	-4.8	769,505	-1.0	389	104.7	116	9.5
41 VENEZIA	89,733	5.2	11,092,525	7.9	7,877	0.6	56,572	8.7
42 VERONA	29,375	8.9	3,406,631	11.8	12,111	-19.9	1,052	180.5
TOTAL	1,413,466	3.6	184,810,849	5.8	422,202	14.7	1,090,699	-0.0

Overall domestic commercial traffic 2018

Scheduled and non-scheduled flights (arrivals + departures)

AIRPORT	Movements		Passengers		Cargo	
	Number	Var. % 2018/2017	Number	Var. % 2018/2017	Tons	Var. % 2018/2017
1 ALGHERO	7,509	3.7	954,410	-3.9	2	-77.0
2 ANCONA	1,563	-53.5	84,486	-48.3	5,978	-1.5
3 BARI	21,071	-0.5	2,875,860	1.5	1,688	19.2
4 BERGAMO	21,789	2.3	3,258,746	0.5	19,753	26.9
5 BOLOGNA	14,526	-0.3	1,970,905	1.8	3,429	-16.2
6 BOLZANO	103	6.2	6,050	13.5	-	-
7 BRESCIA	2,664	7.9	662	794.6	8,903	-1.1
8 BRINDISI	12,681	2.4	1,860,070	3.0	42	481.8
9 CAGLIARI	23,138	-6.7	3,257,527	-0.3	3,447	23.0
10 CATANIA	47,027	3.0	6,403,049	4.4	5,786	0.1
11 COMISO	1,569	-4.9	247,869	-5.6	-	-
12 CROTONE	562	-	83,797	-	-	-
13 CUNEO	314	-28.1	53,330	-31.0	-	-
14 FIRENZE	3,843	-12.7	381,721	-0.7	14	6.5
15 FOGGIA	-	-100.0	-	-100.0	-	-
16 GENOVA	7,004	-0.5	742,319	4.1	84	24.2
17 GROSSETO	2	-100.0	-	-	-	-
18 LAMEZIA TERME	14,257	8.6	2,049,625	6.3	1,010	2.8
19 LAMPEDUSA	4,103	6.3	268,155	6.2	15	-5.4
20 MARINA DI CAMPO	-	-100.0	-	-100.0	-	-
21 MILANO LINATE	49,206	-2.4	4,841,508	-1.7	1,113	-11.9
22 MILANO MALPENSA	29,618	34.5	4,093,221	29.4	886	-24.1
23 NAPOLI	28,508	1.4	3,458,616	16.2	8,870	9.3
24 OLBIA	11,764	-7.2	1,459,574	1.4	146	-16.7
25 PALERMO	36,782	7.5	4,926,889	12.0	365	14.9
26 PANTELLERIA	3,546	6.2	151,143	-0.5	27	6.0
27 PARMA	271	-66.5	42,657	-65.6	-	-
28 PERUGIA	317	-45.6	50,072	-31.5	-	-
29 PESCARA	2,704	-12.2	291,911	-3.7	1	422.4
30 PISA	10,763	-2.9	1,440,336	0.7	4,350	67.4
31 REGGIO CALABRIA	3,501	5.5	356,938	-6.1	16	-51.6
32 RIMINI	21	-44.7	551	-2.5	-	-
33 ROMA CIAMPINO	1,385	4.9	228,999	4.6	71	-5.3
34 ROMA FIUMICINO	99,303	0.5	11,502,570	0.3	3,994	11.4
35 SALERNO	4	-81.8	141	-58.9	-	-
36 TARANTO	4	-96.5	12	100.0	94	248.8
37 TORINO	16,255	-8.4	1,995,805	-6.0	113	26.7
38 TRAPANI	4,181	-38.1	366,826	-60.3	18	-10.3
39 TREVISO	6,320	14.1	1,073,996	12.4	-	-100.0
40 TRIESTE	5,072	-9.4	485,095	-5.7	33	34.5
41 VENEZIA	13,834	10.5	1,551,341	14.9	2,194	6.1
42 VERONA	10,958	8.3	1,205,989	19.1	479	6,374.3
TOTAL	518,042	1.1	64,022,771	3.4	72,921	11.5

Overall international commercial traffic 2018

Scheduled and non-scheduled flights (arrivals + departures)

AIRPORT	Movements		Passengers		Cargo	
	Number	Var. % 2018/2017	Number	Var. % 2018/2017	Tons	Var. % 2018/2017
1 ALGERO	2,617	28.9	399,961	23.1	-	-
2 ANCONA	3,883	11.1	362,658	15.5	639	80.2
3 BARI	15,411	11.5	2,139,036	16.5	75	-52.0
4 BERGAMO	66,331	4.9	9,568,521	6.5	104,358	-5.4
5 BOLOGNA	53,037	1.0	6,518,477	4.4	37,111	-2.1
6 BOLZANO	97	148.7	1,835	215.8	-	-
7 BRESCIA	324	-26.2	2,760	-65.4	1,411	-86.5
8 BRINDISI	4,074	18.1	610,185	20.0	1	-98.5
9 CAGLIARI	8,233	25.6	1,097,830	24.3	141	282.8
10 CATANIA	24,398	19.0	3,412,264	17.9	607	-32.9
11 COMISO	1,286	12.2	175,435	0.7	-	-
12 CROTONE	12	-	-	-	-	-
13 CUNEO	558	64.6	54,016	38.4	-	-
14 FIRENZE	23,765	-3.7	2,324,968	2.8	50	2.0
15 FOGGIA	2	100.0	-	-	0	-
16 GENOVA	7,816	34.2	706,399	33.7	62	-31.3
17 GROSSETO	142	65.1	7,650	-1.6	-	-
18 LAMEZIA TERME	4,841	16.1	696,774	14.1	-	-100.0
19 LAMPEDUSA	4	-93.8	42	-96.3	-	-
20 MARINA DI CAMPO	71	-78.4	718	-86.2	-	-
21 MILANO LINATE	44,781	-2.8	4,345,612	-5.0	11,458	-8.7
22 MILANO MALPENSA	160,292	5.0	20,468,514	8.5	571,889	-2.8
23 NAPOLI	44,030	13.6	6,444,935	15.6	952	80.4
24 OLBIA	11,251	9.9	1,509,884	12.2	6	-53.3
25 PALERMO	11,860	20.8	1,674,583	23.7	8	34.9
26 PANTELLERIA	4	-	-	-	0	-
27 PARMA	299	-0.3	32,596	-2.2	-	-
28 PERUGIA	1,131	-4.9	169,789	-2.1	-	-
29 PESCARA	2,301	-2.1	365,454	2.9	21	32.9
30 PISA	27,749	4.9	4,008,998	5.7	6,824	-10.3
31 REGGIO CALABRIA	6	100.0	128	100.0	-	-
32 RIMINI	2,012	3.8	303,640	1.1	34	756.3
33 ROMA CIAMPINO	33,628	-1.4	5,583,452	-0.9	18,187	7.2
34 ROMA FIUMICINO	205,666	4.9	31,394,261	6.9	201,868	10.9
35 SALERNO	-	-100.0	-	-100.0	-	-
36 TARANTO	248	7.4	46	100.0	6,743	8.6
37 TORINO	21,807	-0.7	2,076,807	1.7	299	-8.8
38 TRAPANI	748	-66.7	103,324	-71.9	0	-100.0
39 TREVISO	13,220	7.2	2,200,290	8.5	-	-100.0
40 TRIESTE	3,173	3.6	284,410	8.1	83	1.9
41 VENEZIA	75,899	4.2	9,541,184	6.8	54,378	8.8
42 VERONA	18,417	9.2	2,200,642	8.2	573	55.9
TOTAL	895,424	5.1	120,788,078	7.2	1,017,779	-0.8

Air taxi and General Aviation traffic 2018

AIRPORT	Air taxi				General Aviation			
	Movements	Passengers	Transits	Cargo (T)	Movements	Passengers	Transits	Cargo (T)
1 ALBENGA	560	943	-	-	1,689	1,591	-	-
2 ALGHERO	154	283	11	-	518	562	90	-
3 ALESSANDRIA	-	-	-	-	224	30	-	-
4 ANCONA	2,359	3,567	9	-	2,043	1,055	-	-
5 AOSTA	89	302	-	-	6,020	3,084	-	-
6 BARI	2,244	1,362	-	-	1,287	2,016	-	0.6
7 BERGAMO	-	-	-	-	1,413	2,173	-	-
8 BIELLA	-	-	-	-	8,288	16,749	-	-
9 BOLOGNA	-	-	-	-	3,940	7,178	-	-
10 BOLZANO	671	1,184	22	-	11,475	8,895	278	-
11 BRESCIA	-	-	-	-	5,099	5,151	18	-
12 BRINDISI	1,323	1,592	-	-	1,116	2,173	6	-
13 CAGLIARI	1,583	3,925	5	-	728	656	9	-
14 CAPUA	-	-	-	-	5,217	7	-	-
15 CASALE MONFERRATO	-	-	-	-	274	-	-	-
16 CATANIA	1,451	3,098	-	0.3	609	1,360	-	-
17 COMISO	111	226	8	-	746	246	-	-
18 CROTONE	-	-	-	-	85	57	-	-
19 CUNEO	326	1,364	9	-	3,387	1,609	-	-
20 FANO	-	-	-	-	1,355	120	-	-
21 FIRENZE	3,371	7,266	3	-	3,246	5,052	6	-
22 FOLIGNO	-	-	-	-	623	40	-	-
23 FOGGIA	66	69	-	-	515	450	11	-
24 GENOVA	-	-	-	-	5,543	5,690	-	-
25 GROSSETO	1,080	2,054	-	-	596	854	-	-
26 L'AQUILA	-	-	-	-	702	1,814	-	-
27 LAMEZIA TERME	-	-	-	-	3,611	806	-	-
28 LAMPEDUSA	397	934	-	-	1,017	78	-	-
29 LUCCA	-	-	-	-	8,498	158	-	-
30 MARINA DI CAMPO	225	308	-	-	3,158	3,808	-	-
31 MASSA	-	-	-	-	3,842	2,565	-	-
32 MILANO LINATE	-	-	-	-	21,314	45,087	-	-
33 MILANO MALPENSA	-	-	-	-	4,605	9,254	-	-
34 NAPOLI	-	-	-	-	6,394	10,440	-	-
35 NOVI LIGURE	-	-	-	-	1,973	-	-	-
36 OLBIA	-	-	-	-	11,544	24,901	56	-
37 PALERMO	1,221	2,247	45	-	788	1,541	28	-
38 PALERMO BOCCADIFALCO	-	-	-	-	2,682	83	-	-
39 PANTELLERIA	307	522	-	0.0	54	41	-	-
40 PARMA	1,093	1,610	5	-	2,997	1,750	10	-
41 PERUGIA	1,206	2,557	-	-	900	992	-	-
42 PESCARA	1,431	645	4	0.1	1,611	1,346	6	0.0
43 PISA	3,299	6,889	17	-	1,298	2,860	37	0.0
44 REGGIO CALABRIA	-	-	-	-	2,702	1,628	-	-
45 REGGIO EMILIA	-	-	-	-	9,230	1,938	-	-
46 RIMINI	1,323	2,307	49	-	828	1,038	38	-
47 ROMA CIAMPINO	8,649	16,946	-	0.4	8,987	10,340	-	0.6
48 ROMA FIUMICINO	185	346	8	2.5	2,582	2,094	1,615	14.4
49 ROMA URBE	-	-	-	-	27,738	1,534	-	-
50 SALERNO	217	363	-	-	3,759	6,088	-	-
51 SIENA	377	528	-	-	1,089	860	-	-
52 TARANTO	72	145	-	-	683	127	-	-
53 TORINO	-	-	-	-	7,449	7,744	-	-
54 TORINO AERITALIA	-	-	-	-	20,228	16,995	-	-
55 TRAPANI	363	744	-	-	655	401	52	-
56 TRENTO	-	-	-	-	20,539	15,340	-	-
57 TREVISO	1,063	1,815	-	-	2,278	2,444	1	-
58 TRIESTE	833	1,278	14	-	6,219	1,243	32	-
59 VENEZIA	468	714	-	-	4,884	11,253	-	-
60 VERCELLI	-	-	-	-	4,540	682	-	-
61 VERONA	-	-	-	-	3,257	6,330	6	-
TOTAL	38,117	68,133	209	3.3	270,671	262,401	2,299	15.6

Airports not in the list have not provided data.



2018 Ranking of the Italian airports based on total number of passengers carried

AIRPORT	Passengers (number)	Var. % 2018/2017	Overall incidence (%)	Distribution (%)	
				Domestic	International
1 ROMA FIUMICINO	42,896,831	5.0	23.2	26.8	73.2
2 MILANO MALPENSA	24,561,735	11.5	13.3	16.7	83.3
3 BERGAMO	12,827,267	4.9	6.9	25.4	74.6
4 VENEZIA	11,092,525	7.9	6.0	14.0	86.0
5 NAPOLI	9,903,551	15.8	5.4	34.9	65.1
6 CATANIA	9,815,313	8.7	5.3	65.2	34.8
7 MILANO LINATE	9,187,120	-3.3	5.0	52.7	47.3
8 BOLOGNA	8,489,382	3.8	4.6	23.2	76.8
9 PALERMO	6,601,472	14.7	3.6	74.6	25.4
10 ROMA CIAMPINO	5,812,451	-0.7	3.1	3.9	96.1
11 PISA	5,449,334	4.3	2.9	26.4	73.6
12 BARI	5,014,896	7.4	2.7	57.3	42.7
13 CAGLIARI	4,355,357	5.0	2.4	74.8	25.2
14 TORINO	4,072,612	-2.2	2.2	49.0	51.0
15 VERONA	3,406,631	11.8	1.8	35.4	64.6
16 TREVISO	3,274,286	9.8	1.8	32.8	67.2
17 OLBIA	2,969,458	6.6	1.6	49.2	50.8
18 LAMEZIA TERME	2,746,399	8.2	1.5	74.6	25.4
19 FIRENZE	2,706,689	2.3	1.5	14.1	85.9
20 BRINDISI	2,470,255	6.7	1.3	75.3	24.7
21 GENOVA	1,448,718	16.7	0.8	51.2	48.8
22 ALGHERO	1,354,371	2.7	0.7	70.5	29.5
23 TRIESTE	769,505	-1.0	0.4	63.0	37.0
24 PESCARA	657,365	-0.2	0.4	44.4	55.6
25 TRAPANI	470,150	-63.6	0.3	78.0	22.0
26 ANCONA	447,144	-6.4	0.2	18.9	81.1
27 COMISO	423,304	-3.1	0.2	58.6	41.4
28 REGGIO CALABRIA	357,066	-6.1	0.2	100.0	0.0
29 RIMINI	304,191	1.1	0.2	0.2	99.8
30 LAMPEDUSA	268,197	5.7	0.1	100.0	0.0
31 PERUGIA	219,861	-10.8	0.1	22.8	77.2
32 PANTELLERIA	151,143	-0.5	0.1	100.0	0.0
33 CUNEO	107,346	-7.7	0.1	49.7	50.3
34 CROTONE	83,797	-	0.0	100.0	0.0
35 PARMA	75,253	-52.2	0.0	56.7	43.3
36 BOLZANO	7,885	33.4	0.0	76.7	23.3
37 GROSSETO	7,650	-1.6	0.0	0.0	100.0
38 BRESCIA	3,422	-57.5	0.0	19.3	80.7
39 MARINA DI CAMPO	718	-92.2	0.0	0.0	100.0
40 SALERNO	141	-95.3	0.0	100.0	0.0
41 TARANTO	58	100.0	0.0	20.7	79.3
42 FOGGIA	-	-100.0	0.0	-	-
TOTAL	184,810,849	5.8	100.0	34.6	65.4

Top 50 airlines operating in Italy ranked on passengers carried – 2018 vs 2017

AIRLINE	NATIONALITY	PASSENGERS CARRIED*		Var, % 2018/2017
		2018	2017	
1 Ryanair	Ireland	37,882,633	36,272,693	4.4
2 Alitalia	Italy	21,987,408	21,765,476	1.0
3 Easyjet - Easyjet Switzerland	Great Britain	18,484,435	16,526,021	11.9
4 Vueling Airlines	Spain	6,245,931	5,873,506	6.3
5 Lufthansa	Germany	4,909,295	4,529,777	8.4
6 Wizz Air	Hungary	4,748,674	4,307,344	10.2
7 British Airways	Great Britain	3,644,642	3,391,785	7.5
8 Volotea	Spain	3,130,883	2,295,845	36.4
9 Air France	France	2,889,197	2,784,450	3.8
10 Eurowings	Germany	2,651,451	1,532,528	73.0
11 Klm Royal Dutch Airlines	Netherlands	1,993,193	1,917,342	4.0
12 Emirates Airlines	United Arab Emirates	1,950,164	1,936,043	0.7
13 Air Italy (ex Meridiana Fly)	Italy	1,942,766	2,474,714	-21.5
14 Blue Air	Romania	1,768,516	1,786,026	-1.0
15 Turkish Airlines	Turkey	1,678,768	1,552,095	8.2
16 Blue Panorama Airlines	Italy	1,552,317	1,443,652	7.5
17 Iberia Airlines	Spain	1,535,069	1,333,050	15.2
18 Neos	Italy	1,246,178	1,163,808	7.1
19 Aeroflot Russian Airlines	Russia	1,159,898	1,068,881	8.5
20 Swiss International Air Lines	Switzerland	1,145,224	1,079,460	6.1
21 Tap Portugal	Portugal	1,126,792	970,713	16.1
22 Air Dolomiti	Italy	1,077,408	912,228	18.1
23 Brussels Airlines	Belgium	1,064,418	1,041,499	2.2
24 American Airlines	USA	967,874	830,791	16.5
25 Qatar Airways	Qatar	946,487	850,455	11.3
26 Delta Air Lines	USA	885,442	835,817	5.9
27 Norwegian Air International	Norway	794,550	729,810	8.9
28 Austrian Airlines	Austria	778,056	674,074	15.4
29 Scandinavian Airlines	Sweden	764,378	752,297	1.6
30 Air Europa	Spain	753,861	507,694	48.5
31 Transavia Holland	Netherlands	727,785	831,501	-12.5
32 Norwegian Air Shuttle	Norway	682,725	387,350	76.3
33 Aegean Airlines	Greece	661,877	557,055	18.8
34 Jet 2	Great Britain	621,646	409,415	51.8
35 Ernest Airlines	Italy	610,793	195,194	212.9
36 Aer Lingus	Ireland	595,074	566,667	5.0
37 Air Malta	Malta	566,808	426,825	32.8
38 United Airlines	USA	496,014	462,949	7.1
39 Ukraine International Airlines	Ukraine	482,100	373,769	29.0
40 Ethiad Airways	United Arab Emirates	474,265	441,873	7.3
41 Air China	China	470,189	415,923	13.0
42 Transavia France	France	457,365	381,029	20.0
43 El Al Israel Airlines	Israel	456,343	434,866	4.9
44 Finnair	Finland	435,355	409,891	6.2
45 Royal Air Maroc	Morocco	404,068	394,477	2.4
46 Tui Airways	Great Britain	391,667	370,954	5.6
47 Pegasus Hava Tasimaciligi	Turkey	388,190	372,413	4.2
48 Pobeda Air	Russia	379,229	189,504	100.1
49 S7 Airlines	Russia	370,321	206,787	79.1
50 Air Canada	Canada	361,699	320,923	12.7

* In order to ensure a correct ranking, the number of domestic passengers includes only departures.



2018 Ranking of the first 20 airlines operating in Italy according to the number of passengers carried

Domestic traffic

AIRLINE	NATIONALITY	PASSENGERS (departures)
1 Alitalia - Alitalia Express	Italy	12,160,138
2 Ryanair	Ireland	11,127,360
3 Easyjet	Great Britain	3,247,696
4 Volotea	Spain	2,115,526
5 Air Italy (ex Meridiana Fly)	Italy	1,291,160
6 Blue Air	Romania	839,592
7 Vueling Airlines	Spain	548,727
8 Blue Panorama Airlines	Italy	276,246
9 Dat Danish Air Transport	Denmark	109,907
10 Neos	Italy	85,980
11 Mistral Air	Italy	80,922
12 Air Horizon	Malta	28,699
13 Albastar	Spain	24,661
14 Air Dolomiti	Italy	16,874
15 Ural Airlines	Russia	16,775
16 Austrian Airlines	Austria	6,155
17 Gowair	Spain	5,626
18 Ernest Airlines	Italy	5,532
19 Corendon Dutch Airlines	Netherlands	5,519
20 Bulgarian Air Charter	Bulgaria	2,713

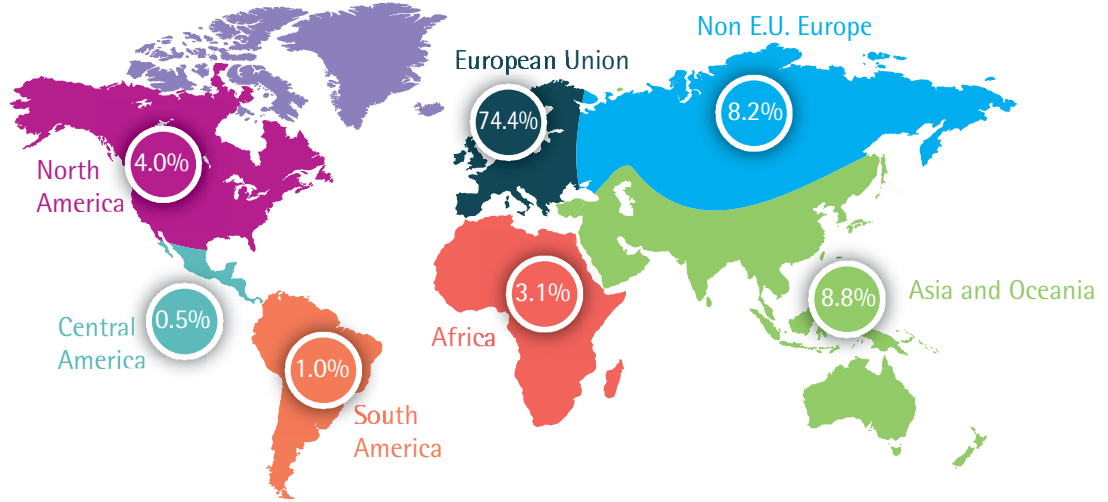
International traffic

AIRLINE	NATIONALITY	PASSENGERS (arrivals + departures)
1 Ryanair	Ireland	26,755,273
2 Easyjet - Easyjet Switzerland	Great Britain	15,236,739
3 Alitalia	Italy	9,827,270
4 Vueling Airlines	Spain	5,697,204
5 Lufthansa	Germany	4,909,129
6 Wizz Air	Hungary	4,748,674
7 British Airways	Great Britain	3,644,642
8 Air France	France	2,889,197
9 Eurowings	Germany	2,651,451
10 Klm	Netherlands	1,993,193
11 Emirates Airlines	United Arab Emirates	1,950,164
12 Turkish Airlines	Turkey	1,678,768
13 Iberia Airlines	Spain	1,535,069
14 Blue Panorama Airlines	Italy	1,276,071
15 Neos	Italy	1,160,198
16 Aeroflot Russian Airlines	Russia	1,159,898
17 Swiss International Air Lines	Switzerland	1,145,224
18 Tap Portugal	Portugal	1,126,659
19 Brussels Airlines	Belgium	1,064,418
20 Air Dolomiti	Italy	1,060,534

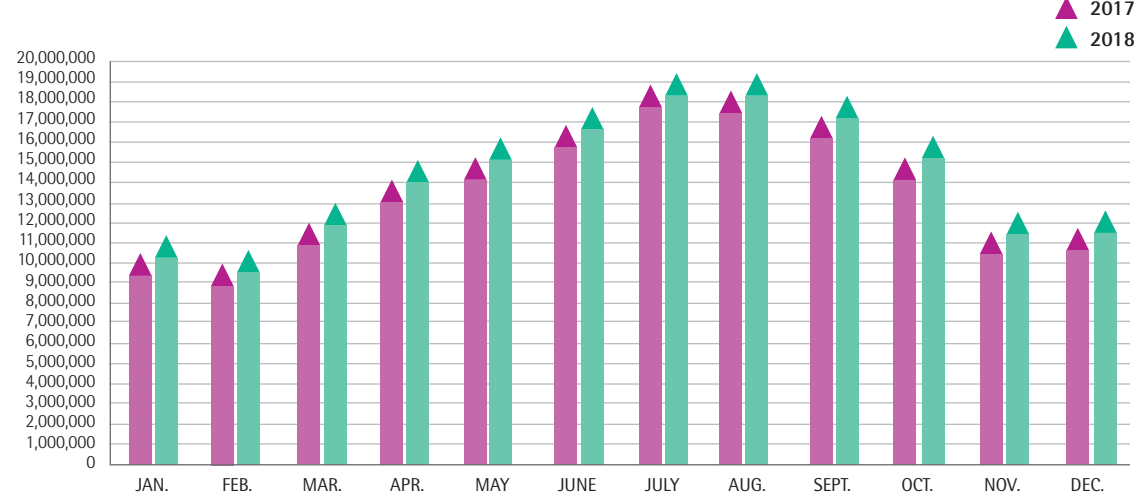
Main airline operating on each Italian airport 2018 based on the number of passengers carried

AIRPORT	AIRLINE	NATIONALITY
1 ALGHERO	Ryanair	Ireland
2 ANCONA	Ryanair	Ireland
3 BARI	Ryanair	Ireland
4 BERGAMO	Ryanair	Ireland
5 BOLOGNA	Ryanair	Ireland
6 BOLZANO	Austrian Airlines	Austria
7 BRESCIA	Mistral Air (Cargo)	Italy
8 BRINDISI	Ryanair	Ireland
9 CAGLIARI	Alitalia	Italy
10 CATANIA	Ryanair	Ireland
11 COMISO	Ryanair	Ireland
12 CROTONE	Ryanair	Ireland
13 CUNEO	Ryanair	Ireland
14 MARINA DI CAMPO	Silver Air	Czech Republic
15 FIRENZE	Vueling Airlines	Spain
16 GENOVA	Volotea	Spain
17 GROSSETO	Travel Service CZ	Czech Republic
18 LAMEZIA TERME	Ryanair	Ireland
19 LAMPEDUSA	Blue Panorama Airlines	Italy
20 MILANO LINATE	Alitalia	Italy
21 MILANO MALPENSA	Easyjet	Great Britain
22 NAPOLI	Easyjet	Great Britain
23 OLBIA	Air Italy (ex Meridiana Fly)	Italy
24 PALERMO	Ryanair	Ireland
25 PANTELLERIA	Dat Danish Air Transport	Denmark
26 PARMA	Ryanair	Ireland
27 PERUGIA	Ryanair	Ireland
28 PESCARA	Ryanair	Ireland
29 PISA	Ryanair	Ireland
30 REGGIO CALABRIA	Alitalia	Italy
31 RIMINI	Ural Airlines	Russia
32 ROMA CIAMPINO	Ryanair	Ireland
33 ROMA FIUMICINO	Alitalia	Italy
34 SALERNO	Pro Air	Germany
35 TARANTO	Atlas Air (Cargo)	USA
36 TORINO	Ryanair	Ireland
37 TRAPANI	Ryanair	Ireland
38 TREVISO	Ryanair	Ireland
39 TRIESTE	Alitalia	Italy
40 VENEZIA	Easyjet	Great Britain
41 VERONA	Volotea	Spain

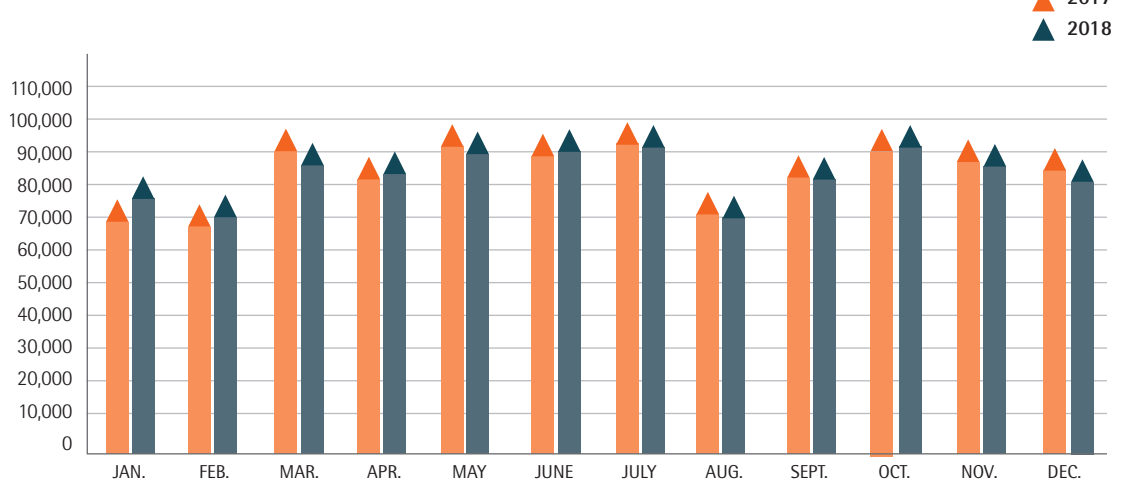
Passenger traffic distribution by origin/destination - Worldwide



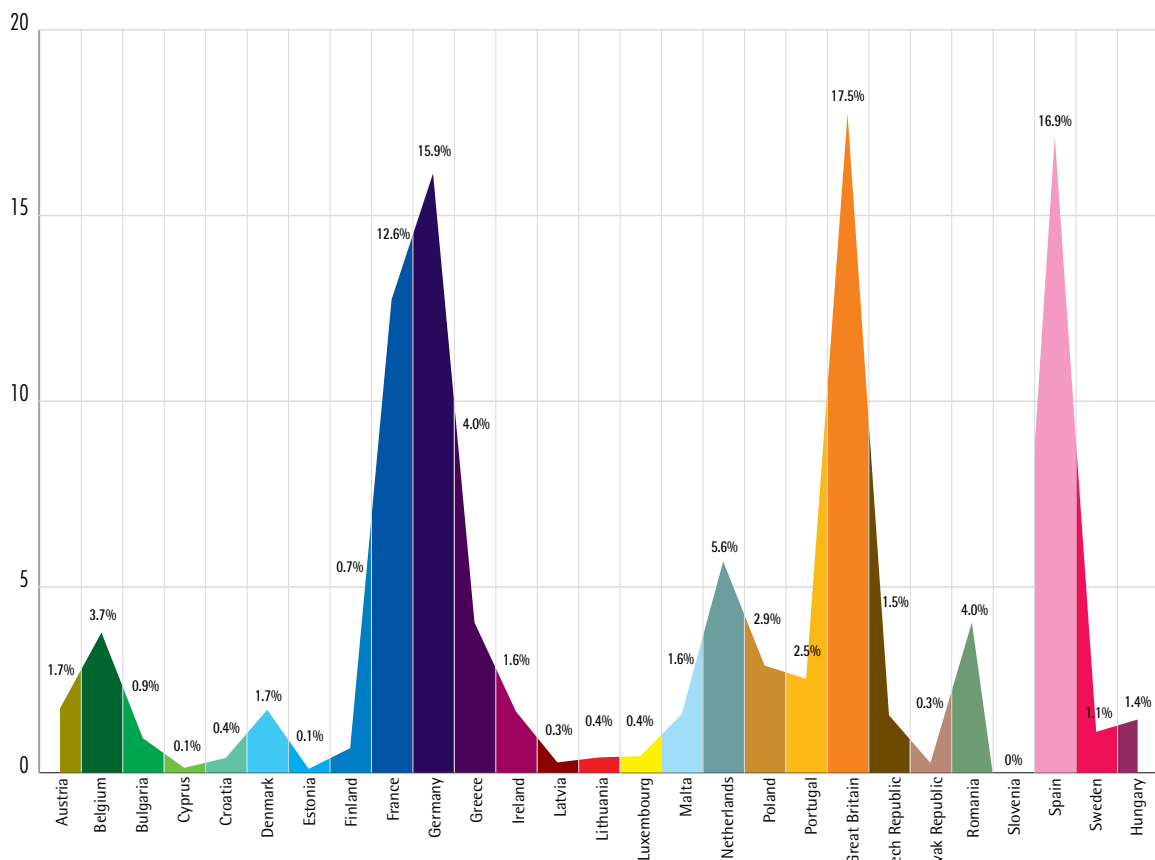
Monthly passenger traffic 2017 vs 2018



Monthly cargo traffic 2017 vs 2018



Passenger traffic distribution by Origin/Destination – EU Countries

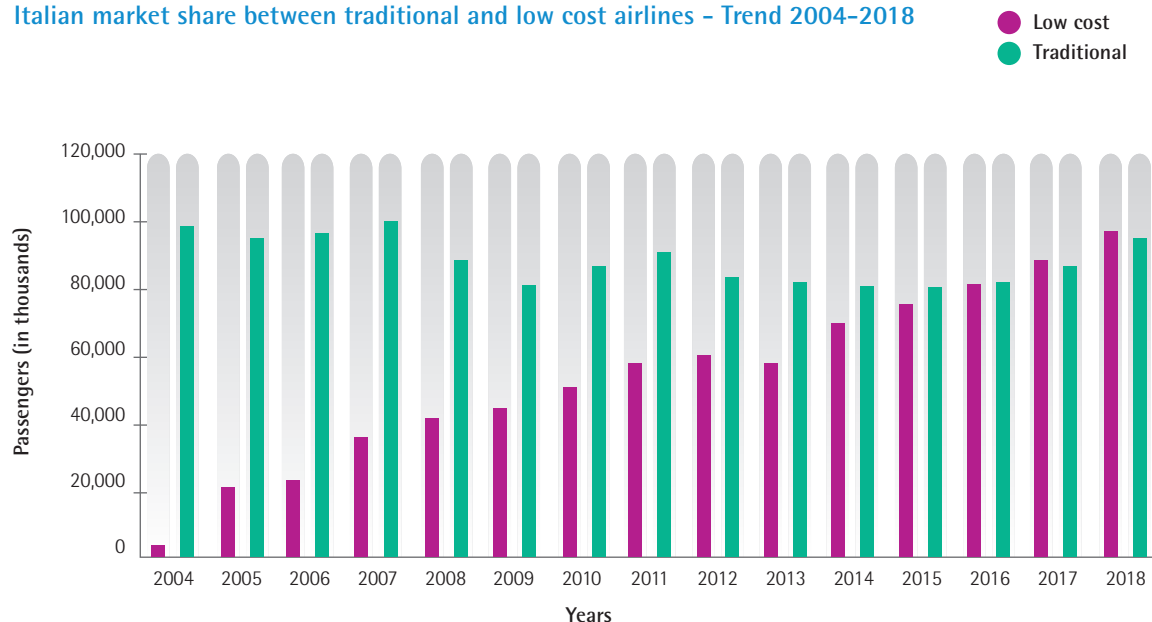


2018 Italian market share between traditional and low cost airlines

AIRLINE	Domestic Passengers * (arr. + dept.)	Share %	Var. % 2018/2017	International Passengers * (arr. + dept.)	Share %	Var. % 2018/2017	Total Passengers * (arr. + dept.)	Share %	Var. % 2018/2017
Low cost	35,823,697	56.0	5.94	58,955,700	48.8	7.18	94,779,397	51.3	6.71
Traditional Airlines	28,199,074	44.0	0.26	61,832,378	51.2	7.19	90,031,452	48.7	4.92
TOTAL	64,022,771	100.00		120,788,078	100.00		184,810,849	100.00	

* The number of national passengers have been calculated in order to exclude double counting by taking into account the total number of airports.

Italian market share between traditional and low cost airlines – Trend 2004–2018



Traffic Data Legend

Cargo: airfreight + airmail (stated in tonnes).

Freight: any properties carried on an aircraft, including diplomatic baggage and urgent shipping except mail, in-flight supplies and passenger and crew baggage.

Movement: take-off/landing. According to the airport traffic survey, the arrival and departure of the same aircraft are counted as two movements.

Passengers: departing or arriving passengers from a stopover. Passengers travelling on a domestic connection are counted as one unit-passenger on departure from the airport of origin and as one unit-passenger on arrival at the airport of destination, whereas passengers on an international connection are counted as a single traffic unit in domestic stopovers. Consequently, the overall traffic registered in domestic airports results from the double counting of the number of passengers who have travelled on domestic route, added to those who have travelled on international route counted only once.

Transits at a specific airport: passengers passing through an airport and departing using an aircraft with the same arrival flight number.

Scheduled flight services: air transport services for passengers and freight offered on payment, available to the public and operated according to a published timetable regularity and frequency characteristics as to represent an evident systematic series of flights.

Non-scheduled flight services: flights involving passenger and freight transport based on a rental agreement entered into by one or more parties for the usage of the whole aircraft.

Commercial air transport: air traffic carried out to transport passengers or goods on payment. It, thus, includes airline transport, charter flight and air taxi.

Non commercial air transport or general aviation: transport other than a commercial air transport, essentially including the activities of aero-clubs, flying schools and small private planes, etc.

International air transport: air transport carried out through connections with airports located outside the national boundaries.

National or domestic air transport: air transport carried out through connections between Italian airports.

1 THE INSTITUTION

2 SAFETY

3 SECURITY

4 AIRPORTS

5 ECONOMIC REGULATION

6 AIRSPACE REGULATION

7 ENVIRONMENT

8 INTERNATIONAL ACTIVITY





THE INSTITUTION

- Sheet 1.1 **27** **Role and organisation**
- Sheet 1.2 **28** **Human resources**
- Sheet 1.3 **31** **Financial resources**
- Sheet 1.4 **32** **Stakeholders**
- Sheet 1.5 **33** **Performance Plan**
- Sheet 1.6 **35** **Prevention of corruption and transparency**
- Sheet 1.7 **36** **Quality of airport services and enforcement of passengers' rights**
- Sheet 1.8 **41** **Technological Innovation**
- Sheet 1.9 **43** **Legal activity**
- Sheet 1.10 **44** **Information and communication**

ROLE AND ORGANISATION

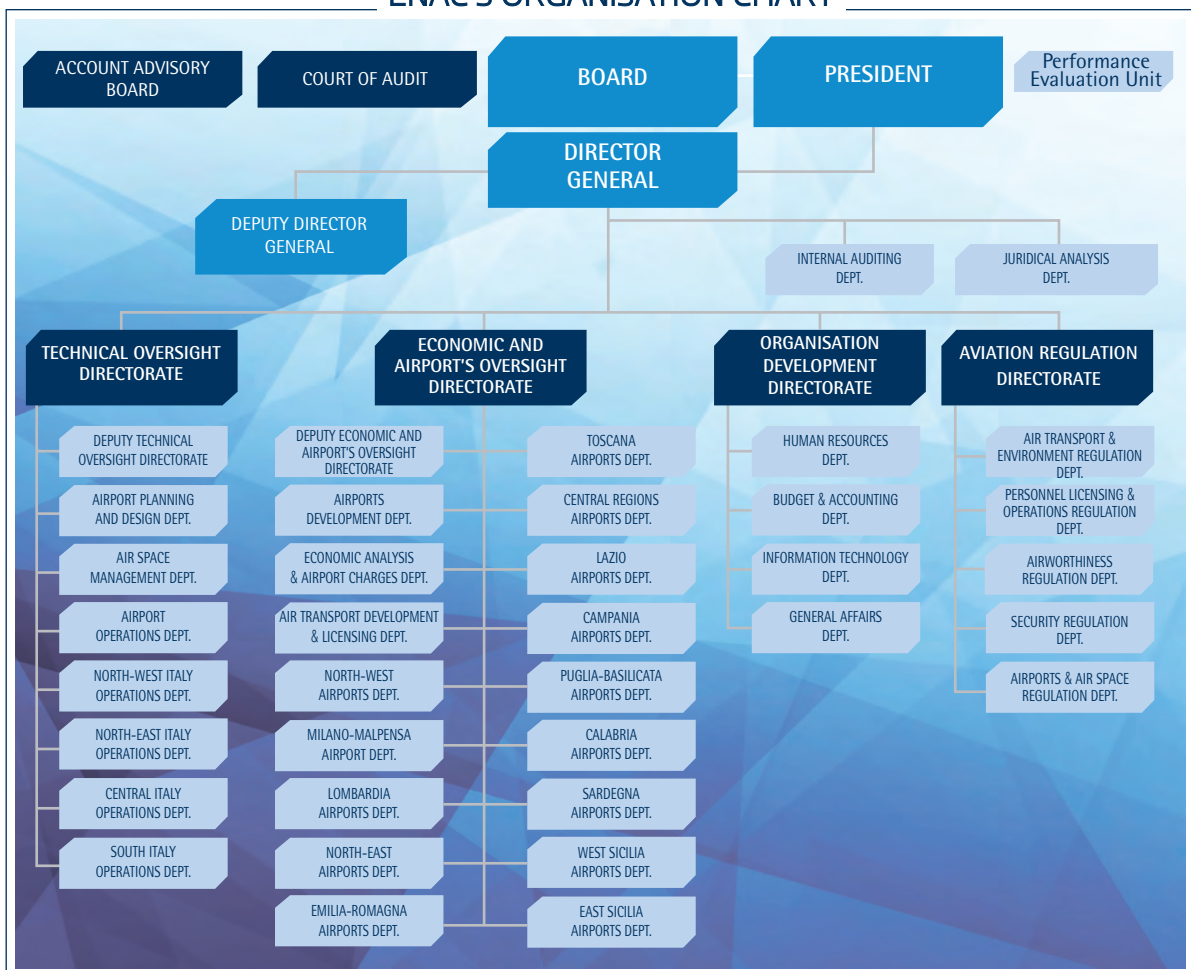
ENAC is the Italian single authority in the technical regulation, certification, oversight and control of civil aviation with powers conferred by the Italian Air Navigation Code. Its primary objectives are set forth in the statutory mandate and highlighted in its Mission:

ENAC, the Italian Civil Aviation Authority, in carrying out its functions of safety regulation, certification, surveillance and oversight in the civil aviation field, supports the development of the civil aviation by ensuring the Country, especially consumers and industry, the safety of the aviation activities, the protection of the rights, the quality of services and fair competition within an environmentally friendly approach.

ENAC has established a strong connection and collaboration with a number of international bodies in

which it holds a leadership position: ICAO (International Civil Aviation Organization), the United Nations specialised agency charged with the task of defining common regulatory and technical civil aviation standards within its member Countries; as a member of the ICAO Council, Italy provides its contribution in the following areas: Technology and development policies; European Union; ECAC (European Civil Aviation Conference), an intergovernmental organization for convergence and cooperation in the field of air transport at pan-European level; EASA (European Union Aviation Safety Agency), an EU agency responsible for defining common levels of safety and environmental protection in civil aviation within the EU member Countries; Eurocontrol, an organization that plans and coordinates the implementation of a harmonised European air traffic management system.

ENAC'S ORGANISATION CHART





HUMAN RESOURCES

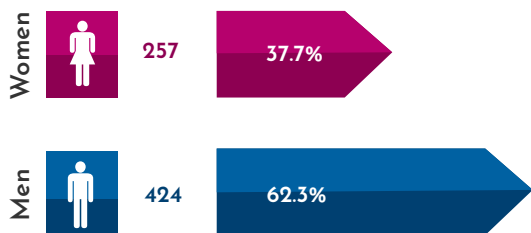
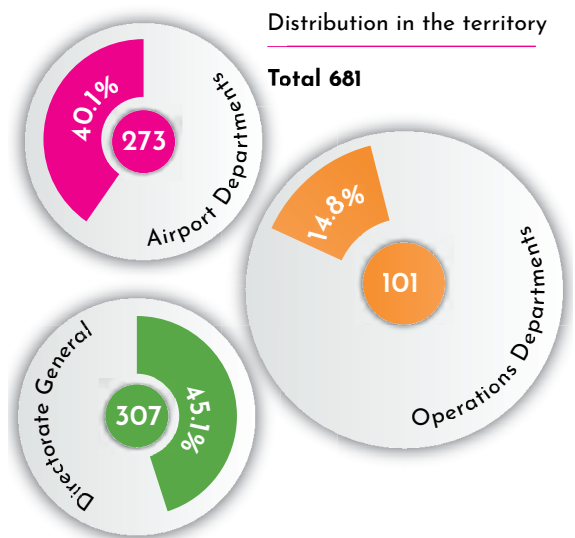
ENAC can count on a highly specialised staff. As at December 31st 2018, ENAC counted 681 members employed in four separate areas.

ENAC staff serving at 31 December 2018		
AREAS OF ACTIVITY	UNITS	%
Executives	39	5.7
Professionals (119 graduates and 20 high school graduates)	139	20.4
Operational (18 flight inspectors, 5 air traffic inspectors and 184 airport inspectors)	207	30.4
Technical and Economic-Administrative	296	43.5
TOTAL	681	100

Internal staff training

In the 2018, ENAC has taken the preparatory measures to draw up the next Three-year training Plan, including those aimed to the definition of the procedural courses and the realisation of a systematic action to identify the training staff needs in each department.

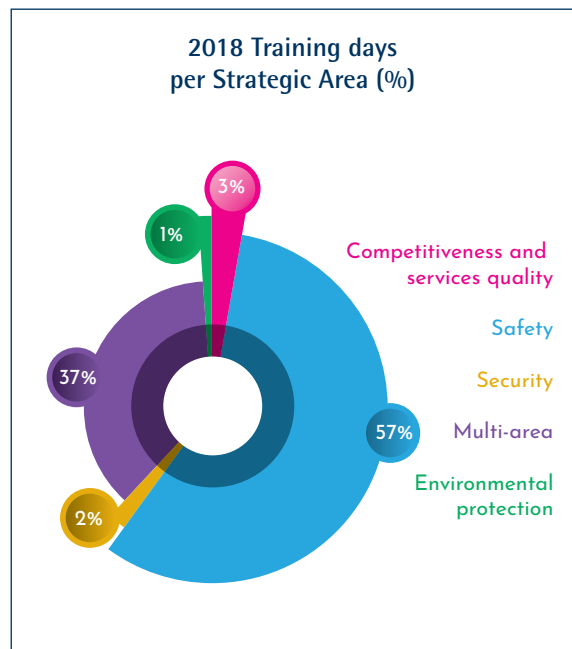
Throughout the year, ENAC's staff took part in 193 internal training initiatives, planned and held by internal experts, in house or external (catalogue). The staff attended some 400 days of training, with an average - calculated on the 1,837 participants - of 3.6 days of training per person.



Total 681



The internal/in-house courses (the latter includes a personalised training held by both external companies and ENAC staff as lecturer) have been slightly preferred to the catalogue courses. The activities related to the project "Qualification of new ENAC Instructors" have had relevance during the whole year. The training course, structured in six modules, engaged all the professional groups (74 employees) and focused on the development of the skills related to the didactic for adults (Andragogy) and the group management. The activities aimed to issue the ENAC Instructor Certification are still ongoing. There have been refresher trainings for the inspection staff specialised in Security, Bill of rights and quality of Airport services. In order to answer the operational needs in ENAC's airports, in 2018, the following trainings have been concluded: qualification for new Airport Inspectors or acquisition of new specialisations for Qualified Staff in the fields of Bill of rights and quality of Airport services, Security, Flight Safety and Handling.



INSPECTION SPECIALTY	PARTICIPANTS	QUALIFIED STAFF
Bill of rights and quality of Airport services	13	9
Security	20	16
Flight Safety	6	4
Handling	26	18
TOTAL	65	47

The On the Job Training activities, preparatory to the qualification issue, are being finalised. In 2018, a specific welcoming course (13 teaching days and 2 weeks of guided observation in the airport) has been organised for the 15 employees hired to work in the airports. Regarding the Safety field, the 3-days internal course "Safety Assessment", started in 2017 and dedicated to the safety oversight staff, has been carried out 9 of the 12 planned times; furthermore, this initiative has been

recognised by the National Council of the Italian Engineers (CIN) in order to obtain the Training Credits (CFP), as a consequence of the Retraining Agreement that ENAC and CNI have signed every year from 2016. Basic and Advanced in-house Anti-corruption trainings have been done for the selected staff in charge of the Sole Responsibility for the Procedure, considered the significant ENAC's negotiation activities to purchase services and supplies and to awards contracts and concessions.

Stakeholders Training

In 2018, the training activity for external members to support the Safety culture and the "cultural change to create an Italian interpretation of the dual system, based on the European best practices combined with the peculiarities of the production sector and the Italian

socio-cultural context" has continued, fostered by the Ministry of Education, University and Research. Another initiative has been the Combined study/work experience project (ASL) for 8 students attending Aeronautical Technical Institutes for 8 days.

Institutional Stakeholders Training	Duration (days)	Editions	Participants
Aero-medical and regulatory workshop	1	2	132
POA	3	1	10
Introduction to EASA Aeronautical Examiner Regulation - Class 1	3	1	3
Examiner Certifications (CRE/TRE/SFE) - Issue	3	3	65
Examiner Certifications (FE/FIE/IRE/CRE/TRE/SFE) - Renewal	1	13	275

Master's Programme in collaboration with ENAC

ENAC, within the institutional mandate, promotes the development of the aeronautical culture by way of agreements with academic institutions regarding topics related to the civil aviation sector.

Civil Aviation Management - 2nd cycle

In 2018, ENAC confirmed the collaboration agreement with the University of Rome Sapienza for the 2018-2019 edition of the master's Programme, which provides training on Italian and European Civil Aviation, with reference to studies in the field of civil aviation, intended as aerospace branch. It will help develop skills required by companies and organizations such as airlines, maintenance operators, airports, ENAC, ENAV, ANSV.

Planning, design, building and management of airport infrastructures - 2nd cycle

In 2018, ENAC confirmed the agreement with Padua University for the master's Programme "Planning, design, building and management of airport infrastructures".

The programme's purpose is to train experts that can cover highly qualified roles in enterprises, engineering companies working in the field, through a multidisciplinary approach.

Design, Application, Regulation of UAV (Unmanned Aerial Vehicles) - 1st cycle

In 2018, ENAC continued the collaboration with Rome Tor Vergata University to activate a master's Programme with the participation of companies and schools. The course is based on the supposed increasing use of the Unmanned Aerial Vehicles, known as drones, in several application and research areas. The Master's Program purpose is to build a new class of professional able to design system of knowledge based on the Remotely Piloted Aircraft System, with a special focus on the operational aspects.

FINANCIAL RESOURCES

ENAC's sources of funding are public financing and internal resources to run its administration and

implement the activities involved with ENAC's institutional duties.

PUBLIC FINANCING		ENAC REVENUE	
State financing for airport investment: PAC	€ 10,000,000	TRANSFER Transfers from the State for ENAC's institutional tasks	€ 23,101,335
Ordinary capital transfer	€ 10,000,000	OWN Fees from airport management concessions (l. 2 August 1985, no. 449, Art. 7 amended)	€ 119,090,000
Emission allowances of the aviation sector allocated for the research for the greenhouse gas reduction	€ 1,192,000	Fees from services	€ 24,975,852
		Route and terminal charges – share transferred by ENAV	€ 4,617,400
		Contributions and certification/documentation fees of members belonging to registers and "Albi" (professional bodies)	€ 900,000
		Interests that accrue on loans, mortgage lending and current accounts	€ 36,000
		Income from ENAC's immovable property	€ 94,000
		Other revenue	€ 550,000
TOTAL	€ 21,192,000	TOTAL	€ 173,364,587

OVERALL TOTAL € 194,556,587

STAKEHOLDERS

Stakeholders involved with the activities, services and results achieved by ENAC. The stakeholder portfolio is divided into 6 categories, grouped in 3 homogeneous

classes according to the type of interaction with ENAC. ENAC identifies its strategic stakeholders through the interest/influence matrix of the Copenhagen Charter.

CLASS	REGULATORS	INSTITUTIONS REGULATORS	CATEGORY
	OPERATORS	INDUSTRY ASSOCIATIONS EMPLOYEES PROVIDERS OF GOODS/SERVICES	
	BENEFICIARIES	USERS/BENEFICIARIES	

CLASS	CATEGORY	KEY STAKEHOLDERS
REGULATORS	INSTITUTIONS	Italian Aero Club, Italian Air Force, Italian agency for state property management, Italian Body for Aircraft Accidents and Serious Incidents Investigation (ANSV), ASI (Italian Space Agency), Judicial Authority, Department of Public Administration, Regions and Local Authorities, Authority for the Regulation of Transports (ART), Ministry of Foreign Affairs, Ministry of Environment, Defence Ministry, ANAC, Ministry of Infrastructures and Transport, Ministry of Economy and Finance, Interior Ministry, National Police, Civil protection, Fire Fighters Body
	REGULATORS	ICAO, European Commission, EASA, ECAC, Eurocontrol
OPERATORS	INDUSTRY ASSOCIATIONS	Assaeroporti, Assohandling, IBAR, Consumer associations
	EMPLOYEES	ENAC Employees
	PROVIDERS OF GOODS/SERVICES	ENAV, Airport Managing Body, Air Operator, Aircraft Manufacturer, Drones Operator
BENEFICIARIES	USERS/BENEFICIARIES	Passenger, Population surrounding airports, Media



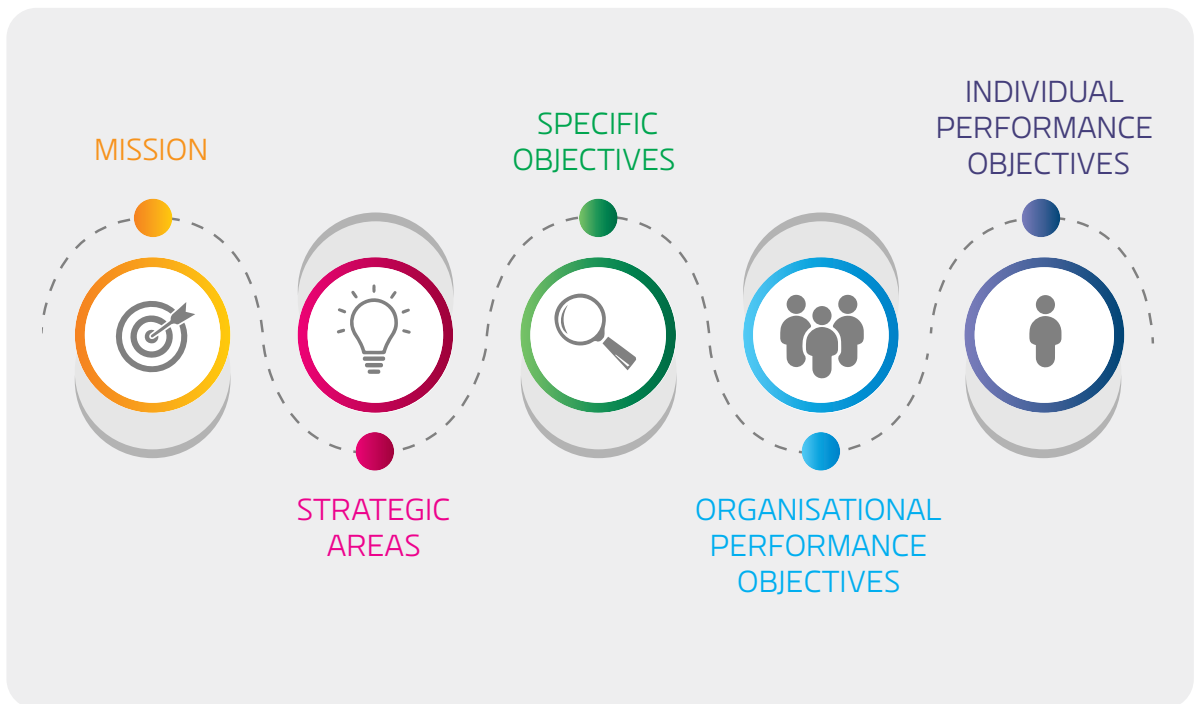
PERFORMANCE PLAN

ENAC's Performance Plan is the strategic planning and social reporting tool published in compliance with the provisions set forth by Legislative Decree no. 150/2009. A greater transparency and visibility of policies and strategic actions helps stakeholders better understand ENAC's role in governing the Italian civil aviation sector. The Performance Plan is part of the so-called "Integrated Performance Cycle", which combines performance, standards of service, quality standards, transparency and integrity and a plan to prevent and contrast corruption. Potential areas of action are defined via an analysis of the internal and external context and stakeholders needs: it allows a better definition of the current operational framework and the future scenarios of the civil aviation sector. ENAC's priorities are set considering its four strategic areas (Safety, Security, Fair competitiveness and Quality of services, Environmental protection). The aim is

to promote the safety and quality of services in the aviation sector, encourage and manage the interaction with all civil aviation system stakeholders and promote the development of airport infrastructures respecting the principles of legality, transparency and integrity, at the heart of ENAC's activity.

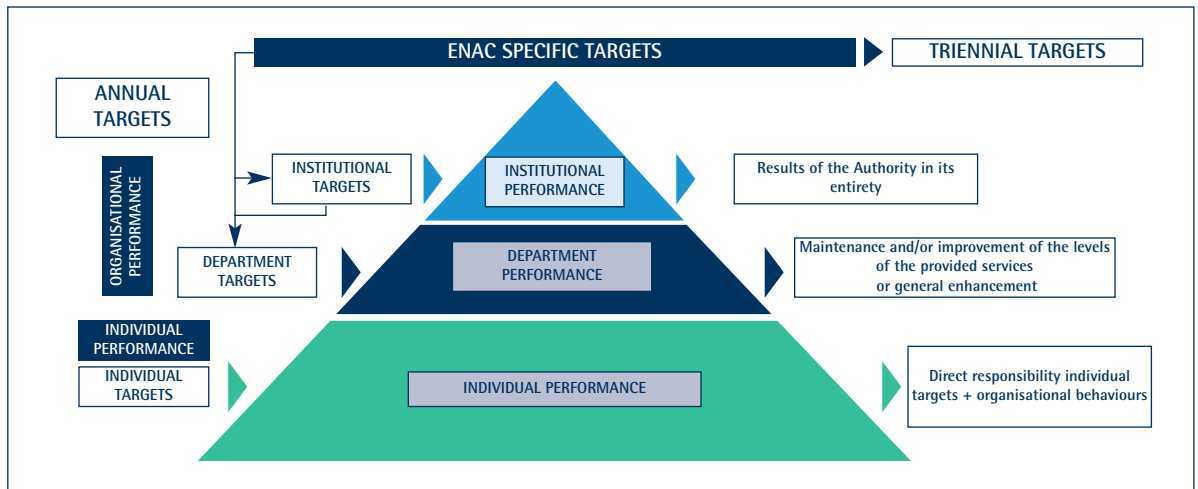
Performance tree

The performance tree is a conceptual diagram that shows the connections between mission, strategic areas, specific objectives and annual planning in order to define the individual objectives. It produces an articulated, complete, concise and integrated depiction of the administration performance. The organisational performance is the totality of the administration expected results in its entirety or in its singularity. It allows to plan, measure and evaluate how the



organization, aware of its state of health, rationally employs the resources (efficiency) in order to deliver services which are adequate to the customers' expectations (efficacy), and, as a goal, to create public value and to improve users and stakeholders social and economic prosperity (impact). The individual performance evaluates the contribution

provided by the individual in order to reach the administration goals. According to the individual role, the contribution would be evaluated considering the organisational performance results of the department of belonging, proportionally to the role and to the responsibilities. In 2018, ENAC published the 2017 Performance Report,



tool aimed at illustrating the organisational and individual results achieved in the previous year, compared with the scheduled targets, to citizens and internal and

external stakeholders. The Performance Report of 2017 showed a substantial achievement of the scheduled targets.

ENAC Specific Objectives 2018-2020

STRATEGIC AREA	SPECIFIC OBJECTIVES 2018-2020	KPI
SAFETY	Rationalisation of the actions to ensure the safety of the infrastructures, of the airport and air navigation services, in line with the EU standards and programmes	FTE surveillance processes of the aeronautic companies
		% conformity of the national regulatory framework to the EU legislation.
SECURITY	Reinforcement the effectiveness of security controls of the infrastructures, of the airports and air navigation services, in line with the EU standards and programmes	Inspection activity efficiency (no. of inspections /no. of inspectors)
FAIR COMPETITIVENESS AND QUALITY OF SERVICES	Develop and implement systems for cataloguing and monitoring the players and the quality services of the air transport sector; revision of the general aviation structure in synergy with the airports open to commercial traffic	State of implementation of the PNA cargo
		% of strategic airports with new investments
ENVIRONMENTAL PROTECTION	Consolidate ENAC's role in the environmental field by promoting the adoption of measures aimed at reducing the environmental impact in the airport infrastructures and in the air transport	CO ₂ emission (ICAO resolution A39-3)
TRASVERSAL	Improve the efficiency and the efficacy of ENAC's processes and services and the measures to prevent corruption	Stakeholders satisfaction rate
		FTE of the web services
	Promote the research in the air transport and aeronautic field	Number of thematic areas managed according to risk management criteria
		State of implementation of the Research Plan 2018-2022
Professional enhancement of the internal resources and improvement of the work operation.	Smart working introduction	

PREVENTION OF CORRUPTION AND TRANSPARENCY

The existing provisions for the prevention and repression of corruption and lawlessness in the public administration established corruption prevention strategies at two levels: the national level, through the adoption of the National Anti-Corruption Plan, and a decentralized system under which each public administration defines and adopts a Three-Year Corruption Prevention Plan of its own. The National Anti-Corruption Plan merged the Three-Year Corruption Prevention Plan and the Three-Year Program on Transparency and Integrity.

ENAC's Three-Year Corruption Prevention Plan is a Three-Year plan that defines ENAC's anti-corruption strategy, drawn up in accordance with the provisions set forth in the ENAC's performance plan.

ENAC's processes (institutional, support, management and control) are evaluated and assigned a risk rating based on the size and discretionary nature of activities. The process defines the concept of corruption and risk and considers the general context and the results of the monitoring plan

of the previous year. The processes that are identified as high-risk are then further divided according to the area and subarea of risk. The actual probability of the occurrence of corruption is assessed along with the economic, organizational and reputational risk (the so-called "concrete" risk). The event that could possibly lead to corruption is identified along with the common measures (mandatory and transversal) that are deemed suitable to contain the risk of its occurrence.

The objectives of transparency and prevention of corruption are tightly connected to the performance of the organization and individuals. These objectives are entrusted to Directors, technical staff and other staff members, and are measured and evaluated to assess the performance of the organization and of individuals.

The Plan is updated annually and considers the results of the monitoring activity carried out by the Manager in charge of Prevention of Corruption and Transparency.

Transparency – Specific actions carried out in 2018

- Implementation of the section "Transparent Administration" webpage through the Transparent Administration Portal that provides a smooth, simple management of information and data required to fulfil the obligations of advertising, transparency and dissemination of information set forth by existing regulatory provisions.
- Implementation of bidirectional communication and information channels with citizens in ENAC's website.
- Implementation of ENAC's communication channel on YouTube to increase the effectiveness of awareness raising campaigns on issues concerning transparency.
- Internal training aimed at employees on issues related to the prevention of corruption, legality, ethics and transparency.
- Organization of the "Days for Transparency".

Service Charter

ENAC's Service Charter is an information tool aimed at providing users with information on a variety of services it provides and on their standards of quality. 43 are the services whose quality is monitored and whose planned values have been defined. They include the main action field of the Authority, from the aircraft and aeronautic companies certification, to the pilot's licences and authorisations for the Drones operators, from the passengers' complaints management following airport and air carriers disruptions. Some indicators related to dimension and the subdimension of the quality have been defined for each service. The monitoring activity permits to have a feedback on the detected values in order to produce any kind of process/service output in the considered period, to compare it with the standard, to start specific verification activities to analyse the variation of the factors that characterise the process which are not in line with the quality standards and to implement corrective and preventive actions.

QUALITY OF AIRPORT SERVICES AND ENFORCEMENT OF PASSENGERS' RIGHTS

Auditing

In 2018, the auditing activity concerning the quality of airport services provided by airport managing bodies, has conducted on the airports of Verona, Trieste, Milan Bergamo, Genoa, Palermo, Bari and Brindisi.

From 2014, the annually planned audits take place to verify the quality system reliability and the correct application of the EU Reg. 1107/2006 about Passengers with disabilities or Reduced Mobility (PRM). ENAC's auditing activity analyses the elements that contribute to improvement of the service quality offered by the airport managing bodies to the customers: the organisation compliance with the national and international legislation, the effectiveness of the procedures, the appropriate training of the staff dedicated to the passengers with reduced mobility, the condition of the infrastructures.

The purpose of the survey was to identify and overcome

the obstacle in order to accomplish the quality objectives included in the yearly-approved Service Charter and to monitor the Quality Plan objectives, included in the Planning Agreement signed by ENAC and the airport managing bodies.

The results of the 2018 audits showed a national general improvement of the airports services quality, also thanks to the sharing of the best practices.

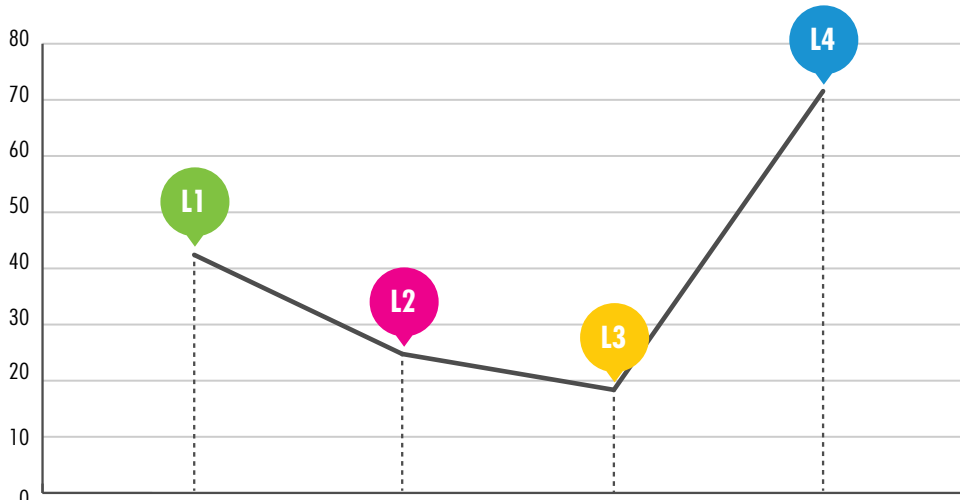
This important result was made possible by the synergic efforts of all the involved parts: the Authority from one side and the airport managing bodies from the other.

The latter showed a great maturity as they understood the importance of a shared strategy oriented towards the quality, in order to prevent and solve the set of problems connected to the complex airport organisation and to improve the organisational and operational efficiency.

In 2018, 159 criticalities have been detected.

Criteria for the non-compliances level allocation

DETECTED NON-COMPLIANCES	LEVEL OF CRITICALITY
European/international regulation Italian regulation ENAC's Regulations and Circulars	L1
Technical requirements Infrastructural requirements Organisational requirements	L2
Incorrect application of the procedures	L3
Best practices related observations	L4

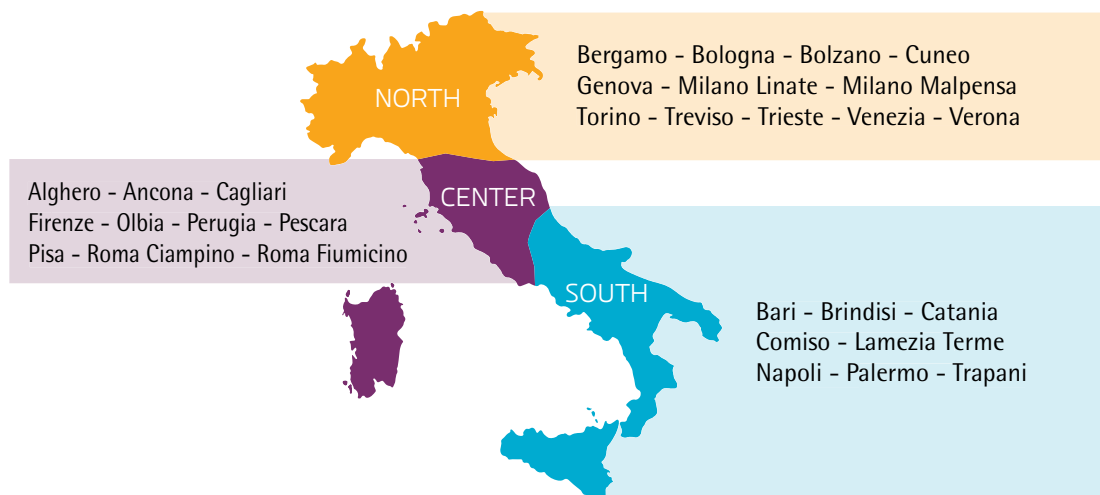


Airport managing body's Service Charter

The Airport managing body's Service Charter, released yearly, aims to provide the users with information about the services quality level and with the improvement

objectives for the following year.

In 2018, at the end of the preliminary procedures, ENAC issued no. 30 Service Charters.



Air carrier Service Charters

In 2018, ENAC approved the first national Air carrier Service Charters which aims to provide information about the quality level of the air carrier services for the current year and about the improvement objectives for the following year, in a transparent context.

The Air carrier Service Charter is an informative tool used by the air carriers to make commitments to the customers about the services standard and the modalities

to carry out the services themselves. The quality indicators publication contributes to helping the passengers being well informed and able to make an informed choice between the air carriers offers, finding the most adequate one to meet their needs.

ENAC and the air carriers put effort into the Air carrier Service Charters elaboration which resulted in a constructive collaboration, with due regard for the roles.

Air carrier Service Charter

The Charter is structured in three parts:

- The first one contains a brief description of the purposes and the fundamental principles, such as equality, impartiality, non-discrimination, right to information, continuity, participation, efficiency and effectiveness, freedom of choice, are highlighted. The document includes the company's peculiarities, the fleet numbers, the environmental policies, the useful information and the loyalty programmes.
- The second part is dedicated to the indicators and includes the quality levels definition of the services offered to the users; these are: flight's regularity and punctuality, luggage, mobility aid devices, hygiene and sanitary conditions, customer information and extra services.
- The last part includes information about the complaint procedures: arrangements for the submission, timeline for the resolution and air carrier's conciliation protocols.

The objectives success rate compared to the target is monitored by the air carrier by internal audit focused on the performances, in order to define a possible improvement plan.

In 2018, the following Air carrier Service Charters have been approved:

- Air Dolomiti
- Air Italy
- Blue Panorama
- Neos

Passengers' rights

Reg. (CE) 261/2004

ENAC is responsible for enforcement of the rights of Passengers in case of denied boarding, flight cancellation or long delays. When a passenger lodges a complaint, ENAC assesses the possible violations with a view to impose sanctions on the defaulters and monitor the quality of services provided to passengers. ENAC's activity is not aimed at satisfying the passengers' claims for compensation, nor at providing legal assistance and consulting services.

Considered the constant and progressive growth of the complaint numbers lodged in 2018, caused by the numerous cancellations and delays, in particular during the summer, ENAC implemented an online service to lodge the complaint, available in both Italian and English and accessible from ENAC website, that allows a faster and more effective complaint management.

The inspections and the verification of the law infringement take place only to impose sanctions on the defaulters. In case of ascertained infringement ENAC transparently informs passengers about the start of the sanctioning procedures.

Sanctions Reg. (EC) 261/2004			
	2016	2017	2018
AMOUNT	€ 362,908.28	€ 108,288.17	€ 262,867.06
NUMBER OF SANCTIONS	38	23	81

Note: The annual amounts do not have direct correspondence with the number of sanctions undertaken in the reporting year: the sanctioning process is in fact divided into several stages beginning with the assessment (the number of penalties reported per year), followed by a phase during which the air carrier has the opportunity to present written pleadings, hearing requests and pay at a reduced rate (oblation). The order for payment or dismissal follows. If a payment order is issued and the carrier does not fulfil it, the order is enforced. The carrier may appeal to ENAC's decision in court with three instances of proceedings.

Passengers' complaints

ENAC uses computerized management system for

passengers' complaints, updated for statistic, monitoring and analysis purposes.

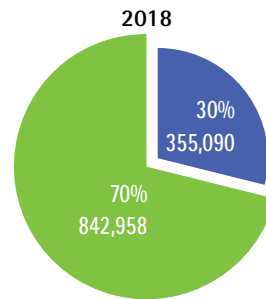
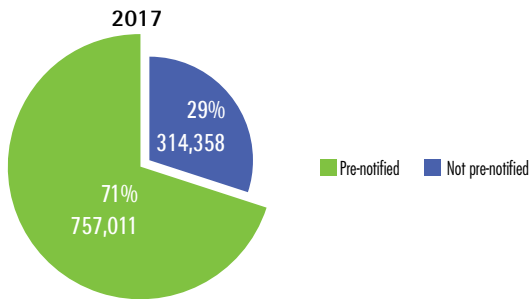
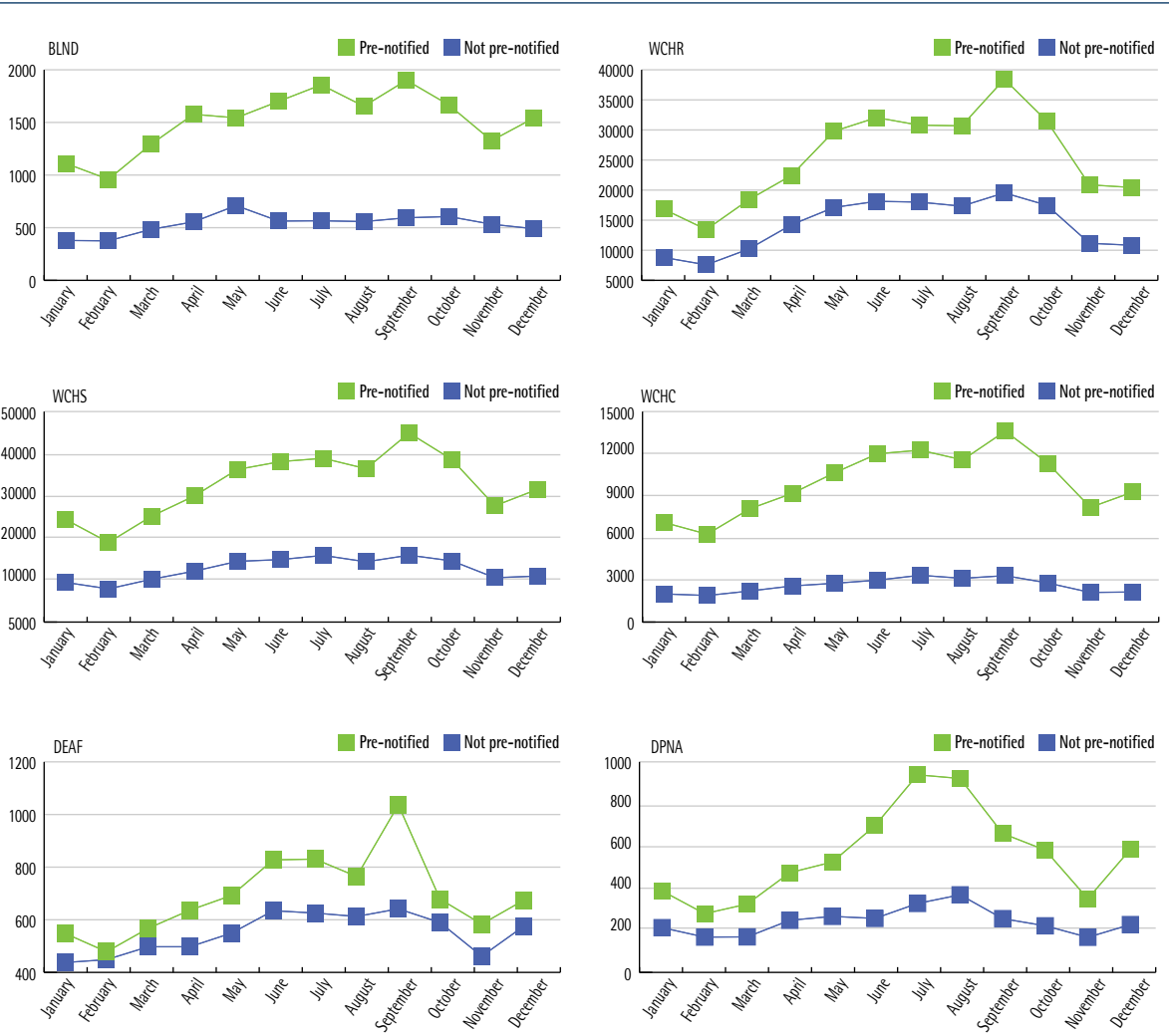
Recorded complaints in 2018 – Reg. (EC) no. 261/2004	
Flight cancellation (art.5)	2,414
Denied boarding (art.4)	222
Lack of information on passenger rights (art. 14)	45
Flight delay (art.6)	2,890
Landing delay >= 3h	296
TOTAL	5,867

Rights of Passengers with disability or reduced Mobility (PRM)

To ensure that air transport be provided without any discrimination and at no additional costs, the EU adopted some common rules that give Passengers with Reduced Mobility a dedicated assistance in EU airports. The PRM passengers should request this special assistance at least 48 hours ahead of their flight. In Italy, the passengers

that did not requested the assistance on time are the 30%. The percentage is high, and a further commitment is required to all the involved entities (air carriers, airport managing bodies, associations) in order to spread the knowledge and the awareness of the pre-notification importance. It is a fundamental element to improve the quality of the offered service and to avoid cases of denied boarding.

Provided assistances in 2018



LEGEND

BLND: Blind or low vision passengers.
WCHR: Passengers with a walking disability who can manage steps and can move unaided.
WCHS: Passengers with a severe walking disability who cannot manage steps but do not need assistance in the cabin.

WCHC: Passengers who are unable to walk and cannot move unaided. They need total assistance.
DEAF: Passengers who are hearing-impaired.
DPNA: Passengers with intellectual and behavioral disabilities.



Autism, travelling through the airport

During 2018, the initiative "Autism", created by ENAC in collaboration with ASSAEROPORTI and sectors' Associations, obtained the support of additional airport managing bodies.

The interest for the initiative, which has an undeniable social importance, of the insiders and the involved families (in Italy around 500,000), is the evidence of ENAC's sensitiveness of the passengers with disability or reduced mobility needs.

The initiative wants to offer advices to help autistic people and their helpers to engage serenely the travel experience offering them the possibility to visit the airport in advance through a procedure created by ENAC.

The airport managing bodies facilitated the familiarization with the complex reality that autistic people can perceive, causing them a possible discomfort, by publishing information, videos, typical airport sounds and noises on their websites.

The airport managing bodies that joined the project organised the reception of autistic people by preparing the units, the services and the specialised staff.



Today the project is operational in the following airports

BARI, BRINDISI, AEROPORTI DI PUGLIA
 FIRENZE E PISA, TOSCANA AEROPORTI
 MILANO BERGAMO - SACBO
 MILANO LINATE E MALPENSA - SEA
 NAPOLI - GESAC, OLBIA - GEASAR
 ROMA FIUMICINO E ROMA CIAMPINO - ADR
 TORINO - SAGAT, TRAPANI BIRGI - AIRGEST
 VENEZIA - SAVE.

In 2018, the following airport managing bodies joined the project and started the implementation phase:

- Bologna - AEROPORTO GUGLIELMO MARCONI DI BOLOGNA
- Catania - SAC



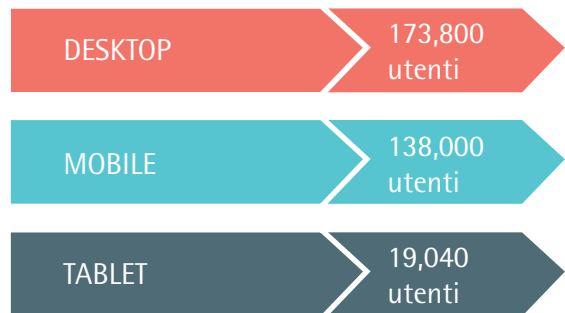
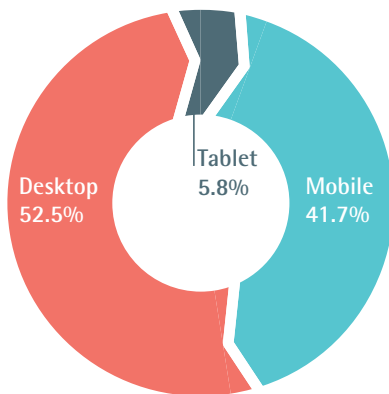
TECHNOLOGICAL INNOVATION

During the last years, ENAC has rationalised the systems, the services and technological infrastructures in order to comply with the institutional stakeholders needs. In this context, in September 2018, ENAC put online the new website. Its design respects the guidelines of the Public Administration (PA) websites: a system characterised by shared visual elements between all the PA websites and services aiming at improving the navigation and the experience of the citizen-user.

At the same time, the Authority wanted to define the

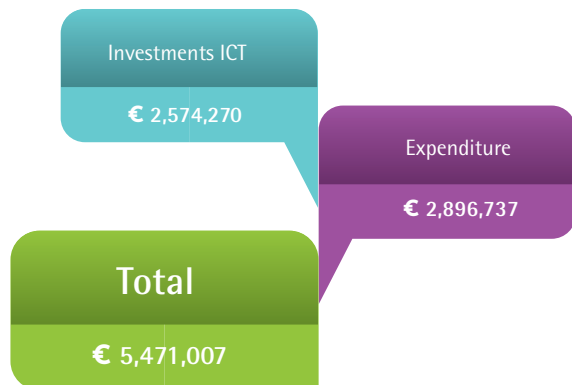
Home Page in order to give the website a specific connotation and identity, respecting the regulatory requirements.

From the go-live date, the anonymous data collection made by the websites' traffic data analysis devices (web analytics), allowed to measure some 330,000 visitors that browsed 3.83 pages per session, averagely. It was found that the new website interests both EU Countries and No-EU Countries such as US, UAE and Russia, even if with lower traffic compared to Italy.



Investments

In 2018, the ENAC investments in the ICT sector have been considerable and equal to € 5,471,007.00, most of them dedicated to the innovation of systems and IT structures.



In the last year, ENAC focused a considerable part of its IT systems on the online services development and on the implementation of a Smart Working system for its staff. In 2018, ENAC completed the management and maintenance services acquisition of the IT system used to manage the certifications and the technical data treated in the ENAC institutional context. The total amount for 5 years is € 2,780,240.00, of which € 1,087,936.00 planned in 2018.

In 2018 first quarter, an executory contract derived from the Consip framework contract has been activated, after the evaluation of the several takeover modalities. Its objective is to implement and improve the services connected to cloud computing, security and the realisation of PA website and online services (€ 650,150.00).

Smart Working

The Smart Working system provides the ENAC's staff with virtual workstations that are like the ones in the headquarters. In such a way the activities' execution is ensured no matter the place and the device used.

In 2018, the Smart Working ICT System has been enhanced in order to improve the user experience and the performance during the logon phase, allowing the staff to have access to all the services and application, with the identical user experience:

- Internal software system;
- Document management system;
- Internal file folder of each business unit;
- Documents in the personal file folder;
- Digital signature system;
- EMPIC, Enterprise aviation processing system.

Introducing the Smart Working, ENAC reached the following goals:

- Make the internal applications usable externally no matter the technology of implementation;
- Obtain an integrated management with the previous IT systems;
- Integrate the Smart Working with the centralized authentication system, with the workstations management system and with ENAC applications portal;
- Eliminate the cost of online publishing of the next ENAC's applications;
- Implementing data protection laws.

Considered positive results, in 2019, ENAC plans to increase the Smart Working users.

Efficiency

The gradual processes computerisation offered via web platforms enabled to reach considerable results: for example, the online payment and invoicing system

registered 15,111 transactions in 2018. Since the service permits the payment and the automatic emission of the invoice, an estimated equivalent of 1,080 FTE (Full Time Equivalent) has been saved.

On line processes	Procedures	FTE saving
Online payment transactions	15,111	1,080
Air Crew examiners reporting	10,300	736
Communications from the drone pilots training centres	6,183	442

The 2018 data analysis shows that the online systems allows managing the 29.80% of the operations outside the usual working time.

The analysis of the weekly transactions' distribution shows that the 10.5% of the operations take place during the weekend.

New investments are planned for the two-year period

2019-2020. They will be aimed to develop the Authority's online services, thanks to innovative technologies such as the SPID (Public System for the Digital Identity) to access the systems and to sign the instances, and the digital stamp for the certifications and the issued documents.

Wi-Fi

According to the vision to make the ENAC staff work out-of-office easier, the Wireless network has been extended in the Directorate General headquarters and it is planned to be extended in all the other regional headquarters during 2019.

LEGAL ACTIVITY

ENAC produced a set of legal opinions on matters pertaining to its areas of competence or related to the public administration, used both in the judicial and extrajudicial field.

ENAC also obtained favourable rulings over 145 ordinances that ENAC issued against air carriers for failure to assist passengers after the closing of European airports due to the ash caused by the eruption of the Icelandic volcano Eyjafjöll.

ENAC has also been involved in drafting set opinions in favour of internal departments and the "Avvocatura Generale dello Stato", called to represent the Italian State before the European Court of Justice for a number of preliminary rulings submitted by the courts of other Member States, particularly regarding the interpretation of the provisions of Reg. (EC) 261/2004 that calls for an enhanced protection of passengers involved in the disruption of air transport.

Despite the reduced number of litigations brought by air carriers against the sanctions implemented by ENAC under the above-mentioned regulation, the consultation requests increased also in 2018.

Some airport managing bodies and handler services providers started a controversy against ENAC, which is now at the State Council level. The controversy is about the conclusion of the procedures to certify or extend the certification, in accordance with the Legislative Decree 13 January 1999 no. 18, implementation of the directive no. 96/67/EC connected to the handler services free access in the EU airports, and with the ENAC Regulation

"Certification of handler services providers", pending the handlers access limitation procedure initiated on the request of the airport managing body for safety/security needs pursuant to the aforementioned regulations.

It is also matter of judgement the regulation of subcontract as modified in the edition 5, amendment 1 of the ENAC Regulation "Certification of handler services providers" as security for the services quality and to avoid distortion of the competition, social dumping phenomenon and serious level of criticality of the airport operation safety/security and for the passengers and staff, by introducing the technical suitability for the non-certified operators as handler providers that want to carry out some handling operations in the limits described in the Regulation itself, based on the certified supplier entrustment.

Regarding the management and the airport concessions, the controversy about the definition of the concession fee of the assets of the civil aviation state property, assigned as gratuitous use to ENAC (ex art. 693 Italian Air Navigation Code), was closed with the entrustment to no profit associations, in order to realise sport, didactic and promotions activities related to the aviation culture, also thanks to the technical certifications issued by ENAC, in competition with other economic operators.

Still pending the judgements about the fuel royalties, pursuant to art. 11 of the Legislative Decree 30 September 2005, converted into law on 2 December 2005 no. 248, which focuses on the actual connection with the cost, as confirmed by ENAC's investigation.





INFORMATION AND COMMUNICATION

Relations with users

ENAC's customer service follows the principles of transparency and effective communication to receive the users' requests, provide them with needed information, granting them access

to documents. To this end, ENAC uses a pool of resources and tools aimed at promoting and optimizing relations with the various target audiences.

Events

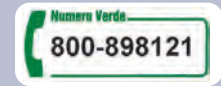
To promote and develop the civil aviation culture, ENAC organizes corporate events on industry issues aimed at both Italian and international stakeholders. During 2018, ENAC

organized some 60 seminars, workshops and conferences in Rome's conference hall at its headquarters, which can accommodate about 100 participants.

Toll-Free Number

The Toll-Free Number 800 898 121, reachable from Italy, is one of the channels through which ENAC responds directly to users' inquiries on air transport. The toll-free number also provides information on passengers' rights in case of poor services provided in Italian flights and airports, on the EU Safety List, and on the procedure involved with security checks. The staff devoted

to this service, internal to ENAC and coordinated centrally, is endowed with the professional skills and knowledge required to address the very complex inquiries pertaining to civil aviation. In 2018, ENAC's toll free number received some 5,000 calls.



Website

ENAC modernised its website by realising a completely new designed institutional portal, respecting the guidelines of the Italian Public administration websites. Its structure has been created considering the different search modalities and the pages navigation in order to make the topics identification easier for the users. The web contents are classified based on six thematic areas of the ENAC's activity and in coherence with its Mission: Safety and Security, Airports, Air transport,

Passengers, Airspace and Environment. The across-the-board navigation allows the association by topic of interest, thanks to a system of tags and related pages.

Beside the search engine, new navigations modalities have been introduced: "who I am? - the user identify himself as a person or organisation", "what am I looking for? - includes links to the most clicked topics based of the user's feedbacks."

Institutional communication campaigns

In addition to campaigns on passenger rights in Italian airports, conducted with other relevant stakeholders, in 2018 ENAC continued its campaign aimed at familiarizing people with autism with airport environments.

ENAC participated in several campaigns including:

- **Viaggiare sicuri e Dove siamo nel mondo**, offering its collaboration to the Crisis Unit of Foreigner Affairs Ministry.
- **Festa della Musica**, promoted by the Ministry of Culture to support musical events about the airports.
- **#salvALI**, to support the Flights Emergency Fund, by which the Flying Angels Foundation ensures the prompt air

transport to seriously ill children that cannot be nursed in their Country and to the doctors who leave for surgical missions in the developing Countries.

- **#WithRefugees**, World refugee day, promoted by the UN Refugee Agency (UNHCR).
- **Stop Sexual Tourism**, initiative in favour of the Juvenile rights in the world, organised by the Association "Fiori di Acciaio", in collaboration with the Association Mete Onlus.
- **Tax free**, started by the Italian Customs Agency to broadcast the new dispositions (in force from the 1st of September 2018) about VAT reimbursement for the Tax-Free sales.

Patronage

ENAC supports cultural, scientific, social, educational and sports initiatives aimed at promoting the aeronautical culture without

funding. In 2018, ENAC has supported 22 projects.

Press releases

The processing and dissemination of press releases is a prominent part of ENAC's activity. It includes the management of relations with the press, the garrison of information relevant to ENAC, organizing interviews, conferences, meetings and press events and preparing material for journalists. ENAC's press releases provide timely information to the media and citizens

on the more important activities related to its institutional mandate. The press releases, in addition to being disseminated to the media, are published in real time on ENAC website, where press releases from 2001 onwards can be consulted. In 2018 ENAC issued 91 press releases.

EnacChannel

EnacChannel on YouTube was designed to convey direct and effective information to citizens such as to help them better understand ENAC's activities and the functioning of a sensitive sector such as air transport. In 2018, some 24 video services were aired on a variety of topics: institutional, current affairs, in depth studies, interviews with top management. The channel also has links to 28 relevant radio and television information

related to ENAC. In 2018 EnacChannel hosted the live streaming of events, meetings and workshops organized by ENAC.



Acts of Parliamentary Inspection

In 2018, a total of 48 formal answers and 1 update were provided to questions lodged from the Parliament that involved

primarily the air transport, airports and the environment topics.

RAI Isoradio bulletin

ENAC and relevant airport managing bodies provide news and information bulletins to travellers through Isoradio (FM 103.3). The bulletins, which are broadcast in the afternoon, provide

interesting information on airport operations and traffic forecasts. In 2017, 250 news bulletins were broadcast.

Library

ENAC's library includes a total of 10,000 documents related to the Italian and foreign civil aviation sector literature and acts as a reference hub for students and scholars. Its search engine,

that can be accessed both on premise and on-line, includes books in its catalogue or in other catalogues of the OPAC network.

ENAC's Crisis Room



ENAC's Crisis Room or Crisis Management Team (CMT) reports directly to the Director General and is entrusted with the task of managing crisis situations in coordination with other relevant government agencies, handling the operational aspects in case of serious events involving the air transport. The Crisis Room also supports ENAC structures in providing clear and coherent information to the media, citizens and

passengers, supporting also other institutional players involved in emergency management, in full coordination with ENAC's Airport Depts. Located throughout the Italian territory.

Main activities of ENAC's CMT in 2018:

- 35 training sessions, 28 of which in the airports, 3 with Italian Civil Protection, 2 with ICAO, 1 with ENISA, 1 with Eurocontrol;
- 22 emergencies;
- 80 aeronautic events.



2

SAFETY

Sheet 2.1 **47** **Flight safety**

Sheet 2.2 **52** **Certification activities**

Sheet 2.3 **56** **Organisations Oversight**

Sheet 2.4 **65** **Personnel certifications**

Sheet 2.5 **69** **Inspection audits by international bodies**



FLIGHT SAFETY



Safety

Safety involves a coherent set of activities and actions aimed at protecting flight safety such as to protect the persons and goods involved in any aeronautical activity. This is one of the key features of the Italian civil aviation governance system.

State Safety Programme (SSP)

To ensure that actions of the Countries are carried out to the highest possible level of civil aviation safety, ICAO Annex 19 requires contracting Countries to develop a national programme called State Safety Program (SSP). In Italy, the SSP (National Civil Aviation Safety Program) has come to the third edition and is governed by a High-Level Coordination Committee chaired by the Director General of ENAC, under delegation of the Minister for Infrastructures and Transports as Executive Accountable. The committee meets regularly and plays an important role in guiding and addressing any safety issues. The Committee is comprised of top executives from ENAC, ANSV, Italian Air Investigation Board, Ministry of Infrastructures and Transports, Italian Air Force, Italian Air Navigation Service Provider (ENAV) and Aero Club d'Italia.

The State Safety Programme is the manifesto of the Italian State that describes the set of policies, activities and safety goals in order to reach and maintain a good safety level, to be realised through a continuous improvement of the institutional activities of regulation, certification and oversight. According to the ICAO Annex 19 indications, the determination of the acceptable Civil Aviation Safety level presupposes that the level has been determined, shared and supported by the State that must use it, as planned by ICAO standards, to check the performances of the whole Civil Aviation System. Establishing the acceptable

level and a plan to reach it require the integration of the current complied-based safety management with a performance-based / risk-based approach.

In 2018, in order to integrate and complete the SSP development, a dedicated working group developed the Safety Performance Indicators (SPI) which are aimed at identifying an acceptable level of safety performance in Italy. Later in 2018, a harmonization activity of the SSP with the new basic regulation (EU) 2018/1139 has started and it would come to an end with the publication of the fourth edition in 2019.

The SPI have been validated by the High-level Coordinating Committee and the publication is ongoing.

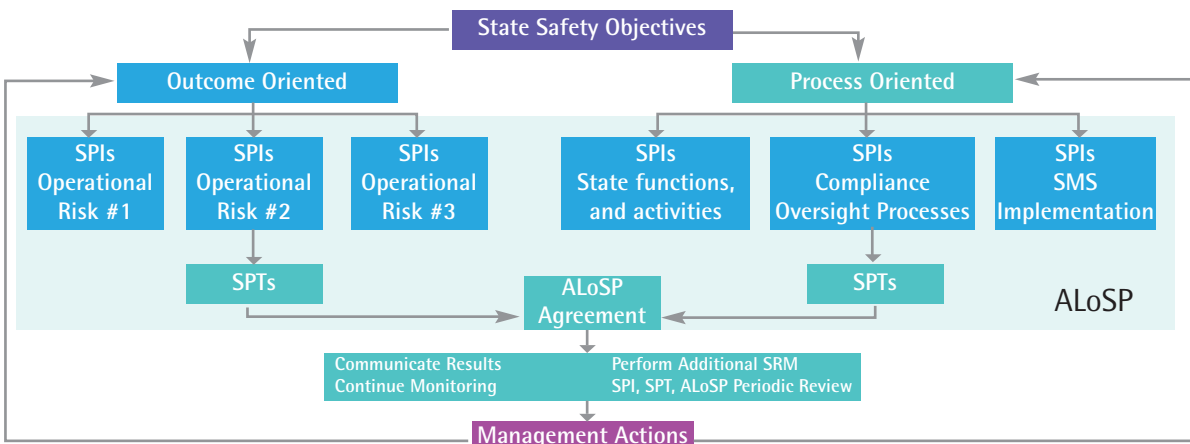
Safety Performance Indicators (SPI)

The State Safety Programme requires that the Italian State defines the indicators to measure the current safety level in the civil aviation sector, as demanded by the Annex 19 and by the Doc. ICAO no. 9859 (Safety Management Manual). These indicators are called Safety Performance Indicators (SPI) and allow to verify the achievement and maintenance of an acceptable level of safety performance.

The key elements that define the acceptable level of safety performance are the following:

- Safety Performance Indicators (SPI), measure of the Safety performance;

ICAO scheme (rif. Doc.9859 Ed.4)



Sheet 2.1 Flight safety

- Safety Performance Targets (SPT), reference value for the SPI;
- Acceptable Level of Safety Performance (ALoSP), acceptable level of Safety performance.

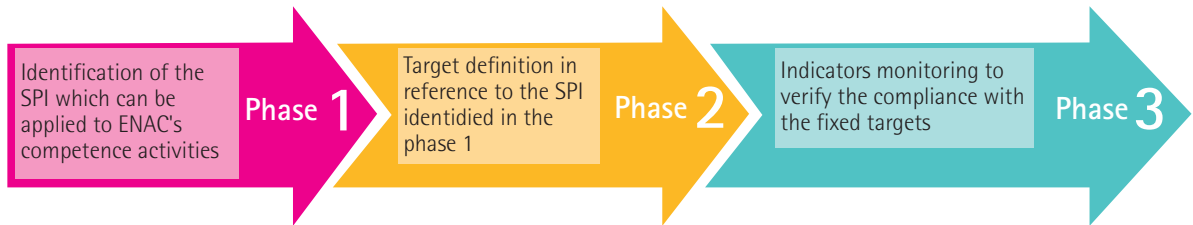
The Safety performances needs to be constantly monitored in order to:

- Identify the Safety critical areas in the Italian civil aviation system;
- Identify the alert conditions which can indicate the presence of critical areas;

- Obtain a constant improvement of the Safety performances;
- Determine whether modifications or additions to the indicators and/or alerts are needed.

Considering it is a complex process that requires a gradual development of the several elements that makes it up, ENAC has decided to begin by identifying the own indicators that will be the base for the indicators that will characterise the SSP at the national level.

The process developed by ENAC is divided into three phases.



The phase 1, which describes the Safety indicators identified by ENAC, was completed in 2018.

The phase 2 will bring to the identification of the targets (SPT) to apply to the chosen indicators and it will take place in 2019, by analysing the available Safety data for the five years 2014-2018.

The process will end with the third phase of monitoring which is aimed at verifying whether the fixed targets have been achieved and whether it is needed to decide corrective actions in order to bring the indicators values back to the fixed targets. These corrective actions will be situated in the ENAC's Safety Plan.

Italy is among the first Countries in the world that have defined/identifies the SPI.

ENAC Safety Plan

The Safety Plan, implemented by ENAC within the SSP, describes ENAC's activities in safety, including regulatory, certification, oversight and promotion activities, towards the achievement of coordinated and shared goals. In particular, in the Safety Plan, there are both the safety actions that the European Plan for Aviation Safety (EPAS) confers to the EASA Member States and the safety actions identified by ENAC based on its certification, oversight and control activity. In this respect, it has to be pointed out that at national level, the emerging issues affecting the civil aviation development in Italy, such as Remotely Piloted Aircraft System (RPAS), airport traffic remotely controlled or suborbital flights, have a particular importance.

ENAC's Safety Plan goals are:

- Realisation of the strategical decisions of the State

Safety Programme;

- Implementation of the safety actions attributed to the Member States by EASA;
- Implementation of the safety actions at national level;
- Implementation of the actions to mitigate the identified risks.

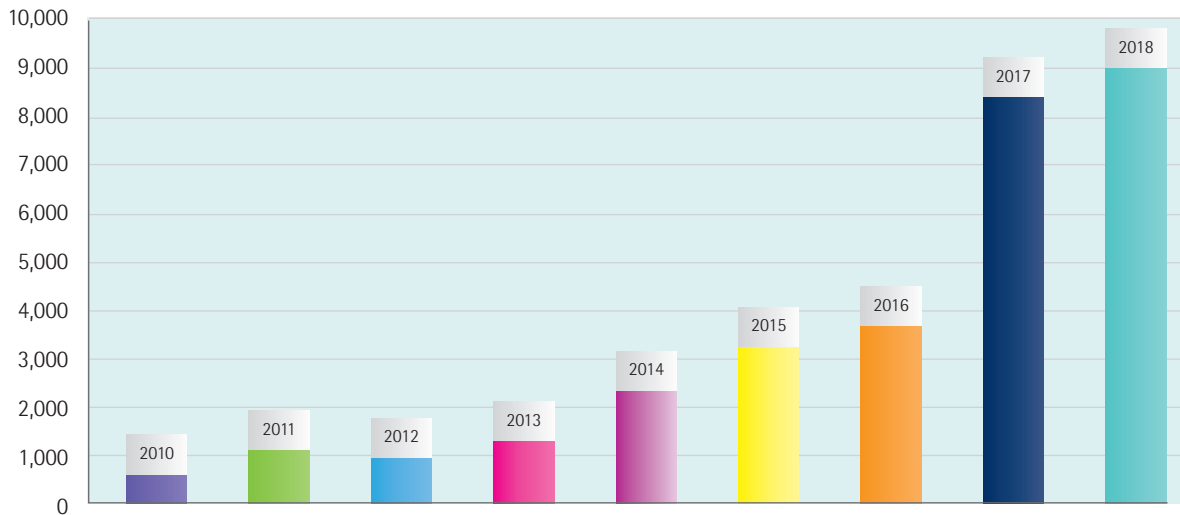
The Safety Plan is not a static document, but it evolves based on the EASA indications, through the EPAS periodical update and through the analysis of the data and information collected at national level. At the head of the Safety Plan, there is the ENAC Safety Board, which meets regularly to monitor the progress of the plan and to make any changes or updates.

Later in 2018, ENAC published the 2018-2022 edition of the Safety Plan; the new edition has been elaborated following the instructions included in the corresponding EPAS version of EASA and it has been integrated with some national characteristics that take into account the results achieved with the ongoing safety actions.

Safety recommendations

ENAC carefully evaluates the content of safety recommendations aimed at preventing aviation accidents and serious incidents received by ANSV, the agency in charge of investigating accidents and serious incidents in the civil aviation sector in Italy. If required, ENAC decides on remedial measures. The position taken by ENAC on recommendations submitted by ANSV is published in ENAC's website in the Follow-up Action on Occurrence Report (FACTOR). For each individual safety recommendation, a FACTOR model is issued containing data that identifies the event with a summary

Trend of the reports



description and measures taken to offset the event along with their implementation status.

During 2018, 9 FACTOR models to answer as many ANSV recommendations were issued and a detailed review activity of all the FACTOR issued by ENAC from 2011 has started, in order to verify the actual effectiveness of the corrective actions.

Reporting and analysis of aeronautical events

Mandatory reports of aeronautical events (accidents and serious incidents), are sent through the eE-MOR (Electronic ENAC Mandatory Occurrence Reporting) system, which complies with Reg. (EU) no. 376/2014. The eE-MOR system is based on the Eccairs software of the European Commission. Information is inputted directly by operators using a web interface (Webdas) and is seamlessly

transferred to the national database managed by ENAC. In 2018, the eE-MOR system has been further developed with the full integration of the Italian Air Force reports and with the development of a new interface for the private pilots. The reports showed an increase of 6%, reaching 9,744.

In June 2018, EASA conducted the first inspection (called SYS) in Italy to verify the application of the Reg. (EU) no. 376/2014 and to control the occurrence reporting system. The result of the verifications on the eE-MOR system has been very positive, highlighting that the system is well structured, works appropriately and provides useful indications to the ENAC's Operations Depts. for the purposes of the Performance Based Oversight.

It is advisable to report ENAC active participation to EASA Key User Group (KUG) activities that is collaborating to design and develop the new Eccairs 2.0 software which should replace the one in use from 2020.

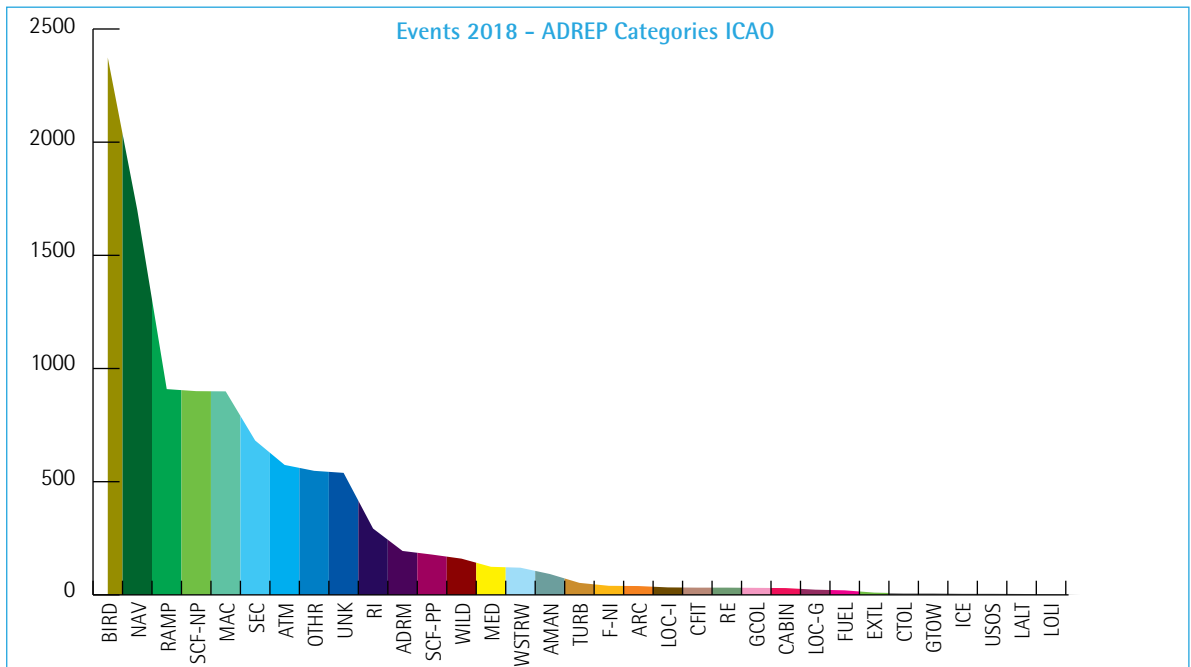
Investigations on parachute accidents

ENAC, based on its institutional mandate, conducts investigations about parachute accidents and serious incidents in order to prevent similar events, without attributing responsibilities.

The investigation on parachute accidents follows the methods of inquiry defined in the ICAO Annex 13 and in the Doc. 9756 ICAO.

The aim of the investigation is to discover the dynamic, the causes and the causal factors that determined the accident, in order to add elements to improve the safety of the system, removing deficiencies and reducing risks not directly related to the causes of the accident itself.

In 2018, three investigations have been opened to discover the causes of three fatal accidents happened during the year. A report system for the parachute sector designed and realised by ENAC, with the aim to collect reports about parachute serious incidents and accidents, will be active in 2019. The mentioned system, besides improving the Risk Analysis, is a tool for a culture change, driven by the Just Culture also in the skydive world.



ADRM: Aerodrome Runway incursion - vehicle, aircraft or person	194
AMAN: Abrupt manoeuvre	92
ARC: Abnormal runway contact	39
ATM: ATM/CNS	574
BIRD: Birdstrike	2,374
CABIN: Cabin safety events	30
CFIT: Controlled flight into or toward terrain	32
CTOL: Collision with obstacle(s) during take-off and landing	7
EXTL: External load related occurrences	10
F-NI: Fire/smoke (non-impact)	40
FUEL: Fuel related	20
GCOL: Ground Collision	31
GTOW: Glider towing related events	7
ICE: Icing	5
LALT: Low altitude operations	4
LOC-G: Loss of control - ground	23
LOC-I: Loss of control - inflight	33
LOLI: Loss of lifting conditions en route	2
MAC: Mid Air Collision	899
MED: Medical	124
NAV: Navigation errors	1,701
OTHR: Other	548
RAMP: Ground handling	909
RE: Runway Excursion	32
RI: Runway Incursion	293
SCF-NP: System/component failure or malfunction [non-powerplant]	900
SCF-PP: powerplant failure or malfunction	178
SEC: Security related	682
TURB: Turbulence encounter	53
UNK: Unknown or undetermined	539
USOS: Undershoot/overshoot	5
WILD: Collision Wildlife	160
WSTRW: Windshear or thunderstorm	120
TOTAL	10,466

Wildlife strike

Wildlife strike is the violent impact between an aircraft and one or more birds or other species of wildlife, with more or less serious consequences both for aviation safety and for economic costs caused by the event. The professionals who deal with wildlife strikes are organized in international and national bodies, such as the World Birdstrike Association or Birdstrike Committee Italy that operates in Italy in ENAC context.

Currently the BSCI databank stores all the wildlife strike events happened in the Italian airports from 2002. A study of the data has established that 81.87% of reported civil aviation impacts take place onsite or near airports, especially during take-off or landing.

This is due, among other reasons, that the airports are an ideal habitat for many different bird species, including gulls, starlings and various birds of prey: all species that are particularly dangerous for the safety of air navigation.

From 2002 till today, in the events happened below 300 feet (airport pertinence), in the 3.2% of them aircraft's damages have been recorded, in the 12.2% there has been multiple strikes, in the 2.6% there has been an engine ingestion and in the 2.8% there have been considerable effects on the flight (delays, aborted take-off, precautional landing and/or flight cancellation).

The worst affected species are swift (24%), kestrel (15%) and seagull (15%). The pigeon weighs for the 5% and the hares for the 4.37%.

The 2018 data owned by ENAC are still temporary and subjected to changes since they have not been compared yet with the data collected by the airport managing bodies, which are responsible for the wildlife risk control and whose risk management area concerns the strikes below 300 feet.

A general analysis of the aggregated partial data shows that the number of reported airport impacts below 300 feet is constantly decreasing compared to previous years. This testifies to the growing attention paid to this phenomenon, which involved detailed studies and the implementation of deterrent strategies aimed at reducing or at least keeping under control the presence of wildlife, a natural phenomenon that involves many variables and is difficult to predict.

After the publication of the ENAC information note NI/2017/011, which identified 12 indicators of objective performance (norm application, risk assessment, etc.) based on which it is evaluated the convenience of a monitoring visit in a specific airport to optimise and rationalise the resources, the BSCI has started the preparation of the ranking factors that will be concluded in the first months of 2019.

YEAR	<300 ft	Damages	Multiples	Ingestions	With effects
2009	620	20	91	13	15
2010	719	18	87	14	11
2011	802	29	87	19	20
2012	961	34	80	25	27
2013	982	21	54	21	18
2014	961	20	64	20	8
2015	933	37	92	18	30
2016	998	41	81	27	32
2017	773	14	84	24	8
2018*	757	33	84	31	27

* Partial data to be verified in comparison with the ones from the airport managing body.

Regulation issued by ENAC in 2018

- Remotely Piloted Aerial Vehicles (RPA) Regulation - Edition 2, amendment 4 - 21 May 2018.
- Regulation about Flight Information Service operator (FIS) - Edition 2 of 26 February 2015 - amendment 1 of 23 April 2018.
- Regulation about Health organisation and medical certifications for aeronautical licences and certificates - Edition 4 of 12 March 2018.
- Advisory Circular NAV 75-A of 24 May 2018 - ACAM National Programme.
- Advisory Circular NAV 73B of 10 December 2018 - Administrative sanctioning procedure to suspend and/or revoke the aeronautical maintenance licence or the technical suitability.
- Advisory circular GEN 05A of 12 October 2018 - Policy on assistance to aircraft accident victims and their families.

CERTIFICATION ACTIVITIES

Certification of products

The certification activities of ENAC are aimed at establishing whether aircraft, components, infrastructures and systems are compliant with the EU and EASA safety requirements. To date, EASA is responsible for the certification of aircraft, engines, propellers and components. The certification of aircraft listed in Annex 2 to the Reg. (EC) no. 216/2008 (Basic Regulation) and the airport infrastructures are a national prerogative. In 2018 ENAC carried out this certification task upon delegation by EASA, based on a cooperation agreement, and for activities of its own competence.

Activity under EASA remit

ENAC has carried out certification and oversight activities on behalf of EASA in relation to some 250 projects and issued for EASA: 41 Technical Visa for Issuing Certificates Approving Modifications, 4 Flight Condition Approval Proposals, 7 Flight Permits for EASA Aircraft.

In addition, ENAC, delegated by EASA, has ensured the supervision of the continuing airworthiness management of Italian products made in Italy and in USA.

As part of the Safety Oversight, ENAC, for EASA, audited

the following Italian companies and products: Leonardo Divisione Velivoli, Alitalia, Avionica, DieselJet, Jet Avionics, LEAT, Mecaer, OMA SUD, Piaggio e Vulcanair.

As part of the Service Agreement signed with EASA, ENAC has carried out certification and oversight activities for 12 maintenance and production companies in non-European Countries.

ENAC, through certification programs managed by EASA, has:

- Provided professionals for the Agusta AW 169 and AW189 helicopters, Sukhoi Civil Aircraft Superjet 100, helicopter Bell 429, Piaggio P180 Avanti II;
- Realised 7 Flight Simulator Training Devices (FTSD) qualifications, flight-training device (FTD) for flight personnel Piaggio P180, AW139, B412EP, CE525, CE560XI, CE750 and 1 audit about flight simulators organisations.
- Released 49 Devices qualifications (Flight simulator) for the ground training of the crew members.

In 2018, ENAC, as part of activities defined in the Service Agreement with EASA, had a turnover of around € 534,400.

Most significant certification activities in 2018

General Aviation Aircraft (CS-23)

ENAC has been involved in the approval processes of major modification of the following aircraft made in Italy: Tecnam Aircraft models P2006T, P2002 and P92, Vulcanair Aircraft P68 and V1 and Piaggio P180.

Continuing airworthiness surveillance and Leonardo Helicopters Division Product Certification on behalf of EASA

Also in 2018, ENAC secured the continuing airworthiness certification and surveillance of the helicopters AW109 and AW139. The Authority has registered a considerable increase of the activity for both lines during the year because of a wider use of these two models and their versions by the air carriers: for instance, the helicopter AW139 reached two millions hours of flight and 900 units produced.

The ENAC effort has been important and resulted in the EASA recommendation to approve several major modifications, such as:

- Certification A109S Trekker new version with skids landing gear (family A109), especially developed for air working and rescue activities;
- Certification AW139 PED (Portable Electronic Device compatibility), thank to which the AW139 passengers can use their portable devices during every phases of flight;
- Certification AW139 Double barycentric hook for human transport, thanks to which will be possible to transport until 8 people during rescue missions hooked outside the helicopter.

Together with the major modification approval activity, the continuing airworthiness surveillance and monitoring has been as important for the safety. Between the end of 2017 and 2018, ENAC proposed EASA to issue 12 Airworthiness Directives for the AW109 and AW139.

TiltRotor AW609

In 2018, the TiltRotor AW609 resumed the flight activities after the tragic accident happened in October 2015.

Besides being involved in the EASA International Validation Team, in 2018, coinciding with AW609 activity resume, ENAC issued two specific permits to fly in collaboration and supporting the Federal Aviation Administration (FAA) specialists.

The authorisation issue preliminary activity required an in-depth ENAC investigation about the design solution implemented on the AW609 both on a software level as a consequence of the new regulations for the autopilot control, and on the external configuration change required after the investigation conducted by ANSV on the 2015 accident.

Large Transport Aircraft (CS-25)

Regarding the mentioned aircraft category, ENAC has been involved in the processes of major modification approval and major reparations on Boeing MD 80, ATR 42/72. In particular, in 2018, the ENAC's activity on behalf of EASA to approve the modifications and reparations on the 85-seats Russian aircraft Superjet RRJ-95 commercialised in EU by Superjet International from Venice has continued.

In parallel with this activity and concurrently with the bilateral agreement signature between ENAC and the Russian Federal Air Transport Agency, ENAC, on EASA behalf, continued the production surveillance activity of these aircraft with a dedicated audit that took place in the Novosibirsk factory during May 2018.

Assistance on obtaining certifications by foreign Authorities

ENAC provided assistance to validate national products in third Countries: in China aircraft Tecnam P92JS e P2006T; in Peru aircraft Tecnam P2006T; in several foreign Countries, major modifications concerning helicopters Leonardo AW139, AW109/119; in Canada type major changes for the regional aircraft ATR 42/72.



Certification under ENAC remit

2018 main activity of certification and authorisation	
Infrastructures, systems, visual aids, airport radio aids projects approval and changes surveys	177
Issuance of aircraft dry-lease authorisations	47
Issuance of aircraft wet-lease authorisations	51
Issuance of aircraft export certificates	143
Issuance of certificates of airworthiness (EASA and Annex II)	73
Issuance of radio station testing attestations	221
Issuance of radio station temporary attestations of validity	186
Issuance of permit to fly for Remotely Piloted Aircraft (RPAS) > 25 kg	6
Issuance of permit to fly for aircraft (EASA)	61
Issuance of permit to fly for aircraft (Annex II)	19
Issuance of permit to fly for home-built aircraft	6
Renewal of permit to fly for home-built aircraft	19
Issuance of historical permit to fly	6
Issuance of home-built radio station testing attestations	8
Authorisation/exemption/approval dangerous goods (Doc. ICAO 9284)	49
Flyover authorisations to aircraft in possession of certification not complying with the ICAO Annex 8	100
Approval of maps for obstacles and dangers for air navigation	2
Authorisation to install permanent obstacles for air navigation	97
Authorisation to install temporary obstacles for air navigation	478
Master Plan/Development Plans approval	5
Risk assessment on the interaction between airport and territory	2
Measures to approve and monitor of the implementation of the airports plan of use	21
Approval of the infrastructural extraordinary maintenance plan of the airports under direct management and of their projects	13
Obstacles evaluation requests	439
Four-year airport investment plans approval	5
Design and modifications evaluation approval	92
Airports under direct management work design approval	2
Interventions approval in reference to the public works three-year plan	13
Intervention plan approval, art. 17 L.135/97	2

National Aeronautical Registry and Construction Registry

ENAC keeps track of all civil aircraft registered in Italy to

which the Civil Code attributes the status of registered mobile property. This is done through the National Aeronautical Registry/Construction Registry.

National Aeronautical Registry and Construction Registry	2017	2018
Registration in the Registry of Construction	276	148
Reserves of Registration Marks	76	97
Registrations	67	78
Transcriptions of Ownership Certificate	633	333
Transcriptions of Finance/Operating Lease	289	349
Deregistrations	92	77
Surveys/Certifications	1,617	1,627

SAPR authorisations

The ENAC activity related to the Remotely Piloted Aircraft Systems sector, which is in expansion also in 2018, regarded:

- evaluation of 3,502 declarations of RPAS operators for specialised operations;
- emission of 585 authorisations for critical specialised operations (Standard Scenario);
- emission of 6 flight permissions for RPAS with total mass over 25 kg;
- expert advices and participation to the ICAO, EASA and JARUS groups' activities.

Remotely Piloted Aircraft Systems (RPAS)

BVLOS (Beyond Visual Line Of Sight) activity

In 2018, the BVLOS experimental activity has continued in order to validate the "Concept of Operations - ConOps", decided with ENAV based on the 2016 agreement. The testing consisted in doing specialised operations using drones whose maximum weight was below 25 kg and could not be controlled at pilot's sight. The operation's goal is to identify the essential requirements to introduce in the ENAC "Remotely Piloted Aerial Vehicles" regulation, to let these operations safely happen in the entire Italian territory. ENAC had exchanges with the major national stakeholders to understand their needs and simulate possible scenarios in order to demonstrate the safe realisation of the operations made with drones operated in a BVLOS modality.

In 2018, 13 research and development projects have been authorised. These technologically advanced projects involved domestic industry's stakeholders, APR operators and APR training centres, Universities, Italian municipalities and Research centres.

Additional research projects about APR innovative services in the so-called smart cities are under evaluation.

Rulemaking in the UAS sector

In 2018, ENAC contributed in the elaboration of the international regulation about UAS Category A (open), B (specific) and C (certified), in the JARUS (Joint Authorities for Rulemaking on Unmanned Systems) context.

In the JARUS WG 7 (ConOps) area of interest, ENAC made a considerable contribution in order to define the emission requirements of the Type Certification and the Category C UAS airworthiness Certification, in coordination with ICAO RPAS Panel. Furthermore, the preliminary discussions about the UAS autonomy concepts and problems started; the first criteria and limitations to define the levels and the switch from the idea of automatism to a real autonomy have been rough out.

In the JARUS WG 3 (Airworthiness) area of interest, ENAC contributed to the CS-UAS performance-based standard definition for the fixed wing UAS, rotorcrafts UAS and Hybrid UAS. The standard will be used by EASA as a reference to define the future basis for UAS certification.

Suborbital commercial transport



The suborbital commercial transport regulation development starts with the "Memorandum of Cooperation in the Development of Commercial Spatial Transportation" signed by ENAC and the Federal Aviation Administration in 2014 and renewed in 2016 with the Italian Space Agency participation.

In 2017, the Ministry of Infrastructures and Transports adopted with a decree the official Guidelines about the sustainable development of the suborbital commercial flights sector (Register of Decrees no. 354, 10 July 2017), which identifies ENAC as the implementing body of the sector policy. ENAC created an interinstitutional working group, called Commercial Suborbital Transportation Task Force (CSTTF), that gather the Italian institutional and industrial stakeholders, divided into seven working groups in order to realise the regulatory framework of the suborbital commercial transport for the spaceport and the operations:

WG 1 - ConOps & Regulation, WG 2 - Legal & Financial, WG 3 - Safety & Environmental, WG 4 - Operations, WG 5 - Crew & Participants, WG 6 - Spaceport, WG 7 - Air/Space Traffic Management.

The 2018 main activities of the Task Force were:

- Elaboration of the Air and Ground Risk Analysis and Monitoring System tool (AGRAMS-t) to develop methods and instruments to evaluate the risk of the falling debris in the suborbital flight, in accordance to the 2018 ENAC Research Operational Plan;
- Elaboration of the research specifications about the efficacy and validity of the informed consent, intended as a tool, and its effects on the regulatory and authorisation activity of suborbital flight, in accordance to the 2018 ENAC Research Operational Plan;
- Training activity: International Association for the Advancement of Space Safety (IAASS) Launch and Re-Entry Safety Analysis Course;
- Definition of the criteria to identify the spaceports;
- Proposal to the Minister of Infrastructures and Transports to identify the Airport of Taranto-Grottaglie as "national spaceport for the suborbital commercial flight needs". (Register of Decrees no. 250, 9 May 2018);
- Elaboration of the document called Reference Operational Scenario (ROS) no. CST-WG1-ROS-01 Ed. 1.1, November 2018, which contains the operational scenarios (ConOps) included in the regulatory framework;
- Initial draft of the Spaceports Regulations.

The Task Force also participated in the following international activities:

- ICAO/UNOOSA Space Learning Group, in particular to the Legal Subgroup - WG I, by contributing to the elaboration of the Final Report on the legal aspects (Report on the legal regime applicable to sub-orbital activities) and to the Operations Subgroup, by contributing to the elaboration of the High Level Operations Vision Document (HLOVD);
- European Group on Suborbital Flight Regulation (EGSFR) aimed to the European guidelines elaboration for the development of the national regulations framework of the suborbital commercial flight with Horizontal Take-Off and Landing (HOTOL);
- European Commercial Spaceport Forum (ECSF), to discuss and analyse the problems related to both horizontal and vertical European spaceports;
- FAA Commercial Space Transportation (CST) Annual Conference and meetings with FAA-AST (Office for Commercial Space) and Virgin Galactic.