

Proposal of 2019 Charges

Progress of Investment Plan

August 2018

Agenda



ENAC - ADR Economic Regulation Agreement

2018 Investments

- Fiumicino
- Ciampino

Implementation of the development plan progresses with some remodeling and optimization vs original plan, driven by exogenous factors and re-assessments owing to changes in market conditions



- For the five-year period 2017-21, the FCO Sud investment plan is substantially confirmed, with higher priority given to the terminal development and remodulation of the airside investments owing to traffic conditions and authorization issues for runway 4. In this context, investments made in 2017 and underway in 2018 provide a framework consistent with the evolution of traffic and an approach with stronger focus on capex efficiency, even if different from what was planned.
- The development of the terminal areas is mainly focused on the expansion of the East Terminal, aimed at serving the Schengen traffic, with some changes to the original plan and a review of interventions aimed at anticipating the completion of the work relative to ERA's timeline (by 2021 vs 2022). The review has meant a decline in investment spending in the two-year period 2017-18 followed by a rise in the following three years. The initiatives to refurbish T3 continue with the upgrading of the equipment mainly in the departures area whilst a reorganization of other portion of the planned interventions is underway for further project works.
- The airside capacity enhancement plan, with particular reference to the construction of runway 4, is affected by the extension of the approval time ("VIA" procedure) of the runway, although it remains compatible with traffic evolution, given the context of higher load factors and use of larger aircraft with consequent lower stress on the infrastructure. Against this backdrop, work is underway for the west aprons (phase 2) to complete the capacity offer dedicated to the extra Schengen segment and the aprons "300" to increase the offer for the new pier A, while other interventions have been rescheduled, however still confirming start within the current five-year period.
- Overall, the planning and implementation of the works are consistent with current and foreseeable capacity requirements; company's focus on optimization and 'value engineering' opportunities remains high to guarantee maximum adherence to operational needs and high quality standards in a capex efficiency context.

Investment Plan 2017 - 2021



Plan submitted to 2016 consultations for the second regulatory period

In '000€

111 00			2017	2018	2019	2020	2021	Totale 2017-2021
	1	Attività urbanistiche Fiumicino Nord	5.306	5.580	7.233	516	7.810	26.445
	2	Interventi infrastrutture di volo Fiumicino Sud	41.366	71.221	28.918	65.672	53.908	261.085
	2	Interventi infrastrutture di volo Fiumicino Nord	7.618	36.468	120.225	184.358	183.363	532.033
NO	3	Interventi terminal Fiumicino Sud	63.586	139.518	126.220	49.497	59.614	438.436
FIUMICINO	3	Interventi terminal Fiumicino Nord	4.365	11.242	9.552	9.653	0	34.812
FIU	4	Interventi land side Fiumicino Sud	11.192	18.252	1.141	1.226	1.706	33.517
	4	Interventi land side Fiumicino Nord	240	2.456	2.788	5.607	4.525	15.615
	5	Interventi parcheggi Fiumicino Sud	2.304	14.469	16.432	1.382	379	34.965
	6	Altri interventi Fiumicino Sud	133.748	83.124	63.855	52.510	43.938	377.175
		Totale Fiumicino Sud	252.197	326.584	236.566	170.287	159.544	1.145.177
		Totale Fiumicino Nord	17.529	55.746	139.798	200.134	195.698	608.905
		Totale Fiumicino	269.726	382.330	376.364	370.420	355.242	1.754.082
	С	Ciampino	15.990	11.217	6.662	4.308	2.880	41.057
		Totale Capex ADR	285.715	393.547	383.026	374.729	358.122	1.795.138

The Project to Complete Fiumicino South



FCO South Completion Project

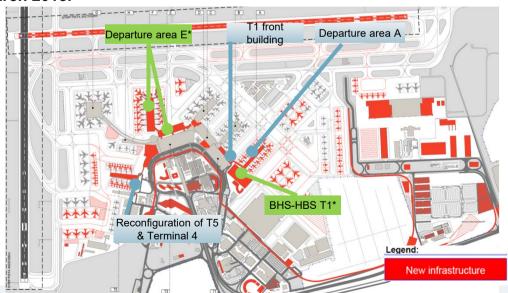
The completion project for FCO South outlines the **infrastructural organization** of the airport within its current premises. **ENAC** issued its **technical authorization** on **July 22, 2011**

The main **objectives** of the project:

- to ensure the relaunch and completion of the Development Plan for Fiumicino South
- to improve the quality level of the infrastructure and of the services provided to users
- to ensure respect for the environment.

Environmental Impact
Assessment (EIA) Decree
FCO South Completion
Project

Environmental Impact Assessment (EIA) Decree 236 of 8 August 2013, published in the Official Gazette on 09 November 2013, concerning environmental compatibility of the Fiumicino South Completion Project contains a number of requirements made by the Environmental Impact Assessment Commission of the Italian Ministry of the Environment and Protection of Land and Sea (MATTM) and the Italian Ministry of Cultural Heritage and Activities and Tourism (MiBACT) for which ADR, on ENAC's behalf as "applicant", is carrying out compliance audits with the Reference bodies in order to start the works. All compliance verification procedures started in 2014 regarding the different EIA Decree requirements to meet for MATTM were completed with positive results and specific Directorial Determinations in February and March 2018.



*BHS-HBS T1, Departures Area E completed

Development of FCO North



FCO's Masterplan until 2044 The **Masterplan** for FCO defines **the infrastructural organization** until the end of the **concession of the FCO airport**. It involves the construction of new flight infrastructure, passenger terminals, accessibility and related infrastructure.

ENAC issued its technical authorization in October 2015.



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In April 2016, ENAC requested ADR to prepare the Masterplan until 2030.

The airport organization until 2030 (runway 4, 1st Terminal North module and connected works) was **shared with ENAC in February 2017**.

On March 31, 2017, the EIA procedure of the MP 2030 works was started (preparatory phase still in progress).

FCO's Masterplan until 2030 Following meetings with MATTM and ENAC, in consideration of the observations that emerged and particularly of the developing situation regarding the definition of the Management Plan of the State Natural Reserve of Rome Coast, ADR asked ENAC on June 20, 2018 to submit to the Ministry a request to suspend the EIA procedure for about 12 months. Afterwards, ENAC sent ADR's request to MATTM, changing the waiting time to about 10 months.



Ciampino Masterplan



CIA's Masterplan

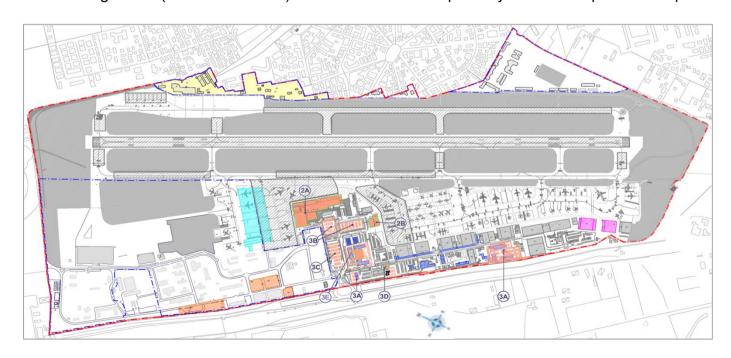
The CIA **MP** includes the upgrade of flight infrastructure and of the commercial and general aviation terminal, under a 'secondary airport' management model oriented at environmental sustainability.

ENAC issued its technical authorization in October 2015.

On February 4, 2016, the EIA procedure of the MP 2030 works was started. As of today, the MATTM EIA Technical Commission has completed the preparatory phase (positive opinion with instructions on works scheduled starting from 2021).

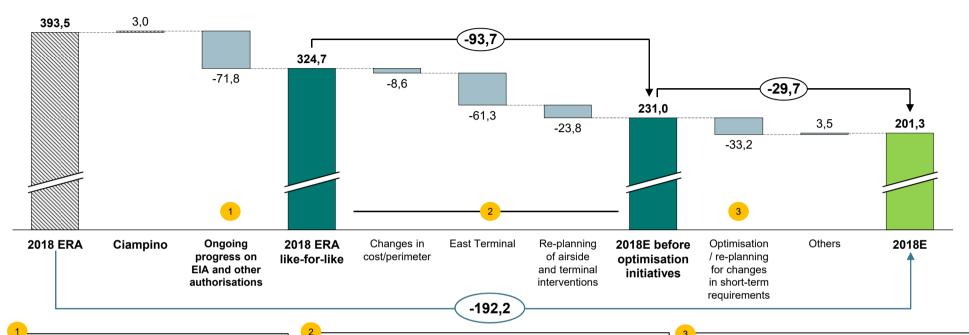
The formal opinions of the Lazio Region and of the MiBACT were also provided.

Presently, the MATTM Directorate General of Environmental Assessments and Authorizations and the EIA Technical Commission Itself are carrying out several additional in-depth examinations for the final issue of the Interministerial Regulation (MATTM/MiBACT) of environmental compatibility of the Ciampino Masterplan.



201 € million capex foreseen in 2018, upon remodulation and optimization relative to the ERA plan, whilst substantially confirming the ERA commitments





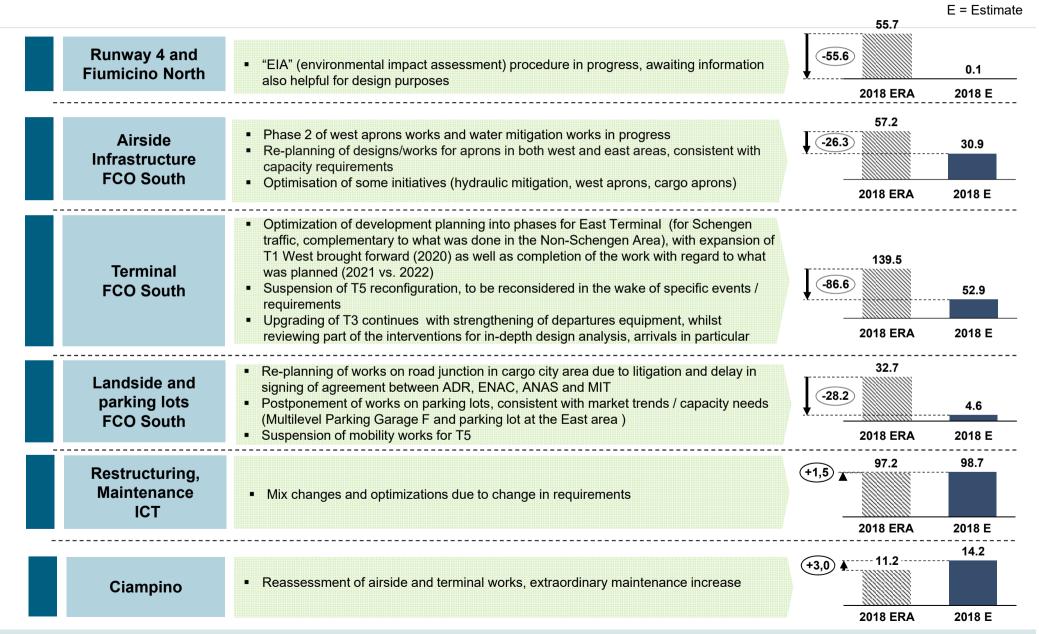
- Runway 4 e FCO North (-55,6 M€): Replanning owing to slowdown in progresses of authorisation procedures
- Road junction in cargo city area (-16,2 M€): Re-planning owing to litigation underway and delay in signing of agreement between ADR, ENAC, ANAS e MIT on rights of use
- Capex change which basically confirms the development objectives of the ERA, due to:
- lower cost /smaller perimeter (mainly acquisition of areas, Pier E vertical connections)
- reorganization of the so-called Lotto 1 program, with recoup in the following three years and anticipation of completion of the East Terminal compared to planning in ERA
- rescheduling of projects / works for aprons, both in the west area and in the east area, consistent with capacity requirements, worth -18.0 M € (mainly repositioning of the SERAM area, wide body aprons in the 600 zone, extension of the east area aprons, re-location of the engine test site)
- T3 refurbishment project continues with upgrading of departures whilst reviewing part of the interventions for indepth design analysis 5.8 M€

Infrastructural optimisations mainly related to:

- terminal development concentrated on acceleration of East Terminal, with «under one roof» approach -20.2 M € (mainly suspension of T5 restructuring)
- review of short-term needs for parking facilities
 -9.5 M € (multi-storey F and parking lot at the East area)
- refinement of airside interventions -2.9 M €
 (mainly cargo area aprons, ULD East storage
 area)

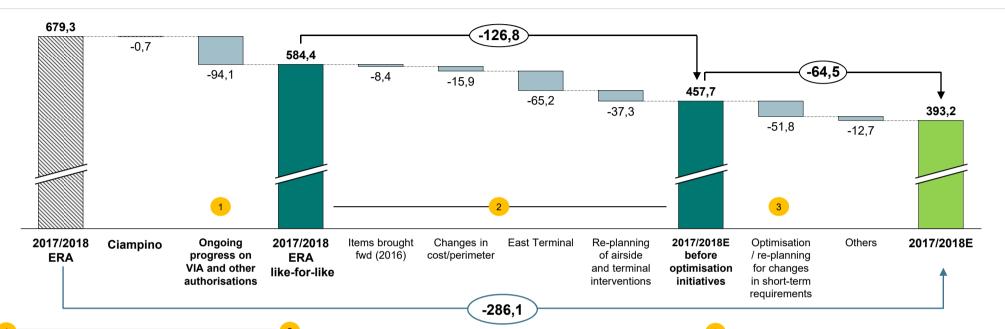
201 € million capex foreseen in 2018, upon remodulation and optimization relative to the ERA plan, whilst substantially confirming the ERA commitments







2017+2018: € **393 M in investments**, with planning and execution of the works consistent with capacity requirements and growing attention to optimization opportunities



- Runway 4 e FCO North (-71,3 M€): Replanning owing to slowdown in progresses of authorisation procedures
- Road junction in cargo city area (-22,8 M€): Re-planning owing to litigation underway and delay in signing of agreement between ADR, ENAC, ANAS e MIT on rights of use

Capex change which basically confirms the development objectives of the ERA, due to:

- Interventions brought forward to 2016*
- lower cost / smaller perimeter (mainly acquisition of areas, Pier Evertical connections, aprons west area, hydraulic mitigation, runway 1 refurbishment)
- reorganization of the so-called Lotto 1 program, with recoup in the following three years and anticipation of completion of the East Terminal compared to planning in ERA
- re-planning of projects / works for aprons, both in the west and east areas, consistent with capacitive requirements -26.9 M € (mainly repositioning SERAM area, wide body aprons in the 600 area, extension of aprons in east area, re-location of the engine test site)
- T3 refurbishment project continues with upgrading of departures whilst reviewing part of the interventions for in-depth design analysis -10,4M€

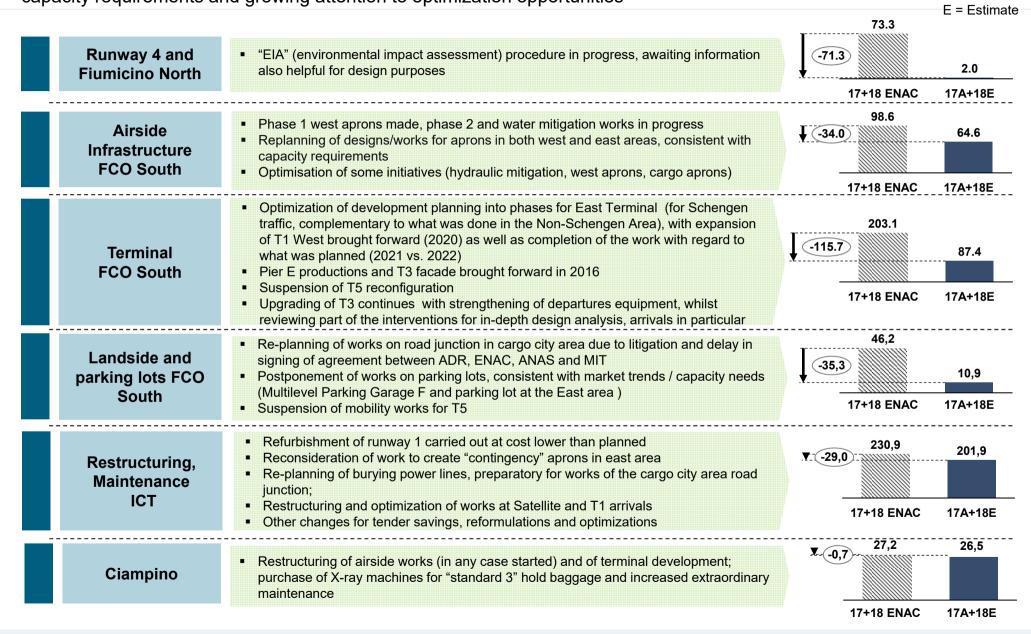
Infrastructural optimisations mainly related to:

- terminal development concentrated on acceleration of East Terminal, with «under one roof» approach -29.8 M € (mainly suspension of T5 restructuring)
- review of short-term needs for parking facilities -11.4 M € (multi-storey F and parking lot at the East area)
- refinement of airside interventions -9,8 M

 (mainly cargo area aprons, "contingency" aprons, ULD East storage area)

2017+2018: € **393 M in investments**, with planning and execution of the works consistent with capacity requirements and growing attention to optimization opportunities





Agenda



ENAC - ADR Economic Regulation Agreement

2018 Investments

- Fiumicino
- Ciampino

2018 Investments



Fiumicino

Terminal

o T1

- East terminal
- · Preparatory works for East terminal:
 - . Demolition of T2
 - New CBC Terminal 1
 - · Strengthening of security checks Terminal 1 West

o **T3**

- New ticket counters in Terminal 3 on mezzanine level
- Strengthening of the Terminal 3 sensitive flights security checks
- Reconfiguration of the Terminal 3 sensitive flights check-in area
- New automated e-gates for Terminal 3 sensitive flights
- New Terminal 3 "row L" check-in counters
- Upgrading of departures area E 31-44 "Satellite"
- Upgrading of VAT Refund area
- New Terminal 3 baggage reclaim carousel and L&F
- New VIP lounges

Airside

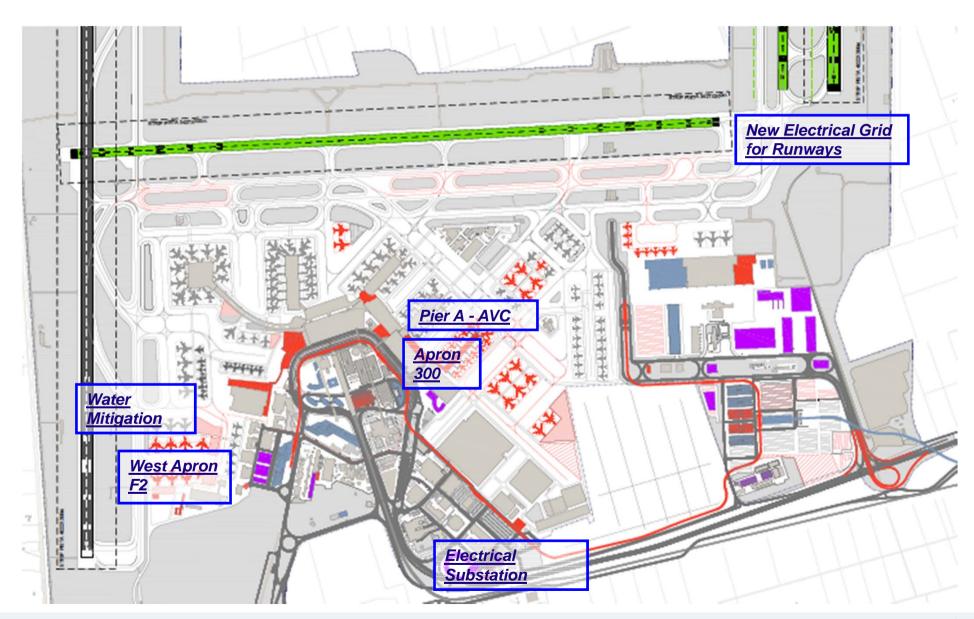
- West Area, expansion of aircraft parking aprons (phases 1, 2)
- · Works to mitigate the water risk in the West Area
- New quadrant 800 ramp area
- · New electricity grid for runways
- Renovation of electrical substation and MV switching center
- · Replacement of lighting towers
- Implementation of new A-VDGS system

Landside

- Perimeter protection system
- ADR's new headquarters building

FCO - 2018 major investments

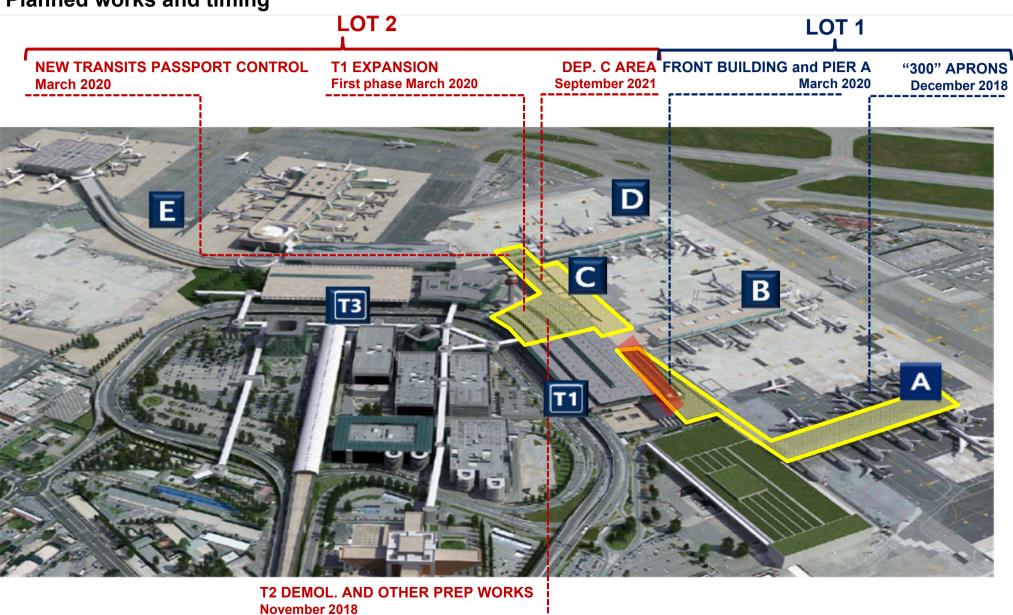




East Terminal

ADR

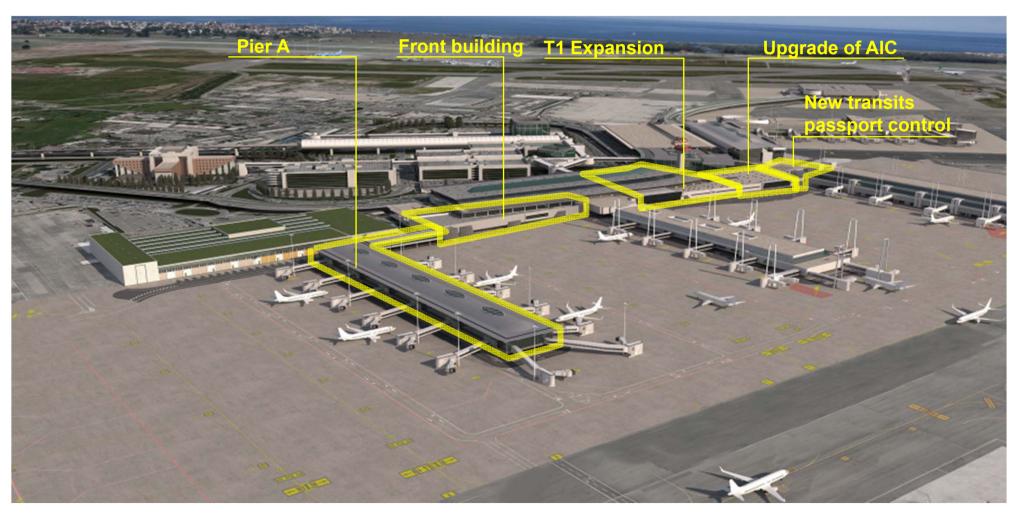
Planned works and timing



East Terminal Northeast view







East Terminal



Ref. Sheet A: 3.4 - Works for FCO South Terminal



T1 front building Restructurial Departure area T1

DESCRIPTION OF THE WORKS:

Development of the East Terminal is organized in functional lots:

- Lot 1, with the new Pier A and the front building of Terminal 1
- Lot 2, with T1 west expansion, reconfiguration of departures area C and new transits passport control

The new Pier will have 13 Loading Bridges and 10 remote gates, with a capacity increase of 6 million passengers a year. The infrastructure will undergo LEED (Leadership in Energy and Environmental Design) environmental certification with Gold target. The works were started up in October 2017; opening is set for March 2020.

The Lot 2 works will be completed between March 2020 and September 2021 in order to centralize and strengthen the west security checks, build a new Dom-Sch departure lounge with food court on the mezzanine level and increase the arrivals system capacity with 3 additional baggages reclaim belts.



East terminal Current work program accelerated compared to the ERA

			Current time table	ERA time table	Key element	
1	Departure area A (Pi	er A)	Mar – 2020*	Oct - 2019	Confirmation of opening by Summer 2020 for capacity and quality increase	
2	T1 front building		Mar – 2020*	Oct - 2019	(13LB)	
3	Upgrading of T1	PHASE 1 departures	Mar - 2020	04 0000	Progressive completion, in line with Front building and Pier timetables	
3	interiors	PHASE II departures	Sept - 2020	Sept - 2020	Front building and Pier timetables	i toni bulluling and Flei timetables
		PHASE 1 departures	Mar - 2020		Made brought forward to have Foot	
4	T1 Extension	PHASE II departures	Nov - 2020	Oct - 2022	Works brought forward to have East Terminal basically completed in 2020	
		Arrivals	Nov - 2020			
5	Departure area C		Sept - 2021	Oct - 2022	Completion brought forward following T1 Expansion	
6	New Transits passpo	ort	Mar - 2020	Oct - 2022	Works brought forward according to Schengen borders regulatory development	

^{*} Limited areas of the mezzanine level will be completed within October 2020

East Terminal - Lot 1 works progress



Ref. Sheet A: 3.4 - Works for FCO South Terminal

Lot 1 works started in October 2017.

The first activity consisted of tearing down the former "Brufa" building adjacent to the north front of Terminal 1 used for baggage storage. For both the front building and the Pier were executed all temporary works supporting the front of the excavations and the foundation works. The reinforced concrete elevation works are under way and the metal structural works of the raised levels are being installed



EXPECTED BENEFITS

- Increased terminal capacity
- Increased quality and service level with 13 new loading bridges
- Improved passenger services

STATUS and AMOUNTS

Construction in progress

Completion date: March 2020

Actual 2017	Estimate 2018
€ 1.1 M	€ 22.1 M

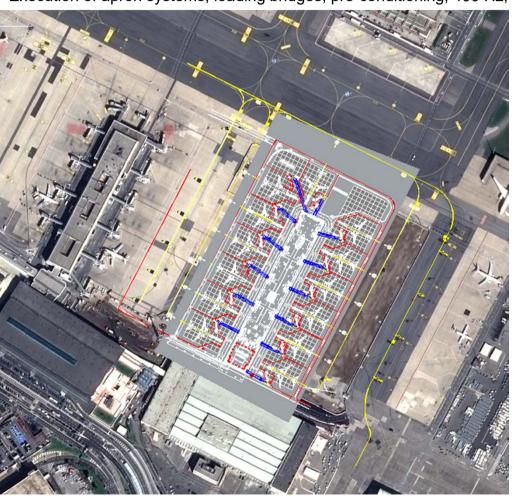
East Terminal - Lot 1 Pier A aircraft aprons "300"



Ref. Sheet A: 3.4 - Works for FCO South Terminal

DESCRIPTION OF THE WORKS:

- Building of 13 "up to C" stands in contact, implementation of parallel taxiways, building of new ramp vehicles area near the head of new Pier A.
- Execution of apron systems, loading bridges, pre-conditioning, 400 Hz, VDGS, fuel pits.



EXPECTED BENEFITS

- · Increase of apron capacity
- Improvement of operational performance: LVP with RVR < 400 m, full optional systems: fuel pit, 400 Hz, PCA, VDGS

STATUS and AMOUNTS

Construction in progress

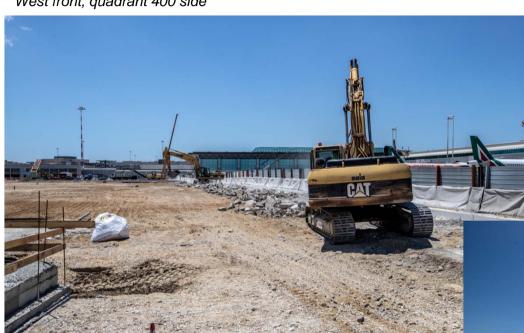
Completion date: December 2018

Actual 2017	Estimate 2018
€ 3.8 M	€ 8.5 M

East Terminal - Lot 1 Pier A aircraft aprons "300"



West front, quadrant 400 side



East front, Alitalia technical area side



Demolition of Terminal 2 – preparatory works for East Terminal



Ref. Sheet A: 3.4 - Works for FCO South Terminal

DESCRIPTION OF THE WORKS:

Terminal 2, closed to operations since November 2017, will be demolished by the end of 2018 to allow the Extension of Terminal 1 to be built.

Security checks and services area of Terminal 1 will be located in the outline of the current Terminal 2.



EXPECTED BENEFITS

Preparatory works for East Terminal

STATUS and AMOUNTS

Works in progress

Completion date: November 2018

Actual 2017	Estimate 2018
- € M	€ 2.4 M

New Terminal 1 CBC - preparatory works for East Terminal

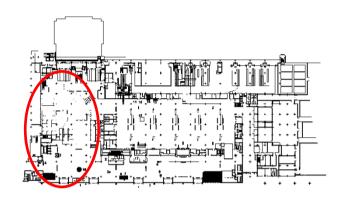


Ref. Sheet A: 3.4 - Works for FCO South Terminal

DESCRIPTION OF THE WORKS:

The location of the current CBC is interfering with the reconfiguration of the root of departure area D, as planned by the East Terminal - lot 2 project and aimed at accommodating the passport control area for passengers in transit.

Together with the crew entry point, the CBC will therefore be repositioned in a transitory stage at Terminal 1 arrivals and set up in two parts - one landside and one airside.



AREA DI CANTIERE

LANDSIDE:

- Staff area
- Arrivals lounge and refreshments
- reserve crews room
- Ipad and tablet technical assistance
- Rest rooms

AIRSIDE:

- 11 briefing rooms
- Briefing Package area
- Baggage storage
- Locker rooms and rest rooms
- Open space

EXPECTED BENEFITS

- Improved functional distribution and facilitation of CBC operations
- Preparatory works for East Terminal

STATUS and AMOUNTS

Works in progress

Completion date: December 2018

Actual 2017	Estimate 2018
€ 0.3 M	€ 2.9 M

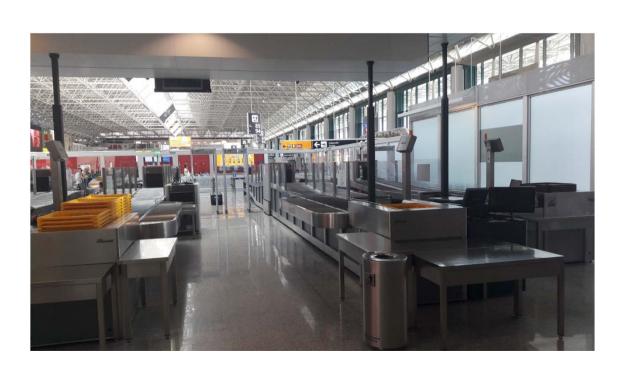
Strengthening of security checks Terminal 1 West - preparatory works for East Terminal

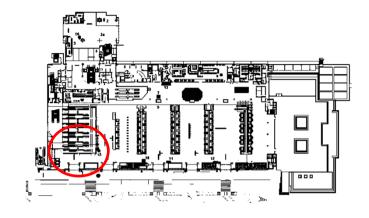


Ref. Sheet A: 6.1 - Other works for FCO South

DESCRIPTION OF THE WORKS:

The east security checks of Terminal 1 are planned to be closed at the end of the summer 2018 to allow the building of the a check-in counters row. Therefore the west security checks have been reinforced by adding the ninth X-ray machine.





EXPECTED BENEFITS

- Increased sub-system capacity
- Increased service level

STATUS and AMOUNTS

in progress

Completion date: August 2018

Actual 2017	Estimate 2018
- € M	€ 0.1 M

New ticket counters in Terminal 3 on mezzanine level

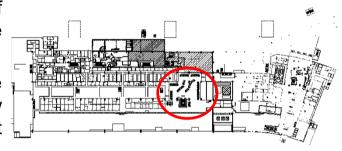


Ref. Sheet A: 3.3 - Works for FCO South Terminal

DESCRIPTION OF THE WORKS:

The construction of new ticket counters was completed with the aim of centralizing the ticket counters service in a single area and in the perspective of upgrading and improving the mezzanine level of Terminal 3.

The transfer to the mezzanine level led to an increase in surface area at the departures level, as the existing stations have been dismantled. The new counters feature an innovative and efficient design, defined with the agreement of the airlines in the choice of both architectural and technical solutions.





EXPECTED BENEFITS

- Centralizing ticketing services to make passenger orientation easier
- Increased surface area for passengers flow at the departures level

STATUS and AMOUNTS

in progress

Completion date: August 2018

Actual2017	Estimate 2018
€ 0.1 M	€ 1.9 M

Strengthening of the Terminal 3 sensitive flights security checks





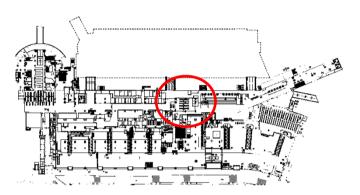
Ref. Sheet A: 3.3 - Works for FCO South Terminal

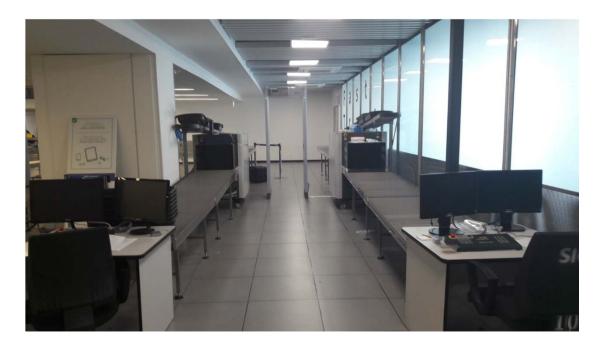
DESCRIPTION OF THE WORKS:

Centralization of all US and Israeli airlines led to a growing demand on the relevant security sub-system.

It was necessary to increase its capacity with the adaptation of the accumulation area and the introduction of two new X-ray machines.

The works also involved the offices of the government bodies, the plants and the direction signs to achieve full integration with the existing structure.





EXPECTED BENEFITS

- Increased Terminal 3 capacity for sensitive flights security checks
- Improved passenger experience by reducing waiting time

STATUS and AMOUNTS

Completed

Actual 2017	Estimate 2018
- € M	€ 0.2 M

Reconfiguration of the Terminal 3 sensitive flights check-in area



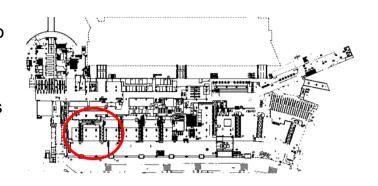


Ref. Sheet A: 6.1 - Other works for FCO South

DESCRIPTION OF THE WORKS:

The increase in "sensitive" originating traffic at Terminal 3 led to the need to enlarge the area in order to improve the service level offered to passengers.

Works included the moving of the "ballistic wall", with the gain an extra 300 sq.m, the installation of 5 new check-in counters and the doubling of baggage collectors of check-in row "E".







- Increased check-in capacity and traffic flow surface area for sensitive flight passengers
- Increased service level

STATUS and AMOUNTS

Completed

Actual 2017	Estimate 2018
- € M	€ 0.5 M

New automated e-gates for T3 sensitive flights

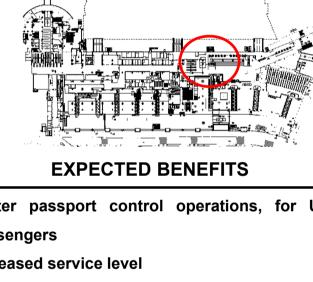


Ref. Sheet A: 6.2 - Other works for FCO South

DESCRIPTION OF THE WORKS:

Following agreements reached with the US authorities, the possibility to use e-gates was extended to passengers carrying US passports.

In order to achieve all of its benefits, this operational changes required that the e-gate area be adapted with the installation of two new devices and with the reconfiguration of the accumulation areas and boundary walls.





- Faster passport control operations, for US passengers
- Increased service level
- Decongestion of the accumulation areas

STATUS and AMOUNTS

In progress **Completion date: August 2018**

Actual 2017	Estimate 2018
- € M	€ 0.3 M

New Terminal 3 "row L" check-in counters



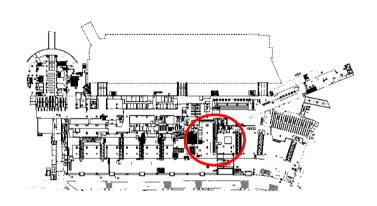
Ref. Sheet A: 6.1 - Other works for FCO South

DESCRIPTION OF THE WORKS:

Building of 11 new check-in counters in place of the ticket counters previously standing in "row L" and now moved to the mezzanine level.

New technology counters were adopted, which have a smaller front and integrate the desk facing the public with the access for the operator.

This concept allowed equipment and capacity to be increased without the need to extend the occupied space and negatively impact the traffic flow area.





EXPECTED BENEFITS

- · Increased check-in desk capacity
- · Technological update
- Increased service level

STATUS and AMOUNTS

Completed

Actual 2017	Estimate 2018
- € M	€ 0.7 M

Upgrading of departures area E 31-44 "Satellite"



Ref. Sheet A: 6.1 - Other works for FCO South

DESCRIPTION OF THE WORKS:

Upgrade of the "Satellite" departures area is progressing by phases in order to guarantee Non-Schengen passengers an experience as close as possible to that offered by departures area E.

The refurbishment works include upgrading the wall covering finishes, new false ceiling, new lighting system, seats and battery charging stations.



EXPECTED BENEFITS

- Upgraded finishes consistent with those in the new pier and front building
- · Increased service level offered

STATUS and AMOUNTS

In progress
Completion in 2019

Actual 2017	Estimate 2018
€ 0.9 M	€ 0.7 M



Upgrading of Terminal 3 VAT Refund area

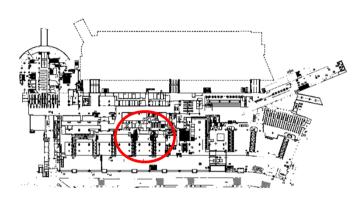


Ref. Sheet A: 3.3 - Works for FCO South Terminal

DESCRIPTION OF THE WORKS:

The desks of the VAT Refund operators are currently positioned in continuity with the check-in counters along the fronts of the two opposite half-rows, while the Customs office is located parallel with the front of the terminal facing the facade.

This configuration often leads to critical lining up and congestion situations, that make total reappraisal of the layout necessary by bringing forward the layout planned in the medium-term project (larger dedicated areas for lining up).



EXPECTED BENEFITS

- Decongestion of the waiting area
- · Increased service level and passenger flow area
- · Elimination of interferences between check-in and VAT Refund processes

STATUS and AMOUNTS

Design in progress Completion date: 2019

Actual 2017	Estimate 2018
- € M	€ 0.3 M



New Terminal 3 baggage reclaim carousel and L&F



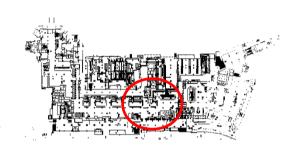
Ref. Sheet A: 3.3 - Works for FCO South Terminal

DESCRIPTION OF THE WORKS:

Another baggage reclaim carousel was installed in order to meet the final destination passenger traffic growth.

So that the position would not negatively affect passenger flow space, the following were built as preparatory works:

- a new baggage storage in the East side of Terminal 3, in an area previously used to store carts
- a new L&F desk configured so as to not affect the passenger flows in the new layout





EXPECTED BENEFITS

- Increased baggage reclaim capacity
- Raised level of quality and comfort of the areas involved
- · Optimized passenger flows

STATUS and AMOUNTS

Completed

Actual 2017	Estimate 2018
€ 0.1 M	€ 1.1 M

New VIP lounges



Ref. Sheet A: 6.1 - Other works for FCO South

DESCRIPTION OF THE WORKS:

In 2018, the services available in Boarding Area E were enhanced through the building of lounges on the mezzanine level of the Front Building and in the Pier.

The new lounges are for Alitalia and British Airways and for the provider "Premium Plaza".

The upgrading the existing lounges has continued at the same time.



EXPECTED BENEFITS

 Increased service level offered and improved overall passenger experience

STATUS and AMOUNTS

Completed

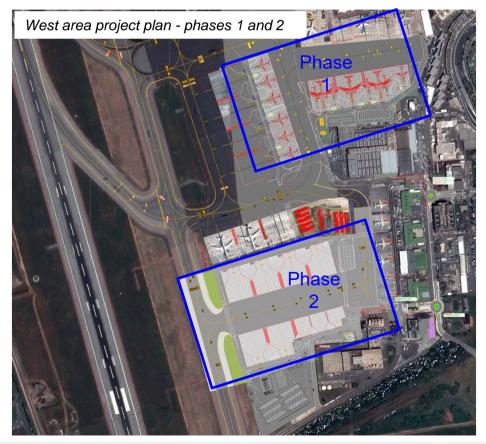
Actual 2017	Estimate 2018
€ 0.2 M	€ 1.1 M

West Area, expansion of aircraft parking aprons (phases 1, 2)



DESCRIPTION OF THE WORKS:

- PHASE 1: demolition of freight tunnel and former waste treatment area buildings, reconfiguration of 808-812 aprons (3 "up to E" + 1 "up to C", alternate configuration 6 "up to C"), construction of 6 new "up to C" aprons and related taxiway, new ramp vehicles area.
- PHASE 2: new aircraft aprons and related taxiway (6 "up to E" + 3 "up to C", alternate configuration 4 "up to E" + 6 "up to C"), new area for ramp vehicles.





Ref. Sheet A: 2.2 - Flight Infrastructure Works for FCO South

EXPECTED BENEFITS

- Capacity increase
- Improvement of operational performance: LVP with RVR < 400 m, full optional systems (fuel pit, 400 Hz, PCA, VDGS)

Phase 1: completed

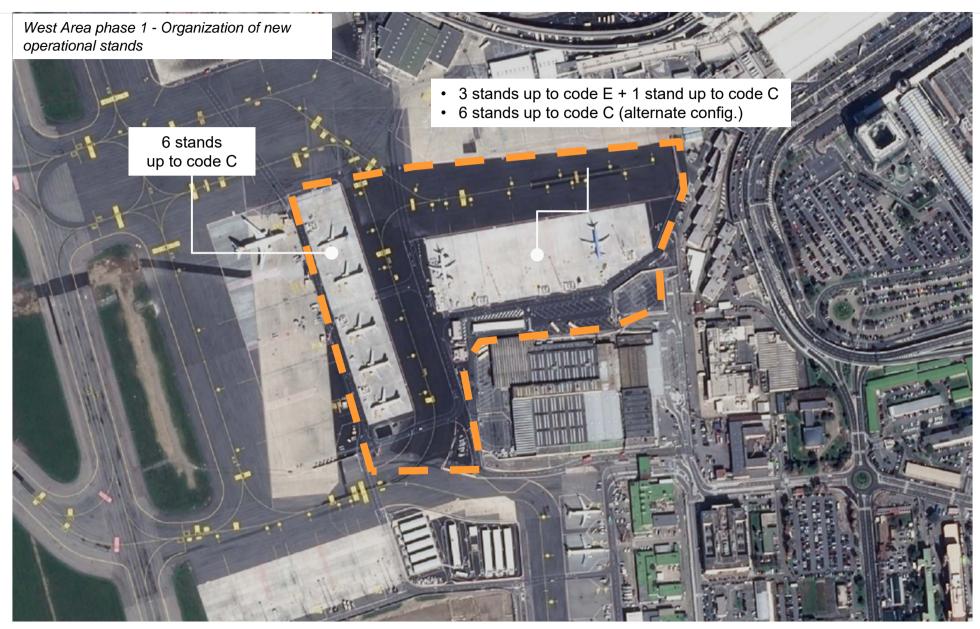
Phase 2: construction in progress

Completion date: March 2019

Actual 2017	Estimate 2018
€ 19.9 M	€ 17.6 M

West Area, expansion of aircraft parking aprons - phase 1





West Area, expansion of aircraft parking aprons - phase 2



West Area phase 2 - Laying of flexible paving



West Area phase 2 - Execution of water works

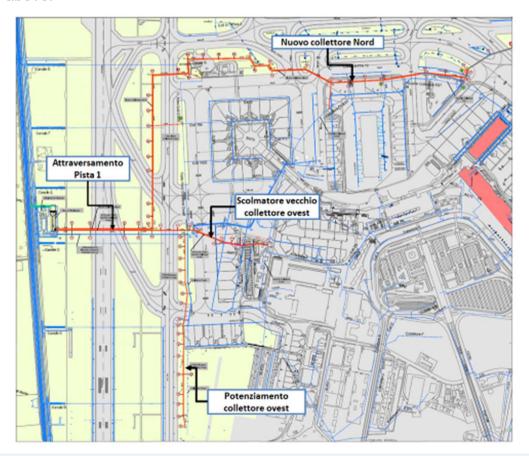


Works to mitigate the water risk in the West Area



DESCRIPTION OF THE WORKS:

- Construction of the new North collector and enhancement of the collectors of the west area;
- Construction of the spillway of the Old West Collector and construction of a new crossing of Runway 1;
- New oil separator to treat the flow coming from the collectors mentioned above.





Ref. Sheet A: 2.31 - Flight Infrastructure Works for FCO South

EXPECTED BENEFITS

- Mitigation of the water risk with creation of new backbones to reduce the impact of heavy rainfall events on airport operations;
- Improvement of the drainage system for the future paved surfaces;
- Reduction of flow to the Traiano pumping station.

STATUS and AMOUNTS

Construction in progress

Completion date:

- main works: December 2018

- residual phase: February 2019

Actual 2017	Estimate 2018
€ 13.3 M	€ 8.1 M

Works to mitigate the water risk in the West Area







New quadrant "800" ramp area



DESCRIPTION OF THE WORKS:

- Relocation of the activities present in building PG353A called "former alce" in order to demolish it;
- Construction of a ramp area for parking the aircraft assistance vehicles serving the airlines operating in the west area;
- Arrangement of specific charging stations for electrically powered ramp vehicles.





Ref. Sheet A: 6.1 - Other works for FCO South

EXPECTED BENEFITS

- New stalls for ramp vehicles serving aircraft with Non-Schengen destinations in response to the growth rate of the expected traffic;
- Reduced handling time and flows of the ramp vehicles.

STATUS and AMOUNTS

Design in progress

Actual 2017	Estimate 2018
- € M	€ 0.1 M

New electricity grid for runways



Ref. Sheet A: 6.1 - Other works for FCO South

DESCRIPTION OF THE WORKS:

- Centralization of absolute reliability of the electrical power supply network for runway equipment;
- Use of high power rotating units, to be installed in two new cabinets specific for power continuity supply, to replace the existing medium-size rotating units installed locally in the single Medium/Low Voltage transformer stations;
- Reorganization of the medium voltage power network that is reconfigured from single rings to double rings in such a way as to maximize power reliability;
- Revamping of systems in existing substations.

EXPECTED BENEFITS

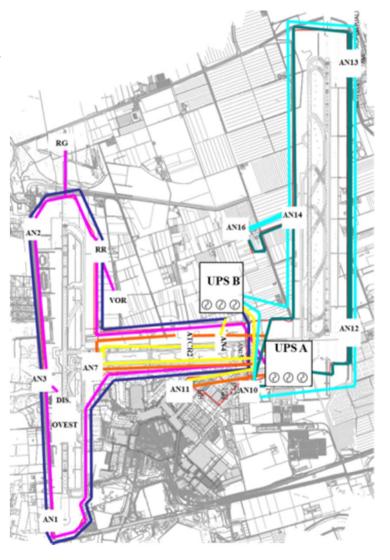
Increased efficiency and reliability of the electricity grid of the runways

STATUS and AMOUNTS

Construction in progress

Completion date: December 2018

Actual 2017	Estimate 2018
€ 7.2 M	€ 5.2 M



Renovation of electrical substation and MV switching center



Ref. Sheet A: 6.1 - Other works for FCO South

DESCRIPTION OF THE WORKS:

- Construction of a new high voltage/medium voltage electrical substation, located adjacent to the existing one, in order to ensure greater reliability of the entire electrical grid
- Physical breakdown at the high/medium voltage transformer level by using four smaller transformers, totally redundant, which divide the network into four sectors
- Adoption of gas rather than air insulated high voltage systems, to provide greater plant protection, better compartmentalization for fire prevention and smaller amounts of electromagnetic emissions.



EXPECTED BENEFITS

- Less time to restore faults by dividing the grid into sectors;
- Provide greater plant protection, better compartmentalization for fire prevention and smaller amounts of electromagnetic emissions

STATUS and AMOUNTS

Construction in progress

Completion date: November 2018

Actual 2017	Estimate 2018
€ 9.3 M	€ 4.8 M

Renovation of electrical substation and MV switching center



4+4 external oil transformers



Gas Insulating System



Replacement of lighting towers



DESCRIPTION OF THE WORKS:

Ref. Sheet A: 6.1 - Other works for FCO South

- Installation of new lighting towers to upgrade the lighting system of the aircraft aprons, of a height above the ground of between 20 and 40 meters, equipped with mobile crown system for the installation of floodlights;
- Installation of new LED floodlights;
- Concrete bed laid on site with low depth in order to reduce operational interferences.



EXPECTED BENEFITS

- Compliance with regulatory requirements (Regulation 139/2014).
- · Increased visibility on aircraft aprons.

STATUS and AMOUNTS

Construction in progress

Completion date:

Phase 1: 2018; phase 2: March 2019

Actual 2017	Estimate 2018
€ 0.4 M	€ 3.1 M

Implementation of new A-VDGS system: Software



Ref. Sheet A: 6.1 - Other works for FCO South

DESCRIPTION OF THE WORKS:

- Implementation of "SAM Safecontrol Apron Management" software and integration of the existing optical guides in the new platform; connection of the new software with the other airport systems and databases.
- Currently, the optical guides are used only for their primary function of guiding the pilot. The new software will enable benefits in terms of airport safety and performance, both with the conventional optical guides ("T3") and even more with the new plant solutions ("Safedock T1" optical guides), at the moment available at Pier E and at the new West aprons.







EXPECTED BENEFITS

- Improved operational safety, above all in bad weather and/or low visibility conditions
- · Quicker aircraft handling during "parking"
- Monitoring of the 400 Hz and preconditioning plants

STATUS and AMOUNTS

Construction in progress

Completion date: February 2019

Actual 2017	Estimate 2018
€ 0.1 M	€ 0.3 M

Perimeter protection system



Ref. Sheet A: 6.1 - Other works for FCO South

DESCRIPTION OF THE WORKS:

The initiative consists in **building of an intrusion-prevention system** along the perimeter fence of the airport (about 35 km)

- Perimeter fence control system with physical intrusion prevention function made up of tri-axial accelerometric sensors
- Video surveillance system consisting of 140 thermal image cameras and the same number of domes/ptz equipped with IR illuminator for night vision
- Central data processing, alarm management and diagnostics system, storage of data flows with operator stations for managing detections





EXPECTED BENEFITS

- Availability of an effective tool able to guarantee high security standards, permitting "smart" video shooting, recording and analysis of the areas involved. The primary objective of "smart analysis" is to eliminate "false positives" by selecting the "alerts" for which it is actually necessary to activate the intervention procedures, drastically reducing the time for evaluation and response
- The system will also be used for safety purposes for the airfield area (which includes apron areas and connectors), with the possibility to monitor the aircraft, vehicle and people flow in these areas.

STATUS and AMOUNTS

Completed

Actual 2017	Estimate 2018
€ 6.1 M	€ 1.4 M

ADR's new headquarters building

ADR

DESCRIPTION OF THE WORKS:

Adaptation of the building previously used for Alitalia offices (about 11,000 sqm) to ADR's new headquarters, centralizing all non-operational functions in a single site.



Ref. Sheet A: 4.4 - Landside Works for FCO South



EXPECTED BENEFITS

- Efficiency improvement
- Brown field development (no additional land consumed)

STATUS and AMOUNTS

Completed

Actual 2017	Estimate 2018
€ 6.1 M	€ 4.6 M

Agenda



ENAC - ADR Economic Regulation Agreement

2018 Investments

- Fiumicino
- Ciampino

2018 Investments



Ciampino

- □ Aprons 400 500 refurbishment
- \Box Aprons 100 200 300 refurbishment

Aprons 400 – 500 refurbishment

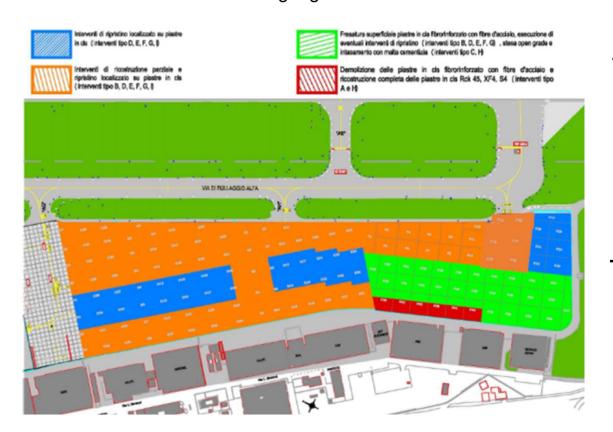


Ref. Sheet A: C.1 – CIA – Upgrade of airside system

DESCRIPTION OF THE WORKS:

Refurbishment of aprons 400 and 500:

- · complete demolition and reconstruction of the concrete slabs and restoration of the joints
- laying reinforcement mesh and surface treatment on site with modified "open grade"- type conglomerate and blocking using cement mortar
- restoration of horizontal signage



EXPECTED BENEFITS

- Correction of the surface characteristics of the paving
- Elimination of risk of FOD production (due to release of inert paving material)

STATUS and AMOUNTS

Completed

Actual 2017	Estimate 2018
€ 0.3 M	€ 2.1 M

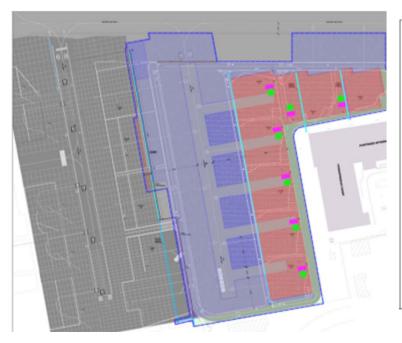
Aprons 100 - 200 – 300 refurbishment



Ref. Sheet A: C.1 – CIA – Upgrade of airside system

DESCRIPTION OF THE WORKS:

- Reconstruction of parking aprons for sectors 100 and 200 in concrete slabs;
- Reconstruction of taxilane SB in flexible paving;
- Realization of a new lighting system by installing 8 lighting towers equipped with LED lights;
- Realization of shielding drainage aimed at resolving critical issues tied to the disposal of apron water in the West side of the taxilane SB;
- Installation of PCA systems and 400Hz devices at the aprons in sector 100 and 200;
- Preparation of the civil works and installation of PCA systems and 28V devices at the aprons in sector 300.





EXPECTED BENEFITS

- · Correction of the characteristics of the paving
- Resolution of a non-compliance issue (see DAAD.LIRA.004) related to the carrying capacity of aprons 100 and 200.

STATUS and AMOUNTS

Construction in progress

Completion date: Pz100 Dec 2018; Pz200 Mar 2019

Actual 2017	Estimate 2018
€ 0.3 M	€ 5.1 M