

## **2020 Charges Update**

## **Progress of Investment Plan**

August 2019

## ENAC – ADR Economic Regulation Agreement

### Investments in 2018

- Fiumicino
- Ciampino

## **The development plan is in progress, with some modifications and optimizations relative to the the original plan due to external factors and assessments linked to capacity requirement**

- The investment plan for FCO Sud for the 2017–2021 five-year period has been substantially confirmed, except for the measures related to Runway 4 and development in the north area, for which permit issues are still being dealt with.
- In this context, the investments made since 2017 and to date are consistent with the traffic trends and the high level of attention to quality and operational efficiency.
- Development of the terminals is mainly focused on the extension of the East Terminal, that serves Schengen traffic, by accelerating the work schedule and rescheduling the investments to complete the work earlier than planned in the Economic Regulation Agreement (by 2021 instead of by 2022).
- Among the development work affected by permit issues, the postponement of the construction of Runway 4 does not appear critical with respect to the airport's operations, also taking into account the expected traffic trend in terms of movements and the progress of flight technologies and procedures for take-off and landing.
- Overall, the planning and execution of the works continue in line with the actual capacity requirements, while paying maximum attention to opportunities for optimization and "value engineering" to ensure maximum compliance with operational requirements and to maintain the high quality standards achieved in a context of capex efficiency.

# ADR's 2017–2021 Capex Plan (ERA)

Plan of the 2016 consultations for the second regulatory five-years period

In '000 €

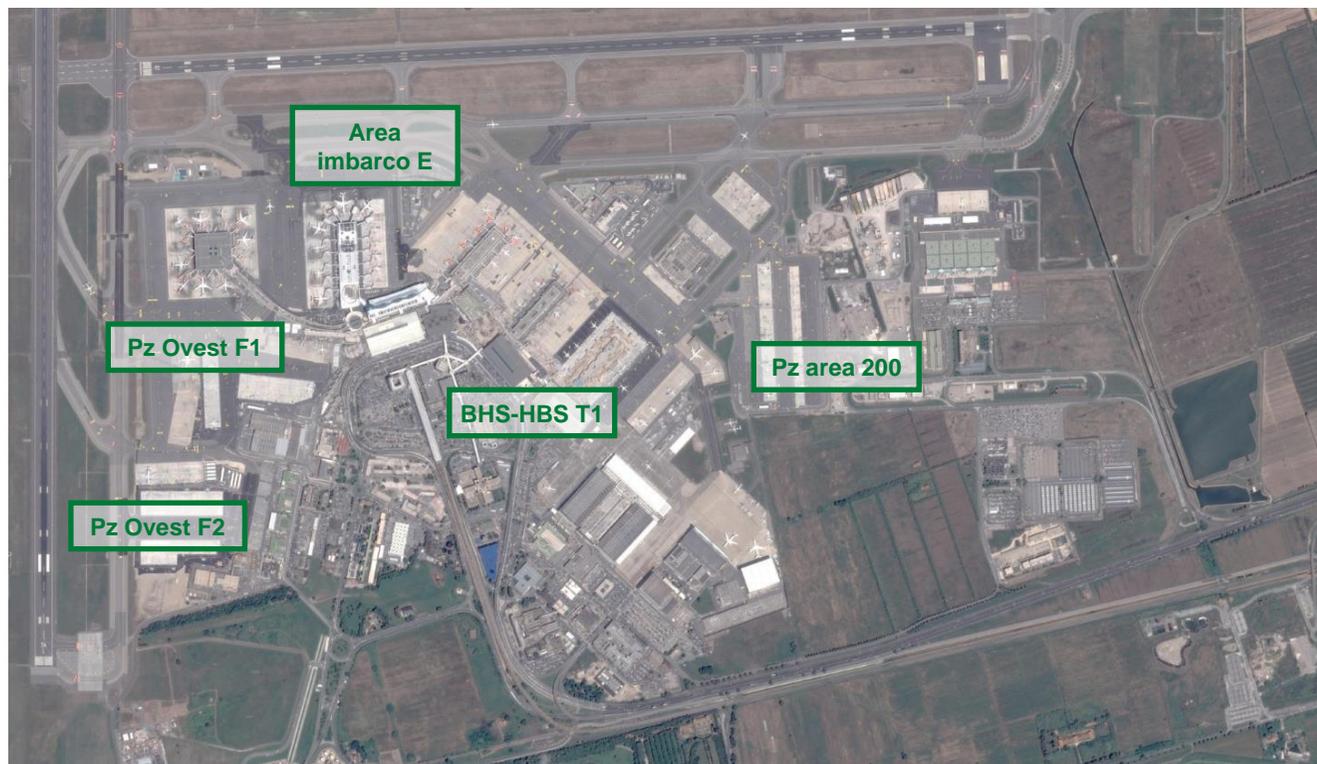
			2017	2018	2019	2020	2021	Tot 2017-2021
<b>F I U M I C I N O</b>	1	Urban Planning (FCO North)	5.306	5.580	7.233	516	7.810	26.445
	2	Airside infrastructures (FCO South)	41.366	71.221	28.918	65.672	53.908	261.085
	2	Airside infrastructures (FCO North)	7.618	36.468	120.225	184.358	183.363	532.033
	3	Terminal (FCO South)	63.586	139.518	126.220	49.497	59.614	438.436
	3	Terminal (FCO North)	4.365	11.242	9.552	9.653	0	34.812
	4	Landside (FCO South)	11.192	18.252	1.141	1.226	1.706	33.517
	4	Landside (FCO North)	240	2.456	2.788	5.607	4.525	15.615
	5	Parking facilities (FCO South)	2.304	14.469	16.432	1.382	379	34.965
	6	Others (FCO South)	133.748	83.124	63.855	52.510	43.938	377.175
	<b>Fiumicino South</b>			<b>252.197</b>	<b>326.584</b>	<b>236.566</b>	<b>170.287</b>	<b>159.544</b>
<b>Fiumicino North</b>			<b>17.529</b>	<b>55.746</b>	<b>139.798</b>	<b>200.134</b>	<b>195.698</b>	<b>608.905</b>
<b>Fiumicino Total</b>			<b>269.726</b>	<b>382.330</b>	<b>376.364</b>	<b>370.420</b>	<b>355.242</b>	<b>1.754.082</b>
<b>C</b>	Ciampino		15.990	11.217	6.662	4.308	2.880	<b>41.057</b>
<b>Total FCO + CIA</b>			<b>285.715</b>	<b>393.547</b>	<b>383.026</b>	<b>374.729</b>	<b>358.122</b>	<b>1.795.138</b>

## Project completion FCO South

The FCO South Completion Project determines the airport's **infrastructural situation** within its current grounds **to maximize the use of existing facilities and improve the airport's service level**. This completes the design of the situation as defined by the previous Airport Development Plans (PSA) without extending the state property for aviation activities (runways, aprons, terminals). **ENAC issued its technical authorization on 22/07/2011**.

The main **objectives** of the project:

- to ensure the relaunch and completion of the capacity offer in the short and medium term
- to improve the quality level of the infrastructure and of the services provided to users
- to ensure respect for the environment.



### “VIA” Decree FCO South Completion Project

- **Environmental Impact Assessment (“VIA”) Decree 236 of 8 August 2013, published in the Official Gazette on 9 November 2013**, concerning the environmental compatibility of the **Fiumicino South Completion Project** includes a number of requirements set by the Environmental Impact Assessment Commission of the **MATTM** and by the **MiBAC** under which ADR, on ENAC's behalf as "applicant", is carrying out compliance audits with the Reference Bodies to start construction of the works.
- Since **2014**, the compliance audits under the responsibility of **MATTM** concerning an initial set of interventions included in the Project have been started (**the so-called section projects, zero, first and second – 1st phase**), all of which **ended successfully in February and March 2018** with specific Directorial Resolutions.
- Further projects **were** sent to the **MATTM during the end of 2018 and the beginning of 2019: East Terminals System, lot 2, Doubling of Bravo taxiway, lot A and East Area Interchange**, the compliance audits of which have recently been completed.
- In **December 2018**, **MiBAC gave a positive opinion on the compliance audits** of the **East side Airport Terminals System project, lot 1**. In **June 2019** the same Ministry requested some **additions** regarding the project for the **East side Terminals System, lot 2**.

### Conference of Services ENAC Directorial Provision

- **The Conference of Services, convened to assess the city planning conformity of the Completion Project, ended in May 2014** issuing the final provision that led to the automatic change to the planning instruments in force, as well as the declaration of public utility and urgency of the Completion Project as a whole and the application of the restriction arranged to expropriate the areas not owned and affected by such procedure.
- On **27 August 2014 ENAC issued Directorial Provision no. 90339 to conclude and complete the permitting procedures**, definitively approving the Completion Project.
- All interventions already completed or planned are included in the Completion Project

# Fiumicino – Long Term Development Masterplan

The **Masterplan** for FCO defines **the infrastructural organization** until the end of the **concession period of the terminal**. It involves the construction of new flight infrastructure, passenger terminals, accessibility works, car parks, utilities and all the related infrastructure. ADR has drawn up and submitted the Masterplan to ENAC, agreeing upon its development path. The interventions included in the Masterplan will be carried out following an "ad hoc" environmental and urban planning approval, according to the ordinary procedures.

The timeline of approvals is summarized below:

- **October 2015:** Technical approval by ENAC of the Masterplan to 2044
- **April 2016:** ENAC requested the presentation of the Masterplan to 2030 with the **development of the first phase:** Runway 4, 1st module of the North Terminal and related works.
- **February 2017:** **ENAC approval** of the Masterplan to 2030
- **March 2017:** **start of the Environmental Impact Assessment procedure at MATTM/MiBAC** on the works included in the Masterplan to 2030.
- **June 2018:** Following discussions with the MATTM, **ADR and ENAC**, taking into account the observations that arose and, in particular, the changing situation regarding the definition of the Management Plan for the State Nature Reserve of Rome's Coast, **the "VIA" procedure had to be put on hold for approximately 10 months.**
- **May 2019:** **EIA procedure resumed.**

To date, the **investigation phase has been resumed and is still ongoing.**



# Ciampino – Long Term Development Masterplan

The **Masterplan for CIA** includes the upgrade of flight infrastructure and of the Commercial And General Aviation Terminal, under a “Secondary Airport” management model, geared towards environmental sustainability.

The timeline of approvals is summarized below:

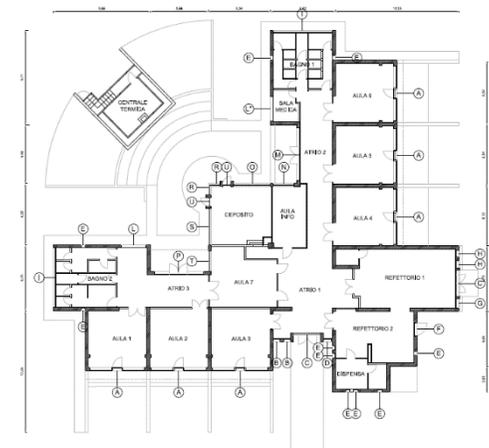
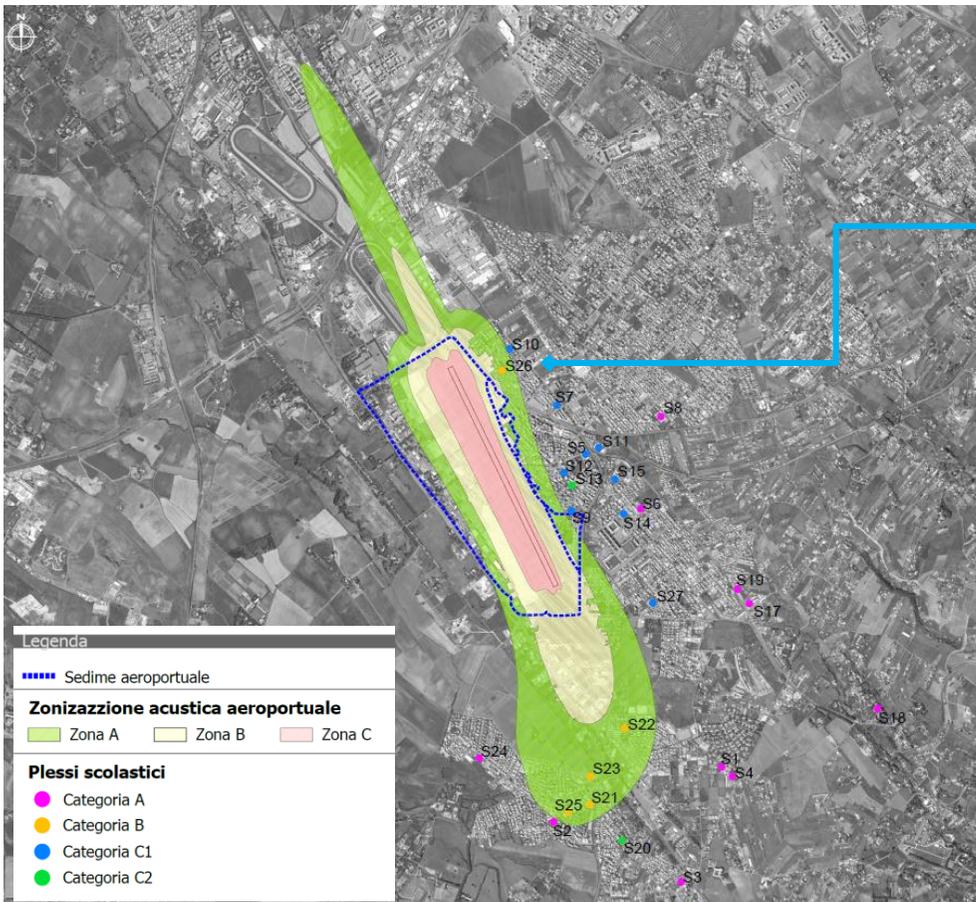
- **October 2015: ENAC** issued its **technical authorization**
- **February 2016: start of the “VIA” procedure at the MATTM for the works of the MP.** To date, **the preliminary phase has been completed** by the **EIA “VIA” Technical Commission**, which has issued a positive opinion with requirements on the measures planned from 2021 onwards. The **formal opinions of the Lazio Regional Government and the Ministry of Cultural Heritage** have also been issued.
- At present, **some further studies are underway between the Directorate General for Assessments and Environmental Permits of the MATTM and the EIA Commission itself** for the final issue of the Interministerial Decree (MATTM/MiBACT) on environmental compatibility. The procedure is therefore **not yet complete**.



# Ciampino – Noise Reduction and Abatement Plan (“PICAR”)

The MATTM approved the PICAR (“Piano interventi contenimento e abbattimento rumore”) with Ministerial Decree 345/2018. ADR is committed to complying with the provisions of the decree:

- By modifying the take-off procedure to reduce the local noise impact
- By introducing a cap on the flights operating at the airport
- By renovating sensitive buildings (schools) near the airport in the municipalities of Ciampino and Marino
  - 27 school buildings have been identified and surveyed. Sound level measurements, building surveys and projects for the adaptation of windows and doors are underway
  - The Decree requires the completion of interventions on noise-sensitive receptors by 2020



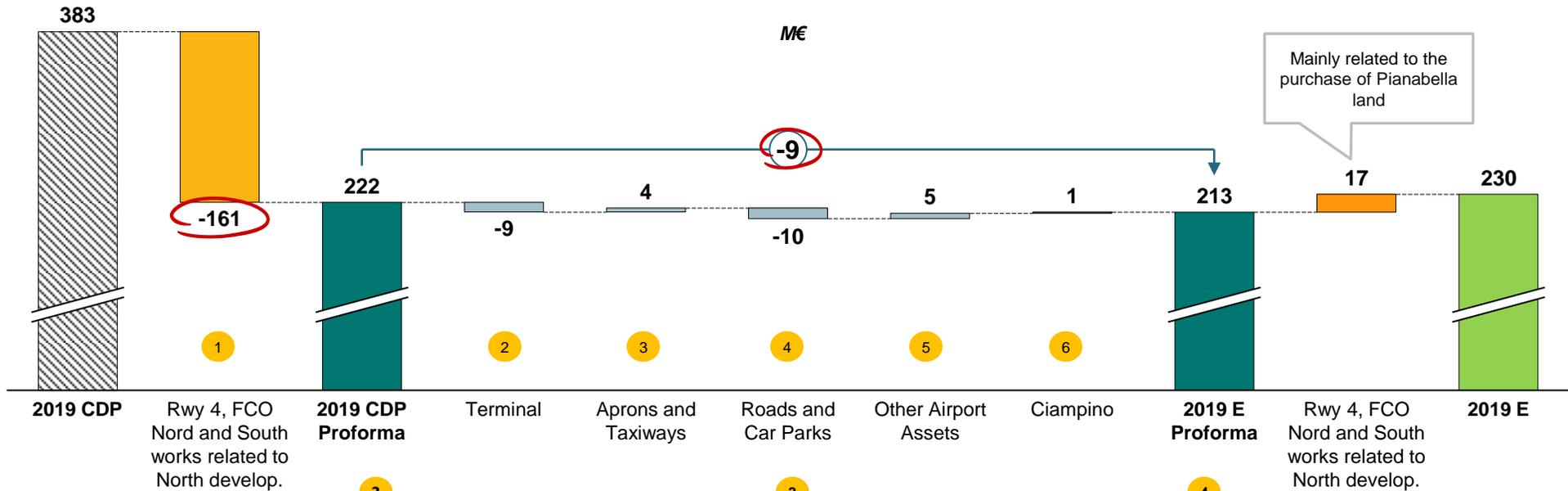
# Capex 2019: 230 M€, excluding works affected by permit issues production is substantially in line with the ERA forecast (213 M€ vs 222 M€ in ERA)



		M€, Like for Like changes (*)	
		2019 CDP	2019 E
<b>Runway 4 and Fiumicino North</b>	<ul style="list-style-type: none"> <li>Re-planning of works due to the EIA preliminary procedure of the Master Plan 2030 being drawn out.</li> </ul>	139,8	0,1
<b>FCO South Flight Infrastructure</b>	<ul style="list-style-type: none"> <li>West aprons phase 2 and works to mitigate flooding risk, completed</li> <li>New fuel logistics area (former Seram island), start of construction</li> <li>Taxiway Bravo doubling, start of works west lot</li> <li>Pianabella area (*), land acquisition (expected in 2018 in ERA)</li> <li>Works in the East Area (*), re-planning of design/work in line with the progress of permitting procedures for Runway 4 and capacity requirements</li> </ul>	28,9 20,0 8,9	27,4 16,8 10,6
<b>FCO South Terminal Infrastructure</b>	<ul style="list-style-type: none"> <li>East Terminals System, optimization of the stages with early expansion of T1 to the west and of NID transits border (2020) and of completion of the work (2021 vs 2022 ERA)</li> <li>T5 Reconfiguration, on hold</li> <li>Terminal 3, partial reorganization for in-depth design</li> </ul>	126,2	109,8
<b>FCO South, Lanside and Car Parks</b>	<ul style="list-style-type: none"> <li>East Area Interchange, start of works (postponed for delay in the signing of ADR/ENAC/ANAS/MIT agreement)</li> <li>People Mover (*), re-planning design in accordance with advancement permitting procedures Runway 4 / FCO North</li> <li>Mobility, new multi-level car park re-planning, in line with capacity requirements, and Mobility interventions for T5</li> </ul>	17,6 1,1 16,4	1,6
<b>Restructuring, Maintenance, ICT</b>	<ul style="list-style-type: none"> <li>High-medium voltage sub-station, higher capex for changes in project plan</li> <li>Terminal interventions, operating improvements and quality enhancements (Satellite riqualfied; T1 east departure hall; VAT refund area; signage posts)</li> <li>Parking and road system, maintenance and improvements</li> <li>ICT, development of technological infrastructures (HW and SW) to support the airport</li> </ul>	63,9	83,0
<b>Ciampino</b>	<ul style="list-style-type: none"> <li>Airside interventions, implementation and completion of planned interventions</li> </ul>	6,7	7,8
<b>Overall Total</b>		<b>383</b>	<b>230</b>
<b>Total excluding Runway 4, Fiumicino North and related works to the South (*)</b>		<b>222</b>	<b>213</b>

NB: ITA GAAP view; does not include real estate operations; (\*) Capex FCO Nord and FCO Sud interventions related to North development, in orange in histograms and neutralized from Like for Like variations

# Capex 2019: 230 M€, excluding works affected by permit issues production is substantially in line with the ERA forecast



Mainly related to the purchase of Pianabella land

**1** Works affected by permit issues (Environmental Impact Assessment procedure related to the Masterplan 2030), considered in ERA plan:

- **Runway 4 (-118 M€)**
- **FCO North (-22 M€)**
- **FCO South works related to North development (-21 M€)**: doubling of East side taxiway Bravo, ii) East aprons expansion, AZ technical area aprons, quadrant 200 "former postal area" aprons, iii) relocation of engine test stand, iv) people mover

**2**

- **East Terminal (+3 M€)**, activity re-planning, with completion of the work brought forward (2021 vs 2022 ERA)
- **Development optimization (-19 M€)** according to «under one roof» approach: suspension of Terminal 5 reconfiguration and prosecution of Terminal 3 upgrade works
- **Functional upgrade and quality (+5 M€)**, mainly related to: Satellite renewal, T1 East departing hall reconfiguration, commercial space refurbishment, new «vat refund» area in «Avancorpo», passengers signage and comfort
- **Other works (+2 M€)**

**3**

- **West aprons phase 2 and flooding risk mitigation works (+8 M€)** completion and recovering of the delay from previous years
- **New jet fuel logistics area (+2 M€)**, start of construction and recovering of delay from previous years
- **Doubling of West side taxiway Bravo (-7 M€)**, start of works, with planning review in order to minimize operational impact
- **Other works (+1 M€)**

**4**

- **New Car Parks (-14 M€)**, multi-level F car park works re-planning, in line with traffic capacity requirements
- **Terminal 5 Roads and Parks (-3 M€)**, on hold as well as Terminal 5 reconfiguration
- **New «Rent A Car» logistical area (+1)**, starting works for preparation area, oil and washing station in order to sustain RAC business development (connected to intercontinental passenger traffic)
- **East Area Junction (+1 M€)**, starting works and partial recovery of delays (for conclusion of the agreement with MIT/ANAS)
- **Other works (+5 M€)**, related to maintenance and functional improvements

**5**

- **New High / medium voltage power station (+2 M€)**, for project changes
- **Technological infrastructures (+4 M€)**, IT systems development (hw & sw) to support airport operations
- **Others (-1 M€)**

**6**

- **Airside works**, implementation and completion of planned interventions, recovering previous years delays

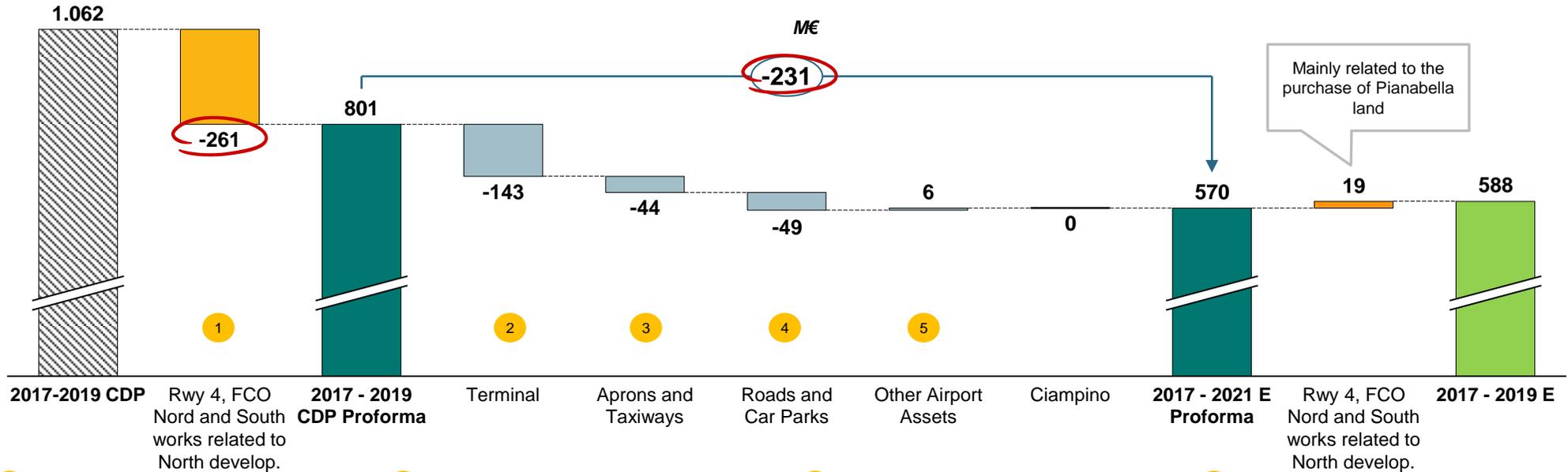
NB: ITA GAAP view; real estate works not included; capex related to item 6.1 and 6.2 of the "Scheda A" are assigned on the basis of the single work nature; the category «Other Airport Assets» includes item 4.1, 4.4 e 6.3 and related values of the 6.1 e 6.2.

# Capex 2017-2019: 588 M€, excluding works impacted by permit issues; reorganization over the five-year period and review of short-term requirements



Category	Key Initiatives	17-19 CDP	17-19 E	Change
Runway 4 and Fiumicino North	<ul style="list-style-type: none"> <li>Re-planning of works due to the EIA preliminary procedure of the Master Plan 2030 being drawn out.</li> </ul>	213,1	1,9	
FCO South Flight Infrastructure	<ul style="list-style-type: none"> <li>West aprons and works to mitigate flooding risk, works completed</li> <li>New fuel logistics area (former Seram island) and aprons in the 600 area, activities re-planned in line with capacity requirements</li> <li>Works in the East Area (*), purchase of Pianabella land; planning of design/work in line with the progress of the permitting procedures for Runway 4 and capacity requirements</li> </ul>	141,5 46,5 95,0	84,0 17,0 67,0	-28,0
FCO South Terminal Infrastructure	<ul style="list-style-type: none"> <li>East Terminal System, activity re-planning with recovery in the subsequent two years and early completion of the work (2021 vs 2022 ERA)</li> <li>Pier E, early production in 2016 versus plan</li> <li>T5 Reconfiguration, on hold</li> <li>Terminal 3, upgrade started, enhancing equipment and reorganizing part of the works for in-depth design</li> </ul>	329,3	192,9	-136,4
FCO South, Landside and Car Parks	<ul style="list-style-type: none"> <li>East area Junction, start of works (postponed awaiting conclusion of the ADR/ENAC/Anas/MIT agreement)</li> <li>People Mover (*), re-planning design due to permitting procedures for Rwy 4/FCO North</li> <li>Mobility, re-planning of work on car parks (mainly new multi-level), in line with capacity requirements; T5 mobility interventions put on hold</li> </ul>	63,8 1,9 61,9	12,3	-49,6
Restructuring, Maintenance, ICT	<ul style="list-style-type: none"> <li>High-medium voltage sub-station, higher capex for changes in project plan</li> <li>Airside and Terminal interventions, optimisation</li> <li>Power line, underground works re-planning in preparation for work on the East Area junction</li> <li>ICT, development of technological infrastructures (HW and SW) to support operations</li> <li>Other changes related to savings in auctioning contracts</li> </ul>	280,7	263,7	-17,0
Ciampino	<ul style="list-style-type: none"> <li>Terminal development interventions, reorganization</li> <li>Purchased "std 3" X-Ray scanners for hold baggage and extraordinary maintenance</li> </ul>	33,9	33,6	-0,3
<b>Overall Total</b>		<b>1,062</b>	<b>588</b>	
<b>Total excluding Runway 4, Fiumicino North and related works to the South (*)</b>		<b>801</b>	<b>570</b>	

# Capex 2017-2019: 588 M€, in reduction compared to ERA due to permit issues, works re-planning over the five-year period and review of short-term requirements



**1** Works affected by permit issues (VIA procedure related to the Masterplan 2030), considered in CDP plan:

- **Runway 4 (-160 M€)**
- **FCO North (-53 M€)**
- **FCO South works related to North development (-48 M€):** doubling of East side taxiway Bravo, ii) East aprons expansion, AZ technical area aprons, quadrant 200 "former postal area" aprons, iii) relocation of engine test stand, iv) people mover. Values include Pianabella land purchase

**2**

- **East Terminal (-65 M€)**, activity re-planning with recoup in 2020-2021 and completion of the work brought forward (2021 vs 2022 ERA)
- **Development optimization (-58 M€)**, according to «under one roof» approach: suspension of the Terminal 5 reconfiguration and continuation of the Terminal 3 upgrade works
- **Other works (-20 M€)**, Pier E optimization and works brought forward in 2016; other variations

**3**

- **West aprons phase 2 and flooding risk mitigation works (-3 M€)** completion in 2019 with optimizations
- **New jet fuel logistics area, aprons in 600 area, doubling of West side taxiway Bravo (-23 M€)**, rescheduled according to capacity requirements and operations needs
- **Optimizations for needs changes (-15 M€)**, mainly for: «contingency» aprons in technical area, cargo aprons, ULD storage areas, upgrade taxiway Delta for A380, pre-conditioning of aprons 313-320
- **Other works (-3 M€)**

**4**

- **New Car Parks (-25 M€)**, postponement of works on parking lots, consistent with traffic capacity requirements (multi-level F and ground parking in East area)
- **Terminal 5 Roads and Parks (-8 M€)**, on hold as well as Terminal 5 reconfiguration
- **New «Rent A Car» logistical area (+1)**, starting works for preparation area, oil and washing station in order to sustain RAC business development (connected to intercontinental passenger traffic)
- **East Area Junction (-22 M€)**, delays due to postponed conclusion of the agreement with MIT/ANAS
- **Other works (+5 M€)**, related to maintenance and functional improvements

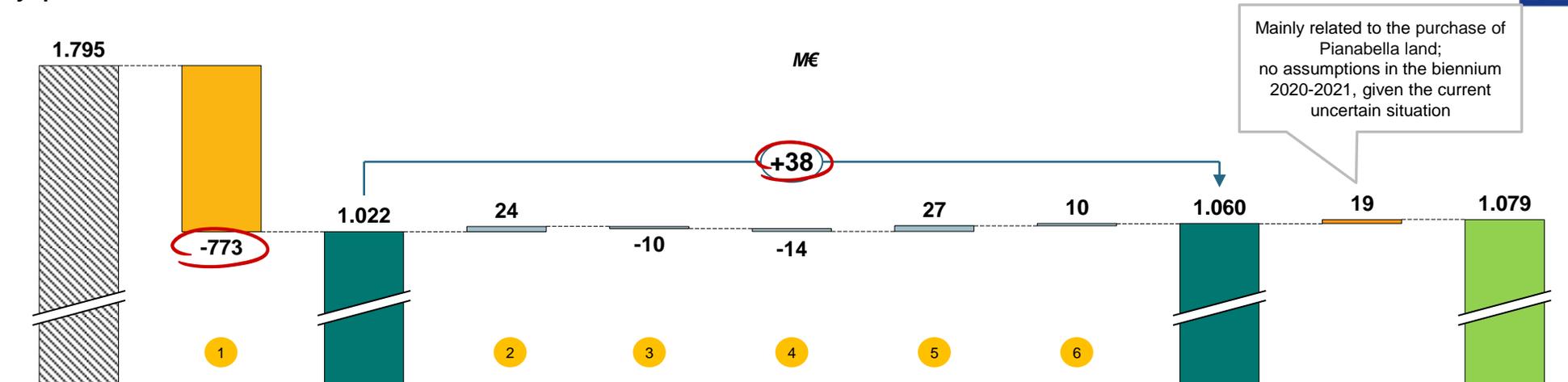
**5**

- **New High / medium voltage power station (+5 M€)**, for project changes
- **Technological infrastructures (+6 M€)**, IT systems development (hw & sw) to support airport operations
- **Others (-5 M€)**

# Capex 2017-2021: 1.1 billion, program substantially in line with ERA excluding works impacted by permit issues

		ME, Like for Like changes (*)	
<b>Runway 4 and Fiumicino North</b>	<ul style="list-style-type: none"> <li>Re-planning of works due to the EIA preliminary procedure of the Master Plan 2030 being drawn out.</li> </ul>		
<b>FCO South Flight Infrastructure</b>	<ul style="list-style-type: none"> <li>West aprons and works to mitigate flooding risk, works completed</li> <li>New jet fuel logistics area and aprons in the 600 area, expected to be completed by 2021</li> <li>Doubling of TWY Bravo, construction of west section, delay for east section (*)</li> <li>Works in the East Area (*), purchase of Pianabella land; planning of design/work in line with the progress of the permitting procedures for Runway 4 and capacity requirements</li> </ul>		-14,8
<b>FCO South Terminal Infrastructure</b>	<ul style="list-style-type: none"> <li>East Terminal System, early completion (2021 vs 2022 ERA)</li> <li>Pier E and Facade of T3, early production in 2016 versus plan</li> <li>T5 Reconfiguration, on hold</li> <li>Terminal 3, continuation of upgrade works and capacity increase including expansion westbound</li> </ul>		+20,0
<b>FCO South, Landside and Car Parks</b>	<ul style="list-style-type: none"> <li>Mobility, re-planning of work on car parks (mainly new multi-level and ground parking in East area), in line with capacity requirements and putting T5 mobility interventions on hold</li> <li>People Mover (*), re-planning design due to permitting procedures for RWY 4 / FCO North</li> </ul>		-34,4
<b>Restructuring, Maintenance, ICT</b>	<ul style="list-style-type: none"> <li>New car rental area for fleet logistics support</li> <li>SESAR interventions (Joint Control Room, VDGS +AMGCS sys.), for operational efficiency</li> <li>Buildings, Systems and networks, maintenance upgrading and enhancement work</li> <li>ICT, development of technological infrastructures (HW and SW) to support operations</li> </ul>		+56,9
<b>Ciampino</b>	<ul style="list-style-type: none"> <li>Terminal development interventions, reorganization</li> <li>Purchased "std 3" X-Ray scanners for hold baggage and extraordinary maintenance</li> </ul>		+10,1
<b>Overall Total</b>		<b>1,795</b>	<b>1,079</b>
<b>Total excluding Runway 4, Fiumicino North and related works to the South (*)</b>		<b>1,022</b>	<b>1,060</b>

# Capex 2017-2021: 1,1 Mld €, substantially in line compared with ERA, excluding works affected by permit issues



Mainly related to the purchase of Pianabella land; no assumptions in the biennium 2020-2021, given the current uncertain situation

**1** Works affected by permit issues (VIA procedure related to the Masterplan 2030), considered in CDP plan:

- **Runway 4 (-509 M€)**
- **FCO North (-100 M€)**
- **FCO South works related to North development (-164 M€):** doubling of East side taxiway Bravo, ii) East aprons expansion, AZ technical area aprons, quadrant 200 "former postal area" aprons, iii) relocation of engine test stand, iv) people mover. Values include Pianabella land purchase

**2**

- **East Terminal (+53 M€)**, early completion (2021 vs 2022 ERA)
- **Development optimization (-20 M€)**, according to «under one roof» approach: suspension of the Terminal 5 reconfiguration and continuation of the Terminal 3 upgrade works and capacity increase, including West extension
- **Other works (-9 M€)**, Pier E optimization and works brought forward in 2016; other minor variations

**3**

- **West aprons phase 2 and flooding risk mitigation works (-3 M€)** completion in 2019 with optimizations
- **New jet fuel logistics area (-4 M€)**, expected completion with optimizations related to reviewing of connected projects
- **Other works (-3 M€)**, suspension of cargo aprons, due to needs changes and different utilization of the area, partially offset by maintenance interventions and functional improvements

**4**

- **New Car Parks (-27 M€)**, postponement of works on parking lots, consistent with traffic capacity requirements (multi-level F, ground parking in East area, multi-level G design)
- **Terminal 5 Roads and Parks (-8 M€)**, on hold as well as Terminal 5 reconfiguration
- **New «Rent A Car» logistical area (+12)**, starting works for preparation area, oil and washing station in order to sustain RAC business development (connected to intercontinental passenger traffic)
- **Parks maintenance and functional improvements (+5)**, includes fire prevention certification, emergency stairs, rooftops refurbishment
- **Roads maintenance and functional improvements (+5 M€)**, includes adjustments to roundabouts, upgrading viaducts and entrance ramps, checks and maintenance on light towers and lighting poles, others

**5**

- **Sub-concession assets refurbishments (+6 M€)**, buildings and system for vehicles maintenance, refurbishment of the "former West catering" building for the Consolidation Center, works on AZ buildings taken over by ADR
- **New High / medium voltage power station (+5 M€)**, for project changes
- **Waters supply network and drainage system (+3 M€)**, i) T1 drainage collector upgrading for increased demand and ii) doubling of water reserve capacity
- **Technological infrastructures (+7 M€)**, IT systems development (hw & sw) to support airport operations
- **Others (+6 M€)**

**6**

- **Compliance/ Security improvement (+5 M€)**, «standard 3» X-Ray scanners for hold baggage, fire-prevention terminal compliance and upgrading of the runway approach path
- **Other changes (+5 M€)**, mainly for increase in intervention for maintenance, quality and functional improvements

NB: ITA GAAP view; real estate works not included; capex related to item 6.1 and 6.2 of the "Scheda A" are assigned on the basis of the single work nature; the category «Other Airport Assets» includes item 4.1, 4.4 e 6.3 and related values of the 6.1 e 6.2.

## ENAC – ADR Economic Regulation Agreement

### Investments in 2019

- Fiumicino
- Ciampino

## Fiumicino

### Terminal

- **T1**
  - East Terminal System
    - Lot 1
    - Lot 2
    - New CBC and crew gate
  - New check-in island
  - New Lost&Found
  
- **T3**
  - Bridge connecting Terminal 3 – Departure area C
  - Terminal 3 Upgrading Project
  - Reconfiguration of Emigration/Immigration borders
  - Upgrade of customs and VAT Refund area
  - New check-in desks in the ex VAT Refund area
  - Densification of check-in islands I, J, and K
  - New toilet facilities on arrivals level
  - Reconfiguration of the sensitive flights security area
  - New customs and VAT Refund area in T3 Front Building
  - Upgrade of Satellite departure area E 31-44
  - Joint Control Room (APOC)
  - Terminal 3 extension and new facility dedicated high-ranking State officials

### Airside

- West Area, expansion of aircraft parking aprons phase 2
- Doubling of taxiway Bravo – Lot A (west)
- Preparatory work for new fuel logistics area
- Works to mitigate the flooding risk in the West area
- New quadrant 800 ramp area
- Runways – New electricity grid
- Renovation of electrical substation and MV switching center
- Replacement of light towers
- Implementation of new A-VDGS system
- Implementation of New A-SMGCS System

# Development of FCO in 2019 – Main Interventions



*New Electrical Grid for Runways*

*Works to Mitigate Flooding Risk*

*Pier A – AVC*

*300 Apron*

*West Apron F2*

*Fuel Logistics Area*

*Cargo Area Interchange*

*Electrical Substation*

## DESCRIPTION OF WORKS:

The development of the East Terminal System is structured as two functional lots. Lot 1 includes the construction of the new Pier A and the front building of Terminal 1; Lot 2 includes the western extension of T1, the reconfiguration of departure area C and the new border node for transit passengers. Overall, the intervention provides a capacity increase of 6M departing pax per year, through 13 new loading bridges and 17 bus gates, as well as 3M pax arriving per year, through 3 additional baggage reclaim carousels.

## EXPECTED BENEFITS

- Greater capacity of the Domestic-Schengen departures system
- Greater capacity of the terminal's departure (check-in hall, security, immigration transits) and arrival subsystems (baggage claim room)
- Better passenger services and perceived quality

## STATUS and AMOUNTS

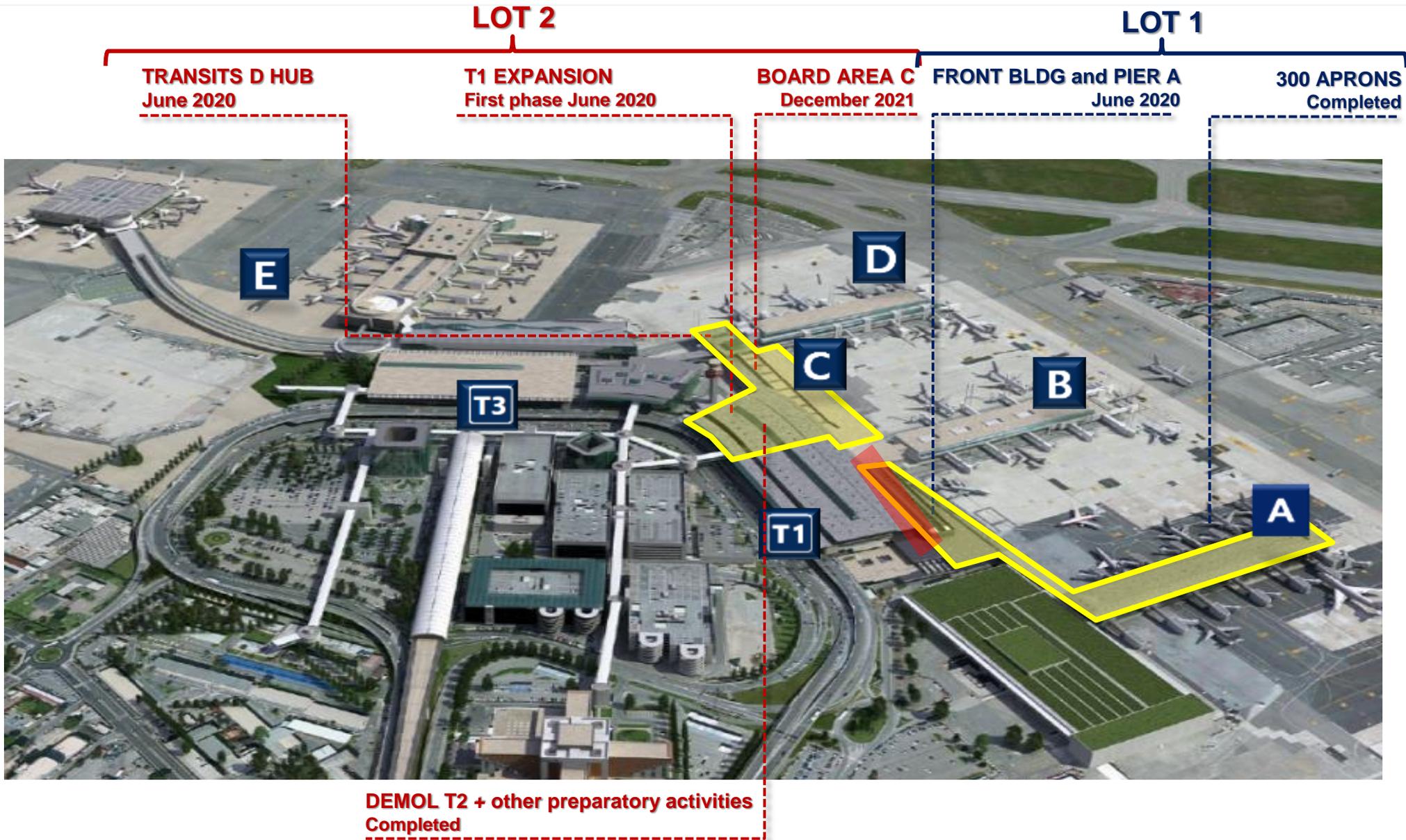
In progress

2018 actual	2019 estimate
40.6 M€	100.1 M€



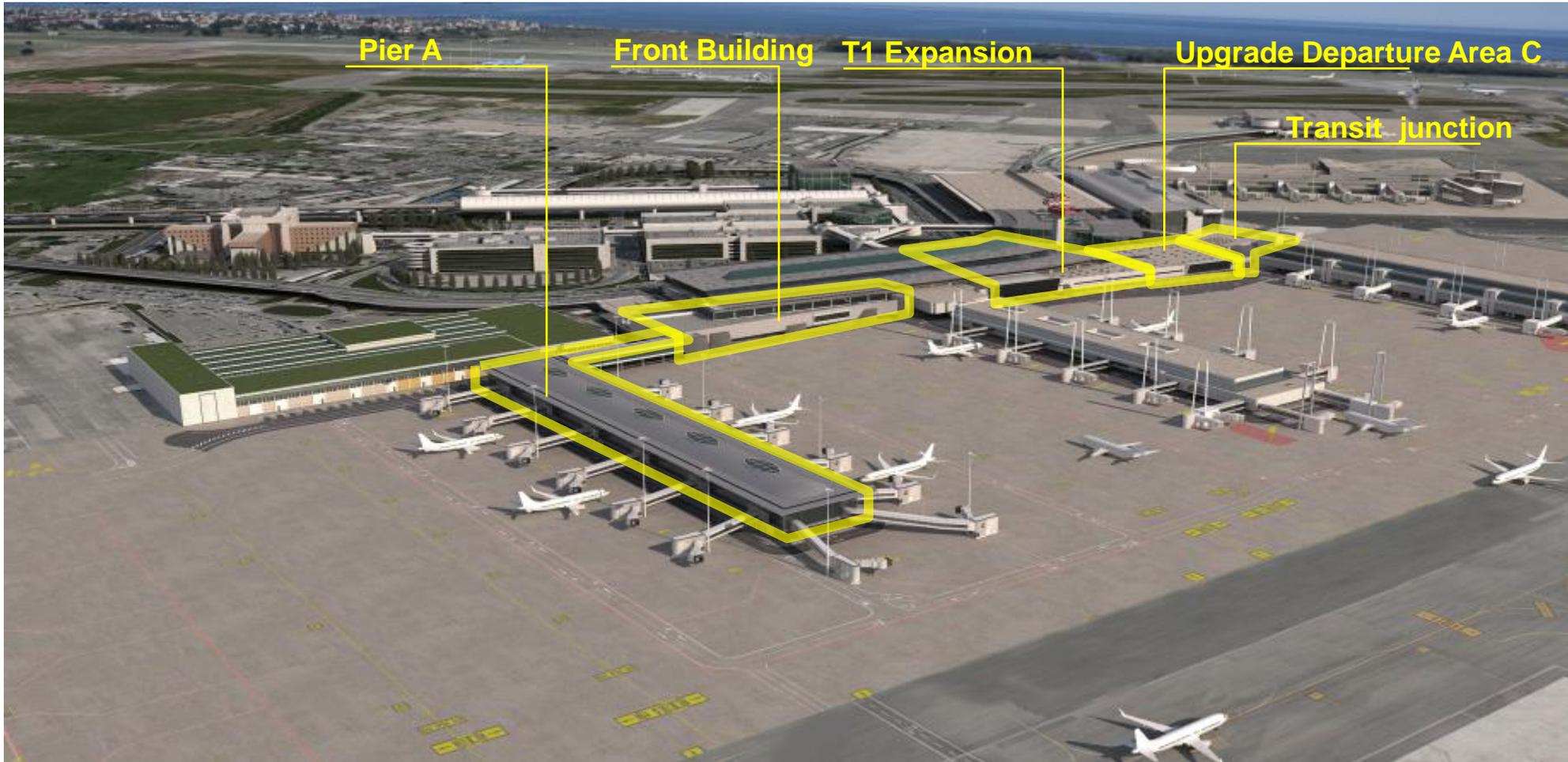
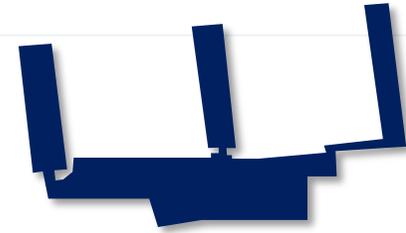
# East Terminal System

## Interventions and schedule



# East Terminal System

## Northeast view



# East Terminals System: program accelerated versus the ERA with releases synchronized with respect to operational requirements



		Current schedule	Schedule per ERA		
1	Departure Area A	Jun – 2020 *	Oct – 2019	<p>Confirmation of commissioning by summer 2020 to increase capacity and quality (13LB+10 remote)</p>	
2	T1 Front Building	Jun – 2020*	Oct – 2019		
3	Internal adaptations T1	PHASE I departures	Jun – 2020	<p>Gradual activation in line with Front Building and Pier timing</p>	
		PHASE II departures	Dec – 2020		Sept –2020
4	T1 Extension	PHASE I departures	Jun – 2020	<p>Early completion to have operational infrastructures of the Eastern system completed at the departures level from the beginning of 2021</p>	
		PHASE II departures	Feb – 2021		Oct – 2022
		Arrivals	Jun – 2021		
5	Departure Area C	Dec – 2021	Oct – 2022	<p>Early completion following activation of the T1 Expansion</p>	
6	Transit node D	Jun – 2020	Oct – 2022	<p>Early completion in view of changes to Schengen border legislation</p>	

(\*) Except for some areas on the Mezzanine level that will be completed by December 2020

See Schedule A: 3.4 – Works for FCO Sud Terminal

## DESCRIPTION OF WORKS:

Work is underway on the construction of the new Pier A and the extension to the north of Terminal 1 (work began in October 2017). The new pier will provide a capacity increase of 6M departing pax per year, thanks to 13 gates served by loading bridges and 10 bus gates. With the entry into service of the front building of Terminal 1, the commercial departure lounge as a passenger waiting area will be available at departure level with the related facilities such as family area, smoking lounges, work areas; while at mezzanine level food areas and three club lounges will be built.

## EXPECTED BENEFITS

- Greater departure capacity with +6M pax/year
- Quality perceived by passengers
- Focus on passenger experience
- Increase of service level offered

## STATUS and AMOUNTS

Work in progress on AVC and AIA

Completion in June 2020

(Completion of T1 adaptation December 2020)

2018 actual	2019 estimate
20.4 M€	64.6 M€



See Schedule A: 3.4 – Works for FCO Sud Terminal

## DESCRIPTION OF WORKS:

Having completed the demolition of Terminal 2, work is underway on the western extension of T1. The extension includes: i) the main square as a passenger waiting area, with seats facing the aprons; ii) the info and transit areas in a central position with respect to the departure lounge; iii) the commercial areas and the walk-through duty free. The new food court will then be built on the mezzanine level, overlooking the square. Looking forward, the upgrade of departure area C will include moving the gates to apron level and completing the departure lounge at departures level. Passport controls for transit passengers will be relocated to the new node at the root of departure area D, increasing capacity compared to the current layout.

## EXPECTED BENEFITS

- Greater capacity of terminal systems
- Enhancement of security and border checkpoints in transit
- More passenger services and perceived quality

## STATUS and AMOUNTS

Construction work in progress

ET1 departures completion February 2021

ET1 arrivals completion June 2021

NID Completion June 2020

AIC Completion December 2021

2018 actual	2019 estimate
8.2 M€	26.7 M€



# East Airport System – Lot 1 and 2 Rendering



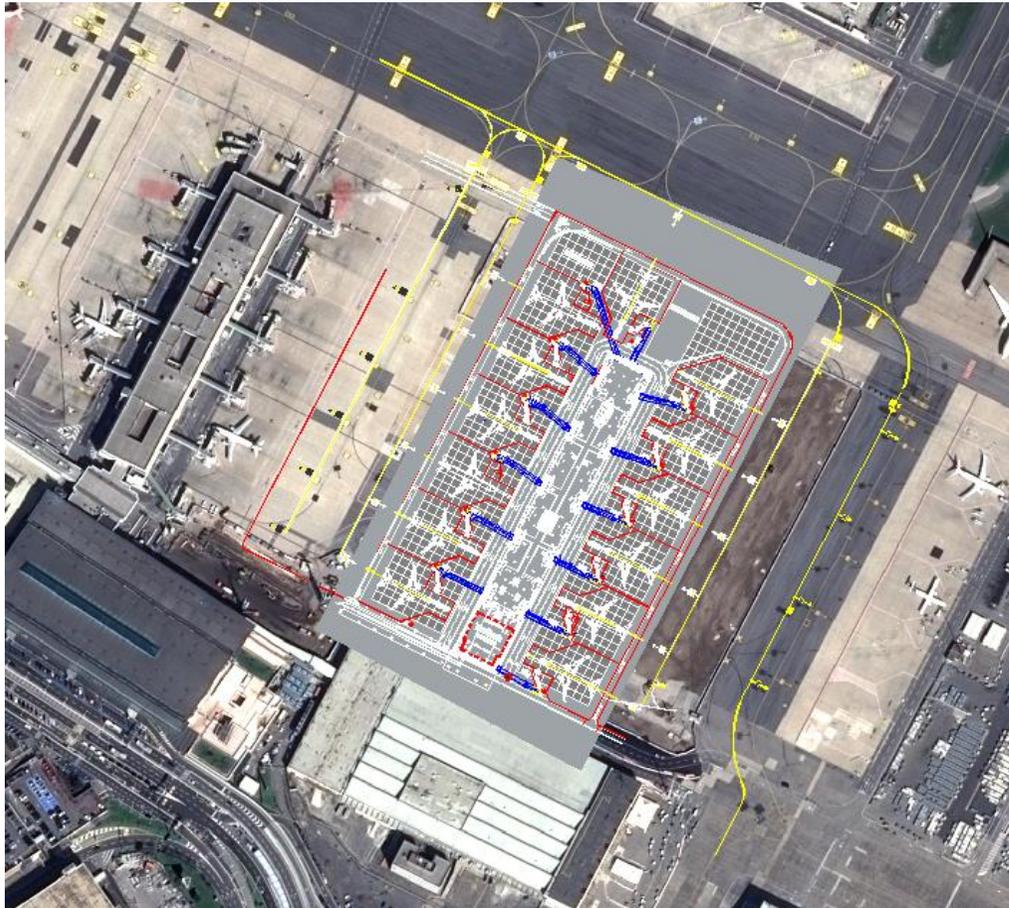
# East Airport System – Lot 1

## Aircraft aprons pertaining to boarding area A

See Schedule A: 3.4 – Works for FCO Sud Terminal

### DESCRIPTION OF WORKS:

- Construction of **13 stands** with "up to C" departure piers and taxiways, equipped with:
  - ramp vehicle areas
  - 400 Hz systems, preconditioning, optical guidance, fuel pit (available when the pier is put into operation)



### EXPECTED BENEFITS

- Capacity increase in aircraft stands and service levels
- Improvement of operational performance: LVP with RVR <400 m, fully equipped stands: fuel pit, 400 Hz, PCA, VDGS

### STATUS and AMOUNTS

Construction in progress

Completion date: July 2019

2018 actual	2019 estimate
7.1 M€	1.6 M€

# East Airport System – Lot 1

## Aircraft aprons pertaining to boarding area A

*West face side quadrant 400*



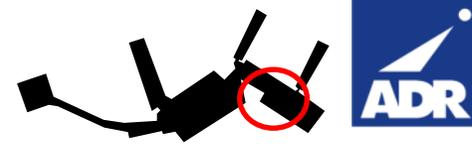
*East side of the Alitalia technical area*



*East side of the Alitalia technical area*



# New CBC and crew gate – preparatory work for East side development



See Schedule A: 3.4 – Works for FCO Sud Terminal

## DESCRIPTION OF WORKS:

The relocation of the Alitalia Crew Briefing Centre (CBC) to the Arrivals area of Terminal 1 is one of the preparatory activities for the development of the East Terminal System, in particular for the construction of the new transit junction at the root of departure area D. The premises of the Crew Briefing Centre have been divided between the landside and airside areas, according to operational requirements, linked by a dedicated corridor and crew security gate.

The final situation, expected by 2020, will optimize crew flows in the terminals, connecting the airside and landside parts of the CBC.



## EXPECTED BENEFITS

- Alitalia crew activity relocation with respect to the size of the future transit node
- Optimization of crew flows in the terminal

## STATUS and AMOUNTS

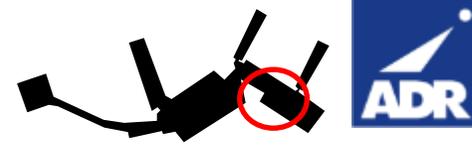
Phase 1 completed

Phase 2: design in progress

Completion December 2020

2018 actual	2019 estimate
2.1 M€	0.4 M€

# Bridge connecting Terminal 3 – Departure area C



See Schedule A: 3.3 – Works for FCO Sud Terminal

## DESCRIPTION OF WORKS:

The "Single Hub" profile defined by the completion of the East Terminals System has as its preliminary activity the new connection between the security checks of Terminal 3 and departure area C with to a new overhead route that allows the separation of the Schengen and Non-Schengen passenger flows originating at Terminal 3 and a greater route fluidity for passengers originating from the Non-Schengen area in Terminal 1.



## EXPECTED BENEFITS

- Passenger flow optimization
- Making pedestrian pathways and wayfinding easier

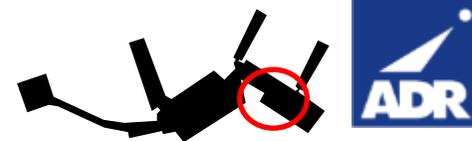
## STATUS and AMOUNTS

Construction work in progress

Completion: September 2019

2018 actual	2019 estimate
0.2 M€	1.3 M€

# New check-in area at Terminal 1



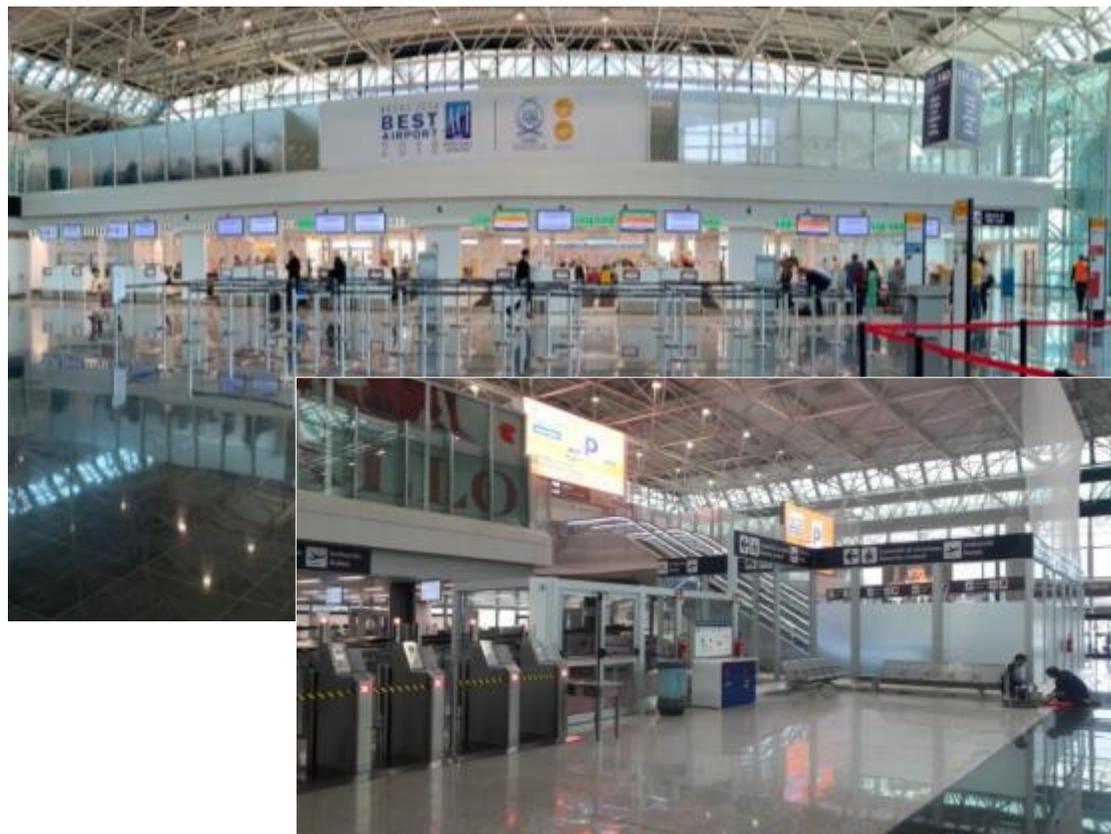
See Schedule A: 3.4 – Works for FCO Sud Terminal

## DESCRIPTION OF WORKS:

Check-in area “V” at Terminal 1 was completed in March 2019 with 30 new check-in desks.

The project is linked to the "East Hub" development work to increase the capacity of the Terminal subsystems.

Following its commissioning, optimization of carriers' allocation between T1 and T3 has become possible



## EXPECTED BENEFITS

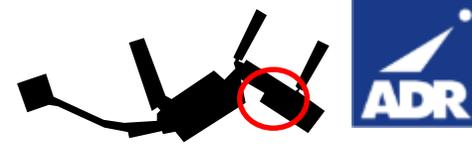
- Greater capacity for check in system
- Balancing of originating traffic between T1 and T3
- Better passenger services

## STATUS and AMOUNTS

Completed

2018 actual	2019 estimate
0.1 M€	2.3 M€

# New Lost&Found offices in Terminal 1

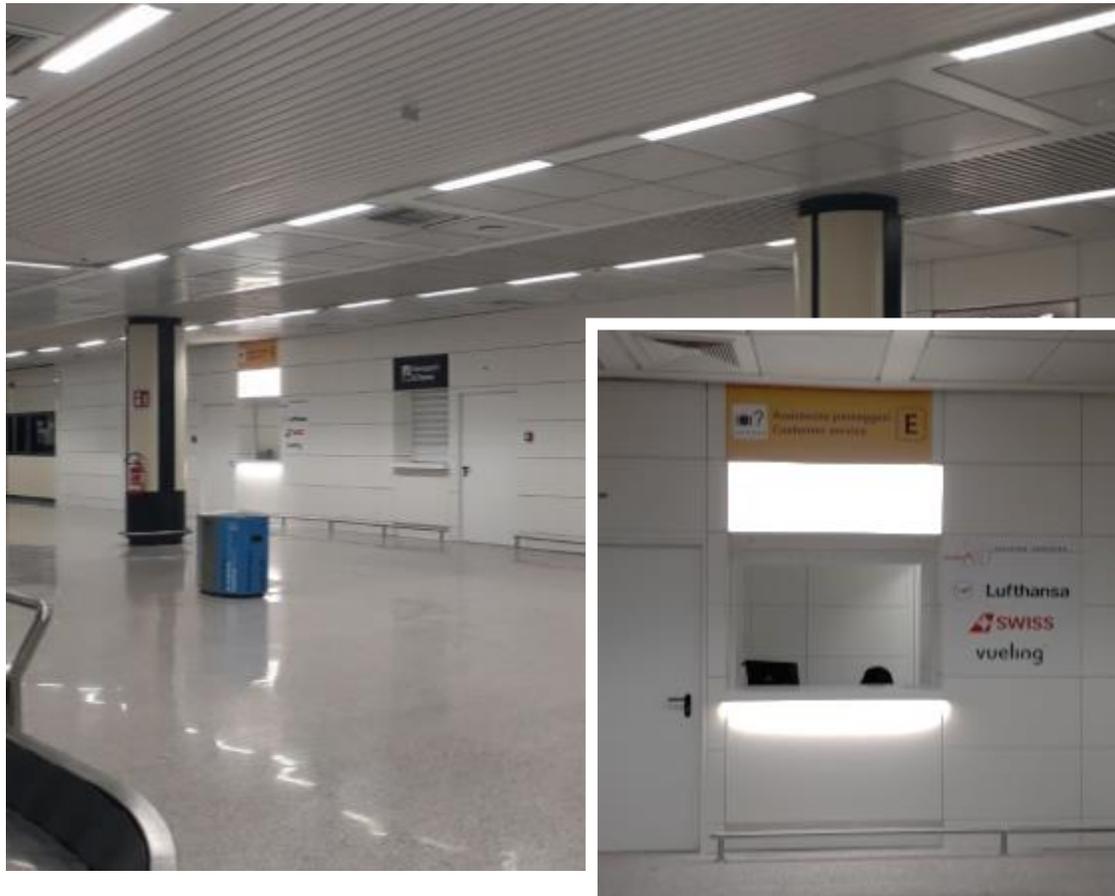


See Schedule A: 3.4 – Works for FCO Sud Terminal

## DESCRIPTION OF WORKS:

The construction of new Lost&Found facilities inside the T1 baggage reclaim room is preparatory to the transfer of traffic from T3 to T1 also for arrivals.

This requirement stems from the fact that, as a result of the above migration, the airlines that currently operate at T1 rely on several handlers.



## EXPECTED BENEFITS

- Will provide better operational flexibility between terminal systems
- Will improve the quality and comfort of the areas involved

## STATUS and AMOUNTS

Completed

2018 actual	2019 estimate
- M€	0.5 M€

# Terminal 3 Upgrading Project



See Schedule A: 3.3 – Works for FCO Sud Terminal

## DESCRIPTION OF WORKS:

ADR has completed the preliminary project to upgrade Terminal 3 in the arrivals, departures and mezzanine levels. Among the main drivers:

- ✓ **Increase** in size of the **baggage claim room** and greater **size and flexibility of the carousels**
- ✓ **More check-in desks** with new generation units
- ✓ Capacity increase in terms of **circulation area for passengers**
- ✓ Reorganization of border and sensitive flights area

The following slides show functional sections commissioned/completed.

## EXPECTED BENEFITS

- **Greater capacity for check in system**
- **Greater capacity for arrivals system**
- **Improved comfort and service level**

## \* STATUS and AMOUNTS

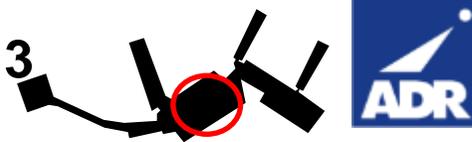
Overall preliminary design completed in July 2019

Final and detailed designs are in progress by sections

2018 actual	2019 estimate
6.4 M€	8.9 M€



# Reconfiguration of borders Emigration/Immigration Terminal 3

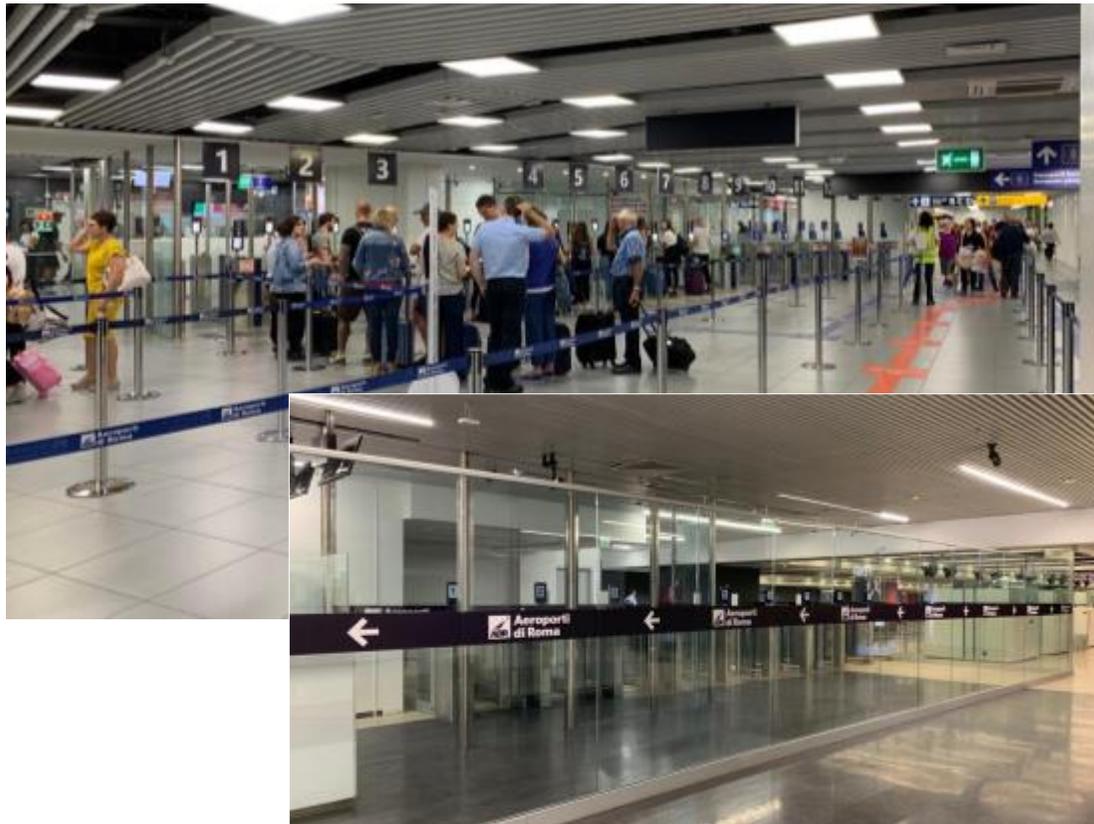


See Schedule A: 3.3 – Works for FCO Sud Terminal

## DESCRIPTION OF WORKS:

To increase the capacity of the immigration and emigration systems, the border lines were upgraded and adapted to the arrivals and departures levels of Terminal 3.

The intervention involved the equipment of the passport booths, the queuing areas, the signage and in particular the number of e-gates, of which the penetration rate is constantly increasing and now accounts for about 50% of passengers in the Non-Schengen area.



## EXPECTED BENEFITS

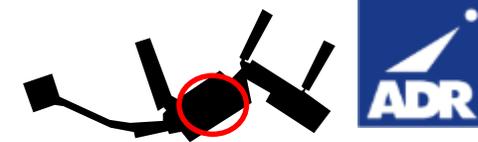
- Increase the capacity of the passport control subsystem
- Maximize the service level offered by automatic equipment
- Optimize passenger flow and spaces

## STATUS and AMOUNTS

Completed

2018 actual	2019 estimate
- M€	1.9 M€

# Upgrade of customs and VAT Refund area in Terminal 3



See Schedule A: 3.3 – Works for FCO Sud Terminal

## DESCRIPTION OF WORKS:

The intervention concerned the upgrade of the Customs and VAT Refund areas at Terminal 3 departures, with a view to avoiding interference with passenger check-in.

This action has made possible the increase in circulation areas and optimization of passenger flows.



## EXPECTED BENEFITS

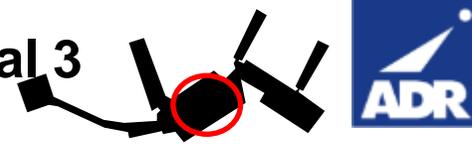
- Relieve congestion in the area between the check-in islands
- Relocation of customs + VAT Refund activities
- Increase circulation areas
- Increase the service level provided

## STATUS and AMOUNTS

Completed

2018 actual	2019 estimate
0.5 M€	1.5 M€

# New check-in desks in the former VAT Refund area of Terminal 3



See Schedule A: 3.3 – Works for FCO Sud Terminal

## DESCRIPTION OF WORKS:

The transfer of the Customs and VAT Refund desks to a dedicated area that does not interfere with the check-in operations has allowed the installation of 8 new check-in desks in the areas previously occupied by these facilities. The new check-in desks are in line with the standard adopted in area V at Terminal 1 which will be gradually extended to the entire Terminal 3.



## EXPECTED BENEFITS

- Increase the capacity of the check-in subsystem and the surface area available for traffic flow
- Increase service level offered

## STATUS and AMOUNTS

Completed

2018 actual	2019 estimate
M€	0.3 M€

# Densification of check-in islands I, J, and K of Terminal 3



See Schedule A: 3.3 – Works for FCO Sud Terminal

## DESCRIPTION OF WORKS:

Following the work done at Terminal 1 with the construction of Check-in area V, and according to the same architectural standards, the check-in areas of Terminal 3 on the east side, area I, J, and K and the surrounding areas will be completely upgraded.

Use of a format with shorter front length and double baggage collector makes it possible to increase the number of desks:

- Island I: from 24 to 28 desks
- Island J: from 24 to 30 desks
- Island K: from 24 to 30 desks



## EXPECTED BENEFITS

- Increase the capacity of the check-in subsystem and the surface area available for traffic flow
- Increase comfort and quality, updating the finishes
- Raise technological standard

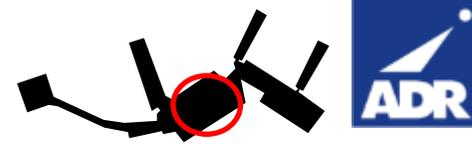
## STATUS and AMOUNTS

Calls for tenders in progress

Completion December 2020

2018 actual	2019 estimate
0.3 M€	1.1 M€

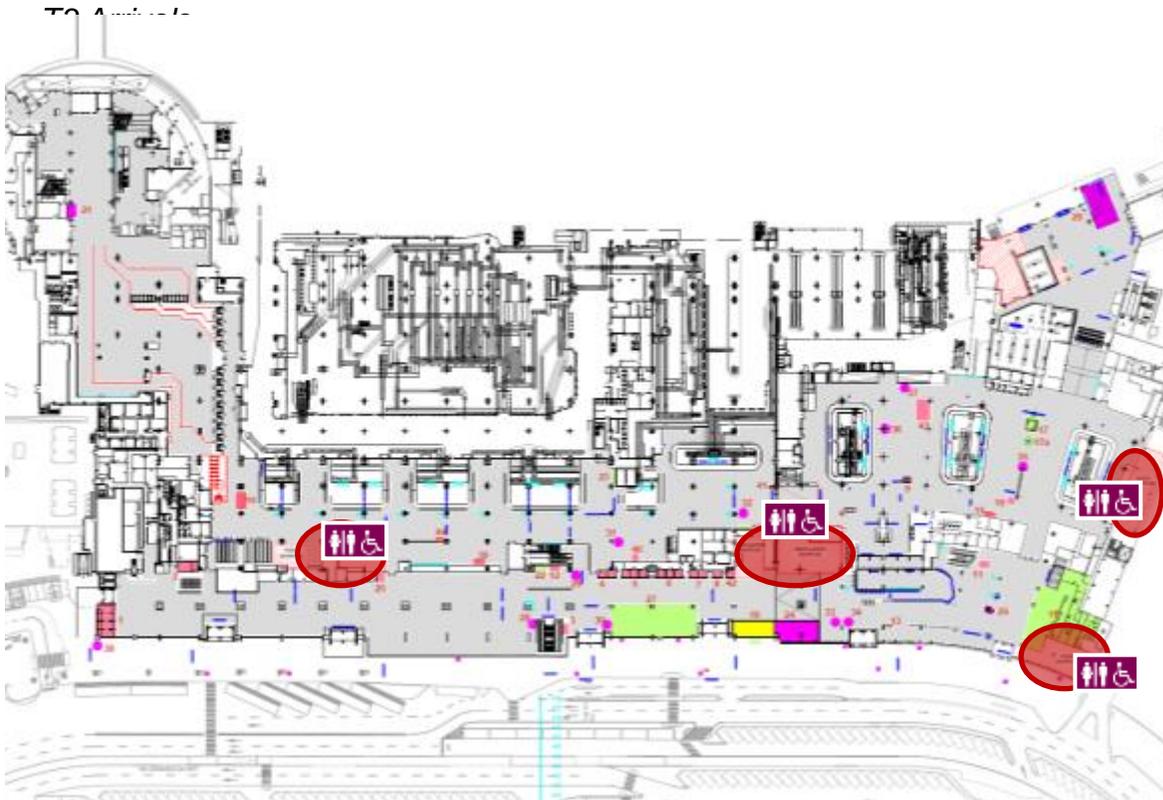
# New toilet facilities on arrivals level of Terminal 3



See Schedule A: 3.3 – Works for FCO Sud Terminal

## DESCRIPTION OF WORKS:

In line with the preliminary upgrade project for Terminal 3, a renovation of the arrivals level toilet facilities will be implemented by summer 2020, in both the landside and the airside areas.



## EXPECTED BENEFITS

- Adapt toilet facility equipment to the expected traffic growth
- Maximize the service level offered
- Improve the quality and comfort of the areas involved

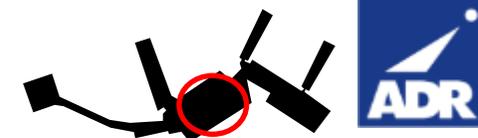
## STATUS and AMOUNTS

Design completed in July 2019

Completion May 2020

2018 actual	2019 estimate
- M€	0.7 M€

# Reconfiguration sensitive flights security area in Terminal 3



See Schedule A: 3.3 – Works for FCO Sud Terminal

## DESCRIPTION OF WORKS:

In view of the updated regulations concerning the "Entry Exit System" and taking into account the increase in Non-Schengen traffic, planning is underway to reconfigure the sensitive flight security area, relocating the support areas for commercial activities currently near the security checkpoint and completely reconfiguring the area.

The intervention also involves the area of the "emigration" border, to further strengthen the equipment by using the areas made available by the transfer of transit passport controls to the NID area.

## EXPECTED BENEFITS

- Increase the capacity of the security and passport control subsystem
- Regulatory compliance
- Optimize passenger flow and spaces

## STATUS and AMOUNTS

Design in progress

Completion in June 2020

2018 actual	2019 estimate
- M€	0.2 M€



# New customs and VAT Refund area in T3 Front Building



See Schedule A: 3.3 – Works for FCO Sud Terminal

## DESCRIPTION OF WORKS:

The VAT Refund desks and the Customs office located beside the "de-stress" area of the Terminal 3 security checks have been transferred inside the Front Building, in the Non-Schengen area. This intervention has made it possible to facilitate the use of services by passengers, taking into account their destination, and at the same time is part of the preparatory activities for the progress of the construction sites of the East Terminal.



## EXPECTED BENEFITS

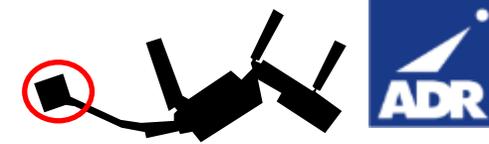
- Ensure the relocation of the VAT Refund service
- Optimize the available space
- Improve the quality and comfort of the areas involved

## STATUS and AMOUNTS

Completed

2018 actual	2019 estimate
- M€	0.4 M€

# Satellite Upgrade – boarding area E 31-44



See Schedule A: 6.1 – Other works for FCO Sud

## DESCRIPTION OF WORKS:

The upgrade of the departure area of the Satellite is being carried out in stages, to provide non-Schengen passengers an experience as similar as possible to that offered by departure area E.

The refurbishment works include the adaptation of the finishes of the wall cladding, false ceiling with blades, a new lighting system, collective seating and battery recharging stations.



## EXPECTED BENEFITS

- Make the finishes consistent with those present in the new pier and front building
- Increase the service level

## STATUS and AMOUNTS

Work starting

Completion March 2020

2018 actual	2019 estimate
- M€	0.9 M€



# SESAR in ADR

ADR is one of the stakeholders of SESAR programme of the EU Commission (Single European Sky Air Traffic Management Research) aimed at optimizing traffic management across Europe. ADR has **participated in the European funding calls** (CEF – Connecting Europe Facility Call) in 2016 and 2017 **presenting 5 project initiatives** that will make it possible to bridge the technological and procedural gaps for **Fiumicino airport**:



## Visual guidance (Smart Docking System)

Equipping the aprons with visual guidance systems for real-time information exchange on 60 stands (already operational in Pier E, Aprons 300 and 800)



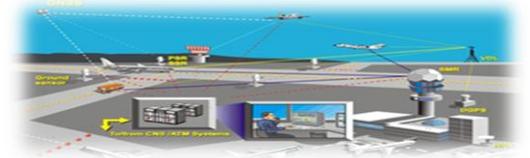
## SWIM encryption protocol

Encryption system for secure information exchange between stakeholders



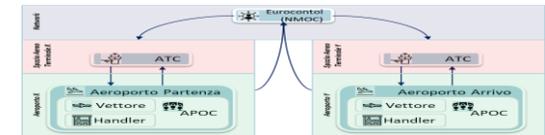
## Joint Control Room

Review of operational processes and centralization of airport controls in a single room



## Advances Surface Movement Guidance and Control System (A-SMGCS)

Multilateration system, integrated with ENAV, for monitoring the aircraft maneuvering area.



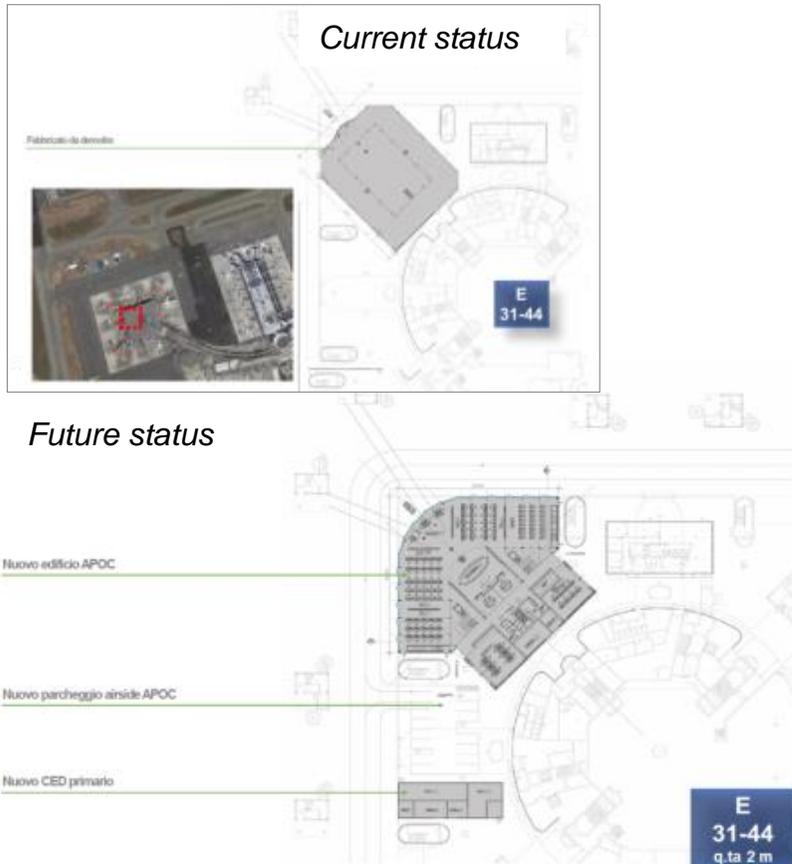
## Eurocontrol NOP Data Exchange Protocol

Data exchange structure for efficient cooperation between Eurocontrol and local structures

Across the 5 project initiatives **there are significant interventions to improve the IT systems**

## DESCRIPTION OF WORKS:

The initiative is part of the broader project scope that ADR has initiated by participating in the SESAR European program. The APOC Room, built at apron level of boarding area E 31-44 (formerly Satellite West), will enable the centralization of the current operational control rooms of the airport. In the future, the room will also host representatives of the various airport stakeholders. The presence of the airport operator and other stakeholders in the Joint Control Room and the integration of systems will enable the airport operator to plan operations in real-time and to receive corrective inputs from the Eurocontrol Network Manager Operations Centre (NMOC).



## EXPECTED BENEFITS

- Centralization of operational control rooms
- Improve synergy and "common situational awareness" among airport stakeholders for quicker reaction time

## STATUS and AMOUNTS

Civil and technical construction design in progress

Completion December 2020

2018 actual	2019 estimate
0.1 M€	1 M€

# Terminal 3 extension and new facility dedicated to high-ranking State officials

See Schedule A: 3.14 – Works for FCO Sud Terminal

## DESCRIPTION OF WORKS:

To increase the check-in capacity of Terminal 3, the passenger area will be expanded, including the spaces where the facility dedicated to high-ranking State officials is currently located

The latter will be relocated near Terminal 5 within a new structure that is more functional in terms of interior and passenger flows.

A new check-in island will be included in the extension of Terminal 3, integrating the structure of the Terminal defined in the general upgrade project.



## EXPECTED BENEFITS

- Greater capacity for check in system
- Passenger flow optimization
- Improved comfort and service level

## STATUS and AMOUNTS

T3 Extension – Design in progress

Completion April 2021

2018 actual	2019 estimate
- M€	0.3 M€

Ceremonial Office – Design in progress.

Completion October 2020

2018 actual	2019 estimate
- M€	0.4 M€

# West Area, expansion of aircraft parking aprons (phase 2)



## DESCRIPTION OF WORKS:

- New aircraft stands and taxiway (6 “up to E” + 3 “up to C”, alternate configuration 4 “up to E” + 6 “up to C”)
- Installation of 400 Hz, PCA and VDGS systems
- Water drainage network and apron lighting system
- Ramp area and vehicle road network

See Schedule A: 2.2 – Flight Infrastructure Works for FCO Sud



## EXPECTED BENEFITS

- Increase of capacity of aircraft stands
- Improvement of operational performance: LVP with RVR <400 m, fully equipped systems: fuel pit, 400 Hz, PCA, VDGS

## STATUS and AMOUNTS

Completed

2018 actual	2019 estimate
15.1 M€	5.7 M€

# West Area, expansion of aircraft parking aprons (phase 2)

*WestArea phase 2 – Installation of light towers*



*West Area phase 2 – Apron paving*



# Doubling of taxiway Bravo – Lot A (west)



## DESCRIPTION OF WORKS:

- Demolition of the existing Bravo taxiway, in the section between TWY Alfa and TWY BG
- Construction, in place of the current Bravo taxiway, of two new taxiways parallel to runway 07/25, called Bravo and Hotel
- Installation of AVL taxiway systems and implementation of rainwater drainage network

See Schedule A: 2.5 – Flight Infrastructure Works for FCO Sud

## EXPECTED BENEFITS

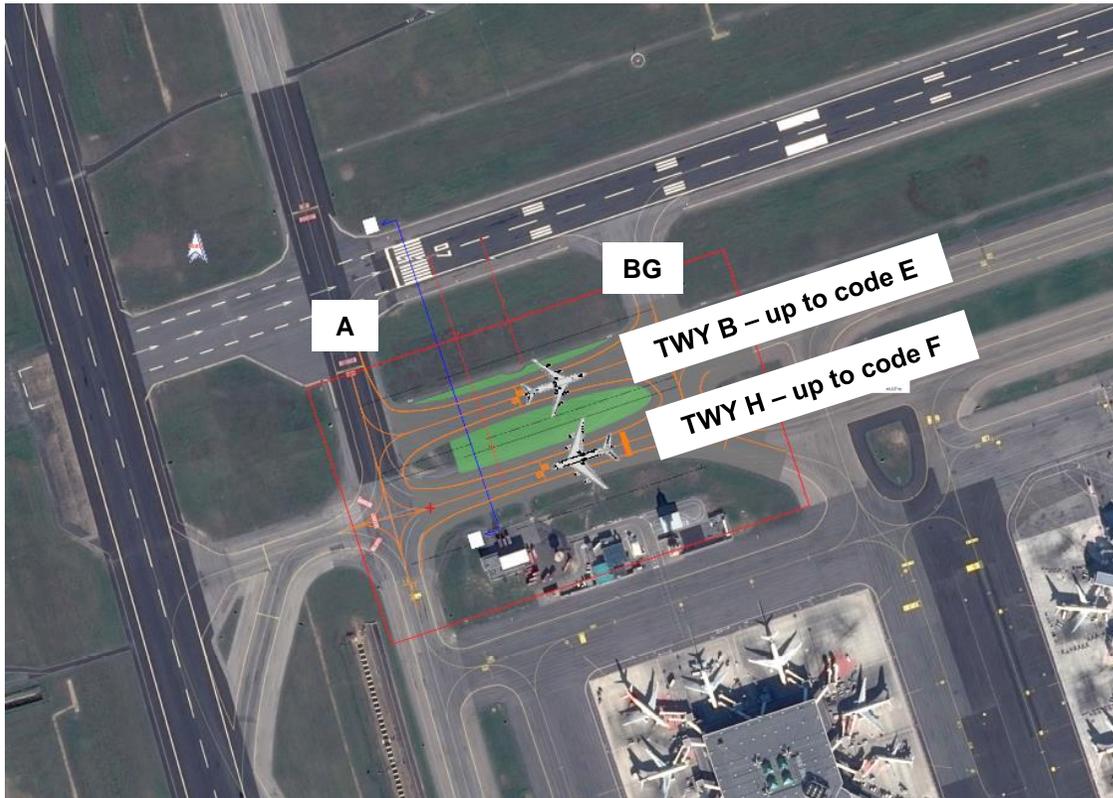
- Efficient aircraft handling
- Elimination of interference between taxiing of aircraft and entry/exit from the satellite stands
- Improved safety levels

## STATUS and AMOUNTS

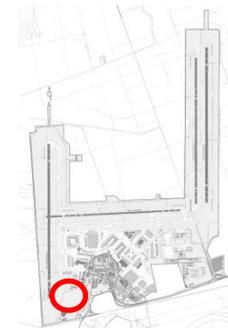
Work starting

Completion: April 2020

2018 actual	2019 estimate
M€	1.2 M€

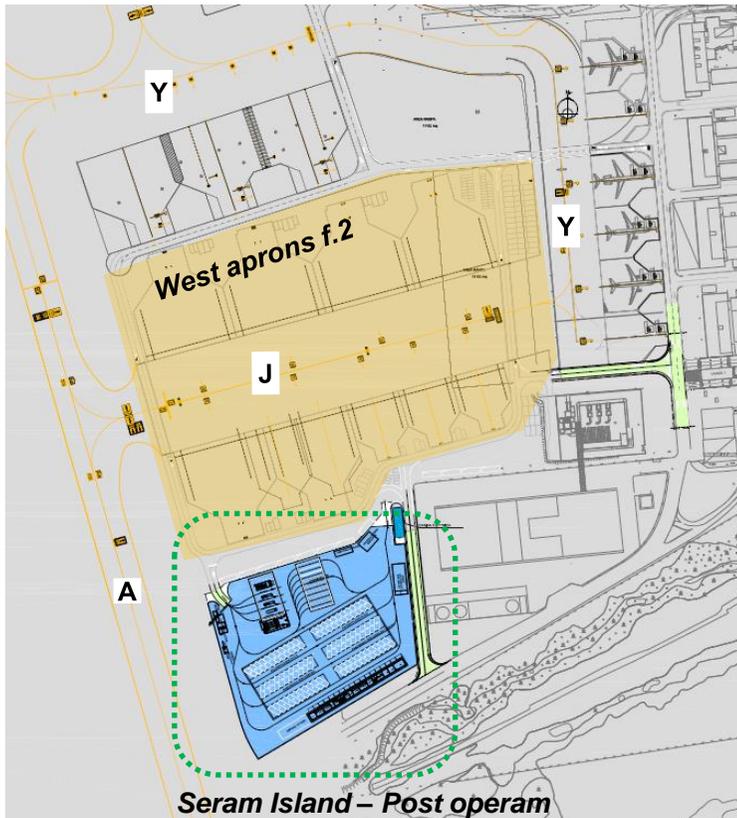


# New fuel logistics area



## DESCRIPTION OF WORKS:

- The initiative involves moving the logistics area from its current position, in front of Pier D, to the west next to the co-generation plant, close to customs gate 1
- Construction of parking areas for vehicles, logistics buildings, oil separator and systems related to the airside storage and distribution of fuel (SERAM)



See Schedule A: 2.1 – Flight Infrastructure Works for FCO Sud

## EXPECTED BENEFITS

- Optimization of the fuel distribution activity
- Relocation of logistics area for subsequent construction of aprons in the central area

## STATUS and AMOUNTS

Work starting

Completion: September 2020

2018 actual	2019 estimate
- €	1.5 M€

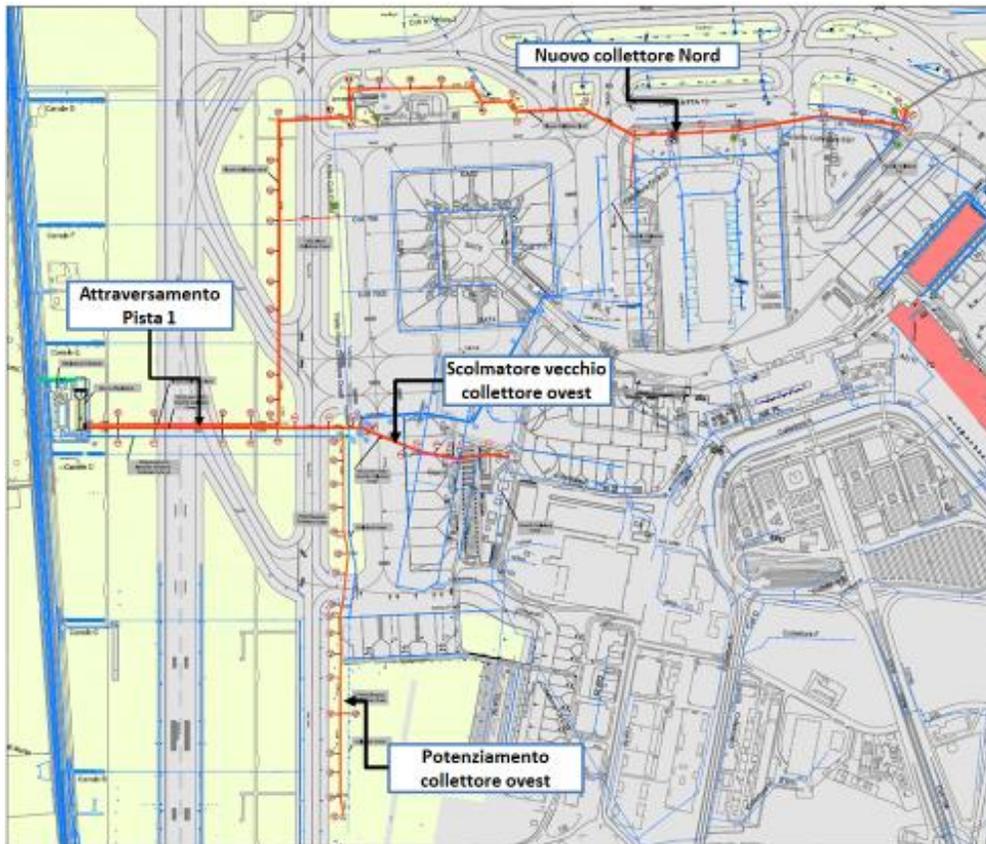
# Works to mitigate the flooding risk in the West area



See Schedule A: 2.31 – Flight Infrastructure Works for FCO Sud

## DESCRIPTION OF WORKS:

- Construction of the new North collector and enhancement of the west area collectors;
- Construction of the spillway of the old West collector and construction of a new crossing of Runway 1;
- New oil separator to handle disposals from the collectors mentioned above.



## EXPECTED BENEFITS

- Mitigation of flooding risk, creating new backbones to reduce the impact of intense weather 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

Completed

2018 actual	2019 estimate
7.6 M€	2.0 M€

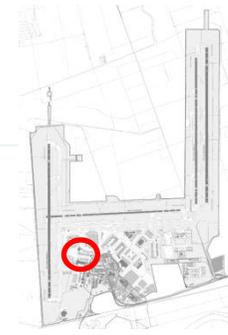
# Works to mitigate the flooding risk in the West area

*New collector – housing for collectors crossing Taxiway AG*



*New twofold – housing for collectors crossing Taxiway BT*

# New quadrant 800 ramp area



## DESCRIPTION OF WORKS:

- Relocation of the activities present in the building PG353A called "ex alce", and demolition of the entire building;
- Creation of a ramp area for parking and logistics of aircraft assistance vehicles, serving companies operating in the west area;
- Preparation of specific recharging stations for electric ramp vehicles.

See Schedule A: 6.1 – Other works for FCO Sud

## EXPECTED BENEFITS

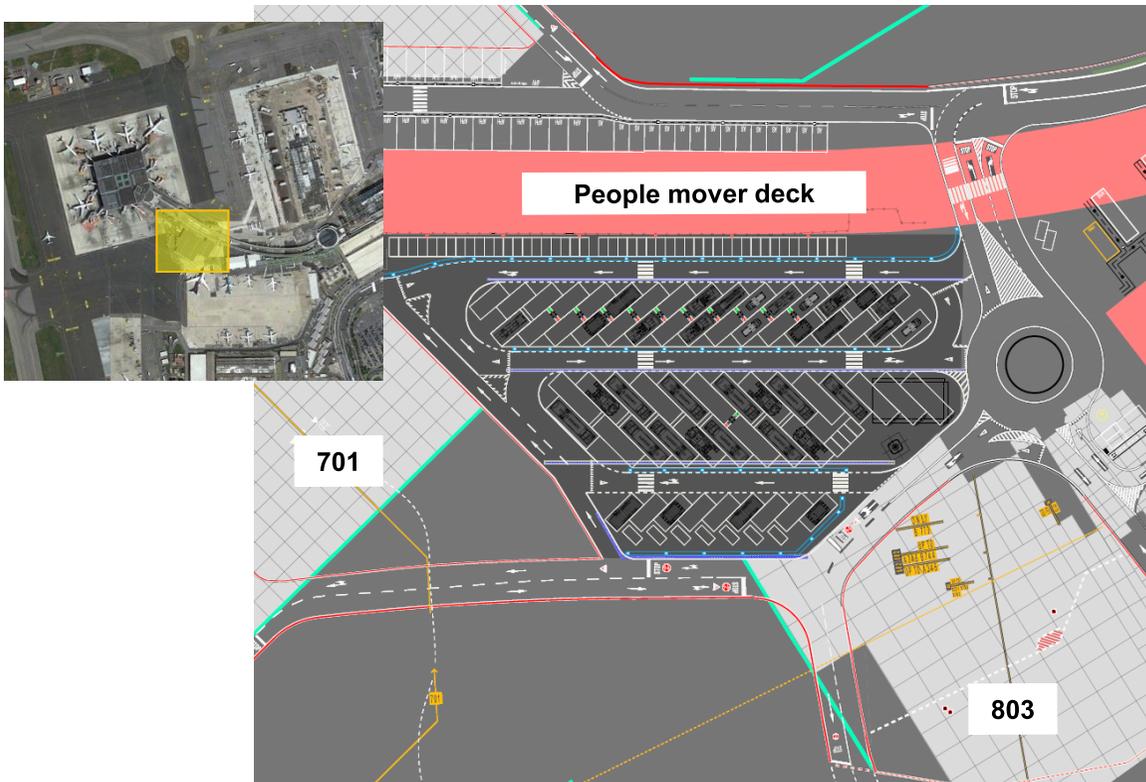
- Implementation of parking spaces for ramp vehicles serving aircraft with Non-Schengen destinations in response to the expected traffic growth rate
- Reduction of handling times and vehicle flows of ramp vehicles

## STATUS and AMOUNTS

Preparatory works in progress

Completion: June 2020

2018 actual	2019 estimate
0.2 M€	1.0 M€



## DESCRIPTION OF WORKS:

- Centralization of full reliability of the electrical power supply network for runway equipment
- Use of high power rotating units to install in two new cabinets to ensure power supply continuity, replacing the existing medium size rotating units, installed locally in individual medium voltage/low voltage transformer cabinets
- Reorganization of the medium voltage electrical network, reconfiguring to double rings to maximize the reliability of the power supply
- Revamping of systems in existing substations.

## EXPECTED BENEFITS

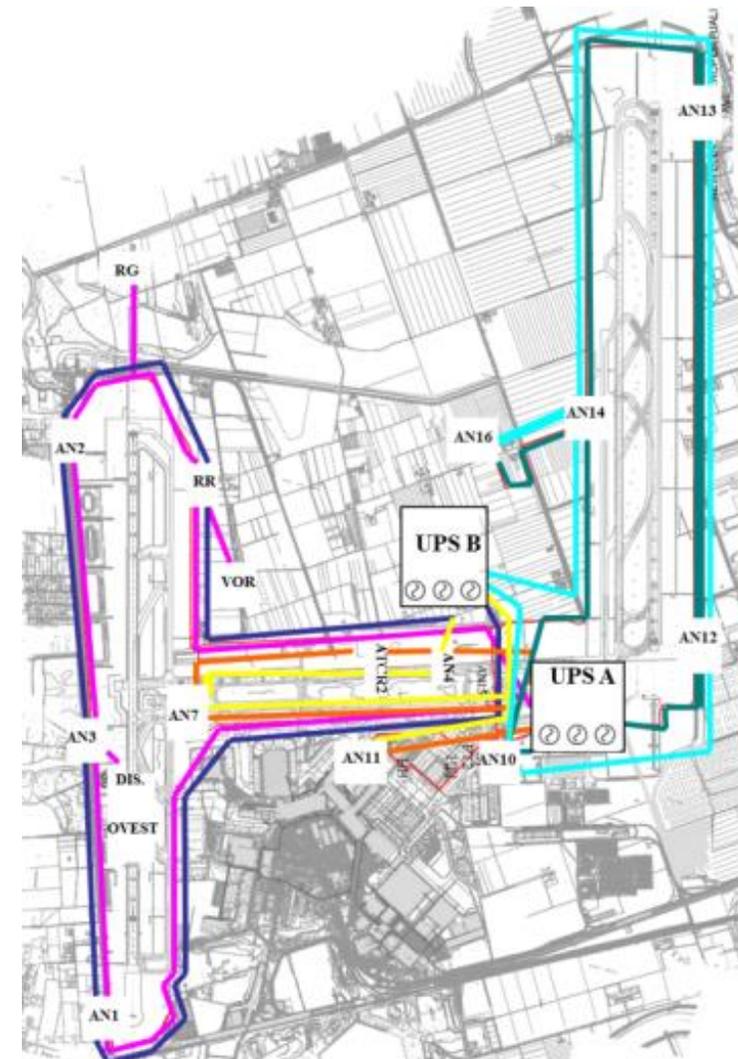
- Increase of efficiency and reliability of the electrical system of the runways

## STATUS and AMOUNTS

Works being completed

Completion: September 2019

2018 actual	2019 estimate
4.7 M€	1.1 M€



See Schedule A: 6.1 – Other works for FCO Sud

## DESCRIPTION OF WORKS:

- Construction of a new high-medium voltage electrical substation, located near the existing facility, so as to ensure greater reliability of the entire electrical grid
- Physical breakdown at the high-medium voltage transformer level by using four smaller transformers, which divide the network into four sectors
- Adoption of gas rather than air insulated high voltage systems, to provide greater plant protection, higher protection against fire and smaller amounts of electromagnetic emissions.



## EXPECTED BENEFITS

- Reduction of recovery times from failures by dividing the network into sectors
- Greater protection of the system, better segmentation for fire protection and lower electromagnetic emissions

## STATUS and AMOUNTS

Works being completed

Completion: October 2019

2018 actual	2019 estimate
4.5 M€	2.2 M€

# Renovation of electrical substation and MV switching center

4+4 Outdoor oil transformers



Gas Insulating System



# Replacement of light towers

## DESCRIPTION OF WORKS:

See Schedule A: 6.1 – Other works for FCO Sud

- Installation of new light towers for the lighting upgrade of aircraft aprons, between 20 and 40 meters high, equipped for installation of new floodlights;
- Equipped with new LED floodlights;
- Concrete base cast in place with low depth to reduce operational interference.

*Installation of new light tower*



*Construction of a new base for the light tower*



## EXPECTED BENEFITS

- Compliant with the regulatory requirements of Regulation 139/2014.
- Increase of visibility on all aircraft aprons.

## STATUS and AMOUNTS

Completed the work in quadrants: 200-500-800.  
Work in progress in quadrants 100-300-400-700  
Completion: October 2019

2018 actual	2019 estimate
3.1 M€	1.0 M€

# Implementation of the New A-VDGS System (Visual Docking Guidance System)

See Schedule A: 6.1 – Other works for FCO Sud

## DESCRIPTION OF WORKS:

- The initiative is part of the Single European Sky ATM Research (SESAR) program set up by the European Commission by Regulation (EC) No 549/2004
- The work includes:
  - supply and development of Apron Management software (“SAM”) and integration with the existing airport systems, ADBM A-SMGCS and with the existing A-VDGS optical guides;
  - Installation of A-VDGS-type visual docking guidance systems (Safedock T1) on the stands currently lacking them and replacement of the current docking guidance stations with A-VDGS units



## EXPECTED BENEFITS

- Improve operational safety especially in unfavorable weather conditions and/or low visibility
- Faster aircraft handling parking and entering in the stand
- Monitoring of 400 Hz and preconditioning systems

## STATUS and AMOUNTS

1. SAM: implementation in progress; completion December 2019
2. A-VDGS supply: project approval in progress; completion December 2020

2018 actual	2019 estimate
0.3 M€	0.8 M€

# Implementation of New A-SMGCS System

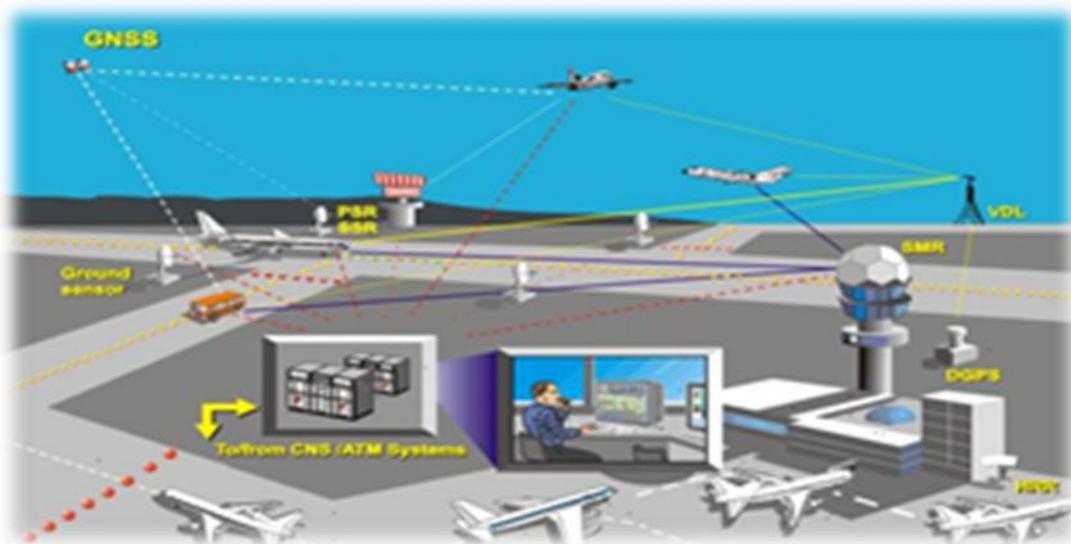
## Advanced Surface Movement Guidance and Control System

See Schedule A: 6.3 – Information systems and miscellaneous

### DESCRIPTION OF WORKS:

An A-SMGCS is a system for controlling surface traffic (aircraft and vehicles) within the aircraft maneuvering area, developed in collaboration with Italy's ATM Controller ENAV, which enables further controls of vehicle and aircraft positions on airport grounds by installing antennas in the field and transponders on the vehicles. An application displays the information related to the movements in the maneuvering area.

The initiative is part of the SESAR project.



### EXPECTED BENEFITS

- Increase the airport security level by constantly monitoring vehicles and aircraft in the maneuvering area
- Geolocate and promptly identify vehicles and aircraft in movement on the ground
- Increase safety in low visibility conditions by reducing the risk of collisions in the maneuvering area

### STATUS and AMOUNTS

In progress

2018 actual	2019 estimate
0.3 M€	0.5 M€

## ENAC – ADR Economic Regulation Agreement

### Investments in 2019

- Fiumicino
- Ciampino

## Ciampino

- Upgrade of aprons 100–200

## DESCRIPTION OF WORKS:

- Rebuilding parking stands in quadrants 100 and 200 using concrete slabs
- Reconstruction of the SB taxilane with flexible pavement
- Construction of a new lighting system, installing 8 light towers equipped with LED lights
- Creation of a drainage system to resolve the critical issues related to the disposal of water from the apron in the west area of taxilane SB

## EXPECTED BENEFITS

- Improvement of the infrastructural characteristics of the pavement

## STATUS and AMOUNTS

Quadrant 100 and SB aprons – Completed

Quadrant 200 aprons – Completed 3333

2018 actual	2019 estimate
5.4 M€	1.8 M€



# Upgrade of aprons 100–200

*100 quadrant apron*



*200 quadrant apron*

