

Covid-19 Impact on Airports

Q3-2020 Financial Results Review



DECEMBER 2020



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Coronavirus Impact Bulletin #2

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INTRODUCTION

- Our second Coronavirus Impact Bulletin provides an update to the traffic and financial performance results for Q3-2020 (July to September).
- The pandemic has continued to have a profound impact on air travel, with the airports under review particularly affected as they are large hubs that provide numerous connecting options to intercontinental destinations.
- Whilst the fall in Q3 passenger traffic versus 2019 (-77%) is less severe than seen in Q2 (-97%), the recovery trend from the summer has faltered as European governments re-introduced travel restrictions as local infection rates increased.
- The outlook for Q4 does not provide much solace for airport operators, and we expect the full year traffic at the airports covered in this bulletin to report a decline of c. -73% (assuming a decline of -83% in Q4).
- The financial impact of the pandemic is arguably more profound than the reduction in passenger traffic.
 - Airports have endeavoured to make proportional reductions in operating costs, but in the short term this is a major challenge given that the infrastructure and operations have been developed in line with pre-pandemic growth trends and volume expectations.
 - In the first 9 months of 2020, aggregate traffic has declined by -69% versus the same period in 2019, whilst operating costs have reduced by -24%, reflecting the semi-fixed nature of the costs involved in operating airports.
 - Revenue is more directly linked to volume, with aggregate revenue reducing by -52% in the first 9 months of 2020.
 - 2020 EBITDA trends reflect the fact that revenue has declined more rapidly than airports have been able to reduce operating costs.
- This bulletin again compares the latest financial results from the following airport groups, with additional insights on elasticity (the pace of change in operating costs and revenue relative to the change in passenger traffic in the 9 months to date) and divisional EBITDA (where reported):

AENA	Operator of Spanish airports and investments in 23 airports
Groupe ADP	Operator of Paris airports and investments in 125 airports
Fraport	Operator of Frankfurt Airport and investments in 31 airports
Heathrow	100% private ownership, and no international investments
FHWG	Operator of Vienna Airport and investments in 2 airports

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PASSENGER TRAFFIC

- In Q1-2020, following positive traffic growth in 2019, there was a progressively sharp decline in traffic across the airport groups as airlines withdrew capacity due to falling demand or because international flight restrictions were introduced. Passenger decline was most extreme in Q2-2020 (-97%), with a marginal improvement in the peak summer season of Q3-2020 (-77%).
- Airlines continue to offer reduced services and airport operations have not yet returned to the pre-Covid normal (LHR for example closed T3 and T4, whilst ORY in Paris closed for almost 3 months, along with terminal closures at CDG and FRA).
- The following slide shows actual traffic for Oct 2020 by airport and forecasts for Nov. 2020, which has been adversely affected by a resurgence of Covid-19 infections in Europe and renewed lockdowns. We estimate Q4-2020 passenger traffic will be c. -86%, with a projected full year reduction of -73% versus 2019.

How has the positive Covid-19 vaccine news affected projections for the coming year?

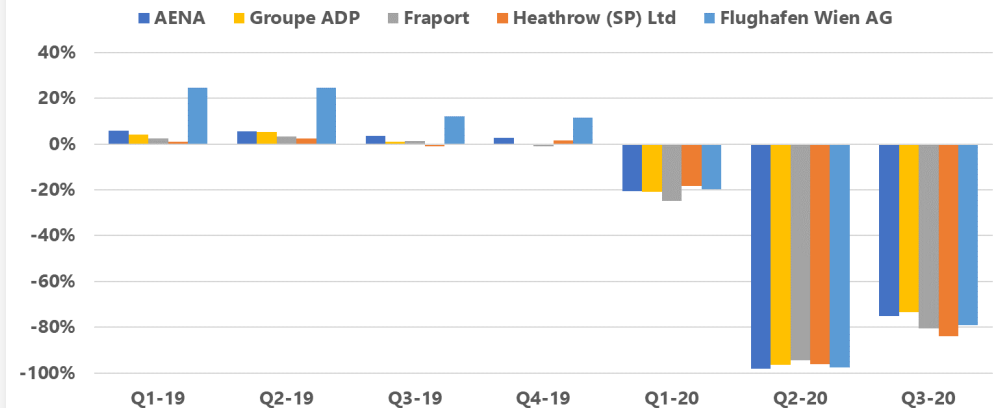
- We expect 2020 annual passenger performance to be -73% versus 2019. H1-2021 is difficult to predict, with some form of regional lockdowns across Europe likely to remain in place.
- Widespread regulatory approval for Covid-19 vaccines and a meaningful rollout is unlikely before Q2-2021, with availability more widespread in Q3-Q4 2021.
- We expect a rapid upturn in Leisure / VFR traffic as 2021 progresses, but business travel is likely to return far more slowly due to a combination of the economic impacts of the pandemic and businesses restricting staff to all but essential air travel.

Passengers (Millions)	Q1-18	Q2-18	Q3-18	Q4-18	Q1-19	Q2-19	Q3-19	Q4-19	Q1-20	Q2-20	Q3-20
AENA <i>(Spanish Airports)</i>	49.9	71.2	83.0	59.7	52.8	75.1	86.0	61.3	42.0	1.5	21.4
Groupe ADP <i>(Paris Airports)</i>	22.8	27.1	30.0	25.4	23.7	28.6	30.4	25.3	18.8	1.0	8.1
Fraport <i>(Frankfurt Airport)</i>	14.4	18.2	20.3	16.5	14.8	18.8	20.5	16.4	11.1	1.1	4.0
Heathrow (SP) Ltd <i>(Heathrow Airport)</i>	17.7	20.4	22.4	19.6	17.9	20.9	22.2	19.9	14.6	0.8	3.5
Flughafen Wien AG <i>(Vienna Airport)</i>	4.9	6.9	8.3	6.9	6.1	8.6	9.3	7.7	4.9	0.2	1.9

Qtr-on-Qtr Growth	Q1-19	Q2-19	Q3-19	Q4-19	Q1-20	Q2-20	Q3-20
AENA	6%	6%	4%	3%	-20%	-98%	-75%
Groupe ADP	4%	5%	1%	0%	-21%	-96%	-73%
Fraport	3%	3%	1%	-1%	-25%	-94%	-81%
Heathrow (SP) Ltd	1%	2%	-1%	2%	-18%	-96%	-84%
Flughafen Wien AG	24%	25%	12%	12%	-20%	-98%	-79%

Qtr-on-Qtr PASSENGER Volume Growth

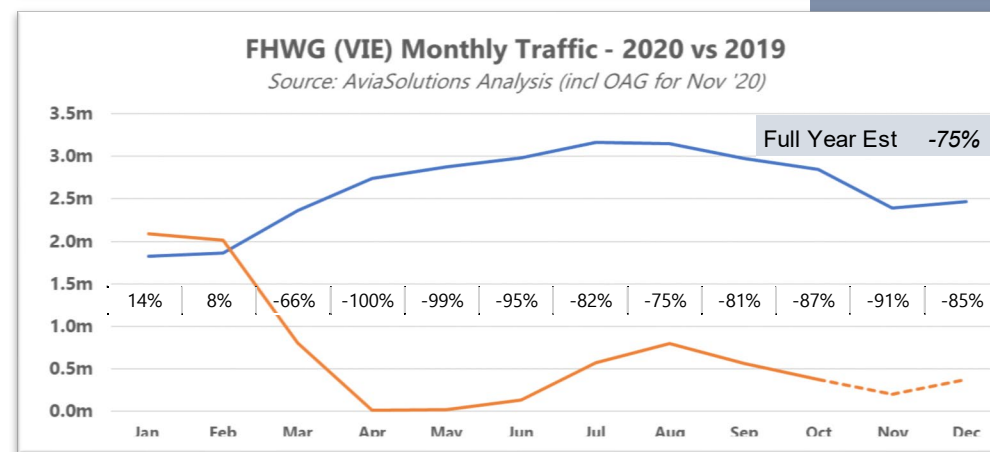
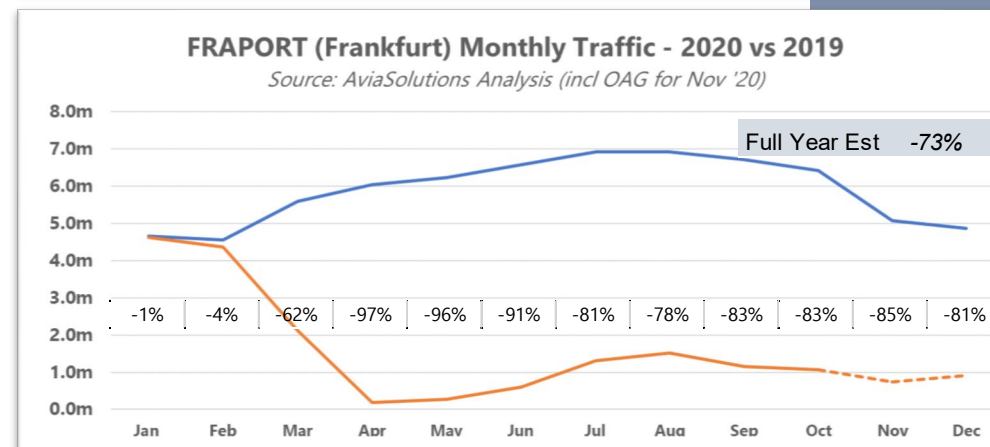
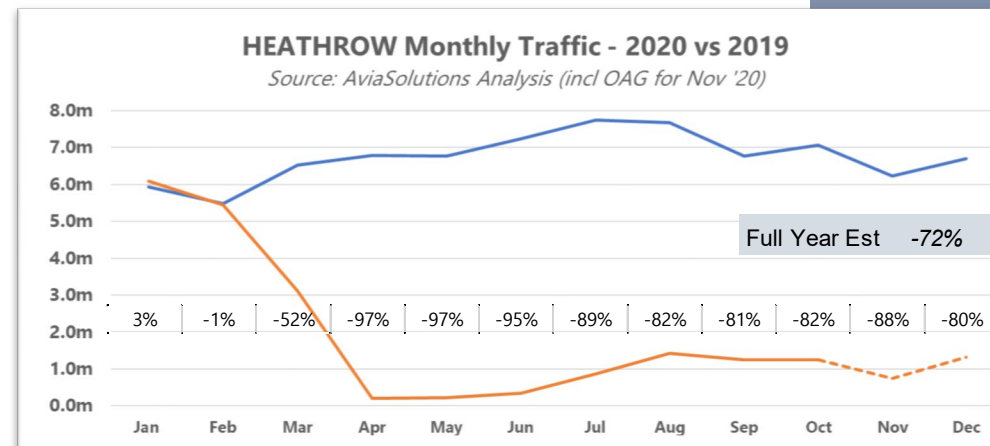
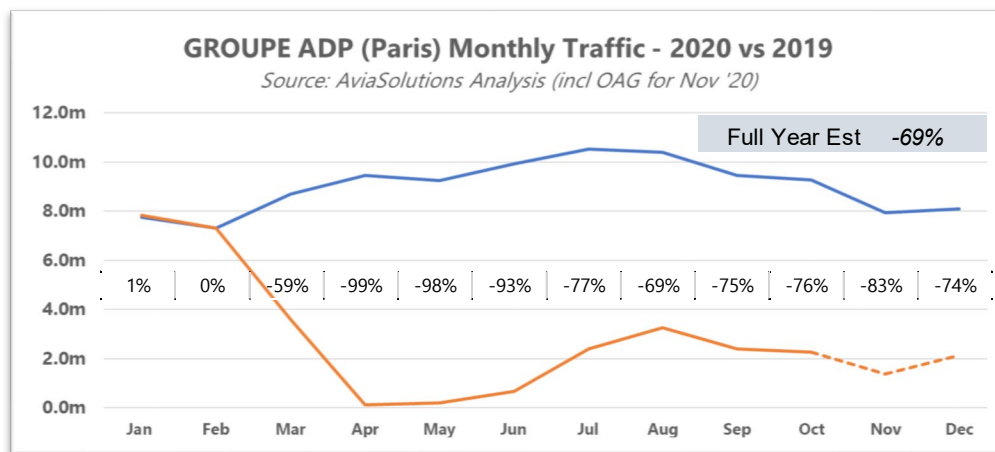
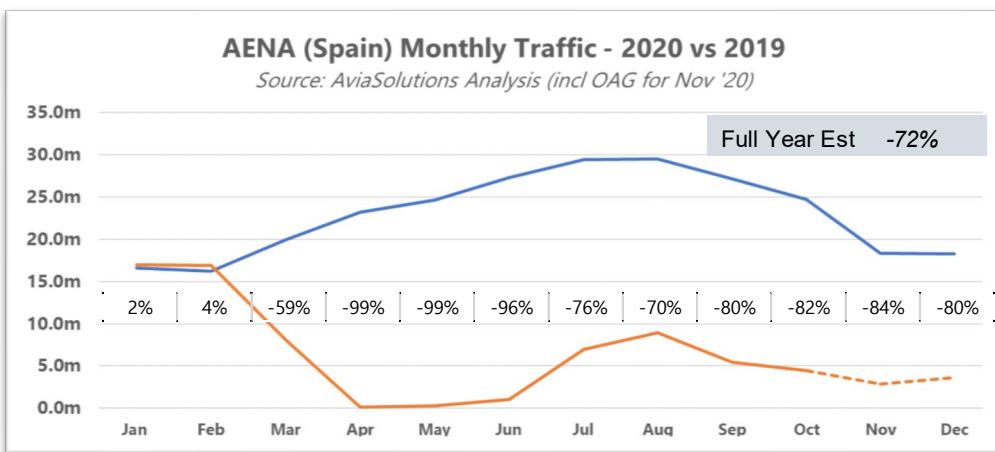
Source - Airport Investor Relations / AviaSolutions Analysis



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PASSENGER TRAFFIC OUTLOOK – 2020 vs 2019



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REVENUE

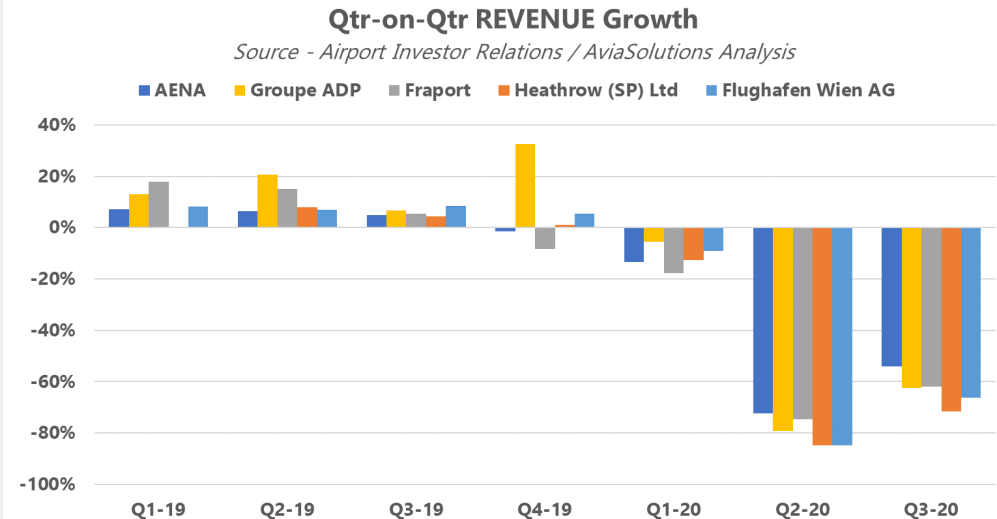
- In 2019, all the airports showed strong revenue growth, although this does include International operations and the impact of new consolidations (e.g., SDA retail at Groupe ADP).
- Year to date traffic has declined by -69%, which compares with an aggregate decline in aero revenue of -62% and non-aero revenue of 40%, with a total revenue elasticity of 0.76x (excluding International operations). Later we review the trends in revenue by airport to highlight the short term changes in aero and non-aero revenue relative to volume (elasticity) by activity.
- Applying the 2020 YTD revenue elasticity to expected Q4 traffic decline suggests 2020 full year revenue will be around -55% lower than in 2019, versus the expected -73% reduction in traffic.

What is the revenue outlook for 2021?

- Revenue performance will not be affected to the same extent as traffic (elasticity of <math>< 1.0x</math>).
- For example, if traffic in 2021 is -50% below 2019, we would expect revenue to be around -40% lower than in 2019, and this relationship (elasticity) to broadly hold true if traffic is better / worse than -50%.
- However, the risk is that lower airport charges may be applicable due to reduced capital expenditure (where charges are regulated), and some of the more fixed income streams (e.g., Real Estate) may decline relative to 2020 performance as terms are renegotiated.

Revenue (Millions)	Q1-18	Q2-18	Q3-18	Q4-18	Q1-19	Q2-19	Q3-19	Q4-19	Q1-20	Q2-20	Q3-20
AENA (€) <i>(Spanish Airports)</i>	842	1,124	1,285	1,070	904	1,195	1,350	1,055	783	331	621
Groupe ADP (€) <i>(Paris Airports)</i>	855	1,011	1,254	886	966	1,219	1,339	1,175	912	254	503
Fraport (€) <i>(Frankfurt Airport)</i>	682	851	1,015	931	804	979	1,069	854	661	250	407
Heathrow (SP) Ltd (£) <i>(Heathrow Airport)</i>	680	725	806	759	679	782	841	768	593	119	239
Flughafen Wien AG (€) <i>(Vienna Airport)</i>	164	210	223	204	177	224	241	215	161	34	81

Qtr-on-Qtr Growth									
AENA	7%	6%	5%	-1%	-13%	-72%	-54%		
Groupe ADP	13%	21%	7%	33%	-6%	-79%	-62%		
Fraport	18%	15%	5%	-8%	-18%	-75%	-62%		
Heathrow (SP) Ltd	0%	8%	4%	1%	-13%	-85%	-72%		
Flughafen Wien AG	8%	7%	8%	5%	-9%	-85%	-66%		



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OPERATING COSTS (excl. Groupe ADP)

- Airport operating costs reflect the fixed or semi-fixed scale of some airport activities irrespective of changes to volume.
- Year to date traffic has declined by -69%, which compares with an aggregate decline in Staff costs of -29% and Non-Staff costs of -42% over the same period, a total operating cost elasticity to volume of 0.37x. It should also be noted that 2020 Staff costs include the impact of Government job retention schemes (e.g., furlough payments).
- Applying the Q1-Q3 operating cost elasticity to the expected Q4 traffic decline suggests aggregate 2020 full year costs will be around -27% lower than in 2019, compared with the expected -73% reduction in traffic.

What is the operating cost outlook for 2021?

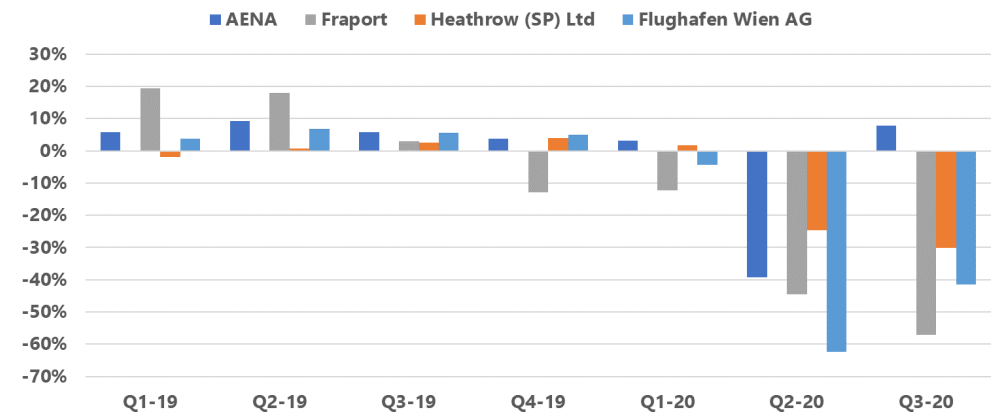
- Operating costs will not reduce to the extent of passenger traffic in 2021, despite the many changes that have been implemented in 2020.
- For example, if aggregate traffic in 2021 is -50% lower than in 2019, we would expect operating costs to be around -20% to -25% lower than in 2019, depending on the efficiency airports can maintain from lower staff numbers.
- As traffic improves over the course of 2021, the airports will continue their cost reduction programmes, which should increase the elasticity of costs to volume, although government job retention schemes may be scaled back compared to 2020.

Opex (Millions)	Q1-18	Q2-18	Q3-18	Q4-18	Q1-19	Q2-19	Q3-19	Q4-19	Q1-20	Q2-20	Q3-20
AENA (€) <i>(Spanish Airports)</i>	-481	-362	-375	-386	-508	-396	-397	-401	-524	-241	-428
Groupe ADP (€) <i>(Paris Airports)</i>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fraport (€) <i>(Frankfurt Airport)</i>	-527	-579	-634	-734	-630	-684	-653	-639	-553	-380	-280
Heathrow (SP) Ltd (£) <i>(Heathrow Airport)</i>	-278	-279	-282	-294	-273	-281	-289	-306	-278	-212	-202
Flughafen Wien AG (€) <i>(Vienna Airport)</i>	-105	-111	-110	-139	-109	-118	-117	-146	-105	-44	-68

Qtr-on-Qtr Growth	Q1-19	Q2-19	Q3-19	Q4-19	Q1-20	Q2-20	Q3-20
AENA	6%	9%	6%	4%	3%	-39%	8%
Groupe ADP	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fraport	19%	18%	3%	-13%	-12%	-44%	-57%
Heathrow (SP) Ltd	-2%	1%	2%	4%	2%	-25%	-30%
Flughafen Wien AG	4%	7%	6%	5%	-4%	-62%	-41%

Qtr-on-Qtr OPERATING COST Growth

Source - Airport Investor Relations / AviaSolutions Analysis



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EBITDA (excl. Groupe ADP)

- In 2019, all the airports reported EBITDA growth (revenue less operating cost, excluding asset depreciation and amortization, financing costs and taxation).
- Q1-2020 EBITDA was positive, though markedly lower than in 2019. Q2-2020 EBITDA was negative at all 4 airports. In Q3-2020, the airports all reported marginally positive EBITDA, but this does exclude exceptional charges such as restructuring costs at FRAPORT (€280m) and impairments at AENA (€120m).
- Q4-2020 is expected to reverse the gradual recovery of passenger traffic seen in Q3-2020. It is likely that airports will be EBITDA neutral or marginally positive in the final quarter of 2020.

What is the 2020 and 2021 EBITDA outlook, given expected volume and financial trends?

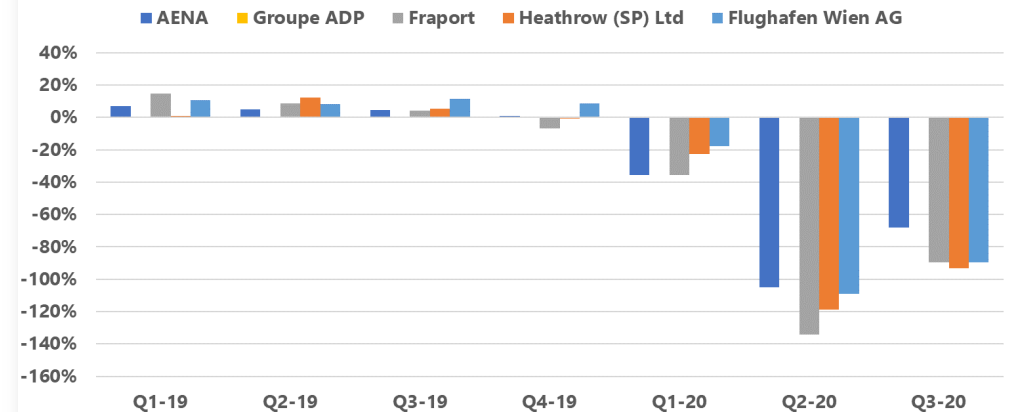
- We expect full year 2020 EBITDA to be c. €0.8bn for the four airport groups reporting quarterly (c. €1.0bn incl. Groupe ADP), c. -85% lower than 2019. Arguably, those airports with a higher EBITDA margin will recover EBITDA more quickly (e.g., AENA and Heathrow).
- 2021 EBITDA obviously depends almost entirely on the recovery of traffic. As assumed in the previous slides, if passenger traffic in 2021 is -50% below 2019 levels, EBITDA is likely to be in the range of €2.5bn (€3.2bn incl. ADP), or around -60% lower than in 2019.

EBITDA (Millions)	Q1-18	Q2-18	Q3-18	Q4-18	Q1-19	Q2-19	Q3-19	Q4-19	Q1-20	Q2-20	Q3-20
AENA (€) <i>(Spanish Airports)</i>	364.2	762	906	624	390	799	948	629	251	-40	305
Groupe ADP (€) <i>(Paris Airports)</i>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fraport (€) <i>(Frankfurt Airport)</i>	174.7	287	419	249	201	311	437	232	129	-107	46
Heathrow (SP) Ltd (£) <i>(Heathrow Airport)</i>	402.0	446	524	465	406	501	552	462	315	-93	37
Flughafen Wien AG (€) <i>(Vienna Airport)</i>	64.8	103	117	66	72	111	130	72	59	-10	13

Qtr-on-Qtr Growth	Q1-19	Q2-19	Q3-19	Q4-19	Q1-20	Q2-20	Q3-20
AENA	7%	5%	5%	1%	-36%	-105%	-68%
Groupe ADP	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fraport	15%	8%	4%	-7%	-36%	-134%	-90%
Heathrow (SP) Ltd	1%	12%	5%	-1%	-22%	-119%	-93%
Flughafen Wien AG	11%	8%	11%	9%	-18%	-109%	-90%

Qtr-on-Qtr EBITDA Growth

Source - Airport Investor Relations / AviaSolutions Analysis



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AIRPORT FINANCIAL TRENDS – AENA (1)

- Airport charges are the major source of revenue at AENA throughout 2018 and 2019 (65% of total revenue) and strongly linked to volume. In the first 9 months of 2020, aero revenue declined by -64% to €812m, compared with a fall in passenger traffic of -70% over the same period. The decline in aero revenue in 2020 to date closely matches the fall in traffic; an elasticity of 0.91x.
- AENA has significant exposure to domestic travel in Spain and we would expect a faster recovery of traffic and corresponding aero revenue compared to similar airport groups discussed in this bulletin.
- AENA's aero revenue per passenger was stable at just below €11.0 in 2018 and 2019, but in the first 9 months of 2020 it increased to €12.5, due to the increase in cargo movements and low load factors (charges are split between passengers and movements).
- Non-aero revenue includes Commercial activities, such as shops and car parks, and rental income from airport Real Estate, though the latter is less than 5% of the total. In the first 9 months of 2020, non-aero revenue declined by -19% to €819m, an elasticity of 0.27x versus the fall in passenger traffic over the same period.
- The low elasticity is likely to result from minimum guaranteed payments (MAGs) from commercial operators and real estate rental income being fixed in the short term. Whether these activities are sustainable at the current level of payment will depend largely on the recovery in traffic.
- In 2018 and 2019, AENA achieved non-aero revenue per passenger of c. €4.8, which has increased to €12.6 in the first 9 months of 2020 (see following page for yield trends).

AENA (€m)	Q1-18	Q2-18	Q3-18	Q4-18	Q1-19	Q2-19	Q3-19	Q4-19	Q1-20	Q2-20	Q3-20
Aero Revenue	556	742	844	711	580	777	876	669	496	61	254
Non-Aeronautical Revenue	238	318	372	303	268	346	397	321	229	261	329
International	48	64	69	57	56	72	77	65	57	9	38
TOTAL	842	1,124	1,285	1,070	904	1,195	1,350	1,055	783	331	621
Staff Costs	-103	-107	-102	-111	-112	-117	-108	-119	-123	-114	-106
Non-staff Costs	-378	-255	-273	-275	-397	-279	-289	-281	-401	-126	-322
TOTAL	-481	-362	-375	-386	-508	-396	-397	-401	-524	-241	-428
EBITDA*	364	762	906	624	390	799	948	629	251	-40	305

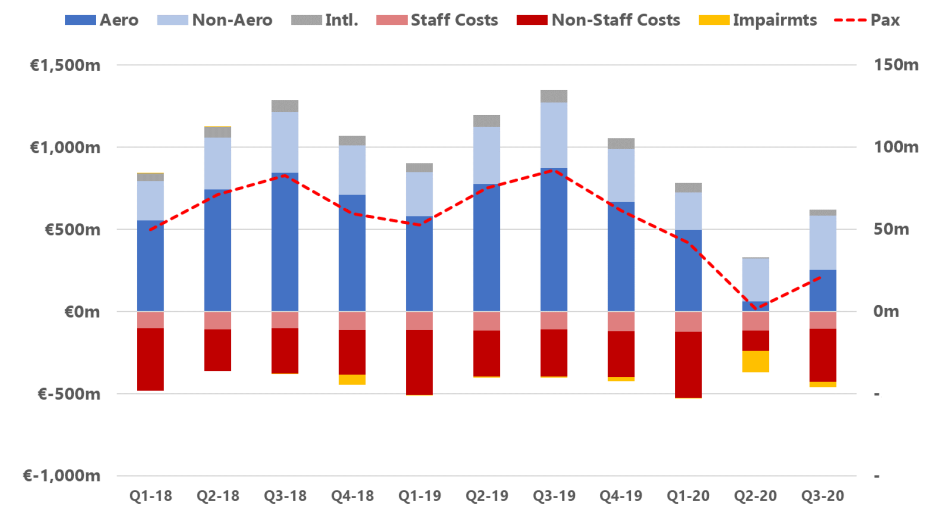
Qtr-on-Qtr Growth

Revenue	7%	6%	5%	-1%	-13%	-72%	-54%
Operating Costs	6%	9%	6%	4%	3%	-39%	8%
EBITDA	7%	5%	5%	1%	-36%	-105%	-68%

*EBITDA includes impairments and other non-operating revenue and costs

AENA - Quarterly Pax / Revenue / Opex 2018-2020

Source: Airport Investor Relations / AviaSolutions Analysis



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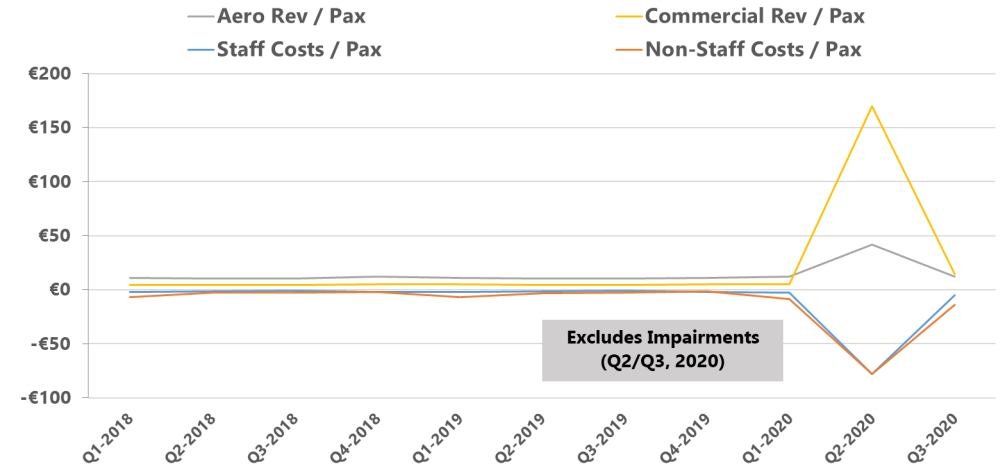
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AIRPORT FINANCIAL TRENDS – AENA (2)

- AENA’s International business consists of concessions to operate Luton Airport to 2031 (51%) and the North-east Brazil Airport Group (ANB) (since Mar 2019) alongside stakes in GAP (Mexico), and airports in Jamaica (via GAP) and Colombia. The EBITDA contribution of the International business in the first 9 months of 2020 was -€62m, compared with €78m in the prior year, though the International EBITDA was marginally positive in Q3-2020.
- AENA operating costs are split between Staff costs (33% of total costs in 2018 & 2019) and Non-Staff costs (67%).
- In the first 9 months of 2020, Staff costs marginally increased (2%) to €344m despite a -70% decline in passenger volume, which is quite different to other airport groups in this bulletin. For reasons noted earlier, this is not entirely unexpected as the state-owned operator ENAIRE will endeavour to retain levels of employment at the Spanish airports, at least until there is more visibility of future passenger demand.
- Non-Staff costs have declined by -8% to €779m in the first 9 months of 2020; an elasticity of 0.11x with the -70% decline in passenger traffic, reflecting the the semi-fixed nature of airport operating costs and the challenge of reducing these costs in the short term whilst retaining the capacity to respond to a rapid return of demand.
- There has also been significant impairments in AENA investments recognised in Q2-2020, which are included in EBITDA. Murcia Region International Airport (AIRM) was written down by €47.7m, and ANB by €72.9m, both due to concession rebalancing.

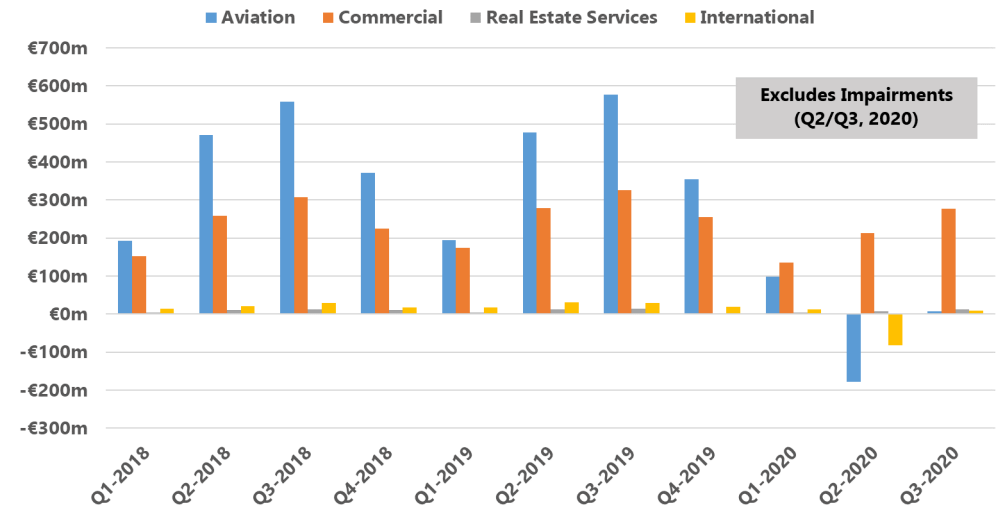
AENA - Revenue & Opex per Passenger 2018-2020

Source: Airport Investor Relations / AviaSolutions Analysis



AENA - EBITDA by Division - 2018-2020

Source: Airport Investor Relations / AviaSolutions Analysis



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AIRPORT FINANCIAL TRENDS – Groupe ADP (1)

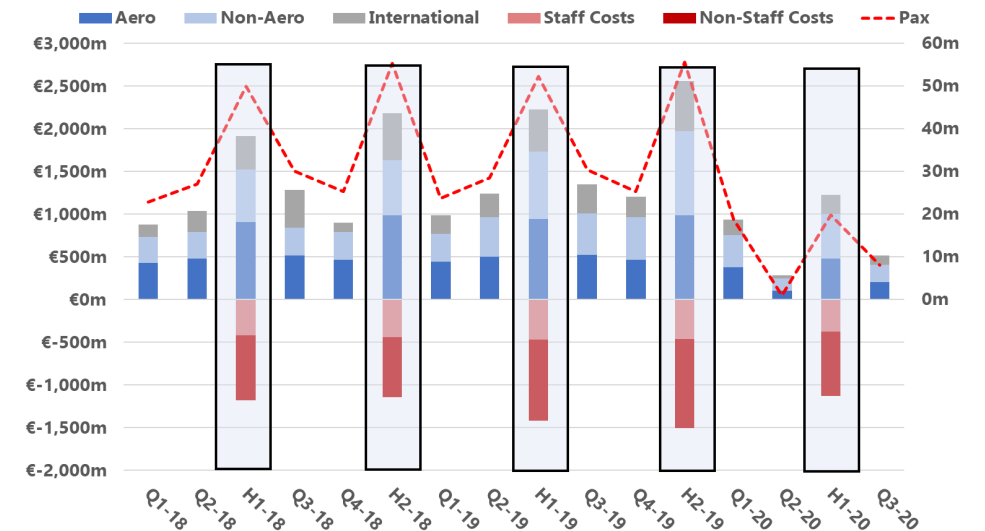
- As noted earlier, Groupe ADP only report revenue on a quarterly basis. Aero revenue from the Paris airports contributed 47% and 41% of total revenue in 2018 and 2019 respectively, with the change in share mainly resulting from new consolidations (SDA and Relay@ADP) from April 2019.
- Aero revenue declined by -53% to €686m in the first 9 months of 2020, an elasticity of 0.8x the fall in passenger traffic (-66%).
- Aero revenue per passenger at Paris airports was €16.9 in 2018 and 2019. In the first 9 months of 2020, aero yields increased by 40% to €24.6, compared with €17.7 in the same period in 2019 (+39%) for the reasons noted earlier (see AENA section).
- Aeronautical charges at the Paris airports are regulated and ADP has requested an early termination of ERA3 (2016-20) and withdrawn its proposal / assumptions for ERA4 (2021-25) due to the obsolescence of the financial and capital investment plans. ADP has proposed an annual tariff reset based on dialogue with airport users which require approval from the French Regulatory Transport Body (ART).

Groupe ADP (€m)	Q1-18	Q2-18	Q3-18	Q4-18	Q1-19	Q2-19	Q3-19	Q4-19	Q1-20	Q2-20	Q3-20
Aero Revenue	426	480	516	468	443	501	521	464	376	106	204
Non-Aeronautical Revenue	305	310	325	324	328	465	488	498	380	139	203
International	145	247	440	109	218	275	344	243	182	42	110
TOTAL	876	1,037	1,281	901	989	1,241	1,353	1,205	938	287	517

Qtr-on-Qtr Growth	
Revenue	13% 20% 6% 34% -5% -77% -62%

Groupe ADP - Quarterly Pax / Revenue / Opex 2018-2020

Source: Airport Investor Relations / AviaSolutions Analysis



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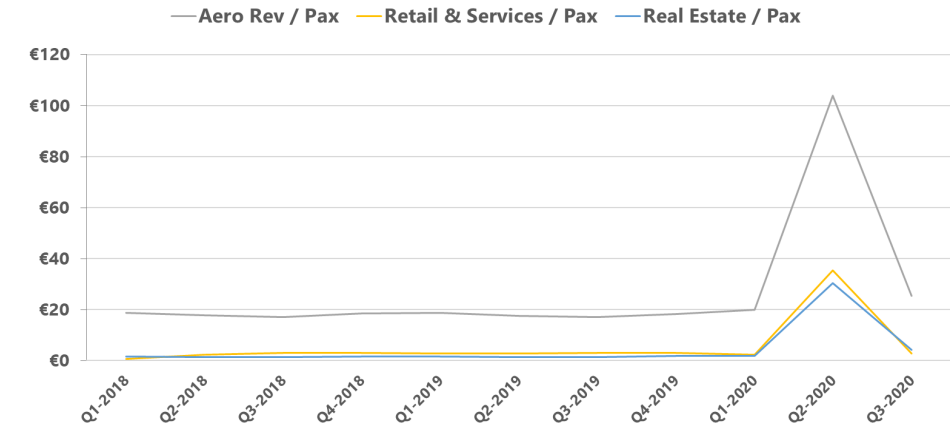
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AIRPORT FINANCIAL TRENDS – Groupe ADP (2)

- Non-aeronautical revenue at the Paris airports increased significantly to €1,800m in 2019 (41%). This was largely due to the consolidations of the retail businesses which increased revenue by €445m (net of eliminations). Retail & Services increased by 51% to €1,500m (€13.9 per passenger), with Real Estate increasing by 3% to €274m (€2.5 per passenger).
- In the first 9 months of 2020, Retail & Services revenue declined by -52% to €509m, an elasticity of 0.8x the decline in passenger traffic (-66%) including the consolidation benefit of €90m (after eliminations) in Q1-2020. Real Estate revenues have remained in line with the prior year at €213m despite the traffic reduction.
- International revenue grew by 15% in 2019, largely due to strong performance at TAV airports and the full year consolidation of AIG. There has been a -60% drop in revenue during the first 9 months of 2020 to €334m, reflecting the sharp reduction in passenger volumes dropped sharply across the Groupe ADP concessions.
- Although Groupe ADP do not report operating costs or EBITDA quarterly, the chart opposite illustrates the half year EBITDA performance of each business division since 2018. The group EBITDA has remained marginally positive (€40m at the end of June-2020), though this is likely to become negative when the results are published in February 2021.

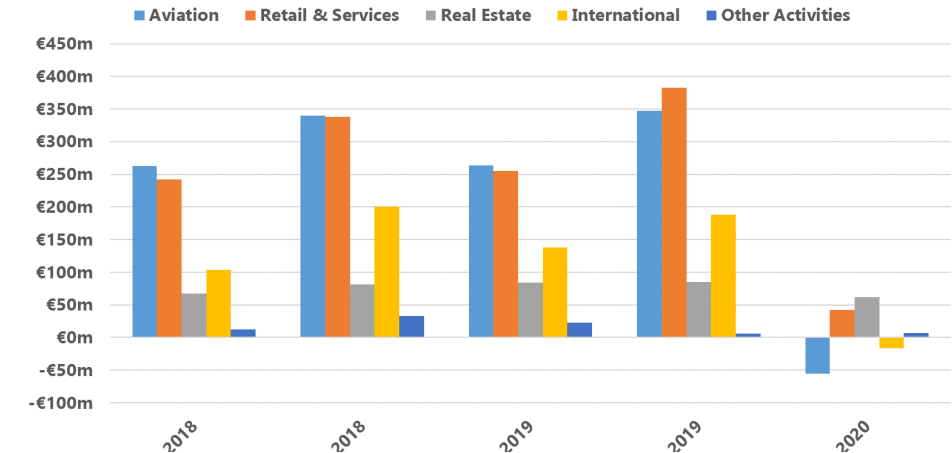
ADP (Paris) - Revenue & Opex per Passenger 2018-2020

Source: Airport Investor Relations / AviaSolutions Analysis



ADP - EBITDA by Division - 2018-2020

Source: Airport Investor Relations / AviaSolutions Analysis



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AIRPORT FINANCIAL TRENDS – FRAPORT (1)

- Airport charges at Frankfurt Airport (FRA) contribute over 40% of total airport revenue. In the first 9 months of 2020, aero revenue has fallen to €354m (-55%) driven by the -70% decline in passenger volume, an elasticity of 0.78x to the change in traffic.
- In 2018 and 2019, FRA achieved aero revenue per passenger of c. €14.5. In the first 9 months of 2020, the yield increased to €21.9 for much the same reasons as AENA and LHR (increased cargo traffic and low load factors on commercial flights - see following slide).
- Non-aero revenue includes commercial activities at FRA, such as shops and car parks (Retail) and rental income from Real Estate. In the first 9 months of 2020, Retail & Real Estate revenue declined to €226m (-39%), an elasticity of 0.56x to the reduction in passenger traffic.
- Retail & Real Estate revenue per passenger was c. €7.2 in 2018 and 2019. In the first 9 months of 2020, this increased to €14.0 which (as with AENA and LHR) is likely to result from some fixed rental payments from commercial operators and tenants which may not be sustainable without significant recovery in traffic at the airport.
- Non-aero revenue also includes Ground Handling activities at FRA, which contributed €250m in the first 9 months of 2020, a reduction of -53% versus the prior year and elasticity to volume of 0.76x. Ground Handling revenue per passenger was c. €10 per passenger in 2018 and 2019, which increased to €15.5 in the first 9 months of 2020, for similar reasons as the upturn in aero revenue per passenger. The following slide explains the impact of the Ground Handling business on Group EBITDA.

FRAPORT (€m)	Q1-18	Q2-18	Q3-18	Q4-18	Q1-19	Q2-19	Q3-19	Q4-19	Q1-20	Q2-20	Q3-20
Aero Revenue	219	259	285	243	225	270	288	244	189	63	102
Non-Aeronautical Revenue	269	298	310	305	277	310	323	306	240	100	136
International	194	294	420	383	302	400	458	304	232	87	169
TOTAL	682	851	1,015	931	804	979	1,069	854	661	250	407
Staff Costs	-284	-302	-297	-300	-300	-318	-306	-298	-293	-205	-206
Non-staff Costs	-243	-277	-337	-434	-330	-365	-347	-341	-260	-175	-73
TOTAL	-527	-579	-634	-734	-630	-684	-653	-639	-553	-380	-280
EBITDA*	175	287	419	249	201	311	437	232	129	-107	46

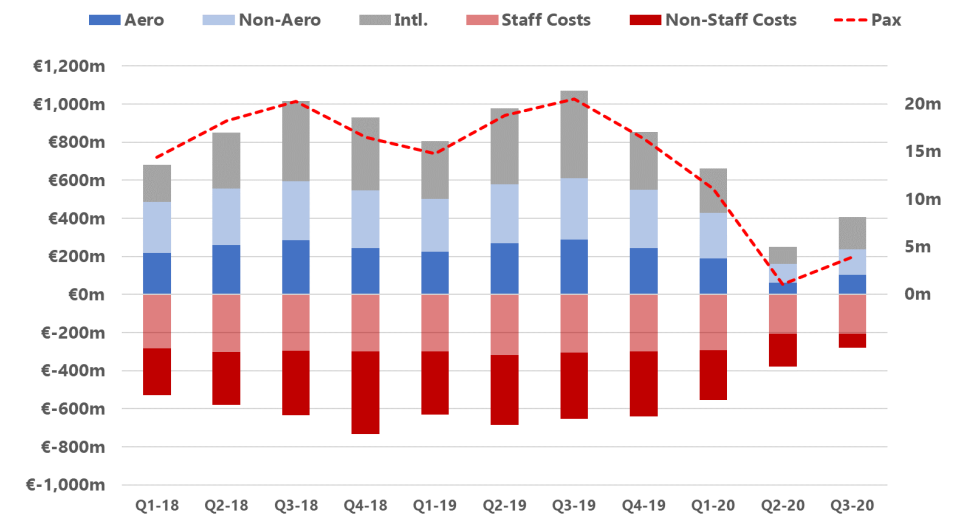
Qtr-on-Qtr Growth											
Revenue					18%	15%	5%	-8%	-18%	-75%	-62%
Operating Costs					19%	18%	3%	-13%	-12%	-44%	-57%
EBITDA					15%	8%	4%	-7%	-36%	-134%	-90%

*EBITDA includes impairments and other non-operating revenue and costs

*Q3 2020 EBITDA Excludes Special Items / Exceptional Costs

FRAPORT - Quarterly Pax / Revenue / Opex 2018-2020

Source: Airport Investor Relations / AviaSolutions Analysis



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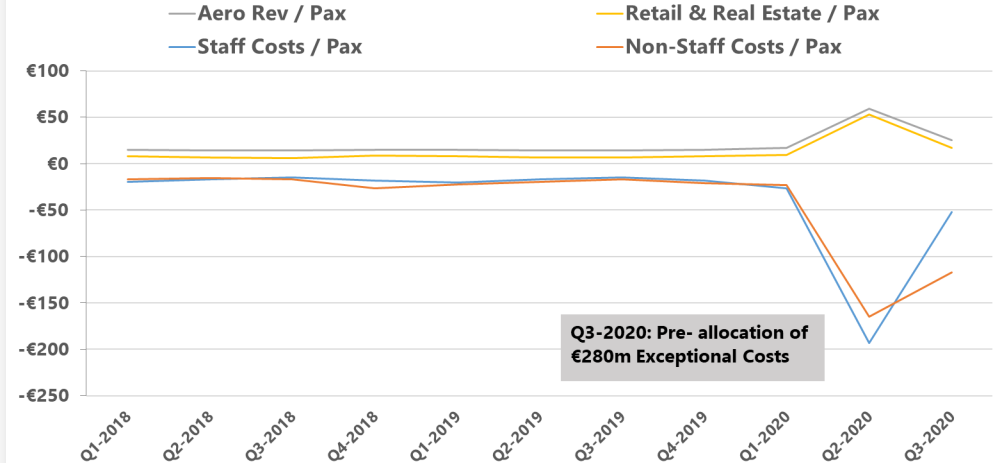
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AIRPORT FINANCIAL TRENDS – FRAPORT (2)

- Income from international operations is a major contributor to Fraport revenue (40% of total revenue in 2019). In line with all airports in 2020, Covid-19 has impacted revenue performance at Fraport’s international investments, notably from the regional airport’s concession in Greece. In the first 9 months of 2020, revenue has fallen by -58% to €488m versus the corresponding period in 2019 (€1,160m).
- FRA operating costs are split between Staff (47% of total costs in 2018 and 2019) and Non-Staff costs. In Q1-2020, operating costs were 20% ahead of the corresponding quarter in 2019, though scaling back operations in Q2 and Q3-2020 (such as consolidating operations into Terminal 1 from 7th April) has resulted in significant cost savings.
- In the 9 months to Q3-2020, Staff costs had reduced to €703m (-24%), despite a -70% decline in passenger traffic over the same period (elasticity 0.34x), excluding €280m of exceptional provision for staff restructuring costs in Q3-2020. Fraport is expecting to make c. 4,000 redundancies at FRA early in 2021 (30% of admin staff and 20% of operational staff). In the same period Non-Staff costs declined to €901m (-13%), an elasticity of 0.19x to the reduction in passenger traffic.
- Group EBITDA has fallen from €948m in the first 9 months of 2019, to €52m in the same period in 2020 (-95%), excluding the €280m provision for staff restructuring costs in Q3-2020. Ground Handling divisional EBITDA losses in the first 9-months of 2020 are -€89m, increasing from -€7m in Q1-2020 to -€54m and -€29m in Q2 and Q3-2020 respectively. Ground Handling has also been allocated €138m of the staff cost restructuring provision, reducing the net EBITDA to -€227m YTD in 2020.

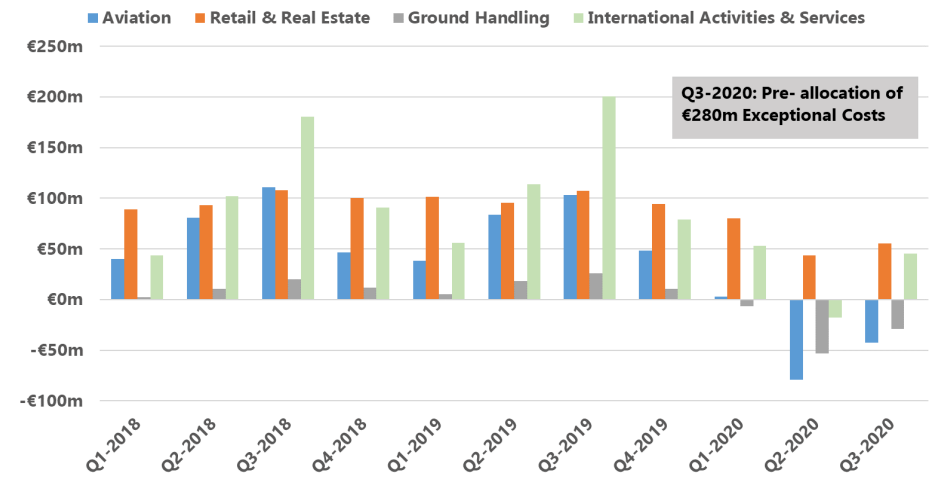
FRAPORT (FRA) - Revenue & Opex per Passenger 2018-2020

Source: Airport Investor Relations / AviaSolutions Analysis



FRAPORT - EBITDA by Division - 2018-2020

Source: Airport Investor Relations / AviaSolutions Analysis



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AIRPORT FINANCIAL TRENDS – HEATHROW (1)

- Airport charges contributed c. 60% of total revenue in 2018 and 2019. In 2018, aero revenue per pax was £21.8, increasing to £22.6 in 2019 based on the regulatory pricing formula (see following slide). In the first 9 months of 2020, LHR has seen a -69% decline in passenger volume and reduction in aero revenue of -62%, an elasticity of 0.9x, and an increase in aero revenue per passenger to £28.0 (+24%).
- The increase in aero revenue per pax is partially due to LHR being the major air freight airport in the UK, due to its extensive network served by widebody aircraft. Aero revenues benefitted from freight only or predominantly bellyhold cargo on commercial flights (with very weak load factors) in Q2/Q3-2020.
- The basis of future airport charges at LHR remains uncertain. The current Q6 regulatory period has been extended to at least the end of 2021, with the two year extension referred to as iH7. It remains that there is *"...no regulatory or commercial precedent to guide how pricing matters should be resolved"*. The focus is on constructive engagement between the airport and airlines.
- LHR has put forward proposals to the CAA that there should be an upward adjustment of the RAB of £1.7bn to compensate for the for the expected loss in revenue during 2020 and 2021 (£2.2bn), which would increase airport charges by c. £1.20 per passenger. The CAA's initial conclusion in Oct 2020 is that LHR has not sufficiently demonstrated the case for intervention, though it is seeking views on its initial conclusions from stakeholders.

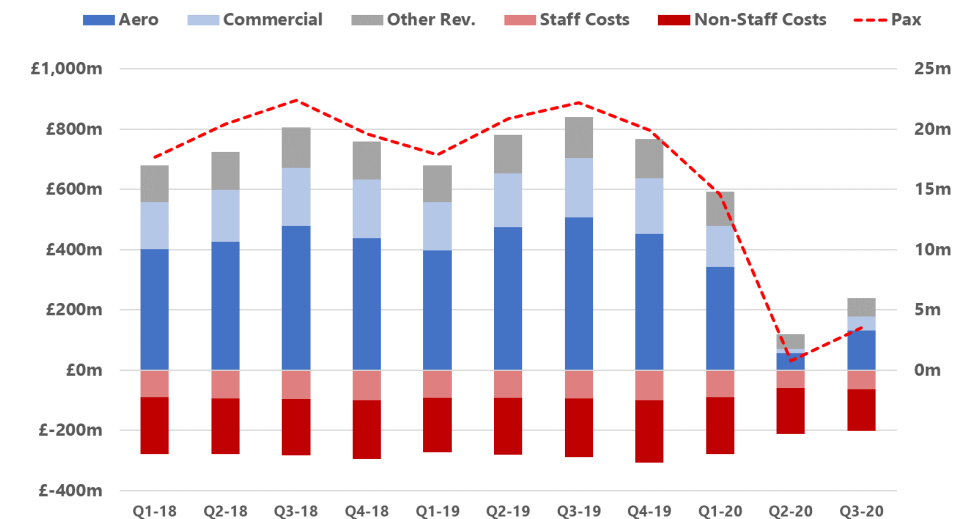
HEATHROW (£m)	Q1-18	Q2-18	Q3-18	Q4-18	Q1-19	Q2-19	Q3-19	Q4-19	Q1-20	Q2-20	Q3-20
Aero Revenue	401	427	479	438	397	474	508	452	342	56	132
Non-Aeronautical Revenue	156	172	192	196	160	179	197	186	136	14	47
Other Revenue	123	126	135	125	122	129	136	130	115	49	60
TOTAL	680	725	806	759	679	782	841	768	593	119	239
Staff Costs	-90	-93	-95	-100	-92	-92	-94	-100	-90	-59	-63
Non-staff Costs	-188	-186	-187	-194	-181	-189	-195	-206	-188	-153	-139
TOTAL	-278	-279	-282	-294	-273	-281	-289	-306	-278	-212	-202
EBITDA*	402	446	524	465	406	501	552	462	315	-93	37

Qtr-on-Qtr Growth	Q1-18	Q2-18	Q3-18	Q4-18	Q1-19	Q2-19	Q3-19	Q4-19	Q1-20	Q2-20	Q3-20
Revenue	0%	8%	4%	1%	-13%	-85%	-72%				
Operating Costs	-2%	1%	2%	4%	2%	-25%	-30%				
EBITDA	1%	12%	5%	-1%	-22%	-119%	-93%				

*EBITDA includes impairments and other non-operating revenue and costs

HEATHROW - Quarterly Pax / Revenue / Opex 2018-2020

Source: Airport Investor Relations / AviaSolutions Analysis



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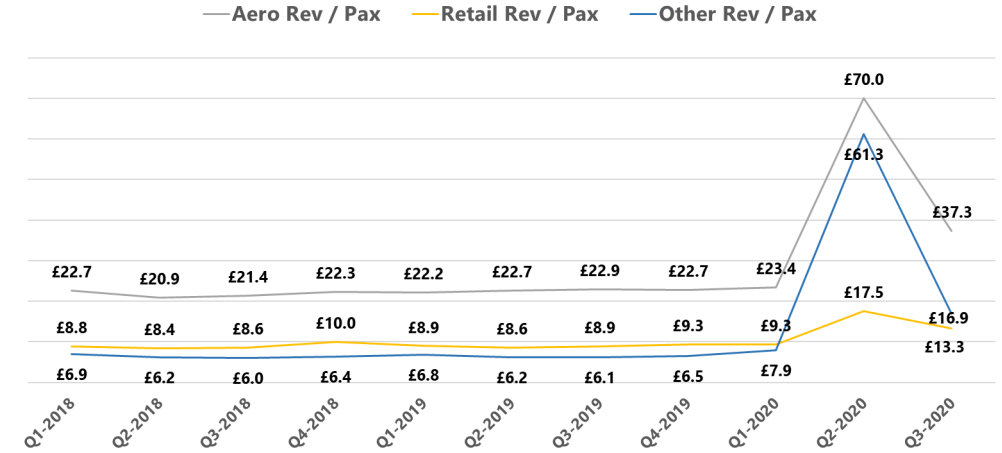
Q3-2020 Results Review – Dec 2020

AIRPORT FINANCIAL TRENDS – HEATHROW (2)

- Non-aero revenue comprises i) Retail and F&B concession, car parking and other commercial revenue (collectively Retail revenue) and ii) Other revenue which includes real estate and income from Heathrow Express. In 2018 and 2019, Retail revenue and Other revenue contributed 24% and 17% of total revenue respectively. In 2018 and 2019, Retail revenue per pax was £8.9, and Other revenue per pax just below £6.4 in both years.
- In the first 9 months of 2020, Retail revenue declined by -62% and Other revenue by -42%, compared with the -69% decline in passenger volume. The elasticity to changes in passenger volume over the 9-month period is 0.92x and 0.62x respectively.
- Heathrow's cost base is predominantly Non-Staff costs, which accounted for 67% of total operating costs in 2018 and 2019. In the first 9 months of 2020, with a fall in passenger volumes of 69%, Staff costs have reduced by -24% (net of furlough payments) and Non-Staff costs by -15%, an elasticity to volume of 0.34x and 0.22x respectively which illustrates the semi-fixed cost nature of many activities. The reduced demand over Q4-2020 and gradual recovery will inevitably lead to further reductions in staff costs to reduce cash outflow.
- The charts opposite illustrate the extent to which the previously stable KPI trends of revenue per passenger and opex per passenger have been severely disrupted over the last 2 quarters of 2020. Given the traffic outlook for Q4-2020, we do not expect a return to previous trends before H2-2021; it will be interesting to see how these re-stabilize post-pandemic. Much will depend on the airport processes, the Retail and F&B outlet protocols that respect social distancing guidelines, and the pace of return of different markets (e.g., business, leisure, VFR).

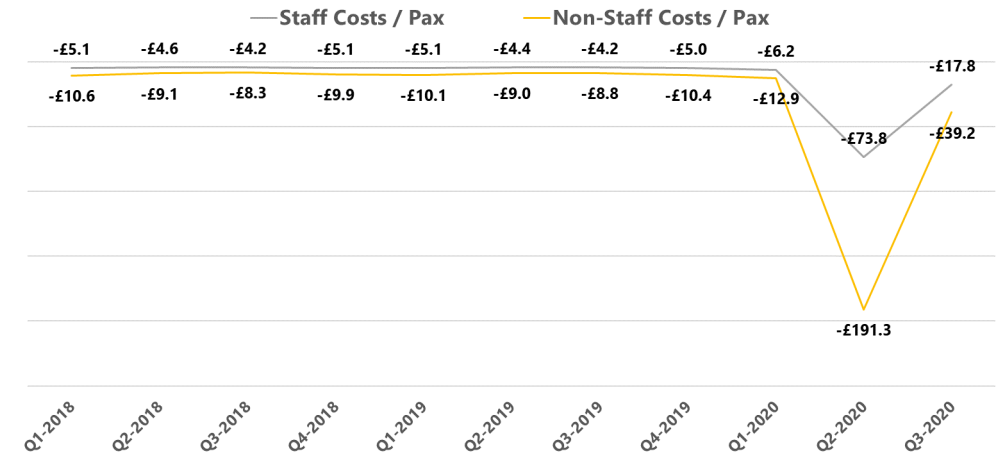
HEATHROW - Revenue per Passenger 2018-2020

Source: Airport Investor Relations / AviaSolutions Analysis



HEATHROW - Opex per Passenger 2018-2020

Source: Airport Investor Relations / AviaSolutions Analysis



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AIRPORT FINANCIAL TRENDS – FHWG (1)

- Airport charges contributed 48% of total revenue at Vienna Airport in 2018 and 2019. In 2019, aeronautical revenue per passenger declined by -8% from €14.1 to €13.0, in large part due to additional LCC capacity introduced by Lauda (subsidiary of Ryanair) and Wizz Air at discounted rates.
- In the first 9 months of 2020, aero revenue declined by -63% to €116m versus the -71% decline in passenger traffic, an elasticity of 0.89x.
- Non-aero revenue at Vienna Airport includes Handling & Security and Retail & Properties. In 2018 and 2019, these activities accounted for 20% and 18% of total revenue respectively, though with significantly different operating margins (10% and 64% respectively in 2019).
- In the first 9 months of 2020, Handling and Security revenue fell to €69m (-44% versus the same period in the prior year), with Retail & Property revenue also declining to €58m (-52%).
- Handling & Security generated revenue per passenger of €6.1 and €5.2 in 2018 and 2019. The contribution from Retail & Properties was €5.4 and €5.1 over the two years (see following slide for detail). Both activities have seen a sharp uplift in revenue per passenger as cargo flights have increased and aircraft movements (charged separately) have not declined in 2020 at the same rate as passengers (-60% versus -71% respectively).

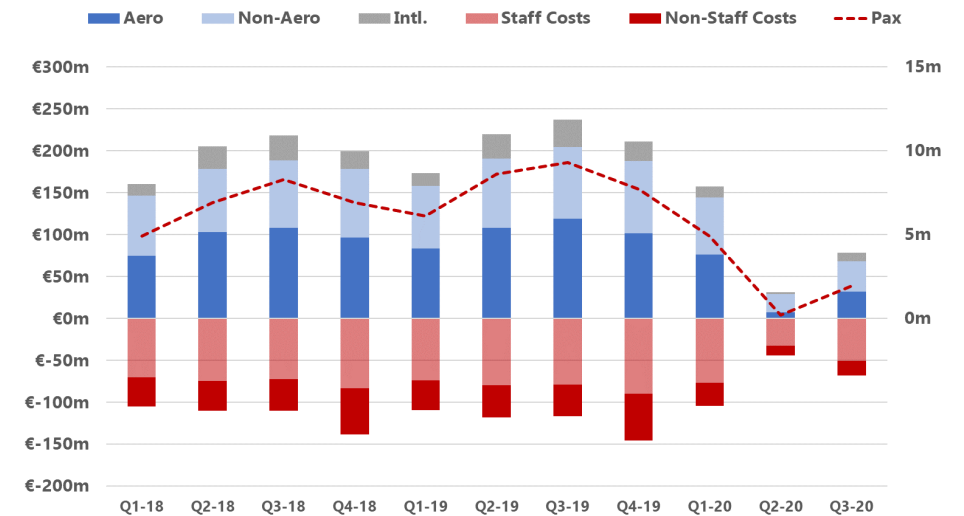
FHWG (€m)	Q1-18	Q2-18	Q3-18	Q4-18	Q1-19	Q2-19	Q3-19	Q4-19	Q1-20	Q2-20	Q3-20
Aero Revenue	74	103	108	96	83	108	119	102	76	8	32
Non-Aeronautical Revenue	72	76	80	82	75	83	85	86	69	22	36
International	14	27	30	21	16	29	33	23	13	2	10
TOTAL	160	205	218	200	173	220	237	211	157	31	79
Staff Costs	-70	-75	-73	-84	-74	-80	-79	-90	-77	-33	-51
Non-staff Costs	-35	-36	-38	-55	-35	-38	-37	-56	-28	-12	-18
TOTAL	-105	-111	-110	-139	-109	-118	-117	-146	-105	-44	-68
EBITDA*	65	103	117	66	72	111	130	72	59	-10	13

Qtr-on-Qtr Growth	Q1-18	Q2-18	Q3-18	Q4-18	Q1-19	Q2-19	Q3-19	Q4-19	Q1-20	Q2-20	Q3-20
Revenue	8%	7%	9%	5%	-9%	-86%	-67%				
Operating Costs	4%	7%	6%	5%	-4%	-62%	-41%				
EBITDA	11%	8%	11%	9%	-18%	-109%	-90%				

*EBITDA includes impairments and other non-operating revenue and costs

FHWG - Quarterly Pax / Revenue / Opex 2018-2020

Source: Airport Investor Relations / AviaSolutions Analysis



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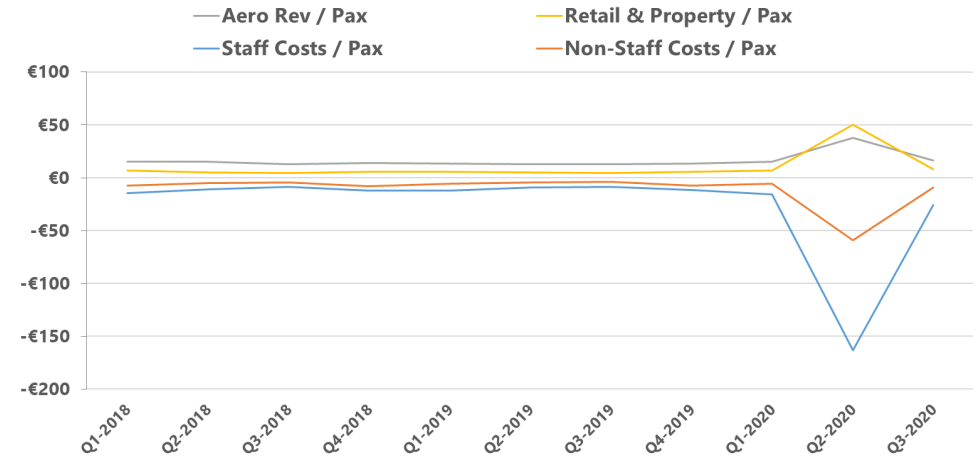
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AIRPORT FINANCIAL TRENDS – FHWG (2)

- The international business is relatively small at FHWG compared with ADP, AENA or FRAPORT. In the first 9 months of 2020, the divisional revenue contribution (Malta & Košice airports) declined by -68% to €25m, though down -56% in Q3-2020.
- Staff costs accounted for around 65% of total costs at Vienna Airport in 2018 and 2019. In the first 9 months of 2020, Staff costs reduced by -31% to €160m, an elasticity to the decline in traffic of 0.44x, largely due to reduced working hours introduced in March 2020.
- Non-Staff costs reduced by -48% to €57m in the first 9 months of 2020, an elasticity of 0.68x the reduction in passenger traffic. The cost reduction is largely due to lower levels of maintenance, reduced requirement for 3rd party services and marketing expenditure cuts.

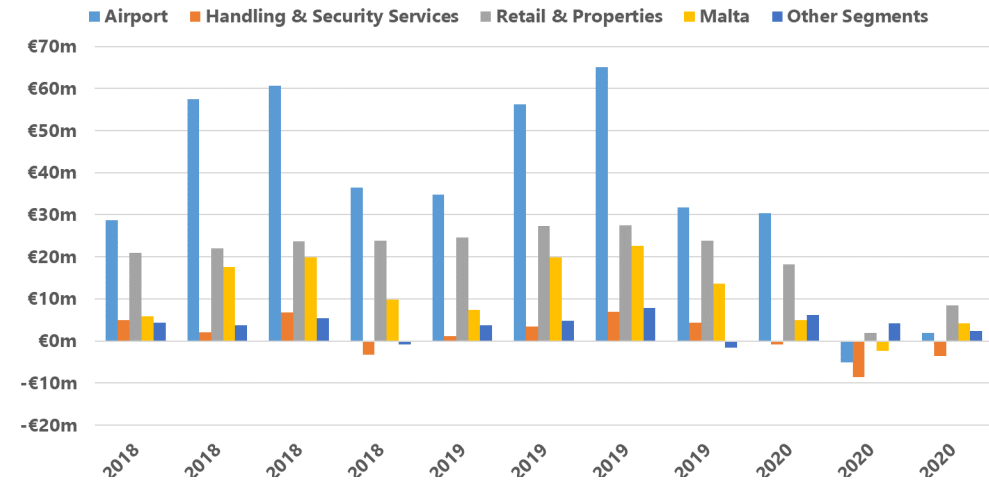
FHWG (VIE) - Revenue & Opex per Passenger 2018-2020

Source: Airport Investor Relations / AviaSolutions Analysis



FHWG - EBITDA by Division - 2018-2020

Source: Airport Investor Relations / AviaSolutions Analysis



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AIRPORT TRAFFIC OUTLOOK - SUMMARY

- Full year EBITDA is dependent primarily on airport traffic volume, and as noted earlier much will depend on the ability of airports to manage operations (and operating costs) in line with volume, especially given that the beneficiaries of government-backed credit facilities (such as AENA) are expected to minimise redundancies.
- **AENA** – There has not been updated guidance on the full year traffic or EBITDA forecast in the latest financial reports (Q3). In the half year results (Aug-2020), AENA estimated that full year traffic was expected to be -57% to -67%. Our latest estimate indicates that it is likely to be c. -72%. No guidance has been given for 2021.
- **Groupe ADP** – Full year traffic is forecast to be -65% to -70% below 2019, in line with our estimate of -69%. Consolidated revenue is projected to be -€2.3bn to -€2.6bn below 2019, which is consistent with our estimate of -€2.5bn. Operating expenditure is projected to be -€650m to -€700m below 2019, which is perhaps a little conservative. Overall, Groupe ADP full year EBITDA forecast is between -€200m and €100m, in line with our estimates. No guidance has been provided for 2021.
- **Heathrow** – The latest (Q3) guidance is for 2020 passenger volumes of 22.6m (in line with our projections) and an EBITDA of £290m. The latest estimate for 2021 is for passenger volumes of 37.1m, -54% below 2019.
- **Fraport** – The latest (Q3) guidance estimates that 2020 passenger volumes will be 18-19m, (in line with our projections). It also states that EBITDA should be marginally positive, before the impact of restructuring costs in Q3 (€280m). No guidance has been given on the outlook for 2021.
- **FHWG** – The latest estimate is that full year traffic at Vienna Airport will be between 7.6m and 7.8m, which is c. -76% below 2019 levels, and in line with AviaSolutions estimates. EBITDA is projected at €55m-€60m, which is likely conservative and €10m-€20m behind our own forecasts.