



**Kortrijk-Wevelgem Airport**

**RUNWAY  
PERFORMANCE  
REPORT  
2022**

# EXECUTIVE SUMMARY

skeyes has been publishing runway performance reports since 2014, for all airports at which Air Traffic Control (ATC) services are provided. Since the end of 2017, Aerodrome Flight Information Services (AFIS) are provided at Kortrijk-Wevelgem International Airport (ICAO code: EBKT), and since the installation of skeyes' Airport Movement System at the end of 2018, sufficient data has been collected to produce annual Runway Performance Reports, which provide information on key performance indicators in terms of traffic figures, safety occurrences, and punctuality. This report focuses on skeyes' operations at Kortrijk-Wevelgem in the year 2022 in comparison to the previous years.

## Traffic

2022 traffic chapter states that the airport's total aircraft movements have improved considerably in the past year, reaching almost 97% of the 2019 activities, despite the pandemic's impact on air travel.

There was a significant increase in Instrument Flight Rules (IFR) movements by 25% compared to 2021. The recovery was mainly driven by the comeback of Visual Flight Rules (VFR) flights and a growth in private/charter IFR flights demand. The Flemish Government and the Provincie West-Vlaanderen invested in the airport, which resulted in more parking space and better gate systems. Two new hangars were built by key Belgian private jet operators, contributing to the growth of IFR traffic. In addition, the new IFR procedure for runway 06 introduced in October 2021 allowed more instrument flights to land, leading to an increase in IFR traffic.

The report shows that weather conditions impact VFR traffic, causing fluctuations in the number of movements. March and October 2022 were the most active months in terms of movements, and Sundays were the least busy day of the week as training flights are not allowed on that day.

The report concludes that the airport's performance is doing well compared to last year, despite the variable weather conditions impacting VFR movements.

## Safety

The 2022 safety chapter covers runway safety occurrences, investigations, and actions taken to improve safety. Since 2019, there have been 20 runway safety occurrences, with five happening in 2022. No runway incursions occurred, indicating the success of the new gateway system. The report also includes a summary of safety-related events, including one accident in 2022, and an overview of wildlife events.

## Punctuality

The 2022 punctuality chapter examines the causes and impact of ATFM delay on arriving and departing flights. The FABEC Performance Plan classifies ATFM delay into different categories, with ATC Capacity being the most common.

In 2022, 12,372 minutes of delay were observed, with a higher percentage attributed to skeyes for both arrivals and departures in comparison the last two years where traffic was really low. The majority of delayed flights experienced a delay of 1 to 15 minutes, while severe delays of over an hour mostly resulted from other ANSP. The report provides a detailed breakdown of delay intervals and causes.

# LUCHTHAVEN



KORTRIJK - WEVELGEM

BRAND

← LUCHTVA

# SAMENVATTING

Sinds 2014 publiceert skeyes Runway Performance Reports voor alle luchthavens waar luchtverkeersleidingsdiensten (ATC, Air Traffic Control) worden verleend. Sinds eind 2017 worden vluchtinformatiediensten (AFIS, Aerodrome Flight Information Services) verleend op de internationale luchthaven van Kortrijk-Wevelgem (ICAO-code: EBKT). Sedert de installatie van het Airport Movement System (AMS) van skeyes eind 2018 zijn voldoende gegevens verzameld om jaarverslagen over de baanprestaties op te stellen, met informatie over de kernprestatie-indicatoren inzake verkeerscijfers, veiligheidsvoorvallen en stiptheid.

Dit verslag belicht de activiteiten van skeyes in Kortrijk-Wevelgem in het jaar 2022 in vergelijking met de voorgaande jaren.

## Verkeer

Als we de balans opmaken van het totale aantal vliegbewegingen op de luchthaven in 2022, stellen we vast dat er aanzienlijk veel vooruitgang geboekt werd in het afgelopen jaar en bereiken ze bijna 97% van de activiteiten van 2019, ondanks de impact van de pandemie op vliegereizen.

Het aantal vliegbewegingen volgens de Instrument Flight Rules (IFR) steeg significant met 25% ten opzichte van 2021. Het herstel werd vooral gedreven door de comeback van de VFR-vluchten (Visual Flight Rules) en een toenemende vraag naar IFR-vluchten (private en charters). De Vlaamse overheid en de Provincie West-Vlaanderen investeerden in de luchthaven, wat uitmondde in meer parkeerruimte en betere gate-systemen. Er werden twee nieuwe hangars gebouwd door vooraanstaande Belgische privéjetoperatoren, wat bijdroeg tot de groei van het IFR-verkeer. Bovendien konden er meer IFR-vluchten landen dankzij de nieuwe IFR-procedure voor baan 06, die in oktober 2021 werd ingevoerd. Dat leidde tot een toename van het IFR-verkeer.

Uit het verslag blijkt dat de weersomstandigheden een impact hebben op het VFR-verkeer, waardoor het aantal bewegingen fluctueert. Maart en oktober 2022 waren de actiefste maanden wat het aantal bewegingen betreft, en de zondag was de minst drukke dag van de week.

De conclusie van het verslag luidt dat de luchthaven degelijk presteerde in vergelijking met het jaar voordien, ondanks de variabele weersomstandigheden die een impact hebben op de VFR-bewegingen.

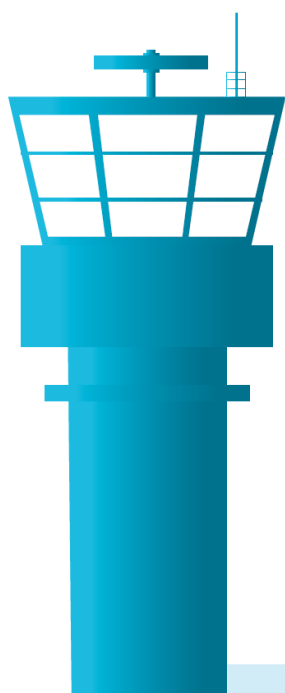
## Veiligheid

Het hoofdstuk veiligheid 2022 omvat veiligheidsvoorvallen op de banen, onderzoeken en acties die werden/worden ondernomen om de veiligheid te verbeteren. Sinds 2019 hebben er zich 20 veiligheidsvoorvallen op de banen voorgedaan, waarvan vijf in 2022. Er deden zich geen runway incursions voor, wat wijst op het succes van het nieuwe gateway-systeem. Het verslag bevat ook een samenvatting van veiligheidsgerelateerde gebeurtenissen, waaronder één ongeval in 2022, en een overzicht van de gebeurtenissen met betrekking tot in het wild levende dieren.

## Stiptheid

In het hoofdstuk stiptheid 2022 worden de oorzaken en de impact van ATFM-vertraging op aankomende en vertrekkende vluchten onderzocht. Het FABEC-prestatieplan brengt ATFM-vertraging onder in vijf categorieën, waarvan ATC-capaciteit de meest voorkomende is.

In 2022 werd 12.372 minuten vertraging vastgesteld, waarbij een hoger percentage werd toegeschreven aan skeyes voor zowel aankomsten als vertrekken, in vergelijking met de twee jaar voordien waarin het verkeersvolume echt laag was. De meerderheid van de vertraagde vluchten liep een vertraging van 1 tot 15 minuten op, terwijl ernstige vertragingen van meer dan een uur meestal konden worden toegeschreven aan andere ANSP's. Het verslag voorziet in een detailoverzicht van de vertragingintervallen en -oorzaken.



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# GLOSSARY





AAE:	Above Aerodrome Elevation
AFISO:	Aerodrome Flight Information Services Officer
AIP:	Aeronautical Information Publication
AMC:	Acceptable Means of Compliance
AMS:	Airport Movement System
ANSP:	Air Navigation Service Provider
ATC:	Air Traffic Control
ATFM:	Air Traffic Flow Management
ATM:	Air Traffic Management
CAA	Civil Aviation Authority
BCAA:	Belgian Civil Aviation Authority
COVID-19:	Coronavirus Disease 2019
CTOT:	Calculated Take-off Time
CTR:	Control Zone
DSA:	Drone Service Application
EASA:	European Union Aviation Safety Agency
EBAW:	Antwerp International Airport ICAO Code
EBBR:	Brussels Airport ICAO Code
EBCI:	Brussels South Charleroi ICAO Code
EBKT:	Kortrijk-Wevelgem International Airport ICAO Code
EBLG:	Liège Airport ICAO Code
EBOS:	Ostend–Bruges International Airport ICAO Code
ETOT:	Estimated Take-off Time
EU:	European Union
FABEC	Functional Airspace Block Europe Central
IAP	Instrument Approach Procedures
ICAO:	International Civil Aviation Organization
IFR:	Instrument Flight Rules
LRST:	Local Runway Safety Team
NM:	Network Manager
NOTAM	Notice to Airmen
PANS	Procedures for Air Navigation Services
RAT	Risk Analysis Tool
RMZ:	Radio Mandatory Zone
RPAS	Remotely Piloted Aircraft Systems
RWY:	Runway
SID	Standard Instrument Departures
TCAS RA	Traffic Alert and Collision Avoidance System Resolution Advisory
TMZ	Transponder Mandatory Zone
TWY	Taxiway
UAS:	Unmanned Aircraft System
VFR:	Visual Flight Rules



# 1. Traffic

In this chapter, traffic at Kortrijk-Wevelgem Airport (International Civil Aviation Organization (ICAO) code: EBKT) is presented as recorded by the Airport Movement System (AMS). The AMS is an in-house developed tower air traffic control (ATC) system and records the movements at an aerodrome and within its Radio Mandatory Zone/Transponder mandatory zone (RMZ/TMZ). The movements are defined as an aircraft either crossing the CTR, landing or taking off at the aerodrome.

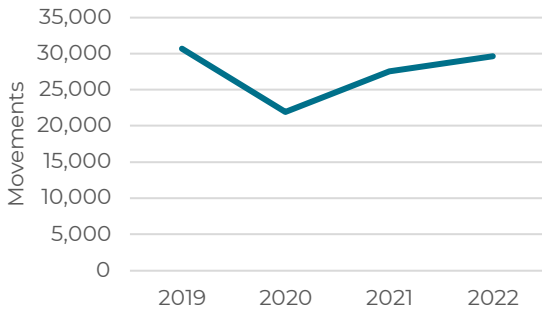
The figures presented throughout the report consider a movement as a take-off or landing of all traffic (flights under Visual Flight Rules (VFR) and Instrument Flight Rules (IFR), helicopters and airplanes, commercial, military or general aviation). As this report considers runway performance, movements such as crossings of CTRs are not considered. As per BCAA's (Belgian Civil Aviation Authority) aerodrome movement definition:

- one take-off = one movement
- one landing = one movement
- one touch-and-go = two movements

## Traffic Overview

The total number of aircraft movements at Kortrijk-Wevelgem for the last four years is as follows:

- 2019 : 30,670 (3,242 IFR; 27,428 VFR)
- 2020 : 21,888 (2,650 IFR; 19,238 VFR)
- 2021 : 27,566 (4,280 IFR; 23,286 VFR)
- 2022 : 29,648 (5,368 IFR; 24,880 VFR)



In 2021, EBKT largely recovered from the 2020 COVID-19 pandemic drop and was back at around 90% of the movements of 2019.

In 2022, traffic reached almost 97% of 2019 activities, with a noticeable IFR movements raise of 25% in comparison with 2021.

IFR market shares already overtook 2019 figures last year and went up to +66% of 2019 figures in 2022.

Figure 1.1 : Kortrijk-Wevelgem airport historical traffic overview

Details on the development per month are provided in Figure 1.2 : Monthly movements per year, Table 1.1 and Table 1.2.

2022's first quarter faced a noticeable traffic raise in comparison to 2021. This raise brought Kortrijk-Wevelgem Airport performance close to 2019 figures and even overtook March 2019 by +34%. This movements reason appeared mainly thanks to VFR flights coming back and a private/charter IFR flights demand growth.

From April to September, movements at the airport look roughly the same as last year, apart from the IFR flights raise already witnessed in the first quarter.

The last quarter movements fluctuates a lot. In October 2022 good weather allowed VFR flights to take place which led roughly to +30% movements. On the other hand, November 2022 was a month with more precipitations compare to last year which impede VFR flights to take-off or land.

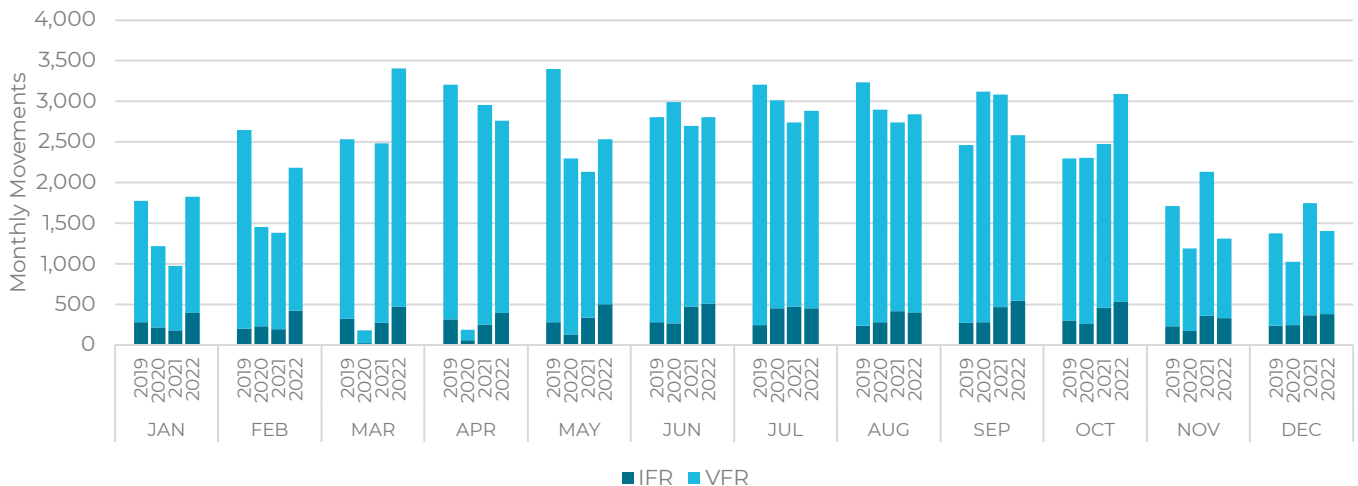


Figure 1.2 : Monthly movements per year

Table 1.1 : Monthly movements per year at Kortrijk-Wevelgem airport

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
IFR	<b>2019</b>	281	203	326	321	279	286	244	243	276	307	233	243	<b>3,242</b>
	<b>2020</b>	218	229	28	63	134	266	455	285	286	261	175	250	<b>2,650</b>
	<b>2021</b>	185	195	273	255	340	478	475	418	466	461	364	370	<b>4,280</b>
	<b>2022</b>	394	425	475	397	505	513	457	403	549	533	334	383	<b>5,368</b>
	2022 vs 2019	+40%	+109%	+46%	+24%	+81%	+79%	+87%	+66%	+99%	+74%	+43%	+58%	<b>+66%</b>
	2022 vs 2021	+113%	+118%	+74%	+56%	+49%	+7%	-4%	-4%	+18%	+16%	-8%	+4%	<b>+25%</b>
VFR	<b>2019</b>	1,498	2,449	2,212	2,887	3,121	2,521	2,960	2,989	2,188	1,991	1,476	1,136	<b>27,428</b>
	<b>2020</b>	999	1,227	152	127	2,164	2,726	2,557	2,617	2,835	2,046	1,013	775	<b>19,238</b>
	<b>2021</b>	794	1,191	2,210	2,704	1,794	2,222	2,266	2,323	2,621	2,013	1,767	1,381	<b>23,286</b>
	<b>2022</b>	1,435	1,757	2,931	2,367	2,029	2,294	2,427	2,442	2,035	2,559	979	1,025	<b>24,280</b>
	2022 vs 2019	-4%	-28%	+33%	-18%	-35%	-9%	-18%	-18%	-7%	+29%	-34%	-10%	<b>-11%</b>
	2022 vs 2021	+81%	+48%	+33%	-12%	+13%	+3%	+7%	+5%	-22%	+27%	-45%	-26%	<b>+4%</b>
Total	<b>2019</b>	1,779	2,652	2,538	3,208	3,400	2,807	3,204	3,232	2,464	2,298	1,709	1,379	<b>30,670</b>
	<b>2020</b>	1,217	1,456	180	190	2,298	2,992	3,012	2,902	3,121	2,307	1,188	1,025	<b>21,888</b>
	<b>2021</b>	979	1,386	2,483	2,959	2,134	2,700	2,741	2,741	3,087	2,474	2,131	1,751	<b>27,566</b>
	<b>2022</b>	1,829	2,182	3,406	2,764	2,534	2,807	2,884	2,845	2,584	3,092	1,313	1,408	<b>29,648</b>
	2022 vs 2019	+3%	-18%	+34%	-14%	-25%	+0%	-10%	-12%	+5%	+35%	-23%	+2%	<b>-3%</b>
	2022 vs 2021	+87%	+57%	+37%	-7%	+19%	+4%	+5%	+4%	-16%	+25%	-38%	-20%	<b>+8%</b>

In the future, the impact of bad weather conditions might be lower as IFR traffic is picking-up in the region. As mentioned above, the figures from 2022 are even higher than those from 2019 by 66%. A substantial factor for this positive development are the investments from the Flemish Government and the Provincie West-Vlaanderen, which lead, for instance, to more parking space and better gate systems on the north side. Furthermore, two new hangars have been built by key Belgian private jet operators. The benefits of these investments are now observable in skeyes' statistics. In addition, it is also plausible that private/charter flights were more often used to reach destinations, which normal airlines did not offer in 2021 due to COVID-19 restrictions. The new IFR procedure for runway 06, which became effective on the 8<sup>th</sup> of October 2021, might have been another cause: IFR flights used to be able to use RNP procedure only on runway 24 in the past.

Overall, Kortrijk-Wevelgem Airport's performance is doing well in comparison to last year and their several lockdowns. On the one hand variables weather leads to VFR movements fluctuation but on the other hand thanks to infrastructure improvements done in the past, IFR movements is continuously growing.

Table 1.2 : Arrival and departure traffic figures per month

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
Arrivals	<b>2019</b>	893	1,328	1,269	1,605	1,711	1,403	1,618	1,613	1,228	1,156	861	693	<b>15,378</b>
	<b>2020</b>	604	738	86	92	1,149	1,508	1,513	1,449	1,567	1,155	595	507	<b>10,963</b>
	<b>2021</b>	489	701	1,253	1,485	1,067	1,364	1,382	1,375	1,546	1,235	1,069	872	<b>13,838</b>
	<b>2022</b>	910	1,103	1,709	1,389	1,271	1,418	1,448	1,423	1,291	1,550	657	705	<b>14,874</b>
Departures	<b>2019</b>	886	1,324	1,269	1,603	1,689	1,404	1,586	1,619	1,236	1,142	848	686	<b>15,292</b>
	<b>2020</b>	613	718	94	98	1,149	1,484	1,499	1,453	1,554	1,152	593	518	<b>10,925</b>
	<b>2021</b>	490	685	1,230	1,474	1,067	1,336	1,359	1,366	1,541	1,239	1,062	879	<b>13,728</b>
	<b>2022</b>	919	1,079	1,697	1,375	1,263	1,389	1,436	1,422	1,293	1,542	656	703	<b>14,774</b>

## Traffic Variations

On average, there were 81.2 movements per day in Kortrijk-Wevelgem in 2022. How all of these movements were spread over the year can be observed in the calendar view of Figure 1.3

Figure 1.3 let us witness once again that March and October 2022 were the most active month in terms of movements. This phenomena can be easily justified by dry weather conditions which allowed VFR flights to happen. Sundays remains the quieter day of the week mostly because training flight are not allowed, whereas Wednesdays and Saturdays the busiest.

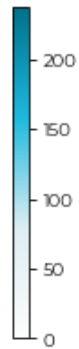
	24	14	151	159	20	168	36	8	103	132	66	111	107	26	71	93	52	60	84	51	29	106	68	63	79	77	124	124	61	45	
	19	115	9	7	34	61	55	20	78	98	95	93	45	40	86	126	111	145	83	59	49	84	41	132	145	148	73	122	57	52	
	99	13	33	69	89	103	19	205	110	152	173	122	64	12	99	110	131	149	103	64	66	103	34	103	91	128	119	119	35	141	
	190	3	83	31	46	24	51	30	119	142	171	116	31	12	172	125	114	71	88	53	60	132	80	136	93	49	47	144	42	124	
	55	51	116	112	21	192	14	114	178	99	205	156	23	142	166	112	153	86	121	37	96	165	101	138	57	147	163	127	131	128	
25	28	28	30	27	224	154	40	190	93	78	150	165	88	77	174	84	86	131	148	114	88	119	126	75	104	78	123	85	50	73	
21	74	9	50	164	18	30	7	126	97	37	64	59	48	97	58	76	36	72	67	92	42	11	86	28	95	101	90	79	52	28	
	Jan				Feb				Mar					Apr				May				Jun				Jul					

Figure 1.3 : Calendar view of daily movements at EBKT in 2022





55	34	51	111	112	110	159	101	37	150	74	98	42	65	42	17	15	37	9	66	25	52	Mon
91	103	52	117	83	81	48	130	49	134	126	157	138	11	39	49	25	0	69	136	15	162	Tue
105	109	17	91	123	86	11	173	123	48	237	105	91	68	39	58	18	8	43	67	35	21	Wed
47	128	105	107	113	30	97	186	107	166	51	50	125	65	126	23	71	51	53	61	50	13	Thu
132	105	35	130	104	32	59	125	137	149	53	115	104	46	68	64	104	22	56	73	21	8	Fri
113	74	149	103	57	46	42	18	51	158	36	143	113	94	1	15	100	81	56	45	53	2	Sat
76	99	82	106	101	102	35	85	48	92	76	36	61	6	78	19	7	19	12	22	10		Sun
Aug			Sep				Oct				Nov				Dec							



## Traffic Patterns

The following figures show the average hourly movements (in local time) throughout the day.

Figure 1.4 depicts how different traffic patterns emerge for IFR and VFR traffic. Throughout the years, two peaks for VFR traffic persist: One around 11:00 and the other between 14:00 and 15:00. Between those, a drop is observed during lunch time. The fact that no training flights are allowed on Saturdays between 12:00 and 14:00 and the whole afternoon in summer also contributes to the observed decrease of movements in that period of the day. Moreover there is an important limitation at 17:00LT, after this time training is only possible for aircraft with a noise certificate of <72dB. This (and sunset) is why a plateau around 17:00 is noticeable. IFR flights are more evenly spread throughout the course of the day and typically peak at 10:00 in 2022 where it was at 18:00 in 2021.

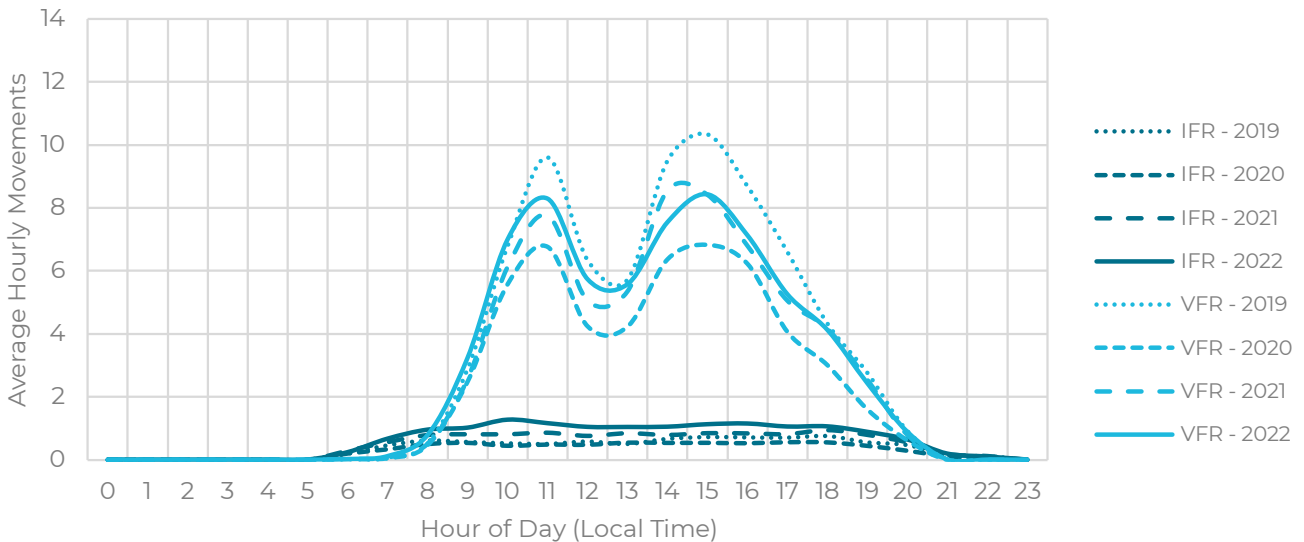


Figure 1.4 : Average hourly movements (2019-2022) per flight rule

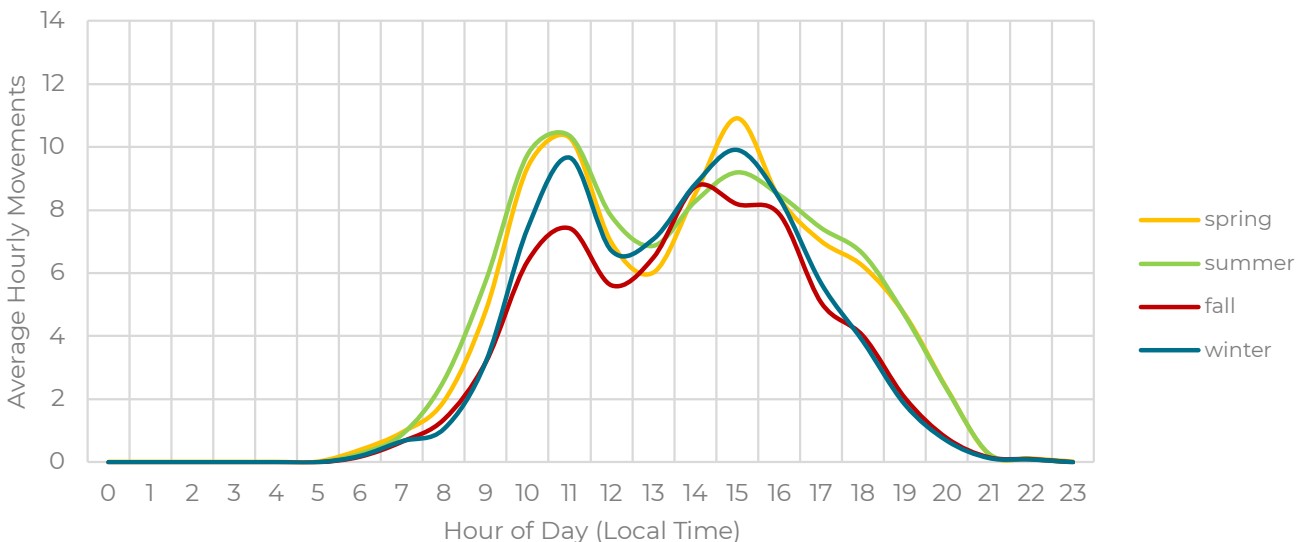


Figure 1.5 : Average hourly movements per season in 2022

Figure 1.5 provides a view on the busiest times of the day per season: In spring and winter, the morning peak is roughly the same as the afternoon one. On the other hand, in summer the morning peak is higher than in the afternoon. A potential reason for this observation is that the sunny, long summer days allow VFR flights to also make use of later evening hours. The plateau from 16:00 to 18:00 in spring and summer supports this reasoning. However, 15:00 spring's peak vanishes in summer probably because people do day trips and come arrive later in the afternoon. The biggest contributors to those variations remain the several training flight limitations.

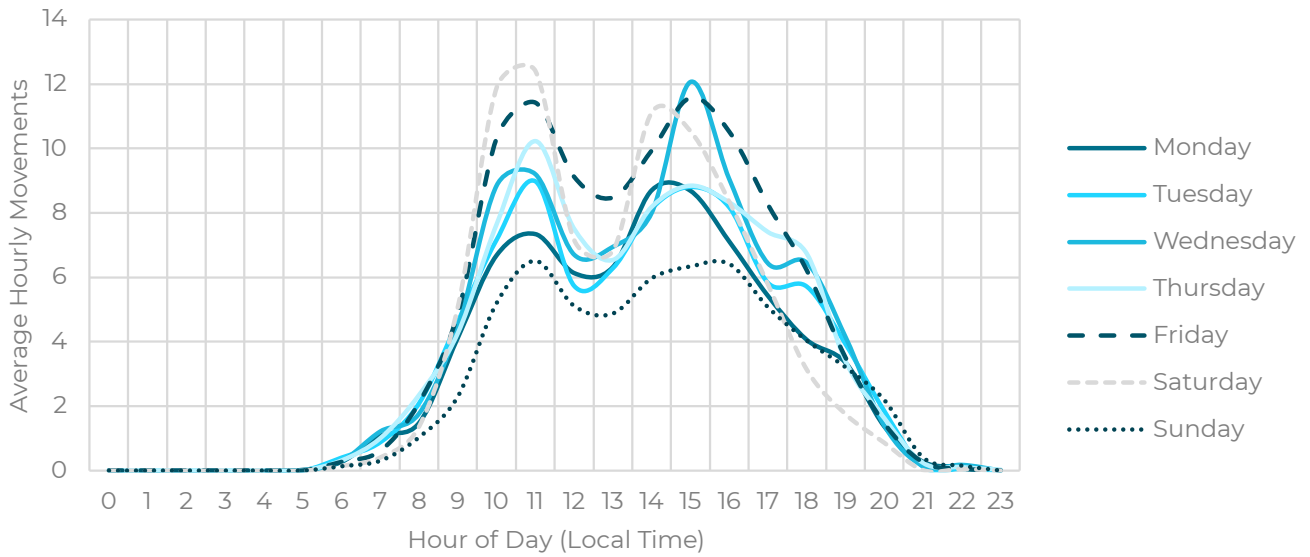


Figure 1.6 : Average hourly movements per weekday in 2022

The daily distribution per weekday as seen in Figure 1.6 demonstrates that Fridays and Saturdays are the most preferred day to fly both in the morning or in the afternoon. Wednesday would be the third preferred day, mainly in the afternoon. Sundays, on the contrary, are the least busy. Given that training flights are prohibited on Sundays, this shows how much the opening hours for training flights influence the daily patterns. In general, local training flights are only allowed during the following periods:

- ➔ Monday to Friday: 08:00-19:00 (07:00-18:00 on holidays)
- ➔ Saturdays from September to June: 08:30-11:00 and 13:00-17:00 (07:30-10:00 and 12:00-16:00 on holidays)
- ➔ Saturdays in July and August: 08:30-11:00 (07:30-10:00 on holidays)
- ➔ Helicopter training flights are not allowed on Saturdays, Sundays and holidays

The forced lunch break for training flights on Saturdays and the limitation of 72db after 17:00 can also be observed in the graph of hourly movements, where it is represented by a deeper valley at noon and a bump in the end of the afternoon. Monday mornings are generally not as busy as other weekdays.

## Drone Activities

The challenges and opportunities associated with the expected widespread growth of unmanned aerial vehicles will be one of the factors driving the future of Air Navigation Service Providers (ANSP). Early 2020, the company skeydrone was created as subsidiary of skeyes. skeydrone envisages to play a central role in the implementation of U-space, a set of specific services and procedures designed to ensure safe and efficient access to airspace for a large number of drones, in Belgium. skeydrone offers a wide variety of services that enable safe and efficient drone operations in all types of airspace. Those services are provided to authorities – such as managers of Unmanned Aircraft System (UAS) geographical zones – and operators of critical infrastructure – such as ports, nuclear plants, prisons and industrial complexes. It provides soft- and hardware based solutions that allow to manage safety & security related risks associated with drone flights in and around their areas of responsibility. skeydrone also supports drone operators – both large and small enterprises, as well as government agencies – in order to offer solutions that allow to plan and execute flights in the safest and most efficient manners<sup>1</sup>.

The UAS geographical zones, also called “GeoZones” are only accessible to drones complying with technical and operational criteria, as well as restrictions with regard to the use of these drones. Therefore, to facilitate planning, coordination and information flow between drone operators and Air Traffic Control, skeydrone has implemented a web application: the Drone Service Application (DSA). The two main objectives of DSA is to simplify the planning process for drone operators, and to visualize the planned drone operations for skeyes, which is the GeoZone manager for controlled airspace above and around the airports of Antwerp, Brussels, Charleroi, Kortrijk, Liège and Ostend<sup>2,3</sup>. This source is used to show the drone activity in the following figures of this section.

Figure 1.7 displays the number of drone activities, which were authorized in the DSA, and the level of risk involved in the operations per airport. These categories are defined by the risk the drone activity forms for manned aviation in very low level (VLL) zones. For all airports where a control zone exists, these are defined as:

- **high risk:** runway and surroundings
- **moderate risk:** departure/approach track, visual circuits and rest of the control zone above 400 ft above aerodrome elevation (AAE), excluding the high risk zone
- **low risk:** on the edge of the control zone below 400 ft AAE, outside the moderate and high risk zone

For Kortrijk-Wevelgem, where there is a Radio Mandatory Zone (RMZ), the categories are defined as:

- **high/moderate risk:** runway, departure/approach track, visual circuits from ground to the top of the RMZ
- **low risk:** the entire RMZ outside the high/moderate risk zone, but where drone operation cannot be higher than 400 ft above ground level

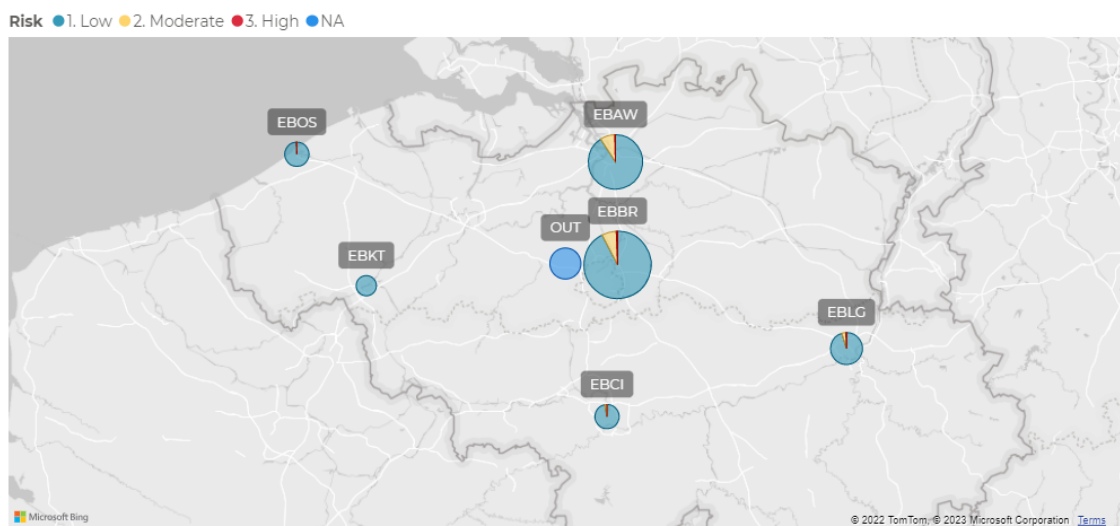


Figure 1.7 : Drone activities in 2022 at the airports where skeyes provides air traffic services

<sup>1</sup> Skeydrone, "Enabling safe drone operations", 2022. <https://skeydrone.aero/> (URL retrieved on 21/04/2022)

<sup>2</sup> UAS geographical zone statuses can be seen at <https://map.droneguide.be> (URL retrieved on 21/04/2022)

<sup>3</sup> skeyes, "skeyes drone service application.", <https://www.skeyes.be/en/services/drone-home-page/you-and-your-drone/drone-service-application/> (URL retrieved on 21/04/2022)

Figure 1.7 provides an overview of the complexity of operations at EBKT and the other five airports, where skeyes provides services. In addition,

Table 1.3: Authorized drone activities per EASA risk category in 2022

	2022			Total	2021	2022 vs 2021
	OPEN	SPECIFIC	FORMER CLASS 1 <sup>4</sup>		Total	
<b>EBBR</b>	3,481	1,709		<b>5,190</b>	<b>4,530</b>	+15%
<b>EBCI</b>	581	345		<b>926</b>	<b>731</b>	+27%
<b>EBLG</b>	1,161	536		<b>1,697</b>	<b>852</b>	+99%
<b>EBOS</b>	652	182	11	<b>845</b>	<b>1,451</b>	-42%
<b>EBAW</b>	2,557	1,181		<b>3,738</b>	<b>4,157</b>	-10%
<b>EBKT</b>	333	163	8	<b>504</b>	<b>610</b>	-17%
Total	8,765	4,116	19	<b>12,900</b>	<b>12,331</b>	+5%

As per European Union Aviation Safety Agency (EASA) definition<sup>5</sup>, activities can furthermore be categorized into a different risk classification scheme that considers the complexity of the operation. The following three classes exist:

- **OPEN:** Presents low risk to third parties. An authorisation from the Civil Aviation Authority (CAA) is not required.
- **SPECIFIC:** More complex operations or aspects of the operation fall outside the boundaries of the Open Category. Authorisation is required from the CAA.
- **FORMER CLASS 1:** Very complex operations, presenting an equivalent risk to that of manned aviation.

Figure 1.8 provides a detailed view of the activities around EBKT in 2022, displaying the initial coordinates of all UAS. Figure 1.9 shows the distribution of activities at EBKT over the year.

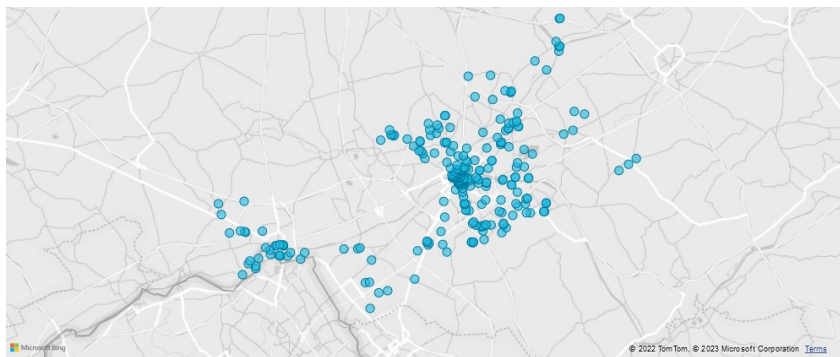


Figure 1.8: Initial Coordinates of Drone Activities near Kortrijk-Wevelgem International Airport in 2022

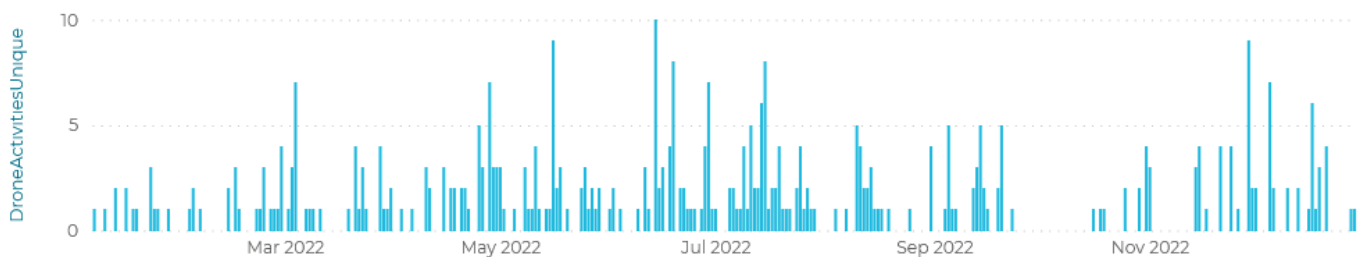


Figure 1.9: Drone activities near Kortrijk-Wevelgem international airport throughout the Year 2022

<sup>4</sup> Since 31/12/2020, the EU Drone Regulation has been in force in Belgium and old licenses for FORMER CLASS 1 operations expired a year after, i.e. at the end of 2021. Thus, no operations in the FORMER CLASS 1 category should have taken place in 2022 – yet some records can be found in the logs of the DSA. For further information, contact skeydrone.

<sup>5</sup> EASA, "Drones - regulatory framework background". <https://www.easa.europa.eu/domains/civil-drones/drones-regulatory-framework-background> (URL retrieved on 21/04/2022)

## Runway Use

The layout of Kortrijk-Wevelgem airport with its two reciprocal runways (RWY) is depicted in the International Civil Aviation Organization (ICAO) chart of Figure 1.10.

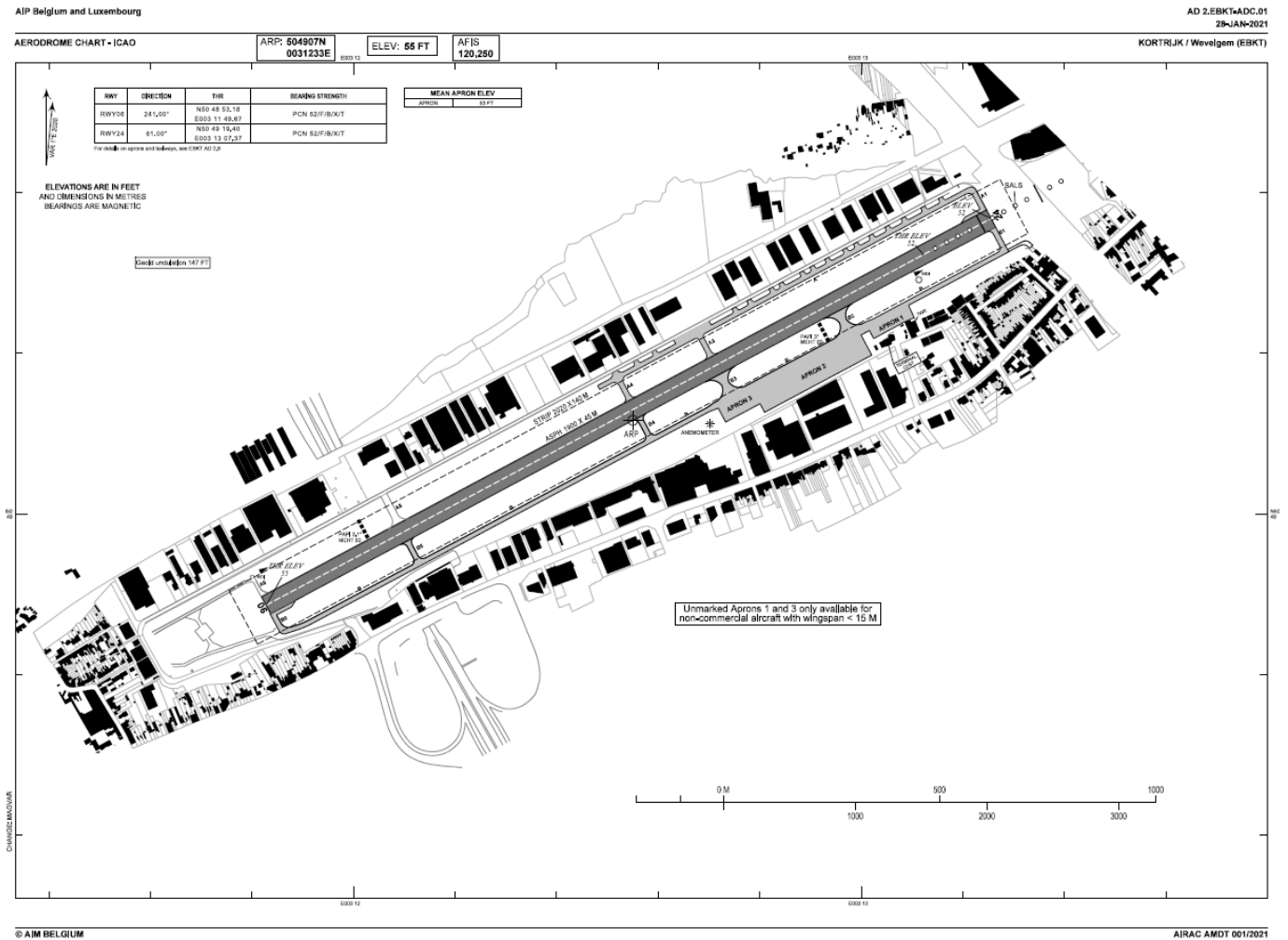


Figure 1.10 : ICAO chart of EBKT

The use of one runway configuration over another depends on several factors and usually, the wind direction is the biggest player. In Belgium, winds are predominantly blowing from South-West, which explains the more frequent use of RWY 24: In 2022, this runway was used in 57% of movements for all arrivals and 49% for departures (see Figure 1.11). The new IFR procedures were introduced for RWY 06 on 8th October 2020. Standard instrument departures (SID) and instrument approach procedures (IAP) now allow IFR flights to use RWY 06 when the wind favours it. Accordingly, the usage of RWY 06 increased from 28% in 2020 to 51% in 2022 for departures and from 33% in 2020 to 43% in 2022 for arrivals. The reason why the usage of RWY 06 increased more for departures than for arrivals might be two-folded: On one hand, departures might favour runway 06 as it directly leads to the frequently used navigation point MAK. On the other hand, bad weather conditions cause arrivals to use runway 24 as the guiding lights of this runway are more efficient and the RNP approach has lower the minima on this runway because runway 06 only has a 15° offset approach.

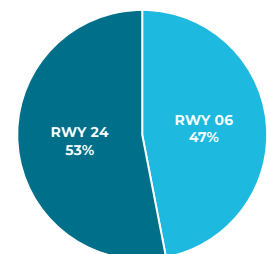


Figure 1.11 : Runway use in 2022

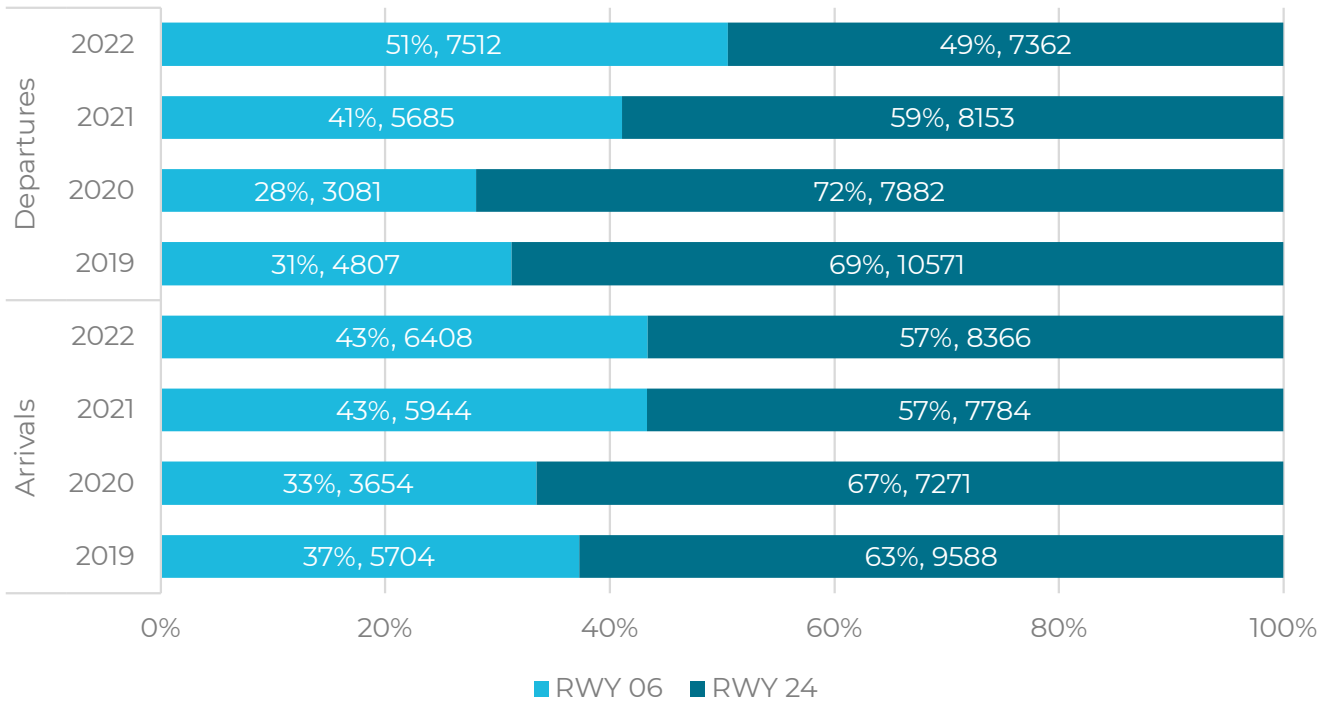


Figure 1.12 : Runway use per year

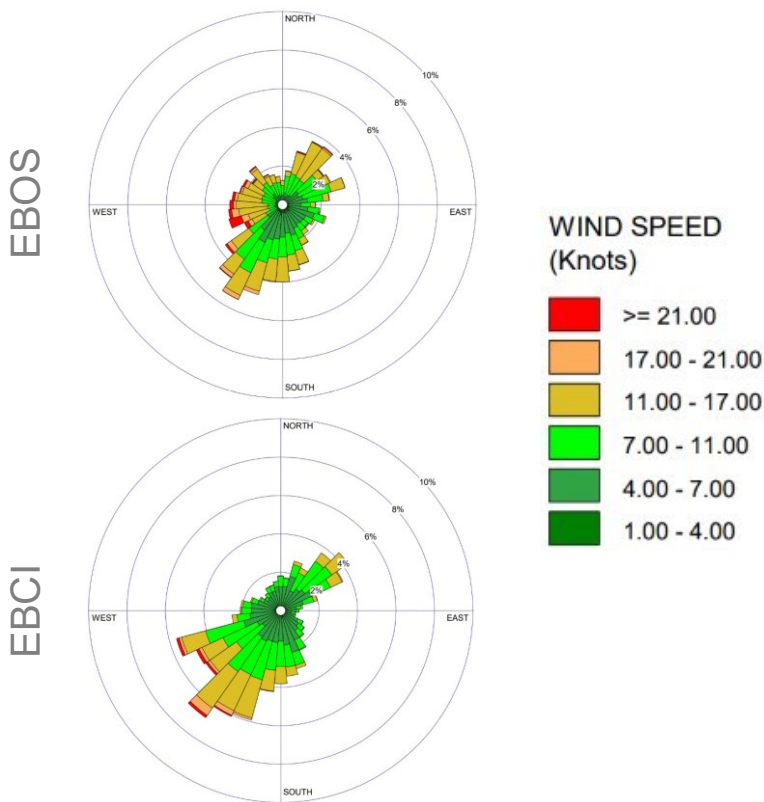


Figure 1.13 : Wind roses for Ostend and Charleroi in 2022

Figure 1.14 below shows the runway use per month in 2022. The percentage of use of RWY 06 fluctuates quite heavily with roughly the same pattern as 2021, ranging from less than 17% in November to almost 75% in April.

No wind data is available at skeyes for Kortrijk-Wevelgem itself, but the wind-roses from nearby airports of Ostend (EBOS) and Charleroi (EBCI) give an indication of the weather in Kortrijk-Wevelgem. As mentioned above, wind direction is one of the main factors for the choice of runway configuration and Figure 1.14 details this. In March, April and August almost all wind was blowing from the North-East, which also explains the exceptionally high usage of RWY 06 during those months.

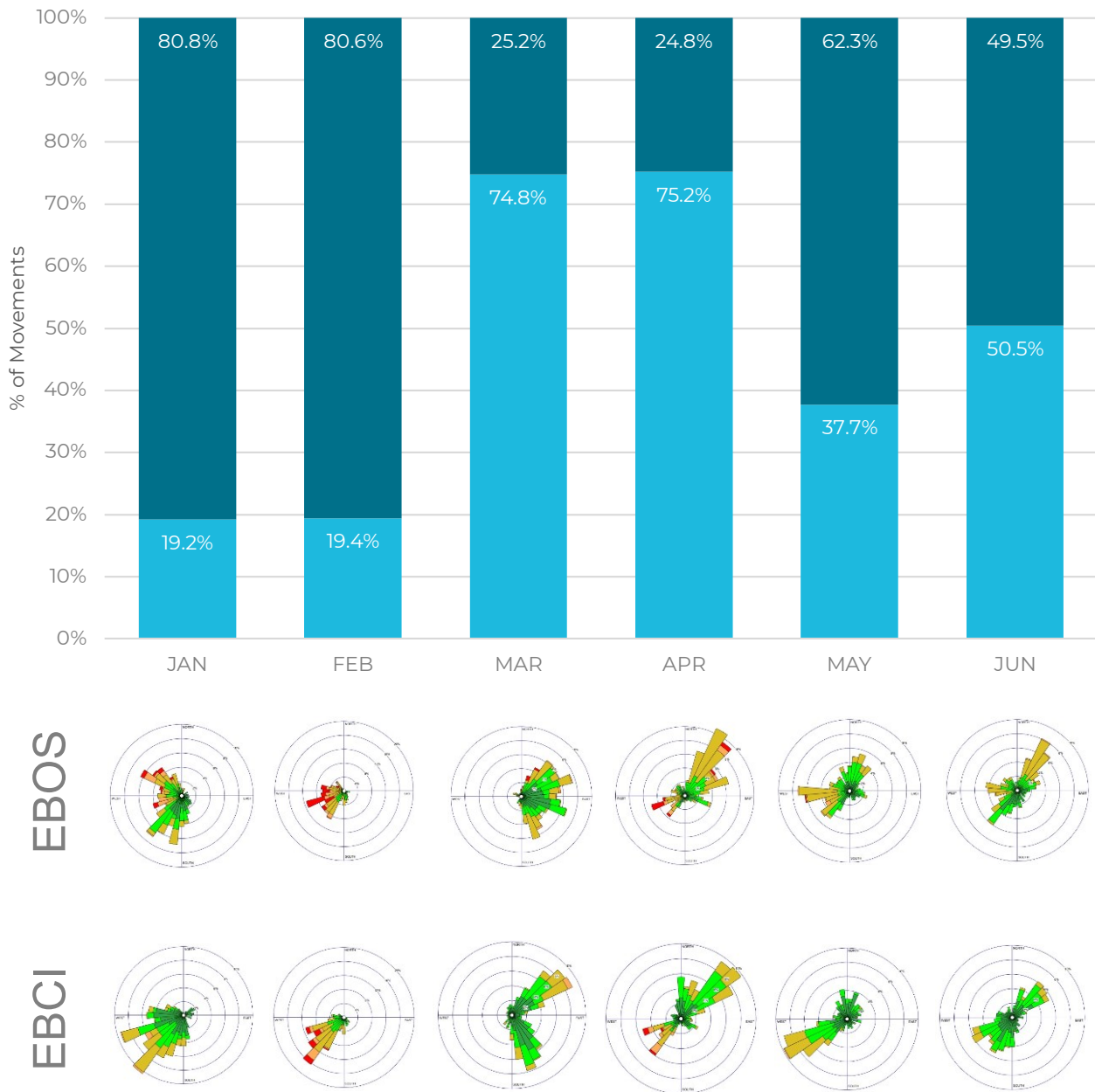
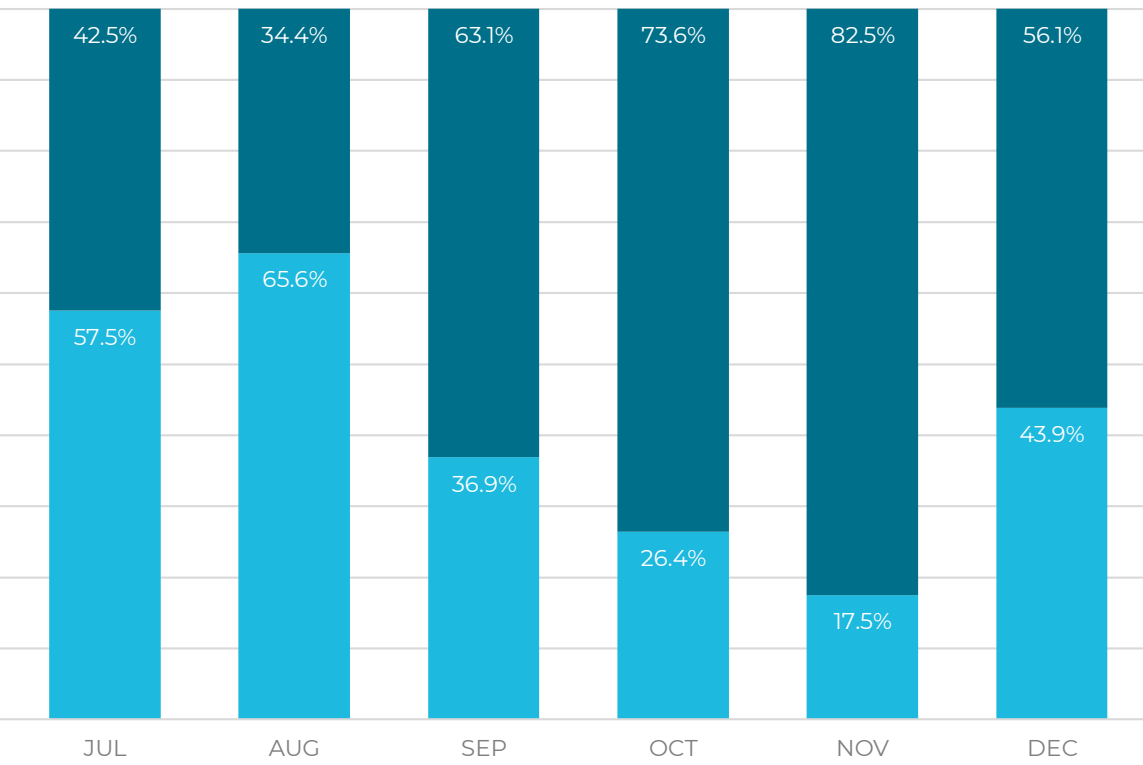
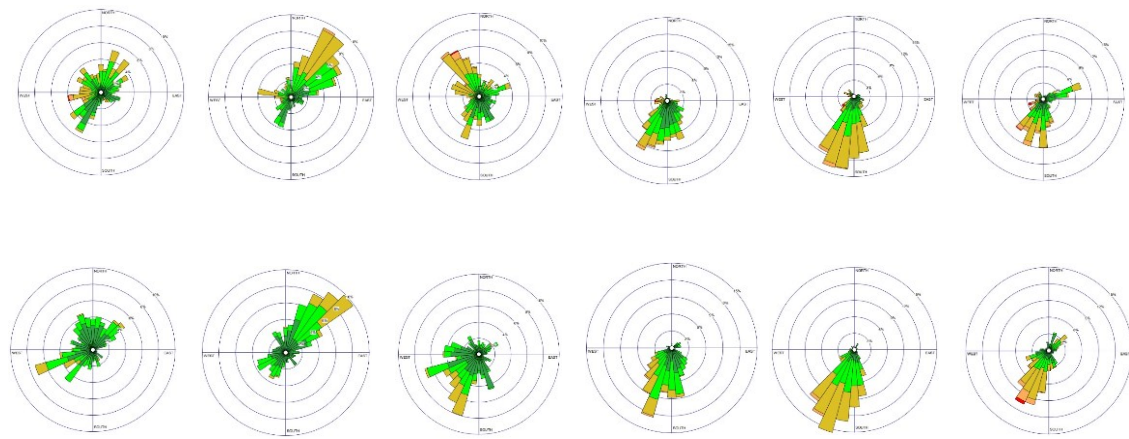


Figure 1.14 : Runway usage per month in 2022 and wind-roses from Ostend and Charleroi





■ 24  
■ 06



## Opening Hours

Kortrijk-Wevelgem airport is opened between 06:00 and 21:00 (local time). Upon request, these opening hours can be extended up to 23:00. Figure 1.15 shows in light blue how the opening hours evolved over the year 2022. The line chart shows that closing time is really volatile but some extensions periods are noticeable. Most of the time VFR flights are not using extensions as it is costly. Extensions pattern should follow IFR flights with peaks around holidays, mostly in summer but also in spring for ski vacation mainly requested by business jets. A limited number of extensions are requested for medical flights.

We also see that oftentimes the Aerodrome Flight Information Services Officers (AFISOs) come in before 06:00 to open the airport at that time.

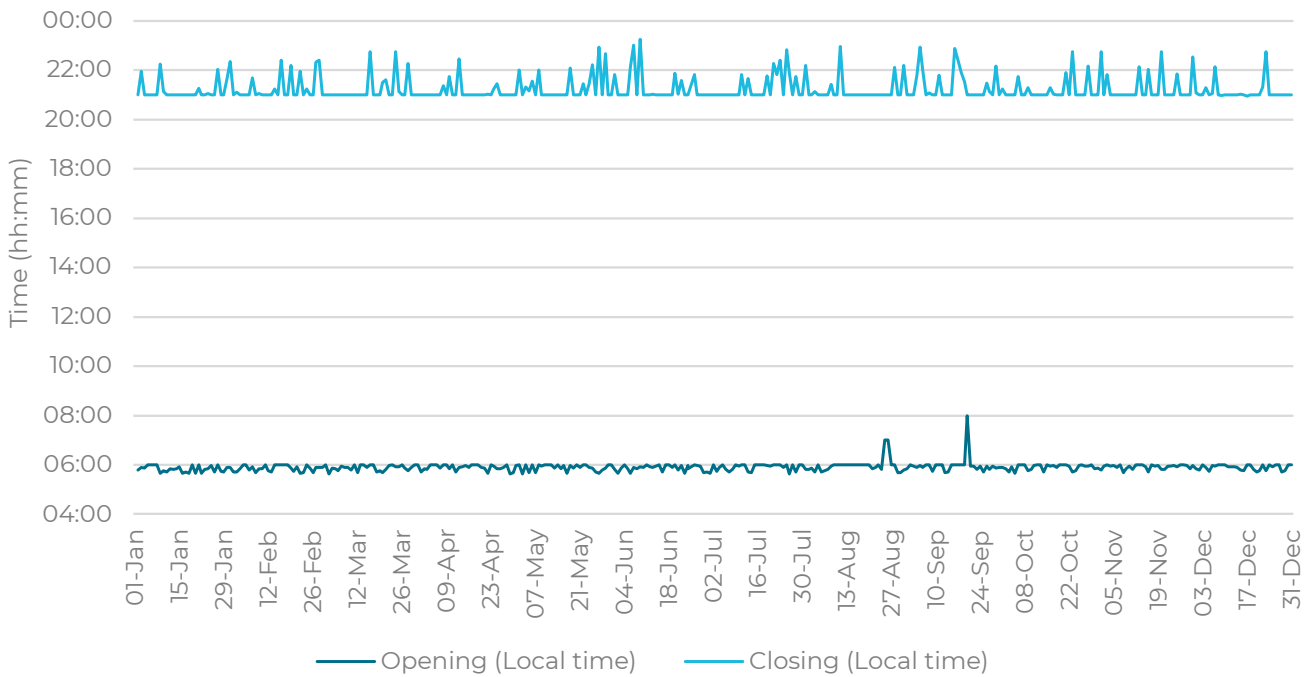


Figure 1.15: Opening times of Kortrijk-Wevelgem airport in local time



Figure 1.16 shows in dark blue the number of days per month in 2022 where at least one extension was planned (that is, days where the closing time of the airport was expected to be later than 21:00). Light blue refers to the days where all the requested extensions were cancelled.

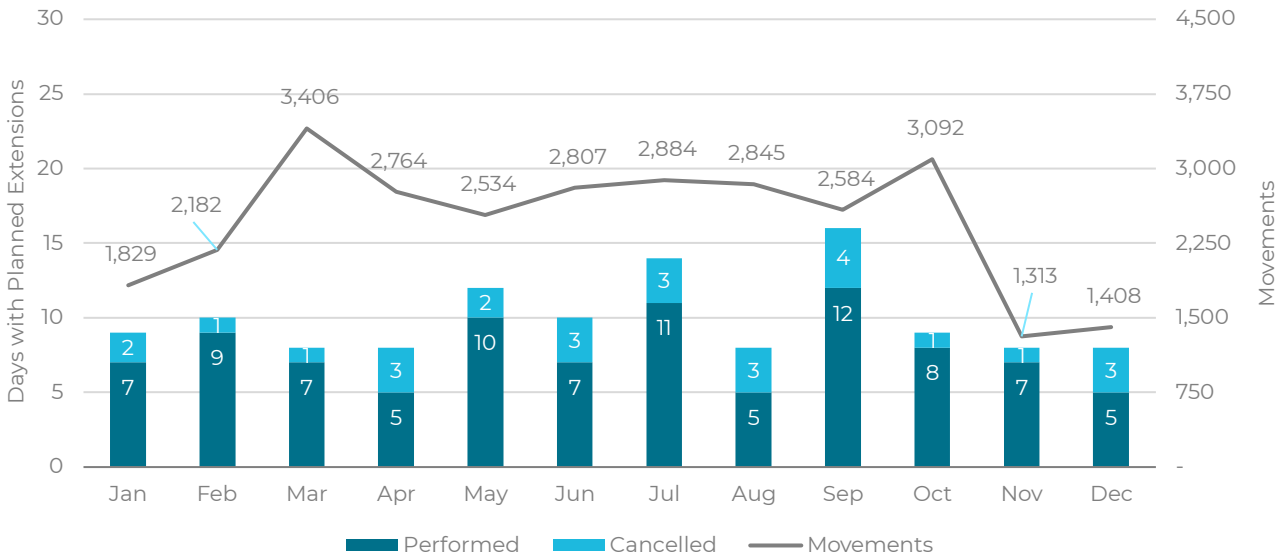


Figure 1.16 : Days with extension per month of 2022

From Figure 1.17 one can derive that there were almost as many days with extension in 2022 as there were in 2019 or 2021. In these years, roughly one in four days was a day with an extension. In 2020 less than one every seven day had an extension.

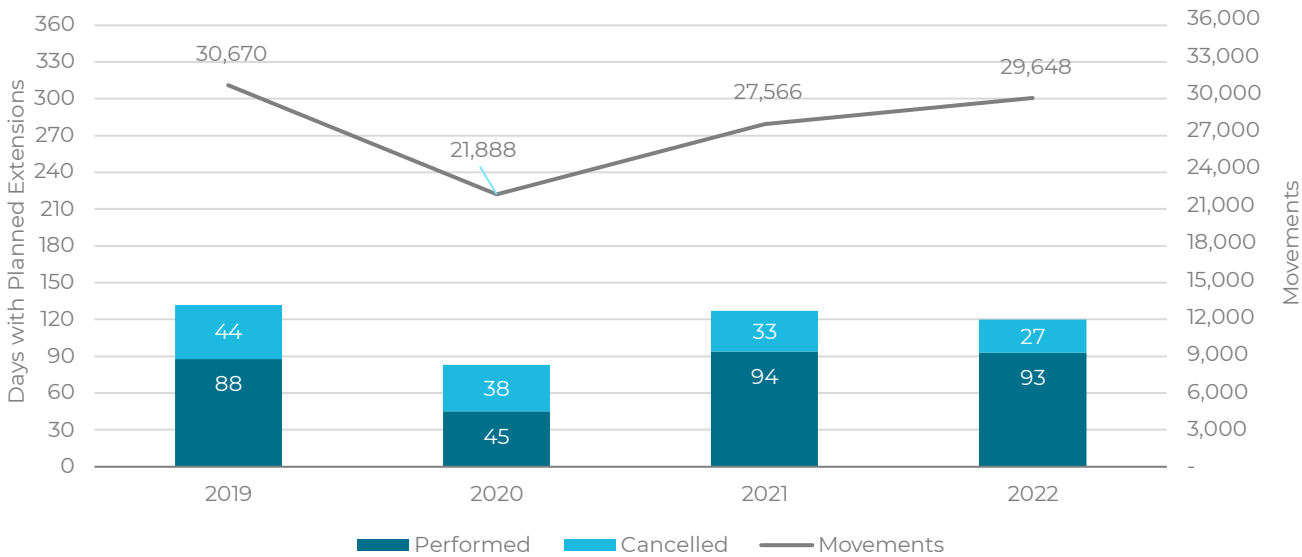


Figure 1.17 : Days with extension per year



## 2.Safety

*This chapter is divided in two topics: runway incursions & events, and safety recommendations.*

*The runway incursions are a lagging runway safety indicator. The runway incursions and occurrences discussed in other noteworthy incidents are safety occurrences. These are subject to a risk classification using the Risk Analysis Tool (RAT) methodology to assess the contribution that skeyes had in the chain of events (in accordance with EU Reg 376/2014 and EU Reg 2019/317). The following chapters indicate the severity classification that was derived from the calculated RAT risk for the safety occurrences. The following definitions apply for the severity classification (in accordance with EASA AMC).*

## Runway incursions and Runway events

According to ICAO<sup>6</sup>, a *runway incursion* is defined as “any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft”. According to the Acceptable Means of Compliance (AMC)<sup>7</sup>, an *incorrect presence* is hereby defined as the unsafe, unauthorised or undesirable presence or movement of an aircraft, vehicle, or pedestrian – irrespective of the main contributor (e.g. AFISO, pilot, driver, technical system).

When a deviation from the aerodrome manual occurs, a runway incursion report is made.

Moreover, if a situation on the runway is deemed unsafe by a pilot or an AFISO, even without a deviation from the aerodrome manual, a safety report is made as well. Such situations are classified as runway events.

Runway events and incursions are investigated and the results of these investigations are discussed at the Local Runway Safety Team (LRST) meetings, which bring together all partners related to the airport. During such LRST meetings, skeyes as well as the airport present their respective view and focus on actions to be taken. The purpose of the LRST is hence to make all partners aware, to share lessons learned, and to take action in the sake of safety.

As to be seen in Figure 2.1, there have been 20 runway safety occurrences since 2019, out of which five happened in the year of 2022. Four of the five occurrences were runway events (involving aircraft or helicopters) and one was an event while taxiing of an aircraft.

On the other hand no runway incursions occurred (involving pedestrians, motorised and unmotorised vehicles). This can be regarded as a success of the new gateway system at the North of the airport. Before this new system was in place, anyone could enter the gate whereas nowadays a badge is needed to prevent unknowing pedestrians or bikers to accidentally enter the runway.

This year, 80% of the runway safety occurrences have been investigated. This double the 40% figure of last year and emphasises the positive increase in safety culture.

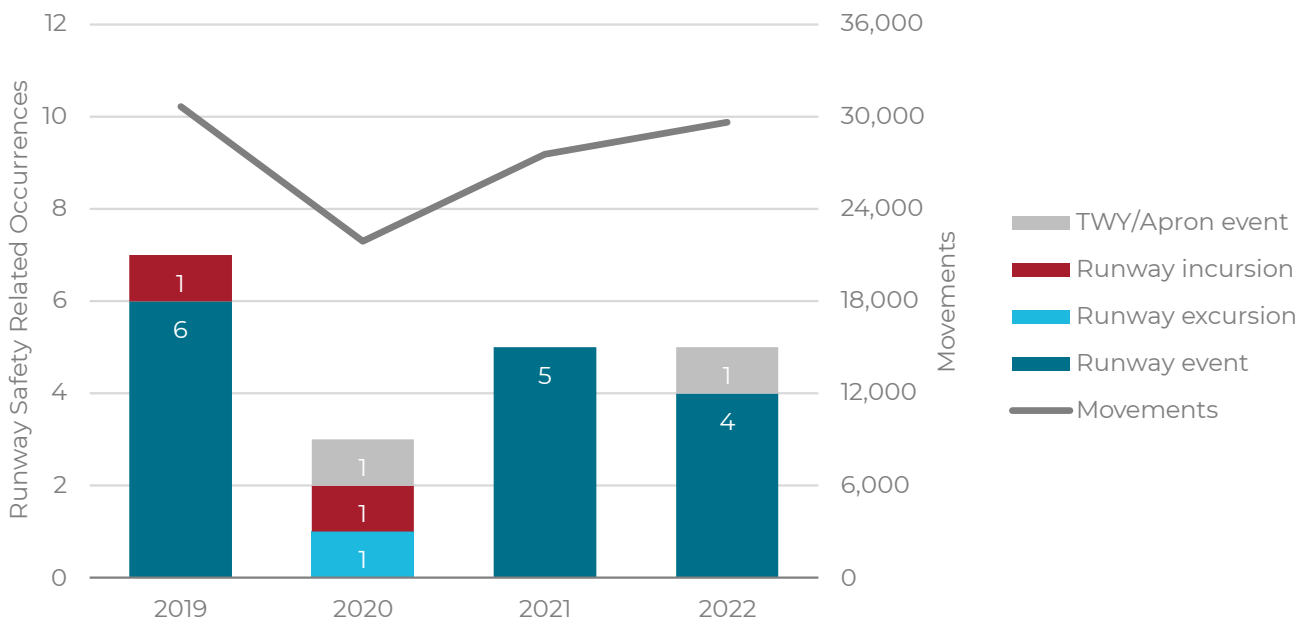


Figure 2.1 : Runway safety occurrences at EBKT per year

<sup>6</sup> ICAO Doc 4444 – PANS-ATM

<sup>7</sup> AMC 3 of EU Reg 2019/317

Table 2.1: Safety occurrences per year

Safety occurrences	2019	2020	2021	2022
Accident report	4	1	1	1
ACFT tech issue	5	4	6	2
Airspace Infringement		1		1
Deviation from ATM procedures	12	9	2	5
Deviation from mandated equipment	2	2		
Inadequate separation		1	1	3
Laser beam			1	1
Other			1	1
RPAS		1	1	2
Runway event	6		5	4
Runway excursion		1		
Runway incursion	1	1		
TCAS RA		1	4	3
TWY/Apron event		1		1
Wildlife report	5	5	5	3
WM		2	1	1
Total	35	30	28	28

Table 2.1 further shows a summary of all safety related events ascribed to the unit of EBKT.

One accident occurred in July 2022 described as a forced landing of a ULM without any injuries for the passengers. Note that the trend is stabilizing, with a noticeable decrease from 35 in 2019 to 28 in 2022. The drop is particularly noticeable in deviations from Air Traffic Management (ATM) procedures.

An overview of the wildlife reports is given in the bar chart in Figure 2.2.

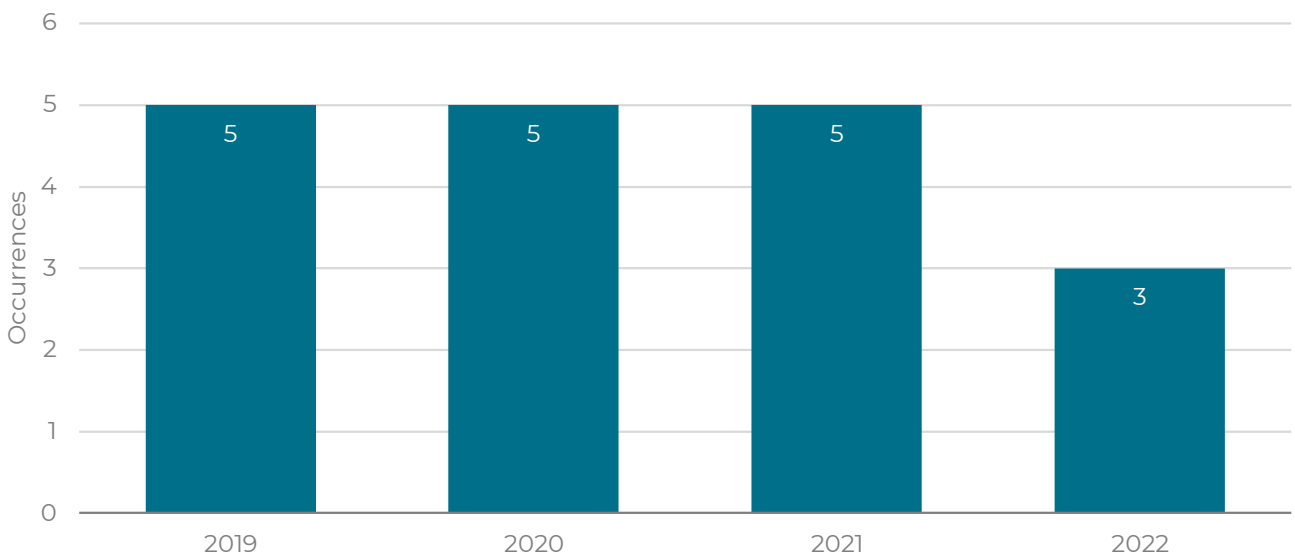


Figure 2.2: Wildlife occurrences at EBKT





## 3. Punctuality

*In the second section, the punctuality at Kortrijk-Wevelgem International Airport is studied. The arrival delay, delay due to regulations placed by Kortrijk-Wevelgem International Airport on the arrivals, is analysed and the ATFM delay from the airport's point of view is given, i.e. the impact on traffic to or from Kortrijk-Wevelgem International Airport caused by regulations in the Belgian en-route airspace and by other Air Navigation Service Providers (ANSPs).*

## Punctuality

ATFM delay can be caused by many different reasons. According to the FABEC<sup>8</sup> Performance Plan the causes with ANSP contribution are (in the order listed in the Performance Plan):

- C – Air Traffic Control (ATC) Capacity
- R – ATC Routing
- S – ATC Staffing
- T - Equipment (Air Traffic Control)
- M - Airspace Management
- P - Special Event

As part of the Flight Information Service at Kortrijk-Wevelgem International Airport, skeyes cannot place restrictions on traffic at the airport. However, IFR flights can be affected by ATFM delay along their routes. This section gives an overview of the influence of ATFM measures on departing and arriving traffic at Kortrijk-Wevelgem International Airport.

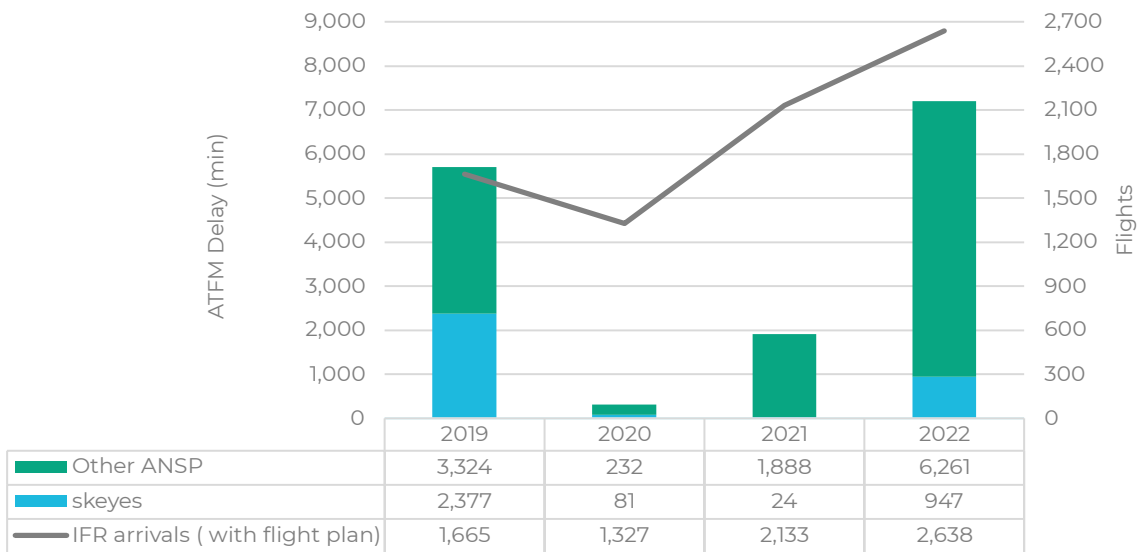


Figure 3.1 : EBKT arrivals ATFM delays

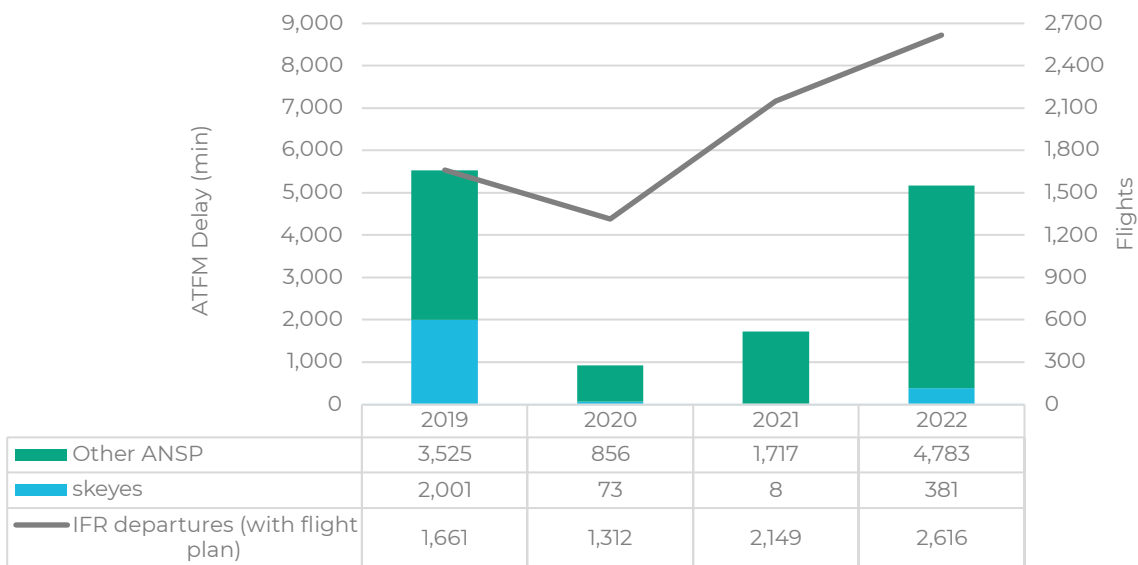


Figure 3.2 : EBKT departures ATFM delays

<sup>8</sup> FABEC stands for 'Functional Airspace Block Europe Central', comprising the airspace of the six FABEC States of Belgium, France, Germany, Luxembourg, the Netherlands and Switzerland

In 2022, a total of 12,372 minutes of delay (5,164 minutes for departures, 7,208 for arrivals) was observed. To compare these numbers with the ATFM delay of several years, we also need to consider how much traffic there was in each year. The year 2022 displays a noticeable raise of ATFM delays in comparison with last year (+277% for arrivals, +199% for departures), which is directly linked to the comeback of flights after the Covid-19 crisis.

A further breakdown of the delay statistics into arrivals and departures as well as the origin of the delay-affecting regulations is given in Figure 3.1 and Figure 3.2. Note that the share of delay attributable to skeyes increased in 2022, both for arrivals (947 of 7,208 minutes) and departures (381 of 5,164 minutes). This share was decreasing since 2019 because of low levels of movements. Nevertheless, even if the amount of movements is almost back to its 2019 level, ATFM delays due to skeyes ratio are lower in 2022:

- Arrivals' delays due to skeyes : 42% in 2019 vs 13% in 2022
- Departures' delays due to skeyes : 36% in 2019 vs. 7% in 2022

To give a view of the severity of the impact for the delayed flights, the delay per flight is categorized into the following four categories:

- Little Delay: between 1 and 15 minutes
- Medium Delay: between 15 and 30 minutes
- Heavy Delay: between 30 and 60 minutes
- Severe Delay: more than 60 minutes

Based on Figure 3.3 and Figure 3.4, we conclude that the majority of flight encountered a delay between one and fifteen minutes. The majority of flight delayed due to skeyes faced the same amount of delay. Forty flights were delayed for more than one hour and mostly due to other ANSPs.

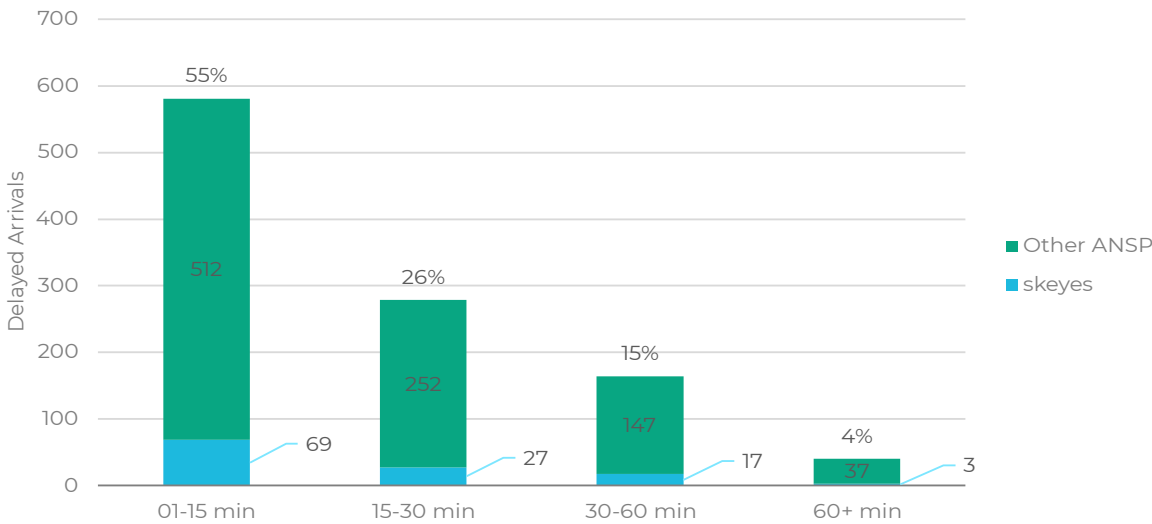


Figure 3.3: Distribution of delayed arrivals per delay interval

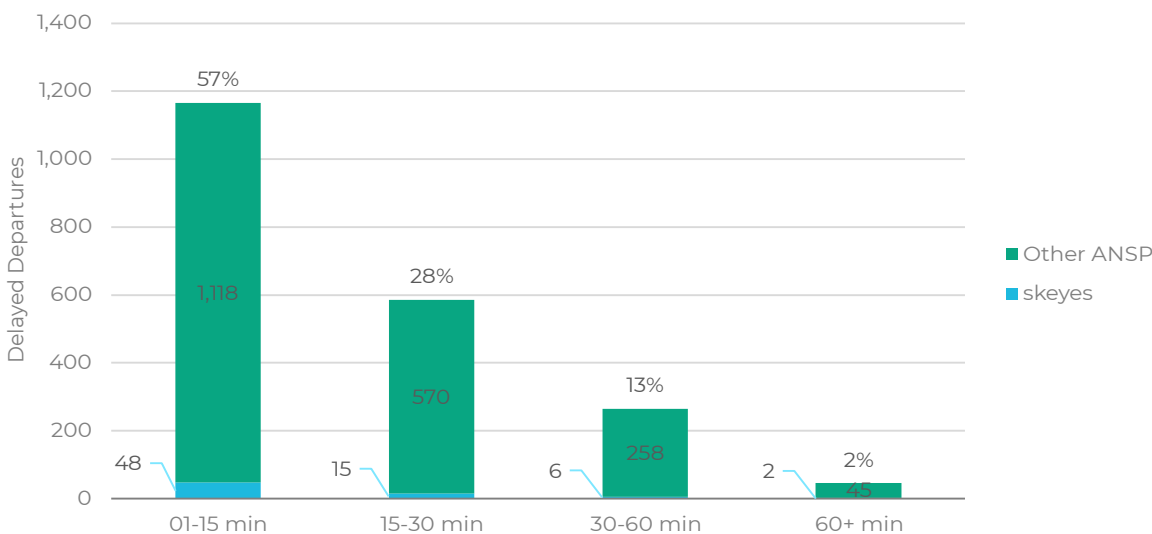
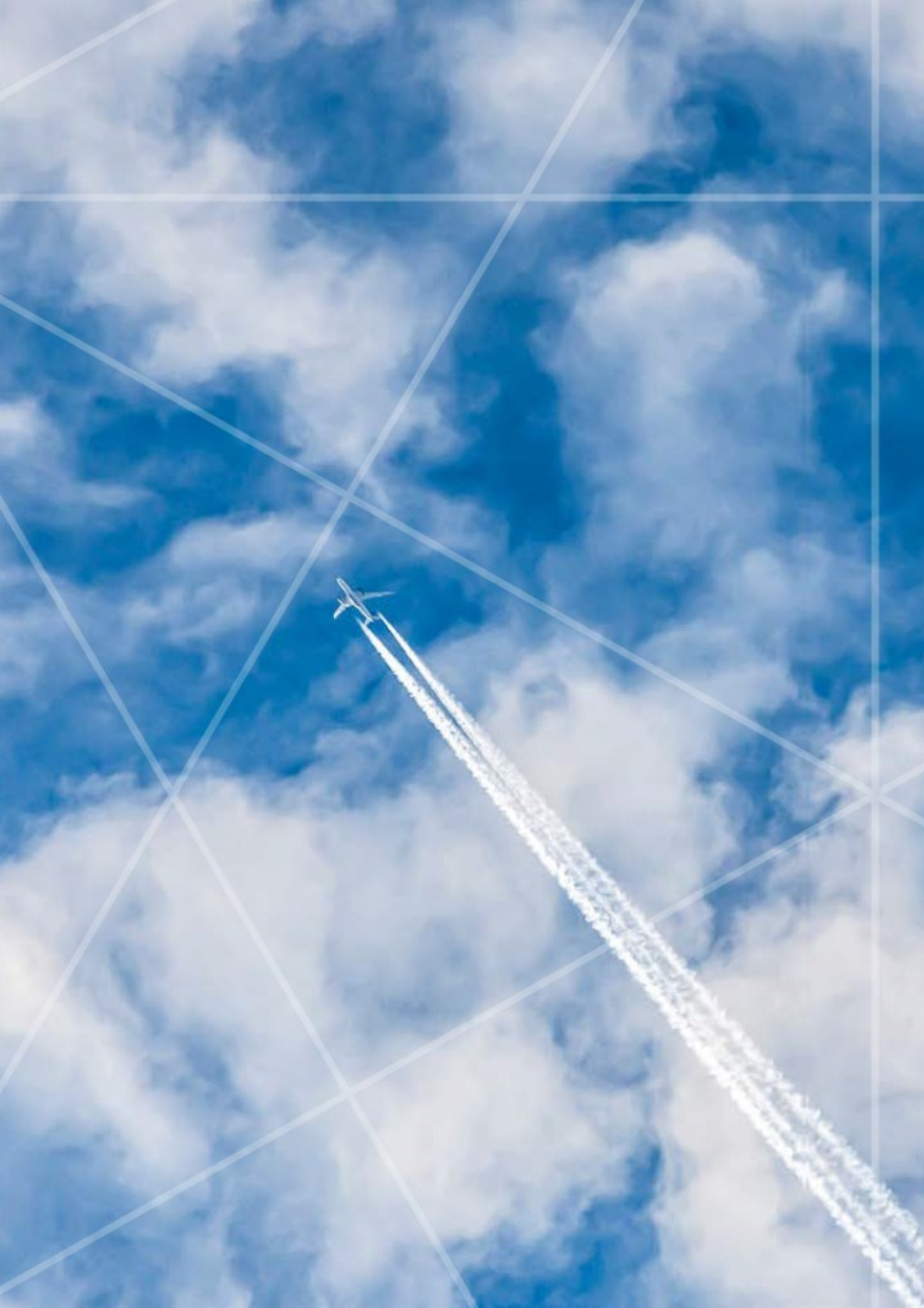


Figure 3.4: Distribution of delayed departures per delay interval



# ANNEX

7000  
A009





6353  
A009

OVAP32  
A007/060  
M150

TAP509  
F198/240  
M330B

6353  
A009

## ANNEX: Fact sheet 2022

<p>Traffic</p> 	<p><b>Yearly evolution</b></p> <ul style="list-style-type: none"> <li>2022 movements figures similar to 2019's level (-3%) and +8% vs 2021</li> <li>IFR market shares continue their progression following infrastructure improvements and private/charter flights demand increase, started the wakes of COVID-19</li> </ul> <table border="1" data-bbox="411 421 1385 528"> <thead> <tr> <th>Movements</th> <th>2019</th> <th>2020</th> <th>2021</th> <th>2022</th> <th>2022 vs 2021</th> <th>2022 vs 2019</th> </tr> </thead> <tbody> <tr> <td><b>Total</b></td> <td>30,670</td> <td>21,888</td> <td>27,566</td> <td>29,648</td> <td>+8%</td> <td>-3%</td> </tr> <tr> <td><b>IFR</b></td> <td>3,242</td> <td>2,650</td> <td>4,280</td> <td>5,368</td> <td>+25%</td> <td>+66%</td> </tr> <tr> <td><b>VFR</b></td> <td>27,428</td> <td>19,238</td> <td>23,286</td> <td>24,280</td> <td>+4%</td> <td>-11%</td> </tr> </tbody> </table> <p><b>Quarterly comparison</b></p> <ul style="list-style-type: none"> <li>Increase (+53%) during Q1 in comparison with 2021, motivated mostly by private/charter flights demand raising and lack of COVID-19 restriction for VFR.</li> </ul> <table border="1" data-bbox="411 667 1385 792"> <thead> <tr> <th>Movements</th> <th>2019</th> <th>2020</th> <th>2021</th> <th>2022</th> <th>2022 vs 2021</th> <th>2022 vs 2019</th> </tr> </thead> <tbody> <tr> <td><b>Q1</b></td> <td>6,969</td> <td>2,853</td> <td>4,848</td> <td>7,417</td> <td>+53%</td> <td>+6%</td> </tr> <tr> <td><b>Q2</b></td> <td>9,415</td> <td>5,480</td> <td>7,793</td> <td>8,105</td> <td>+4%</td> <td>-14%</td> </tr> <tr> <td><b>Q3</b></td> <td>8,900</td> <td>9,035</td> <td>8,569</td> <td>8,313</td> <td>-3%</td> <td>-7%</td> </tr> <tr> <td><b>Q4</b></td> <td>5,386</td> <td>4,520</td> <td>6,356</td> <td>5,813</td> <td>-9%</td> <td>+8%</td> </tr> </tbody> </table>	Movements	2019	2020	2021	2022	2022 vs 2021	2022 vs 2019	<b>Total</b>	30,670	21,888	27,566	29,648	+8%	-3%	<b>IFR</b>	3,242	2,650	4,280	5,368	+25%	+66%	<b>VFR</b>	27,428	19,238	23,286	24,280	+4%	-11%	Movements	2019	2020	2021	2022	2022 vs 2021	2022 vs 2019	<b>Q1</b>	6,969	2,853	4,848	7,417	+53%	+6%	<b>Q2</b>	9,415	5,480	7,793	8,105	+4%	-14%	<b>Q3</b>	8,900	9,035	8,569	8,313	-3%	-7%	<b>Q4</b>	5,386	4,520	6,356	5,813	-9%	+8%
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<p>Safety</p> 	<p><b>Safety Occurrences</b></p> <ul style="list-style-type: none"> <li>4 runway events</li> <li>0 runway incursions</li> <li>1 accident (Hard landing)</li> </ul>																																																															
<p>Capacity &amp; Punctuality</p> 	<p><b>Capacity</b></p> <ul style="list-style-type: none"> <li>The yearly average number of movements per day in 2022 is 81.2</li> <li>Busiest months: March (3,406 movements) and October (3,092 movements)</li> <li>Busiest day: 12<sup>th</sup> of October (237 movements)</li> <li>Not a single day without movements</li> </ul> <p><b>Punctuality</b></p> <ul style="list-style-type: none"> <li>Total minutes of ATFM delay: 12,372 minutes (1,328 minutes due to skeyes' regulations) <ul style="list-style-type: none"> <li>→ Arrivals: 7,208 minutes (thereof 947 minutes due to skeyes' regulations)</li> <li>→ Departures: 5,164 minutes (thereof 381 minutes due to skeyes' regulations)</li> </ul> </li> <li>Average delay per flight: 141 seconds (11% due to skeyes' regulations) <ul style="list-style-type: none"> <li>→ Arrivals: 164 seconds/flight (thereof 13% due to skeyes' regulations)</li> <li>→ Departures: 118 seconds/flight (thereof 7% due to skeyes' regulations)</li> </ul> </li> </ul>																																																															
<p>Environment</p> 	<p><b>Runway use</b></p> <ul style="list-style-type: none"> <li>RWY 24 : 53%</li> <li>RWY 06 : 47%</li> </ul> <p><b>Operational Times</b></p> <ul style="list-style-type: none"> <li>120 days with extensions in total</li> <li>Most days with extensions in September (16) and July (14)</li> </ul>																																																															

