

VIRAL Case studies Denmark

Case 1: Pilot strike in the legacy airline SAS 2022

Case 2: Air Traffic Controllers – a scarce resource after (recurrent) crises

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Case 1: Pilot strike in the legacy airline SAS summer 2022

Introduction

The legacy airlines – or flag carriers – have been under pressure the last two decades as low-cost carriers have gained a significant share of the market. COVID-19 hit all companies along the aviation value chain, but the question is whether it has changed the power balance between employers and employees or even industrial relations in aviation. The case of the pilot strike in the legacy airline SAS can shed some light over how Industrial Relations developed during and after the COVID-19 lock-downs, as the strike took place in the summer of 2022, just when the aviation industry was ramping up after lockdowns. The case is particularly interesting when compared with a similar strike in spring 2019 before the COVID-19 lock-downs.

Scandinavian Airline System - partly state-owned legacy airline

Scandinavian Airline System – SAS – is a legacy airline or flag carrier. From the company's establishment in 1946 to the end of the 20th century, the company was owned by three Nordic states, Norway, Sweden, and Denmark. In the 1970's and 1980's the company developed to company primarily for businesspeople, culminating in the establishment in 1997 of the Star Alliance partnership with Lufthansa, Thai International, United Airlines, Air Canada, and Varig Brazilian Airlines. In 2001, SAS became a joint stock company; however, the Nordic states were still important shareholders. 21.4 per cent was owned by the Swedish state, 14.3 per cent by the Danish state, and 14.3 per cent by the Norwegian state. The remaining 50 per cent were in private hands. In 2018 Norway sold all its shares and as of 2023, only the Danish and Swedish states are shareholders in SAS. As such, an incremental privatization of SAS has taken place during the two decades leading up to the C-19 pandemic.

Over the years, SAS has benefited from being owned by the Nordic states and generally, the wages and working conditions were considered very favorable. However, that changed in the beginning of the 21st century. A combination of factors – privatization and fierce competition from low-cost carriers – put SAS under pressure, and the company went through several restructuring rounds during the first two decades of 21st century. Industrial conflict has not been uncommon within SAS.

Industrial relations in SAS

SAS has always had company agreements, which is quite widespread in aviation – as opposed to sector agreements that are prevalent in Danish

Industrial Relations. Several actors – both on union and employer side – points out that this is the best solution as companies are very different within aviation. SAS in Denmark is member of the Confederation of Danish Industry (Dansk Industri, DI). Pilots are represented by Dansk Pilot Forening (Danish Airline Pilot Association – DPF) while the cabin crew in SAS is represented by the union Cabin Attendants Union (CAU). While DPF and CAU were independent unions until 2022, the unions decided to join the confederation Dansk Metal (Danish Metal Workers' Union), and together with the flight mechanics a subgroup Metal Luftfart (Metal Aviation) was established under Dansk Metal. The new constellation could give DPF and CAU more bargaining power vis-à-vis SAS management. Furthermore, if in conflict, a sympathy strike could be announced, meaning that while one group within the confederation might be striking, another group can deny delivering services and goods to the employer who is the target of the strike.

As international competition became still fiercer from the mid-1990's onwards, constant restructurings (cuts in wages and personnel) in SAS have generated turmoil over the last two decades, leading to recurring conflicts between SAS' management and pilots as well as cabin crew. While SAS had some 35,000 employees in the beginning of 1990's (including hotels and connected services), some 10,000 were employed in SAS in 2019 – a mix of a general reduction of staff and the fact that hotels were sold. A quarter of the SAS fleet was wet leased. Over the years, negotiations had led to concessions from unions, and the recurrent conflicts had eroded trust and loyalty in the company – a feature that in the old days was crucial for the service level and the satisfaction of employees.

While several conflicts have taken place over the years, here we will focus on the pilot strikes in 2019 and 2022, respectively. The 2019 strike took place before the lockdown when SAS was performing quite well, while in July 2022 the strike took place at the same time as aviation in general was ramping up production after the lock-down. As such, it is fruitful to compare the two conflicts.

The pilot strike in April 2019

As mentioned, SAS have had company-specific unions for decades. While the unions initially were able to secure very favorable conditions for its members, still more fierce international competition has forced SAS to restructure and unions to engage in successive bargaining rounds where strikes have been a recurrent issue.

In 2017, SAS and the pilot union Danish Airline Pilots' Union (DPF) signed a collective agreement with a duration of three years. As part of the agreement, both parties could opt out of the agreement after two years.

In 2019, the DPF used the opt-out possibility and terminated the collective agreement with SAS after only two years – in accordance with the 2017

agreement. The pilots demanded a 13 per cent pay raise over three years, arguing that SAS came out with good results in the previous years, and referred to the fact that pilots had taken severe pay cuts over the years when SAS was suffering; now, SAS had positive results for four consecutive years. SAS responded by terminating all cooperation agreements. Following the Danish model, any strike is legal when a collective agreement is terminated, and hence the pilots sent a strike warning. In the media, SAS argued that such wage demands were irresponsible in times of fierce international competition.¹

Apparently, no negotiations took place after the strike warning in the beginning of April, and the strike started 26. April 2019. The tone between SAS and the pilots was harsh, each party accusing the other of being irresponsible.² The strike lasted one week till 3. May, where an arbitrator settled the dispute. The settlement awarded the pilots 3.5 per cent wage increase in 2019, 3 per cent in 2020 and 4 per cent in 2021 – all in all 10.85 percent. The agreement was to last three years – with an opt-out option after two years.

The strike resulted in 4,000 cancelled flights, affecting 370,000 passengers – giving SAS an estimated loss of 450 million DKK (60 million euro).³ This made SAS CEO Rickard Gustafson predict that it would be very difficult to reach a positive result in 2019. Nevertheless, SAS came out of 2019 with a surplus of 440 million DKK (60 million euro) as opposed to 1 billion (133 million euro) in 2018.

SAS during the C-19 lock-down

The collective agreement in 2019 was reached by a company in fierce competition, but with a positive bottom line. However, that changed very fast as C-19 hit in March 2020. Initially SAS presented successive plans for employees, all directed towards keeping the employees close to the company so that a reopening could be relatively swift. As such, SAS initially took advantage of different kinds of relief packages, but as the crises prolonged SAS dismissed a considerable amount of their employees.

Soon after the lockdown – 15. March 2020 – SAS sends home 90 per cent of the workforce – 10,000 employees, the majority on state sponsored wage compensation schemes. In Denmark 4,000 out of 4,200 were send home on wage compensation schemes. The purpose was to secure the employees' connection to SAS, so SAS could ramp up the production as soon as lockdown was over.⁴

¹ <https://nyheder.tv2.dk/samfund/2019-04-27-sas-strejke-fortsætter-parterne-er-langt-fra-hinanden>

² <https://www.dr.dk/ligetil/indland/sas-aflyser-ogsaa-fly-soendag-paa-grund-af-pilot-strejke>

³ <https://www.berlingske.dk/virksomheder/strejke-rammer-sas-haardt-koster-selskabet-450-millioner-kroner>

⁴ <https://check-in.dk/sas-sender-10-000-ansatte-hjem/>

However, in late April 2020, SAS announced the redundancy of 5,000 employees – 1,700 in Denmark, 1,900 in Sweden and 1,300 in Norway. Including around 650 pilots.⁵ The result, implemented in late June, was that 1,593 persons was made redundant – about half was cabin crew. That meant that SAS could no longer utilize the wage compensation schemes as the precondition was that all workers stayed employed and there are no dismissals.⁶ Almost 10 per cent of the pilots accepted a voluntary dismissal.

Before the pandemic, SAS had just started up two airlines, SAS Link and SAS Connect, to compete with the business model in low-cost carriers. Pilots and cabin crew in the Scandinavian SAS unions criticized the set-up as it was regarded as a pathway towards poorer salaries and working conditions that circumvented the existing collective agreements with the main company SAS Scandinavia. However, a collective agreement was closed between these companies and a competing trade union – FPU (Flight Personnel Union) – in 2020 (Link) and 2021 (Connect) respectively.

In March 2021, SAS management is taking advantage of the opt-out option to terminate the three-year agreement with the SAS pilots from 2019. SAS and SAS Pilot Group (the Scandinavian umbrella union of Nordic SAS pilots) agrees on a new agreement that replaces the three-year collective agreement from 2019, where pilots got a pay raise of 10,86 % over the three years. The parties renegotiated and the pilots agreed to denounce the third year's raise of 4 %, agreed upon in 2019. The new collective agreement only ran for one year and had to be renewed 1. April 2022.

The pilot strike in the Summer 2022

As the collective agreement with the pilots, expired 1. April 2022, the pilots and SAS negotiated during the winter 2021-22. However, on the 26. of March the negotiations broke down. However, the pilots continued to fly in May and April on old agreement.

9. June almost 1,000 SAS pilots sent a strike warning, and the strike was meant to start 24. June if a collective bargaining agreement was not reached. The strike was later postponed to a 29. June, in order to coordinate the strike with the pilots in Sweden and Norway. On the 21. of June SAS' airplane mechanics announced a sympathy strike from 5. July.⁷ Because the mechanics as well as the pilots are members of Metal Aviation under Danish Metal Workers' Union, such a sympathy strike is legal and basically consists of holding back services of SAS airplanes.

On 29. June, the SAS pilot strike was supposed to commence but were postponed for another 72 hours as negotiations were still ongoing.⁸ Negotiations

⁵ <https://nyheder.tv2.dk/business/2020-04-28-sas-fyrer-op-til-5000-medarbejdere>

⁶ <https://check-in.dk/sas-goer-klar-til-afskedigelse/>

⁷ <https://www.dr.dk/nyheder/indland/flymekanikere-varsler-sympatistrejke-mod-sas-det-kan-blive-et-kaempe-tilbageslag-sas>

⁸ <https://check-in.dk/pilotstrejke-udsat-i-op-til-72-timer/>

were taking place in Stockholm for all Nordic pilot groups under the leadership of the Norwegian arbitrator Mats Ruland. A coordination of the different IR-systems in Norway, Sweden and Denmark was necessary. From Denmark, the chair of Danish Pilot Association and an experienced negotiator from Metal Workers' Union were sitting at the negotiation table.

For the next three days, negotiations went on. The strike was postponed once again by the arbitrator, now with a deadline 4. July at noon.

However, the negotiations between SAS and the SAS pilots' broke down without results and the pilot strike was a reality. 50 per cent of SAS departures were cancelled, and only departures catered by leasing companies and SAS Connect and SAS Link departed according to schedule. Pilots expressed surprise as they thought an agreement was reached when SAS at the 11th hour put forward new demands.⁹ 5. July SAS mechanics commenced the sympathy strike. The same day SAS announced that they have filed for a Chapter 11 process in USA.¹⁰

Over the next 2 weeks – during the busy Scandinavian holiday season – the strike was on.

Negotiations took place off and on during the strike, and at the same time, an information war was going on in the media where both parties commented on the other party's role in the conflict, blaming each other for the lack of progress. For example, the announcement of the Chapter 11 process was perceived a way to put the pilots under pressure in the negotiations while SAS claimed that the timing was coincidental.¹¹

Finally, after 2 weeks of conflict, an agreement was reached on the morning of 19. July. ¹²3,700 flights were cancelled, and 370,000 passengers affected by the strike, while SAS estimated to have lost more than one billion Danish

What is a U.S. Chapter 11 Process?

The chapter 11 restructuring process in the U.S. is different than a bankruptcy or administration proceeding in other parts of the world. The process provides the company time and flexibility to reorganize its capital structure, reduce costs, and complete a financial restructuring under the supervision of the U.S. court system. The board of directors and management continue to run the company and the restructuring process is overseen by a U.S. federal court.

⁹ <https://avisendanmark.dk/erhverv/forhandlinger-brudt-sammen-sas-piloter-strejker>

¹⁰ <https://www.sasgroup.net/files/documents/chapter-eleven/SAS-About-the-Chapter-11-Process-Infographic-ENG.pdf>

¹¹ <https://www.kristeligt-dagblad.dk/piloter-konkursbeskyttelse-betyder-ikke-nye-indroemmelser>

¹² <https://www.altinget.dk/artikel/her-er-hvad-vi-ved-om-den-nye-sas-overenskomst>
<https://www.tv2lorry.dk/tv-2/det-ved-vi-om-sas-aftale-med-piloterne-stor-loennedgang-og-flere-arbejdstimer>

kroner – or some 135 million euros. The rest of 2022, SAS had red numbers on the bottom line, losing half its liquidity in just three months of 2022.¹³

The result of the negotiations between SAS and the pilots - what was all the fuzz about?

The main initial demands:

- In November 2021, SAS suggested a collective agreement for 10 years – i.e., no right for pilots to strike for 10 years.
- For SAS, a solid reduction of pilot costs was mandatory.
- For pilots, a re-hiring of pilots fired during corona was mandatory, with seniority from former employment.
- Shortly before the break-down of the negotiation 4. July, the pilots offered a 6-year agreement; this was denied by SAS.

The final main results:

- Long agreement: The agreement last 5½ years
- Wage reduction: Pilots are going down in wage.
- More flexibility: Pilots can work up to 60 hours per week.
- Combined the wage reduction and the enhanced flexibility is estimated to a reduction of approximately 25 % on pilot costs.
- New partner in the collective agreement: SAS Connect and SAS Link is committed to release itself as soon as possible from their collective agreements with FPU for the pilots hired in the company.
- Pilots employed on the FPU-agreement can at any time chose to transfer from the FPU to the DPF agreement. Any agreement with the Connect is expiring in 2025, and any agreements with Link is expiring in 2027.
- Rehiring of pilots: Pilots fired during the Covid-19 crisis must be re-hired before any other hiring of new pilots – and under the same seniority, irrespective if the company is SAS Scandinavia or Link or Connect. Seniority is transferred to any SAS company with the same seniority before any other pilots are hired.
- Pilots' seniority: Pilots working in SAS Link and SAS Connect (presently under a collective agreement with FPU) maintain their positions and seniority when they transfer to the collective agreement btw. SAS and DPF.
- Competition: SAS is guaranteed that Metal Workers' Union/DPF do not close agreements with competing airlines that underbids the agreement between SAS and the pilots.

(<https://borsen.dk/nyheder/virksomheder/aftale-mellem-ryanair-og-dansk-metal-kan-annullere-sas-pilotaftale>)

¹³ <https://check-in.dk/massivt-likviditetsdraen-i-sas/>

Discussion and conclusion

Up to the negotiations of a collective agreement in the Spring of 2019, the pilots were in a strong bargaining position. Firstly, SAS has had positive results for several years leading up to 2019. Secondly, pilots had accepted recurrent concessions during the years when SAS was struggling economically and as such they had 'something in the bank'. While the parties had to go through a one-week strike, the result was an impressive wage increase of 10.86 per cent over the three-year duration of the collective agreement.

Fast forward to Spring 2022. The situation in aviation was at the time very unclear. While societies in general were opening all over the world, no one had any idea to what extent and at what speed aviation would pick up business. The pilots and SAS had negotiated during most of the winter under the heavy clouds of a lock-down, but as of 1. April 2022, no agreement was reached.

It is highly questionable who – if anybody – had the upper hand in the negotiations in the aftermath of the COVID-19 lock-downs. If business was picking up slowly, management might have had the upper hand. However, that demanded a swift return of the employees, and as it turned out, many had found new jobs in other branches.

It should not be underestimated that the pilot union DPF had joined a very strong union confederation, Metal Workers' Union. With the Metal Workers' Union, the pilots went into negotiations with the SAS management backed up by lots of bargaining experience. Furthermore, they could expect sympathy actions from other members of the confederation if industrial conflict was the outcome.

Summing up the result in Industrial Relations terms:

- The pilots strengthened their position by joining Danish Metal Workers' Union. Hereby they
 - a) got bargaining experience and
 - b) the possibility of expanding the conflict to other groups servicing SAS.

As it turned out, both elements played a role in the negotiation in 2022. Danish Metal Workers' Unions' bargaining experience was used in the negotiations, and when negotiations eventually ended in a conflict, the pilots did get support from the plane mechanics who launched a sympathy strike. Everything went according to the rules in the Danish labour market model as strikes as well as sympathy strikes are legal when – and only when – a new collective agreement is negotiated.

- While most collective agreements on the Danish labour market have a duration of 2 or 3 years, SAS got an agreement for an unprecedented 5½ years. As it is illegal to engage in collective action while a collective agreement is running, SAS basically is guaranteed industrial peace for 5½ years.

While most of the Danish labour market is regulated via sector agreements, airlines typically are negotiating company agreements. While company agreement can be tailor made to accommodate needs of the specific company, the diversity of the agreements could have the effect that employees across one branch have very different working conditions and wages, despite effectively having the same function. One way to obtain more equal conditions is sector agreements. In Denmark, sector agreement secures a relatively high floor, while there is still room for local negotiations. In companies in financial strain, the add-ons in company negotiations might be close to nothing, while in companies with a positive bottom line, there is room for higher wages.

A route towards securing an even playing field between airlines, at least nationally, is to secure that airline companies engaging in negotiations with the same trade union can expect similar conditions in agreements – what is in effect what sector agreement secures, however as mentioned company agreements dominate in airlines. Upon writing this case (January 2023), a Ryanair subsidiary, Malta Air, made their first collective agreement in Denmark with DPF under Metal Workers' Union. As this is the same union with whom SAS closed their agreement in the summer 2022, SAS announced that they would examine the Malta Air agreement carefully to assure that the conditions are similar to the conditions offered in the SAS-agreement in 2022 – to assure a level playing field.¹⁴ However, SAS has not made any objections so far.

While COVID-19 undoubtedly sent aviation in free fall, it is not possible to conclude that any party – employers nor unions – were gaining bargaining power during the lock-down or after COVID-19. Employers across aviation, in this case SAS, were already before COVID-19 under pressure to change their with the recurrent concession bargaining and the establishment of SAS Link and SAS Connect. It is not good for any company to have planes for hundreds of millions of euros grounded and management are expected to go to great lengths to get planes in the air. However, employees and their unions also have a vested interest in keeping their employer on the wings as many workplaces along the aviation value chain are dependent on active planes. That is why a bargaining result with a concession from the pilots of some 25 percent post-COVID-19 can be seen as a victory – because the SAS planes are still flying, and jobs are secured.

¹⁴ <https://mobilitywatch.dk/nyheder/persontransport/article14922997.ece>;
<https://check-in.dk/vil-ikke-acceptere-konkurrence-fra-overenskomster/>

Perhaps the ultimate winner is the Danish bargaining model – and the unions and the employers’ organisations within the model. The model has shown its ability to accommodate profound changes along the aviation value chain. However, low-cost carriers are employing business models that are putting IR-models across Europe under constant pressure to find ways to close collective agreements with appropriate wages and working condition while at the same time securing that companies are competitive. As such, any IR model must be a constant rolling stone, ready to accommodate highly internationalized competition.

Case-study evaluation: SAS pilot strike summer 2022

Please, evaluate your case study by using the following indicators and give a brief explanation of your evaluation.

Criteria	Evaluation on a scale of 1-5 (1=minimum, 5=max)	1	2	3	4	5
		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovation	<p>Explanation: to what degree does the topic/subject analysed in the case study deviate from existing practices and legal frameworks? Why the case study is innovative?</p> <p>The case is illustrating the core of the Danish labour market model in terms of a strike that is perfectly legal (taking place during negotiations). As such, it is very much part of the existing practices.</p> <p>The deviation – if we must use that concept – is that the conflict took place after long negotiations and a conflict point was rehiring of pilots that was made redundant during C-19 lockdown.</p> <p>Furthermore, the case shows that company agreements – prevalent in aviation – while securing the enterprise flexibility, also opens the possibility of very diverse wages and working conditions across aviation.</p> <p>SAS made the Metal Workers’ Union guarantee, that they would not close agreements with competing airlines that undermine the agreement SAS made with the pilots’ summer 2022. The case illustrates exactly the problem, but also at least one example of a way to solve it – maybe en route to sector or branch agreements?</p>			X		

Criteria	Evaluation on a scale of 1-5 (1=minimum, 5=max)	1	2	3	4	5
		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transferability	<p>Explanation: to what degree can the results/lessons learnt in the case-study be transferred along the air transport value chain? other sectors? other countries?</p> <p>Probably not that transferable, except it is illustrating that even within one of the strongest and most cooperative IR-systems in the world, the business case of internationally competitive low cost carriers, combined with financial strain</p>		X			

	due to C-19 lockdown is putting pressure on normally good cooperation spirits in a legacy airline.
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Criteria	Evaluation on a scale of 1-5 (1=minimum, 5=max)	1	2	3	4	5
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inclusiveness	<p>Explanation: to what degree does the topic/subject analysed in the case-study see the involvement of partners and public actors?</p> <p>Unions as well as three states are stakeholders in this case – as is the dominating legacy airline in the Nordic countries SAS.</p>					

Criteria	Evaluation on a scale of 1-5 (1=minimum, 5=max)	1	2	3	4	5
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Covid-19 causality	<p>Explanation: to what degree is the topic/subject analysed in the case-study directly related to the Covid-19 outbreak?</p> <p>While strikes among pilots occurred also before C-19, the strike in 2019 led to a pay raise of almost 11 per cent – while the strike in 2022 led to a huge decline in wage, but also secured rehiring of the pilots made redundant during the lockdown.</p>					

Case 2: Air traffic controllers – a scarce resource after (recurrent) crises

Introduction

Over the past two decades, aviation has been through some profound crises affecting all links along the value chain. 9/11 affected air travel, as did the global financial crisis in 2008-09. The volcanic ash cloud in 2010 also affected the aviation value chain as did SARS, and most recently COVID-19 effectively halted about 90 per cent of aviation within weeks. As such, crises could be considered a ‘normal’ in aviation in so far as recurrent economic and health are to be expected, albeit in different forms and shapes. Obviously, these recurrent crises have profound impacts on working conditions and Industrial Relations along the value chain – including the balance between the social partners.

Aviation does not seem well prepared for ramping up after a crisis. This became obvious when aviation took off again in the Summer 2022. It soon became clear that the relaunch after C-19 was hampered by a lack of personnel and a recruitment along the whole value chain.

The problem of losing employees and facing obstacles when ramping up is even more pronounced if highly skilled employees have left the premises for good. For example, training a traffic controller lasts 3-4 years; likewise, it lasts several years before a pilot is full-fledged and ready to fly. Even employees generally described as unskilled often have a lot of tacit knowledge after years in the job. Hence, getting for example security and luggage handling up and running with many new employees is not an easy task as much of the training is based on on-the-job-training and hence demands more routinized colleagues next to the trainee.

This case study focuses on one of the smallest professions in aviation, but nevertheless a vital part of aviation, namely air traffic controllers. Without traffic controllers, flying is not possible, and when air traffic controllers are a scarce resource, planes must wait in queues on the ground or in the air and planes are delayed. As such, a lack of air traffic controllers can potentially constitute a bottle neck, affecting all airlines. While air traffic controllers might seem as a ‘special case’ – a small group with a relatively long education – it could be considered an extreme case, underlining problems that can be found to varying degrees in other links along the value chain when aviation must ramp up the production.

Air Traffic Controllers – education and union affiliation

Air Traffic Controllers are crucial for aviation. The education lasts 3 years and, in most countries (including Denmark), it is financed by the government. In Denmark, students are getting a state education grant while attending school. During the practical education, they get a salary. It is quite difficult to pass the

entrance exam. On average, the intake is some 15-20 students a year, sometimes even less a year and about 50 % complete the education. The intake is decided by the board in the air traffic control company Naviair. In 2021 and 2022, 16 people started their education while in 2020 the number was only six. Some years, no one started education (2013, 2015 and 2017). It is obvious that this is a very small and highly specialized trade.¹⁵

Union density among air traffic controllers is 100 %. They are members of the union Trafikforbundet (Traffic Union). Trafikforbundet has some 680 members. Trafikforbundet has seven sub-groups that are representing specific professions and are helping shop stewards to negotiate local agreements. Air traffic controllers are the biggest sub-group in Trafikforbundet (about 300 persons). The traffic controllers' sub-group is called DATCA, Danish Air Traffic Controllers Association.

Reduction of air traffic controllers in Copenhagen Airport 2020

Naviair, a public independent company owned by the Danish state, runs the air traffic controllers in Denmark. Naviair is run as a private company and could present positive results up to the C-19 crises.

According to an international agreement in ICAO – International Civil Aviation Organisation - the state is obligated to navigate air traffic in general. That includes scheduled flights, charter flights, military traffic, private jets, small propellers, hospital planes etc. No matter the amount of traffic, the space has to be regulated, and as such, the air traffic controllers were necessary during the C-19 lock downs. However, in the autumn 2020 management announced a saving plan of 190 DKK (25 million euros) and a reduction of personnel, mostly through severance package, in part because of demands from the EU commission's initiative *Single European Sky*.

In 2004, the EU announced a regulation for a *Single European Sky* (SES) with the aim to reform the European air traffic management system through a series of actions carried out in four different levels (institutional, operational, technological and control and supervision). The aim was to fulfill the needs of the European airspace in terms of capacity, safety, efficiency, and environmental impact.¹⁶ The overall aim was to make an infrastructure that could meet the challenge of large increases in air traffic that was – and is - to be expected by making the air traffic regulation more efficient by making the supervision of air space more effective. Or as formulated on the EU website:

The single European sky (SES) initiative was launched in 1999 to improve the performance of air traffic management (ATM) and air navigation services (ANS) through better integration of European

¹⁵ <https://www.flyveleder.com/FAQ.24.aspx>

¹⁶ https://en.wikipedia.org/wiki/Single_European_Sky

airspace. The stated benefits of the SES could potentially be huge: compared with 2004, the SES (upon completion around 2030-2035) could triple airspace capacity, halve the costs of ATM, improve safety tenfold and reduce the environmental impact of aviation by 10%.¹⁷

As part of the SES initiative, it is necessary to estimate the demand for air traffic controllers for the years to come. As part of the EU-commissions Single European Sky, each state must make a *performance scheme* in order to evaluate the air traffic five years ahead; the last performance scheme was for 2020-24 and the next is for 2025-29. As such, to be certain to have the right amount of air traffic controllers, you have to look 4-7 years ahead and secure timely education of new air traffic controllers.

However, during the Covid-19 lock-down, the enterprises operating the air traffic control were asked to save money as the income was drastically reduced due to an almost total halt of scheduled flights and charter flights. One of the ways to do that was early retirement. [

Commented [WM1]: Early retirement?

DATCA, the air traffic controller officers' union, pointed out that a reduction in manpower would have long term consequences for the service level when aviation picked up again after the lock down:

“This will mean that the system is pressed to the limit, and air traffic controllers will be forced to reduce the number of planes in order to maintain safety. Consequently, planes will be delayed, and we will deliver a less service-oriented air traffic management.” (Dacta, 17. September 2020)¹⁸

Naviair management did not see it the same way. They pointed out that it would take years before aviation picked up – and the bill for over-capacity would end with the airlines:

“We will be facing a significant operational overcapacity for many years to come. In addition, since all costs for air traffic control and related services are paid by the airlines under European rules, the bill for the overcapacity will go to them.”¹⁹

So – what happened after the lock-down?

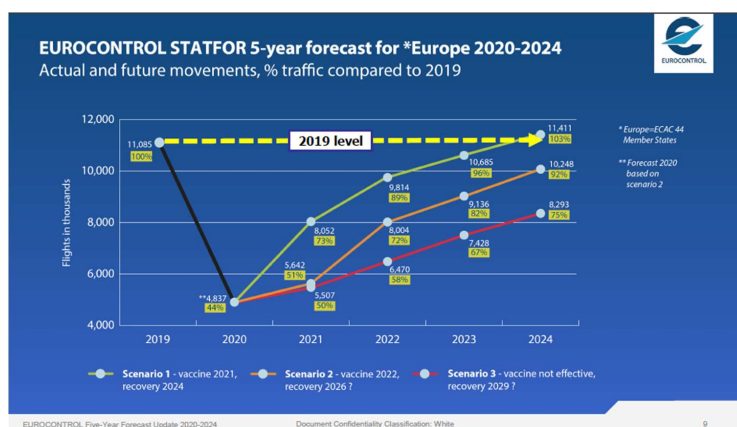
¹⁷ <https://www.europarl.europa.eu/factsheets/en/sheet/133/air-transport-single-european-sky>

¹⁸ <https://check-in.dk/naviair-og-flyveledere-i-strid-om-nedskaeringer/>

¹⁹ <https://check-in.dk/naviair-og-flyveledere-i-strid-om-nedskaeringer/>

The air traffic controller situation after the C-19 lock-down

When Danish aviation were getting back to (almost) normal production in 2022, they lacked all kind of employees along the aviation value chain. Many former employees have found other jobs, often with better working hours. But while some of these employees to some degree were replaceable, air traffic controllers were not, and the air traffic controllers were suddenly a scarce resource. This is even though Eurocontrol²⁰ had made a forecast for air traffic in Europe 2020 to 2024 with three scenarios for how fast air traffic would pick up after corona (see figure below). No matter the effect and timing of the C-19 vaccine, all three scenarios indicated a fast recovery in 2022 and 2023.



Because of the lack of air traffic controllers, the remaining air traffic controllers had to work overtime – as one traffic controller expresses it, ‘the system is glued together with overtime’.

“We take extra turns where we are paid up to 3.5 times what we get for an ordinary turn. But it is not in our interest. (...) You can call it an advantage in the short term, but it really isn’t – we use our holidays, and it is not very pleasant to be an air traffic controller when you lack colleagues.” (Air traffic controller, union leader)

As it turned out, the warning from the air traffic controllers’ union in 2020, to a high degree ignored by management, seemed to come be correct.²¹

The lack of air traffic controllers is combined with a wage lag compared to other countries – which was one of the reasons that air traffic controllers left

²⁰ Eurocontrol is a pan-European, civil-military organisation dedicated to supporting European aviation, See more here: <https://www.eurocontrol.int/>

²¹ <https://mobilitywatch.dk/nyheder/persontransport/article15143944.ece>

jobs in Denmark for jobs abroad when the Danish aviation control company cut down.

“In countries comparable to us, Norway, Switzerland, air traffic controllers get higher wages. If the difference is too big, then you are willing to move with your family. Then the resources spend to educate an air traffic controller, which is 400,000 euros – you don’t want to lose that, so you have to raise the wages to keep them or get them back.”

To solve the problem, Naviair tried to rehire air traffic controllers, that had found other (often better paid) jobs abroad during the lock down – but this is at a high cost, as an air traffic controller points out:

“To have 10 air traffic controllers too many might cost 1.5 million euro per year – but 10 too few might cost you 15 million euro because you have to recruit around the world.”

Another long-term problem is that air traffic controllers to a great degree are trained by other experienced controllers. As the main road to reduce the work force in 2020 was to let the older air traffic controllers go, there is now a lack of trainers as well, as pointed out by one air traffic controller.

“We have full employment, and we train our own colleagues. We must have that capacity, but if you take that away, you are eating you own tail.”

While the reason for the deficit of air traffic controllers in 2022 and 2023 is the reduction of personnel in 2020, it should not be overlooked that it has become a recurrent phenomenon. Back in 1995 (connected to the wars in Yugoslavia where air traffic in Europe was reduced) and again in 2007 (connected to 9/11) the situation was similar. Management stopped educating new air traffic controllers and, in some cases, dismissed air traffic controllers due to a temporary decline in air traffic and a certain degree of over-capacity, only to experience under-capacity shortly after. When this happens, air traffic controllers are in a very strong bargaining position and can obtain a considerable wage raise in negotiations.

Discussion & conclusion: Crisis – a new normal?

While this case seems like a unique case, it is not atypical for crises management in aviation. When times are hard, companies have to react and make redundancies across the value chain. We have seen that during several crisis from 9/11 over the global financial crises to C-19.

However, the longer and higher the education, the more problematic it is to lay off and rehire. As shown in this case, air traffic controllers are a scarce resource, very few are graduating every year, and when they are lost to other workplaces, most often in other countries, it is quite difficult to ramp up 'production'.

While air traffic controllers seem like a special group, the points in this case also go for the other groups in the value chain. While some of these jobs seem simple, it does take time to learn the ropes in an airport – and sidekick training is important to obtain the skills. During the lock down, many routinized workers found other jobs (often with better working hours and wages), and hence sidekick trainers became a scarce resource. As experienced during the summer of 2022, ramping up aviation was no easy task as labour was a scarce resource, and even rather simple jobs turned out to be not that easy to replace as new employees had to go through training – a training complicated by lack of trained and experienced workers as sidekick training is essential. A case in point was security: In airports all over Europe, security constituted a bottleneck in the airport logistics, and it took more time than expected to train and clear personnel. Also, in other areas like luggage handling, ground marshals and cleaning, labour shortage and the need for sidekick training constitutes a similar problem.

As such, the lack of experienced personnel to train newcomers is not only seen among air traffic controllers – also other branches seem to have 'eaten its own tail'.

This points towards an overall challenge in aviation: How to cope with fluctuations and crisis in aviation. As pointed out, firing and hiring is no simple task, especially when former employees have found other jobs. The longer the education, the more pronounced the problem might seem, as pointed out in this case on air traffic controllers. It seems like aviation is experiencing recurrent crises that, while different in origin, spark pretty much the same kinds of problems – but still, no efficient system to deal with these fluctuations in labour demands seems to be in place.

The case points out a need to establish a system that secures the right amount of employees in aviation, while adjusting to fluctuations in demands due to crises. The case indicates that a certain over-capacity might be necessary within some areas in aviation – more so, the more specialized a function is needed. In this case, a stoppage in hiring and education of air traffic controllers turns out to constitute a major problem upon ramping up production.

Case-study evaluation: Air traffic controllers in Denmark

Please, evaluate your case study by using the following indicators and give a brief explanation of your evaluation.

Criteria	Evaluation on a scale of 1-5 (1=minimum, 5=max)	1	2	3	4	5
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
Innovation	<p>Explanation: to what degree does the topic/subject analysed in the case study deviate from existing practices and legal frameworks? Why the case study is innovative?</p> <p>The case illustrate that no system is existing that take recurrent crises into account, illustrated by the dismissal and (attempted) rehiring of air traffic controllers.</p>					

Criteria	Evaluation on a scale of 1-5 (1=minimum, 5=max)	1	2	3	4	5
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
Transferability	<p>Explanation: to what degree can the results/lessons learnt in the case-study be transferred along the air transport value chain? other sectors? other countries?</p> <p>While air traffic controllers is a small group and highly educated, similar disability to adjust the work force and ramping up when aviation comes out of a crisis is to be found all along the aviation value chain – as we saw in the summer 2022, when lack of security created long queues in most airports in Europe</p>					

Criteria	Evaluation on a scale of 1-5 (1=minimum, 5=max)	1	2	3	4	5
		<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inclusiveness	<p>Explanation: to what degree does the topic/subject analysed in the case-study see the involvement of partners and public actors?</p> <p>The employers' organisations play a smaller role in this case study. Rather, it shows how higher goal to make aviation more efficient and profitable coincide with a certain rhythm int the education of higher skilled labour across the value chain. Unions makes this point clear to management, and as the summer of 2022 showed, many functions along the aviation value chain was difficult to fulfil due to lack of labour.</p>					

Criteria	Evaluation on a scale of 1-5 (1=minimum, 5=max)	1	2	3	4	5
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Covid-19 causality	<p>Explanation: to what degree is the topic/subject analysed in the case-study directly related to the Covid-19 outbreak?</p> <p>While the case is discussing crises management during and after C-19, it addresses a general problems transgressing C-19 as other crisis (9/11, GFC, SARS) have constituted the same kind of problems: How to adjust the labour force, when fluctuations are huge.</p>					