

Third Runway at Munich Airport

Planning, Protests and Progress

Transportation Systems in Germany

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1. Introduction

Introduction of every new big project is marked with lot of discussions and interferences. The same is with the proposal of new runway at Munich airport. Good plan needs a public approval for being called as a project, but sometimes the public opinion is overlooked to meet other priorities which are considered important by the decision makers with the sole aim of development, betterment of the people and economy as a whole.

Every project has two or more aspects and often are valid and have big effects on the society. Munich Airport Company (FMG) claims that if Bavaria has to maintain its international competitive edge, they need to improve and expand connections to the world's growth markets and key requirement for that is an efficient airport that is equipped to meet tomorrow's challenges (Munich Airport, 2014). But on the other hand, citizens of Bavaria says "no to higher, faster, farther forever – two runways are enough".

The planning of this project started already in 2005 (Airport International, 2005) and it got the green flag in 2014 (Riegler, 2014) and in between it faced many obstacles like people's referendum against third runway in 2012 (Hofmann, 2012). This project has gathered a huge media attention throughout the globe.

"Wherever a new runway or new airport is planned, it is meeting with well-organized and well-informed opposition".

(Stewart, 2012)

This study will focus on the 'Planning, Protests and Progress' of this project and with the aim to answer the research questions of 'what led to the planning of third runway in Munich?', 'why were people against this project?', 'how did various events led finally to the green flag to start this project?' and 'measures the company and authorities will take to respect and protect people's opinion and concerns.'

1.1 Brief History

The tragic accident on 17th December 1960, when an aircraft crashed in a tram and killed 52 persons, led to demands for a new airport that should be located far away from the city in rural areas. Planning was started in 1963, after assessment of several alternatives, the regional planning commission selected the current location at Erdinger Moos on 5th August 1969. Initial plan comprised of four parallel runways, two with 4,000 meter and other two of 2,500 meter length. The number of runways reduced to three in 1974 and in 1981 to two parallel 4,000 meter long runways. The main reason for the downsizing the project was mainly environmental effects, but also the traffic growth was expected to be slower. After more than 7 years of construction with delays and stops from the court decisions the airport was finally opened on 17th May 1992 (Niemeier, 2013).

2. Munich Airport at present

In 1992, Munich Airport was shifted 28.5kms North East of the city. Location of Munich airport is shown in the figure 1 and its connection to road network (Wolters, 2012).

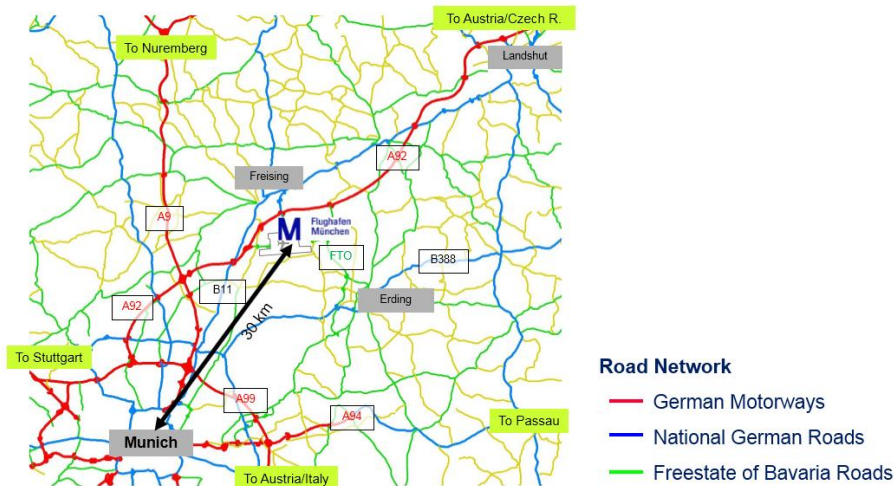


Figure 1: Location of Munich Airport and connection to Road network

Source: (Wolters, 2012)

2.1 Passenger Growth

Munich Airport has been developed into one of Europe's foremost aviation hubs. The strategic position of Munich attracts huge passenger volume and therefore acts as a hub for further transfers. The annual passenger volume has been tripled to 38.4 million passenger in 2012 in comparison with 1992, the year of new location of the airport. 58.2 million Passengers has been forecasted for the year 2025. The freight volume is also expected to increase further. Munich Airport Company says, "The goal is to maintain Munich Airport's position in Europe and to continue to meet the growing demand for air transport within our catchment area, comprising southern Germany and neighboring countries" (Munich Airport (FMG), 2011). For this reason, the decision was made to expand the airport in line with demand and we applied for zoning approval in 2007 for the construction of a third runway (Munich Airport, 2014).

The passenger growth per year is also shown in Figure 2

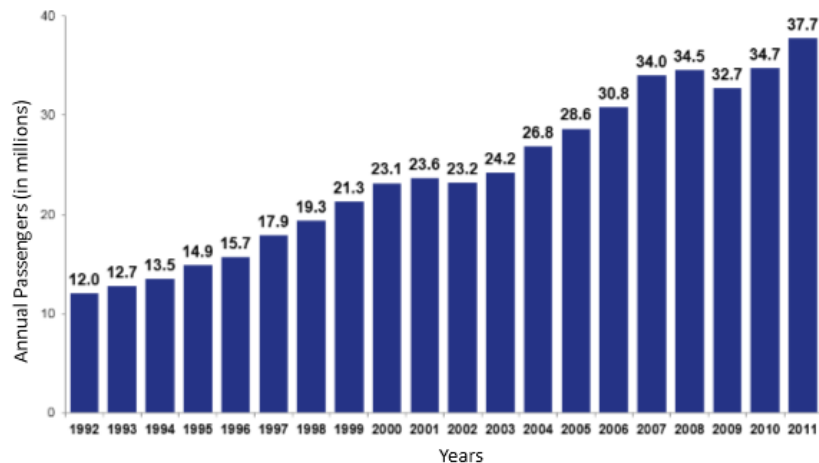


Figure 2: Passenger growth per year since 1992

Source: (Wolters, 2012)

2.2 Capacity of flight operations

The maximum aircraft movements (landings and takeoffs) that this airport can handle is 90 aircraft movements an hour. The capacity of the two-runway system is regularly exhausted for many hours a day, especially 600 hours to 1000 hours. Therefore, possibility to meet the demand of the airlines for desired slots is difficult, even during the off peak hours there are not much options available for additional traffic. The Munich airport claims that air traffic forecast for 2025 cannot be handled with the two-runways (Munich Airport, 2014).

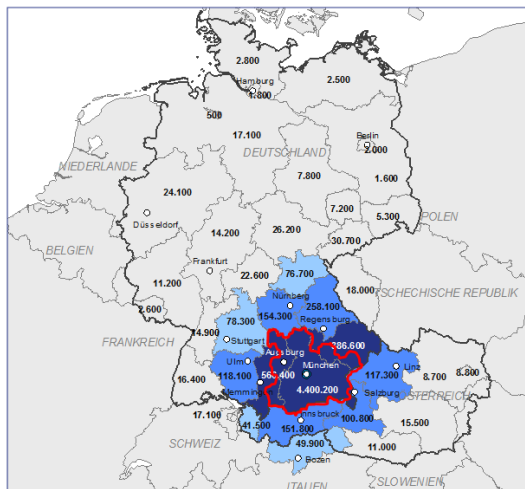
Approximately 90 percent of all long-haul flights to and from Germany are handled through the two hubs of Munich and Frankfurt which makes Munich Airport a keen and strategic area of importance and development (Munich Airport (FMG), 2011).

2.3 Passenger Structure

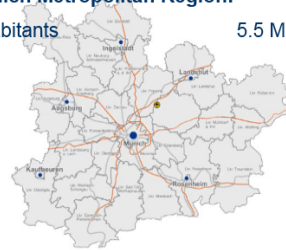
The reasons for the travel has been estimated to be 45 percent of the passengers travel for business purpose and 55 percent passengers are travelling for personal reasons. Approximately 56 percent of them are tourists and 44 percent are visiting friends and family (Munich Airport (FMG), 2014).

According to the statistics, 62 percent of the passengers boarding in Munich Airport are origin traffic, which means outward journey, 38 percent are foreign visitors. 86 percent of the total traffic comes from Bavaria, 8 percent from abroad and rest from other German states (Munich Airport (FMG), 2014).

Munich is a transit airport for 39 percent of departing passengers (Munich Airport (FMG), 2014). The catchment area of passenger is shown in Figure 3.



Munich airport 2010:
 Total Passengers : 34.7 Mil.
 Originated Passengers: 21.9 Mil
 Total Enplanements: 6.5 Mil
Main Catchment area:
 Inhabitants 20.8 Mil
Munich Metropolitan Region:
 Inhabitants 5.5 Mil



Source: Munich Airport: Passenger survey 2010, based on 6,900,000 enplanements

Figure 3: Munich airport as hub.

Source: (Wolters, 2012)

2.4 Volume of traffic

In 2012 38.4 million passengers travelled through Munich Airport and in terms of passengers, this gives Munich Airport a ranking of (Munich Airport (FMG), 2014):

- Number 2 among German Airports
- Number 7 in Europe
- Number 30 worldwide

The increase in passenger growth was 1.6 percent in 2012. It is expected that in 2025, the passenger will rise to 58.2 million (Munich Airport (FMG), 2014).

2.5 Airlines

In 2012 Munich was regularly served by 101 airlines operating scheduled and charter services. The airlines flew to a total of 242 destinations in 68 different countries (Munich Airport, 2014).

2.6 Number of employees

Munich airport is among of the largest employer in Bavaria with total workforce exceeding 30,000 employees (Munich Airport (FMG), 2011).

3. Need for Third Runway

“If Bavaria is to maintain its international competitive edge, we need to improve and expand connections to the world’s growth markets. A key requirement is an efficient airport that is ready and equipped to meet tomorrow’s challenges”.

(Munich Airport, 2014)

Since the relocation of the Airport in May 1992, and soon becoming the hub for at least 20 years now, passenger traffic has increased three-folds to almost of 35 million Passengers in 2010 and is continuously increasing. The year-on-year increase displays the rising trend of numbers and a rise of 13 percent was noticed in the beginning of 2011 (Airports Council International, 2011).

According to the airport’s forecast, the total air traffic movements (ATMs) will cross 536,000 – compared to the figure of 390,000 in 2010 (Munich Airport (FMG), 2011), which gives the clear reason of the need of the third runway. Some interesting facts and figures are mentioned in table 1.

Table 1: Key facts and figures (2010)

| | |
|---|--|
| Annual ATMs | 390,000 |
| Maximum movements per hour | 90 |
| Hub for | Lufthansa, Air Berlin, Augsburg Airways |
| Number of airlines served | 100 |
| Number of destinations served | 225 (20 domestic, 156 European, 49 Intercontinental) |
| Number of stands | 172 |
| Number of companies on the airport site | Approx. 500 |

Source: (Airports Council International, 2011)

“With the capacity limitations of the two-runway system, we are already facing the problem of struggling to meet the demand for additional flights,” Kerkloh explained. “The current capacity of 90 schedulable take-offs and landings per hour, which is actually an outstanding performance for a two-runway system, is already stretched to the utmost during peak traffic periods and we cannot offer any slots for additional take-offs and landings.”

(Airports Council International, 2011).

3.1 Increasing efficiency with collaboration.

Munich airport has been dedicated to ensuring the most efficient operations for a long time and it was the first airport to adopt Airport Collaborative Decision Making (A-CDM) in 2004, which was way ahead of the full implementation in June 2007. The aim of the A-CDM Action Plan – which is driven by a collaboration between ACI EUROPE, EUROCONTROL and CANSO – is to improve the operational efficiency of all airport partners by reducing delays, streamlining the predictability of events during the progress

of a flight and optimizing the utilization of resources. As per the data obtained of 2011, more than 30 airports are already engaged in the project (Airports Council International, 2011). Instead of the collaborative efforts of other nations with Germany, still there is need of more movements to cater the exponential passenger growth.

Munich Airport's A-CDM implementation has also contributed to its certification under Airport Carbon Accreditation at the 'Optimization' level. Having successfully engaged with third parties on the airport campus to reduce their carbon footprint, Munich is the first German airport to achieve this level under the accreditation program (Airports Council International, 2011).

3.2 Increasing runway capacity

Presently, Munich Airport shares a substantial percentage of long-haul flights to and from Germany with Frankfurt Airport. Approximately 90 percent of all long-haul flights to and from Germany are handled through two hubs of Munich and Frankfurt (Munich Airport (FMG), 2011), but catering for the additional slots or capacity is impractical without further expansion of the infrastructure (Airports Council International, 2011).

“Due to the very limited opportunities for airlines to overcome these bottlenecks by using larger aircraft or rescheduling flights, they are simply unable to launch many potential new connections to and from Munich,”

Kerkloh (Airports Council International, 2011)

The air traffic forecast for 2025 cannot be handled with the existing two runway system. It has been researched that the useful capacity of an airport cannot be determined from a simple addition of available slots. In order to determine the capacity available in practice, the fluctuation of the demand in a year, in the week, and during the day must be considered (Munich Airport, 2014).

The introduction of third runway, will increase the capacity at Munich Airport to 120 schedulable take-offs and landings per hour compared to the present figure of 90 schedulable take-offs and landings per hour (Airports Council International, 2011) and would help with reducing the bottlenecks (Munich Airport, 2014). This planned capacity expansion project will enable the Munich airport as well as the airlines operating from the airport to plan with certainty for increase in traffic, thus enabling them to meet rising demand, even in the long term (Airports Council International, 2011).

The table 2, shows the double digit rise in the passenger number and the cargo in the first quarter of the 2011

Table 2 Detailed traffic figures for the first three months (2011)

| | 2011 | 2010 | Change |
|--|-------------|-------------|---------------|
| Passenger volume Commercial traffic | 8,038,900 | 7,191,684 | + 11.8% |
| Aircraft movements Total | 96,800 | 88,230 | + 9.7% |
| Cargo turnover (in metric tons) Flown airfreight | 69,700 | 57,652 | + 20.8% |

Source: (Munich Airport (FMG), 2011)

3.3 Economic Importance

The addition of third runway is vital to ensure that export driven nature of Germany's economy and the required infrastructure is in place to cater for the extension of international business links (Airports Council International, 2011).

"The Bavarian companies that rank among the global players in their industries keep the export quota of the economy at approximately 50%. Bavaria is among Europe's top-performing regions and has an excellent reputation – as a globally respected research and development location, a hotspot for leading-edge technologies, an attractive trade fair venue and a highly efficient logistics hub.

Moreover, Bavaria is number one among German states for tourism. To secure our future growth and prosperity and ensure that we are able to keep generating new jobs, we must maintain and expand our international business relationships. This will require an airport that is equipped to handle the demands of the future."

Kerkloh (Airports Council International, 2011)

4. Opposition to 3rd Runway

“The construction of a third runway at Munich Airport concerns the whole of Bavaria. It will hurt people, nature and climate and Bavaria will not be benefited from it.”

(Dritte Startbahn Stoppen, 2014)

4.1 Opinion of the people against third runway can be summed under following heading:

4.1.1 Loss of quality of life

For Landshut, Freising, Munich and many surrounding communities, the third runway at Munich airport would mean a significant loss of quality of life. The runway would endanger the health of many people, the housing market will be stressed and people and buildings would be overloaded in the surrounding areas. (Dritte Startbahn Stoppen, 2014).

Aircraft Noise is pathogenic

Aircraft noise harms the heart, circulation and psyche. Even today, many people suffer at airport regions under the noise of constantly arriving and departing aircraft. With additional air traffic services, the third runway would further worsen the situation. Continuous noise causes constant stress and can lead to high blood pressure, sleep disorders, circulatory disorders, poor concentration and heart attack (Dritte Startbahn Stoppen, 2014).

Today about 540,000 people in the districts of Freising, Erding, Dachau and Munich are already affected by aircraft noise. In addition large parts of Munich would suffer from aircraft noise, as well, when flight paths will be changed because of the third runway and exhaust fumes are also sickening (München gegen die 3. Startbahn, 2014).

Especially at night, aircraft noise is a huge concern. Unlike the eye, the ears cannot be shut and during sleep transmit sensory data to the brain. Nocturnal noise leads to a constant stress from which residents near airport can hardly recover. The permissible limit for night time noise is 55 dB (A). This corresponds roughly to a running TV standing beside the bed every night (Dritte Startbahn Stoppen, 2014).

However, the aircraft noise robs not only sleep. It also interferes with daytime recreation seekers who spend their free time alone outside, play sports or want to relax. There is also a persistent irritation of the respiratory tract caused by the aircraft exhaust gases that contain partially carcinogenic pollutants (Dritte Startbahn Stoppen, 2014).

Pressure on housing market rises:

Munich continues booming, prosperity goes up but there is a dark side. Scarce housing space, increased cost of living, unavailable child care and overcrowded traffic

routes threaten our quality of life. The social balance is also wavering (München gegen die 3. Startbahn, 2014).

"The third runway is good for the economy and jobs," some people might think that. But that turns out to be bogus argument. In the region Freising there is full employment for years. Even the Munich Airport Company acknowledges that additional workers would have to come mainly from the surrounding areas as there are no such workers in the immediate vicinity. So, it would lead to even more people around the airport region (Dritte Startbahn Stoppen, 2014).

Another influx would weigh heavily on the region. The housing market in Freising and Munich is very tense, affordable housing is scarce. According to Freising Mayor, Mr. Dieter Thalhammer, even without the third runway, it's difficult to find sustainable and socially acceptable solutions for all here. Also in Munich is increasingly discussed beyond the limits of growth in the city. The third runway would make these problems even worse (Dritte Startbahn Stoppen, 2014).

Democracy shall be questioned

Also in view of the impending loss of quality of life, more than 80,000 citizens have been objected during the planning process of the third runway at Munich Airport. But the government of Upper Bavaria has approved the construction of a third runway in 2011, ignoring the simple objections and took decision that affects their daily life immediately. This loss of control over what happens in their own environment, has shaken confidence in institutions and policies (Dritte Startbahn Stoppen, 2014).

4.1.2 Rising air loads

Climate change: two degrees

The global average temperature has risen by 0.74 degrees Celsius in the 20th century. Experts estimate that climate change from a warming of two degrees Celsius above pre-industrial levels have catastrophic consequences. Already, global warming led to more frequent natural disasters and weather extremes, in Germany and Bavaria. In addition, climate change from a global warming of two degrees is likely to enhance themselves; for example, by the thawing of the methane or the cutting of the rainforests. Both would release enormous forest or soil-bound greenhouse gases (Dritte Startbahn Stoppen, 2014).

The two-degree target has therefore been recognized internationally at the UN Climate Change Conference in Cancun, also by the federal government. To achieve its self-imposed climate change targets, Germany would have to reduce its greenhouse gas emissions by 2050 by 80 percent compared to the same 1990 (Dritte Startbahn Stoppen, 2014).

Climate killer

Munich Airport is already without the third runway, the largest climate killer in Bavaria. It is responsible each year for 7.5 to 10 million tons of CO2 equivalents. This is one tenth of the total output in Bavaria. The more man provokes climate chaos, the more we need to set us all to increasingly frequent and violent thunderstorms with torrential rain, hail and wind gusts. The heat waves increase, increase the risk of forest fires and represent a health threat to the population. In the Alps, the glaciers are melting, leading to frequent landslides (Dritte Startbahn Stoppen, 2014).

4.1.3 Landscape and animals in danger

Runway will ruin Erdinger Moos

According to Bavarian Ministry of the Environment, the northern Erdinger Moos, where the third runway is planned, is "one of the most important Bavarian meadow breeders areas, with one of the largest Curlew stocks, very significant breeding population of lapwing, skylark, corn bunting, other types of standing water, reeds and siltation zones, as the Bluethroat" (Dritte Startbahn Stoppen, 2014).

95 percent of the original Moore of the Free State is now destroyed. But the Erdinger Moos has already reached at the ecological limit through the construction of the airport. Surface sealing, noise, pollution and drainage are common glitches (Dritte Startbahn Stoppen, 2014).

The construction of a third runway would cover up even more space. Approximately 3.5 million square meters, an area larger than the Tegernsee, would disappear under concrete. In total an area of 871 acres would be used by the tracks. The groundwater would continue to decrease. 4.3 million Cubic meters of soil would be removed. Nature would totally be destroyed, 1,000 hectares bird sanctuary have already been lost. In addition, the runway would entail not only the immediately affected area, but affect the total natural environment Erdinger Moos. The construction of the third runway would be one of the largest species exterminations in Bavaria (Dritte Startbahn Stoppen, 2014).

Setback for the Marsh and climate

Marshes are not only rare and worth protecting habitats, but also carbon sinks. Marsh protection is therefore necessary for climate. Marsh saves 700 tons of carbon per hectare, six times as much as the same area of forest. This means that Marsh have a record in terms of carbon storage. Around 30 percent of the global soil carbon stored in marshes, although they cover only three percent of the land area. With the marsh destruction by the third runway Bavaria would therefore lose not only a diverse landscape, but also a valuable way to slow climate change (Dritte Startbahn Stoppen, 2014).

Endangered animals will lose their home

The Erdinger Moos is one of the last remaining large swamp areas in Bavaria - and thus one of the last and most important sanctuaries for animals that hardly found elsewhere. The construction of the third runway would destroy this irreplaceable habitat in the Erdinger Moos where animals have their home (Dritte Startbahn Stoppen, 2014).

Erdinger Moos provides home for threatened dragonflies species such as the helmet-Azurjungfer and rare butterflies such as the Ried devil. Many typical species of the swamp and its water birds such as corncrake, curlew, lapwing or Bluethroat have become rare in Bavaria - with the third runway they would lose another retreat. A complete loss of corncrake in the Erdinger Moos is feared (Dritte Startbahn Stoppen, 2014).

4.1.4 Financial risks for taxpayers

The Munich Airport Company (FMG) is fully owned by the public sector, that is, the federal government, the State of Bavaria and the city of Munich. None of the three shareholders want to pay for the third runway: The Federal Ministry of Transport is accessible on request from the fact that the runway could be built without government funding grants. Prime Minister Horst Seehofer has repeatedly declared the Free State of Bavaria could not afford a second disaster as the Landesbank and create a new billion grave, the runway will not be financed from tax revenues (Dritte Startbahn Stoppen, 2014).

Faced with a debt of 2.727 billion Euros, it looks rather bad for the creditworthiness of the Munich Airport Company. Even the airport itself cannot fund because the debt are too high and the cash flow is too low for this the additional runway. The only certainty is from the help of the Munich Airport Company, the federal government, the Free State and the city of Munich, whose money comes from taxpayers. If the third runway is built and Airport needs money, so there remains only the taxpayers left as a donor (Dritte Startbahn Stoppen, 2014).

4.1.5 Risk of nuclear accident

Increase in number of flights over Atomic Nuclear Plant Isar I and II

By the third runway, air traffic would grow north of the airport, in the direction Landshut and Niederaichbach. There are already 60 to 70 percent of the days in the year, landing approaches over the AKW Isar I and II. With an increasing volume of air traffic there is also the danger of intersections, evasive maneuvers and accidents in the air over the nuclear power plant (Dritte Startbahn Stoppen, 2014).

Supporters and opponents of the third runway assess the risk of a crash over Isar I or II differently. For the federal government conservation risk is too big already. On the one hand, the experience of Chernobyl and Fukushima, that even the smallest risk is too high - and the nuclear location Niederaichbach involves three sources of risk: now

disconnected, but still radiant nuclear reactor Isar I has a big waste store and the reactor Isar II is active till 2022, and the risk of falling in the vicinity of airports is significantly higher (Dritte Startbahn Stoppen, 2014).

4.2 Environmental Impact Assessment for the third runway:



Figure 4: Proposed location of third runway and affected area

Source: (EOI, 2012)

The current land use of Munich airport comprises of 1,560 hectares, from which nearly 60% are green spaces. The new runway would be a code F category, with 4,000 meter length and 60 meter width. The estimated land use outside the existing airport would be 970 hectares (EOI, 2012).

The Environmental Impact Assessment (EIA) has already been done in 2006 and analyzed the following sector: Humans (health and well-being), animals (wild animals and their habitats), plants, biodiversity, soil, surface waters, groundwater, air, climate, landscape, cultural goods and possible interactions (EOI, 2012).

The human settlements north and northeast of the airport would have the largest impact because of the increasing air traffic noise during operation and probably during construction. According to the available information, "Attaching" can claim for compensations due to the increase of the continuous sound level. Additionally the habitat "Erdinger Moos" of wild animals would be affected due to the land consumption of the third runway, the noise during construction and operation and the lighting during

the operation of the airport. The connectivity of the habitats would be interrupted and could hinder the migration and spread of animals and plant species (EOI, 2012).

Within the area of the planned runway is a monument, it would need an archaeological exploration before the constructions. In addition there would be a medium impact on the biodiversity in this area and on the soil. Apparently the overall appearance of the landscape would be changed too (EOI, 2012).

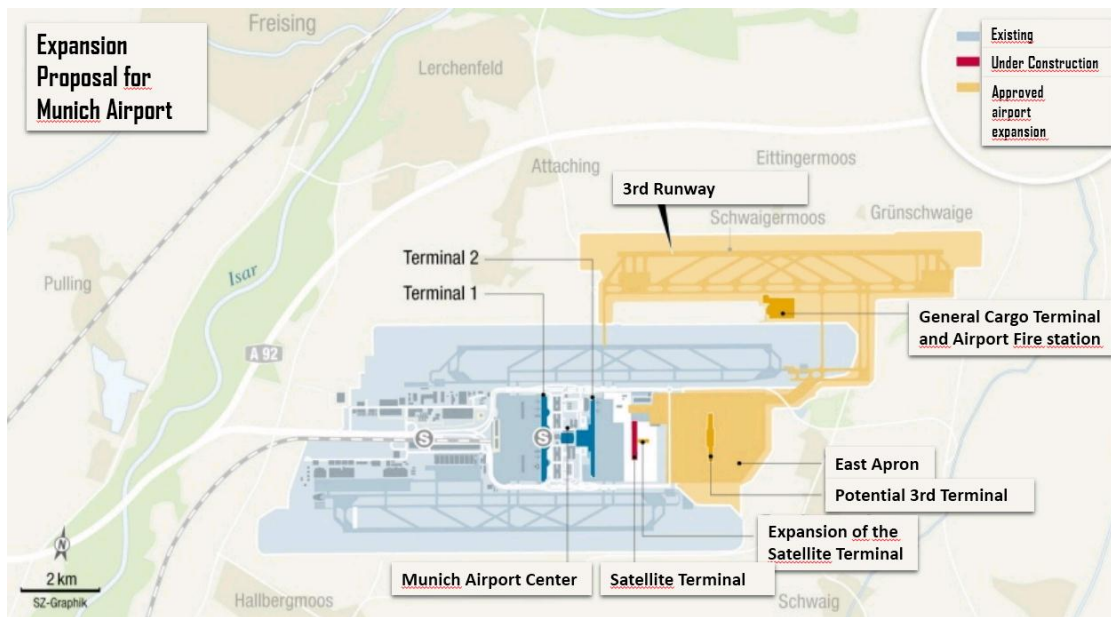


Figure 5: Expansion Proposal for Munich Airport

Source: (EOI, 2012)

The airport endeavors to make its process transparent and to include the affected neighborhoods early in the planning process. It even is consent to pay 100 million Euros for compensation – without legal obligation (EOI, 2012).

5. Progress of the project

5.1 Beginning of Planning (October 2005)

Munich Airport Operation Company had started planning of third runway already in 2005. The initial statement was:

"Continuous strong traffic growth at Munich is beginning to put a strain on runway capacity limits at peak periods. In view of current traffic trends, the result will be substantial waiting times and delays in the very near future. Expanding the runway system to sustain future growth and avoid anticipated capacity bottlenecks in coming years will therefore become a necessity."

(Airport International, 2005)

5.2 Zoning Approval (July 26, 2011)

On this day the government of Upper Bavaria issued the zoning approval for the construction of the new runway. The need presented by the Munich Airport Company (Flughafen München GmbH) and the plans submitted for the third runway, after the intensive examination and consideration of all ramifications were unambiguously approved with this decision. The approval by the government of Upper Bavaria also demanded the completion of the construction project quickly (Munich Airport (FMG), 2011).

A parallel runway to the northeast of the current perimeter and like existing runways, it will be 4,000 meter long and 60 meter wide. It will be located 1,180 meter north of the current runway 08L/26R, with its thresholds displaced 2,100 meter to the east. The expansion would increase the number of aircraft movements from 90 to 120 per hour. Part of the expansion project will also include a new apron with 78 aircraft parking positions east of the current terminal complex, a third fire station, general aviation facilities, a new helicopter pad and snow dumping areas (Gubisch, 2011).

The authorities considered 31 different proposals for the runway location as well as the option of not building new runway and transferring some air traffic to other airports. However, in the end government granted the planning permission which was sought in 2007 (Gubisch, 2011).

Dr. Michael Kerkloh, the CEO of FMG, called the ruling, *"the most important new starting point for Munich's competitiveness as an air transportation location since the relocation of the airport in Riem."* The airport CEO added, *"This sets the stage in terms of planning permission regulations to continue this Bavarian success story in the long term. The expansion of Munich Airport to meet growing demand and the resulting increase in available flights and destinations will benefit in particular the population of Bavaria and the economy."*

(Munich Airport (FMG), 2011)

The prosperous Munich air transportation hub was already making substantial contribution to prosperity and employment in the state of Bavaria; and is also among the Bavaria's largest workplaces. The Munich Airport Company has planned to completely implement the conditions and protective claims that are contained in the planning permission ruling. According to the initial assessment, it is said that the company plans to go far beyond the requirements of the law in the interests of the parties affected by noise pollution. The airport operating company will contribute to limit as far as possible any negative effects from the construction and operation of the third runway to an unavoidable minimum (Munich Airport (FMG), 2011).

The airport has conveyed its commitment to continue proper dialog process with its neighbors and the surrounding communities. The company will adhere to the framework of discussions in the Regional Advisory Council and address the concerns of the residents. The new runway will not be used between 22:00 and 06:00 except in case of emergency operations or if one of the existing runway is closed (Gubisch, 2011). 'In this particular regard, the Munich Airport Company has voluntarily made 100 million euros in funding available, with no legal obligation, as compensation for hardships and inconvenience related to the expansion project' (Munich Airport (FMG), 2011).

While the construction works could legally begin straight away after this decision, never the less, the Munich Airport Company chose to follow the advice of the Bavaria's Higher Administration Court and planned not to proceed until the principal proceedings concerning the project will reach to a conclusion. The building permit associated with the zoning is valid for up to 15 years (Munich Airport, 2014).

5.3 Residents voted against the third runway at Munich (June 17, 2012)

The final approval was dependent on the unanimous decision by the airport's three shareholders - the Free State of Bavaria (51%), the Federal Republic of Germany (26%) and the City of Munich (23%). While the former two supported the project, Munich's city government called for a referendum which was held on 17th June 2012. The city's social-democratic mayor, Christian Ude, was in favor of the third runway, but his junior coalition partners, the Green party, opposed it. On this remarkable day 54.3 percent of the polled voters were against the new runway and 45.7 percent were in favor. (Gubisch, Munich's third runway put on ice following referendum, 2012).

The outcome of the referendum was seen as a significant blow to Lufthansa and Air Berlin, which had already been impacted by delays in the opening of Berlin's new airport and a ban on night flights in Frankfurt (Riegler, 2014).

5.4 Third Runway for Munich Airport gets Green Light from Court (February 19, 2014)

The ‘Bayerische Verwaltungsgerichtshof’ or Bavarian Administrative Court on this day dismissed 17 complaints that sought to block the expansion and gave the approval to the expansion of the airport. Judge Erwin Allesch, who has presided over this hearing, told media that the new runway will be built according the best possible measures and would not be significantly detrimental to the environment nor troublesome for those living nearby (Riegler, 2014).

Neither environmental nor noise reasons preclude the project, ruled the presiding judge. The administration in charge of planning has not exceeded its powers or discretion and planning has no shortcomings (Geiger, 2014).

“As a result of the ruling, Munich Airport still has the opportunity to handle the projected traffic growth in the coming years and maintain its position among Europe’s major air transportation hubs,” said Michael Kerkloh, the airport’s chief executive (Riegler, 2014). The allowance of third runway at Germany’s second-biggest airport would also help the eager airlines to expand capacity in Europe’s biggest economy. The airlines like Lufthansa and Air Berlin had been struggling for a long time under a ban on night flights in Frankfurt and endless delays in the opening of the new airport of Berlin, this decision would have provided them with a great relief (TTG Nordic, 2014).

5.5 Initiatives taken by Munich Airport Company

Munich Airport Company has made several transport infrastructure project plans that aim to improve the connection to Munich Airport. The expenditure on the airport’s third runway will be borne by the regional fund as soon as its commencement. The money has been already allocated straightaways to the two community road projects, in the Erding district (€23.4 million) and in the Freising district (€26.6 million). Some part of the funding will also go towards Erding’s north bypass and to Freising’s west expressway (Munich Airport, 2014).

Dedicated sum of €5 million each has been made available for planning services in connection with the Erding north bypass and the Freising west expressway, and also for purchasing of land for the Freising west expressway. Erding district council till 2014 has already drawn €500,000 in funding to cover planning work for the town’s north bypass. Freising too, has drawn €500,000 for purchasing land for the town’s west expressway. However, all other funding has been kept on hold until the beginning of third runway (Munich Airport, 2014).

6. Conclusion

Third runway at Munich Airport has been marked by several dramatic events in the history that have been captured in this study in appropriate detail. The need of this runway was realized quite early in 2005 and planning began, to anticipate the alternatives. After proper evaluation of the proposals that would have been resulted after the huge investment of man-hours from experts, it was opposed by the public. Protests were seen across the whole state. Politicians and environmentalist came into picture with strong counteracting reasons, the issue was captured by media and highlighted heavily. The case went to government to get the approvals and then to big court of state. Some of the political parties made this issue their main political agenda and used it to capture the votes to come into power. At last the project gets the approval, but the commencement remains under question. During these processes, huge amount of state money, valuable time of public workers and local public is invested, but still it is hard to reach for a conclusion and the end product is still 'ambiguity' and 'confusion'. This line of action is common throughout the world for big projects. The same story is presented with little turns and twists, across the globe.

Still, it is hard to predict, when the construct would start. According to the technical experts, the rise of passengers and bottlenecks; it can be stated that Munich needs another runway, but issues raised by 80,000 directly affected people and causes highlighted by environmental pioneers are also in accordance, which leads to the conclusion of not having a new runway. It is always not easy to do cost benefit analysis when it comes to people's welfare and health, environmental disturbance and other ecological deteriorations.

Munich is a financial capital Germany and the rate with which it is growing, the expertise and industries it has, it can be concluded that the passengers will definitely rise. Munich is a country that has huge export share and earns from it, strategic location, strong economy and people's easy affordability to aero mobility are main factors that cannot be overlooked and are essential for the nation's growth and comfort to its citizens. Citing the present trends, I can be said, if not now, then there will be a day in future when another runway will become a necessity.

The health and welfare of citizens, wildlife and environmental degradations cannot be overlooked. These are the vital part of the ecosystem and history has proved it many times, if any of its elements is not respected the result can be dreadful. The government and people's representative would have to play a vital role to come to a win-win situation. Proper measures have to be designed and decided so that the issues raised by people can be solved in a satisfied manner. Reliable and economic rail transport to the domestic destinations have to be increased in Germany. Environmental deterioration should be balanced by better proposals to nullify the adverse impacts and endangered species should be preserved. Expenditure made by public money should be done wisely and wastage should kept to minimal.

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