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## **CORONAVIRUS PANDEMIC IMPACT ON INTRODUCTION OF NEW SECURITY MEASURES IN THE MIDDLE EASTERN AIRLINES**

### **Abstract**

In this paper, the impact of the coronavirus pandemic on the introduction of new security measures in Middle Eastern airlines is researched. The focus is put on the three most influential companies – Qatar Airways, Emirates and Etihad Airways. Reduction of the number of seats and thus passengers in the plane, maintaining physical distance, new ways of serving meals, and the use of robots and artificial intelligence are just some aspects elaborated on in this paper. The conclusion is that the coronavirus pandemic has impacted the change of rules in many economic fields, the airline industry included. One of the biggest challenges in the future will certainly be the balance between the health security of the passengers and airline profits.

**Keywords:** coronavirus, COVID-19, security measures, airlines, airline industry

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## INTRODUCTION

In 2019, China recorded a mysterious pneumonia among several of its citizens. Few, if any, were able to even imagine at that point that the year of 2020, which sounded somehow important and as a turning point on paper, a sort of preparation for entering the third decade of the 21st century, will be noted in the history books of the future as the year of the pandemic that would take several million lives world-wide. Still, it is a reality with which we are currently living. At this moment, it seems as if the coronavirus pandemic is coming to an end, and the detection of new strains brings along unrest among the immunologists and epidemiologists, who fear that the new variations of the virus might be resistant to vaccines used for mass vaccination of the population world-wide, constructed in compliance with the original virus type from the beginning of the pandemic. Still, the consequences of the current pandemic have long surpassed health framework. The population world-wide has for almost two years been facing declarations of states of emergency, different forms of quarantines of different duration, and even deprivation of normal functioning when conducting the most basic activities, such as going to the market, using public transportation, or undisturbingly performing professional obligations in the workplace. The pandemic has left many without a job and has endangered their existence, as well as the existence of their families. Moreover, we can separately speak of health, psychological, emotional, social and other consequences felt by billions of people world-wide during this period when the life we knew before the emergence of the SARS-CoV-2 virus is only put on a pause, let us hope. Interpersonal relations too have also taken a strong hit. Physical (or social, as called by some) distance was imposed as one of the basic precautionary measures that presumably protect us from the new virus, which is the reason why we nowadays spend less time with our loved ones and visit each other or travel less. Traveling has become particularly rare due to not only fear of passengers from being in a closed space, but also the closure of countries, thus preventing entrance of tourists, which seriously endangered the survival and functioning of the airline

industry. Nowadays, after two years of living with the pandemic, the airline industry is learning how to adapt to the new circumstances, and thus, in this paper, we will examine how the three biggest airlines in the Middle East responded to the occurrence of the coronavirus. We will explain what new security measures had to be implemented as an attempt of airlines to prove to their passengers that, in the conditions of the coronavirus pandemic, air traffic might be the safest form of travelling in the world.

The aim of this paper is to give a closer look on how the ongoing covid-19 pandemic hit the airline industry in the Middle East and the impact it had on the new security measures in the leading three Middle Eastern airlines.

### **THE CORONAVIRUS PANDEMIC**

On January 5, 2020, the World Health Organization published for the first time on their website an official news about 44 patients in China suffering from pneumonia of unknown cause (World Health Organization [WHO], 2021). A day earlier, this organization also posted their first statement on the official profile on social networks, regarding, as stated, “the investigation that should determine the cause of illness” (WHO, 2021) that caused simultaneous cases of pneumonia among several people in the city of Wuhan, in the Chinese province of Hubei. Hardly any of the health professional could expect that, in the following two years, as much as has passed since then, this was to become one of the biggest global health challenges of the recent history. Until January 7, 2022, worldwide, a total of 298,915,721 confirmed cases of coronavirus infection emerged, as it turned that this virus was the cause of pneumonia cases in the province of Hubei, and a total of 5,469,303 patients has died – this is an official data provided by the World Health Organization. (WHO, 2022) The word “vaccine” was proclaimed to be the world of the year by the end of 2021, as stated by the “Merriam Webster” dictionary (Sheidlower & Zdanovicz, 2021). However, the current pandemic is not a challenge solely from the standpoint of public health. During the last two years, we have witnessed closures, the so-called “lockdowns” in many countries world-wide,

which confronted different categories of population with many forms of mental, social and financial challenges, especially among the urban population (Peeling et al., 2022). Some researchers especially stress the psychological impact of the pandemic, and thus they write about researches conducted in China that have shown that more than one half of the interviewed population (53.8%) believed, after going through a quarantine, that the psychological impact of the pandemic was moderate or harsh, while in Japan, for example, in the midst of the pandemic, that is, in October 2020, the number of people who committed suicide is higher than the number of people who died due to coronavirus pandemic (Peeling et al., 2022). The truthfulness of this statement was also confirmed by the Serbian Umbrella organization of Youth for Human Rights (Serb. *Krovna organizacija mladih za ljudska prava - KOMS*), which presented a report stating that a total of 58.9% young interviewees in Serbia stated that they felt moderately to very endangered regarding the security and health risks during the state of emergency, proclaimed due to the pandemic (Stojanovic & Vukov, 2020). Their fears were heightened during the pandemic and the state of emergency, and some of the biggest fears of young population in Serbia were “*the fear of falling ill and then infecting the family*”; “*the fear of loved ones getting infected*”; “*the fear of getting infected*” and “*the fear of death*” (Stojanovic & Vukov, 2020). Besides that, many ethical questions were posed during this pandemic. In this sense, the biggest turbulence was and is still caused by detrimentally opposite opinions regarding the relation of vaccination and human rights. While governments of certain countries, such as Austria and Greece, are nowadays inclined towards the idea of mandatory vaccination for some or certain categories of population (the Austrian government submitted on December 9, 2021, the Law on mandatory vaccination for the entire population to the Parliament, and the said measure is to be implemented starting from February 1, 2022), in other, such as the Great Britain, the State Secretary of Health believes that the introduction of mandatory vaccination would be an unethical move (King et al., 2022). In Austria specifically, the announcement of mandatory vaccination led about 44 thousand of protesters

in one day only, in the end of the previous year (Beta – AFP, 2021) and various “anti-covid” measures introduced throughout the course of the pandemic are for months being protested world-wide. The pandemic has also shaken up different health system sectors, and thus, it is stressed that there is a dramatic increase of digitalization in the provision of services of psychiatrists (Stein et al., 2021) due to the inability of continuing the usual “one on one” talks with the patients, which causes one to question the quality of provision of health services of that sort to the ones that, for any given reason, are not able to use medical services via Internet, and significant worries arose for the mentally endangered in poor countries. The impact of the coronavirus pandemic also had a negative impact on different human habits, and given that lockdowns made people spend more time alone in isolation, it is stated that, based on a sample of 5 million people, it was determined that the percentage of emergence of various eating disorders among the youth has risen by 15.3% percent on a global level during 2020, in comparison to the standard reported during previous years (Zipfel et al., 2022). The pandemic also strongly hit the mobility of citizens and the possibility of free movement and travel, given that the governments world-wide have, in different ways, restricted or modified the rules regarding entrance and exit from the country.

## **LEADING AIRLINES IN THE MIDDLE EAST**

### **Qatar Airways**

Qatar Airways is one of the three leading airlines in the Middle East – the other two will be talked of in sections 3.2 and 3.3. It is headquartered in Doha, the capital of Qatar. Qatar is an emirate in the Middle East functioning as a sovereign and independent state since 1971. The lifeline of Qatari economy, since the early days of the independence until nowadays, is the oil industry. Historically speaking, the faith in Qatar becoming a country known for prestige and wealth was set by the end of the thirties of the previous century, when oil drilling and extraction began in Dukhan, in the western part of the country. Only forty years after gaining independence, in 2010, according to official statistics, Qatar possessed

third biggest gas reserves in the world, as well as 25 billion barrels of oil (Sorkhabi, 2021). A year later, in 2011, Qatar Airways won first of its currently six awards for the best airline of the year, awarded by Skytrax, independent airline consultant group, headquartered in the Great Britain. Qatar Airways was proclaimed to be the best airline in the world in 2012, 2015, 2017, 2019, and finally, in 2021 (Qatar Airways, 2021). The representatives of Skytrax explained that Qatar Airways was chosen as the winner among the airlines in 2021 by the clients and passengers, and that it has succeeded in maintaining the “high level of innovation in provision of services, not only during the normal times, but during the times of the pandemic as well” (World Airline Awards [WAA], 2021). However, as much as the response of the company was good, it still faced losses in the first rush of the pandemic, and thus, in September 2021, it was said that, during the previous fiscal year, due to coronavirus pandemic, the company’s losses amounted to 4 billion dollars, but also that the number of passengers declined for unbelievable 82% in the midst of the pandemic. (AP, 2021) However, this did not stop the company to win numerous other awards during the pandemic (WAA, 2021), and its executive director Akhbar al-Baker was proud of the fact that the company was awarded with five stars, which is the highest number of stars, in the category of companies that has significantly improved the security measures in terms of protection of health and maintenance of hygiene during the global pandemic. (Skytrax, 2021) Given that it is a current topic, it is worth mentioning that this all happened to Qatar Airways only one year before the start of the long-expected World Cup, that will be held in Doha in the end of 2022, for which, as it was stated by the company on several occasions, as expected, ambitious preparations are currently underway.

### Emirates

Emirates is one of the two biggest airlines in the United Arab Emirates (UAE), headquartered in Dubai. The UAE are consisted of seven emirates, of which one is Dubai. Just like Qatar, this country owes a significant part of its economic

expansion to the abundance of oil, but natural gas as well. According to some estimates, the UAE is attempting to reach the production capacity of 5 million barrels of oil daily by 2030 (Gnana, 2021). Another similarity with Qatar is the fact that in this country as well, parallel with increase of wealth and luxury throughout the previous two decades, airline industry developed as well. According to the estimate of the International Agency for Air Traffic, in 2020, Emirates was officially the biggest airline in the world, with over 45 thousands of employees and a fleet of 270 planes (Emirates, 2021). One year later, Emirates won fourth place on the Skytrax list of the best airlines world-wide, but also two first prices – for the best entertainment content available to passengers during flight, and for the best airline in the category of provision of services in the first class in the Middle East (WAA, 2021). In the year of the rise of the pandemic, that is, in 2020, this airline was awarded four out of maximum five stars in the category of travel safety in the conditions of the pandemic (some of the parameters are the following: availability of hand sanitizers upon boarding flights, availability of information on the travel conditions during the pandemics on informative desks, control of compliance with the preventive measure of physical distancing, etc.) (Skytrax, 2021). Just like Qatar Airways and other big companies, Emirates as well suffered harsh economic hits during the coronavirus pandemic. In order to ease the said hits, the UAE Government invested billions of dollars into this company from the beginning of the pandemic – according to some estimates, at least 3.8 billion dollars were given by the Dubai emirate (Reuters, 2021).

### **Etihad Airways**

Etihad Airways is another national company headquartered in Abu Dhabi, in the United Arab Emirates, second in line when speaking of size, right behind Emirates. This airline currently owns 93 planes (Etihad, 2021) transferring passengers or goods in cargo flights. Founded in 2003, it is the youngest of the three airlines mentioned in this paper. On its website, Etihad Airways especially stresses among its goals decarbonization – reaching zero emission of carbon dioxide by 2050,

and before that, reduction of emission by 50% of the current value by 2035 (Etihad, 2021). In accordance with the “green” (The International Air Transport Association [IATA], 2021) goal of the business, Etihad Airways had its first “eco flight” long time before decarbonization became the official demand of the International Agency for Air Traffic. Namely, in 2019, Etihad had its first “eco flight”, and two years later, in October 2021, conducted its first “sustainable flight” which, according to the data made public by the company, was based on 38% of sustainable aircraft fuel (Radičević, 2021), and during the flight, the use of plastics was reduced by as far as 80% (Etihad, 2021). In 2021, Etihad Airways won the first price for excellence in provision of services in the midst of the coronavirus pandemic (WAA, 2021).

### **THE CORONAVIRUS PANDEMIC IMPACT ON AIRLINES IN THE MIDDLE EAST**

With the first news reports on the mysterious virus that infected the first individuals in China (Devex, 2021), it was clear that the spread of a quite unknown virus might pose a serious health challenge for the entire planet. It could especially be presumed that such global health problem might attract attention of the airline representatives, given that their professional success depends on the number of passengers, which are willing and, what is even more important, are given a possibility to freely use all the benefits of air traffic. The airline industry, from the aspect of the duration of the human history, is still quite a young industrial branch. Just a little bit over one hundred years have passed since the Wright brothers constructed their first plane in 1903, on the beach of Kitty Hawk in North Carolina, which is believed to be the first model of a practical plane known to human civilization, and the KLM (KLM Royal Dutch Airlines [KLM], 2021) became the first airline world-wide in 1919. Having in mind still relatively short common experience of the human civilization and the airline industry, it is not a surprise that this industry is still not best prepared for the crises similar to the one caused by the coronavirus.

By the way, in the second half of the 20th and the beginning of the 21st century, like the coronavirus, a few other illnesses started in China, such as the Hong



Kong flu (1968), SARS (2002/3) and the Bird flu (2003–2007), thus causing the development on Chinaphobia, that is, the fear of China (Stavljanin, 2020). A similar occurrence emerged in the case of the current coronavirus pandemic. In May 2020, only two months after the World Health Organization proclaimed the coronavirus pandemic, the Human Rights Watch organization warned the governments world-wide about the growing Chinaphobia and racist incidents involving Asians, predominantly of Chinese nationality, world-wide, including the discrimination of the Chinese in neighboring countries, such as Korea, Japan and Indonesia, and all in the light of development of the coronavirus pandemic, recorded for the first time in China (Human Rights Watch [HRW], 2020). This phenomenon was recorded in the airline industry as well. The Guardian reported in its article entitled ‘Coughing while Asian’ a story of an American of Asian descent, Rosalind Chou, who witnessed on her flight a text exchange of one passenger with her friend. Namely, the passenger Chou observed sent a message insinuating potential danger of falling ill with the coronavirus only because she was surrounded by passengers from Asia: “There’s a lot of them. Pray for me”, said the message sent by the said passenger to her friend in the presence of Rosalind Chou (Visontay, 2020). During the years of 2020 and 2021, this will be only one of many problems for which the airline industry was to find a solution.

### **THE LOSSES OF CAPITAL AND HUMAN RESOURCES**

The news (Executive Traveler, 2021) that Qatar Airways introduced once again their style of serving meals in business and first class, a service once regarded as exquisite before the pandemic, was published on December 21, 2021. One year and nine months have thus passed since the beginning of the pandemic when the company found itself in a position to once again offer to the passengers who buy the most expensive plane tickets this service in accordance with the standards for which, as previously stated, it was awarded multiple times. And in the times of the beginning of the pandemic, the news was quite gloomy for all airline companies of the world, and thus the three biggest companies in the Middle East were not

an exception. Given that during the first months of spread of the coronavirus pandemic, the most affected part of the world was Asia, the news about travelling to this part of the world sounded worse and worse, and thus it seemed that the countries of the Asian continent, one by one, were being cut from the standardized air and maritime traffic. On March 9, 2021, only two days before the World Health Organization proclaimed the global pandemic of a new virus, (Cucinotta & Vanelli, 2020) the Qatari state officially forbid entrance to the country for citizens of fourteen countries, predominantly from the Asian continent, due to the fear of the spread of the new virus. The citizens of China, India, Bangladesh, Nepal, South Korea, the Philippines, Thailand, Sri Lanka, Pakistan, Iran, Lebanon, Syria and – Egypt found themselves of the said list (NDTV, 2020). One month earlier, the first news about the consequences of the spread of the coronavirus on Qatar Airways entered the world. Namely, it was published that, since February 3, 2020, Qatar Airways stopped all flights to China due to, as stated by the executive director of the company Akhbar al-Baker, the “challenge” in the form of the fact that the pilots and the cabin crew, stewards and stewardesses who spent time in China were not able to conduct their jobs properly because of the restrictions imposed by countries world-wide towards people who spent time in that country, in the context of being allowed to cross the border. Thus, further organization of flights to China would potentially endanger the operational efficacy of the company (Qatar Airways, 2020). As the new virus pandemic gained its moments, the list of countries to which flights were canceled was widened. This, however, was not exclusive only to the response of the Middle Eastern airlines, but it ended up being an imposed solution for all companies world-wide that had to adapt to measures and decisions of the governments of the countries they do business with. The biggest hit, without a doubt, was of a financial nature. International Civil Aviation Organization stated in December 2021 that the estimate on joint losses of airlines from the entire world are quite gloomy – in 2020 alone, they lost up to 371 billion American dollars, in comparison to 2019, while the said amount in 2021, in comparison to the pre-covid year, ended up being negative

324 billion (Hasegawa et al., 2021). In the consolidated report for the financial year of 2019/20, published on March 31, 2020, Qatar Airways stated that “in one of the hardest years in the history for the airline industry” it had net loss in the amount of almost seven billion riyals, which is almost two billion American dollars. The development of the pandemic also impacted the method of serving meals during flight, but other standards present during flight as well.

The development of the pandemic also had a strong impact on the employees within the airline industry, given that by May 2020, the company admitted that it would have to fire “a significant number” (Al Jazeera, 2020) of pilots and cabin crew. Even though it is hard to speak of precise numbers, local media report that, within one year from the beginning of the pandemic, Qatar Airways fired over 11 thousand of people. (Doha News, 2021) This includes pilots, cabin crews (stewards and stewardesses), as well as the staff employed within the airport and all other organizational units within the company. Still, it was expected that the firing would continue even after February 2021, given that the pandemic was still at its peak. The identical challenges, embodied in the form of loss of capital and forced lay off of workers, were faced by the other airlines in the Middle East as well. The media reported that Etihad, a company known to the local public as a long-term partner to the Serbian national airline Air Serbia (Aviatica, 2020), fired in May 2020 several hundreds of people (El Yaacoubi & Cornwell, 2020). At the time, probably no one could expect that number to rise to several thousands in the following months of the coronavirus pandemic. Etihad admitted to facing another form of loss in the beginning of 2020, having to sell 38 planes from their fleet, which is not a surprise, given that the announcement of problems in the air traffic ended up being like rubbing salt into the wound of a company that has, since 2016, been recording enormous losses due to not especially successful investment in various smaller airlines in Europe and Australia – according to estimates, the losses of this company surpassed five and a half billion American dollars by 2020 (Associated Press, 2020). This company also faced another sort of problem in the midst of the crisis caused by the pandemic when the group of

about two hundred of former employees stated that they are planning to initiate lawsuits due to the way they were fired, and which was deemed as “unfair” and “illegal” (Paddle Your Own Kanoo, 2020). Even though the global health crisis left obvious, documented consequences on the work and professional ethic of the airline industry, the changes that emerged within this industry are more deeply rooted than examining capital investment, financial loss and adjustment of the workforce to the newly emerges circumstances. The emergence of the coronavirus has deeply changed the way travels function on a daily level, and it has maybe permanently changed the human perception of how the procedures at airports and in plains look like. In the following chapter, we will find out how did the global pandemic of a new virus change the method of work and provision of services, when speaking of the biggest airlines of the Middle East, that is, how did transfer of potentially sick passengers become one of the biggest security issues in the airline industry.

### **NEW SECURITY MEASURES IN AIRLINES IN THE MIDDLE EAST**

#### **Reduction of number of seats and passengers in the plane: maintaining physical distance**

When the rule was set that on every 50 passengers at least one member of the cabin crew (Goodman, 2015), steward or stewardess, must be present on the plane, probably no one even imagined that a time will come when the airline companies will have to disable the use of a certain number of seats on the plane and thus decrease the number of cabin crew members present due to a problem such as the global virus pandemic. The most recent research of the International Civil Aviation Organization showed that, in comparison to numbers from the pre-covid year, that is, in comparison to 2019, the airlines in 2021 were able to offer up to 40% less seats on the plane, and thus, their services were used by 49% less passengers in comparison to the times before the emergence of the virus – these numbers were even more dramatic in 2020, and the number of available seats on plains declined for up to 50%, and the number of passengers

up to 60%. (Hasegawa et al., 2021) To this contributed not only the fact that the demand for airline tickets went through a drastic decline due to fear from the virus among passengers, but also by the fact that the demand for maintaining physical distance, as a measure that was, during the peak of the pandemic, the norm of conduct in public places, meant that, for example, almost 50% of seats in the economy class had to remain empty. The ability of airline companies to smoothly organize half-empty long-term flights was denounced by the president of the Emirates, Tim Clark, stating that not only it is not a financially-sustainable solution, but it is also not good for the environment (Gulf Business, 2020). Still, this was the reality for the Middle Eastern companies, and especially on the so-called long-haul flights, that is, flights longer than ten hours. Etihad officials stated in July 2020 that the Government demanded that there is not to be more than 30 passengers per flight on flights to Sydney, Australia, given that it was a country that was, during the pandemic, known for enforcing very strict anti-covid measures (Visontay, 2020). In Qatar Airways, it was stated that, even though the middle seat is empty on some flights, their recommendation for the passengers is that, wherever and whenever they can, during flight, they should maintain physical distance among each other, but implement other measures too, in order to protect themselves from possible transmission of the virus (A. Cornwell, 2020). Still, as many other anti-covid measures in transport, it still remains clear how airlines made decisions regarding on what flights will the reduction of seats available to passengers be implemented, leaving much space for the assumption that this is one issue the airlines made decisions at their own disposal. Moreover, it is unclear when will this security measure stop being imposed and to what extent.

### **Meal service during flights: prevention from transmission of virus via food consumption**

Delivery of meals on flights in a timely manner is one of the basic tasks of the cabin crew (besides ensuring safety of passengers on flight). This task was put on a serious test since the beginning of the pandemic. The companies changed the method

of servicing meals (as well as the content, that is, presentation of meals) many times, and as previously stated regarding the case of Qatar Airways, returning to the pre-covid meal service standard in business and first class was introduced only in December 2021, which speaks of the fact that this was a challenge for companies for a long period of time. Apart from the fact that in November 2020 there were certain announcements that meal servicing will return to normal (M. Caswell, 2020), Emirates still lists on their website that the presentation of meals is changed in order to reduce the contact of passengers with the cabin crew upon food servicing to a minimum, as well as in order to maintain the hygienic standards to the fullest (Emirates, 2021). At one moment, for example, Qatar Airways introduced implementation of disposable menu cards, while the previous practice, as it was the case with the majority of other airlines, implied the cabin crew collecting all menu cards by the end of the flight so that they could be used once again, not only upon return, but on future flights as well. It should be mentioned that, in the Middle Eastern airlines, it has, too, become a practice that, upon provision of service, the cabin crew should wear white see-through paper robes, intended for single use only. Benet Stevens from the Sales Department of Qatar Airways confirmed that the cabin crew, besides protective robes, also wears masks, gloves, but protective goggles as well (Travel Daily Media, 2021). The measure implemented in order to maintain security and health of passengers when consuming meals during flight, even though primarily based on the measure of maintaining physical distance between the passengers on one side and the cabin crew on the other, was also implemented in order to minimize the possibility of transmission of virus via food consumption. Namely, even though the Food and Drug Administration stated in February 2021 that the existing epidemiological research does not point to the chance that coronavirus can be transmitted upon food consumption or in case of contact with the package containing the food, this topic still remains controversial in scientific circles. This was noticed by the airlines and thus, for example, in Qatar Airways, practice of servicing covered meals and wrapped cutlery were introduced in business and first class.

## OTHER NEW HYGIENIC MEASURES IN ACTION DURING FLIGHTS: RISK MINIMIZATION

The flights might vary from very short, lasting less than one hour, to extremely long ones. The longest flight world-wide nowadays is officially the flight from New York to Singapore, organized by Singapore Airlines, lasting 18 hours and 40 minutes (Statista, 2021). On long flights, the cabin crew must be prepared for different contingencies that can be numerous, especially in the conditions of the coronavirus pandemic, when, for example, it might happen that some passengers recognize the first symptom of the virus when the plane has already taken off. At that point, the crew must have two things in mind – first, that the passenger is potentially infected and thus that they must, somehow, protect the other passengers, as well as themselves, from falling ill; secondly, the passenger might not be infected, but due to fear and panic arising from the recognized symptoms, other sorts of problems might occur as well. For example, the passenger might face different form of health problems due to emotional reaction and shock, or problems with other passengers might occur, given that they might have an aggressive reaction towards a passenger sitting near them, if that person shows signs of severe problems with coughing, sneezing or fatigue, or they might even react aggressively towards others around them or even the cabin crew. Because of that, the companies made an effort to introduce different security measures on flights in order to reduce the risk of infection and transmission of coronavirus among the passengers. Emirates introduced in April 2020, even before the majority of other airlines, the so-called personal protection package for all the employees who in any way have direct contact with the passengers – at the time, the equipment included a visor, a see-through robe, a mask and a pair of gloves. On the other hand, the passengers were provided with special packages consisting of a pair of gloves, a mask and hand sanitizer – such package is nowadays being offered to passengers in the majority of big airlines. Besides that, one of the first measures introduced by this company was suspension of offering daily newspapers and other magazines during flight. For a certain period

of time, the measure of prohibition of cabin baggage, except the indispensable things, such as working laptops and baby bags, was in action (Association of Tennis Players [ATP], 2020). Qatar Airways went a step further from the others by introducing the technology which enables the passengers to link their own electronic devices to the “Oryx-one” system of entertaining content, including movies, series and music that can be watched/listened to by the passengers during flight. This practically means that the passengers are given a chance to use this service without physically touching the screens installed on the seats in front of them – instead, they will only be touching their own devices. This possibility, according to Benet Stevens, a representative of the company, is being provided on Airbus 350 (Travel Daily Media, 2021). This company also became the first global carrier which introduced the Honeywell’s ultra-violet cabin system since, according to the president of the Honeywell Aerospace EMEAI, James Currier, this mechanism contains certain technologies that make the entire process of travelling on airports and in airplanes safer. Namely, clinical studies have shown that UV lights, if used in defined dosages, might have a positive impact on elimination of harmful effects of bacteria and viruses on humans (Haber, 2020).

### **New security measures on airplanes: robots and scanning of passengers**

As one of additional security measures during the pandemic, Qatar Airways implemented the use of UV-C robots for disinfection at their main international airport Hamad (T. Pallini, 2021). The robots are installed at the airport in the areas where passengers frequent most often, in order to reduce the spread of pathogens with UV-C lights (Travel Daily Media, 2021). A portal that conducts analyses and publishes news regarding biggest international airports stated in October 2020 that the crisis caused by the coronavirus opened the doors for the artificial intelligence to enter airports, all for the purpose of enabling the continuance of smooth functioning of transport of passengers world-wide. Practically, the message passed is that, without opening a wider space for artificial intelligence,



it won't be possible to ensure the further functioning of airports in the new living conditions. Gathering enormous amounts of data and their centralization is put on the top of the list of benefits generated from the use of artificial intelligence in airline industries, given that the use of derived aphorisms might be used for predicting future challenges and threats for which the airline industry must be ready in the years to come (International Airport Review [IAR], 2021). This implies not only a higher possibility for the airports to adjust to living with the coronavirus pandemic and other potential similar crises in the future, but also more advanced abilities to protect the health of the passengers. More or less, all three Middle Eastern airlines have adjusted to other, nowadays already "normal" procedures to which the passengers are accustomed – scanning of passengers in order to determine their body temperatures, wide availability of disinfectants, obligation to wear masks while performing procedural activities, etc. Regular disinfection of all surfaces with which the passengers come to contact was "normalized" as well (for example, in Qatar Airways, every 15 minutes), including regular cleaning and disinfection of holders in buses transporting the passengers from the airport to the plane, where they board for their flights.

### **THE NEW "GREEN" REALITY: DIGITAL COVID-CERTIFICATES AS TRAVELLING VISAS**

Another big change faced by airlines and passengers, but state administrations world-wide as well, is the emergence of the so-called "digital green certificates" which were, depending on the country and the situation in which they are used, also called "covid certificates", "covid passports", "green passports", etc. Israel was among the first countries to introduce green certificates in the conditions of the coronavirus pandemic (McDonagh & Gallagher, 2021). We are speaking of a document that proves that the owner of such certificate is an individual that is either completely vaccinated against the coronavirus (this currently means at least two-times vaccination) or that the said individual was infected with the virus and then recovered (most often, we are speaking of a limited period of the

previous six months, during which the green certificate is being used). In travelling conditions, this document has nowadays practically become an integral part of complete documentation necessary for free crossing the borders. The countries of the Middle East were not an exception as well. The condition for entering the United Arab Emirates currently is “full vaccination” by some of the vaccines approved by the World Health Organization (Covid19 vaccine tracker, 2022), and with the emergence of omicron strain of the coronavirus (Tanjug, 2021), an increasing number of African countries can be found on the list of countries which citizens are not allowed to enter Dubai. The said prohibition of entry is valid even for individuals who spent some time in the said countries in the past 14 days, no matter whether they are citizens of the said countries or not. Of course, as it can be seen on the Emirates website, there are always certain exemptions from the rules regarding entering UAE, which usually refer to special medical cases or members of the diplomatic core (Emirates, 2022). More or less, “digital green certificate” functions in a similar way as the necessary “visa” for entering Qatar, and the differences from country to country are usually of procedural type, either regarding the exemptions from the rule, or regarding the rules of travel from certain countries due to constant changes of rules imposed by the pandemic. One part of necessary documentation nowadays is also the proof of negative PCR test (Garibyan & Avashia, 2013) – the decision passed by the United Arab Emirates officials, where Emirates and Etihad are headquartered, is that such test must not be older than 48 hours (Emirates, 2022), while entering Qatar, where Qatar Airways is headquartered, asks for a valid test not older than 72 hours (Ministry of Public Health, 2022) upon arrival to the Qatari border.

## CONCLUSION

Even though it is still early to say that the airlines in the Middle East have completely adjusted to the coronavirus pandemic, the trend of recovery is evident, and it emerges from the obligatory new security measures introduced with the goal of preserving the health and security of passengers during travels. Given that the

trends of digitalization and introduction of artificial intelligence are evidently present in an increasing number of segments of functioning of airports worldwide, we should probably expect that the future solutions, closely linked to the working conditions in the times of the pandemic, will, too, adjust to new trends. Partial recovery of the three leading airlines in the Middle East was enabled by numerous factors, such as mass immunization, easing down of anti-pandemic measures (especially in terms of opening of borders), and in some cases, the financial aid provided by the government, as well as the readiness of an increased number of people to travel again without fear of the coronavirus. Still, given that there are no signs that the pandemic will end soon, and having in mind the emergence of the new strain of the virus, different attitudes of national governments regarding mandatory vaccination, but also other challenges brought along by the pandemic, the future of the model of work of airlines remains, to a certain point, quite uncertain.

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## **УТИЦАЈ ПАНДЕМИЈЕ КОРОНАВИРУСА НА УВОЂЕЊЕ НОВИХ БЕЗБЕДНОСНИХ МЕРА**

### **Сажетак**

У овом раду истражује се утицај пандемије коронавируса на увођење нових мера безбедности у блискоисточним авио-компанијама. Фокус је стављен на три најутицајније компаније – Qatar Airways, Emirates и Etihad Airways. Смањење броја седишта, а тиме и путника у авиону, одржавање физичке дистанце, нови начини сервирања obroka, употреба робота и вештачке интелигенције, само су неки од аспеката који су разрађени у овом раду. Закључак је да је пандемија коронавируса утицала на промену правила у многим економским областима, укључујући и авио-индустрију. Један од највећих изазова у будућности свакако ће бити баланс између здравствене безбедности путника и профита авио-компаније.

**Кључне речи:** коронавирус, COVID-19, безбедносне мере, авио-компаније, авио-индустрија