



Navigating the Runways: Southeast European Airport Infrastructure Evaluation according to TEN-T requirements



Contents

1.	Intr	Introduction					
2.	. Regulatory aspect and alignment with EU						
3.	Description of TEN- T Comprehensive and Core Airport Network in Western Balkans						
4. We		relopment of indicative TEN- T extensions of the Comprehensive and Core Airport Network in Balkans	12				
4	.1.	Airport Compliance indicators	.12				
4	.2.	Compliance assessment by airport	.13				
4	.3.	Compliance assessment summary	. 15				
5.	Ow	nership Structure and effect on passenger transport flows	.16				
6.	Ong	going Airport Projects	. 19				
6	5.1.	Effect of ongoing project on TEN- T Airport compliance	. 20				
7.	Plar	nned Projects as indicated in the Five-year rolling work plan	.20				
8.	Con	clusion	.21				
Lis	t of	Figures					
Figu	ıre 1	Indicative extension of TEN-T Comprehensive and Core Airports to the Western Balkans Region	n -				
rev	ised r	nap	6				
Figu	ıre 2	Airport passenger transport 2010-2022	. 19				
Lis	t of	Tables					
Tab	Table 1 List of terminal availability						
Tab	Table 2 Ownership structure						



1. Introduction

The Transport Community is an international organisation in the field of mobility and transport. It has 36 participants – the European Union member states represented by the European Commission, the six South East European Parties (the Republic of Albania, Bosnia and Herzegovina, Kosovo*, Montenegro, the Republic of North Macedonia, and the Republic of Serbia) and the three observing participants (Georgia, Republic of Moldova and Ukraine). The organisation was founded by the Treaty establishing the Transport Community signed on 9th of October 2017 by all partners (Council Decision (EU) 2019/392).

Main aim of the TCT is integrating Western Balkans' transport markets into the EU by assisting the six Western Balkans partners in adopting and implementing the EU legislation in the transport field and supporting projects connecting Western Balkans regional partners among themselves and with the EU. The Transport Community is based on the progressive integration of transport markets of the Western Balkan Parties into the EU transport market on the basis of the relevant acquis, including in the areas of technical standards, interoperability, safety, security, traffic management, social policy, public procurement and environment.

Aviation is not included in the Transport Community Treaty, given that development of aviation and integration of Western Balkan with EU has been regulated through the European Common Aviation Area (ECAA) agreement. Ambitious agreement between the partners from South-Eastern Europe: Albania, Bosnia and Herzegovina, North Macedonia, Montenegro, Serbia, Kosovo (on the one side and the European Union, Norway and Iceland on the other side. The ECAA Agreement is a multilateral agreement signed on 9 June 2006. It entered into force on 1 December 2017. The aim of this aviation agreement is the creation of a European Common Aviation Area (ECAA), integrating the EU's neighbours in South-East Europe in the EU's internal aviation market which consists of EU Member States as well as Norway and Iceland. ECAA agreement marked an important step towards a closer and deeper integration of all the economies in the Western Balkan region into the European aviation area that will further enhance growth, connectivity, and competitiveness for all of citizens¹.

However, development of airport infrastructure remains under the Transport Community Treaty. Namely, development of airport infrastructure should follow the requirements set in TEN-T guidelines. They identify terminal availability, road/rail connections to airports, and airport sustainability as critical requirements that all airports in the EU and Western Balkans must adhere to in order to ensure seamless interoperability and connectivity across Europe. This report addresses the current stage of development of airport infrastructure in Western Balkans, airport compliance with TEN-T requirements, analyses passenger flows and ownership structure of the airports located on TEN-T Core and Comprehensive Network.

¹ https://transport.ec.europa.eu/transport-modes/air/international-aviation/status-aviation-relations-country/ecaa en#:~:text=The%20European%20Common%20Aviation%20Area,the%20ICJ%20Opinion%20on%20the

^(*) This designation is without prejudice to positions on status and is in line with UNSCR 1244 (1999) and the ICJ Opinion on the Kosovo declaration of independence.



2. Regulatory aspect and alignment with EU

The European Commission has published its annual progress reports for those aspiring to join the European Union, giving an assessment of what each candidate and potential candidate has achieved over the last year, as well as a set of guidelines on reform priorities, including air transport. Excerpts from the reports that concern aviation are outlined below:

Albania

The Albanian Civil Aviation Authority has a new structure since January 2023, aiming to improve its operability. Currently, oversight duties are covered by outsourced staff. New Ministerial Orders have been adopted on the approval of the national civil aviation security quality control programme and on the national civil aviation security training programme. Alignment with the EU ATM/ANS *acquis* is still not complete and, where the relevant rules are formally aligned, implementation is incomplete. Legislation on passenger rights is largely aligned with EU legislation.

To comply with the requirements for the first transitional phase under the European Common Aviation Area Agreement (ECAA), Albania still needs to address the findings raised by the EU Aviation Safety Agency (EASA) during its standardisation inspection in 2022 on air traffic management (ATM) and air navigation services (ANS) ².

Bosnia and Herzegovina

Preparation for civil aviation is still at a standstill. Although the Air Navigation Services Agency has been operational since December 2019, the 2009 Law on civil aviation still needs be aligned with the requirements of the European Common Aviation Area Agreement (ECAA). Bosnia and Herzegovina urgently needs to address the lack of adequately trained and qualified staff and the institutional set-up within the Bosnia and Herzegovina Directorate of Civil Aviation (BHDCA), which increases the risks of safety oversight. Although the new management has been in place for more than 2 years, it has not yet addressed this issue. There is no progress in harmonising legislation with the EU Regulation on passenger rights. Bosnia and Herzegovina needs to enhance the independence of the civil aviation regulator to reverse the negative trend³.

Kosovo

On air transport, Kosovo is part of the European Common Aviation Area (ECAA)) and is also covered by the single European sky arrangements. The sector continues to face a number of challenges arising from Kosovo's non-membership in several international civil aviation organisations. KFOR/NATO still manages and coordinates upper Kosovo airspace. The institutional shortcomings of the Air Navigation Service Agency

² COMMISSION STAFF WORKING DOCUMENT, Albania 2023, Report Accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 2023 Communication on EU Enlargement policy

³ COMMISSION STAFF WORKING DOCUMENT Bosnia and Herzegovina 2023 Report Accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 2023 Communication on EU Enlargement policy



and the Civil Aviation Authority, as well as the lack of revenue from upper airspace management, remain an issue. The ongoing staff-management issues in the Civil Aviation Authority remain unsolved and may have a negative impact on the functioning of the Authority. Its upcoming reorganisation and administrative reforms should reflect public administration reform principles, as well as the aviation sector's specific circumstances and requirements. More efforts are needed to continue the alignment with the remaining ECAA first-phase items. Kosovo made some progress with the second phase of ECAA requirements, on aviation safety matters⁴.

Montenegro

As regards aviation, in April 2023, the Parliament ratified amendments to the European Common Aviation Area Agreement and its Annex I, on the rules applicable to civil aviation. However, the law was not signed by the president. Certification of Podgorica airport was successfully finalised in May 2023, the procedure is still ongoing for Tivat airport. The adoption of several implementing laws during 2023 provided further alignment on common rules in the field of civil aviation, air safety and air traffic operations. In November 2022, the national airline company, To Montenegro, received an Operational Safety Audit certificate from the International Air Transport Association. The company currently operates four aircrafts and slowly develops its connection network⁵.

North Macedonia

In the area of aviation, the country has maintained a good level of alignment with the EU *acquis* and has partially aligned with the aviation safety legislation. Further efforts are still needed to facilitate European Aviation Safety Agency standardisation inspections.⁶

Serbia

Serbia has a good level of alignment with the EU *acquis* on aviation. During the reporting period, Serbia adopted several regulations on aerodrome certificates, rules of the air and provision of air traffic control, alerting and flight information services, conditions for performing air operations, and common basic standards on civil aviation security. Regarding aviation regulations, Serbia is close to fulfilling all obligations stipulated in the first transitional period of the European Common Aviation Area Agreement. However, Serbia still needs to further align its secondary legislation on State aid with the *acquis* and provide a solid track record in the implementation of laws on protection of competition and State aid control. In the domain of aviation safety, the European Union Aviation Safety Agency continues monitoring the implementation of EU safety standards. On the Single European Sky, Serbia completed its alignment process. No progress was made regarding lifting the suspension of articles on the licensing of air carriers

⁴ COMMISSION STAFF WORKING DOCUMENT Kosovo 2023, Report Accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 2023 Communication on EU Enlargement policy

⁵ COMMISSION STAFF WORKING DOCUMENT Montenegro 2023 Report Accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 2023 Communication on EU Enlargement policy

⁶ COMMISSION STAFF WORKING DOCUMENT North Macedonia 2023 Report Accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 2023 Communication on EU Enlargement policy



and the normalisation of the lower airspace regime over Kosovo, which remain important priorities. Serbia needs to apply Regulation (EC) No 1008/2008 on common rules for the operation of air services in the Community, as incorporated into the European Common Aviation Area Agreement⁷.

3. Description of TEN- T Comprehensive and Core Airport Network in Western Balkans

Currently, ten airports (Tirana, Sarajevo, Banja Luka, Prishtina, Podgorica, Skopje, Ohrid, Belgrade, Kraljevo, Niš) are part of the TEN-T Comprehensive Network in the Western Balkans, six of which are located on the Core Network (Tirana, Sarajevo, Podgorica, Skopje, Belgrade). While with the revision of the TEN-T Guidelines there is an addition of one more Comprehensive Network airport in Montenegro, airport Tivat.



Figure 1 Indicative extension of TEN-T Comprehensive and Core Airports to the Western Balkans Region - revised map

⁷ COMMISSION STAFF WORKING DOCUMENT Serbia 2023 Report Accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 2023 Communication on EU Enlargement policy



Podgorica Airport

Podgorica Airport is a core airport in the Western Balkans and an important node in the Trans-European Transport Network (TEN-T). The airport is owned by the Government of Montenegro, holding 100% ownership. Podgorica Airport operates passenger and freight activities, making it a significant transport hub for the region. The airport's condition is reported as "Good," ensuring high-quality services for travellers and cargo.

Podgorica Airport features one runway and a single passenger terminal. In terms of airport classifications, Podgorica is categorized as a "Level 1 (Non-Coordinated Airport)" based on the IATA Landing Slot Classification. Under the ICAO Airport Classification, it falls into "Code D," indicating that it can accommodate airplanes with wingspans ranging from 36 meters up to less than 52 meters and outer main gear wheel spans from 9 meters up to less than 14 meters. The ILS Category for Podgorica Airport is "I."

The longest runway at Podgorica Airport stretches 2500 meters, offering sufficient space for aircraft operations. The passenger terminals area spans 5500 square meters, while the apron area, where aircraft park, covers an area of 59500 square meters⁸.

Prishtina International Airport

The airport is owned by the Government of Kosovo, holding 100% ownership but managed and operated by Limak and Aeroports de Lyon under a concession agreement. The consortium took over following a public private partnership agreement signed in 2010. Since then, Limak has built a new 42.000 m2 terminal with adjoining buildings capable of handling 4 million passengers. The consortium will continue to manage and operate Prishtina International Airport for 20 years from the date of the agreement, transferring its assets into the Government of Kosovo after this period.

The airport's condition is reported as "Very Good," ensuring excellent services for travellers and cargo. Prishtina International Airport features one runway and a single passenger terminal. In terms of airport classifications, Prishtina is categorized as a "Level 2 (Schedules Facilitated Airport)" based on the IATA Landing Slot Classification. Under the ICAO Airport Classification, it falls into "Code E," indicating that it can accommodate airplanes with wingspans ranging from 52 meters up to less than 65 meters and outer main gear wheel spans from 9 meters up to less than 14 meters. The ILS Category for Prishtina International Airport is "I."

The longest runway at Prishtina International Airport stretches 3040 meters, offering sufficient space for aircraft operations. The passenger terminals area spans 15680.7 square meters, while the apron area, where aircraft park, covers an area of 118534 square meters⁹.

⁸ Source: TODIS data base and Regional Partners data

⁹ Source: TODIS data base and Regional Partners data



Skopje International Airport

Skopje International Airport is a Core Network airport, that operates under a concession agreement, with the Grantor being the North Macedonia Government and the Concessionaire being TAV Airports. In 2008, the Macedonian Government granted TAV Airport holding company-the concession for two Macedonian airports - Skopje and Ohrid. TAV's key investments at Skopje have been a new terminal, new administration building, new cargo terminal, and an extended runway. In 2011, TAV a modern terminal opened for up to 3.2 million passengers' capacity. The airport recorded a rapid increase in passenger numbers which rose by 20% annually between 2013 and 2015. Since 1990, passenger traffic has grown from 312,492 to 2,358,548 in 2019.

Skopje International Airport operates passenger and freight activities, making it a vital transport hub for the region. The airport's condition is reported as "Good," ensuring high-quality services for travelers and cargo.

Skopje International Airport features one runway and a single passenger terminal. In terms of airport classifications, Skopje is categorized as a "Level 2 (Schedules Facilitated Airport)" based on the IATA Landing Slot Classification. Under the ICAO Airport Classification, it falls into "Code D," indicating that it can accommodate airplanes with wingspans ranging from 36 meters up to less than 52 meters and outer main gear wheel spans from 9 meters up to less than 14 meters. The ILS Category for Skopje International Airport is "I."

The longest runway at Skopje International Airport stretches 2950 meters, offering sufficient space for aircraft operations. The passenger terminals area spans 40000 square meters, while the apron area, where aircraft park, covers an area of 90000 square meters. Skopje Airport has a runway capacity of 22 aircraft movements per hour and a freight capacity of 8000 tons per year¹⁰.

Ohrid St. Paul the Apostle Airport

Ohrid St. Paul the Apostle Airport is a Comprehensive Network airport in the Trans-European Transport Network (TEN-T). The airport operates under a concession agreement, with the Grantor being the North Macedonia Government and the Concessionaire being TAV Airports from 2008. Ohrid St. Paul the Apostle Airport operates passenger and freight activities.

The last reconstruction of Ohrid Airport was in 2004, when an up-to-date lighting system was installed, together with a new system of access lights. Other features of the airport enable take-off, landing, maneuvering and acceptance of aircraft of the smallest category, up to the reference TU 154 type. However, the airport's condition is reported as "Good," ensuring high-quality services for travellers and cargo.

¹⁰ Source: TODIS data base and Regional Partners data



Ohrid St. Paul the Apostle Airport features one runway and a single passenger terminal. In terms of airport classifications, Ohrid is categorized as a "Level 1 (Non-Coordinated Airport)" based on the IATA Landing Slot Classification. Under the ICAO Airport Classification, it falls into "Code D," indicating that it can accommodate airplanes with wingspans ranging from 36 meters up to less than 52 meters and outer main gear wheel spans from 9 meters up to less than 14 meters. The ILS Category for Ohrid St. Paul the Apostle Airport is "I."

The longest runway at Ohrid Airport stretches 2548 meters, offering sufficient space for aircraft operations. The passenger terminals area spans 3233 square meters, while the apron area, where aircraft park, covers an area of 35100 square meters, with passenger capacity of 400,000 per year¹¹.

Nis Constantine the Great Airport

Nis Constantine the Great Airport is a TEN-T Comprehensive Network airport, fully owned by the State, with the Government of Serbia holding 100% ownership. Nis Airport operates passenger and freight activities, and airport's condition is reported as "Medium," ensuring satisfactory services for travellers and cargo.

Nis Constantine the Great Airport features one runway and a single passenger terminal. In terms of airport classifications, Nis is categorized as a "Level 2 (Schedules Facilitated Airport)" based on the IATA Landing Slot Classification. Under the ICAO Airport Classification, it falls into "Code D," indicating that it can accommodate airplanes with wingspans ranging from 36 meters up to less than 52 meters and outer main gear wheel spans from 9 meters up to less than 14 meters. The ILS Category for Nis Constantine the Great Airport is not specified in the data.

The longest runway at Nis Airport stretches 2500 meters, offering sufficient space for aircraft operations. The passenger terminals area spans 2290 square meters, while the apron area, where aircraft park, covers an area of 27500 square meters. Nis Airport has a runway capacity of 6 aircraft movements per hour and a specific passenger capacity of 500,000 passengers.

Morava Airport (Kraljevo Airport)

Morava Airport, also known as Kraljevo Airport, is a TEN-T Comprehensive Network airport, fully owned by the State, with the Government of Serbia holding 100% ownership. Morava Airport operates passenger activities, making it a key transport hub for the region. The airport's condition is reported as "Good," ensuring high-quality services for travellers.

Morava Airport features one runway and a single passenger terminal. In terms of airport classifications, Morava is categorized as a "Level 2 (Schedules Facilitated Airport)" based on the IATA Landing Slot Classification. Under the ICAO Airport Classification, it falls into "Code C," indicating that it can accommodate airplanes with wingspans ranging from 24 meters up to less than 36 meters and outer main

¹¹ Source: TODIS data base and Regional Partners data



gear wheel spans from 6 meters up to less than 9 meters. The ILS Category for Morava Airport is not specified in the data.

The longest runway at Morava Airport stretches 2265 meters, offering sufficient space for aircraft operations. The passenger terminals area spans 4966 square meters, while the apron area, where aircraft park, covers an area of 4897 square meters¹².

Belgrade Nikola Tesla Airport

Belgrade Nikola Tesla Airport is a Core Network airport in the Western Balkans and an important node in the Trans-European Transport Network (TEN-T). The airport operates under a concession agreement, with the Grantor being the Republic of Serbia Government and the Concessionaire being VINCI Airports. The Vinci Airports international company took over the management of Nikola Tesla Airport on 21 December 2018 by concession. Through a €730 million investment plan, the goal is to grow passenger numbers to 15 million by 2043.

By signing a 25-year concession contract with the Serbian government, VINCI Airports is committed to transforming the airport into a benchmark hub in South-Eastern Europe: opening new lines, improving flows, enhancing deployment of environmental policy. Belgrade Nikola Tesla Airport operates passenger and freight activities, making it an essential transport center for the region. The airport's condition is reported as "Good," ensuring high-quality services for travellers and cargo¹³.

Belgrade Nikola Tesla Airport features one runway and a single passenger terminal. In terms of airport classifications, Belgrade is categorized as a "Level 1 (Non-Coordinated Airport)" based on the IATA Landing Slot Classification. Under the ICAO Airport Classification, it falls into "Code E," indicating that it can accommodate airplanes with wingspans ranging from 52 meters up to less than 65 meters and outer main gear wheel spans from 9 meters up to less than 14 meters. The ILS Category for Belgrade Nikola Tesla Airport is "III B."

The longest runway at Belgrade Airport stretches 3400 meters, offering sufficient space for aircraft operations. The passenger terminals area spans 54000 square meters, while the apron area, where aircraft park, covers an area of 162700 square meters. Belgrade Airport has a runway capacity of 37 aircraft movements per hour and a freight capacity of 30,000 tons per year.

Banja Luka International Airport

Banja Luka International Airport is a TEN-T Comprehensive Network airport, that operates under a mixed ownership type, with the Government of the Republika Srpska (entity ownership) holding 93% ownership, and the remaining 7% is owned by a private entity.

¹² Source: TODIS data base and Regional Partners data

¹³ https://beg.aero/eng



Banja Luka International Airport operates passenger and freight activities, making it an important transport hub for the region. The airport's condition is reported as "Good," ensuring high-quality services for travellers and cargo.

Banja Luka International Airport features one runway and a single passenger terminal. In terms of airport classifications, Banja Luka is categorized as a "Level 1 (Non-Coordinated Airport)" based on the IATA Landing Slot Classification. Under the ICAO Airport Classification, it falls into "Code D," indicating that it can accommodate airplanes with wingspans ranging from 36 meters up to less than 52 meters and outer main gear wheel spans from 9 meters up to less than 14 meters. The ILS Category for Banja Luka International Airport is "I."

The longest runway at Banja Luka Airport stretches 2500 meters, offering sufficient space for aircraft operations. The passenger terminals area spans 1632.4 square meters, while the apron area, where aircraft park, covers an area of 16200 square meters¹⁴.

Sarajevo International Airport

Sarajevo International Airport is a Core Network airport, fully owned by the Federation of Bosnia and Herzegovina (entity ownership), with the entity holding 100% ownership. Sarajevo Airport operates passenger and freight activities, making it an essential transport center for the region. The airport's condition is reported as "Medium," ensuring satisfactory services for travellers and cargo.

Sarajevo International Airport features one runway and a single passenger terminal. In terms of airport classifications, Sarajevo is categorized as a "Level 3 (Coordinated Airport)" based on the IATA Landing Slot Classification. Under the ICAO Airport Classification, it falls into "Code D," indicating that it can accommodate airplanes with wingspans ranging from 36 meters up to less than 52 meters and outer main gear wheel spans from 9 meters up to less than 14 meters. The ILS Category for Sarajevo International Airport is "I."

The longest runway at Sarajevo Airport stretches 2600 meters, offering sufficient space for aircraft operations. The passenger terminals area spans 9350 square meters, while the apron area, where aircraft park, covers an area of 38000 square meters. Sarajevo Airport has a runway capacity of 10 aircraft movements per hour¹⁵.

Tirana International Airport

Tirana International Airport (TIA) is a Core Network Airport in the Trans-European Transport Network (TEN-T). In 2005, Tirana International Airport took over Rinas Airport which was handling about 600,000 passengers at the time under a Concession Agreement for Tirana International Airport SHPK (TIA, a consortium comprising HOCHTIEF AirPort, DEG Deutsche Investitions- und Entwicklungsgesellschaft and the Albanian-American Enterprise Fund). In December 2016, the airport announced that it had served 2

¹⁴ Source: TODIS data base and Regional Partners data

¹⁵ Source: TODIS data base and Regional Partners data



million passengers in 2016. By 2019, this had increased to 3.3 million passengers, showing significant growth. Due to the Covid 19 pandemic, in 2020, the traffic was reduced to ca. 1.3 million passengers, but airport has recovered since. Since 2005, more than EUR 70 million have been invested in developing and expanding the Airport.

On 1 April 2016, the Government of Albania and TIA signed an amendment to the Concession Agreement of TIA and took a major step towards the development of air transport and the liberalization of international flights in Albania. The Concession Period of TIA was extended by two years, i.e. until April 2027, in exchange for allowing the development of a further airport in Vlora in the future. On October 6, 2016 China Everbright Limited (CEL stock exchange code: 165.HK), an international investment and asset management company based in Hong Kong, acquired 100% of TIA's share capital. As of December 18, 2020 Kastrati Group SHA, a leading independent company based in Albania, established in 1990, owns 100% of the share capital of Tirana International Airport¹⁶ operations while the ownership of the airport is 100% Government.

Tirana International Airport operates passenger and freight activities, making it an essential transport hub for the region. The airport's condition is reported as "Good," ensuring high-quality services for travelers and cargo.

Tirana International Airport features one runway and a single passenger terminal. In terms of airport classifications, Tirana is categorized as a "Level 1 (Non-Coordinated Airport)" based on the IATA Landing Slot Classification. Under the ICAO Airport Classification, it falls into "Code C," indicating that it can accommodate airplanes with wingspans ranging from 24 meters up to less than 36 meters and outer main gear wheel spans from 6 meters up to less than 9 meters. The ILS Category for Tirana International Airport is not specified in the data.

The longest runway at Tirana Airport stretches 2746 meters, offering sufficient space for aircraft operations. The passenger terminals area spans 16150 square meters, while the apron area, where aircraft park, covers an area of 76000 square meters. Tirana Airport has a runway capacity of 12 aircraft movements per hour and a freight capacity of 2500 tons per year¹⁷.

4. Development of indicative TEN- T extensions of the Comprehensive and Core Airport Network in Western Balkans

4.1. Airport Compliance indicators

The legal framework for the development of the Indicative Extension of TEN-T Core and Comprehensive Network regarding airports is contained in Regulation (EU) 1315/2013 together with Commission

¹⁶ https://www.tirana-airport.com/en

¹⁷ Source: TODIS data base and Regional Partners data



Regulation (EU) 2016/758 amending Regulation (EU) No 1315/2013. The compliance indicators for airports derive from TEN-T Regulation 1315/2013 where they are mentioned as infrastructure requirements. In this report, the following compliance indicators for airports in the Western Balkans will be assessed:

- a) Rail connection;
- b) Clean fuels applicable only to Core Network Airports;
- c) Terminal availability at least one terminal is open to all operators in a non- discriminatory way and applies transparent, relevant and fair charges.

4.2. Compliance assessment by airport¹⁸

Conclusions for each compliance standard are provided below.

Podgorica Airport has a runway capacity of 12 and handled a total of 1,322,016 passengers during 2022, with the capacity used percentage standing at 132.2%, indicating that the airport is operating above its capacity threshold. The airport operates internationally and does not offer rail connections or clean fuels availability. Nonetheless, the terminal remains operational and accessible. Podgorica Airport's passenger capacity is reported as 1,000,000, and the data is valid for the year 2022.

Prishtina International Airport has a runway capacity of 12 and handled a total of 2,9 million passengers during 2022, with the capacity used percentage at 72.5%. The airport operates internationally and offers public bus shuttle connections but does not have rail connection. Prishtina Airport does not require an upgrade to increase its capacity or runway length. The airport's passenger capacity is reported as 4,000,000.

Skopje International Airport operates internationally and offers public bus shuttle connections but does not have rail connection. During 2022, Skopje Airport handled a total of 1,269,224 passengers, and the capacity used stands at 39.66%, indicating that the airport is operating below half of its capacity threshold. The airport does not offer clean fuels availability, and the terminal remains operational and accessible. Skopje Airport's passenger capacity is reported as 3,200,000, and the data is valid for the year 2022.

Ohrid St. Paul the Apostle Airport operates internationally and offers public bus shuttle connections but does not have rail connection. During 2022, Ohrid Airport handled a total of 122,154 passengers, and the capacity used percentage stands at 30.53%, indicating that the airport is operating below one-third of its capacity threshold. The terminal remains operational and accessible, with a passenger capacity of 400,000. The data is valid for the year 2022.

Nis Constantine the Great Airport operates internationally and offers public bus shuttle connections but does not have rail connection. According to the data, the airport requires an upgrade to increase its overall capacity but does not need a runway length upgrade. During 2022, Nis Airport handled a total of 430,000

_

¹⁸ Source: TODIS data base and Regional Partners data



passengers, and the capacity used percentage stands at 84%, indicating that the airport is operating at four-fifths of its capacity threshold. The data states that Nis Constantine the Great Airport does not offer clean fuels availability, and the terminal remains operational and accessible. The data is valid for the year 2022.

Morava Airport operates internationally and offers public bus shuttle connections but does not have rail connection. According to the data, the airport requires an upgrade to increase its runway length but does not need an upgrade to increase its overall capacity. During 2022, Morava Airport handled a total of 1,500 passengers. Nonetheless, the terminal remains operational and accessible. The data is valid for the year 2022.

Belgrade Nikola Tesla Airport operates internationally and offers other public bus shuttle connections but does not have rail connection. During 2022, Belgrade Airport handled a total of 3,285,760 passengers, and the capacity used percentage stands at 32%, indicating that the airport is operating at half of its capacity threshold. The data states that Belgrade Nikola Tesla Airport offers clean fuels availability, implying that it utilizes clean energy sources for its operations. The terminal remains operational and accessible, with a passenger capacity of can handle 10 million passengers a change in 2023 from 2022 when it could handle 7.5 million passengers.

Banja Luka International Airport operates internationally and offers public bus shuttle connections but does not have rail connection. According to the data, the airport requires an upgrade to increase its overall capacity but does not need a runway length upgrade. During 2022, Banja Luka Airport handled a total of 139,882 passengers. The data does not provide information on the capacity used percentage, passenger capacity, or clean fuels availability. Nonetheless, the terminal remains operational and accessible. The data is valid for the year 2022.

Sarajevo International Airport operates internationally and offers public bus shuttle connections but does not have rail connection. According to the data, the airport requires an upgrade to increase its overall capacity and runway length since its capacity with 1.37 million passengers in 2022 is almost reached. Current passenger capacity is 1.5 million passengers.

Tirana International Airport operates internationally and does offer public bus shuttle connections but does not have rail connection. However, there is an ongoing project to connect airport with rail connection. According to the data, the airport requires an upgrade to increase its overall capacity and runway length. During 2022, Tirana Airport handled a total of 5.2 million passengers, well above its capacity threshold. The data does not provide information on clean fuels availability. Nonetheless, the terminal remains operational and accessible, with a passenger capacity of 2,000,000. The data is valid for the year 2022.



4.3. Compliance assessment summary

a) Connection to other modes

A key condition to ensure interoperability of the airports of the TEN-T Network is their connection to the railway network. Currently, no airports have a direct rail connection, and all have motorway/expressway connection and public transport availability¹⁹.

b) Availability of alternative fuels

Currently, no fixed storage tank facilities for aviation biofuel are reported to be in use at Sarajevo, Podgorica, Belgrade, Skopje, Ohrid, Nis, Kraljevo or Prishtina. Alternative fuels for airport ground services are available to some extent in Belgrade, Sarajevo, Skopje, Nis and Kraljevo airports.

It should be pointed out, that this criterion is to be applied according to market requirements and that airports need to be prepared to make alternative clean fuels available when the need arises, as cited in the regulation, 'for air transport infrastructure: capacity to make available alternative clean fuels'²⁰.

However, Airports in the Western Balkans have taken significant steps to address their CO2 emissions. They have joined the @AirportCO2 programme, which was developed by the Airports Council International (ACI). This initiative, known as Airport Carbon Accreditation, is governed by ACI EUROPE in collaboration with four ACI regions and with the support of ACI World. Airport Carbon Accreditation is the only institutionally endorsed, global carbon management certification programme for airports. It independently assesses and recognises the efforts of airports to manage and reduce their carbon emissions through 6 levels of certification: 'Mapping', 'Reduction', 'Optimisation', 'Neutrality', 'Transformation' and 'Transition'.

Currently, there are 34 airports in world that have achieved carbon neutrality. Among them is Prishtina Airport (PRN), which has successfully neutralized its carbon footprint. Moreover, 85 airports have actively worked to reduce their CO2 emissions. Notable examples from Western Balkans region include Belgrade Airport (BEG) and Tirana Airport (TIA). Additionally, 71 airports have conducted assessments and mapped their carbon footprints. Noteworthy airports in this regard are Sarajevo International Airport, Tivat Airport (TIV), and Podgorica Airport (TGD). By actively participating in the Airport Carbon Accreditation programme, airports in the Western Balkans are demonstrating their commitment to environmental sustainability and taking concrete actions to mitigate their impact on climate change. These efforts are praiseworthy and contribute to the global aviation industry's collective commitment to a greener and more sustainable future²¹.

¹⁹ Source: TODIS data base and Regional Partners data

²⁰ Source: TODIS data base and Regional Partners data

²¹ https://www.airportco2.org/



c) Terminal availability

All airports are open to international traffic with foreign air-carriers operating in and out. Some airports such as Tirana, Podgorica, Sarajevo, and Nis reached, or came close to reaching, their capacity limit²².

Terminal availability Regional Airport partner Open to international traffic Enough terminal capacity²³ Albania Tirana Yes No Bosnia and Yes Sarajevo Yes Herzegovina Banja Luka Yes Yes North Skopje Yes Yes Macedonia Ohrid Yes Yes Kosovo Prishtina Yes Yes Montenegro Podgorica Yes No Serbia Yes Yes **Beograd** Nis Yes Yes

Yes

Yes

Table 1 List of terminal availability

5. Ownership Structure and effect on passenger transport flows

Kraljevo

There are two main types of managing airports: purely publicly owned and controlled or Public Private Partnership (PPP) through concession agreements. Both approaches offer advantages and disadvantages. PPP brings significant advantages to airport development and management. They expedite infrastructure projects by leveraging private sector expertise and resources, resulting in faster delivery to meet growing travel demands. Private partners introduce innovation and technological enhancements that improve passenger experiences, safety, and security. These innovations span from modern terminal facilities to advanced security measures and digital passenger services. Moreover, PPPs ease the financial burden on governments, allowing resources to be redirected to other vital public projects. Governments can also generate revenue through concession fees, profit sharing, or revenue-sharing mechanisms with private partners, benefiting public infrastructure and services.

While PPPs offer substantial benefits, they come with complexities. The intricate arrangements, multiple stakeholders, regulatory hurdles, and complex financing structures can lead to prolonged negotiations and disputes, potentially delaying project implementation. Financial risks, stemming from passenger

²² Source: TODIS data base and Regional Partners data

²³ Based on the 2022 passenger volume data



fluctuations or unforeseen events like pandemics, pose a significant challenge to private partners, impacting their financial stability and potentially leading to conflicts with the government. Additionally, the long-term commitment required by PPP agreements, spanning decades, can be vulnerable to changing circumstances and priorities, introducing uncertainties. Concerns also exist that private ownership may prioritize profits over public interests, affecting accessibility, pricing, and service quality. Striking the right balance between private sector efficiency and public sector accountability is crucial for successful PPPs in airport development and management.

As reported before, airport in the region is all state owned, however many of them are operated under concessionaire agreements. Ownership structures of airports in the Western Balkans can be grouped into two main categories: public ownership and concession ownership.

Public Ownership:

Sarajevo International Airport (Bosnia and Herzegovina), Podgorica Airport (Montenegro), Morava Airport (Serbia) and Nis Constantine the Great Airport (Serbia) are fully owned by the respective Government, and they operate under complete public ownership and control.

Banja Luka International Airport (Bosnia and Herzegovina) operates under mixed ownership, with 93% ownership held by the Government of the Republika Srpska (entity ownership) and the remaining 7% owned by a private entity.

Concession Ownership:

Pristina International Airport (Kosovo), owned by the Government of Kosovo, it holds 100% ownership. However, the airport's management and operations are conducted by Limak and Aeroports de Lyon through a concession agreement in 2010.

Skopje and Ohrid International Airports (North Macedonia): operate under a concession agreement, with the North Macedonia Government as the Grantor and TAV Airports as the Concessionaire. The concession for both Skopje and Ohrid airports was granted in 2008.

Belgrade Nikola Tesla Airport (Serbia) is managed under a concession agreement. The Republic of Serbia Government is the Grantor, while VINCI Airports serves as the Concessionaire, taking over airport management in December 2018.

Tirana International Airport (Albania), originally managed by a consortium under a Concession Agreement, it later saw ownership changes. China Everbright Limited acquired 100% of TIA's share capital in 2016. Subsequently, as of December 18, 2020, Kastrati Group SHA owns 100% of Tirana International Airport's operations. Nonetheless, the airport's ownership remains 100% government.



Ownership status significantly influences the management and development of these vital transport hubs, with implications for investment, operations, and future expansion plans.

Table 2 Ownership structure

Economy	Airport	Ownership structure	
		Governance	Year (concession)
Albania	Tirana	Concession (Kastrati Group	2020 (with this
		SHA)	concessionaire, but under
			concessions since 2005
Bosnia and	Sarajevo	Public	NA
Herzegovina	Banja Luka	Public (mostly)	NA
North	Skopje	Concession (TAV Airports)	2008
Macedonia	Ohrid	Concession (TAV Airports)	2008
Kosovo	Prishtina	Concession (Limak and	2010
		Aeroports de Lyon)	
Montenegro	Podgorica	Public	NA
Serbia	Beograd	Concession (VINCI Airports)	2018
	Nis	Public	NA
	Kraljevo	Public	NA
Slovenia	Ljubljana	Concession (Fraport)	2014
Croatia	Zagreb	Concession (ZAIC consortium)	2013

When observing the transport flows, there was a clear upward trend since 2010 until 2019, then sudden drop due to COVID pandemic in 2020. In 2021 and 2022, market recovered with airport reaching (or almost reaching) pre — COVID levels. Additionally, Core airports have shown more steady growth than Comprehensive Network airports, which are struggling to find the constant market demand and right business model, therefore fluctuations from year to year are higher. All regional airports did manifest some variations in transport flows from year to year, however operation was normalised in the years after.

Comparing the transport flows in the region, Belgrade is a frontrunner with flows bypassing other RP airports as well as airports Zagreb and Ljubljana. By October 2023, Belgrade already had 7 million passenger, 26% growth rate in the number of passengers compared to 2019, the last pre-pandemic year.

Tirana, Prishtina and Skopje airport are following where Tirana airport made significant growth in the 2022, completely recovering from COVID and surpassing 2019 passenger volume and came close to matching the figures of Belgrade Airport. Demonstrating even more remarkable growth in the first part of 2023, Tirana Airport welcomed a total of 4.5 million passengers by the end of August.



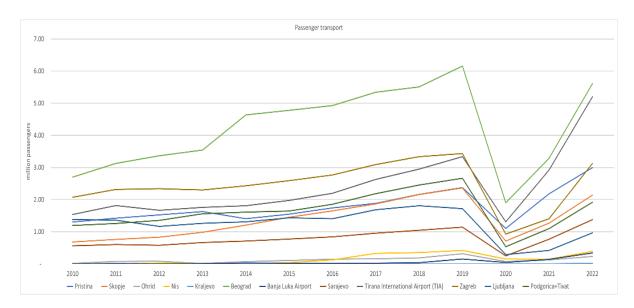


Figure 2 Airport passenger transport 2010-2022²⁴

6. Ongoing Airport Projects

Currently, several ongoing projects address the TEN-T compliance indicators for airports such as: Sarajevo Airport Modernisation; Modernisation and Connection of the Airport to the Railway Network in Tirana, Albania; Terminal Building Expansion in Nis, and Modernisation of Belgrade Airport²⁵.

Several projects for modernization of **Sarajevo Airport** are in the pipeline, aiming to provide more airport capacity. Project of East apron extension with total value of 3.4 million EUR and construction of Business - Administration Building (total value of 3 million EUR) have been completed and put in operation in 2022. Works are currently ongoing for Terminal B Extension and Modernization with a total value of 26.5 million EUR, with the deadline of completion end 2023. Design/Tender Dossier for DB are ongoing for projects of runway reconstruction (value 29.45 million EUR), new rapid exit taxiway (value 3.69 million EUR), new fuel depot (value 2.62 million EUR) and West apron extension (4.09 million EUR), while Design/Tender Dossier for DB under preparation for airport rescue and firefighting center.

Rehabilitation and construction of the 41 km Durres - Tirana line on the Core Network includes connecting **Tirana airport** to the railway line. The cost of the project is estimated at 90.45 million EUR. Projects Apron Extension, Airfield Code E Readiness and Passenger Terminal North Extension and rearrangement of Security Corridor (Phase I) have been finalised while, and Airfield Code E Readiness is under construction.

²⁴ Official website of airports: https://ir.tav.aero/, https://ini.aerodromisrbije.rs/, https://ini.aerodromisrbije.rs/, https://ini.aerodromisrbije.rs/, https://www.tirana-airport.com/, https://www.zagreb-airport.hr/, https://www.zagreb-airport.hr/, https://www.zagreb-airport.hr/, https://www.zagreb-airport.hr/, https://www.tirana-airport.com/, https://www.tiran

²⁵ Source of data for all projects, unless specified otherwise, are TODIS data base and Regional Partners data



At **Nis airport**, the existing terminal building cannot meet future airport needs. It is planned to reconstruct the existing area of 2,115 m2 and build new facilities of 3,600 m2 with total value of project of 11.1 million EUR. A permit has been obtained and public procurement for construction work closed on 20 January 2022. Deadline for completion of works is end-2023.

Morava airport (Kraljevo), the design for the project of extension of apron and building facility for technical service and firefighting brigade is being developed, total value of the project is estimated to 20.8 million EUR.

Work on modernizing and expanding **Belgrade's Nikola Tesla Airport** began in early 2020. Most of this will be completed in the course of 2024. A new inserted runway (BCIR), de/anti-icing pad, landside access and car parking in front of the Terminal have been completed. Currently, works are proceeding at several locations: existing runway reconstruction, Terminal reconstruction and extension (phase 1.3, 1.4, 2.2). While Design/Tender Dossier is under preparation for Airport Rescue and Firefighting Center. Additionally, new planning technical documentation regarding the Railway Network is in preparation which will tackle the compliance criteria of railway connections.

The operator of **Prishtina International Airport** has requested the consent of the PPP Committee and CAA for the extension of the north and south side remote gates in order to increase the boarding gate capacity of the terminal building, from 8 to 12. The total value of the project is approximately 3 million EUR²⁶.

6.1. Effect of ongoing project on TEN-T Airport compliance

With four ongoing projects, Tirana will become the first airport with a railway connection, in compliance with TEN-T criteria. On completion of projects in Sarajevo, Nis and Belgrade, capacity will be improved, and the airports will continue to have terminal availability in the future.

7. Planned Projects as indicated in the Five-year rolling work plan

Sarajevo International Airport is the main international airport of Bosnia and Herzegovina, serving the capital, Sarajevo, and the rest of the country. There are major issues during the winter when traffic is blocked for days, sometimes weeks. It is the only capital airport in the region which does not have a 24-hour landing and take-off capacity, according to ICAO rules of noise restriction. Increase of operational airport capacities for Sarajevo International Airport with total investment value needs €43.6 million.

²⁶ Source of data for all projects, unless specified otherwise, are TODIS data base and Regional Partners data and Five-year rolling work plan for the development of the indicative TEN-T extension of the Comprehensive and Core Network in Western Balkans 2022



The **Podgorica Airport Development** project is a part of several strategic documents. The project is in an early phase of preparation and so far, only a conceptual idea has been developed. The proposed project aims to maintain the safety level of air transport and to meet the demands and standards of national and international regulations. As a part of the project, a new terminal building, capacity 12,500 m2, should be constructed and manoeuvring areas and apron expanded and reconstructed. Additionally, a new fuel depot and parking and ground support facilities (including shelter) are also envisaged. Podgorica Airport is located on the Core Network and the total project cost is 94.84 million EUR.

A prominent project that has not been cited in the 5-year rolling plan but is crucial part of TEN-T Network and regional interconnectivity are planned investments in **Belgrade's Nikola Tesla Airport**. As a part of concession agreement value of 732 million EUR is planned to be invested for 25-year period (2018-2043). As mentioned in the chapter before, several of these projects have been completed or are ongoing.

8. Conclusion

Airports play a crucial role in modern society, serving as vital hubs of transport that connect people and goods across the globe. These sprawling complexes are not just places where airplanes take off and land; they are intricate networks of facilities, services, and technologies that facilitate travel and contribute significantly to the economy, tourism, and international relations.

One of the most prominent benefits of airports is their role in promoting economic growth and job creation. Airports generate a substantial amount of revenue through various means, including ticket sales, airport fees, retail and dining establishments, and cargo services. They often attract businesses and investments to their surrounding areas, fostering economic development and improving the overall quality of life for nearby residents.

Moreover, airports are pivotal in supporting tourism by acting as gateways for travellers to explore new destinations and cultures, bolstering economies and creating opportunities for businesses in hospitality, entertainment, and transport. They also foster cross-cultural interactions, improving international relations and mutual understanding as meeting points for diverse individuals, facilitating diplomacy, business collaborations, academic exchanges, and humanitarian initiatives, thus promoting a more interconnected global community. Therefore, management of operation of airports becomes one of the crucial tasks not just for the airport in question but for the economy and the region as a whole.

As for TEN-T compliance, there is still work to be done to ensure compliance with TEN-T requirements. Currently, no airports have a direct rail connection, a key condition to ensure interoperability of the airports of the TEN-T Network. All airports are open to international traffic with foreign air-carriers operating in and out. Many airports, including Tirana, Podgorica, Sarajevo, and Nis, have either reached or approached their capacity limits, highlighting the surge in international traffic and foreign air-carrier operations. However, more needs to be done on sustainability since airports lack fixed storage tank facilities for aviation biofuel,



such as in Sarajevo, Podgorica, Belgrade, Skopje, Ohrid, Nis, Kraljevo, and Prishtina. Although alternative fuels for airport ground services exist to some extent in airports like Belgrade, Sarajevo, Skopje, Nis, and Kraljevo.

As previously reported, all airports in the region are owned by the state (or entity within state), yet many of them operate under concessionaire agreements. Out of the total of 10 airports, five are governed by such agreements, primarily those located in regional capitals where there is sufficient passenger volume to justify the financial investment involved.

When analysing the movement of transport, a clear upward trajectory was observed from 2010 to 2019 for majority of observed airports, followed by a sudden decline due to the COVID-19 pandemic in 2020. However, in the subsequent years of 2021 and 2022, the market demonstrated a recovery, leading to airports reaching or nearly reaching their pre-pandemic levels.

Comparing transport flows across the region, Belgrade emerges as a frontrunner, surpassing other Western Balkan airports as well as airports in Zagreb and Ljubljana. Following suit are Tirana, Prishtina, and Skopje airports. Of these, Tirana experienced significant growth in 2022, achieving a complete recovery from the COVID-19 impact, surpassing its 2019 passenger volume, and approaching the levels of Belgrade Airport with 5.2 million passengers.

In conclusion, airports are more than just transit points; they are multifaceted entities with far-reaching benefits. They drive economic growth, support tourism, enhance global trade, foster cultural exchange, and fuel technological progress. As society becomes increasingly interconnected, airports will continue to play a pivotal role in shaping the way people and goods move around the Western Balkans region and further and therefore improving their operations, sustainability and compliance with TEN-T should remain one of key priorities of regional economies.