Based on Articles 239 and 265 of the Air Transport Law ("Official Gazette of RS", No 73/10, 57/11, 93/12, 45/15, 66/15- other law, 83/18 and 9/20),

Director of the Civil Aviation Directorate of the Republic of Serbia hereby adopts

REGULATION

laying down airspace usage requirements and operating procedures concerning performance-based navigation

Subject matter Article 1

This Regulation lays down airspace usage requirements and operating procedures concerning performance-based navigation.

Transposition Article 2

This Regulation transposes, in legislation of the Republic of Serbia, Commission Implementing Regulation (EU) No 2018/1048 of 18 July 2018 laying down airspace usage requirements and operating procedures concerning performance-based navigation.

Definitions Article 3

Terms used in this Regulation shall have the following meaning:

- 1) *ECAA agreement* (The European Common Aviation Area Agreement) means the Multilateral Agreement between the European Community and its Member States, the Republic of Albania, Bosnia and Herzegovina, the Republic of Bulgaria, the Republic of Croatia, the former Yugoslavian Republic of Macedonia, the Republic of Iceland, the Republic of Montenegro, the Kingdom of Norway, Romania, the Republic of Serbia and the United Nations Interim Administration Mission in Kosovo (pursuant to United Nations Security Council Resolution 1244 of 10 June 1999) on the establishing a European Common Aviation Area;
- 2) *Network manager* means a body established by Article 6 of the Regulation (EC) No 551/2004 which has been entrusted the task to enhance the performance of the European Air Traffic Management Network through the allocated functions. By Commission Implementing Decision, Eurocontrol has been appointed to perform the functions of the Network Manager until 31 December 2029;
- 3) *competent authority* means the Civil Aviation Directorate of the Republic of Serbia (hereinafter Directorate), in accordance with the law governing air traffic;
- 4) *Aerodrome operator* means any legal or natural entity managing an aerodrome and holds a certificate, a approval or an agreement for operating the aerodrome;
- 5) Provider of air traffic management/air navigation services means a natural or legal entity providing ATM/ANS functions or services as defined by Article 3, point (q) of Regulation (EC) No 216/2008 or other ATM network functions, separately or as a package of services, for air traffic purposes;
- 6) *ATM/ANS providers* mean providers of air traffic management /air navigation services and aerodrome operators;

- 7) Regulation (EC) No 550/2004 means Regulation (EC) 550/2004 of the European Parliament and of the Council of 10 March 2004 on the provision of air navigation services in the single European sky (the service provision Regulation) transposed in the legislation of the Republic of Serbia with Regulation on conditions to be fulfilled by air navigation service providers ("Official Gazette of RS", No 26/20, 154/20 and 24/21);
- 8) Regulation (EC) No 551/2004 means Regulation (EC) No 551/2004 of the European Parliament and of the Council of 10 March 2004 on the organisation and use of the airspace in the single European sky (the airspace regulation), transposed in the legislation of the Republic of Serbia with Regulation on transposition of the EU regulations on the airspace management and the flexible use of airspace ("Official Gazette of RS", No 69/11);
- 9) Regulation (EU) No 139/2014 means Commission Regulation (EU) No 139/2014 of 12 February 2014 laying down requirements and administrative procedures related to aerodromes pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council, transposed in the legislation of the Republic of Serbia with Regulation on conditions and the procedure for issuing aerodrome certificate ("Official Gazette of RS", No 11/17 and 16/19):
- 10) Regulation (EU) No 923/2012 means Commission Implementing Regulation (EU) No 923/2012 of 26 September 2012 laying down the common rules of the air and operational provisions related to services and procedures in air navigation and amending Implementing Regulation (EU) No 1035/2011 and Regulations (EC) No 1265/2007, (EC) No 1794/2006, (EC) No 730/2006, (EC) No 1033/2066 and (EU) No 255/2010, transposed in the legislation of the Republic of Serbia with Regulation laying down rules of the air and provision of air traffic, alerting and flight information services ("Official Gazette of RS", No 142/20);
- 11) Regulation (EU) No 677/2011 means Commission Regulation (EU) No 677/2011 laying down detailed rules for the implementation of air traffic management (ATM) network functions and amending Regulation 691/2010;
- 12) Regulation (EU) No 965/2012 means Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council transposed in the legislation of the Republic of Serbia with Regulation on conditions for performing air operations ("Official Gazette of RS", No 9/18, 56/18, 12/19, 3/21 and 54/21);
- 13) Regulation (EC) No 216/2008 means Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC. This Regulation is transposed in the legislation of the Republic of Serbia with Regulation on common rules in the field of civil aviation and the competences of European Union Aviation Safety Agency ("Official Gazette of RS", No 23/12 and 104/17).

Other terms used in this Regulation shall have the meanings listed in Addendum 1 to this Regulation.

Term "Agreement" and "Member State" used in Addendum to this Regulation shall be construed pursuant to points 2 and 3 of Annex II to ECAA Agreement.

Transition Article 4

Providers of ATM/ANS shall deliver for approval the transition plan proposal of Addendum 1, Article 4 to this Regulation, to the Directorate, no later than 3 December 2021.

Providers of ATM/ANS shall also deliver for approval the draft transition plan and the draft of any significant updates thereof no later than 30 days prior to their entry into force.

Entry into Force Article 5

This Regulation shall enter into force on the eight day following the day of its publication in the "Official Gazette of the Republic of Serbia".

No 5/1-01-0010/2021-0001 In Belgrade, 18 June 2021

Director

Mirjana Cizmarov

Commission Implementing Regulation (EU) 2018/1048 of 18 July 2018 laying down airspace usage requirements and operating procedures concerning performance-based navigation

Article 1

Subject matter and scope

- 1. This Regulation lays down airspace usage requirements and operating procedures concerning performance-based navigation.
- 2. This Regulation applies to providers of air traffic management/air navigation services (ATM/ANS), and operators of aerodromes (hereinafter 'providers of ATM/ANS') that are responsible for putting in place instrument approach procedures or air traffic service (ATS) routes, where they provide their services in the following airspace:
 - (a) above the territory to which the Treaty applies;
- (b) any other airspace where Member States are responsible for the provision of air navigation services in accordance with Article 1(3) of Regulation (EC) No 551/2004 of the European Parliament and of the Council.

Article 2 Definitions

For the purposes of this Regulation, the following definitions shall apply:

- (1) 'performance based navigation (PBN)' means performance based navigation as defined in Article 2(5) of Regulation (EU) No 965/2012;
- (2) 'ATS route' means ATS route as defined in Article 2(46) of Implementing Regulation (EU) No 923/2012;
- (3) 'instrument approach procedure' means instrument approach procedure as defined in Article 2(90) of Implementing Regulation (EU) No 923/2012;
- (4) 'conventional navigation procedures' means ATS routes and instrument approach procedures predicated on the use of ground-based navigation aids that do not enable compliance with the PBN requirements set out in this Regulation;
- (5) 'instrument runway' means instrument runway as defined in Annex I, point 22 of Commission Regulation (EU) No 139/2014;
- (6) 'navigation specification' means a set of requirements for aircraft and aircrew needed to support performance-based navigation operations within a defined airspace;
- (7) 'required navigation performance (RNP) X specification' means a navigation specification based on area navigation that includes the requirement for on-board performance monitoring and alerting, whereby 'X' refers to the lateral navigation accuracy in nautical miles or the operation type and required functionalities;
- (8) 'lateral navigation (LNAV)', 'lateral navigation/vertical navigation (LNAV/VNAV)' and 'localizer performance with vertical guidance (LPV)' mean the labels to identify the different types of operating minima on approach charts depicting approach procedures based on Global Navigation Satellite Systems (GNSS) which are classified as RNP approaches (RNP APCH);

- (9) 'radius to fix (RF)' means a constant radius circular path about a defined turn centre that terminates at a fixed point;
- (10) '2D approach' means an instrument approach procedure, classified as an non-precision approach procedure, as defined in Article 2(90) of Implementing Regulation (EU) No 923/2012;
- (11) '3D approach' means an instrument approach procedure, classified as an approach with vertical guidance or a precision approach, as defined in Article 2(90) of Implementing Regulation (EU) No 923/2012;
- (12) 'satellite-based augmentation system (SBAS)' means a wide-coverage augmentation system in which the user of a GNSS receives augmentation information from a satellite-based transmitter;
- (13) 'area navigation (RNAV) X specification' means a navigation specification based on area navigation that does not include the requirement for on-board performance monitoring and alerting, whereby 'X' refers to the lateral navigation accuracy in nautical miles;
- (14) 'standard instrument arrival (STAR) route' means a designated instrument flight rule arrival route linking a significant point, normally on an air traffic service (ATS) route, with a point at which a published instrument approach procedure can be commenced;
- (15) 'standard instrument departure (SID) route' means a designated instrument flight rule departure route linking the aerodrome with a specified significant point, normally on a designated ATS route, at which the en route phase of a flight commences;
- (16) 'navigation functionality' means the detailed capability of the navigation system required to meet the needs of the proposed operations in the airspace.

Article 5 Exclusive use of PBN

- 1. Providers of ATM/ANS shall not provide their services using conventional navigation procedures, or using performance-based navigation which is not in accordance with the requirements of point AUR.PBN.2005 of the Annex.
- 2. Paragraph 1 shall be without prejudice to Article 6 and to the possibility of providers of ATM/ANS to provide their services using landing systems enabling CAT II, CAT IIIA or CAT IIIB operations within the meaning of points 14, 15 and 16, respectively, of Annex I to Regulation (EU) No 965/2012.

Article 6

Contingency measures

Providers of ATM/ANS shall take the necessary measures to ensure that they remain capable of providing their services through other means where, for unexpected reasons beyond their control, GNSS or other methods used for performance-based navigation are no longer available, making it impossible for them to provide their services in accordance with Article 3. Those measures shall include, in particular, retaining a network of conventional navigation aids and related surveillance and communications infrastructure.

Article 7

Entry into force and application

1. This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

- 2. This Regulation shall apply from 3 December 2020. However, by way of derogation from the first subparagraph:
 - (a) Article 5 shall apply from 6 June 2030;
- (b) for aerodromes listed in point 1.2.1 of the Annex to Implementing Regulation (EU) No 716/2014 and for instrument runway ends served by precision approach procedures at other aerodromes, point AUR.PBN.2005(1) of the Annex shall apply from 25 January 2024;
- (c) for all instrument runway ends, point AUR.PBN.2005(4) of the Annex shall apply from 25 January 2024 with respect to one SID or STAR route established and from 6 June 2030 with respect to all SID or STAR routes established;
- (d) for ATS routes below FL 150, point AUR.PBN.2005(6) of the Annex shall apply from 25 January 2024.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

ANNEX

SUBPART PBN — Performance-based navigation

AUR.PBN.1005 Subject-matter

In accordance with Article 3, this Subpart sets out the requirements for the implementation of performance-based navigation (PBN) to be complied with by providers of ATM/ANS.

AUR.PBN.2005 Routes and procedures

- (1) Providers of ATM/ANS shall implement, at all instrument runway ends, approach procedures in accordance with the requirements of the RNP approach (RNP APCH) specification, including LNAV, LNAV/VNAV and LPV minima and, where required due to traffic density or traffic complexity, radius to fix (RF) legs.
- (2) By way of derogation from point (1), at instrument runway ends where, due to terrain, obstacles or air traffic separation conditions, the implementation of 3D approach procedures is excessively difficult, providers of ATM/ANS shall implement 2D approach procedures in accordance with the requirements of the RNP approach (RNP APCH) specification. In that case, they may also, in addition to the implementation of those 2D approach procedures, implement 3D approach procedures in accordance with the requirements of the RNP authorisation required (RNP AR APCH) specification.
- (3) By way of derogation from point (1) at instrument runway ends without an appropriate SBAS coverage, providers of ATM/ANS shall implement RNP APCH procedures, including LNAV and LNAV/VNAV minima. Providers of ATM/ANS shall also implement LPV minima at those instrument runway ends, no later than 18 months from the date at which such appropriate SBAS coverage is available.
- (4) Where providers of ATM/ANS have established SID routes or STAR routes, they shall implement those routes in accordance with the requirements of RNAV 1 specification.
- (5) By way of derogation from point (4), where providers of ATM/ANS have established SID routes or STAR routes and where higher performance requirements than those referred to in that point are required in order to maintain air traffic capacity and safety in environments with high traffic density, traffic complexity or terrain features, they shall implement those routes in accordance with the requirements of the RNP 1 specification, including one or more of the following additional navigation functionalities:
 - (a) operations along a vertical path and between two fixes and with the use of:
 - (i) an 'AT' altitude constraint;
 - (ii) an 'AT OR ABOVE' altitude constraint;
 - (iii) an 'AT OR BELOW' altitude constraint;
 - (iv) a 'WINDOW' constraint;
 - (b) the radius to fix (RF) leg.
- (6) Where providers of ATM/ANS have established ATS routes for en route operations, they shall implement those routes in accordance with the requirements of the RNAV 5 specification.
- (7) By way of derogation from points (4) and (6), where providers of ATM/ANS have established ATS routes, SID routes or STAR routes for rotorcraft operations, they shall implement those routes in accordance with the requirements of the RNP 0.3, RNAV 1 or RNP

1 specifications. In that case, they requirements they comply with.	shall	be	entitled	to	decide	which	of	those	three	sets	of