



WORKING PAPER

LEGAL COMMITTEE – 40TH SESSION

(Montréal, 26 to 30 October 2026)

Agenda Item 3: Review of the General Work Programme of the Legal Committee

A HISTORICAL ACCOUNT OF PREVIOUS WORK DONE IN ICAO IN RELATION TO ITEM NO. 6 OF THE GENERAL WORK PROGRAMME OF THE LEGAL COMMITTEE: *STUDY OF INTERNATIONAL LEGAL ISSUES RELATING TO GLOBAL SATELLITE SYSTEMS AND SERVICES SUPPORTING INTERNATIONAL AIR NAVIGATION SERVICES*

(Presented by the Secretariat)

1. INTRODUCTION

1.1 The international legal issues relating to global navigation satellite systems (GNSS) and Communications, Navigation, Surveillance/Air Traffic Management (CNS/ATM) systems have been under study in ICAO for many decades. The effort has involved work by several sessions of the Assembly, the Council, Air Navigation Conferences, the Legal Committee, a Panel of Legal and Technical Experts, and a Secretariat Study Group that met eleven times over nearly five years.

1.2 In June 1983, the ICAO Council expressed its intention to form a special committee to develop a projection of air navigation requirements and related activities for international civil aviation, on the understanding that further examination of the subject would cover all new and advanced technology including satellite technology.¹ In November 1983, the Special Committee of Future Air Navigation Systems (FANS Committee) was established with the following terms of reference: “to study technical, operational, institutional and economic questions, including cost/benefit effects, relating to the future potential air navigation systems; to identify and assess new concepts and new technology, including satellite technology, which may have future benefits for the development of international civil aviation including the likely implications they would have for users and providers of such systems; and to make recommendations thereon for an overall long-term projection for the co-ordinated evolutionary development of air navigation for international civil aviation over a period of twenty-five years. The Committee should avoid duplication of effort, and its work should be co-ordinated with that of existing groups in the Organization”.² The terms of reference of the FANS Committee included the study of the institutional aspects of the future air navigation systems.

1.3 The institutional aspects of FANS were considered by the technical experts on the FANS Committee at its second (1985), third (1986) and fourth (1988) meetings and by the Special Committee for the Monitoring and Co-ordination of Development and Transition Planning for the Future Air Navigation Systems (FANS Phase II Committee) at its first (1990), second (1991) and third meetings (1992). The 10th Air Navigation Conference (5-20 September 1991) addressed under Agenda Item 4 the subject: “Consideration of institutional aspects of the future air navigation system”. The Conference emphasized the important role for ICAO in future institutional arrangements in accordance with Article 44 of the Chicago Convention and concluded that many of the institutional and legal problems were interrelated and would require consideration by the Legal Committee. As a result of its deliberations, the Conference

¹ C-DEC 109/20.

² C-DEC 110/9, para. 1.

recommended that ICAO should expedite the work of the Legal Committee on the subject of “Institutional and legal aspects of the future air navigation systems”, to the extent necessary to achieve implementation of the FANS concept, and that further work on the subject by ICAO bodies should take account of relevant ICAO Assembly Resolutions, Guiding Principles and Guidelines proposed by the FANS Committee.

1.4 On 29 June 1988 the Council decided to add the item: “*Institutional and legal aspects of the Future Air Navigation Systems*” to the general work programme of the Legal Committee.³ The title of the item has since been modified by the Assembly, the Council or the Legal Committee on numerous occasions and presently reads “*Study of international legal issues relating to global satellite systems and services supporting international air navigation services*”. As further elaborated below, the work done by the Legal Committee in relation to the item culminated in or significantly contributed to the adoption of the *Statement of ICAO Policy on CNS/ATM Systems Implementation and Operation* approved by the Council on 9 March 1994, the *Charter on the Rights and Obligations of States Relating to GNSS Services*,⁴ *Development and Elaboration of an Appropriate Long-term Legal Framework to Govern the Implementation of GNSS*,⁵ *A Practical Way Forward on Legal and Institutional Aspects of Communications, Navigation, Surveillance/Air Traffic Management (CNS/ATM) Systems*,⁶ and the *Consolidated statement of continuing ICAO policies and practices related to a global air traffic management (ATM) system and communications, navigation, and surveillance/air traffic management (CNS/ATM) systems*.⁷ This notwithstanding, the Legal Committee has not carried out any substantive work on the item since its 33rd Session which was held in 2008.

1.5 As observed by Dr. Assad Kotaite, former President of the ICAO Council, during the Council’s consideration of the final report of the Secretariat Study Group on Legal Aspects of CNS/ATM systems on 5 March 2004, ICAO’s efforts in regard to CNS/ATM systems began much earlier than as indicated above. In his view, “[w]hile reference had often been made to the Tenth Air Navigation Conference in 1991, which had adopted the concept of a CNS/ATM system, later approved by the Council and the Assembly, it had been at the Seventh Air Navigation Conference in 1972 when the idea of a satellite-based air navigation system had first been raised. That idea had progressively evolved into FANS I and FANS II in the 1980s”. Dr. Kotaite further noted that “[t]his subject, which is complex not only from the legal point of view but also from the technological and technical point of view, is one of the items on the work programme of the Legal Committee which was approved by the Assembly and reviewed by the Council on a yearly basis”.⁸

1.6 The introduction of GNSS-based services to support the needs of international civil aviation was initially made possible by the operational implementation of two core satellite constellations, the Global Positioning System (GPS) provided by the United States and the Global Navigation Satellite System (GLONASS) provided by the Russian Federation.⁹ In 1994, the United States offered the Standard Positioning Service of GPS (GPS-SPS) to support the needs of international civil aviation and reaffirmed the offer in 2007. The ICAO Council accepted both offers.¹⁰ In 1996, the Russian Federation offered GLONASS to support the needs of international civil aviation and the ICAO Council accepted this offer.¹¹ Both States are upgrading their constellations and have committed to ICAO to take all necessary measures to maintain service reliability. The global GNSS infrastructure has undergone a significant evolution since then with the introduction of new core constellations. Europe and China have developed new GNSS systems

³ C-DEC 124/16, para. 1.

⁴ Assembly Resolution A32-19

⁵ Assembly Resolution A32-20

⁶ Originally adopted as Assembly Resolution A35-3, presently Appendix F to Assembly Resolution A42-5

⁷ Assembly Resolution A42-8

⁸ C-MIN 171/9, para. 47.

⁹ Doc 9849, *Global Navigation Satellite System (GNSS) Manual*, Fifth Edition, 2025.

¹⁰ C-DEC 143/12; C-DEC 182/7 and corresponding exchange of letters between ICAO and the Government of the United States.

¹¹ C-DEC 147/15 and corresponding exchange of letters between ICAO and the Government of the Russian Federation.

(respectively, Galileo and the BeiDou Navigation Satellite System) that are interoperable with upgraded GPS and GLONASS. The European Commission declared the provision of Galileo Initial Services in 2016 and has been working since then on the additional developments required to declare full operational capability. China declared the third phase of the BeiDou Navigation Satellite System (BDS-3) fully commissioned in July 2020 and offered BDS-3 Open Service to the civil aviation community in 2021.¹²

1.7 In 2001, ICAO adopted Standards and Recommended Practices (SARPs) setting out the requirements for GNSS.¹³ These SARPs support GNSS operations based on augmenting core satellite constellation signals to meet safety and reliability requirements.¹⁴

1.8 This paper presents a historical account of the work carried out by various organs and bodies within ICAO on the institutional and legal aspects of CNS/ATM systems, including GNSS, with a view to facilitating the Legal Committee's consideration of whether any further work on this item is warranted, and if so, to assist the Legal Committee in providing specific guidance on the scope and direction of the future work.

2. 1990-1991: INSTITUTIONAL AND LEGAL ASPECTS OF FUTURE AIR NAVIGATION SYSTEMS

2.1 The 27th Session of the Legal Committee (27 March – 12 April 1990) considered the item “*Institutional and legal aspects of the Future Air Navigation Systems*” on the basis of a note prepared by the Secretariat.¹⁵ This note indicated that the introduction of future air navigation systems would depend not only on the development and availability of new technology but, to a large extent, on the level of co-operative effort of States and their consensus to put the new systems into practical use under specified legal conditions. While unanimously supporting the appointment of a Rapporteur to study the subject, the Legal Committee concluded that any study to be undertaken on the subject should be co-ordinated with the continuing work following up on the work of the FANS Committee.¹⁶

2.2 In view of the work undertaken by the FANS Committee, and taking into account the institutional ramifications of the future systems, the Council considered that the item: “*Institutional and legal aspects of the future air navigation systems*” deserved the highest priority on the general work programme of the Legal Committee, which was amended accordingly by the Council on 14 June 1991. In accordance with Rule 17 of the Rules of Procedure of the Legal Committee, the then Chairperson of the Legal Committee appointed a Rapporteur (Dr. W. Guldemann, Switzerland) to study and prepare a report on the subject “*Institutional and legal aspects of the future air navigation systems*”.

¹² Doc 9849, *Global Navigation Satellite System (GNSS) Manual*, Fifth Edition, 2025.

¹³ Amendment 76 to Annex 10 – *Aeronautical Telecommunications*, 16 July 2001.

¹⁴ Doc 9849, *Global Navigation Satellite System (GNSS) Manual*, Fifth Edition, 2025.

¹⁵ LC/27-WP/7 *Institutional and legal aspects of the Future Air Navigation Systems – Introductory Note presented by the Secretariat*.

¹⁶ Doc 9556-LC/187, *Report of the 27th Session of the Legal Committee*, paras. 7.1 – 7.8.

3. **1992-1993: DESIRABILITY OF A LEGAL FRAMEWORK WITH REGARD TO GLOBAL NAVIGATION SATELLITE SYSTEMS; CONSIDERATION, WITH REGARD TO GLOBAL NAVIGATION SATELLITE SYSTEMS (GNSS), OF THE ESTABLISHMENT OF A LEGAL FRAMEWORK**

3.1 During its 28th Session (11-22 May 1992), the Legal Committee concluded, following its consideration of the Rapporteur's report on the item "*Institutional and legal aspects of the future air navigation systems*" that, there was no legal obstacle to the implementation and achievement of the CNS/ATM systems concept, and that there was nothing inherent in the CNS/ATM systems concept which was inconsistent with the Chicago Convention. The Legal Committee also endorsed the guidelines developed by the Third Meeting of the FANS Phase II Committee for acceptable institutional arrangements relative to the implementation of GNSS for civil aviation. In reviewing its work programme, the Legal Committee agreed to delete item no. 1 "*Institutional and legal aspects of the future air navigation systems*" in view of the work completed during the 28th Session and to include a new item regarding GNSS with priority No. 5 titled: "*Desirability of a legal framework with regard to global navigation satellite systems (GNSS)*".¹⁷

3.2 On 17 June 1992, during its 136th Session, the Council decided to amend item no. 5 of the work programme of the Legal Committee to read: "*Consideration, with regard to global navigation satellite systems (GNSS), of the establishment of a legal framework*" and to raise its priority to No. 1.¹⁸ The 29th Session of the Assembly (22 September to 8 October 1992) endorsed the work programme of the Legal Committee as amended by the Council and agreed that there was an urgent need for the Council to clearly establish the objectives of the item. Consequently, during its 137th Session (on 18 November 1992) and 138th Session (on 5 and 26 March 1993), the Council, following its consideration of the work programme of the Legal Committee, agreed that with respect to item no. 1, "*Consideration, with regard to global navigation satellite systems (GNSS), of the establishment of a legal framework*," the Legal Committee should address the following specific issues:

- a) the definition of internationally acceptable institutional arrangements;
- b) the possible role of ICAO in the long-term provision of GNSS;
- c) the content of the arrangements to be entered into between ICAO and the present GNSS-provider States; and,
- d) the compliance of GNSS systems providers with the relevant ICAO Standards and Recommended Practices (SARPs).¹⁹

3.3 In July 1993, the then Chairperson of the Legal Committee appointed Dr. Kenneth Rattray (Jamaica) as rapporteur on the subject: "*Consideration, with regard to global navigation satellite systems (GNSS), of the establishment of a legal framework*". The rapporteur's report,²⁰ which was considered during the 29th Session of the Legal Committee, focussed essentially on the establishment of a regulatory institution which would be responsible for the supervision and oversight of GNSS providers, but without ownership of the system. The rapporteur suggested that the legal framework should be an international convention or agreement adopted under the auspices of ICAO. That agreement would require a GNSS provider to obtain certification from ICAO. The rapporteur then examined a number of additional matters, namely determination of user charges, liability issues, possible provisions on co-operation and consultations between States parties and service providers, the compatibility of the proposed convention with other international

¹⁷ Doc 9588 LC/188 Report of the 28th Session of the Legal Committee, paras 5.1 – 5.8.

¹⁸ C-DEC 136/12

¹⁹ C-DEC 138/18.

²⁰ LC/29-WP/3-1 The Institutional and Legal Aspects of Future Air Navigation Systems – Rapporteur's Report to the Legal Committee.

instruments and dispute settlement procedures. Finally, the rapporteur addressed the need to have transitional provisions which would recognize the existence of GPS and GLONASS as a component part of the evolutionary approach to the definitive global navigation satellite system. In order to provide a practical starting point, the rapporteur proposed a Memorandum of Understanding between ICAO and the States providing the services.

4. 1994: STATEMENT OF ICAO POLICY ON CNS/ATM SYSTEMS IMPLEMENTATION AND OPERATION

4.1 During its 139th Session, while discussing the Secretary General's proposal²¹ for the possible establishment of an ICAO CNS/ATM mechanism in response to Recommendations 4/5 and 8/5 of the Tenth Air Navigation Conference, the Council agreed that an ICAO policy on CNS/ATM systems implementation and operation should be developed.²² This policy should, among other things, address issues such as continuity of the existing air navigation systems, access to the new systems, prevention of monopoly situations and non-discrimination. Accordingly, the Council requested the Secretary General to draft a proposal on the overall ICAO CNS/ATM policy, setting out the policy elements to be incorporated in a legal framework for GNSS. The Council agreed that the Legal Committee should be advised that it would be asked to carry forward in its work programme the drafting of a legal framework for the long-term implementation of GNSS and that, in due course, a rapporteur should be appointed by the Chairman of the Legal Committee.

4.2 On 9 March 1994, the Council approved the Statement of ICAO Policy on CNS/ATM Systems Implementation and Operation prepared by the Secretariat²³ and requested the Legal Committee to incorporate, as appropriate, the elements of the policy statement in its proposals regarding a legal framework.

5. 1994: 29TH SESSION OF THE LEGAL COMMITTEE

5.1 Further to its consideration of the rapporteur's report, the 29th Session of the Legal Committee (4 – 15 July 1994) adopted a draft model agreement to be entered into between ICAO and GNSS signal providers for the immediate future. The Legal Committee also endorsed a "checklist of items to be considered in contracts for GNSS signal provision with signal providers in the context of long-term GNSS" and recommended to the Council to establish a panel of legal and technical experts with the following terms of reference, taking into account: a) the report of the rapporteur; b) the Statement of ICAO Policy on CNS/ATM Systems Implementation and Operation; c) the reports of the 28th and 29th Sessions of the Legal Committee; and d) any other relevant documents:

- a) to consider different types and forms of the long-term legal framework for GNSS, indicating the pros and cons for each form and their preferences, and, in particular, exploring the need, if any, for a convention;
- b) to elaborate the legal framework which would respond, *inter alia*, to the fundamental principles set out in paragraph 6 of the rapporteur's report; and
- c) to prepare draft text(s), including a model contract using the checklist approved by the 29th Session of the Legal Committee, for consideration by the ICAO Council.

²¹ C-WP/9776 *Establishment of ICAO Communications, Navigation and Surveillance/Air Traffic Management (CNS/ATM) Mechanism*

²² C-DEC 139/13 and 14

²³ C-DEC 141/13

6. 1995-1998: PANEL OF LEGAL AND TECHNICAL EXPERTS ON THE ESTABLISHMENT OF THE LEGAL FRAMEWORK WITH REGARD TO GNSS (LTEP)

6.1 At the 11th meeting of its 146th Session on 6 December 1995, the Council established the Panel of Legal and Technical Experts on the Establishment of the Legal Framework with regard to GNSS. The Council also decided that the LTEP should have the terms of reference recommended by the 29th Session of the Legal Committee and endorsed by the 31st Session of the Assembly.²⁴

6.2 The LTEP held three meetings and established two working groups: one mandated to develop provisions of a Charter setting out the fundamental principles for GNSS, and the other tasked with considering issues relating to certification, liability, administration, finance, cost recovery, and future operating structures for GNSS.

6.3 The LTEP prepared the text of the Charter on the Rights and Obligations of States Relating to GNSS Services. The Charter embodies fundamental principles applicable to the implementation and operation of GNSS, including the safety of international civil aviation; universal access to GNSS services without discrimination; preservation of States' sovereignty, authority and responsibility; continuity, availability, integrity, accuracy and reliability of GNSS services; compatibility of regional arrangements with the global planning and implementation process, and the principle of co-operation and mutual assistance. With respect to the form of the Charter, the majority of the LTEP preferred a new international convention, while a minority wished to have it adopted as an Assembly Resolution. The majority in favour of a convention had no difficulty in accepting an Assembly Resolution as an interim or transitional arrangement. The Panel believed that the final form of the Charter should be left to the Council or another appropriate body to decide.

6.4 The LTEP put forward several other recommendations on legal issues relating to certification, liability, administration, finance and cost recovery, and future operating structures for GNSS. Some of these recommendations referred to the need for further studies on certain subjects.

6.5 During its 153rd Session, on 20 March 1998 the Council decided, following its consideration of the Report of the Third Meeting of LTEP, that a report on the work of LTEP should be submitted to the 32nd Session of the Assembly for further guidance; and that the draft Charter on the Rights and Obligations of States Relating to GNSS Services should be submitted to the 32nd Session of the Assembly for adoption.²⁵

7. 1998: WORLD-WIDE CNS/ATM SYSTEMS IMPLEMENTATION CONFERENCE

7.1 During the World-wide CNS/ATM Systems Implementation Conference held in Rio de Janeiro from 11 to 15 May 1998, the results of the work of LTEP were presented for information. The Conference supported the adoption of the Draft Charter as an interim framework for the short term. While the form of a legal framework for the long term was controversial, the predominant view was that an international convention was necessary in order to provide firm guarantees of universal accessibility and continuity of the services and other related matters, and to cover the issue of liability. Meanwhile, it was agreed that the implementation of CNS/ATM systems should not be delayed pending work on the legal issues. The Conference also concluded that regional arrangements may contribute to the development of a global legal and institutional framework for the implementation of CNS/ATM, including GNSS, provided they are fully compatible with the global framework to the extent that it exists, and that they support the interoperability of CNS/ATM regional components. The Conference endorsed the central role of ICAO

²⁴ C-DEC 146/11

²⁵ C-DEC 153/16, para. 10.

towards the implementation of a long-term global GNSS system by developing technical and operational SARPs. A further view expressed during the Conference was that consideration of the legal framework should not be limited to GNSS but that it should extend to the other aspects of CNS/ATM. Moreover, for the protection of the safety of civil aviation, legal measures should be developed to deal effectively with potential unlawful interference with the processing and flow of data relating to CNS/ATM.

7.2 The World-wide Conference adopted the following recommendations:

“The complex legal aspects of the implementation of CNS/ATM, including GNSS, require further work by ICAO. Such further work should seek to elaborate an appropriate long-term legal framework to govern the operation and availability of CNS/ATM, including the consideration of an international convention for this purpose. Such further work should not, however, delay implementation of CNS/ATM.

Further work on this matter, which should be carried out by ICAO, should have the following objectives:

- a) to develop and build mutual confidence among States regarding CNS/ATM systems; and
- b) to support the implementation of CNS/ATM systems.”

8. 1998: 32ND SESSION OF THE ASSEMBLY (22 SEPTEMBER – 2 OCTOBER 1998)

8.1 Having considered the outcomes of the work of the LTEP and the recommendations of the World-wide CNS/ATM Conference, the 32nd Session of the Assembly adopted two Resolutions on the subject: Assembly Resolution A32-19: *Charter on the Rights and Obligations of States Relating to GNSS Services*; and A32-20: *Development and Elaboration of an Appropriate Long-term Legal Framework to Govern the Implementation of GNSS*. In Resolution A32-20, the Assembly instructed the Council and the Secretariat to establish a Secretariat Study Group to ensure the follow up of the recommendations of the Rio Conference and the LTEP, in particular with respect to institutional issues and the question of liability, as well as considering the elaboration of a longer-term framework to govern the operation of GNSS systems. In so doing, the Assembly endorsed the decision of the Council during its 154th Session on 10 June 1998 to establish the Secretariat Study Group on Legal Aspects of CNS/ATM Systems.

8.2 The 32nd Session of the Assembly also decided to amend item No.1 of the work programme of the Legal Committee, which had previously referred to GNSS only, to read as follows: **“Consideration, with regard to CNS/ATM systems including global navigation satellite systems (GNSS), of the establishment of a legal framework”**. In this regard, it was recalled that when the Council established the LTEP, it gave the Panel terms of reference relating only to GNSS and not to the other aspects of CNS/ATM.²⁶ Accordingly, the Panel did not consider legal aspects of other elements of CNS/ATM. The amendment of the title of item No. 1 of the work programme of the Legal Committee by the 32nd Session of the Assembly was therefore in response to the recommendation of the 1998 World-wide CNS/ATM Systems Implementation Conference to the effect that consideration of the legal aspects should not be limited exclusively to GNSS but should also extend to other elements of CNS/ATM.

9. 1999-2004: WORK OF THE SECRETARIAT STUDY GROUP ON LEGAL ASPECTS OF CNS/ATM SYSTEMS

9.1 The Secretariat Study Group on Legal Aspects of CNS/ATM Systems held eleven meetings between April 1999 and January 2004 and periodic progress reports were presented to the Council. A Progress Report on the Work of the Study Group was presented to the 33rd Session of the Assembly in 2001, which decided that that further work on the legal aspects of CNS/ATM systems be carried out so as

²⁶ C-DEC 146/11

to finalize the concept of a contractual framework for CNS/ATM as an interim framework and provide a path toward its implementation, including the consideration of an international convention. Pursuant to this decision, the Secretariat Study Group on Legal Aspects of CNS/ATM systems finalized its work in January 2004. It reviewed the existing legal framework applicable to CNS/ATM systems, identified certain inadequacies, discussed in detail a contractual framework for the systems, and studied the possibility of an international convention for this purpose.

9.2 The Study Group engaged in detailed discussions and agreed upon a set of contractual clauses in the form of a “Draft Contractual Framework Relating to the Provision of GNSS Services”. Although the Draft Contractual Framework was supported by the majority of the Group’s members, differing views remained with respect to the scope and mandatory nature of the framework. Some members regarded the framework as an optional, non-binding model contract, which States or other parties retained the freedom to accept. Others considered that, in order to maintain the desired degree of uniformity and to provide essential assurances of confidence in CNS/ATM systems, the framework should contain a number of common mandatory elements binding upon the parties. In their view, these elements should take the form of an intergovernmental agreement and could gradually evolve in the future into an international convention. In spite of detailed discussions over several meetings, the Group could not reach consensus on the subject of an international convention.

9.3 Two schools of thought emerged in the Study Group regarding an international convention as a long-term legal framework to govern the operation of GNSS systems: one school of thought viewed it as premature to elaborate and draft an international convention at that point since insufficient experience had been gained with the implementation of CNS/ATM systems, and GNSS in particular; whereas another school considered that an international convention was necessary and desirable.

9.4 On 5 March 2004, during the Council’s consideration of the Final Report of the Secretariat Study Group, a view was expressed that since there had not been any consensus on the need for an international convention, the Council should acknowledge that ICAO’s studies on the legal aspects of CNS/ATM systems implementation had been exhaustive, and that the Council should recommend to the 35th Session of the Assembly that ICAO should consider its legal research complete and concentrate its efforts on the technical aspects of CNS/ATM systems implementation. A number of Council Representatives expressed the view that it was premature at that stage to elaborate and draft an international convention. Others were of the view that the study on the legal aspects of CNS/ATM systems must continue. In support of that view, it was stated that since satellite radio communication should ultimately become the single tool for use in air traffic management, the need for new international arrangements to govern the implementation and operation of the future GNSS should be recognized. Such arrangements should, in particular, provide adequate legal certainty for those States which would be relying on signals provided by others regarding their obligations under Article 28 of the Chicago Convention. The arrangements should also provide a comprehensive, consistent and coordinated liability framework for GNSS-related activities.

9.5 While recognizing that the legal aspects of CNS/ATM systems implementation were of a high degree of importance, the Council decided to defer to the 35th Session of the Assembly to determine what further action could be taken on the subject.

10. 2004: 35TH SESSION OF THE ASSEMBLY (28 SEPTEMBER – 8 OCTOBER 2004)

10.1 Consideration of the item during the 35th Session of the Assembly was based on A35-WP/75 introduced by the Secretariat, A35-WP/125 presented by the 41 Members of the European Civil Aviation Conference, A35-WP/179 presented by the 21 Member States of the Latin American Civil Commission, A35-WP/215 presented by the International Air Transport Association and A35-WP/216 presented by the United States. The Legal Commission noted the divergent views expressed in the aforementioned working papers, which ranged from a proposal to consider an international convention, a proposal to adopt a contractual framework as a step toward the long-term objective of a global instrument

of international law, to a proposal to suspend work towards a new “long-term legal framework” until the next regular session of the Assembly. Based on the Legal Commission’s recommendation, the Assembly adopted Assembly Resolution A35-3: *A Practical Way Forward on Legal and Institutional Aspects of Communications, Navigation, Surveillance/Air Traffic Management (CNS/ATM) Systems*.

10.2 Assembly Resolution A35-3 recalled that ICAO had devoted substantial resources to the study of the legal and institutional aspects of CNS/ATM in the ICAO Assembly, the Council, the Legal Committee, and a Panel of Legal and Technical Experts and a Study Group, building a detailed record and developing an understanding of the issues, challenges, and concerns facing the global community. Operative Clause 3 of the Resolution invited Contracting States to consider using regional organizations to develop mechanisms necessary to address any legal or institutional issues that could inhibit the implementation of CNS/ATM in the region, while ensuring that such mechanisms will be consistent with the Chicago Convention, and public international law. The Resolution further directed the Secretary General to monitor and, where appropriate, assist in the development of contractual frameworks to which parties may accede, *inter alia*, based on the structure and model proposed by the Members of the European Civil Aviation Conference and the other regional civil aviation commissions, and on international law.

11. **2007-2008: CONSIDERATION, WITH REGARD TO CNS/ATM SYSTEMS, INCLUDING GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS) AND REGIONAL MULTINATIONAL ORGANISMS, OF THE ESTABLISHMENT OF A LEGAL FRAMEWORK**

11.1 During the 36th Session of the Assembly (18 – 28 September 2007), EUROCONTROL, on behalf of the Members of the European Civil Aviation Conference (ECAC), apprised the Assembly of the progress made in implementing Resolution A35-3. EUROCONTROL highlighted the importance of the contractual framework for addressing the legal and institutional issues of GNSS at the regional level and stated that the model developed at the European level would constitute a flexible and easily applied tool which would be able to accommodate the specific demands of the various regions. EUROCONTROL informed the Assembly that the ECAC contractual framework had received recognition within Europe and that it would soon be offered to ICAO for scrutiny or even validation. The crucial issue of liability would be addressed in the contractual framework.

11.2 The Legal Commission understood that once a model of a regional legal framework had been developed by the Members of ECAC, such model could be distributed through ICAO to its Member States, and interested States could use the information as guidance material to develop their own regional legal frameworks as appropriate. In view of the foregoing, the 36th Session of the Assembly agreed to modify the title of the item (then with priority No. 3 on the work programme of the Legal Committee) to include regional multinational organisms in the consideration of a legal framework. The title of the item as amended therefore read as follows: ***“Consideration, with regard to CNS/ATM systems, including global navigation satellite system (GNSS) and regional multinational organisms, of the establishment of a legal framework”***.

11.3 During the 33rd Session of the Legal Committee (21 April – 2 May 2008), EUROCONTROL presented a working paper²⁷ demonstrating the European Framework Agreement as a regional mechanism further to the invitation to regional multinational organisms to do so under Assembly Resolution A35-3. The Legal Committee noted the paper presented by EUROCONTROL.

²⁷ LC/33-WP/4-8 *A practical way forward: Model Framework Agreement for the implementation, provision, operation and use of a global navigation satellite system for air navigation purposes*

12. 2009 – 2018: NO MAJOR DEVELOPMENTS

12.1 During the 34th Session of the Legal Committee (9 – 17 September 2009), no specific developments were reported in relation to the on-going work of the Legal Committee regarding the item “*Consideration, with regard to CNS/ATM systems, including global navigation satellite system (GNSS) and the regional multinational organisms, of the establishment of a legal framework*”. In this regard, it is important to recall that the 34th Session of the Legal Committee was primarily devoted to the consideration of the draft instruments developed by the Sub-Committee tasked to address new and emerging threats. These instruments ultimately became the Beijing Convention and Protocol of 2010.

12.2 The work programme of the Legal Committee, including the prioritization of items thereon, was considered by the Council at the third meeting of its 197th Session in November 2012. On this occasion, the Council decided to change the priority of the item “*Consideration, with regard to CNS/ATM systems, including global navigation satellite system (GNSS) and the regional multinational organisms, of the establishment of a legal framework*” on the work programme of the Legal Committee from No. 3 to No. 4.

12.3 Some attempts were made, during the 35th Session of the Legal Committee (6 – 15 May 2013), to remove item No. 4 “*Consideration, with regard to CNS/ATM systems, including global navigation satellite system (GNSS) and the regional multinational organisms, of the establishment of a legal framework*” from the work programme of the Legal Committee. Despite the absence of any pertinent developments on the subject since 2008, the 35th Session of the Legal Committee decided to retain the item on the work programme considering that some States had highlighted that the provision of technical assistance for the implementation of CNS/ATM had not been forthcoming.

12.4 During the 38th Session of the Assembly (24 September - 4 October 2013), one delegation expressed the view that the item could be removed from the work programme or reduced in priority considering the material already developed by ICAO and the fact that no work had been done in the Legal Committee or the Legal Commission over a period of nine years. The African Civil Aviation Commission (AFCAC) objected to the removal of the item from the work programme of the Legal Committee or the reduction of its priority therein and requested that the Secretary General develop guidance material for the implementation of CNS/ATM systems. At the recommendation of the Legal Commission, the 38th Session of the Assembly decided to retain the item on the work programme of the Legal Committee with priority No. 4.

12.5 During the 203rd Session of the Council (15 September – 14 November 2014), one representative requested that item No. 4 “*Consideration, with regard to CNS/ATM systems, including global navigation satellite system (GNSS) and the regional multinational organisms, of the establishment of a legal framework*” be prioritized as the establishment of the said legal framework was essential for formalizing rights under GNSS and facilitating the latter’s use. Underscoring that CNS/ATM systems, specifically GNSS, were critical enablers of the Aviation System Block Upgrades (ASBUs), the representative stressed the need to synchronize the envisaged legal framework with the block upgrade global framework. Another representative expressed the view that while it did not seem that there had been any recent progress regarding the item, that was not to suggest that the establishment of the legal framework was not important. The world of CNS/ATM, and the world of satellites in particular, was evolving every day. There were proposals for global systems for Automatic Dependent Surveillance – Broadcast (ADS-B) that would become operational in the next few months. Other initiatives were contemplated for global systems that might address aviation requirements for network communications associated with remote storage (in the cloud) for real-time monitoring of flight data, which were of importance for global flight tracking. It would be necessary at some point to give legal consideration to such services that were being provided at a global level in each of the States concerned as under the Chicago Convention it was the States which assumed the responsibility for providing such services, based on the information received from others. In therefore suggesting that the item be retained on the work programme, the representative emphasized that the apparent lack of any progress lately did not mean that there would not be a need for

such a legal framework in the future. Notwithstanding the above views, the Council decided to change the priority of the item on the work programme of the Legal Committee from No. 4 to No. 5.²⁸

12.6 Subsequently, the work programme was revised during the 36th Session of the Legal Committee (30 November – 3 December 2015), and the item was returned to priority No. 4. While there had been no major activities within ICAO relating to this item, the Secretariat agreed to continue to observe and to monitor the relevant developments as necessary.

12.7 The Council considered the outcomes of the 36th Session of the Legal Committee during its 207th Session (11 January – 11 March 2016). During the discussion, one representative believed that the item should be considered an important matter by the Legal Committee noting that many activities had been advanced in the GNSS panel regarding GPS, GLONASS, Galileo and the latest Chinese BeiDou constellation. The representative referred to the implementation of GNSS which affected the responsibilities of States under Article 28 of the Chicago Convention when a State used these signals to provide air navigation services but did not control such signals. He underscored that Member States needed to be satisfied that the GNSS signals and services offered within their airspace met the appropriate performance requirements in terms of integrity, reliability, accuracy and continuity, and that the liabilities were clearly defined. In noting that no comprehensive framework existed that provided the legal certainty required for States or for industry in the global environment, the representative stressed that reliance on national laws and procedures was not sufficient to deal effectively with the challenge of technological advances. Acknowledging that this item had been ongoing for some time yet not much had been done, he stressed the importance of the issue in terms of safety of the usage of GNSS signals. As such, he proposed that the legal framework of GNSS, prioritized as No. 4, be accorded a higher level of priority on the work programme of the Legal Committee. He reiterated the importance of the Secretariat or the Legal Committee examining the issue of Article 28 of the Convention on the liability of usage of signals which are not under the control of the State itself. Another representative remarked that since work on this item had not advanced over the past ten years and the only action identified was to monitor and observe the issue, raising the priority would be appropriate if legal issues existed with the implementation of GNSS. Otherwise, he indicated that the best approach would be to remove the item from the work programme. As a compromise solution, the Council decided to retain the item on the work programme of the Legal Committee with the same priority.

13. 2018: STUDY OF INTERNATIONAL LEGAL ISSUES RELATING TO GLOBAL NAVIGATION SATELLITE SYSTEMS

13.1 Further to the decisions of the Council requesting the Legal Committee to review the then current wording of the item to better reflect progress registered in the technological field, including the adoption of the Global Air Navigation Plan (GANP) and other initiatives such as satellite based navigation and global flight tracking, the 37th Session of the Legal Committee (4 – 7 September 2018) reformulated of the title of the item as follows: “*Study of international legal issues relating to global navigation satellite systems (GNSS)*”, taking into account the outcomes of the 13th Air Navigation Conference, which had reviewed the status of existing and future technologies enabling the global air navigation system. At the fifth meeting of its 215th Session on 7 November 2018, the Council, following its consideration of the report of the 37th Session of the Legal Committee assigned priority No. 8 to the item “*Study of international legal issues relating to global navigation satellite systems*”.

²⁸ C-DEC 203/5

14. **2019: STUDY OF INTERNATIONAL LEGAL ISSUES RELATING TO GLOBAL SATELLITE SYSTEMS AND SERVICES SUPPORTING INTERNATIONAL AIR NAVIGATION SERVICES**

14.1 At the third meeting of its 216th Session on 22 February 2019, the Council requested that further consideration be given to the suggestion to broaden the scope of the legal study beyond GNSS to encompass other air navigation systems with global coverage.²⁹ The outcomes of the 13th Air Navigation Conference were to be taken into account in that regard.³⁰ In summarizing the Council's deliberations, the President of the Council confirmed that item No. 8 of the Work Programme of the Legal Committee would now encompass global satellite systems and services such as space-based automatic dependent surveillance – broadcast (ADS-B) and space-based weather services. Highlighting that since the time of GPS and GLONASS there had been a significant shift in the ownership of satellite systems supporting international air navigation services from the public sector to the private sector, he underscored the need for the Legal Committee, composed of legal experts designated by Member States, to also draw on relevant expertise from the private sector in addressing item No. 8 on its work programme.

14.2 Further to the Council's request, the 40th Session of the Assembly (24 September - 4 October 2019) reformulated the title of the item to read: "*Study of international legal issues relating to global satellite systems and services supporting international air navigation services*", while maintaining its priority on the work programme at No. 8.³¹

15. **2022: 38TH SESSION OF THE LEGAL COMMITTEE (22 – 25 MARCH 2022) AND 41ST SESSION OF THE ASSEMBLY (27 SEPTEMBER – 7 OCTOBER 2022)**

15.1 The 38th Session of the Legal Committee reprioritized the item from No. 8 to No. 6 on the work programme.³²

15.2 During the 41st Session of the Assembly, the African Civil Aviation Commission (AFCAC) presented a working paper on its own behalf and that of 54 African States.³³ The working paper highlighted that aspects of GNSS required additional legal frameworks/instruments to guide: a) the operational services; and b) the introduction of more satellites within the GNSS constellation. The paper further noted that due to the increased application of GNSS as a primary means of navigation support during all phases of flight, it was important to ensure the safety, availability, and continuity of GNSS. While acknowledging that the item "Study of international legal issues relating to global satellite systems and services supporting international air navigation services" had existed on the work programme of the Legal Committee for such a long period without any recent progress, the paper advocated for a reprioritization of the item and underlined the need to develop regulations to address the probability of private ownership of the satellite systems supporting international air navigation in terms of implications to Member States. While conceding that the implementation of the actions proposed in the working paper would have financial implications for the Organization, it was recommended that this should not deter the resumption of work within ICAO to develop a legal framework/instrument to address aspects of GNSS operations in support of the Global ATM System.

²⁹ C-DEC 216/3

³⁰ C-DEC 217/3, para. 8.

³¹ A40-WP/617 *Report of the Legal Commission on the General Section and on Agenda Items 37, 38, 39 and 40*.

³² Doc 10195-LC/38 *Report of the 38th Session of the Legal Committee*

³³ A41-WP/208, Revision No. 1, *A Practical Way Forward on Legal and Institutional Aspects of Communication, Navigation and Surveillance/ATM (CNS/ATM) Systems*.

15.3 In response, the Secretariat provided a historical background of the work previously carried out by the Organization in relation to the subject since it was first added to the work programme of the Legal Committee in 1988. In addition, the Secretariat indicated that that States providing GNSS services had established arrangements with ICAO through the exchange of letters pertaining to the USA's Global Positioning System (GPS) done in 1994 and reaffirmed in 2007, the Russian Federation's GLONASS done in 1996 and China's BeiDou done in 2022. Those arrangements provide for the free use of the signals, assurance of SARPs compliance and at least six years of notice prior to any discontinuance of the service. The Secretariat observed that, as with other long-range air navigation services, international air law instruments remain applicable to GNSS and thus the current GNSS operation and use do not exist outside of a broader legal framework. The Secretariat advised that it had continued to monitor developments warranting the resumption of substantive work on the item but had not identified any developments that would necessitate the consideration of legal instruments beyond the current Assembly Resolutions. Nonetheless, the Secretariat expressed an openness to receive concrete proposals from States on how to resume or advance work on the item.

15.4 The 41st Session of the Assembly decided to keep the item on the work programme of the Legal Committee and to maintain its priority at No. 6. In so doing, the Assembly expressed the view that a change in the priority level of the item was not likely to bring about the desired outcomes. Instead, considering the Secretariat's willingness to entertain concrete proposals from States and the widely supported suggestion to review the work previously done on the item, a focus on the substance of the work to be carried out rather than the reprioritization of the item could help clarify what needed to be done going forward.³⁴ The Assembly therefore urged States to present concrete proposals for the Legal Committee to resume work on the item.

16. 2025: 42ND SESSION OF THE ASSEMBLY (23 SEPTEMBER - 3 OCTOBER 2025)

16.1 The 42nd Session of the Assembly maintained the item at priority No. 6 while taking note of the Secretariat's proposal to undertake a survey of all ICAO Member States and selected international organizations to assess their needs with respect to the resumption of work on the item.³⁵ The Assembly was informed that no concrete proposals for the resumption of work had been received from States.

16.2 The Assembly also considered a working paper presented by South Africa³⁶ urging the Assembly to assign key work packages to relevant ICAO bodies for continuous monitoring of the aviation operating landscape to identify potential risks, including supporting mitigation measures relating to CNS/ATM implementation, as well as the potential impacts posed by increasing space object re-entries and higher altitude operations. The paper also suggested that the Legal Committee be tasked to create a risk matrix on aspects considered and deemed addressed under the Chicago Convention and related SARPs/PANS for consideration by States. Given the divergent views expressed by States in the ensuing discussion, the Assembly decided to refer the matter to the Legal Committee to determine whether the elements covered in the South African proposal could fit within a broader scope of item No. 6.

17. ACTION BY THE COMMITTEE

17.1 The Legal Committee is invited to note the information provided in this paper for the conduct of its work.

— END —

³⁴ A41-WP/649 *Report of the Legal Commission on the General Section and on Agenda Items 40, 41, 42 and 43.*

³⁵ A42-WP/699 *Report of the Legal Commission on the General Section and Agenda Items 28 and 29.*

³⁶ A42-WP/90 *Study of International Legal Issues relating to Global Satellite Systems and Services Supporting International Air Navigation Services.*