



**THE FORTY-THIRD MEETING OF THE  
INFORMAL PACIFIC ATC CO-ORDINATING GROUP  
(IPACG/43)**

(Tokyo, Japan 27 – 28 September 2017)

Agenda Item 5: Communications/Navigation/Surveillance (CNS) Issues

**Status of PBCS Global Charter Development**

(Presented by xxx)

**SUMMARY**

This paper discusses the performance-based communication and surveillance (PBCS) Global Charter being developed by members of the ICAO operational data link working group (OPDLWG) PBCS project team (PT).

**1. Introduction**

1.1 The communication service providers (CSPs) and satellite service providers (SSPs) have expressed concern over adding PBCS requirements to binding contracts or agreements. They explained that the nature of the communication system is such that there are contributing factors outside of the CSP/SSP domain that impact performance, preventing their ability to guarantee a certain performance to individual ANSPs and operators. In addition, it is felt that it would take significant cost/effort to re-negotiate individual contracts currently in place.

1.2 As an alternative to the individual contract/agreement, the CSPs proposed the use of a “PBCS Charter,” in which all data link users/providers would sign and collectively agree to meet their allocated requirements. The PBCS Global Charter is being developed through the OPDLWG PBCS PT.

1.3 This paper discusses the current status of the PBCS Global Charter.

**2. Discussion**

*PBCS background on CSP compliance*

2.1 The PBCS framework includes performance requirements associated with the data link network that is provided by the CSPs and SSPs. The system components that make up the data link network allow for the transmission of data and communications between the aircraft and ground systems. The ability of these components to perform as expected, particularly when used for aircraft utilizing performance-based separation minima, is critical.

2.2 Section 4.3.2 of the 2<sup>nd</sup> edition of the PBCS Manual (ICAO Doc 9869) provides guidance related to the CSP.

*4.3.2.1 The CSP should provide services that meet the RCP/RSP allocations provided in the specifications. These allocations are used to establish contractual arrangements, which support*

*safety oversight and approval of both ANSP and aircraft operator for provision and use of the services respectively.*

*4.3.2.2 The CSP should ensure that the services it provides adhere to the contractual arrangements, which include:*

- a) RCP/RSP allocations, as contained in appropriate RCP/RSP specifications;*
- b) notification to ATS units, aircraft operators and others, as appropriate, of any failure condition that may impact PBCS operations.*

2.3 The complete list of requirements allocated to the CSP for RCP240 and RSP180 are contained in Appendices B and C, respectively, of the PBCS Manual. The tables listing the requirements, Tables B.2.1.3 (RCP240) and C.2.1.3 (RSP180) are provided in Appendix A.

2.4 Ensuring the compliance of CSP allocations through the air navigation service provider (ANSP) and operator is particularly important because no direct State safety oversight requirements under existing Annex provisions. ATS provision and aircraft operation are subject to the certification and/or SMS requirements under Annexes 6, 11 and 19. During the 4<sup>th</sup> meeting of the ICAO operational data link working group (OPDLWG), it was agreed that the ICAO secretariat would “explore the future amendments to relevant Annexes to strengthen the safety oversight requirements over communication services.”

#### *Update on PBCS Global Charter*

2.5 The OPDLWG PT has conducted six teleconferences and considerable email correspondence to progress the development of the PBCS Global Charter. The participants have included representation by ICAO, IATA, SITA, ARINC, Inmarsat, Iridium, Airways New Zealand, FAA, and NavCanada. Input has been obtained from the legal departments of most of these organizations.

- (1) The wording around “term” is being further reviewed.

#### **3. Term**

- 3.1. The Charter remains in effect until such time the majority of charter stakeholders agree to terminate the Charter.

- (2) The wording around the “limitation of liability” is being further reviewed.

#### **5. Limitation of Liability**

- 5.1. No charter stakeholders can file any claims against any Charter stakeholders concerning Charter related matters as a result of having agreed to this Charter, except for claims for any losses arising out of, or in connection with any act or omission that is attributable to the gross negligence, contract breach, willful default, bad faith or fraud of any such Charter stakeholder.

- (3) IATA has requested some revision to the section listing additional operator support, in particular the statements regarding the release of flight log data and the implementation of software updates.

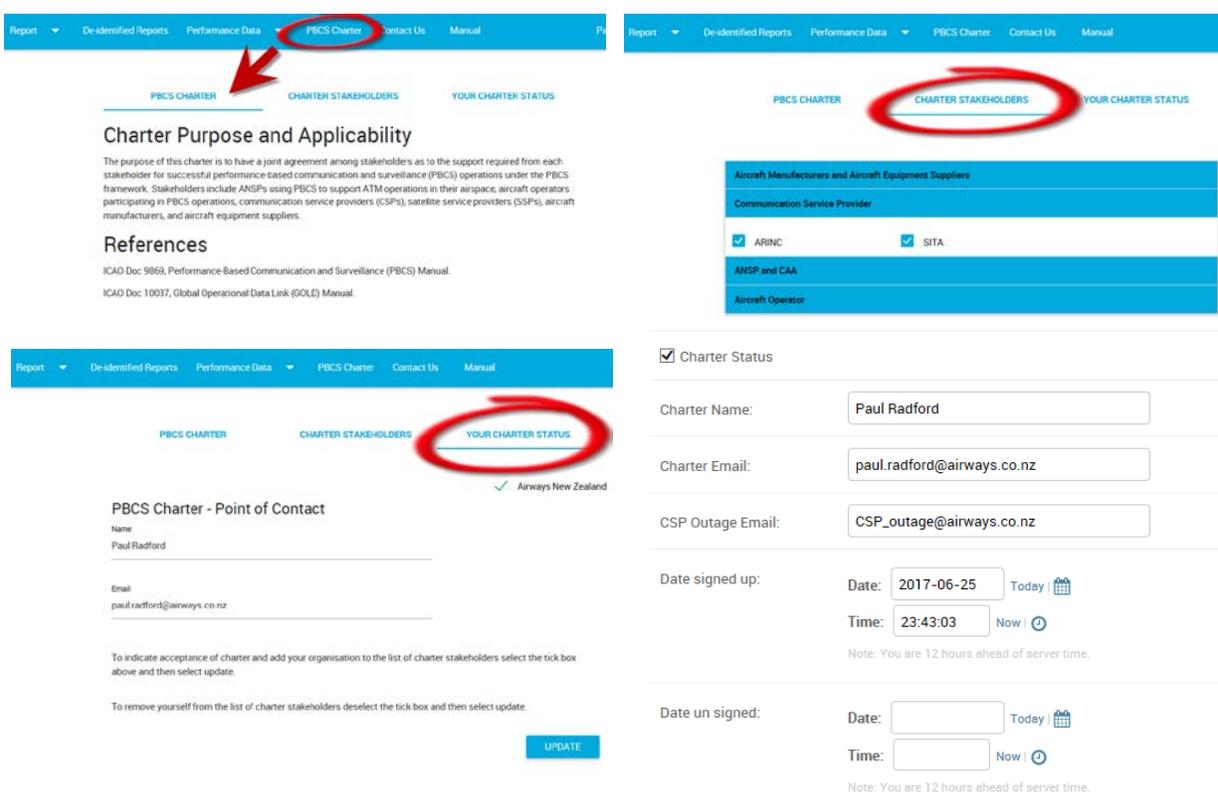
**6.4. Additional Aircraft Operator Support**

- 6.4.1. By agreeing to this Charter authorize CSPs to provide any flight log data containing aircraft operator messages to CRA ('s)
- 6.4.2. By agreeing to this Charter authorize ANSPs to promulgate PBCS performance for the operators aircraft to charter stakeholders.
- 6.4.3. Provide aircraft-specific recordings upon CRA request.
- 6.4.4. Implement all aircraft equipment software updates that resolve FANS1/A performance issues.

2.6 In general, the legal review has concluded there this is not a legally enforceable document as currently worded, and thus does not pose significant concern for the signatories. While this makes it more likely to have widespread participation, increasing the utility and global consequence of the Charter, it causes concern for some States and operators over the ability to address identified deficiencies and ensure that fixes/ improvements be made within a reasonable timeframe.

2.7 The PBCS Global Charter is under the final round of review pending a few areas of required resolution.

2.8 It is anticipated that the PBCS Global Charter will be finalized by 30 September 2017. It will then be posted by mid-October to the existing problem reporting website, [www.FANS-CRA.com](http://www.FANS-CRA.com), where users will be able to sign up and maintain membership. Figure 1 provides snapshots of the proposed web design.



**Figure 1.** Proposed web design for PBCS Global Charter

**3. Action by the meeting**

3.1 The meeting is requested to note the information.