



*International Civil Aviation Organization*

**NINETEENTH MEETING OF THE COMMUNICATIONS/NAVIGATION  
AND SURVEILLANCE SUB-GROUP (CNS SG/19) OF APANPIRG**

Bangkok, Thailand, 20 – 24 July 2015

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**Agenda Item 10: Any other business**

**A COOPERATIVE CNS SYSTEM PROCUREMENT APPROACH**

(Presented by AEROTHAI)

**SUMMARY**

This paper presents information regarding and creates awareness about the new (cooperative) procurement approach for CNS (and ATM automation) systems and shows some initial analysis on existing procurement approach applied in general and the new (cooperative) approach that may benefit the ANSPs at inter-organizational or international level.

**1. INTRODUCTION**

1.1 According to that an ANSP constantly needs to procure CNS systems, ATM automation systems, etc. in order for it to be able to provide the services it needs to provide. It constantly needs to carry out the procurement process in accordance with its laws/regulations. Ownership of the systems is then transferred from a vendor to the ANSP. The ANSP will then be fully responsible for preparing all required resources to maintain the systems to make sure that they operate at satisfactory level of performance, reliability and other quality aspects. Figure 1 illustrates this scenario.

**2. DISCUSSION**

2.1 There's a new approach for ANSPs playing the role of customer who needs the services delivered by the systems acquired from vendors. This new approach has been trialed by some vendors and ANSPs in other regions. The operational systems are provided and are up and running while their ownership is not transferred to the ANSP. The vendor still owns them and is fully responsible for maintaining the systems to make sure that they are running and delivering the required services to the ANSP at the level of quality predefined by the ANSP. Figure 2 illustrates this scenario.

2.2 Another scenario is illustrated in figure 3, where one (or more) vendors (Service Providers) provide services to multiple ANSPs (Service Users). Those ANSPs use the services from the cloud in a plug-and-play manner and there is a new term coined for the service users called "Buying club". The buying club cooperatively set up a set of quality indicators which the vendor(s) must meet and the members of buying club share the systems. Members of the same buying club may be in a couple of forms, e.g., civil and military ANSPs in the same state, or many ANSPs in multiple states.

2.3 The cooperative system procurement like this may have some benefits for the service provider in the way that they prepare the main systems only once and can provide services to multiple service users at the same time without having to physically install them at multiple places, the software update or the repair of the broken hardware parts can be performed very rapidly since the vendor (service provider) directly possess the systems. For the service user, this may have benefits in the way that the time required for the required services to be available is a lot shorter, which can help speeding up the implementation of newer technologies for improved service quality of ANSPs. And the very obvious benefit for all parties is the investment cost required is lower.

2.4 However, there may also be some concerns regarding secrecy of data and information that, under the existing procurement approach, each service user (ANSP) owns and its secrecy is always maintained. Sharing resources in this new cooperative approach means that the data/information may no longer be confidential. All of the data and information running through the systems will be immediately available to the service provider.

### 3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) be aware of the new cooperative procurement approach for CNS systems, ATM automation systems and other systems;
- b) conduct further pros and cons analysis and cooperatively apply it as appropriate;
- c) consider establishing a governance committee comprising representatives from every party in a buying club to monitor the activities of the service provider.

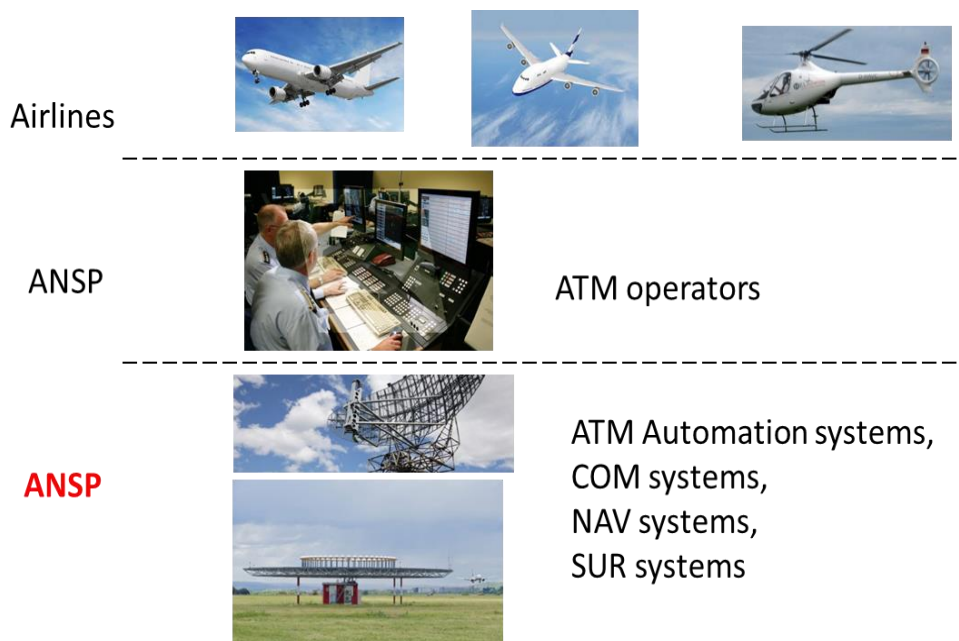


Figure 1

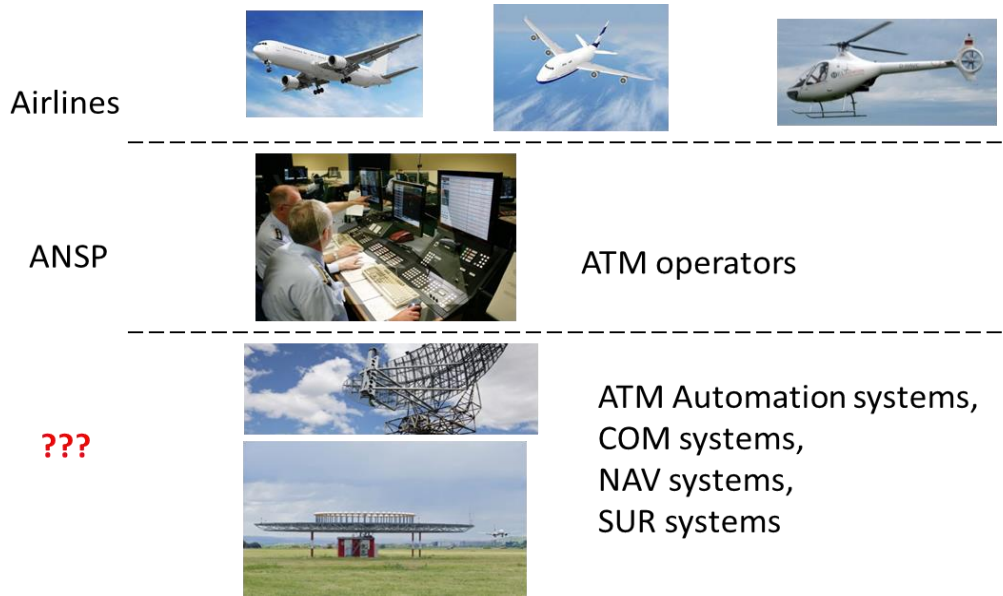


Figure 2

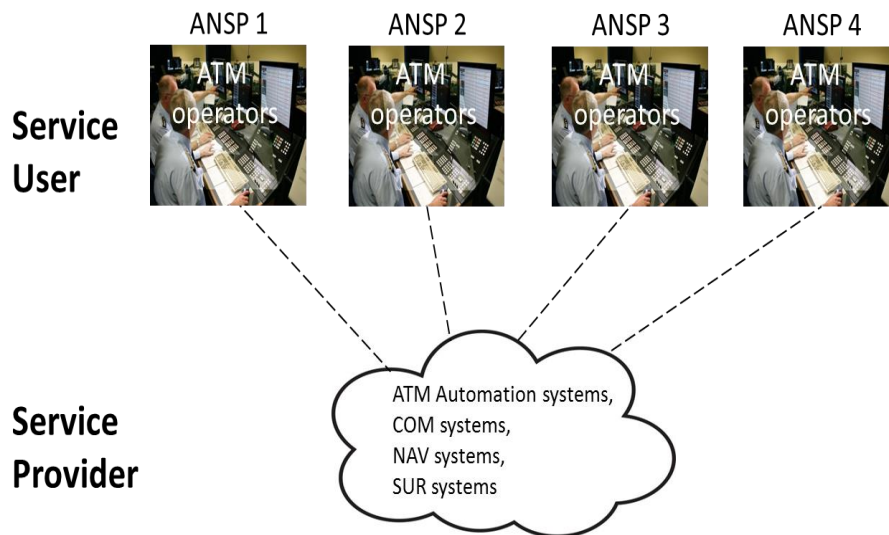


Figure 3