ATNP WG3
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Operator's need for Ground-Ground Data Exchange between Airline Host
Systems and State ATM Facilities

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Summary

IATA proposes the development of ATN SARPs and Guidance
material for ATN to support existing data exchanges among
ATS providers and operators such as flight plan filing, Notices
to Airmen (NOTAMs) and AFTN free text, and to cater for the
anticipated new applications to enable flight trajectory
negotiations, collaborative decision making (CDM) and other
traffic flow management applications.

1. Introduction

1.1   Following the ICAO Secretariat decision that identified applications could be brought directly to the ATN Panel, this paper identifies the need for the standardisation of applications for the ground to ground information exchange between operators and ATS providers.

1.2   The paper recommends the ATN panel to development SARPs and Guidance material to support existing ground to ground communication applications and applications expected to become required within the new CNS/ATM operating concept of free flight.

2   Background

2.1   To increase capacity and improve flight efficiency, it is anticipated that aside from the introduction of ATN air-ground applications, there will be an increasing need to exchange information among the ATS providers and the operators between their respective ground host systems. Within the new CNS/ATM concept both ATS providers and operators will require more and actual information on traffic, weather and facilities for the subject airspace and routes. As ATN is seen as the enabling technology to realise this need, it is advised to identify the new applications and establish the communication requirements for flight trajectory negotiations and collaborative decision making.

2.2   Whilst the process as identified under paragraph 2.1 is being pursued, there are a number of automated data flow mechanisms currently in place among various ATS providers and airline host systems for the exchange of information such as flight plan filing, Notices to Airmen (NOTAMs), and AFTN free text. With the advent of the aeronautical telecommunication network (ATN), these applications require global standards using ATN protocols and services to replace the existing automated data flow mechanisms. Such standardized ground-ground interfaces will permit both airlines and ATS providers to make use of the code and byte independent ATN, as well as application authentication security and network system management mechanisms.

3   Recommendation

3.1 The working group is requested:

   a) To start developing the necessary standards to enable the use of ATN for the present automated data flow mechanisms,
   b) To take account with the work under a) of the need to facilitate future applications for the ground to ground information interchange between ATS providers and operators, and
   c) To request the appropriate ICAO panels to identify and establish requirements for the ground to ground data interchange between ATS providers and operators.