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ASSEMBLY — 40TH SESSION

TECHNICAL COMMISSION

Agenda Item 30: Other issues to be considered by the Technical Commission

CONNECTING NATION-WIDE LOGISTICS IN INDONESIA WITHIN 24 HOURS

(Presented by Indonesia)

EXECUTIVE SUMMARY

This information paper presents Indonesia's vision and mission to establish integrated air cargo operator and logistics provider to connect nation-wide cargo potentials to the world's market. Indonesia is an archipelago country with potential market growth 11% forecasted from 2016 to 2028 and will reach an estimated 4 bio kilogram of cargo in the next 10 years. However, there are challenges to encounter: (1) E-commerce was growing so fast; (2) limited capacity to deliver cargo market by air transportation; (3) connectivity, currently the potential cargo market in small island or remote area can only be delivered by land and sea transportation; and (4) technology, people tend to want an easy access and digitized. Garuda Indonesia as a national flag carrier have a mission for connecting nation-wide logistics in Indonesia within 24 hours and supporting the National Logistics System (SISLOGNAS) through optimizing connectivity between the center of economic activity and the area that is widespread in Indonesia. Unmanned aircraft systems (UAS) is a solution to answer those challenges because UAS have: (1) economic advantage which is 30% lower air freight cost; (2) technical advantage to reach a short runway for take-off and landing; and (3) sustainable strategy with no barrier for distributing cargo to all domestic destination.

Strategic Objectives:	This information paper relates to the Safety, Air Navigation Capacity and Efficiency and Economic Development of Air Transport Strategic Objectives
Financial implications:	-
References:	Annex 6 — *Operation of Aircraft*

1. INTRODUCTION

1.1 Challenges for Indonesia cargo market:

a) E-commerce: total online e-commerce will rise to USD 55-65 bio in 2022 (*McKinsey,2018*) leads to the increase of shipment's volume/traffic;

b) Limited capacity: total capacity of Indonesian air cargo 2 bio Kgs in 2018, meanwhile the cargo market forecasted to reach 4 bio Kgs in the next 10 years;

c) Connectivity: Indonesia has many potential marine products in small island or remote area which can only be delivered by land and sea transportation, most likely taking a long time; and

d) Technology: people in current generation (millennials) tend to want an easy access, faster, and digitized.

Why UAS technology in Indonesia:

1.2 Economic advantages:

a) low cost for purchasing and operating;

b) adequate capacity (2,200 kg,18 cubic meters);

c) air and land joint operation; and

d) 30% lower air freight cost.

1.3 Technical advantages:

a) short runway for take-off and landing capability;

b) lower risk with unmanned; and

c) experienced with already serving China military for 10 years.

1.4 Sustainable strategy:

a) suitable to operate in archipelago country;

b) no barrier for distributing cargo to all domestic destination; and

c) connecting nationwide air cargo network within 24 hours.

2. DISCUSSION

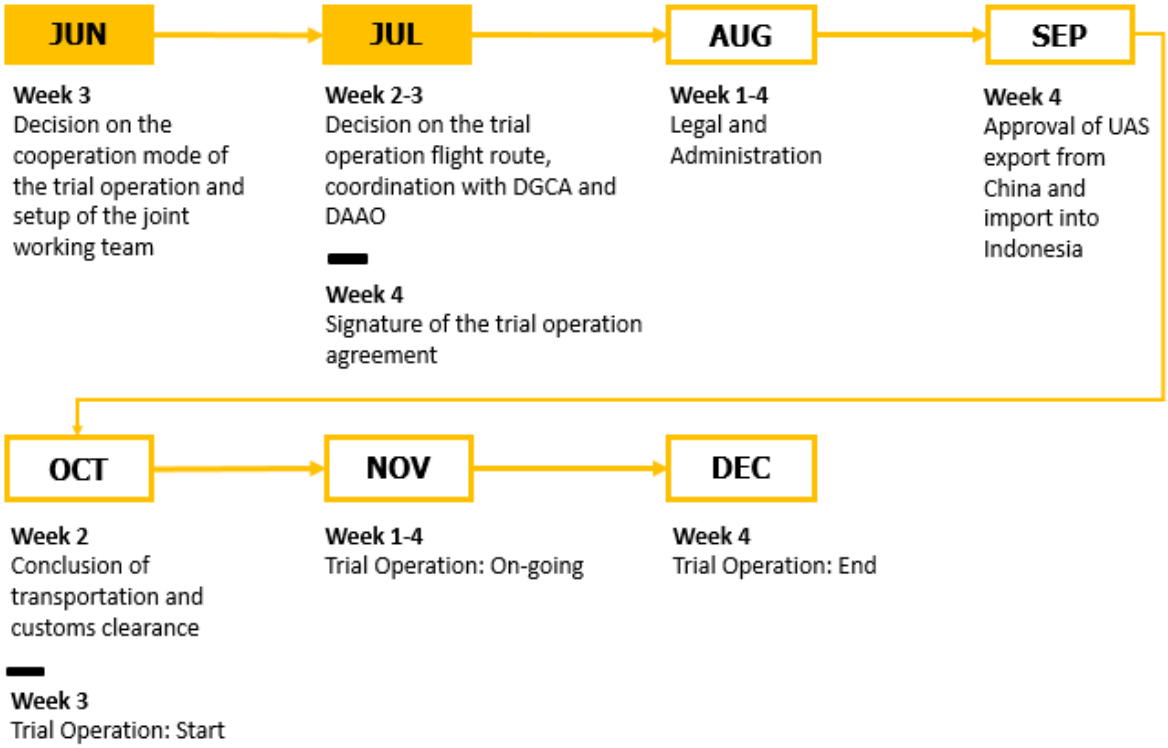
2.1 There is no specific regulation for drone permits as an air transportation. In terms of supporting the regulation, it is necessary to have agreement on the determination of drone's classification, whether as an aircraft or any other type of transportation. Also, the classification of drones as a commercial or non-commercial matter.

2.2 There are concerns were needed by individual drone users such as technical instruction/manual for using drones in population areas and the conditions for operating at night, geofencing applications, security clearance procedures, clearance of vital objects and protection from unlawful actions by individuals in the field.

2.3 Currently, Garuda Indonesia is in the preparation to develop and operate 100 drones/UAS as freight or air transportation and will be operated to connect cities in Central and East Indonesia. The trial operation is planned to take place in September 2019.

2.4 By anticipating the operation and development of drone in a comprehensive and balanced either of the benefits and the risks. These risks are related to aviation safety and security, public safety, and security risk including national defense.

2.5 Trial operation timeframe (based on conventional scenario):



3. CONCLUSION

3.1 The Assembly is invited to:

a) comment and discuss any relevant matters of the content in this paper;

b) share other Member States experience to be used as lesson learned for UAS management economically;

c) share other Members States for the possibilities of charging permit of UAS operations and trial operation;

d) support UAS as the new modes of transportation for air cargo and logistic infrastructure; and

e) optimize the working group of UAS operation to formulate the regulation.

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