(Joint Release)

December 20, 2023 Japan Airlines Co., Ltd. KDDI Corporation KDDI SmartDrone Co., Ltd.

## Japan Airlines and KDDI SmartDrone Announce Capital and Business Partnership to Accelerate Advanced Drone Utilization

Japan Airlines Co., Ltd. (Headquarters: Shinagawa-ku, Tokyo, President and JAL Group CEO: Yuji AKASAKA, hereinafter referred to as "JAL") and KDDI SmartDrone Co., Ltd. (Headquarters: Minato-ku, Tokyo, President: Masafumi HIRONO, hereinafter referred to as "KDDI SmartDrone") have signed a business partnership agreement on November 28, 2023, to promote the social implementation of advanced drone utilization, including beyond visual line of sight (BVLOS) flight.

In addition to this business partnership,, JAL, KDDI Corporation (Headquarters: Chiyoda-ku, Tokyo; President and CEO: Makoto Takahashi; hereinafter referred to as "KDDI"), and KDDI Smart Drone have also entered into a capital alliance agreement on the same day. Under this agreement, JAL has acquired shares issued by KDDI SmartDrone through third-party allotment, strengthening the collaborative structure between the companies.

## ■Background:

The utilization of drones is expected to help solve various social challenges in Japan, including logistics "2024 Problem," labor shortages resulting from a decreasing working-age population, aging infrastructure, depopulation, and aging of rural areas.

The revised Aviation Act implemented in December 2022 has legalized level 4 flight, allowing for BVLOS flight without visual observers in populated areas. Furthermore, regulations easing restrictions for BVLOS flight are scheduled for December 2023. In light of these developments, the social implementation of drones needs to be accelerated.

To make greater contributions to solving social challenges, more advanced drone utilization, such as BVLOS flight in level 3 and level 4 environments, and "one-to-many drone operation" where a single operator controls multiple drones, needs to be implemented under appropriate safety management and operational methods.

Building upon their collaborative efforts, JAL and KDDI signed a basic agreement in February 2022 on the establishment of operational management and business models for the development of social infrastructure using drones. Since then, they have been promoting joint initiatives, such as drone delivery implementation in the Amami Islands, demonstration experiments for level 4 flight in Tokyo, and collaborative technological development to achieve "one-to-many drone operation."

## ■Purpose and Details of the Partnership:

By leveraging JAL's technological expertise and knowledge in aviation transport business operations, including safety management of air mobility, and KDDI and KDDI SmartDrone's operation management systems and communication infrastructure that enable flight control and airspace management, the partnership aims to accelerate the realization and expansion of advanced drone utilization.

Specifically, JAL and KDDI SmartDrone will focus on the following initiatives to achieve safe, secure, and efficient social implementation of advanced drone utilization, including BVLOS flight and "one-to-many drone operation":

- 1. Establishment of systems and services related to remote operation and airspace management of drones.
- 2. Research and development of flight management and establishment of operational structures for drones.

For instance, by remotely controlling and operating multiple drones across different regions, the aim is to streamline business operations and facilitate rapid responses during emergency situations for companies and local governments. Furthermore, the partnership endeavors to ensure safe airspace management for multiple drones operating within the same airspace.

These initiatives are intended to provide solution services that support drone operators by fiscal year 2024. JAL and KDDI SmartDrone are committed to expanding their efforts to facilitate the adoption of advanced drone utilization by companies and local governments throughout Japan.



<Reference>

Press Release, February 15,2022,

"JAL and KDDI Collaborate to Create Social Infrastructure for Drones"

https://press.jal.co.jp/en/release/202202/006546.html

Press Release, Aug 26,2022

"KDDI and JAL to launch Initiative to Realize One-to-Many Drone Operation" https://press.jal.co.jp/en/release/202208/006924.html

Press Release, Nov 28,2022

"JAL conducts demonstration of drone implementation model to support island life" https://press.jal.co.jp/en/release/202211/007077.html

• Press Release, Jan 24,2023

"Demonstration of long-term drone operations with a view to future Level 4 flights in Tokyo" <u>https://press.jal.co.jp/en/release/202301/007182.html</u>