A Concept Note

*Wakanda Beyond
Peer Action Group*

Check First:
A Drone Regulatory
Information App

Overview

The advent of drone technology has brought about a significant change in various sectors, including agriculture, photography, infrastructure, and delivery services, offering immense economic potential. However, the rapid proliferation of drones necessitates stringent regulatory measures to ensure safe airspace and compliance with local and international laws. The complexity and diversity of these regulations pose a significant challenge to drone operators, particularly novices unaware of specific restrictions pertaining to airfields, military zones, and other sensitive areas. Unsurprisingly low compliance is a key issue in many countries. This concept note outlines a proposed solution to bridge the communication gap between regulatory authorities and drone operators, making it quick and easy for operators to know if they can fly in a specific area, and what actions are required to do so legally.

The problem

Drone operators often navigate a convoluted regulatory landscape, with many unsure how rules apply to their specific operations. The lack of awareness or understanding of regulations leads to unintentional non-compliance, risking safety breaches and legal repercussions. Regulations that simply list the types of areas where one can not fly e.g. prisons, air traffic control zone, army bases are insufficient as a user may not be aware that they are near a sensitive area.

Current mechanisms fall short in effectively disseminating crucial regulatory information. For many drone operations that do not require prior authorisation, it can be difficult to determine whether there are restricted areas nearby. Rather than complying and staying on the ground, this tends to lead to non-compliance, whether through ignorance or deliberate disregard. This highlights a fundamental challenge: informing the public of the specific rules governing the use of airspace in any specific geographic location.

Our Proposed Solution

We propose the creation of a drone information app for the members of Wakanda Beyond to address the communication gap between authorities and drone operators. This gap relates to the, sometimes complex, rules and restrictions that drone operators have to follow. The main challenge is to make these regulations easy to understand and accessible to everyone. By developing an app we call Check First, authorities can share the latest rules in a simple way that is accessible to most drone operators without barriers.

An app is important not only because it provides a more accessible way of understanding the regulations, but also because it ensures that people are complying with them. By providing a platform where operators can easily identify which regulations apply to a particular operation, and where authorities can easily post updates and information, the app will help drone operators stay informed and compliant. This will lead to safer and more responsible drone use.

After downloading the Check First app, drone operators would need to follow three basic steps:
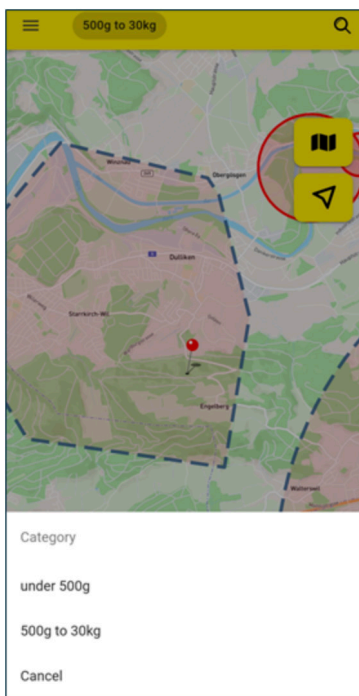
STEP 1:
Operators must select their drone type in the app. The selection process depends on specific characteristics such as weight and size, depending on local regulations.

STEP 2:
Operators can use the app to locate themselves via GPS for immediate flights, or mark a location on a map for planned operations. This step is crucial in identifying the specific regulations that apply to the area where the drone will be flying.
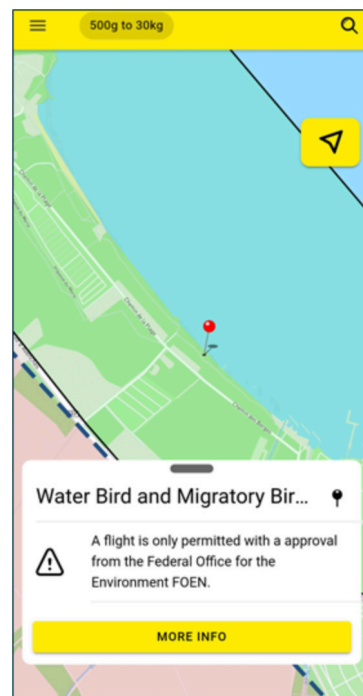
STEP 3:
The app provides operators with feedback on the rules and restrictions for the selected location. This can include zonal restrictions, checklists and information on whether regulatory approval is required. If permission is required, the app will guide operators on how to contact the relevant authorities.

STEP 1: Selecting a drone category

STEP 2: Locating the user or a planned drone operations area

STEP 3: App provides feedback on restrictions and authorities to be contacted for approval

In addition, the app can help prevent tourists and other temporary users from inadvertently breaking local drone laws. By providing clear, accessible information, the app helps all users understand and comply with the specific drone regulations of the area they are in.

Why this is important

The Check First app addresses a critical need for clear, accessible regulatory guidance within the drone community, promising to:

- Enhance airspace safety by promoting informed compliance with regulations.
- Support the integration of drone technology across sectors by reducing operational barriers.
- Foster a culture of responsible drone use that respects legal and safety standards.

How it works

1. **Target definition:** Defining what the app needs to achieve and which stakeholders in the country should be involved to provide information.

2. **Market research:** Research existing apps to understand the current landscape, identify gaps and potential partners

3. **Solution customisation:** Based on the selected partner, adaptation of the app to include the specific regulations of the country in question and to use data (e.g. maps) that are valid in that country.

4. **Data collection:** Requesting relevant information from identified in-country stakeholders such as police, military, environmental agencies, air navigation service providers and government institutions.

5. **Data digitisation:** Converting the collected data into formats suitable for application integration and publishing within the application.

6. **Training:** Training internal staff and stakeholders on how to use and manage the back-end of the application.

7. **Launch:** Releasing the app on all relevant app stores (especially Android Play Store & Apple App Store) for public download, providing access to web version, if developed.

8. **Promotion:** Conducting initial and ongoing promotional campaigns. Partner with local drone vendors to include the app download link in their information sheets.

9. **Continuous improvement:** Regular updates to the app with new data and changes provided by in-country participants or ensure that data is updated by them.

Expected Outcomes

Results:

The introduction of the Check First drone information app is set to significantly increase compliance and elevate operational safety within the drone community. By providing drone operators with easy access to clear, concise regulatory information, the app is expected to foster higher compliance with local drone laws. It will also improve safety by offering real-time updates on no-fly zones and other flight restrictions, thereby minimizing the risk of aerial incidents. Moreover, the app will empower drone pilots with the knowledge necessary to make informed decisions about their flight operations, promoting safer and more responsible drone usage.

Outcomes:

The deployment of this app will streamline the communication between regulators and drone operators, ensuring that the latest updates and essential safety information are readily accessible. This not only supports the growth of drone-based services and innovations by simplifying compliance but also enhances the protection of critical infrastructures and sensitive areas through increased operator awareness. Furthermore, the data collected from app usage will offer valuable insights, enabling regulators to refine drone policies and improve the integration of drones into national airspace systems effectively. By establishing Africa as a leader in drone safety and regulation, this initiative serves as a model that can be adapted and adopted globally, underscoring the continent's commitment to fostering a safe, innovative future for drone operations.

Join us

Become part of the Wakanda Beyond Alliance, joining forces with partners dedicated to enhancing drone safety and operational efficiency across Africa and beyond.

If you share our vision for a seamlessly integrated airspace, we invite you to express your interest. Together, we can contribute to making Africa the easiest place to fly drones safely.

AN INITIATIVE OF: DRONES DOING GOOD ALLIANCE

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