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## WFP AVIATION: MORE THAN A SERVICE

Beyond the Annual Performance  
Report 2018 Series



December 2019

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# I. INTRODUCTION

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Photo: WFP/JUNHAS/ Niema AbdeImaged

The frequency of humanitarian emergencies has significantly increased the number of people in need of humanitarian assistance over the last 20 years. During 2018, 136 million people required international humanitarian assistance, representing an increase of 5.8 percent as compared to 2017<sup>12</sup>. This increase was particularly pronounced in sudden-onset emergencies, where air transport to move lifesaving supplies over vast distances was critical. Air transport remained the fastest means to reach people who would otherwise be inaccessible by road.

## SERVING THE HUMANITARIAN COMMUNITY

The WFP Strategic Plan (2017–2021) strategic goals are based on two primary Sustainable Development Goals (SDGs): SDG 2: Achieving zero hunger, and SDG 17: Partnering to support the implementation of the SDGs. In line with these two SDGs, WFP Aviation provides the humanitarian and development communities with access to safe and reliable air services. It transports passengers and cargo and facilitates medical evacuations using three different modalities: i) the United Nations Humanitarian Air Service (UNHAS), ii) Airlift, and airdrops for the delivery of large quantity relief cargo and, iii) on-demand bilateral aviation services.

This report, “WFP Aviation – More than a Service”, highlights WFP Aviation’s primary achievements for 2018. It presents data collected from WFP’s corporate systems and complements the 2018 Annual Performance Report. Section II presents the historical background of WFP Aviation, while Section III reviews some of 2018’s main operational activities.

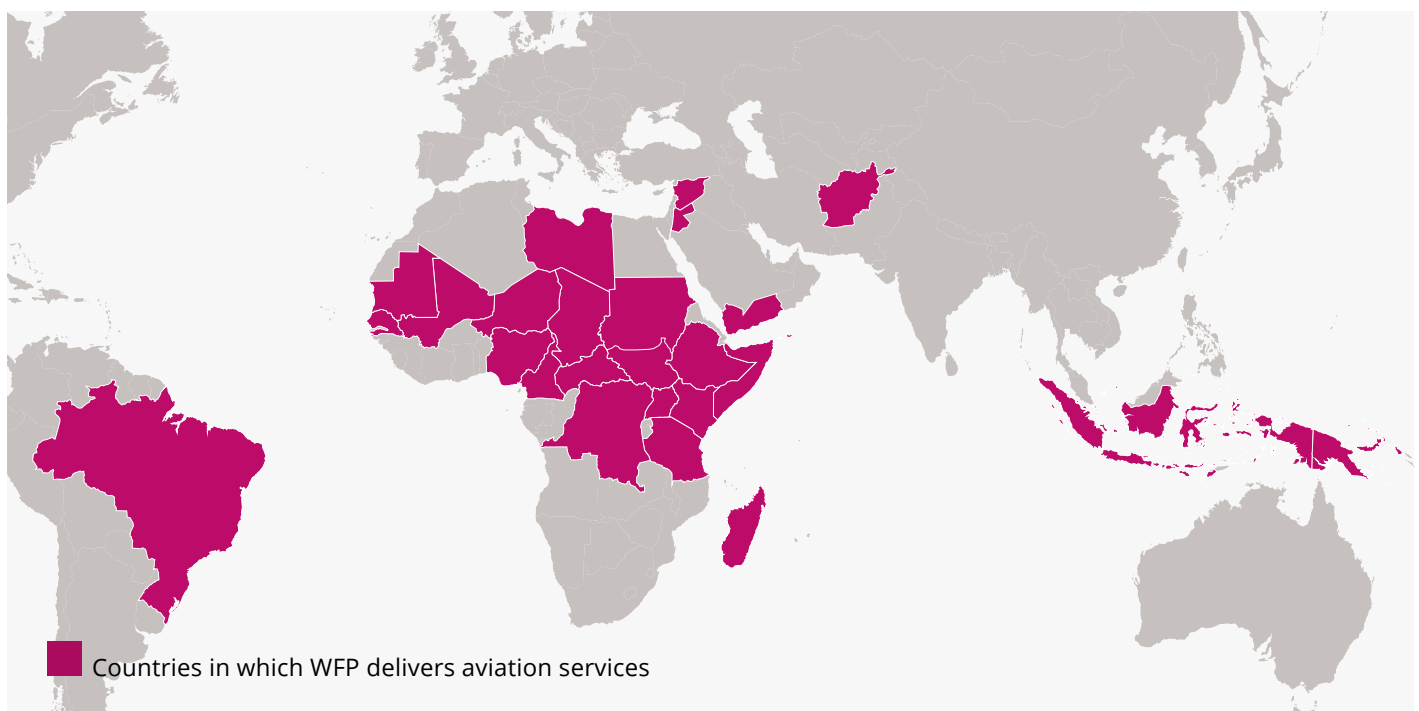
Section IV describes WFP Aviation’s three types of air services, while Section V presents details about UNHAS’ governance structure, funding model and passenger trends. Section VI highlights WFP’s commitment and adherence to safety standards, and Section VII discusses innovative strategies to assist communities in remote locations. Finally, Section VIII discusses the way forward.

## BACKGROUND

WFP began its large-scale air operations in the 1980s to transport food and humanitarian workers to countries like Angola, Ethiopia, Somalia and Sudan. Air transport subsequently evolved into an integral part of WFP’s logistics. Gradually, WFP Aviation transformed from addressing an internal, institutional need into a common service for the humanitarian community.

During the early 1990s, the rise of global humanitarian crises led to an increased need for air support to enable timely delivery of food, medicine and shelter. Many United Nations agencies maintained separate air operations, reflecting their individual organisational needs. The United Nations High-Level Committee on Management assigned WFP the mandate to lead all United Nations humanitarian air operations following a series of severe and fatal air accidents. Effective 1 January 2004, WFP was commissioned to establish an independent air safety unit. WFP was chosen because of its logistics leadership. Fifteen years later, UNHAS has become the leading humanitarian air transport provider for humanitarian and development communities.

**Figure 1: Aviation services delivered by WFP**



1 United Nations Office for the Coordination of Humanitarian Affairs. 2017. Global Humanitarian Overview 2017.  
 2 United Nations Office for the Coordination of Humanitarian Affairs. 2018. Global Humanitarian Overview 2018.

## II. OPERATIONAL UPDATE

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In 2018, WFP Aviation supported operations in 24 countries, providing safe, efficient and effective air transport to 400,000 passengers and 80,000 mt of relief supplies. This helped donors, United Nations agencies, non-governmental organizations (NGOs) and other organizations to respond more effectively to humanitarian and development needs worldwide. WFP Aviation delivered air services to some of the world's direst emergencies: the Ebola response in the Democratic Republic of Congo, insecurity in Nigeria and conflict in Yemen.

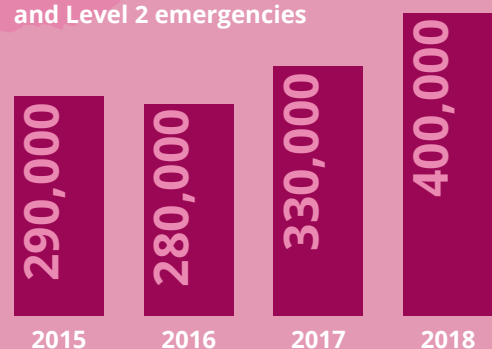
The declaration of a Level 3 emergency in Nigeria, following insurgency and internal displacement, led to a significant increase in the number of passengers transported by WFP Aviation between 2016 and 2018. In 2016, 15,000 passengers relied on WFP Aviation to access northeast Nigeria; this figure grew to 63,000 in 2018. Same-day, roundtrip missions were also conducted to help evacuate patients to receive emergency medical treatment and health interventions such as vaccinations and treatment of cholera.

The Ebola outbreak in the provinces of Equateur and North Kivu required immediate action by humanitarian actors. Within 24 hours of the outbreak, WFP Aviation established an air bridge between Goma and Beni (the epicentre of the epidemic in North Kivu province), increased the frequency of flights to Mbandaka in the Equateur province, and added a helicopter to its fleet. Donor support was critical to ensuring a specially-equipped helicopter was positioned to facilitate the movement of health personnel and biological samples for the World Health Organization and the Ministry of Health. The helicopter also ensured that any suspected or symptomatic patients could be moved quickly.

UNHAS operational performance demonstrates its responsiveness and ability to adapt to existing and emerging demands. Increased numbers of passengers transported across Level 3 emergencies from 2014 to 2018 reflect an increasing reliance on UNHAS to access populations affected by conflict, epidemics and climate-related shocks.

The situation in Yemen continued to deteriorate in 2018. United Nations agencies and NGOs scaled up activities to meet the increasing needs, resulting in a 22 percent rise in the demand for UNHAS services compared with 2017. Since August 2016, the Sana'a airspace had been closed to international flights. Without any local airlines, the WFP-operated UNHAS remained the only common air service available to the humanitarian community in Yemen. The aviation service connected humanitarian and development workers from Djibouti and Amman to Sana'a and the port city of Aden.

Figure 2: Number of UNHAS passengers transported to Level 3 and Level 2 emergencies



### III. AVIATION SERVICES - 2018 IN NUMBERS

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Photo: WFP/Gabriela Vivacqua

## UNITED NATIONS HUMANITARIAN AIR SERVICE

UNHAS is a critical enabler of humanitarian and development assistance. It provides safe, reliable, cost-efficient and effective passenger and light cargo transport to and from areas affected by natural and man-made disasters. UNHAS is activated at the request of the humanitarian community when safe and reliable surface transport options are critically compromised by poor infrastructure, vast distances and insecurity, and when there is no safe commercial air transport alternative. UNHAS served over 700 organizations comprising United Nations agencies, NGOs, donor countries and diplomats to facilitate humanitarian and development response. Representatives from these users constitute a Steering Committee at field level, which provides strategic guidance for the service in each operation.

### Key achievements in 2018



**16 COUNTRIES**  
REACHED



**386,330 PASSENGERS**  
TRANSPORTED



**3,655 MT LIGHT CARGO**  
TRANSPORTED



**1,362 PEOPLE**  
EVACUATED



**323 DESTINATIONS**  
SERVED

## AIRLIFTS AND AIRDROPS

WFP Aviation offers services such as airlifts and airdrops in support of humanitarian interventions. Both are important for WFP food assistance programmes and large-scale cargo delivery for partner organizations. WFP also deploys cargo aircraft to meet protracted needs in large-scale operations such as South Sudan and Somalia and provides specialized cargo aircraft services for charter flights from major hubs of the United Nations Humanitarian Response Depot (UNHRD) and other locations, as requested.

It is critical to recognize that cargo delivery is demand-driven. Significant spikes in humanitarian cargo quantities often reflect a response to sudden-onset emergencies or changing dynamics in a protracted operation. In 2014, for example, the response to the Ebola outbreak in West Africa accounted for a high quantity of airlifted cargo (36,984 mt). The airlift to Qamishli in northeast Syria, as well as the introduction of high-altitude airdrops in the besieged city of Deir Ezzor, led to a significant increase in cargo delivered through airlifts and airdrops from 2014 to 2017. Both airlift and airdrop operations in Syria ended in 2017 following an increase in negotiated access by surface transport.

## Key achievements in 2018



**19 COUNTRIES**

REACHED



**14,912 MT DELIVERED**

THROUGH AIRLIFTS



**60,667 MT DELIVERED**

THROUGH AIRDROPS

**Figure 3: Cargo delivery by airlift and airdrop, 2014-2018**



## ON-DEMAND BILATERAL SERVICES

On-demand bilateral services provide passenger services to United Nations agencies and NGOs in locations where UNHAS is either non-operational or the organizational needs cannot be fulfilled consistent with Standard Operating Procedures. e.g., there is a limitation on the number of passengers per organization. In 2018, WFP provided air services to the United Nations High Commissioner for Refugees and the United Nations Department of Safety and Security in the Democratic Republic of Congo, Kenya, Somalia, and Tanzania.

## Key achievements in 2018



### 2 PARTNERS

SERVED (UNHCR AND UNDSS)



### 7,506 PASSENGERS

TRANSPORTED



Photo: WFP/Gabriela Vivacqua

# IV. UNITED NATIONS HUMANITARIAN AIR SERVICE - BUSINESS MODEL



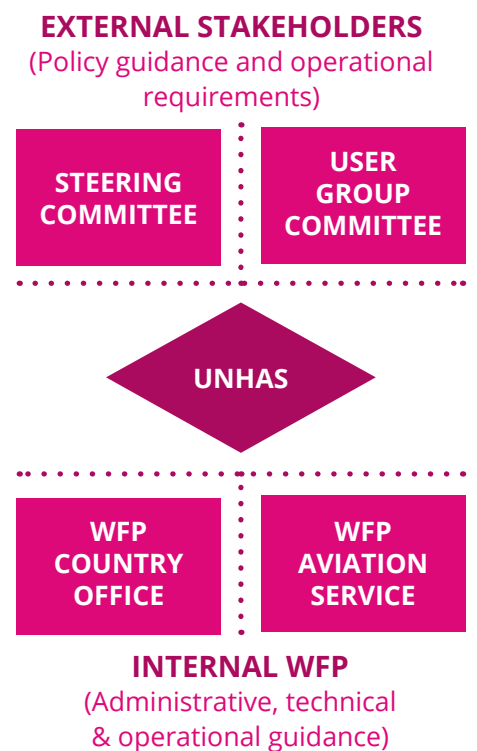
Photo: WFP/Rein Skullerud

## GOVERNANCE

WFP oversees the operational management of and ensures all UNHAS operations comply with pertinent safety standards and regulations. UNHAS utilizes steering and user group committees at the field level to ensure high-quality air services are delivered to the humanitarian community.

1. The Steering Committee is chaired by the Resident/Humanitarian Coordinator and co-chaired by the WFP Country Director. It comprises representatives from donors, United Nations agencies, and NGOs and is first and foremost responsible for overseeing the funding situation of the relevant UNHAS operation and ensuring sufficient funding is provided on time. The committee also advises on prioritization of operational locations, frequency of flights, and organizations' eligibility to use the air service. Globally, 44 organizations are represented in the Steering Committee.
2. The User Group Committee is chaired by the UNHAS Chief Air Transport Officer and comprises all registered user organizations. This committee advises UNHAS on issues such as the quality of service and flight schedule.

Figure 4: Governance structure



## FUNDING MODEL

Predictable and timely funding is essential to provide effective and cost-efficient air services to the humanitarian and development communities. UNHAS is sustained through a combination of two funding streams: donor contributions and partial cost-recovery mechanism. Contributions from donor governments, intergovernmental organizations and multilateral funds remain the principal lifeline of the common aviation service.

The UNHAS Steering Committee in each operation determines the funding modality in the country, including decisions on cost recovery to be charged to the agencies and organizations per passengers transported. This governance structure reinforces the sense of ownership and protects the interests of all stakeholders, a management system in sync with a common service mindset. Cost recovery augments donor contributions and serves as a deterrent against potential abuse of the common service, with a negative impact on the optimal utilization of the air assets. The cost-recovery rate in each UNHAS operation is carefully looked at and evaluated at the relevant Steering Committee, as it has a direct implication on the usage of UNHAS. Most UNHAS operations apply partial cost recovery, however, some operations may be funded entirely by donor contributions either due to the nature of the operation, sudden onset emergencies and where a local permit for cost-recovery is withheld. For example, the Libyan operation is fully funded from donor contributions. This operation is yet to introduce cost recovery due to the lack of relevant permits to do so from the local civil aviation authority.

In 2018, there was an increase in the total funds received compared with previous years. The cost recovery component accounted for thirty percent of the total funds required during the year. UNHAS managed to begin their operations in 2018 thanks to carried over funds from the previous year and similarly to start operations at the beginning of 2019, carrying over 20 percent of the yearly requirements, enabling to bridge potential funding gaps when donor commitments were being confirmed.

Non-UNHAS services provided through WFP Aviation, such as ad-hoc flights and air support for WFP logistics activities, amounted to USD 22 million.

## PASSENGERS AND CARGO TRANSPORTED

UNHAS has established itself as one of the United Nation's premier mechanisms for reaching affected populations in logistically difficult locations.

The progressive growth in passenger services from 2015 to 2018 reflect an increased number of emergencies, mainly in insecure and deep field locations, where air service providers are limited. New operations such as Nigeria and Yemen, as well as protracted emergencies like South Sudan and the Democratic Republic of Congo accounted for the increase in passenger trends from 2015 onwards. In 2014, the Ebola response in West Africa, for instance, witnessed record levels of logistics support and passenger transport.

Similarly, cargo delivery reflects emergencies' changing dynamics. UNHAS was the primary air service to transport medical supplies to affected locations during the Ebola crisis, leading to an increase in the quantity of cargo transported in 2015.

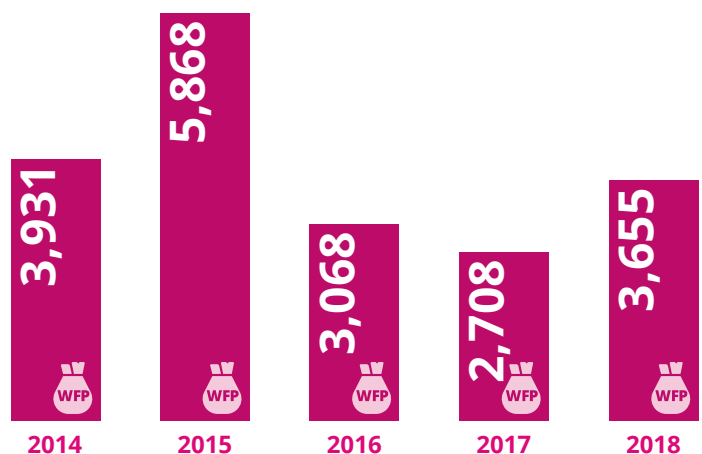
Figure 5: UNHAS user categories 2018



Figure 6: Five-year trend of passenger transport



Figure 7: Five-year trend of cargo transport



V. AVIATION SAFETY

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Photo: WFP/Giulio D'Adamo

## AVIATION SAFETY UNIT

WFP Aviation does not manage any aircraft of its own, but contracts aircraft from other operators. The chartered operators need to be compliant with both International Civil Aviation Organization (ICAO) Standards and Recommended Practices and the United Nations Aviation Standards for Peacekeeping and Humanitarian Air Transport Operations. Operators are approved by the WFP Aviation Safety Unit (ASU). Based in Rome, with regional offices in South Africa, Kenya and the United Arab Emirates, the ASU, which directly reports to the Deputy Executive Director, conducts safety evaluation of commercial air operators across all regions for possible inclusion in the List of Registered Air Operators. In 2018, ASU completed 150 evaluations of different air operators.

The safety evaluation process, which includes a review of certifications, safety records and identification of gaps, enables air operators to improve their safety systems. ASU also provides safety management system training to commercial air operators, civil aviation authorities and WFP staff across all operations. Also, all UNHAS operations actively involve the civil aviation authority and domestic air service providers in their training initiatives. For example, UNHAS in Chad provides tailored trainings to staff of Tchadia, the new national carrier of Chad.

## GLOBAL HUMANITARIAN AVIATION CONFERENCE

The annual Global Humanitarian Aviation Conference convened by WFP has become a rallying point for sharing knowledge, addressing some of the most challenging issues in the aviation sector and leveraging available innovations to enhance the quality of humanitarian air service. This annual event is organized in collaboration with key industry players including the International Civil Aviation Organization, the International Air Transport Association, manufacturers, air transport operators and other humanitarian air transport providers such as the International Committee of the Red Cross, Médecins Sans Frontières and Aviation Sans Frontières. Also, WFP facilitates aviation safety campaigns twice a year in different parts of the world, to raise awareness on recurrent safety concerns and to promote a culture of safe aviation among civil aviation authorities, airport authorities, air carriers and regulators.

VI. EFFECTIVE SOLUTIONS THROUGH INNOVATION





WFP Aviation is embracing new technologies that will enhance the effectiveness of its air operations for humanitarian and development responses. Efforts to optimize the use of emerging technologies and innovations to increase WFP's cargo delivery capacity remain a priority. The technologies that WFP has prioritized and will continue to explore further are Remotely Piloted Aircraft Systems (RPAS) – commonly known as drones – and hybrid cargo airships.

## USING DRONES FOR CARGO DELIVERY

While cargo delivery by air has traditionally relied on manned aircraft, RPAS offer untapped potential in this task. RPAS would also reduce the risks associated with staff security, especially in conflict areas. WFP Aviation has been engaged with potential operators and manufacturers offering RPAS capable of delivering up to 1.5 mt of cargo from very short airstrips.

WFP will continue collaborating with the ICAO, the IATA, the national civil aviation authorities and other key stakeholders to build a regulatory framework for RPAS operations. This will enable more direct delivery of relief supplies to local communities and help to improve the humanitarian response while creating jobs in advanced technology and providing employment for local operators.

## PRIORITIZING ENVIRONMENTAL EFFICIENCY

Continuously striving for greater fuel efficiency and less impact on the environment, WFP Aviation is investing in the use of environmentally-friendly aircraft technologies. The newer generation of aircraft, such as Casa 295, recently deployed by WFP in Mozambique and now operating in South Sudan, offers better performance by combining enhanced capabilities such as short take-off and landing with improved fuel efficiency, speed, range, and noise reduction. The Casa 295 deployed by WFP is the first civilian version of this military aircraft.

Recent advances in emerging aviation technology such as modern helium-filled “hybrid cargo airships” offer opportunities to improve the logistic response to a rapid onset disaster. Hybrid airships enable affordable and safe delivery of heavy cargo and personnel over significant distances. They require little to no infrastructure for take-off and landing, burn less fuel than conventional aircraft and consequently reduce the carbon footprint. The significant cargo-carrying capacity of hybrid airships, together with their ability to operate from and into ad hoc locations (including those on water) would enable direct delivery from an international airport or humanitarian response depot to an affected area. These airships would provide substantial savings by avoiding transitional warehousing, time-consuming and costly loading/unloading requirements, and the use of extensive ground handling equipment.



Photo: WFP

## VII. LOOKING FORWARD

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During 2020, providing uninterrupted access for humanitarian aid workers to all target locations will continue to be WFP Aviation's number one priority. In the process of actively managing WFP Aviation to ensure the delivery of reliable, safe and efficient air transport services, specific focus will be given to environmental efficiency, gender equality, innovation and engagement.



## ENVIRONMENTAL EFFICIENCY

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WFP Aviation will continue to engage industry actors, including manufacturers, to identify fuel-efficient air assets, enhancing capabilities to operate from short and dusty airstrips. Similarly, through donors' engagement WFP Aviation will continue to invest in optimized preparedness on the ground — for example, by pre-positioning stock and scaling up river transport. In South Sudan, WFP scaled down food airdrops to reduce operational costs and redirect funds to food assistance. This reduced the need for airdrops by 70 percent compared with the same period in 2018. Air assets dedicated to airdrops were reduced from eight to two Ilyushin IL-76 aircraft, bringing significant savings to the operation.



## GENDER EQUALITY

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Recently, WFP Aviation has collaborated with the International Aviation Women's Association and Women in Aviation International to close the gender gap that exists in aviation globally. Such efforts focus on promoting air transport as a career choice for women. This also serves to enhance the presence of female officers in managerial positions and at airport check in and security procedures. Currently, women represent 20 percent of WFP Aviation's staff globally. This represents a big achievement for WFP Aviation considering that women are vastly underrepresented in the aviation and aerospace sectors. Women make up 41 percent of aviation employees in Europe, but a much lower percentage in technical roles. Just over 4 percent of airline pilots in the world are women and according to IATA, only 3 percent of commercial aviation chief executive officers are women.



## INNOVATION

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WFP Aviation is keen to continue to enable innovation through evolving its services and working in close cooperation with several leading regulatory and industry bodies and initiatives. The use of drones, hybrid cargo airships and other technologies will be another priority for WFP in 2020 and going forward.



## ENGAGEMENT

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WFP Aviation's continued commitment to building partnerships with the private sector and international aviation authorities, among others, is critical to ensuring the continued evolution of aviation services.

**World Food Programme**

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