

Runway Change Guide

Runway changes can improve aerodrome efficiency but require careful coordination to ensure a smooth transition. The **Tower controller** is responsible for initiating a runway change, ensuring all affected units are informed, and managing the transition effectively. This guide outlines the procedures for a **safe and efficient runway change**.

Conditions for Runway Changes

A runway change may be necessary due to various factors, including but not limited to:

1. **Weather Conditions:**
 - Significant wind shifts affecting operations.
 - Consecutive missed approaches.
 - Low Visibility Procedures (LVPs).
2. **Operational Considerations:**
 - Runway equipment availability (e.g., ILS operational status).
 - Optimised arrival sequencing for increased efficiency.

Initiating a Runway Change

When a runway change is **deemed necessary**, the **Tower controller** must coordinate the following with all relevant ATC units:

1. **Estimated time of runway change completion.**
2. **Identification of the last departure using the current runway.**
3. **Identification of the last arrival using the current runway**

Tower declares the last arrival, but this must be confirmed by Approach (APP), as APP has the final say on arrivals.

The **last departure and last arrival** must be confirmed with Approach (APP) and Area (ACC) to ensure proper sequencing and spacing.

Aerodrome Procedures

Delivery (DEL)

- Aircraft previously cleared for **departures on the old runway** must be **recleared for the appropriate SID**.
- Once this is completed, all new aircraft should be issued **clearances for the new runway** as prescribed.

Ground (GND)

- **Taxiing aircraft:**
 - The **last departure** should taxi to the **current departure runway**.
 - All **subsequent departures must be held** until the **last arrival has landed**.
 - Once the last arrival has landed, **departures may taxi to the new runway**.
- If Delivery **was unable to reclear departures on the new SID**, Ground is responsible for ensuring the **correct departure clearance** is issued.

Tower (TWR)

IFR Procedures

- **Coordination with Approach:**
 - TWR must **inform APP when the last arrival/departure is complete**, signaling the start of the runway transition.
 - **The last arrival must be confirmed by APP, as APP has the final say on sequencing.**
 - The first **departure on the new runway requires a release from APP** before clearance is issued.

VFR Procedures

- **Circuit traffic should be repositioned** safely during the transition.
- VFR aircraft must be cleared for **circuits on the new runway** as soon as operationally feasible.
- Aircraft waiting for departure **should be held in a safe area** until the transition is complete.

Approach Procedures (APP)

- Once the **last arrival has landed**, APP must ensure **all subsequent arrivals are sequenced for the new runway**.
- If necessary, aircraft may be **vectored for spacing** before approach clearance to the new arrival runway.
- **Caution is required:** The **last departure may not have departed yet**, so careful sequencing must be maintained.
- APP must inform ACC when the **runway change is complete**.

Area Control Procedures (ACC)

- ACC should ensure arriving aircraft are **cleared for the correct STAR** leading to the new active runway.
- APP should **notify ACC when the runway change is complete**, allowing controllers to adjust area sequencing as necessary.

Managing Holding and Spacing During a Runway Change

- **If traffic is heavy**, Approach may identify a **gap** in arrivals where the runway change can be executed smoothly.
- The **last arrivals on the old runway should land close together** to minimize disruption.
- If necessary, **short-term holding or vectoring** may be used to space aircraft correctly before sequencing them to the new runway.
- **Coordination between all ATC positions is critical** to ensure a smooth transition.

Summary of Key Runway Change Steps

1. **Runway change is initiated by the Tower controller** based on weather and operational factors.
2. **Tower coordinates with APP and ACC** to determine the **last departure and last arrival**
3. **Delivery reclears affected departures** and issues new runway clearances.
4. **Ground ensures proper taxi sequencing**, holding aircraft as needed.
5. **Tower coordinates with Approach** and **obtains release for the first new departure**.
6. **Approach vectors and sequences arrivals** for the new runway while monitoring departure status.
7. **ACC clears aircraft for the appropriate STAR** and coordinates with APP.
8. **APP informs ACC when the runway change is complete** to resume normal operations.

Additional Best Practices for Runway Changes

- **Advance planning** is key—controllers should anticipate **spacing issues before initiating the change**.
- **Clear communication** between all controllers ensures a smooth transition.
- **Time the first arrival for the new runway** so that it reaches **final approach shortly after the last arrival on the old runway has landed**.
- **Do not rush departures**—ensure proper sequencing to avoid conflicts.
- **Use holding or vectoring sparingly**—only if needed to manage sequencing effectively.

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