INDICATOR FORM
(Guidance on completing the form is included on page 2)

PART A: INDICATOR IDENTIFICATION

1. INDICATOR

Indicator 1.205: Tailwind landings by threshold level

2. DESCRIPTION

Percentage of landings where the tailwind exceeded 5, 10 or 15 knots (kts).

3. ICAO STRATEGIC OBJECTIVE

☒ Safety ☐ Capacity ☐ Efficiency ☐ Security ☐ Environment

PART B: INDICATOR SPECIFICATIONS

4. GASP OR GANP ELEMENT

GASP

5. PROJECT OR PROGRAMME

Runway safety

6. INDICATOR TYPE

The indicator is: ☐ activity-related (predictive or leading) OR ☒ outcome-related (reactive or lagging)

7. RATIONALE

Tailwind landings increase the risk of a runway excursion. The ground speed at touchdown will be greater than usual and any float tendency will result in a long landing. The increased stopping distance could result in a runway overrun (excursions).

8. LIMITATIONS

This indicator is applicable only when both the aircraft and the airport are equipped and covered by automatic dependent surveillance – broadcast (ADS-B).

9. DEFINITION OF TECHNICAL OR SPECIFIC TERMS

Tailwind is the wind component in the same direction as the landing of the aircraft.

10. CALCULATION METHOD/FORMULA

Using ADS-B, detection of a landing aircraft and runway direction at time t.
Using METARs, retrieval of the last available METAR at time t.
Extraction of wind speed and direction (normal, not gust or variable) from METAR.

Tailwind component tailwind = wind speed in kts x cos (wind direction – runway direction)

PART C: DATA

11. DATA SET(S)	12. AVAILABILITY	13. DISAGGREGATION LEVEL	14. PROVIDER	15. CUSTODIAN
Flight monitoring data (ADS-B)	5	Runway end	ANSP or private company	State
METARs	5	Airport	AIS of State	State

FOR USE BY THE INTEGRATED AVIATION ANALYSIS (IAA) SECTION

INDICATOR NUMBER	TIER CLASSIFICATION
1.205	I

GUIDANCE ON COMPLETING THE FORM

1. **Indicator:** the name assigned to the indicator. The indicator must support achieving a goal/objective, performing a desired outcome or avoiding a hazard/unwanted outcome. The following criteria should be considered in defining an indicator:

    - Simple – the indicator shall measure a clearly defined variable that stakeholders understand;
    - Specific – the indicator must include a single precise metric;
    - Measurable – the indicator must include a clear and specific metric that can be measured;
    - Relevant – the indicator shall be relevant to the organization's objective or the outcome/activity being measured;
    - Timely – the indicator shall be defined within a specific timeframe.

2. **Description:** a brief yet clear explanation of the indicator, the related metric and what it will measure; e.g. the number of, percentage of, average of, rate of something.

3. **ICAO strategic objective:** the ICAO strategic objective to which the indicator relates.

4. **GASP or GANP element:** if the indicator is related to ICAO's Global Aviation Safety Plan (GASP) or the Global Air Navigation Plan (GANP), the specific priority, objective, module or block of GASP or GANP associated to the indicator.

5. **Project or Programme**: if applicable, the project or programme to which the indicator is related, e.g. USOAP, PBN, RPAS, etc.

6. **Indicator type:** the indicator may be activity-related (or leading), i.e. measuring current or future events and activities and reporting on how well the organization is doing, e.g. audit or inspection results, completion of tasks or projects. Or the indicator may be outcome-related (or lagging), i.e. measuring past events and identifying the conditions within a system after events have happened.

7. **Rationale:** an explanation of how the indicator connects to the identified ICAO strategic objective and what the measurement and monitoring of the indicator supports.

8. **Limitations:** the scope or the extent of the variable or entity that the indicator measures. For example, accident rates may be limited to a specific aircraft category; compliance may apply to a certain type or set of standards.

9. **Definition of technical or specific terms:** if applicable, a definition of any technical, specific or project-related terminology used in naming or defining the indicator that may not be widely known or understood.

10. **Calculation method or formula:** if applicable, the specific or technical formula available for the calculation of the indicator value.

11. **Data set(s):** the data that is needed for measuring the indicator.

12. **Data availability:** the listed datasets may have different levels of availability, varying from 0 for unavailable data to 5 for fully available data.

13. **Data disaggregation level:** the lowest level into which the data can be broken down to a more detailed level. For example, the data may be available on a global, regional or national level; in that case, the disaggregation level is the national data.

14. **Data provider:** the provider of the data or the source where the data comes from. It's better to indicate a database or programme as opposed to a person or a single task/project where the data comes from.

15. **Custodian:** the organization that manages or controls the data; referring to a specific programme (instead of a person) will be helpful.